

## Chapter 6

### Area and Community and Sub Area Plans





# **CHAPTER 6.0**

## **Area and Community and Sub Area Plans**

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### **Introduction**

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 Area Plans component is titled “Part II: Area Plan Policies” and covers topics related to four different types of area plans. The Community Plans component is titled “Part III: Community and Sub Area Plans.” Consequently, this chapter addresses the following plans:

- Section 6.1 Rural Valley Lands Plan
- Section 6.2 Corridors
- Section 6.3 Foothill Growth Management Plan
- Section 6.4 Mountain Framework Plan
- Section 6.5 Community Plans

### **6.1 Rural Valley Lands Plan**

This chapter of the Goals and Policies Report incorporates the Rural Valley Lands Plan (RVLP) adopted by the County in 1975. The RVLP applies to the Central Valley below the 600-foot elevation contour line along the foothills of the Sierra Nevada outside the County’s Urban Development Boundaries (UDBs), Hamlet Development Boundaries (HDBs) and Urban Area Boundaries (UABs) for cities. The Rural Valley Lands Plan was initiated in order to establish minimum parcel sizes for areas zoned for agriculture and to develop a policy that is fair, logical, legally supportable and which consistently utilizes resource information to determine the suitability of rural lands for nonagricultural uses. The policies in this chapter of the Goals and Policies Report will act as a guide to the Planning Commission and Board of Supervisors in determining appropriate minimum parcel sizes and areas where nonagricultural use exceptions in the rural areas of the County may be allowed.

Key impacts to land within this Area Plan are primarily expected to be impacts to agricultural lands (including agricultural conversion). These impacts are discussed in Chapter 3.3 of this EIR, specifically in Impact AG-1 (page 3-4), AG-2 (page 3-6) and AG-3 (page 3-7).

RVLP policies are included in the agricultural impact discussions for Impact AG-1 and AG-3 (conversion of important farmland to non-agricultural use) in Section 3.3 of Chapter 3. Specific policies included in the impacts discussion are: RVLP-1.1 (Development Intensity), RVLP-1.2 (Existing Parcels and Approvals) and RVLP-1.4 (Determination of Agricultural Land). Non-agricultural issues and impacts related to this Area Plan are expected to be similar to the impacts identified for the rest of the planning area, described in Chapters 3.0, 4.0 and 5.0.

## **6.2 Corridors**

This chapter of the Goals and Policies Report sets out area plan policies for development within corridors adjacent to transportation routes in the County. The Corridors Area chapter provides guidance in the unincorporated portions of the County that are adjacent to major transportation routes outside of adopted UABs, UDBs, and HDBs.

Key impacts to land within this Area Plan are expected to be primarily economic development, agriculture, and scenic and visual resources related. The EIR does not evaluate economic impacts. Agriculture resources impacts and scenic and visual resources impacts are addressed in Chapters 3.3 and 4.2, respectively. Specifically, in Impacts AG-1 (page 3-4), AG-2 (page 3-6), AG-3 (page 3-7), SL-1 (page 4-3), SL-2 (page 4-6) and SL-3 (page 4-8).

Corridors Policy C-1.3 (Scenic Corridor Protection Plans) regarding visual resources is included in the Scenic Lands impact discussions for Impact SL-1 (degrade the existing visual character or quality of the site and its surroundings), Impact SL-2 (substantial adverse effect on a scenic vista or substantially damage scenic resources) and SL-3 (create a new source of substantial light or glare which would adversely affect day or nighttime views in the area). Although CEQA does not require the evaluation of economics, Policy C-1.5 (Agricultural Enterprises) is included in the impact discussion for Impact AG-1 and AG-3 (conversion of important farmland to non-agricultural use) in Section 3.3 of Chapter 3. Impacts that are not visual resource related or related to economic development to Corridors are expected to be similar to the impacts identified for the rest of the planning area, described in Chapters 3.0, 4.0 and 5.0.

## **6.3 Foothill Growth Management Plan**

The Foothill Growth Management Plan (FGMP) was originally adopted in 1981 and includes a comprehensive statement of the development policies and standards that prescribe land use and circulation patterns for the foothill region of Tulare County, generally above the 600-foot elevation line. The FGMP covers about 675,641 acres of land bounded on the east by the Federally-owned parks in the Sierra Nevada Mountains and privately owned lands on the San Joaquin Valley floor. The plan's policies set out guidelines for community identity, new development, recreation/open space, agriculture, environmental protection, scenic corridors

protection, history/archaeology, infrastructure facilities, and public services. The communities of Springville and Three Rivers, each with their own community plans, lie within the FGMP boundaries.

The FGMP utilizes four development types that are geographically limited to two areas outside the communities of Three Rivers and Springville. These development types include:

- **Development Corridors.** Areas in the foothills where development may occur provided it meets the development standards of this FGMP. Lands identified as development corridors are designated Foothill Mixed-Use on the Land Use Diagram;
- **Extensive Agriculture.** Areas in the foothills where development may not occur due to access constraints, emergency response time, slope, and other biological or archeological factors that prohibit safe development. Lands identified as extensive agriculture are designated Foothill Agriculture on the Land Use Diagram;
- **Foothill Extensions.** Areas that would be considered a part of the valley where extensions of the foothills (buttes, mountains, foothill extensions) warrant identifying the land as part of the FGMP. Lands identified as Foothill Extension are designated Foothill Agriculture on the Land Use Diagram; and
- **Valley Agriculture Extensions.** Areas that would be considered a part of the FGMP where extensions of the valley (small inlet valleys, hollows, or other flat shallow inclusions into the foothills) warrant identifying the land as part of the valley. Lands identified as Valley Extension are designated Valley Agriculture on the Land Use Diagram.

Key issues within this Area Plan are impacts to agriculture (Chapter 3.3, Impacts AG-1, AG-2 and AG-3), visual resources (Chapter 4.2, Impacts SL-1, SL-2 and SL-3), geology and soils (Chapter 4.5, Impacts HS-1, HS-2, HS-3 and HS-4), biological resources (Chapter 4.3, Impacts ERM-1 through ERM-6), water quality, water supply and drainage (Chapter 5.3, Impacts PFS-1 through PFS-9), historic resources (Chapter 4.3, Impact ERM-14), and fire protection and law enforcement (Chapter 5.3, Impacts PFS-12 and PFS-13).

FGMP policies are described in the impact discussions of various topics throughout Chapters 3.0, 4.0 and 5.0. Specifically, the following FGMP policies are utilized:

- FGMP policies related to agriculture are included in the impact discussions for Impacts AG-1 and AG-3 (conversion of important farmland to non-agricultural uses) in Section 3.3. Specifically, policies include F-1.12 (Development in Success Valley) and F-6.1 (Protect Agricultural Lands).
- Policies related to scenic lands are described in the impact discussions for Impacts SL-1 (substantially degrade the existing visual character or quality of the site and its surroundings), SL-2 (adverse effect on a scenic vista or substantially damage scenic resources), and SL-3 (source of substantial light or glare which would adversely affect

day or nighttime views in the area) in Section 4.2. Specific policies include 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), and F-9.19 (Maintenance of Scenic Vistas).

- Policies related to geology and soils are described in the impact discussion for Impact HS-1 (substantial soil erosion or the loss of topsoil), HS-3 (be located on a geologic unit or soil that is unstable). Specific policies include F-1.4 (Grading), F-1.13 (Hillside Development), F-9.7 (Minimize Soil Disturbance), F-9.8 (Erosion Mitigation Measures), and F-9.11 (Development on Slopes), F-9.12 (Vegetation Removal).
- Policies related to biological resources are described in the impact discussions for Impact ERM-1 (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), ERM-2 (adverse effect on any riparian habitat or other sensitive natural community), ERM-3 (substantial adverse effect on “federally protected” wetlands), ERM-4 (interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors), ERM-5 (conflict with any local policies or ordinances protecting biological resources), and ERM-6 (conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan). Specific policies include 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-9.13 (Development near Woodland Habitats), F-9.15 (Identification of Wildlife), and F-9.20 (Preservation of Unique Features).
- Policies related to cultural and historic resources are described in the impact discussions for Impact ERM-13 (cause a substantial adverse change in the significance of a historical resource) and Impact ERM-14 (substantial adverse change in the significance of a unique archaeological resource). Specific policies include F-8.1 (Inventory of Historical Sites), F-8.2 (Preparation of an Archaeological Sensitivity Map) and F-8.3 (Protection of Historical or Archaeological Sites).
- Policies related to water quality, water supply and drainage are described in the impact discussions for Impact PFS-2 (require new or expanded water supply entitlements), PFS-7 (violate water quality standards or waste discharge requirements, or otherwise degrade water quality), and PFS-8 (alter the existing drainage pattern of the area). Specific policies F-9.2 (Development Drainage Patterns), F-9.3 (Development in the Floodplain), F-9.5 (Protection of Lakes), F-9.6 (Development in the Frazier Valley Watershed), F-9.7 (Minimize Soil Disturbances), F-9.8 (Erosion Mitigation Measures), F-9.12 (Vegetation Removal), F-10.1 (Infrastructure Capacity) and F-10.2 (Provision of Adequate Infrastructure).

- Policies related to fire protection and law enforcement are described in the impact discussions for Impact PFS-12 (adverse physical impact to the continued provision of fire protection services) and Impact PFS-13 (adverse physical impact to the continued provision of law enforcement services). Specific policies include F-11.2 (Provision of Safety Services) and F-11.3 (Fire and Crime Protection Plan).

Impacts to the Foothill Growth Management Plan Area that are not described above are expected to be similar to the impacts identified for the rest of the planning area, described in Chapters 3.0, 4.0 and 5.0.

## 6.4 Mountain Framework Plan

The Mountain Framework Plan chapter of the Goals and Policies Report provides policy guidance in the unincorporated mountain area on the eastern side of the County. This area includes all land located east of the foothills, which generally coincides with the westerly boundary of federal lands. This includes lands under the jurisdiction of the National Park Service (Sequoia National Park), the U.S. Forest Service (Sequoia National Forest and Giant Sequoia National Monument), and the Bureau of Land Management (BLM). The County has never adopted an overall plan for the mountain area. The private lands in this region amount to about 40,000 acres.

This section of the Goals and Policies Report provides guidance on the key resource areas that may be potentially impacted by the General Plan Update. Key impacts to land within this Area Plan are primarily agricultural impacts lands (including agricultural conversion). Mountain Framework Plan Policy M-1.9 (Agricultural Preserves) is included in the impact discussions for Impact AG-1 and AG-3 (conversion of important farmland to non-agricultural use) in Section 3.3 of Chapter 3.

Non-agricultural impacts to the Mountain Framework Plan Area are expected to be similar to the impacts identified for the rest of the planning area, described in Chapters 3.0, 4.0 and 5.0.

## 6.5 Community and Sub Area Plans

Part III of the Goals and Policies Report consists of previously adopted community plans, the Kings River Plan and Mountain 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. However, since these plans are adopted separately from the General Plan Update, analysis of policies and implementation measures included in these plans are not discussed in this EIR.





# Chapter 7

## Alternatives to the General Plan Update





# CHAPTER 7.0

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### 7.1 Overview

#### General CEQA Requirements

The purpose of the alternatives analysis in an EIR is to describe a range of reasonable alternatives to the project, or to the location of the project, that could feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, and to evaluate the comparative merits of the alternatives (CEQA Guidelines, Section 15126.6[a]). Additionally, Section 15126.6(b) of the CEQA Guidelines requires consideration of alternatives that could reduce to a less-than-significant level or eliminate any significant adverse environmental effects of the General Plan Update, including alternatives that may be more costly or could otherwise impede to some degree the attainment of the project's objectives.

It is important to understand, however, that the mere inclusion of an alternative in an EIR does not constitute definitive evidence that the alternative is in fact “feasible.” The ultimate decision regarding the feasibility of alternatives lies with the ultimate decision-maker for a project, which in this case is the County of Tulare Board of Supervisors. Such determinations are to be made in statutorily mandated findings addressing potentially feasible means of reducing the severity of significant environmental effects. One finding that is permissible, if supported by substantial evidence, is that “specific economic, legal, social, technological, or other considerations . . . make infeasible the . . . alternatives identified” in the EIR (Pub. Resources Code, § 21081, subd. [a]; see also CEQA Guidelines, § 15901, subd. [a]). CEQA Guidelines section 15364 defines “feasible” to mean “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.” In deciding whether an alternative is feasible or infeasible, a decision-making body may consider the stated project objectives in an EIR, and may balance any relevant economic, environmental, social, and technological factors. (See *City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 410, 417; *Sequoyah Hills Homeowners Assn. v. City of Oakland* (1993) 23 Cal.App.4th 704, 715.)

## 7.2 Factors Considered In Selection of Alternatives

The CEQA Guidelines recommend that an EIR should briefly describe the rationale for selecting the alternatives to be discussed, identify any alternatives that were considered by the lead agency but were rejected as infeasible, and briefly explain the reasons underlying the lead agency's determination [CEQA Guidelines, Section 15126.6(c)]. This section describes the process used in selection of the alternatives. The alternatives addressed in this EIR were selected in consideration of one or more of the following factors:

- The extent to which the alternative would accomplish most of the basic goals and objectives of the project;
- The extent to which the alternative would avoid or lessen any of the identified significant environmental effects of the project;
- The potential feasibility of the alternative, taking into account site suitability, economic viability, availability of infrastructure, and consistency with various applicable plans and regulatory limitations;
- The appropriateness of the alternative in contributing to a "reasonable range" of alternatives necessary to permit a reasoned choice; and
- The requirement of the CEQA Guidelines to consider a "no project" alternative and, where the "no project" alternative is the environmentally superior alternative, to identify an "environmentally superior" alternative in addition to the no-project alternative [CEQA guidelines, Section 15126.6(e)].

The significant environmental impacts that the County, in identifying alternatives, seeks to eliminate or reduce are:

- Transportation and circulation impacts resulting from substantial increases in vehicular traffic.
- Air quality impacts resulting from increased development and vehicular traffic.
- Noise and nuisance effects on adjacent sensitive receptor locations.
- Loss of agricultural land.
- Biological resources impacts resulting from a loss of habitat.
- Viewshed impacts resulting from increased development.

## Alternatives Selection Process

The General Plan Update and the alternatives addressed in this chapter of the EIR are based on several ideas and concepts developed with the public during two community workshops along with input from the Technical Advisory Committee (TAC) and County staff during the spring of 2004. The alternative selection process was complimented with background information from the General Plan Background Report (existing conditions), identification of community issues of concern, and the development of several project objectives. The process was conducted to incorporate stakeholder input (in the form of workshops) at several key points through-out the alternatives development process. As part of the EIR preparation process another alternative (Confined Growth) was developed by County staff (Fall 2007) to consider the feasibility of establishing "hard" urban boundaries to better protect the County's important agricultural resources.

## Alternatives Eliminated From Further Consideration

The following alternative(s) were originally considered during the planning and scoping process for the General Plan Update, but were determined to not be viable for continued evaluation and were eliminated from further consideration.

During development of the land use alternatives, two additional alternatives were discussed. These alternatives included the Proportional Growth Alternative and the Existing Trends Alternative, which are briefly discussed below. Similar to the alternatives discussed in Section 7.3 “Alternatives Selected for Further Consideration”, these alternatives assumed that buildout population in 2030 would be approximately 621,549.

- **Proportional Growth Alternative.** Future growth under the Proportional Growth Alternative would be distributed throughout the County at a rate proportional to current conditions. The ratio of existing population to the total county population would be held constant. Consequently, the cities and communities would maintain the same percentage of the County’s total population in the future. Under this alternative, 30% of future growth would occur in unincorporated areas of the County.
- **Existing Trends Alternative.** The Existing Trends Alternative would allow future growth in cities and unincorporated areas of the County to continue to grow at the rate of growth that occurred in those areas from 1990 through 2000. This would result in approximately 28% of future growth to occur within unincorporated areas of the County.

## 7.3 Alternatives Selected for Further Consideration

The following section provides a general description of the five alternatives considered in this analysis, with Table 7-1 providing a brief summary and comparison of the key population components that comprise each alternative. Using the community workshop input identified above, these five alternatives were developed and have been determined to represent a reasonable range of alternatives which (with the exception of “No Project”) have the potential to feasibly attain most of the basic project objectives.

**TABLE 7-1  
SUMMARY OF KEY COMPONENTS FOR EACH ALTERNATIVE**

<b>Alternative</b>	<b>2030 Total Unincorporated Population (Increase from 2003)</b>	<b>2030 Population Distribution for Unincorporated Areas</b>
General Plan Update	170,000 (106,440)	28%
Alternative 1 – No Project Alternative (Build-out of Existing General Plan	Not Available	Not Available

**TABLE 7-1  
SUMMARY OF KEY COMPONENTS FOR EACH ALTERNATIVE**

<b>Alternative</b>	<b>2030 Total Unincorporated Population (Increase from 2003)</b>	<b>2030 Population Distribution for Unincorporated Areas</b>
Alternative 2 – City-Centered Alternative	111,344 (52,396)	26%
Alternative 3 – Rural Communities Alternative	188,152 (78,594)	30%
Alternative 4 – Transportation Corridors Alternative	188,152 (78,594)	30%
Alternative 5 – Confined Growth Alternative	Not Available	Not Available

Following the general description of each alternative provided in this section, the alternatives are evaluated to determine whether they have the ability to meet the basic project objectives (see Chapter 2.0 “Project Description”) developed for the General Plan Update. These objectives for the General Plan Update are identified in Table 7-2. The table also provides a summary of each alternative’s ability to meet these project objectives, which was obtained from the analysis provided further in the section.

**TABLE 7-2  
SUMMARY OF THE ALTERNATIVES ABILITY TO MEET THE PROJECT OBJECTIVES**

<b>Alternative 1 – No Project</b>	<b>Alternative 2 – City-Centered</b>	<b>Alternative 3 – Rural Communities</b>	<b>Alternative 4 – Transportation Corridors</b>	<b>Alternative 5 – Confined Growth</b>	<b>Project Objective</b>
No	No	Yes	Yes	No	Provide opportunities for small unincorporated communities to grow.
No	No	Yes	Yes	Yes	Promote reinvestment in existing communities and hamlets in a way that enhances the quality of life in these locations.
No	Yes	Yes	No	Yes	Protect the County’s agricultural uses and scenic natural lands from urban encroachment.
No	Yes	No	No	Yes	Reduce rural residential development outside of communities, hamlets, and cities (i.e., avoid rural residential sprawl).
No	Yes	Yes	Yes	Yes	Allow existing, outdated agricultural facilities in rural areas to be used for new businesses (including non-agricultural uses) if they provide employment.
Yes	Yes	Yes	Yes	Yes	Enhance planning coordination and cooperation with the agencies and organizations with land management responsibilities in and adjacent to Tulare County.

This section also provides a description of the environmental impacts associated with each alternative. As provided in Section 15126.6(d) of the CEQA Guidelines, the significant effects of each alternative are identified in less detail than those of the General Plan Update. A matrix comparing the significance of the identified impacts for each alternative to the impacts identified for the General Plan Update is presented in Table 7-3.

**TABLE 7-3  
SUMMARY OF ALTERNATIVES  
(COMPARISON OF IMPACTS WITH GENERAL PLAN UPDATE LEVEL OF SIGNIFICANCE)**

Key: LTS = Less than Significant Impact  
SU = Significant and Unavoidable Impact  
SU - = Lesser impact than the General Plan Update  
SU + = Greater impact than the General Plan Update

Impact		General Plan Update	Alt 1 – No Project	Alt 2 – City-Centered	Alt 3 – Rural Communities	Alternative 4 – Transportation Corridors	Alternative 5 – Confined Growth
<b>Aesthetics</b>							
SL-1	The General Plan Update would substantially degrade the existing visual character or quality of the site and its surroundings.	SU	SU +	SU -	SU +	SU +	SU -
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.	SU	SU +	SU -	SU +	SU +	SU -
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.	SU	SU +	SU -	SU +	SU +	SU -
<b>Agricultural Resources</b>							
AG-1	The General Plan Update could result in the substantial conversion of important farmland to non-agricultural uses.	SU	SU-	SU -	SU+	SU -	SU -
AG-2	The General Plan Update could conflict with existing zoning for agricultural use, or conflict with existing Williamson Act contracts.	LTS	LTS	LTS	LTS	LTS	LTS
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.	SU	SU-	SU-	SU+	SU -	SU -

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Impact		General Plan Update	Alt 1 – No Project	Alt 2 – City-Centered	Alt 3 – Rural Communities	Alternative 4 – Transportation Corridors	Alternative 5 – Confined Growth
<b>Air Quality and Global Climate Change</b>							
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.	SU	SU-	SU	SU+	SU+	SU
AQ-2:	The General Plan Update would not conflict with or obstruct implementation of an applicable air quality plan.	LTS	LTS	LTS	LTS	LTS	LTS
AQ-3:	The General Plan Update would expose sensitive receptors to substantial pollutant concentrations.	SU	SU-	SU	SU+	SU+	SU
AQ-4:	The General Plan Update would not create objectionable odors affecting a substantial number of people.	LTS	LTS	LTS	LTS	LTS	LTS
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.	SU	SU-	SU	SU+	SU+	SU
<b>Biological Resources</b>							
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 the U.S. Fish and Wildlife Service.	SU	SU+	SU-	SU+	SU -	SU -
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.	SU	SU+	SU-	SU+	SU -	SU -



**TABLE 7-3  
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	Impact	General Plan Update	Alt 1 – No Project	Alt 2 – City-Centered	Alt 3 – Rural Communities	Alternative 4 – Transportation Corridors	Alternative 5 – Confined Growth
ERM-3	The General Plan Update could have a substantial adverse effect on "federally protected" wetland habitats (including, but not limited to marsh, vernal pool, etc.) through direct removal, filling, hydrological interruption, or other means.	SU	SU+	SU-	SU+	SU -	SU -
ERM-4	The General Plan Update could interfere substantially with the movement of 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.	SU	SU+	SU-	SU+	SU -	SU -
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.	LTS	LTS	LTS	LTS	SU -	LTS
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.	LTS	LTS	LTS	LTS	LTS	LTS
<b>Cultural Resources</b>							
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.	SU	SU-	SU+	SU+	SU+	SU+
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, 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.	SU/LTS	SU/LTS	SU+/LTS	SU/LTS	SU+/LTS	SU+/LTS
<b>Geology and Soils</b>							
HS-1	The General Plan Update would not result in substantial soil erosion or the loss of topsoil.	LTS	LTS	LTS	LTS	LTS	LTS

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SUMMARY OF ALTERNATIVES  
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	Impact	General Plan Update	Alt 1 – No Project	Alt 2 – City-Centered	Alt 3 – Rural Communities	Alternative 4 – Transportation Corridors	Alternative 5 – Confined Growth
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, 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.	LTS	LTS	LTS	LTS	LTS	LTS
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.	LTS	LTS	LTS	LTS	LTS	LTS
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.	LTS	LTS	LTS	LTS	LTS	LTS
<b>Hazards and Hazardous Materials</b>							
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.	LTS	LTS	LTS	LTS	LTS	LTS
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.	LTS	LTS	LTS	LTS	LTS	LTS

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	Impact	General Plan Update	Alt 1 – No Project	Alt 2 – City-Centered	Alt 3 – Rural Communities	Alternative 4 – Transportation Corridors	Alternative 5 – Confined Growth
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.	LTS	LTS	LTS	LTS	LTS	LTS
HS-5	The General Plan Update could result in development located within an airport land use plan area or/and could result in a safety hazard for people residing or working in the Project Area.	LTS	LTS	LTS	LTS	LTS	LTS
HS-12	The General Plan Update could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	SU	SU	SU	SU	SU	SU
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.	LTS	LTS	LTS	LTS	LTS	LTS
<b>Hydrology and Water Quality</b>							
PFS-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.	SU	SU	SU	SU	SU	SU
PFS-7	The General Plan Update could violate water quality standards or waste discharge requirements, or otherwise degrade water quality.	LTS	LTS	LTS	LTS	LTS	LTS
PFS-8	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 could result in on- or off-site flooding.	LTS	LTS	LTS	LTS	LTS	LTS

**TABLE 7-3  
SUMMARY OF ALTERNATIVES  
(COMPARISON OF IMPACTS WITH GENERAL PLAN UPDATE LEVEL OF SIGNIFICANCE)**

Key: LTS = Less than Significant Impact  
 SU = Significant and Unavoidable Impact  
 SU - = Lesser impact than the General Plan Update  
 SU + = Greater impact than the General Plan Update

	Impact	General Plan Update	Alt 1 – No Project	Alt 2 – City-Centered	Alt 3 – Rural Communities	Alternative 4 – Transportation Corridors	Alternative 5 – Confined Growth
PFS-9	The General Plan Update could create or contribute runoff water which would exceed the capacity of existing storm water drainage systems or provide substantial additional sources of polluted runoff.	LTS	LTS	LTS	LTS	LTS	LTS
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.	LTS	LTS	LTS	LTS	LTS	LTS
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.	SU	SU	SU	SU	SU	SU
<b>Land Use and Planning</b>							
LU-1	The General Plan Update would not divide the physical arrangement of an established community.	LTS	LTS	LTS	LTS	LTS	LTS
LU-2	Development proposed under the Draft 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.	LTS	LTS	LTS	LTS	LTS	LTS
<b>Mineral Resources</b>							
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.	LTS	LTS	LTS	LTS	LTS	LTS
ERM-8	The General Plan Update could result in land use incompatibilities with adjacent mineral extraction operations.	LTS	LTS	LTS	LTS	LTS	LTS
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.	LTS	LTS	LTS	LTS	LTS	LTS

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SUMMARY OF ALTERNATIVES  
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Impact	General Plan Update	Alt 1 – No Project	Alt 2 – City-Centered	Alt 3 – Rural Communities	Alternative 4 – Transportation Corridors	Alternative 5 – Confined Growth
ERM-10 The General Plan Update could result in land use incompatibilities with adjacent oil and gas operations.	LTS	LTS	LTS	LTS	LTS	LTS
ERM-13 The General Plan Update could result in land use incompatibilities with adjacent timber or forestry operations.	LTS	LTS	LTS	LTS	LTS	LTS
<b>Noise</b>						
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.	SU	SU	SU -	SU+	SU+	SU -
HS-14 The General Plan Update will result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.	SU	SU	SU -	SU+	SU+	SU -
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.	SU	SU	SU -	SU+	SU +	SU -
<b>Public Facilities, Services and Recreation</b>						
PFS-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.	SU	SU	SU	SU	SU	SU
PFS-2 The General Plan Update would require new or expanded water supply entitlements.	SU	SU	SU	SU	SU	SU

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Impact	General Plan Update	Alt 1 – No Project	Alt 2 – City-Centered	Alt 3 – Rural Communities	Alternative 4 – Transportation Corridors	Alternative 5 – Confined Growth
PFS-4 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.	SU	SU	SU	SU	SU	SU
PFS-5 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.	SU	SU	SU	SU	SU	SU
PFS-6 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.	SU	SU	SU	SU	SU	SU
PFS-10 The General Plan Update would produce substantial amounts of solid waste that could exceed the permitted capacity of a landfill serving the County.	SU	SU -	SU-	SU+	SU -	SU -
PFS-11 The General Plan Update would comply with all federal, State, and Local Statutes and Regulations related to solid waste.	LTS	LTS	LTS	LTS	LTS	LTS
PFS-12 The General Plan Update would result in a substantial adverse physical impact to the continued provision of fire protection services in the County.	LTS	LTS	LTS	LTS	LTS	LTS
PFS-13 The General Plan Update would result in a substantial adverse physical impact to the continued provision of law enforcement services in the County.	LTS	LTS	LTS	LTS	LTS	LTS
PFS-14 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.	SU	SU	SU	SU	SU	SU

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SUMMARY OF ALTERNATIVES  
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Key: LTS = Less than Significant Impact  
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Impact	General Plan Update	Alt 1 – No Project	Alt 2 – City-Centered	Alt 3 – Rural Communities	Alternative 4 – Transportation Corridors	Alternative 5 – Confined Growth
PFS-15 The General Plan Update would result in a substantial adverse physical impact to the continued provision of school services in the County.	LTS	LTS	LTS	LTS	LTS	LTS
PFS-16 The General Plan Update would result in a substantial adverse physical impact to the continued provision of library services in the County.	LTS	LTS	LTS	LTS	LTS	LTS
PFS-17 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.	SU	SU	SU	SU	SU	SU
PFS-18 The General Plan Update would not result in the wasteful, inefficient, or unnecessary consumption of energy by residential, commercial, industrial, or public uses.	LTS	LTS	LTS	LTS	LTS	LTS
PFS-19 The General Plan Update may require the construction or expansion of additional energy infrastructure facilities, the construction of which could cause significant environmental effects.	SU	SU	SU	SU	SU	SU
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.	LTS	LTS	LTS	LTS	LTS	LTS
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.	SU	SU	SU	SU	SU	SU
<b>Transportation</b>						
TC-1 The General Plan Update would result in a substantial increase in vehicular traffic.	SU	SU-	SU-	SU+	SU+	SU -
TC-2 The General Plan Update would result in substantial changes in accessibility to County-area railroad terminals and cargo transfer points.	LTS	LTS	LTS	LTS	LTS	LTS

**TABLE 7-3  
SUMMARY OF ALTERNATIVES  
(COMPARISON OF IMPACTS WITH GENERAL PLAN UPDATE LEVEL OF SIGNIFICANCE)**

Key: LTS = Less than Significant Impact  
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	Impact	General Plan Update	Alt 1 – No Project	Alt 2 – City-Centered	Alt 3 – Rural Communities	Alternative 4 – Transportation Corridors	Alternative 5 – Confined Growth
TC-3	The General Plan Update would result in a substantial increase in Countywide aviation usage at local facilities.	LTS	LTS	LTS	LTS	LTS	LTS
TC-4	The General Plan Update would result in a substantial increase in public transit usage.	LTS	LTS	LTS	LTS	LTS	LTS
TC-5	The General Plan Update could result in a substantial increase in bicycle and pedestrian activity.	LTS	LTS	LTS	LTS	LTS	LTS

## 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.

## Ability to Meet Project Objectives

A summary of the No-Project Alternative’s ability to meet each of the project objectives is provided in Table 7-2. Under the No-Project Alternative, the County would continue with implementation of its existing General Plan, which would remain as the adopted long-range planning policy document for the County. Current development patterns would continue to occur in accordance with the existing General Plan, Zoning Code, and Community/Area Plans. Consequently, this alternative would fundamentally fail to meet a majority of the Project Objectives described above. Failure to update the County’s existing General Plan will not result in a comprehensive update to the County’s existing goals and policies to help incorporate current planning, environmental, and regulatory trends and objectives. Failure to incorporate these updated goals and policies could make it more difficult to provide the necessary planning



framework that would set standards for the protection of open space areas, habitats, agricultural areas, and scenic landscapes. The lack of updated economic development policies or programs may also make it more difficult to promote the desired level of reinvestment within existing communities and hamlets. However, it is assumed that the County would still continue to coordinate and cooperate with other local agencies and organizations on a variety of relevant land management issues irregardless of whether the General Plan is updated or not.

## **Environmental Impacts of the Alternative**

The environmental impacts of the No-Project Alternative are summarized in Table 7-3 and described in greater detail below. It should be noted that the No-Project Alternative would continue the redistribution of new growth to cities. Such city growth will result in impacts similar to those discussed here, but are too speculative for detailed analysis.

### ***Aesthetics***

Under the No-Project Alternative, the existing General Plan does not have a separate Scenic Landscapes Element and lacks updated Land Use and Community Design policies that regulate aesthetics or scenic resource issues (both rural and urban resources). The current Land Use Element includes some policy guidance with respect to community character and scenic highways; however, the proposed goals and policies provided as part of the General Plan Update are considerably more comprehensive and detailed than those in the existing General Plan. However, it is assumed that the County would continue to evaluate the environmental impacts of these projects on a case-by-case basis and would identify all applicable feasible mitigation measures for significant impacts.

As with the General Plan Update, the No Project Alternative would result in a significant and unavoidable impact because growth would occur over currently undeveloped or agricultural land. This growth would affect the existing visual character of the County and would also result in increased sources of nighttime light and glare.

### ***Agricultural Resources***

Implementation of the No-Project Alternative would result in less of an impact to agricultural resources compared to the General Plan Update. This is because a smaller amount of land designated as Prime, Unique or Farmland of Statewide Importance would be converted to urban uses under the No Project Alternative compared to the amount of farmland that would be converted to urban uses under the General Plan Update. However, since there would be some conversion of important farmland to urbanized uses under this alternative, there would still be a significant and unavoidable impact.

### ***Air Quality***

Under the No-Project Alternative, the County would continue to function under the direction of the existing General Plan. Consequently, buildout under the existing General Plan would result in fewer jobs, dwelling units, and residents in the unincorporated areas than the General Plan Update. These reductions in dwelling units and other types of development would result in

reduced levels of both mobile and stationary sources of air quality emissions and toxic air contaminants. However, implementation of the No Project Alternative would still result in a significant and unavoidable impact because growth would still contribute to air pollutant emissions that could exceed the daily SJVAPCD thresholds for NO<sub>x</sub> and ROG.

### ***Biological Resources***

The reduction in buildout potential of the existing County General Plan relative to the General Plan Update would result in less development that could result in adverse impacts to sensitive habitats, wetlands, riparian areas, wildlife movement, and tree preservation policies. However, the new goals and policies included as part of the General Plan Update to protect federal and state listed and threatened species are more comprehensive than those in the existing General Plan. Therefore, as with the General Plan Update, the No Project Alternative would also result in a significant and unavoidable impact because growth would occur over currently undeveloped or habitat land and would result in the overall reduction of a plant or wildlife species habitat.

### ***Cultural Resources***

Land that has been used for various types of agricultural or open space uses that do not require extensive excavation and/or grading activities may be more likely to contain previously undiscovered cultural resources, particularly near local waterways. Urbanized areas may also contain a variety of historic resources (i.e., buildings, bridges, etc.).

The existing General Plan does not have the full range of policies designed to address cultural resources. The current Environmental Resource Management Element includes some policy guidance with respect to cultural resources; however, the proposed goals and policies provided as part of the General Plan Update (including the “Community Design” section of the Land Use Element) are considerably more comprehensive and detailed, including, in particular, those related to historic resources.

Similar to the General Plan Update, urbanization associated with future growth could damage or destroy a variety of cultural resources during various construction-related activities.

### ***Geology and Soils***

The No-Project Alternative proposes development that is similar in nature to that anticipated under the General Plan Update. Current State and federal regulations require specific engineering and design criteria to avoid impacts related to geologic, soils, and seismic hazards, which would apply to both the No-Project Alternative and the General Plan Update. For this reason, geologic and soils impacts under the No-Project Alternative are considered to be similar to those of the General Plan Update.

### ***Hazards and Hazardous Materials***

The No-Project Alternative proposes development that is similar in nature to that anticipated under the General Plan Update. The No Project Alternative would not include the additional hazardous materials and public safety policies and implementation measure contained as part

of the General Plan Update. However, hazardous materials generation, storage and clean-up are heavily regulated by federal, State and local regulations that would apply to both the No-Project Alternative and the General Plan Update. For this reason, hazards and hazardous materials impacts under the No-Project Alternative are considered to be similar to those of the General Plan Update.

### ***Hydrology and Water Quality***

Under the No-Project Alternative, development would convert less open space land to urban uses than the General Plan Update. As with the General Plan Update, the creation of impervious surfaces associated with urbanization would increase the amount of runoff, which could affect water quality. An increase in impervious surfaces could also reduce groundwater recharge potential. However, because land conversion would be less than the General Plan Update, fewer impervious surfaces would be developed. Overall, hydrologic and water quality impacts under the No-Project Alternative are considered to be similar to those of the General Plan Update.

The No-Project Alternative also proposes development in areas that are within the 100-year floodplain in a similar manner to the General Plan Update. Similarly, levees are regulated at the State level with maintenance activities delegated to local flood control and levee districts. The County has no jurisdiction and is limited in terms of alternatives to mitigate for the identified flood risks. Consequently, flood risk impacts are also considered to be significant and unavoidable.

### ***Land Use and Planning***

Neither the No-Project Alternative nor the General Plan Update would result in the division or alteration of an existing community. However, under the existing General Plan, the County would have less of an ability to direct specific development changes to ensure that new development is well-connected and compatible with surrounding uses. However, similar to the General Plan Update, development proposed under the No-Project Alternative would still need to be consistent with existing plans and policies. Existing General Plan policies would generally ensure that new development is compatible with surrounding land uses. For these reasons, the land use impacts of the No-Project Alternative are considered to be similar to those of the General Plan Update.

### ***Mineral Resources***

The No-Project Alternative would result in less development than the General Plan Update, so there would be fewer potential land use incompatibilities and development of land containing local mineral and oil resources. Policy guidance in the existing General Plan is similar to that provided under the General Plan Update and the overall impacts are considered to be similar to those identified for the General Plan Update.

### ***Noise***

Under the No-Project Alternative, the County would continue to function under the direction of the existing General Plan. Consequently, buildout under the existing General Plan would result in fewer jobs, dwelling units, and residents than the General Plan Update. These reductions in

dwelling units and other types of development would result in reduced levels of both mobile and stationary noise sources. However, implementation of the No Project Alternative would still result in a significant and unavoidable impact because growth could still contribute additional sources of noise that exceed local standards.

### ***Public Services, Facilities and Recreation***

Build-out under the existing General Plan would result in fewer jobs, dwelling units and residents than the General Plan Update. This lower level of population growth and development would result in similar although slightly lesser impacts to the public services and utilities in the County that would be required to adequately serve the levels of development projected under the No-Project Alternative.

Similar to any other development in areas of new growth the construction of future public service and utility facilities could result in some level of permanent conversion of agricultural and open space 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. As with the General Plan Update, mechanisms to reduce such impacts to less than significant may not exist. Due to this uncertainty, potential impacts resulting from construction and/or expansion of public service and utility facilities are also considered significant and unavoidable at this time.

### ***Transportation/Traffic***

Build-out of the County's existing General Plan would result in substantially fewer jobs, dwelling units and residents than the General Plan Update. Total daily vehicle trips generated under this alternative over most roadway segments would be lower under Alternative 1 than the General Plan Update. However, Alternative 1 may result in similar localized level of service impacts on some roadway segments within the County as those anticipated under the General Plan Update even with overall lower roadway traffic volumes.

Outside of the County limits, traffic volumes under Alternative 1 are expected to be less than the General Plan Update and thus would generally result in less level of service impacts on roadways outside the jurisdiction of the County.

## **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).

## **Ability to Meet Project Objectives**

A summary of Alternative 2's ability to meet each of the project objectives is provided in Table 7-2. Under Alternative 2, the County would adopt the updated General Plan with lower population growth assumptions for the County that would focus additional growth within existing City planning boundaries. Because this alternative would include adoption of a comprehensive General Plan that includes updated goals and policies to help incorporate current planning, environmental, and regulatory trends and objectives, Alternative 2 would meet all objectives related to the protection of existing open space and agricultural land uses. However, lower levels of anticipated growth and development may make it more difficult to achieve the desired level of reinvestment within existing communities and hamlets. As with all the alternatives, it is assumed that the County would still continue to coordinate and cooperate with other local agencies and organizations on a variety of relevant land management issues regardless of whether the General Plan is updated or not.

## **Environmental Impacts of the Alternative**

The environmental impacts of the City-Centered Alternative (Alternative 2) are summarized in Table 7-3 and described in greater detail below.

### **Aesthetics**

Alternative 2 would result in similar types of development with a lower buildout population to that anticipated under the General Plan Update. City-centered growth would focus a majority of the County's new growth within existing urban areas and would convert less County open space areas to developed uses. Development of less County open space would result in less impacts to existing County scenic landscapes. However, similar to the General Plan Update, Alternative 2 would still result in a significant and unavoidable impact, since there would be some level of future development that would affect existing scenic landscapes. Light and glare impacts would also be lessened under this alternative. However the resultant impact would also be similar to the General Plan Update.

### **Agricultural Resources**

City-centered development proposed under Alternative 2 could result in a reduced impact to agricultural resources compared to the General Plan Update if development in cities is more efficient than development in unincorporated areas. Therefore a fewer number of acres of land designated as Prime, Unique or Farmland of Statewide Importance would be converted to urban uses under this alternative compared to the amount of important farmland that could be converted to urban uses under the General Plan Update. However, similar to the General Plan Update, Alternative 2 would also result in a significant and unavoidable impact, since conversion of important farmland to urbanized uses under this alternative would be unavoidable.

***Air Quality***

Under Alternative 2, similar levels of growth would still occur within the County by 2030. City-centered growth may reduce the overall number of vehicle miles driven; however city focused dwelling units and other types of development would still result in similar overall emission levels of both mobile and stationary sources of air quality emissions, toxic air contaminants, and the potential for odor emissions. Consequently, development proposed under Alternative 2 would still result in a significant and unavoidable impact because growth would still contribute to air pollutant emissions that could exceed the daily SJVAPCD thresholds for a variety of air pollutants.

***Biological Resources***

Development proposed under Alternative 2 would result in similar impacts to biological resources (compared to the General Plan Update) through the conversion of open space lands to developed uses. However, under this alternative, a fewer number of acres of land designated as natural or open space would be converted to urban uses compared to the same types of land uses that would be converted under the General Plan Update.

***Cultural Resources***

Development proposed under this alternative would focus new growth within existing City areas, which could result in similar or greater impacts to historic resources located within existing urbanized areas. The intensification of land uses within the existing City limits may result in greater impacts to the design qualities of individual City neighborhoods and historic districts to those anticipated under the General Plan Update.

***Geology and Soils***

Alternative 2 proposes development that is similar in nature to that anticipated under the General Plan Update. Current State and federal regulations require specific engineering and design criteria to minimize impacts related to geologic, soils, and seismic hazards, which would apply to local geologic/soil conditions under each of the alternatives and the General Plan Update. Policies and implementation measures included as part of the General Plan Update incorporate all applicable regulations to minimize these impacts. For this reason, geologic and soils impacts under Alternative 2 are considered similar to those of the General Plan Update.

***Hazards and Hazardous Materials***

Alternative 2 proposes development that is similar in nature to that anticipated under the General Plan Update. Similar to the General Plan Update, hazardous materials generation, storage and clean-up are heavily regulated by federal, State and local regulations that would apply to both Alternative 2 and the General Plan Update. For this reason, hazardous materials impacts under Alternative 2 are considered to be similar to those of the General Plan Update.

### ***Hydrology and Water Quality***

Under Alternative 2, development would convert less open space land to urban uses than the General Plan Update. As with the General Plan Update, the creation of impervious surfaces associated with urbanization would increase the amount of runoff, which could affect water quality. An increase in impervious surfaces could also reduce groundwater recharge potential. However, because land conversion would be less than the General Plan Update, fewer impervious surfaces would be developed. Overall, hydrologic and water quality impacts under Alternative 2 are considered to be similar to those of the General Plan Update.

Alternative 2 also proposes development in areas that are within the 100-year floodplain in a similar manner to the General Plan Update. Similarly, levees are regulated at the State level with maintenance activities delegated to local reclamation districts. The County has no jurisdiction and is limited in terms of alternatives to mitigate for the identified flood risks. Consequently, flood risk impacts are also considered to be significant and unavoidable.

### ***Land Use and Planning***

Alternative 2 would result in similar types of development. However, implementation of this alternative could intensify development within City planning areas and would convert less open space areas within the County to developed uses. Consequently, neither the General Plan Update nor Alternative 2 would divide existing communities and they would both be subject to the same policy direction with regards to ensuring land use compatibility with surrounding uses.

### ***Mineral Resources***

Alternative 2 would result in slightly less development than the General Plan Update on lands similar to those affected by the General Plan Update. Similar to the General Plan Update, this alternative would result in similar impacts to mineral, timber, and oil resources.

### ***Noise***

Although Alternative 2 includes a slightly reduced development footprint, development anticipated under this alternative would be similar in nature to that anticipated under the General Plan Update. Similar to the General Plan Update, significant noise level increases (3 dBA Ldn or greater) associated with increased traffic and railroad operations would likely occur adjacent to existing noise sensitive land uses during the 30-year planning horizon. Overall, implementation of Alternative 2 would still result in a significant and unavoidable impact because growth could still contribute additional sources of noise and vibration that would exceed local standards.

### ***Public Services, Facilities and Recreation***

Alternative 2 would be expected to result in lower levels of development within the County. However, anticipated levels of development would still require the expansion of a variety of local County services (including police, fire, water supply, parks, etc.) in addition to those provided by several local school districts. Overall, public service and utility impacts are also anticipated to be similar.

Similar to any other development in areas of new growth, the construction of future public service and utility facilities could result in the permanent conversion of agricultural and open space 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. As with the General Plan Update, mechanisms to reduce such impacts to less than significant may not exist. Due to this uncertainty, potential impacts resulting from construction and/or expansion of public service and utility facilities are also considered significant and unavoidable at this time.

### ***Transportation/Traffic***

Alternative 2 would result in the intensification of similar types of development within the planning areas of existing cities. Overall, total daily vehicle trips generated under this alternative would be similar to those anticipated with the General Plan Update (see Table 7-3). However, Alternative 2 would focus growth and consequently more traffic within existing urban areas, which could see reductions in their local roadway levels of service. Implementation of Alternative 2 would still result in significant and unavoidable traffic impacts.

## **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).

### **Ability to Meet Project Objectives**

A summary of Alternative 3's ability to meet each of the project objectives is provided in Table 7-2. Under Alternative 3, the County would adopt the updated General Plan with slightly higher population growth assumptions that would focus growth within existing communities and hamlet areas. Because this alternative would include adoption of a comprehensive General Plan that includes updated goals and policies to help incorporate current planning, environmental, and regulatory trends and objectives, Alternative 3 would meet all objectives related to the protection of existing open space and agricultural land uses. Additionally, higher levels of anticipated growth and development would help to promote the desired level of reinvestment within existing communities and hamlets. As with all the alternatives, it is assumed that the County would still continue to coordinate and cooperate with other local agencies and organizations on a variety of relevant land management issues regardless of whether the General Plan is updated or not.



## Environmental Impacts of the Alternative

The environmental impacts of the Continued Growth Alternative are summarized in Table 7-3 and described in greater detail below.

### ***Aesthetics***

Under Alternative 3, the County is expected to continue with current development patterns through the 2030 planning horizon, which would result in a slightly higher population level within a development footprint similar to that anticipated under the General Plan Update. Consequently, this alternative has the potential to result in the use or conversion of slightly more open space land within the proposed County than that anticipated to occur with implementation of the General Plan Update.

As with the General Plan Update, Alternative 3 would result in a significant and unavoidable impact because growth would occur over currently undeveloped land. This growth would affect the existing visual character of the County and may result in a slightly greater impact to aesthetic resources due to the larger area that would be developed under this alternative.

Light and glare impacts would also be slightly greater under this alternative due to the increased number of currently undeveloped acres that would be developed with an urban use, such as additional parking lots, building lights, and streetlights.

### ***Agricultural Resources***

Alternative 3 has the potential to result in a slightly greater impact to agricultural resources compared to the General Plan Update. This is because an additional number of acres of land designated as Prime, Unique or Farmland of Statewide Importance have the potential to be converted to urban uses under this alternative compared to the amount of farmland that would be converted to urban uses under the General Plan Update. Similar to the General Plan Update, Alternative 3 would also result in a significant and unavoidable impact, since there would be some conversion of important farmland to urbanized uses under this alternative.

### ***Air Quality***

Under Alternative 3, the County is expected to continue with current development patterns through the 2030 planning horizon, which would result in a slightly higher population level within a development footprint similar to that anticipated under the General Plan Update. Consequently, build-out under this alternative could result in a slightly greater number of overall jobs, dwelling units, and residents than the General Plan Update. These additional dwelling units and other types of development would result in increased levels of both mobile and stationary sources of air quality emissions and toxic air contaminants. Similar to the General Plan Update, development proposed under Alternative 3 would result in a significant and unavoidable air quality impact because growth would also contribute to air quality emissions that would exceed the daily SJVAPCD thresholds for NO<sub>x</sub> and ROG.

### ***Biological Resources***

Development proposed under Alternative 3 would result in similar impacts to biological resources (compared to the General Plan Update) associated with the conversion of open space lands to developed uses. However, under this alternative, a slightly greater amount of land has the potential to be converted to urban uses compared to the same types of land uses that would be converted under the General Plan Update. As with the General Plan Update, this impact is still considered to be significant and unavoidable due to the proposed development on several acres of currently undeveloped land, which would result in the overall reduction of a plant or wildlife species habitat.

### ***Cultural Resources***

Similar to the General Plan Update, development associated with future growth could damage or destroy a variety of previously undiscovered cultural resources during various construction-related activities. However, development proposed under this alternative would affect a slightly larger area and could result in potentially greater impacts to additional cultural resources within new development areas.

### ***Geology and Soils***

Alternative 3 proposes development that is similar in nature to that anticipated under the General Plan Update. Current State and federal regulations require specific engineering and design criteria to minimize impacts related to geologic, soils, and seismic hazards, which would apply to local geologic/soil conditions under each of the alternatives and the General Plan Update. Policies and implementation measures included as part of the General Plan Update incorporate all applicable regulations to minimize these impacts. For this reason, geologic and soils impacts under Alternative 3 are considered similar to those of the General Plan Update.

### ***Hazards and Hazardous Materials***

Alternative 3 proposes development that is similar in nature to that anticipated under the General Plan Update. Development proposed under this alternative would affect a variety of agricultural lands (predominately to the north, east and south) outside the existing County limits. Similar to the General Plan Update, implementation of this alternative would involve a decrease in the use of pesticides, herbicides, and other hazardous materials used for agricultural practices. Although hazards related to agricultural uses would be reduced, potential new commercial and industrial uses may introduce new sources of hazardous materials. However, hazardous materials generation, storage and clean-up are heavily regulated by federal, State and local regulations that would apply to both Alternative 3 and the General Plan Update. For this reason, hazardous materials impacts under Alternative 3 are considered similar to those of the General Plan Update.

### ***Hydrology and Water Quality***

Under Alternative 3, development has the potential to convert greater amounts of open space land to urban uses as those anticipated under the General Plan Update. As with the General Plan Update, the creation of impervious surfaces associated with urbanization would increase the amount of runoff, which could affect water quality. An increase in impervious surfaces could also reduce groundwater recharge potential. For these reasons, hydrologic and water quality impacts under Alternative 3 are considered similar to those of the General Plan Update.

Alternative 3 also proposes development in areas that are within the 100-year floodplain in a similar manner to the General Plan Update. Similarly, levees are regulated at the State level with maintenance activities delegated to local reclamation districts. The County has no jurisdiction and is limited in terms of alternatives to mitigate for these identified flood risks. Consequently, flood risk impacts are also considered to be significant and unavoidable.

### ***Land Use and Planning***

Alternative 3 would result in additional development within the County than that anticipated under the General Plan Update. However, neither the General Plan Update nor Alternative 2 would divide existing communities and they would both be subject to the same policy direction with regards to ensuring land use compatibility with surrounding uses. Overall, this alternative would result in similar impacts to land use issues as those anticipated to occur with implementation of the General Plan Update.

### ***Mineral Resources***

Alternative 3 would result in a slightly larger development footprint than the General Plan Update on lands similar to those affected by the General Plan Update. Overall, this alternative would result in similar impacts to mineral, timber, and oil resources as those anticipated to occur with implementation of the General Plan Update.

### ***Noise***

Alternative 3 includes slightly higher levels of development that would be of a type similar to that anticipated under the General Plan Update. Similar to the General Plan Update, significant noise level increases (3 dBA Ldn or greater) associated with increased traffic and railroad operations would occur adjacent to existing noise sensitive land uses during the 30-year planning horizon (see Table 7-3). Overall, implementation of Alternative 3 would still result in a significant and unavoidable impact because growth would still contribute additional sources of noise and vibration that could exceed local standards.

### ***Public Services, Facilities and Recreation***

Alternative 3 would be expected to result in slightly higher levels of development within the County. This development would require the expansion of a variety of local County services (including police, fire, water supply, parks, etc.) in addition to those provided by several local school districts. Because development proposed under this alternative would be similar to that anticipated under the General Plan Update (although slightly higher), public service and utility impacts are also anticipated to be similar.

Similar to any other development in areas of new growth, the construction of future public service and utility facilities could result in the permanent conversion of agricultural and open space 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. As with the General Plan Update, mechanisms to reduce such impacts to less than significant levels may not exist. Due to this uncertainty, potential impacts resulting from construction and/or expansion of public service and utility facilities are also considered significant and unavoidable at this time.

### ***Transportation/Traffic***

Alternative 3 would result in slightly higher but similar types of development. Overall, total daily vehicle trips generated under this alternative would be greater than the General Plan Update for some roadways. However, Alternative 3 would still result in the same type of significant and unavoidable impacts on vehicular traffic as those identified for the General Plan Update, in that there would be some road segments operating at LOS E or F, and some of the improvements necessary to accommodate each alternative would be outside the County's control and could not be guaranteed solely through the County's actions. Because development proposed under this alternative would be similar to that anticipated under the General Plan Update (although slightly higher), transportation impacts are also anticipated to be similar.

## **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).

### **Ability to Meet Project Objectives**

A summary of Alternative 4's ability to meet each of the project objectives is provided in Table 7-2. Under Alternative 4, the County would adopt the updated General Plan with slightly higher population growth assumptions that would focus growth within existing cities, communities and hamlet areas adjacent to the major transportation corridors in Tulare County, Highways 99 and 65. Because this alternative would include adoption of a comprehensive General Plan that includes updated goals and policies to help incorporate current planning, environmental, and regulatory trends and objectives, Alternative 4 would meet all objectives related to the protection of existing open space and agricultural land uses. The rural character of the county would be preserved since growth would be primarily focused along transportation corridors. Additionally, higher levels of anticipated growth and development and the opportunity to take advantage of highway commercial opportunities would help to promote reinvestment within existing communities and hamlets. As with all the alternatives, it is assumed that the County would still continue to coordinate and cooperate with other local agencies and organizations on a variety of relevant land management issues regardless of whether the General Plan is updated or not.

## Environmental Impacts of the Alternative

The environmental impacts of the Transportation Corridors Alternative are summarized in Table 7-3 and described in greater detail below.

### **Aesthetics**

Alternative 4 would result in similar types of development with a lower buildout population to that anticipated under the General Plan Update. Transportation corridor growth would focus a majority of the County's new growth to cities and unincorporated communities along Highways 99 and 65. This alternative would only allow very minimal development of open space in rural areas of the County. However, development along transportation corridors would develop some open space and agricultural areas and would eliminate views of open space and agricultural landscapes currently found along these highways. Similar to the General Plan Update, Alternative 4 would result in a significant and unavoidable impact, since there would be some level of future development that would affect existing scenic landscapes. Light and glare impacts would also be similar to the General Plan Update.

### **Agricultural Resources**

Data from the Background Report shows that a majority of the areas along Highways 99 and 65 contain a significant amount of important farmland. Consequently, transportation corridor development proposed under Alternative 4 would result in a significant impact to agricultural resources. However, because the growth under this alternative is directed towards the cities and communities along these highways there is less of a possibility of fragmenting farmland throughout the County than could occur under the General Plan Update. Although the impacts to agricultural resources under Alternative 4 would be considered significant and unavoidable, they are considered to be slightly less significant than those agricultural impacts that would occur under the General Plan Update.

### **Air Quality**

Under Alternative 4, similar levels of growth would still occur within the County by 2030. Transportation corridor growth may reduce the overall number of vehicle miles driven; however city and community focused dwelling units and other types of development would still result in similar overall emission levels of both mobile and stationary sources of air quality emissions, toxic air contaminants, and the potential for odor emissions. Consequently, development proposed under Alternative 4 would still result in a significant and unavoidable impact because growth would still contribute to air pollutant emissions that could exceed the daily SJVAPCD thresholds for a variety of air pollutants.

### **Biological Resources**

Development proposed under Alternative 4 would result in similar impacts to biological resources (compared to the General Plan Update) through the conversion of open space lands, primarily cropland, vineyards, and grassland, to developed uses. However, under this alternative,

conversion of land designated as natural or open space would be focused around the cities and communities located along Highways 99 and 65. Although a similar amount of natural or open space lands may be converted, Alternative 4 may result in less habitat fragmentation than the General Plan Update.

### ***Cultural Resources***

Development proposed under this alternative would focus new growth within existing City and community areas along transportation corridors in the County, which could result in similar or greater impacts to historic resources located within existing urbanized areas than the General Plan Update. The intensification of land uses within and adjacent to the existing City limits or community boundaries may result in greater impacts to the design qualities of individual City neighborhoods and historic districts to those anticipated under the General Plan Update.

### ***Geology and Soils***

Alternative 4 proposes development that is similar in nature to that anticipated under the General Plan Update. Current State and federal regulations require specific engineering and design criteria to minimize impacts related to geologic, soils, and seismic hazards, which would apply to local geologic/soil conditions under each of the alternatives and the General Plan Update. Policies and implementation measures included as part of the General Plan Update incorporate all applicable regulations to minimize these impacts. For this reason, geologic and soils impacts under Alternative 4 are considered similar to those of the General Plan Update.

### ***Hazards and Hazardous Materials***

Alternative 4 proposes development that is similar in nature to that anticipated under the General Plan Update. Similar to the General Plan Update, hazardous materials generation, storage and clean-up are heavily regulated by federal, State and local regulations that would apply to both Alternative 4 and the General Plan Update. For this reason, hazardous materials impacts under Alternative 4 are considered to be similar to those of the General Plan Update.

### ***Hydrology and Water Quality***

Under Alternative 4, development could convert more open space land to urban uses than the General Plan Update. As with the General Plan Update, the creation of impervious surfaces associated with urbanization would increase the amount of runoff, which could affect water quality. An increase in impervious surfaces could also reduce groundwater recharge potential. However, because land conversion could be more than the General Plan Update, more impervious surfaces would be developed. Overall, hydrologic and water quality impacts under Alternative 4 are considered to be similar to those of the General Plan Update.

Alternative 4 also proposes development in areas that are within the 100-year floodplain in a similar manner to the General Plan Update. Similarly, levees are regulated at the State level with maintenance activities delegated to local reclamation districts. The County has no jurisdiction and is limited in terms of alternatives to mitigate for the identified flood risks. Consequently, flood risk impacts are also considered to be significant and unavoidable.

### ***Land Use and Planning***

Alternative 4 would result in similar types of development as the General Plan Update. Implementation of this alternative would intensify development within and adjacent to city and community planning areas and would convert similar amounts of open space areas within the County to developed uses. Consequently, neither the General Plan Update nor Alternative 4 would divide existing communities and they would both be subject to the same policy direction with regards to ensuring land use compatibility with surrounding uses. Similar to the General Plan Update, this alternative would result in similar impacts to land use.

### ***Mineral Resources***

Alternative 4 would result in about the same amount of development than the General Plan Update on lands similar to those affected by the General Plan Update. This alternative would result in similar impacts to mineral, timber, and oil resources.

### ***Noise***

Development anticipated under Alternative 4 would be similar in nature to that anticipated under the General Plan Update. Similar to the General Plan Update, significant noise level increases (3 dBA Ldn or greater) associated with increased traffic and railroad operations would likely occur adjacent to existing noise sensitive land uses during the 30-year planning horizon. Overall, implementation of Alternative 4 would still result in a significant and unavoidable impact because growth could still contribute additional sources of noise and vibration that would exceed local standards.

### ***Public Services, Facilities and Recreation***

Alternative 4 would be expected to result in similar levels of development within the County as would occur under the General Plan Update. Development under Alternative 4 would be directed adjacent to major transportation corridors and within or adjacent to existing cities and communities. However, anticipated levels of development would still require the expansion of a variety of local County services (including police, fire, water supply, parks, etc.) in addition to those provided by several local school districts. Overall, public service and utility impacts are also anticipated to be similar to the General Plan Update.

Similar to any other development in areas of new growth, the construction of future public service and utility facilities could result in the permanent conversion of agricultural and open space 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. As with the General Plan Update, mechanisms to reduce such impacts to less than significant may not exist. Due to this uncertainty, potential impacts resulting from construction and/or expansion of public service and utility facilities are also considered significant and unavoidable at this time.

### ***Transportation/Traffic***

Alternative 4 would result in development within the planning areas of existing cities and communities adjacent to Highways 99 and 65. Overall, total daily vehicle trips generated under this alternative would be similar to those anticipated with the General Plan Update (see Table 7-3). However, Alternative 4 would focus growth and consequently more traffic within existing urban areas, which could see reductions in their local roadway levels of service. Implementation of Alternative 4 would still result in significant and unavoidable traffic impacts.

## **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.

### **Ability to Meet Project Objectives**

A summary of Alternative 5's ability to meet each of the project objectives is provided in Table 7-2. Under Alternative 5, mechanisms would be put in place that insure the existing capacity for development already present in the existing General Plan is used efficiently and smartly under General Plan 2030. It would meet all the objectives with respect to protection of existing open space and agricultural resources in a more efficient manner than the other alternatives. It would accommodate the high levels of anticipated growth and development and help to promote a greater interest in reinvestment within existing communities and hamlets

### **Environmental Impacts of the Alternative**

The environmental impacts are likely to be most similar to Alternative 2 with the exception that it would result in greater protection of agricultural resources.

### **Aesthetics**

Alternative 5 would result in similar types of development with a smaller footprint than that anticipated under the General Plan Update. City-centered growth would focus a majority of the County's new growth within existing urban areas and would convert less County open space areas to developed uses. Development of less County open space would result in less impacts to existing County scenic landscapes. However, similar to the General Plan Update, Alternative 5 would still result in a significant and unavoidable impact, since there would be some level of future development that would affect existing scenic landscapes. Light and glare impacts would also be lessened under this alternative. However the resultant impact would also be similar to the General Plan Update.

### **Agricultural Resources**

Confined growth development proposed under Alternative 5 would result in a reduced impact to agricultural resources compared to the General Plan Update. Because of "hard boundaries" limiting the outward growth of cities and communities and other land use controls, a fewer number of acres of land designated as Prime, Unique or Farmland of Statewide Importance would be converted to urban uses under this alternative compared to the amount of important farmland that would be converted to urban uses under the General Plan Update. However, similar to the General Plan Update, Alternative 5 would also result in a significant and unavoidable impact, since there would be some conversion of important farmland to urbanized uses under this alternative.

***Air Quality***

Under Alternative 5, similar levels of growth would still occur within the County by 2030. Confined growth may reduce the overall number of vehicle miles driven; however city focused dwelling units and other types of development would still result in similar overall emission levels of both mobile and stationary sources of air quality emissions, toxic air contaminants, and the potential for odor emissions. Consequently, development proposed under Alternative 5 would still result in a significant and unavoidable impact because growth would still contribute to air pollutant emissions that could exceed the daily SJVAPCD thresholds for a variety of air pollutants.

***Biological Resources***

Development proposed under Alternative 5 would result in similar impacts to biological resources (compared to the General Plan Update) through the conversion of open space lands to developed uses. However, because of the “hard boundaries” utilized under this alternative, a fewer number of acres of land designated as natural or open space would be converted to urban uses compared to the same types of land uses that would be converted under the General Plan Update.

***Cultural Resources***

Development proposed under Alternative 5 would focus new growth within existing City areas, which could result in similar or greater impacts to historic resources located within existing urbanized areas. The intensification of land uses within the existing City limits may result in greater impacts to the design qualities of individual City neighborhoods and historic districts to those anticipated under the General Plan Update.

***Geology and Soils***

Alternative 5 proposes development that is similar in nature to that anticipated under the General Plan Update. Current State and federal regulations require specific engineering and design criteria to minimize impacts related to geologic, soils, and seismic hazards, which would apply to local geologic/soil conditions under each of the alternatives and the General Plan Update. Policies and implementation measures included as part of the General Plan Update incorporate all applicable regulations to minimize these impacts. For this reason, geologic and soils impacts under Alternative 5 are considered similar to those of the General Plan Update.

***Hazards and Hazardous Materials***

Alternative 5 proposes development that is similar in nature to that anticipated under the General Plan Update. Similar to the General Plan Update, hazardous materials generation, storage and clean-up are heavily regulated by federal, State and local regulations that would apply to both Alternative 5 and the General Plan Update. For this reason, hazardous materials impacts under Alternative 5 are considered to be similar to those of the General Plan Update.

### ***Hydrology and Water Quality***

Under Alternative 5, development would convert less open space land to urban uses than the General Plan Update. As with the General Plan Update, the creation of impervious surfaces associated with urbanization would increase the amount of runoff, which could affect water quality. An increase in impervious surfaces could also reduce groundwater recharge potential. However, because land conversion would be less than the General Plan Update, fewer impervious surfaces would be developed. Overall, hydrologic and water quality impacts under Alternative 5 are considered to be similar to those of the General Plan Update.

Alternative 5 also proposes development in areas that are within the 100-year floodplain in a similar manner to the General Plan Update. Similarly, levees are regulated at the State level with maintenance activities delegated to local reclamation districts. The County has no jurisdiction and is limited in terms of alternatives to mitigate for the identified flood risks. Consequently, flood risk impacts are also considered to be significant and unavoidable.

### ***Land Use and Planning***

Alternative 5 would result in similar types of development. However, implementation of this alternative would intensify development within City planning areas and would convert less open space areas within the County to developed uses. Consequently, neither the General Plan Update nor Alternative 5 would divide existing communities and they would both be subject to the same policy direction with regards to ensuring land use compatibility with surrounding uses.

### ***Mineral Resources***

Alternative 5 would result in slightly less development than the General Plan Update on lands similar to those affected by the General Plan Update. Similar to the General Plan Update, this alternative would result in similar impacts to mineral, timber, and oil resources.

### ***Noise***

Although Alternative 5 includes a slightly reduced development footprint, development anticipated under this alternative would be similar in nature to that anticipated under the General Plan Update. Similar to the General Plan Update, significant noise level increases (3 dBA Ldn or greater) associated with increased traffic and railroad operations would likely occur adjacent to existing noise sensitive land uses during the 30-year planning horizon. Overall, implementation of Alternative 5 would still result in a significant and unavoidable impact because growth could still contribute additional sources of noise and vibration that would exceed local standards.

### ***Public Services, Facilities and Recreation***

Alternative 5 would be expected to result in lower levels of development within the County. However, anticipated levels of development would still require the expansion of a variety of local County services (including police, fire, water supply, parks, etc.) in addition to those provided by several local school districts. Overall, public service and utility impacts are also anticipated to be similar.

Similar to any other development in areas of new growth, the construction of future public service and utility facilities could result in the permanent conversion of agricultural and open space 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. As with the General Plan Update, mechanisms to reduce such impacts to less than significant may not exist. Due to this uncertainty, potential impacts resulting from construction and/or expansion of public service and utility facilities are also considered significant and unavoidable at this time.

### ***Transportation/Traffic***

Alternative 5 would result in the intensification of similar types of development within the planning areas of existing cities. Overall, total daily vehicle trips generated under this alternative would be similar to those anticipated with the General Plan Update (see Table 7-3). However, Alternative 5 would focus growth and consequently more traffic within existing urban areas, which could see reductions in their local roadway levels of service. Implementation of Alternative 5 would still result in significant and unavoidable traffic impacts.

## **7.4 Environmentally Superior Alternative**

As previously described, Table 7-3 provides a summary of the anticipated impacts resulting from implementation of the alternatives compared to those identified for the General Plan Update. As summarized in the table, the environmentally superior alternative for this project would be Alternative 5 (Confined Growth Alternative). Other than the No Project Alternative, this is the only alternative that would reduce the severity of most environmental impacts associated with the General Plan Update. As described above, build-out of Alternative 5 would convert less open space and prime agricultural farmland than the General Plan Update. This alternative also has the potential to result in fewer impacts to scenic resources. However, as shown in Table 7-3, implementation of Alternative 5 would still result in significant and unavoidable impacts to biological, agricultural, air quality, and traffic resources.

# Chapter 8

## Additional Statutory Considerations





## CHAPTER 8.0

# Additional Statutory Considerations

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## 8.1 Growth Inducing Effects of the General Plan Update

### Introduction

The CEQA *Guidelines* require that an EIR evaluate the growth-inducing impacts of a proposed action (Section 15126.2[d]). A growth-inducing impact is defined by the CEQA Guidelines as:

*[T]he ways in which the General Plan Update could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth .... It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.*

A project can have direct and/or indirect growth-inducement potential. Direct growth inducement would result if a project involved construction of new housing. A project can have indirect growth-inducement potential if it would establish substantial new permanent employment opportunities (e.g., commercial, industrial or governmental enterprises) or if it would involve a substantial construction effort with substantial short-term employment opportunities and indirectly stimulate the need for additional housing and services to support the new employment demand. Similarly, under CEQA, a project would indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on a required public service. An example of this indirect effect would be the expansion of a wastewater treatment plant, which might allow for more development in service areas.

### Potential for Growth-Inducement

The purpose of a general plan is to guide the growth and development of a community. Accordingly, the County's proposed General Plan is premised on a certain amount of growth taking place. Cities within the County, Tulare County, as well as the larger San Joaquin Valley region, have experienced dramatic growth over the past decade and this trend is expected to continue. Consequently, the focus of the County's General Plan is to provide a framework in which the growth can be managed in order to best suit the needs of the County and its various community plan areas.

The U.S. Census Bureau, California Department of Finance (DOF), and the Tulare County Association of Governments (TCAG) develop population projections for the County. Projected populations by both the DOF and the U.S. Census do not provide long term forecasts to 2025; however, TCAG does provide these forecasts.

TCAG is both the Metropolitan Planning Organization (MPO) and the Regional Transportation Planning Agency (RTPA) for the County. As a MPO, it is charged by the federal government to research and prepare plans for transportation, growth management, hazardous waste management, and air quality. Additionally, one of the many State mandated responsibilities is the development of demographic projections, which are discussed below.

The DOF provides population estimates for cities and counties throughout California. According to DOF population estimates, between 1980 and 1990, Tulare County, including its incorporated cities, grew by 18.9 percent from 250,800 to 309,200 persons. From 1990 to 2000 the population grew 1.8 percent per year (5,846 persons). Overall, the County experienced a population increase of 36.8 percent since 1980.

Overall, growth in the incorporated areas of Tulare County was higher during the 1980s compared with the 1990s, a trend that was seen throughout California. The unincorporated areas of the County experienced a fluctuation in population during the same time, rising at the onset of each decade. More people live in incorporated cities than in the unincorporated area of the County. The unincorporated area of the County is home to approximately 37.1 percent of the County's total population. Major growth has occurred in the largest cities in the county over the past 24 years. Porterville, located southeast of Visalia, has seen an increase of 21,700 persons, 50.3 percent since 1980. Similarly, Tulare gained an additional 24,650 residents for a 51.7 percent increase in population. Finally, Visalia added 50,000 more residents to its 1980 population of 52,700 for a 48.7 percent gain to 102,200 persons.

For the unincorporated areas of the county, growth has been erratic, jumping at the beginning of the 1980s and 1990s before tapering off in the latter part of each decade. However, the unincorporated areas of the county have increased by only 26,675 persons, or 18.1 percent since 1980.

According to TCAG projections, the County's population is projected to exceed 621,549 by 2030. As shown in Table 8-1, TCAG projects population growth within the entire County to grow by 254,000 people by 2030. These projections distribute population growth between the various cities and the unincorporated area of the County. As shown in the table, the cities would accommodate an estimated 75.8 percent of the overall growth by 2030.



**TABLE 8-1  
TCAG POPULATION PROJECTIONS 2003 TO 2030**

<b>Jurisdiction</b>	<b>2003</b>	<b>2030</b>	<b>Net Growth</b>	<b>Percent</b>
Cities	262,862	468,096	205,234	75.8%
County	104,578	153,453	48,875	24.2%
<b>County Total:</b>	<b>367,440</b>	<b>621,549</b>	<b>254,109</b>	<b>100%</b>

Source: Tulare County Association of Governments (2006)

## Direct Impacts

As discussed in this Draft EIR, during the next 30 years, implementation of the General Plan Update would induce some of the population and housing growth in the County, in part because it increases intensity of uses and densities in both the cities and communities that comprise the County. As identified in Chapters 3.5 “Land Use” and 4.3 “Environmental Resource Management”, the General Plan Update provides goals and policies to maintain the character of the County and minimize the environmental impacts of the anticipated growth. Proposed policies are intended to be obtainable and as such, take into account market conditions and realistic growth assumptions that are consistent with the land use principles/concepts of the region and discourage undesirable development in areas with sensitive natural resources, critical habitats and important scenic resources. In addition, the General Plan Update encourages the orderly growth of new development to occur in areas adjacent to existing urban uses and requires developers to provide service extensions.

As a result, while the General Plan Update would result in an increase of growth locally, the policies included in the General Plan Update reduce the potential for negative impacts associated with directly induced growth. However, because this growth resulting from the General Plan Update would still significantly affect existing resource conditions (including air quality, open space and agricultural land, visual resources, etc.) the growth inducing impacts of the General Plan Update are also considered significant and unavoidable.

## Indirect Impacts

While the General Plan Update does allow additional growth, it also includes specific policies that focus growth within existing communities and hamlet areas. The General Plan does this to focus new residential growth within existing areas that currently provide a mixture of housing, shopping and employment opportunities so that as the number of residents increase they do not pressure adjacent rural areas to provide new commercial and employment opportunities. Also, as previously stated in Chapter 5.3 “Public Facilities and Services”, commitments to provide water and sewer infrastructure would be limited to areas within the areas currently served by existing service providers. As result, the Draft General Plan policies would strive to contain growth

within existing community areas. However, the County's proposed policies would not preclude other surrounding jurisdictions from developing areas adjacent to the County or prevent existing cities from expanding their sphere of influences. Consequently, indirect growth inducing impacts of the General Plan Update are also considered significant and unavoidable.

## **8.2 Summary of Cumulative Impacts**

### **Introduction**

CEQA Guidelines Section 15130(a) requires that an EIR discuss the cumulative impacts of a project when the project's incremental effect is "cumulatively considerable," meaning that the project's incremental effects are considerable when viewed in connection with the effects of past, current, and probable future projects. A consideration of actions included as part of a cumulative impact scenario can vary by geographic extent, time frame, and scale. They are defined according to environmental resource issue and the specific significance level associated with potential impacts. CEQA Guidelines 15130(b) requires that discussions of cumulative impacts reflect the severity of the impacts and their likelihood of occurrence. The CEQA Guidelines note that the cumulative impacts discussion does not need to provide as much detail as is provided in the analysis of project-only impacts and should be guided by the standards of practicality and reasonableness and focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impacts.

In addition, CEQA Guidelines Section 15130(b) identifies that the following three elements are necessary for an adequate cumulative analysis:

A list of past, present, and reasonably anticipated future projects producing related or cumulative impacts, including those projects outside the control of the Lead Agency (i.e., the list approach); or a summary of projections contained in an adopted general plan or related planning document designed to evaluate regional or area-wide conditions (i.e., the plan approach). Any such planning document shall be referenced and made available to the public at a location specified by the Lead Agency.

A summary of expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available.

A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.

### **Cumulative Setting**

For the purposes of this EIR, the cumulative setting is based on a two-fold approach. For some impact issue areas (i.e., air quality, traffic, and water supply), the cumulative setting is defined by specific regional boundaries (air basin, regional roadway network, etc.) or projected regional or area-wide conditions, contributing to cumulative impacts. For the remaining impact issue areas, the cumulative setting is based on development anticipated within the County.

The overall assumption of the analysis in this EIR is that the majority (75%) of the net new growth will occur within UDBs as opposed to within the unincorporated areas, which will account for a much smaller (25%) portion of the net new growth. This distribution of growth is shown in Table 2-7 of Chapter 2 of this EIR. As part of the analysis, the following General Plan Amendments (GPAs) and General Plan Initiatives (GPIs) are taken into consideration for the cumulative impacts discussion and analysis:

- **Goshen**: Status – GPI allowed to proceed. On March 29, 2006, the Tulare County Resource Management Agency convened a meeting with 30 property owners, land developers, services providers, and their representatives, having a development interest in Goshen. The purpose of the meeting was to “...discuss the potential for joint cooperation amongst the various developers and property owners to achieve a well planned community and to foster the spirit of cooperation” towards completion of the Community Plan update and EIR. The proposed planning study area boundary would add approximately 3,277 acres to the existing Goshen UDB, as opposed to the Draft Goshen Community Plan UDB which adds 422 acres using a needs based analysis patterned on historical growth trends extrapolated 20 years into the future. The revised boundary incorporates the GPI applicants’ lands, the hamlet of West Goshen, and additional land to be held in reserve for future growth. The applicant’s land excluding Mangano’s “Westfield” totals 661 acres. The area is bounded in the north by Avenues 320 and 312, taking in West Goshen; in the west by Roads 52 and 56; in the south by State Hwy. 198; and in the east by Camp Road and Road 76 at the City of Visalia Sphere of Influence. This ‘study’ area will be the focus of technical analysis that will set a proposed Urban Development Boundary in which build out will be contemplated for preparation of the new Goshen Community Plan, EIR and Infrastructure Master Plan. Since the study area involves lands not owned or controlled by the developers, the MOU agreement to be negotiated will contain a provision to reimburse the developers for expenses incurred when development authorized by the new plan occurs.
- **Westfield**: Status – GPI allowed to proceed. A 640 acre proposed development in Goshen. Mangano Homes agreed to contribute a fair share of the costs of the Goshen Community Plan update and EIR, and was also permitted to prepare and file a General Plan amendment separate from the other Goshen applicants due to foreseeable litigation.
- **Yokhol Ranch**: Status – GPI allowed to proceed in February 2007. On September 13, 2005, the Tulare County Resource Management Agency received a request from the J.G. Boswell Company and the Eastlake Company, to initiate the formal process to amend the Tulare County General Plan, including the Foothill Growth Management Plan (FGMP), to change the land use designation for the 36,000 acre Yokohl Ranch property from ‘Extensive Agriculture’ to ‘Planned Community Area’. According to the applicants, the proposed amendment will result in master planned communities that balance the needs for housing, neighborhood commercial uses, recreation, ranching operations and open space. As such, 40% (14,400 acres) of the ranch is proposed for development with 60%

(21,600 acres) of the property to remain as untouched open space and ranchlands. The developed portions of the ranch will include the Village of Yokohl Ranch, an active adult community accessible to Yokohl Drive; and a Ranch Resort Lodge Enclave located in the northern reaches of the site, approximately four miles south of Lake Kaweah.

- **Rancho Sierra**: Status – GPA approved. The project site consists of 114.6 acres. Currently the site is an existing golf course facility located on both sides of Liberty Avenue (Avenue 264), east of Road 124, south of the city of Visalia. There are 30 existing homes within the golf course area but not a part of this application. The intended use is to subdivide the site into 175 single family residential lots. The project has been approved.
- **Earlimart**: Status – GPI allowed to proceed January 2006. On September 9, 2005, the Tulare County Resource Management Agency received a request from the Earlimart Development Group, a land development partnership comprised of four business owners with interests in 1,491 acres of private property located both within and outside of the existing Earlimart Urban Development Boundary. The Group is seeking authorization to file an amendment to the Tulare County General Plan, specifically the Earlimart Community Plan (1988). In addition to an updated Community Plan, an Infrastructure Master Plan and Program EIR for the update will also be prepared. The applicants proposed that a 7,680 acre planning study area be established. The area is bounded in the north by Avenue 68 (Deer Creek as a natural boundary), in the south by Avenue 36 (White River as a natural boundary), in the east by Road 144, and in the west by Road 120. This ‘study’ area will be the focus of technical analysis that will set the proposed Community Plan boundary for which the new Community Plan, EIR and Infrastructure Master Plan will be prepared. Since the study area involves lands not owned or controlled by the Development Group, the MoU agreement to be negotiated will contain a provision to reimburse the Development Group for expenses when development authorized by the new plan occurs. The Earlimart Development Group has indicated that they have contracts with the consulting firms of Hogle-Ireland, Inc., Provost & Pritchard Engineering Group, Inc. and TPG Consulting or other environmental consulting firm, to prepare the General Plan amendment. However, it is important that preparation of the EIR be managed by the County as Lead Agency for the project.

The following section evaluates the potential for the project to contribute significantly to cumulative impacts in the areas of aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, and traffic and transportation issues.

## Cumulative Impacts

### Cumulative Impacts Related to Aesthetics

As noted previously (see Chapter 4.2, “Scenic Landscapes”), growth associated with implementation of the General Plan Update along with development within UDBs would result in changes to the visual character of the County from a more agricultural/rural setting to one that is more characterized

by suburban or urban uses (i.e., streets, homes, and neighborhood shopping centers), with increased light and glare sources. As more fully described in Chapter 4.2 “Scenic Landscapes” despite the proposed General Plan’s policies and actions, in conjunction with adopted State and County regulations to enhance the County’s current community character and preserve open space, development permitted under the General Plan Update would result in a significant impact to the existing visual identity and character of the County due to the amount of growth allowed.

Similarly, development associated with the anticipated regional growth would result in a substantial change to the visual character of the surrounding area of the County. Continual urbanization of existing agriculture and open space land has the potential to permanently alter the character of the area. State and local regulations, such as the State Scenic Highway guidelines mitigate some potential impacts along scenic corridors by preserving views and open space land. However, the General Plan Update combined with the overall growth trends in the surrounding counties and the cities that comprise Tulare County would contribute considerably to cumulative aesthetic impacts (including additional sources of light and glare) which would transform the region from an agricultural/rural character to a more suburban setting and thus, would result in a cumulative significant and unavoidable aesthetic impact.

### **Cumulative Impacts Related to Agricultural Resources**

As noted previously (see Chapter 3.4, “Agriculture”), growth associated with implementation of the General Plan Update along with development within UDBs would result in a loss of some existing agricultural lands within the County. While the General Plan Update includes policies to minimize this impact, there would still be a project level significant and unavoidable impact. The loss of agricultural land within the County as a result of urban development is part of an overall trend within the San Joaquin Valley and the County will continue to face development pressure in the foreseeable future. As more fully described in Chapter 3.3 “Agriculture”, the General Plan Update does include several policies stating that the County will work at a regional level to control the conversion of agricultural uses. However, since the County is projected to continue to urbanize, the loss of agricultural lands as a result of the General Plan Update would contribute considerably to a significant and unavoidable cumulative impact to agricultural resources.

### **Cumulative Impacts Related to Air Quality**

Cumulative air quality impacts were considered in terms of the various land uses proposed under the General Plan Update (including residential, commercial, agricultural, etc.) and the traffic projections generated by a cumulative traffic model. The traffic model considered growth under the General Plan Update in conjunction with projected regional growth for the TCAG jurisdictional boundaries. As more fully described in Chapter 4.4 “Air Quality and Global Climate Change”, due to the existing and projected air quality issues in the San Joaquin Valley Air Basin, the General Plan Update would contribute considerably to a significant and unavoidable cumulative air quality impact.

## **Cumulative Impacts Related to Biological Resources**

Development associated with implementation of the General Plan Update would contribute to the ongoing loss of natural and agricultural lands in the San Joaquin Valley, which currently provide habitat for a variety of federal and State listed special status species, as well as other wildlife and plant resources. As noted previously (see Chapter 4.3, “Environmental Resources Management”), growth associated with implementation of the General Plan Update along with development within UDBs would result in the conversion of some existing habitats to urban uses. As more fully described in Chapter 4.3 “Environmental Resources Management”, policies in the proposed General Plan and regional, State and federal regulations are available to mitigate impacts to biological resources at a project specific level. However, since areas within the County and the larger region are projected to continue to urbanize at a steady rate, the loss of open space areas and habitats as a result of the General Plan Update would contribute considerably to a significant and unavoidable cumulative impact to biological resources.

## **Cumulative Impacts Related to Cultural Resources**

While grading and other construction activities have the potential to impact cultural resources in developing County areas, Draft General Plan policies identified in the EIR and compliance with federal and State regulations reduce the project-specific impact to a less-than-significant level. Cultural resources such as historical, archaeological and paleontological resources, in the through out the County and the larger San Joaquin Valley region could be cumulatively impacted by future development and related construction activities in the region.

As stated in Chapter 4.3, “Environmental Resources Management”, the County will continue to ensure that a variety of preservation efforts are implemented (including the new policies ERM-6.12 “Discovery of Archaeological Resources” and ERM-6.13 “Discovery of Human Remains”) for all future development projects to minimize impacts to archaeological resources (as defined in Section 15064.5), paleontological resources, 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. Consequently, the General Plan Update has the potential to contribute considerably to a significant and unavoidable cumulative impact to these historic resources. However, similar considerations do not apply to unique archaeological resources or paleontological 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 reduce the potential cumulative impact to a less-than-significant level with respect to human remains and archaeological resources that do not qualify as historical resources.

A variety of historic resources (including above ground buildings, etc.) are also present within the County and surrounding area. Because the General Plan Update and surrounding development could significantly affect these resources, for which no mitigation may be available to replace the resource, the General Plan Update has the potential to contribute considerably to a significant and unavoidable cumulative impact to historic resources.

### **Cumulative Impacts Related to Geology and Soils**

Regional development would increase the number of people and structures subject to geologic- and soils-related risks. The policies contained in the Draft General Plan, along with compliance with federal, State and local regulations addressing building construction, run-off and erosion, reduce the potential project-level impact associated with geology and soils to a less-than-significant level. Development in other communities surrounding the County would also be required to comply with federal, State and local regulations that are designed to protect increases in people and structures from hazards related to such issues as earthquakes, landslides and soil erosion. As a result, conformance with adopted California building codes, and other measures to protect people and structures from geologic hazards, would reduce this impact to a less-than-significant level. The project's incremental contribution to these impacts will be less than cumulatively considerable.

### **Cumulative Impacts to Hazards and Hazardous Materials**

As discussed in the Hazardous Materials section of Chapter 4.5 "Health and Safety", the increase in local population and employment under the General Plan Update would result in the increased use of hazardous household, commercial and industrial materials. In addition, there would be an increase in population that would be exposed to potential wildland fires and hazards associated with aircraft operation. Potential project-level impacts associated with hazards and hazardous materials would be reduced to a less-than-significant level due to local, regional, State and federal regulations, such as those that control the production, use and transportation of hazardous materials and waste and control the location of incompatible land uses in airport hazard area. Similarly, as growth occurs in throughout the San Joaquin Valley region, additional people would be exposed risks associated with hazardous materials, wastes, wildland fires and airport operations. However, County, regional, State and federal regulations would apply to development countywide, thereby reducing the potential for cumulative impacts associated with hazards and hazardous materials to a less-than-significant level. The project's incremental contribution to these impacts will be less than cumulatively considerable.

### **Cumulative Impacts to Hydrology and Water Quality**

As development proceeds within the County's planning boundary (primarily within UDBs with a smaller portion in unincorporated areas), additional population would also be exposed to the risk of flooding and increase the amount of impervious surfaces which could affect local hydrologic resources. As mentioned in Chapter 5.3 "Public Facilities and Services", existing regulations and Draft General Plan policies would reduce the risk to a less-than-significant level. However, new development within Tulare County may locate additional population and structures within areas

subject to flooding. Regional development would also increase the amount of impervious surfaces and result in increased impacts to water quality. Although, development would also be required to comply with regional, State and federal regulations designed to address flooding issues, the General Plan Update has the potential to contribute considerably to a significant and unavoidable cumulative flooding impact.

### **Cumulative Impacts to Land Use and Planning**

As the primary planning document for the County, the General Plan Update provides direction for growth and development within the County as well goals and policies that direct the County to coordinate such growth and development so that it does not conflict with other applicable plans and regulations. Therefore, the General Plan Update would have a less-than-significant impact in relation to most potential conflicts with other applicable plans, policies and regulations.

### **Cumulative Impacts to Mineral Resources**

As discussed in Chapter 4.3 “Environmental Resources Management”, the Draft General Plan includes specific policies to avoid significant impacts to important mineral, timber, and oil/gas resources in the County. These policies are in compliance with State laws that require local jurisdictions to take into consideration the continued availability of important natural resources in land use decisions. As a result, the General Plan Update would not add considerably to any significant cumulative impact on mineral, timber, and oil resources in Tulare County or the larger San Joaquin Valley region.

### **Cumulative Impacts to Noise**

Traffic-related cumulative noise impacts are considered as part of the noise analysis provided in Chapter 4.5 “Health and Safety” since the future traffic projections used for the noise analysis were generated by a traffic model that considered growth under the Draft General Plan in conjunction with the projected regional growth for the TCAG planning area. As discussed in detail in the Noise section of Chapter 4.5 “Health and Safety” future noise level increases related to increases in traffic associated with new or improved roadways facilitated by the General Plan Update would result in an overall significant and unavoidable noise impact at the project-level and cumulative level.

### **Cumulative Impacts to Public Facilities and Services**

The following provides a cumulative analysis broken down by each category of service or utility.

#### ***Solid Waste***

Population growth within Tulare County and the larger San Joaquin Valley region would contribute to the need for adequate solid waste disposal facilities. It is assumed that existing waste disposal 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. However, because of the uncertain availability of where and what these future waste disposal options may be by 2030, this impact remains significant and unavoidable at the project-level and cumulative level.



### ***Fire Protection and Emergency Medical Services***

Future regional growth would result in increased demand for fire services throughout the County and the greater San Joaquin Valley. As discussed in Chapter 5.3 “Public Facilities and Services”, the County will implement a variety of policies designed to address the adequate provision of a variety of public services as part of the General Plan Update. Facilities needed to service the proposed General Plan would also be adequate to meet the demand generated by growth occurring within each fire department’s service area. Therefore, the project would not contribute considerably to a significant cumulative impact associated with fire protection services.

### ***Law Enforcement Service***

Future regional growth would result in a need for expanded law enforcement service throughout Tulare County and the larger San Joaquin Valley region. As discussed in Chapter 5.3 “Public Facilities and Services”, the County will implement a variety of policies designed to address the adequate provision of a variety of public services as part of the General Plan Update. The analysis contained in Chapter 5.3 for the General Plan Update took into consideration the potential growth within the area that would be provided law enforcement service by the County and no significant impact was identified in regards to the construction of new and expanded facilities. Therefore, the project would not contribute considerably to a significant cumulative impact associated with law enforcement services.

### ***Schools***

Future regional growth would result in increased demand for schools throughout the County and the greater San Joaquin Valley region. For some of the County various school districts, growth within the County would be the primary source of demand for additional school facilities. As with the analysis for the General Plan Update, it is unknown exactly where these school facilities would occur to support the cumulative increase in population resulting from growth within and surrounding the County. As specific school facility expansion or improvement projects are identified, additional project-specific, second-tier environmental analysis would be completed. Additionally, the payment of school impacts fees (pursuant to SB 50), is deemed as a matter of law to help mitigate these potential impacts to school facilities. Therefore, the General Plan Update would not contribute considerably to a significant cumulative impact associated with schools.

### ***Water Supply and Delivery***

Future population and industry growth in Tulare County and the greater San Joaquin Valley region would generate an additional demand for water. A portion of this growth would be dependent on the groundwater basin for its primary water source. Most new development throughout the County would be subject to SB 610 and SB 221, which require adequate water supplies be identified prior to approval of the project. As a result of these existing regulations, there would not be a cumulative impact associated with water supplies for developments that trigger SB 610 or SB 221 analysis (based on number of units, land area, etc.). Additionally, the General Plan Update includes several policies, which are intended to clarify the process by which the County will work with local service

providers to address the phasing of future development and the availability of an adequate water supply. These policies would apply to all projects, including those that do not trigger SB 610 or SB 221 analysis. 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. Consequently, the General Plan Update would contribute considerably to a significant and unavoidable cumulative impact to water supply and availability.

Future regional growth would result in a need for expanded water infrastructure throughout the County (focused within the UDBs). However, only growth within the water service provider's service areas would result in the need for additional water facilities to serve future population growth, resulting in additional environmental impacts. As previously described in the "Water Supply" section of Chapter 5.3, the General Plan Update includes several policies and implementation measures designed to address a variety of environmental impacts including the loss of agriculture/open space, the premature conversion of agricultural lands, noise, light, and glare impacts associated with new development (including infrastructure facilities). However, even with implementation of the above mentioned policies and implementation measure, the construction and/or operation of this new infrastructure may contribute considerably to a cumulatively significant environmental impact (i.e., biological resource, noise, aesthetic, etc.).

### **Wastewater**

Future regional growth would result in increased demand for wastewater services throughout Tulare County and the greater San Joaquin Valley region. Similar to the development of new wastewater infrastructure, the General Plan Update includes several policies and implementation measures designed to address a variety of environmental impacts including the loss of agriculture/open space, the premature conversion of agricultural lands, noise, light, and glare impacts associated with new development (including infrastructure facilities). However, even with implementation of the above mentioned policies and implementation measure, the construction and/or operation of this new infrastructure may contribute considerably to a cumulatively significant environmental impact (i.e., biological resource, noise, aesthetic, etc.).

### **Stormwater**

As development proceeds within the County and the greater San Joaquin Valley region, impervious surfaces would increase, as would the amount of pollutants in runoff, thereby increasing stormwater drainage rates and potentially impacting surface and groundwater quality. Overall, project-level water quality impacts to water resources would be reduced to a less-than-significant level by implementing Best Management Practices (BMPs) in accordance with the NDPS and other applicable regulations, as well as implementation of the water quality policies contained in the General Plan Update. New development within the County would also result in an increase in runoff. Regional development would also be required to comply with regional, State and federal regulations addressing stormwater runoff and water quality, as it currently occurs today.

Future regional growth would result in increased demand for additional stormwater drainage infrastructure throughout the County and the larger region. However, only growth within the County would result in the need for the various service providers to construct additional stormwater drainage infrastructure, resulting in additional environmental impacts. Similar to the development of new water infrastructure, the General Plan Update includes several policies and implementation measures designed to address a variety of environmental impacts including the loss of agriculture/open space, the premature conversion of agricultural lands, noise, light, and glare impacts associated with new development (including infrastructure facilities). However, even with implementation of the above mentioned policies and implementation measure, the construction and/or operation of this new infrastructure may contribute considerably to a cumulatively significant environmental impact (i.e., biological resource, noise, aesthetic, etc.).

### **Cumulative Impacts to Traffic and Transportation**

Cumulative traffic and transportation impacts of the General Plan Update are more fully described in Chapter 5.2 “Transportation and Circulation” of this Draft EIR. Chapter 5.2 describes how the transportation analysis of the General Plan Update is inherently cumulative in nature, in that the implementation of the General Plan Update would take place over many years and would occur in conjunction with other growth and development throughout the region.

As with the impacts identified in Chapter 5.2, the physical improvements identified in the General Plan Update would require cooperation and funding from a variety of entities outside the County, so implementation of the improvements cannot be guaranteed solely through the County’s actions. Thus, for the same reasons as presented in Impact TC-1, these cumulative effects are considered significant and unavoidable. The project’s incremental contribution to these impacts will be cumulatively considerable.

## **8.3 Significant Unavoidable Adverse Impacts which could not be avoided if the Project was Implemented**

Public Resources Code section 21100(b) (2) and CEQA Guidelines section 15126.2(b) require that any significant and unavoidable effect on the environment must be identified. In addition, CEQA Guidelines 15093(a) allows the decision-making agency to determine if the benefits of a General Plan Update outweigh the unavoidable adverse environmental impacts of implementing the project. The County can approve a project with unavoidable adverse impacts if it prepares and adopts a “Statement of Overriding Considerations” setting forth the specific reasons for making such a judgment. A list of unavoidable adverse impacts identified in this EIR is provided below. For each of the unavoidable adverse impacts, the County must prepare and adopt a Statement of Overriding Considerations if the County approves the project.

## Unavoidable Adverse Impacts

The Executive Summary (Table ES-1) and Chapter 7.0 “Alternatives to the General Plan Update” (Table 7-3) provide detailed summary tables that identify the General Plan Update’s environmental impacts, proposed mitigation measures, and the level of impact significance after mitigation. This section lists the impacts (by environmental resource topic) which are considered significant after all mitigation is applied. These impacts include the following:

### Aesthetics

As noted previously (see Chapter 4.2, “Scenic Landscapes”), growth associated with implementation of the General Plan Update along with development within UDBs would result in changes to the visual character of the County from a more agricultural/rural setting to one that is more characterized by suburban or urban uses (i.e., streets, homes, and neighborhood shopping centers), with increased light and glare sources. As a result, the following aesthetic impacts are considered significant and unavoidable:

- SL-1: The General Plan Update would substantially degrade the existing visual character or quality in areas of the County.
- 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.
- 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.
- Contribute to a cumulative significant and unavoidable aesthetic impact.

### Agricultural Resources

With the implementation of the General Plan Update there would be a loss of the existing agricultural lands within the County. While the General Plan Update includes policies to minimize this impact, the following agricultural resource impacts are considered significant and unavoidable:

- AG-1: The General Plan Update could result in the substantial conversion of important farmland to non-agricultural uses.
- 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.
- Contribute to a cumulative significant and unavoidable agricultural resource impact.

## Air Quality

Construction activities associated with individual development projects in accordance with the General Plan Update would exceed local air quality district significance thresholds. Operation of future projects would also contribute to exceedance of thresholds. While the General Plan Update includes policies to minimize this impact, the following air quality impacts are considered significant and unavoidable:

- 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.
- AQ-3: The General Plan Update would expose sensitive receptors to substantial pollutant concentrations.
- 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 CO<sub>2</sub> emissions from on-road vehicles and methane emissions from cattle and cattle manure.
- Contribute to a cumulative significant and unavoidable air quality impact.

## Biological Resources

Development associated with implementation of the General Plan Update would contribute to the ongoing loss of natural and agricultural lands in Tulare County, which currently provide habitat for a variety of federally and State list special status species. While the General Plan Update includes several policies to minimize this impact, the following biological resource impacts are considered significant and unavoidable:

- 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.
- 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.
- 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.

- 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.
- Contribute to a cumulative significant and unavoidable biological resource impact.

## **Cultural Resources**

Development associated with implementation of the General Plan Update could cause a substantial adverse change (i.e., result in the demolition) to a historic resource for which no mitigation may be available to replace the affected resource. While the General Plan Update includes several policies to minimize this impact, the following cultural resource impact is considered significant and unavoidable:

- 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.
- 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.
- Contribute to a cumulative significant and unavoidable impact to historic resources impact.

## **Hazards and Hazardous Materials**

Overall, most impacts associated with hazards and hazardous materials would be reduced to a less-than-significant level due to local, regional, State and federal regulations, such as those that control the production, use and transportation of hazardous materials and waste and control the location of incompatible land uses within an airport hazard area. While the General Plan Update includes policies to minimize a majority of these impacts, the following impacts are considered significant and unavoidable:

- HS-12: The General Plan Update could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

## **Water Resources**

Overall, most impacts associated with hydrology and/or water quality would be reduced to a less-than-significant level. However, while the General Plan Update includes policies to minimize a majority of these impacts, the following impacts are considered significant and unavoidable:

- 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.

- WR-2: The General Plan Update would require new or expanded water supply entitlements.
- 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.
- 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.
- Contribute to a cumulative significant and unavoidable flooding impact.

## Noise

Future noise level increases related to the additional traffic resulting from the General Plan Update would result in significant noise impacts. While the General Plan Update includes several policies developed to minimize this impact, the following noise impacts are considered significant and unavoidable:

- 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.
- HS-14: The General Plan Update will result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.
- 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.
- Contribute to a cumulative significant and unavoidable noise impact.

## Public Services, Facilities and Recreation

Similar to any other development in areas of new growth, the construction of new facilities or the expansion of existing facilities may result in the permanent conversion of existing agricultural lands or other open space areas. While the General Plan Update includes several policies developed to minimize these environmental impacts, the following impacts are considered significant and unavoidable:

- 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.
- 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.
- 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.
- 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.
- 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.
- 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-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-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.

## Transportation and Circulation

Population growth under the General Plan Update would result in significant and unavoidable impacts to several local and regional roadways. While the General Plan Update includes several policies developed to minimize these traffic and transportation impacts, the following impacts are considered significant and unavoidable:

- TC-1: The General Plan Update would result in a substantial increase in vehicular traffic.
- Contribute to a cumulative significant and unavoidable transportation impact.



## 8.4 Significant Irreversible Environmental Changes which would Result from the Proposed Action should it be Implemented

### Introduction

Public Resources Code section 21100(b) (2) and CEQA Guidelines section 15126.2(b), which apply to projects as specified in CEQA Guidelines section 15127 (e.g., the adoption of a plan), require that any significant effect on the environment that would be irreversible if the project is implemented must be identified. A project would generally result in a significant irreversible impact if:

- Primary and secondary impacts would commit future generations to similar uses;
- The project would involve a large commitment of nonrenewable resources; and/or
- The project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the project.

### Significant Irreversible Environmental Changes

Significant and irreversible environmental changes associated with the General Plan Update include the following:

#### Changes in Land Use that Commit Future Generations

Although the majority (75%) of net new growth is planned to occur within UDBs, a smaller portion of growth (25%) is planned for unincorporated areas. Development under the General Plan Update would result in the conversion of some vacant and agricultural/open space lands to industrial, commercial and residential uses, and the intensification of underutilized areas. This development would constitute a long-term commitment to residential, commercial, industrial, parking and other urban uses. The General Plan Update would result in the commitment of land that is not currently designated for development under the County's existing General Plan. This commitment of land would be generally tied to TCAG population growth projections (see Table 8-1 above) that are anticipated to occur both locally and regionally throughout the Sacramento/San Joaquin Valley.

#### Commitment of Resources

Development allowed under the General Plan Update would irreversibly commit nonrenewable resources to the construction and maintenance of buildings, infrastructure and roadways. These non-renewable resources include mining resources such as sand, gravel, steel, lead, copper and other metals. Build-out of the General Plan Update also represents a long-term commitment to

the consumption of fossil fuels, natural gas and gasoline. Increased energy demands would be used for construction, lighting, heating and cooling of residences, and transportation of people within, to and from the County. The General Plan Update includes several policies and implementation measures promoting waste recycling and energy conservation (see Chapter 5.3) which would result in some savings in non-renewable energy supplies. Development would also result in an irreversible commitment of limited, renewable resources such as lumber and water. The General Plan Update also includes several policies and implementation measures promoting resource and water conservation (see Chapter 4.6, “Water Resources” and Chapter 5.3, the section entitled “Energy Facilities”) would result in some savings of these renewable resources.

# Chapter 9

## Report Preparation





# **CHAPTER 9**

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## **Report Preparation**

### **Introduction**

Key staff from the County and the consulting firms that contributed to preparation of the EIR are identified below.

### **Tulare County**

This EIR has been prepared for:

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George Finney, Assistant RMA Director, Planning Branch  
Julia Roberts, County Counsel, Chief Deputy

### **Environmental Science Associates**

Ray Weiss – EIR Project Director, Hazardous Materials, Cultural Resources and Agricultural Resources  
Ellen Morales – EIR Project Manager  
Jessica Mitchell – Aesthetics, Land Use, Public Services and Utilities  
Pete Hudson – Hydrology, Geology and Soils  
Matt Morales – Air Quality and Noise  
Paul Miller – Air Quality and Noise  
Sara Lee – Biological Resources  
Brad Allen – Geographic Information Services  
Tom Wyatt – Graphics  
John Patrus – Word Processing and Production

### **Omni Means**

Gary Mills – Transportation and Circulation  
Mike Winton – Water, Wastewater and Storm Drainage



# Chapter 10

## References







# CHAPTER 10

## References

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### Chapter 2. Project Description

California Department of Finance. 2004. *City/County Population and Housing Estimates*.

California Department of Finance. 2007. *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2001-2007, with 2000 Benchmark*.

Tulare County Association of Governments. 2003, Tulare County Data Book.

### Chapter 4. Environment

#### Section 4.4 Air Quality and Global Climate Change

California Air Resources Board (CARB), 2007a. *Draft List of Early Action Measures To Reduce Greenhouse Gas Emissions In California Recommended For Board Consideration*. September 2007.

California Air Resources Board (CARB), 2007b. *Mandatory Reporting of California greenhouse gas Emissions, Presentation at Cal/EPA Headquarters*. August 29, 2007.

Jones and Stokes, 2006. *The Draft Phase I Animal Confinement Facilities Plan Supplemental Program EIR*. October 2006.

National Research Council (NRC). 2001. *Nutrient Requirements of Dairy Cattle*. Seventh Revised Edition. Washington DC: National Academy Press.

Natural Resources Conservation Service (NRCS). 2003. *Conservation Practice Standard 359: Waste Treatment Lagoon*. <http://www.nrcs.usda.gov/technical/Standards/nhcp.html>, accessed September 17, 2007.

San Joaquin Valley Air Pollution Control District (SJVAPCD). 2002. *Guide for Assessing and Mitigating Air Quality Impacts*. Adopted August 20, 1998; January 10, 2002 revision.

Schmidt, David; L. Jacobson, and K. Janni. 2001. University of Minnesota Extension. *Preparing an Odor Management Plan*. 2001.  
<http://www.extension.umn.edu/distribution/livestocksystems/DI7637.html>

Tulare County Association of Governments (TCAG). 2007a. Personal communication with Mark Hays, Associate Regional Planner, Tulare County Association of Governments.

Tulare County Association of Governments (TCAG). 2007b. *Draft Conformity Analysis for the 2007 Tulare County Federal Transportation Improvement Program and 2007 Tulare County Regional Transportation Plan*.

U.S. Environmental Protection Agency (U.S. EPA). 2006. *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2004*. April 15, 2006.

## **Section 4.5 Health and Safety**

Bolt, Beranek and Newman, 1987. *Noise Control for Buildings and Manufacturing Plants*.

## **Chapter 5. Infrastructure**

### **Section 5.2 Transportation and Circulation**

#### **Roads and Highways**

Final 2006 ½ Cent Transportation Sales Tax Measure Expenditure Plan (Measure R).

Transportation Research Board. 2000. *Highway Capacity Manual*. National Research Council, Washington, DC.

Tulare County Association of Governments Regional Travel Demand Forecast Model – Year 2030.

OMNI-MEANS, 2006. *State Route 99 Interchange Analysis – Southern Tulare County*

### **Section 5.3 Public Facilities and Services**

#### **Waste Water**

Provost & Pritchard. 2005. “The Wastewater Treatment Facility Upgrade and Expansion Project – Project Feasibility Report.” Prepared for Tulare County.

#### **Solid Waste**

Environmental Protection Agency, 2006. *Municipal Solid Waste Generation, Recycling, and Disposal in the United States: Facts and Figures for 2005*.

# Appendix A

## Notice of Preparation





# **APPENDIX A**

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## **Notice of Preparation**

This appendix includes materials related to the Notice of Preparation (NOP) for County of Tulare 2030 General Plan EIR. The following materials are included:

1. Notice of Preparation Mailing List
2. Notice of Preparation
3. Scoping Meeting Notice
4. Scoping Meeting Minutes (includes names of those who spoke)
5. Notice of Preparation Comments



# Notice of Preparation Mailing List

CITY OF DELANO  
P O BOX 3010  
DELANO CA 93215

CITY OF DINUBA  
405 E EL MONTE WAY  
DINUBA CA 93618

CITY OF EXETER  
P O BOX 237  
EXETER CA 93221

CITY OF FARMERSVILLE  
909 W VISALIA RD  
FARMERSVILLE CA 93223

CITY OF KINGSBURG  
1401 DRAPER ST  
KINGSBURG CA 93631

CITY OF LINDSAY  
P O BOX 369  
LINDSAY CA 93247

CITY OF PORTERVILLE  
291 NORTH MAIN ST  
PORTERVILLE CA 93257

CITY OF TULARE  
411 E KERN AVE  
TULARE CA 93274

CITY OF VISALIA  
315 E ACEQUIA  
VISALIA CA 93291

COMMUNICATIONS COMPANIES:  
SBC  
ATTN BEVERLY PATTON  
AREA MANAGER  
CONSTRUCTION & ENGINEERING  
217 W ACEQUIA  
VISALIA CA 93291

COMMUNITY SERVICE DIST.  
ALLENSWORTH COMMUNITY SERVICE DISTRICT  
3336 RD 84  
STAR ROUTE 1 BOX 64  
ALLENSWORTH CA 93219

ALPINE VILLAGE-SEQUOIA CREST COM SERV DIST  
HCR 2 BOX 599  
SPRINGVILLE CA 93265

CUTLER/OROSI MEMORIAL DISTRICT  
P O BOX 232  
OROSI CA 93647

DUCOR COMMUNITY SERVICES DISTRICT  
P O BOX 187  
DUCOR CA 93218

EARLIMART MEMORIAL DIST  
P O BOX 10337  
EARLIMART CA 93219

GOSHEN COMM SERV DIST  
P O BOX 2  
GOSHEN CA 93227

GOSHEN PLAN COMMITTEE  
30498 D69  
VISALIA CA 93291

IVANHOE MEMORIAL DIST  
33209 HAWTHORNE ROAD  
IVANHOE CA 93235

IVANHOE TOWN COUNCIL  
C/O BETTY BICARS  
15964 EDMISTON  
IVANHOE CA 93235

PATTERSON TRACT COMMUNITY SERVICE DIST  
P O BOX 532  
VISALIA CA 93279

PIXLEY TOWN COUNCIL  
P O BOX 671  
PIXLEY CA 93256

PONDEROSA COMM SERV DIST  
56692 ASPEN DRIVE  
SPRINGVILLE CA 93265

POPLAR COM SERV DIST  
P O BOX 3849  
POPLAR CA 93258

RICHGROVE COM SERV DIST  
P O BOX 86  
RICHGROVE CA 93261

SO TULARE CO MEMORIAL DIST  
P O BOX 10148  
EARLIMART CA 93219

SPRINGVILLE CHAMBER OF COMMERCE  
P O BOX 104  
35680 HWY 190  
SPRINGVILLE CA 93265

TEVISTON COMM SERV DIST  
P O BOX T  
PIXLEY CA 93256

THREE RIVERS COMMUNITY SERVICE DISTRICT  
P O BOX 423  
THREE RIVERS CA 93271

TIPTON COMMUNITY SERVICES DISTRICT  
P O BOX 266  
TIPTON CA 93272

TIPTON COMMUNITY COUNSEL  
P O BOX 355  
TIPTON CA 93272



TRACT 92 COMM SERV DIST  
15196 WATER AVENUE  
VISALIA CA 93292

TULE RIVER TRIBAL COUNCIL  
340 INDIAN RESERVATION RD  
PORTERVILLE CA 93257

VISALIA MEMORIAL DIST  
609 W CENTER ST  
VISALIA CA 93291

IRRIGATION DISTRICTS:  
ALPAUGH IRRIGATION DIST  
P O BOX 129  
ALPAUGH CA 93201

ALTA IRRIGATION DISTRICT  
P O BOX 715  
DINUBA CA 93618

ATWELL ISLAND WATER DIST  
P O BOX 911  
VISALIA CA 93279-0911

CALIFORNIA WATER SERVICE CO  
216 N VALLEY OAKS DR  
VISALIA CA 93291

CAMP NELSON WATER CO  
P O BOX 2217  
CAMP NELSON CA 93208

CONSOLIDATED PEOPLES DITCH  
15370 AVE 256  
VISALIA CA 93292

CONSOLIDATED IRR DIST  
P O BOX 209  
SELMA CA 93662

CORCORAN IRRIGATION DIST  
1150 6½ AVENUE  
CORCORAN CA 93212

DELANO-EARLIMART IRRIGATION DISTRICT  
14181 AVE 24  
DELANO CA 93215

DELTA VECTOR CONTROL DIST  
P O BOX 131  
VISALIA CA 93279

DUCOR IRRIGATION DIST  
P O BOX 73  
DUCOR CA 93218

EXETER IRRIGATION DIST  
P O BOX 546  
EXETER CA 93221

FRIANT WATER USERS  
854 NORTH HARVARD AVE

LINDSAY CA 93247

HILLS VALLEY IRR DIST  
P O BOX 911  
VISALIA CA 93279-0911

IVANHOE IRRIGATION DIST  
33777 ROAD 164  
VISALIA CA 93291

KAWEAH DELTA WATER CONSERVATION DISTRICT  
2975 N FARMERSVILLE BLVD  
FARMERSVILLE CA 93223

KERN - TULARE WATER DIST  
1820 21ST ST  
BAKERSFIELD CA 93301

KINGS RIVER CONSERVATION DISTRICT  
4886 EAST JENSEN AVENUE  
FRESNO CA 93725

LEVEE DIST #1  
2100 W PRATT RD  
VISALIA CA 93291

LEVEE DISTRICT NO TWO  
12899 AVE 336  
VISALIA CA 93292

LEWIS CREEK WATER DIST  
PO BOX 846  
LINDSAY CA 93247  
LINDMORE IRRIGATION DIST  
P O BOX 908  
LINDSAY CA 93247

LINDSAY-STRATHMORE  
IRRIGATION DISTRICT  
P O BOX 1205  
LINDSAY CA 93247

LOWER TULE RIVER  
IRRIGATION DISTRICT  
357 E OLIVE AVE  
TIPTON CA 93272-9627

MORELAND CAMPBELL DITCH CO  
2032 S HILLCREST  
PORTERVILLE CA 93257

ORANGE COVE IRR DIST  
P O BOX 308  
ORANGE COVE CA 93646

PIXLEY IRRIGATION DIST  
357 E OLIVE  
TIPTON CA 73272-9627

PONDEROSA CSD  
WATER COORDINATOR  
56287 APSSEN DRIVE  
SPRINGVILLE CA 93265

PORTERVILLE IRRIGATION DIST  
P O BOX 1248

PORTERVILLE CA 93258

RIVER ISLAND WATER CO  
31910 COUNTY CLUB DRIVE  
PORTERVILLE CA 93257

ROSEDALE WATER IRR DIST  
ATTN ROD HUDSON  
28521 AVE 140  
PORTERVILLE CA 93257

RWQCB DISTRICT #5  
1665 E ST STE 100  
FRESNO CA 93706

SAUCELITO IRR DIST  
P O BOX 3858  
PORTERVILLE CA 93257

SEVILLE WATER DIST  
P O BOX 262  
YETTEM CA 93670

ST JOHNS WATER DISTRICT  
11878 AVE 328  
VISALIA CA 93291

STONE CORRAL IRR DIST  
37656 ROAD 172  
VISALIA CA 93291

TEA POT DOME WATER DIST  
105 W TEA POT DOME AVE  
PORTERVILLE CA 93257

TERRA BELLA IRRIGATION DISTRICT  
24790 AVE 95  
TERRA BELLA CA 93270

TEVISTION WATER DISTRICT  
P O BOX T  
PIXLEY CA 93256

TULARE COUNTY WATER WORKS DISTRICT #1  
P O BOX 1  
ALPAUGH CA 93201

TULARE IRRIGATION DIST  
ATTN AARON FUKUDA  
1350 W SAN JOAQUIN AVE  
TULARE CA 93274

TULARE LAKE BASIN  
WATER STORAGE DISTRICT  
1109 WHITLEY AVENUE  
CORCORAN CA 93212

UPHILL DITCH COMPANY  
11787 AVE 340  
VISALIA CA 93291

VANDALIA IRRIGATION DIST  
2032 S HILL CREST ST

PORTERVILLE CA 93257

WEST GOSHEN WATER COMPANY  
P O BOX 547  
GOSHEN CA 93227-0547

POLICE & FIRE:  
CALIF DEPT OF FORESTRY  
P O BOX 517  
VISALIA CA 93279-0517

UTILITIES  
CUTLER PUBLIC UTILITY DIST  
40526 OROSI DR  
CUTLER CA 93615

EARLIMART PUD  
168 N FRONT RD  
EARLIMART CA 93219

IVANHOE PUD  
P O BOX A  
IVANHOE CA 93235

OROSI PUBLIC UTILITY DIST  
12488 AVE 416  
OROSI CA 93647

P G & E  
951 CHITTENDEN  
CORCORAN CA 93212

P G & E  
152 NORTH K ST  
DINUBA CA 93618

P G & E  
208 W D STREET  
LEMOORE CA 93245

PIXLEY PUBLIC UTILITY DIST  
P O BOX 535  
PIXLEY CA 93256

PORTER VISTA PUD  
P O BOX 2280  
PORTERVILLE CA 93258

PUC  
505 VAN NESS AVE  
SAN FRANCISCO CA 94102

SOUTHERN CAL EDISON CO  
2425 S BLACKSTONE  
TULARE CA 93274

SOUTHERN CALIFORNIA GAS CO  
404 N TIPTON ST  
VISALIA CA 93292

SPRINGVILLE PUD  
P O BOX 434  
SPRINGVILLE CA 93265

STRATHMORE PUD

P O BOX 425  
STRATHMORE CA 93267

WOODVILLE PUD  
P O BOX 4567  
WOODVILLE CA 93258

SCHOOL DISTRICTS:  
ALLENSWORTH ELEMENTARY  
HC 1 BOX 136  
3320 YOUNG ROAD  
ALLENSWORTH CA 93219

ALPAUGH UNIFIED SCHOOL DIST  
P O BOX 9  
ALPAUGH CA 93201

ALTA VISTA ELEMENTARY  
2293 EAST CRABTREE AVE  
PORTERVILLE CA 93257

BUENA VISTA ELEMENTARY  
21660 ROAD 60  
TULARE CA 93274

BURTON ELEMENTARY  
264 NORTH WESTWOOD ST  
PORTERVILLE CA 93257

CITRUS SOUTH TULE ELEMENTARY  
31374 SUCCESS VALLEY DR  
PORTERVILLE CA 93257

COLLEGE OF THE SEQUOIAS  
915 SOUTH MOONEY BLVD  
VISALIA CA 93277

COLUMBINE ELEMENTARY  
2240 ROAD 160  
DELANO CA 93215-6006

CORCORAN JOINT UNIFIED SCHOOL DIST  
1520 PATTERSON AVE  
CORCORAN CA 93212

CUTLER ELEMENTARY  
40532 RD 128  
CUTLER CA 93615

CUTLER-OROSI UNIFIED  
12623 AVE 416  
OROSI CA 93647

DELANO HIGH SCHOOL  
1331 CECIL AVE  
DELANO CA 93215

DINUBA ELEMENTARY  
1327 E EL MONTE WAY  
DINUBA CA 93618

DINUBA JOINT UNION HIGH  
1327 EL MONTE WAY  
DINUBA CA 93618  
DUCOR UNION ELEMENTARY  
P O BOX 249  
DUCOR CA 93218

EARLIMART ELEMENTARY  
P O BOX 11970  
EARLIMART CA 93219-1970

EXETER UNION ELEMENTARY  
134 SOUTH E STREET  
EXETER CA 93221

EXETER UNION HIGH  
134 SOUTH E STREET  
EXETER CA 93221

FARMERSVILLE UNIFIED  
571 E CITRUS DRIVE  
FARMERSVILLE CA 93223

HOPE ELEMENTARY  
613 W TEAPOT DOME AVE  
PORTERVILLE CA 93257

HOT SPRINGS ELEMENTARY  
P O BOX 38  
CA HOT SPRINGS CA 93207

KERN COMMUNITY COLLEGE  
2100 CHESTER AVE  
BAKERSFIELD CA 93301

KINGS CANYON UNIFIED SCHOOL DIST  
675 W MANNING AVE  
REEDLEY CA 93654

KINGS RIVER UNION ELEMENTARY  
3961 AVE 400  
KINGSBURG CA 93631

KINGSBURG HIGH SCHOOL  
1900 18TH ST  
KINGSBURG CA 93631

LIBERTY ELEMENTARY  
11535 AVE 264  
VISALIA CA 93277

LINDSAY UNIFIED  
519 E HONOLULU STREET  
LINDSAY CA 93247

MONSON-SULTANA JOINT UNION ELEMENTARY  
P O BOX 25  
SULTANA CA 93666

OAK VALLEY UNION ELEMENTARY

24500 RD 68  
TULARE CA 93274

OUTSIDE CREEK ELEMENTARY  
26452 RD 164  
VISALIA CA 93292

PALO VERDE UNION ELEMENTARY  
9637 AVE 196  
TULARE CA 93274

PIXLEY UNION SCHOOL DIST  
DRAWER P  
300 NORTH SCHOOL STREET  
PIXLEY CA 93256

PLEASANT VIEW ELEMENTARY  
14004 RD 184  
PORTERVILLE CA 93257

PORTERVILLE COLLEGE  
100 E COLLEGE AVE  
PORTERVILLE CA 93257

PORTERVILLE UNIFIED SCHOOL DISTRICT  
600 W GRAND AVE  
PORTERVILLE CA 93257

PROTEUS INC  
ATTN MARTHA LOYA  
54 N MAIN ST STE 10  
PORTERVILLE CA 93257

REEDLEY UNION JOINT HIGH  
740 WEST NORTH AVE  
REEDLEY CA 93654

RICHGROVE ELEMENTARY  
P O BOX 540  
RICHGROVE CA 93261-0540

ROCKFORD ELEMENTARY  
14983 RD 208  
PORTERVILLE CA 93257

SAUCELITO ELEMENTARY  
17615 AVE 104  
TERRA BELLA CA 93270

SEQUOIA UNION ELEMENTARY  
P O BOX 44260  
LEMON COVE CA 93244

SPRINGVILLE UNION ELEMENTARY  
P O BOX 349  
SPRINGVILLE CA 93265

STONE CORRAL ELEMENTARY  
15590 AVE 383  
VISALIA CA 93291

STRATHMORE UNION ELEMENTARY  
P O BOX 247  
STRATHMORE CA 93267

STRATHMORE UNION HIGH  
C/O PORTERVILLE HIGH  
600 W GRAND AVE  
PORTERVILLE CA 93257

SUNDALE UNION ELEMENTARY  
13990 AVE 240  
TULARE CA 93274

SUNNYSIDE UNION ELEMENTARY  
21644 AVE 196  
STRATHMORE CA 93267

TCOVE REGIONAL OCCUPATIONAL CENTER  
4136 N MOONEY BLVD  
TULARE CA 93274

TERRA BELLA UNION ELEMENTARY  
9121 ROAD 240  
TERRA BELLA CA 93270

THREE RIVERS UNION ELEMENTARY  
P O BOX 99  
THREE RIVERS CA 93271

TIPTON ELEMENTARY  
P O BOX 787  
TIPTON CA 93272

TRAVER JOINT ELEMENTARY  
P O BOX 69  
TRAVER CA 93673

TULARE CITY ELELMENTARY  
600 NORTH CHERRY  
TULARE CA 93274

TULARE CO DEPT OF ED  
CO SCHOOL SERVICES FUND  
P O BOX 5091  
VISALIA CA 93278-5091

TULARE JOINT UNION HIGH  
426 NORTH BLACKSTONE  
TULARE CA 93274

VISALIA UNIFIED  
ATTN TERRY WHITE  
5000 W CYPRESS  
VISALIA CA 93291

VISALIA UNIFIED SCHOOL DIST TRANSPORTATION  
801 N MOONEY BLVD  
VISALIA CA 93291

WAUKENA JOINT UNION ELEMENTARY  
19113 RD 28  
TULARE CA 93274



WOODLAKE UNION ELEMENTARY  
300 WEST WHITNEY  
WOODLAKE CA 93286

WOODLAKE UNION HIGH  
300 WEST WHITNEY  
WOODLAKE CA 93286

WOODVILLE UNION ELEMENTARY  
16541 RD 168  
PORTERVILLE CA 93257

STATE DEPT.:  
ARCHAEOLOGICAL CONSERVANCY  
1 SHOAL CT #67  
SACRAMENTO CA 95831

PHIL DEFFENBAUGH  
U S ARMY CORPS OF ENGINEERS  
P O BOX 44270  
LEMON COVE CA 93244

ARMY CORPS OF ENGINEERS  
SACRAMENTO DISTRICT  
1325 J STREET  
SACRAMENTO CA 95814-2922

ANNE DUNISCH  
CALIF DEPT OF TRANSPORT  
DIV OF MASS TRANSIT MS 39  
P O BOX 942874  
SACRAMENTO CA 94274-0001

CALIFORNIA DEPT PARKS & REC  
OFFICE OF HISTORIC PRESERVATION  
PO BOX 942896  
SACRAMENTO CA 94296-0001

CALIFORNIA ENERGY COMMISSION  
1516 9TH STREET  
SACRAMENTO CA 95814

CALIFORNIA HIGHWAY PATROL  
5025 W NOBLE AVE  
VISALIA CA 93277

CALTRANS DISTRICT #6  
P O BOX 12616  
FRESNO CA 93778

DEPT OF CONSERVATION  
DIVISION OF LAND RESOURCES PROTECTION  
ATTN TIM BRYANT  
801 K ST MS 18-01  
SACRAMENTO CA 95814-3520

DEPT OF TRANSPORTATION  
ACCOUNTING SERVICE CNT  
P O BOX 942874 MS #33  
SACRAMENTO CA 94274-0001

DISTRICT ARCHAEOLOGIST  
CALIFORNIA ARCHAEOLOGICAL  
INVENTORY INFO CENTER  
9001 STOCKDALE HWY  
BAKERSFIELD CA 93311-1099

CA DEPT OF FISH & GAME REGION #4  
ATTN KATHY OR SARA  
1130 E SHAW AVE ST 206  
FRESNO CA 93710

DEPT OF HOUSING & COMM DEV  
1800 THIRD ST  
SACRAMENTO CA 95814

DEPT OF HOUSING & COMM DEV  
STATE OF CALIFORNIA  
HOUSING POLICY DIVISION  
P O BOX 952053  
SACRAMENTO CA 94258-2053

STATE OF CALIFORNIA  
INTEGRATED WASTE MANAGEMENT  
1001 I ST  
P O BOX 4025  
SACRAMENTO CA 95812-4025

STATE OF CALIFORNIA  
DEPT OF CONSERVATION  
OIL GAS & GEOTHERMAL DIV  
4800 STOCKDALE HWY  
BAKERSFIELD CA 93309

NATIVE AMERICAN HERITAGE COMMISSION  
915 CAPITOL MALL STE 364  
SACRAMENTO CA 95814

STATE OF CALIFORNIA  
RECLAMATION BOARD  
1416 NINTH STREET RM 4556  
SACRAMENTO CA 95814-5594

SJVUAPCD  
ATTN DAN BARBER  
SENIOR AIR QUALITY PLANNER  
1990 E GETTYSBURG AVE  
FRESNO CA 93726

STATE CLEARINGHOUSE  
OFFICE PLNG & RESEARCH  
1400 TENTH STREET RM 222  
P O BOX 3044  
SACRAMENTO CA 95812-3044

STATE LANDS COMMISSION  
100 HOWE AVE ST 100 SOUTH  
SACRAMENTO CA 95825-8202

DEPT OF FISH & GAME  
P O BOX 4437  
VISALIA CA 93278

DEPT OF WATER RESOURCES

P O BOX 942836  
SACRAMENTO CA 94236

STATE WATER RESOURCES  
CONTROL BOARD  
P O BOX 100  
SACRAMENTO CA 95801

STATE OF CALIFORNIA  
DEPT OF CONSERVATION  
LAND RESOURCE PROTECTION DIVISION  
WILLIAMSON ACT PROGRAM  
ATTN EMILY KISHI  
801 K ST MS-1801  
SACRAMENTO CA 95814

RAIL ROADS:  
UNION PACIFIC RAILROAD  
915 L STREET SUITE 1180  
SACRAMENTO CA 95814

OTHER COUNTY'S  
FRESNO COUNTY  
DEVELOPMENT SERVICES  
2220 TULARE ST 6TH FLOOR  
FRESNO CA 93721

KERN COUNTY  
PLANNING DEPARTMENT  
2700 M ST #100  
BAKERSFIELD CA 93301

KINGS COUNTY  
1400 W LACY BLVD  
HANFORD CA 93230

INYO COUNTY  
168 N EDWARDS STREET  
P O BOX L  
INDEPENDENCE CA 93526

FEDERAL OFFICES:  
FEDERAL AVIATION ADMIN  
831 MITTEN RD  
BURLINGAME CA 94010

NATIONAL PARK SERVICE  
SEQUOIA/KINGS CANYON NATIONAL PARK  
47050 GENERALS HIGHWAY  
THREE RIVERS CA 93271

SEQUOIA NATIONAL FOREST  
1839 S NEWCOMB ST  
PORTERVILLE CA 93257

SEQUOIA NATIONAL FOREST SERVICE  
TULE RIVER RANGER DIST  
32588 HIGHWAY 190  
SPRINGVILLE CA 93265

US DEPT OF INTERIOR  
BUREAU OF LAND MGMT  
3801 PEGASUS DRIVE

BAKERSFIELD CA 93308

US FISH & WILDLIFE SERV  
2800 COTTAGE WAY  
RM W-2605  
SACRAMENTO CA 95825-1846

FEDERAL HIGHWAY ADMIN  
400 SEVENTH STREET SW  
WASHINGTON DC 20590

INTER-OFFICE

AG COMMISSIONER

COUNTY ADMIN OFFICE

COUNTY COUNSEL

ENVIRONMENTAL HEALTH

FIRE WARDEN

LAFCo

PARKS

REDEVELOPMENT

SHERIFF HEADQUARTERS

SOLID WASTE

TCAG

TRANSPORTATION/UTILITIES

MISC. COMPANIES:  
KINGS RIVER CONSERVATION DISTRICT  
4886 E JENSEN AVE  
FRESNO CA 93725

ECONOMIC DEV CORP  
4500 S LASPINA  
TULARE CA 93274

KINGS RIVER CONSERVATION  
4886 E JENSON  
FRESNO CA 93725

TULARE COUNTY FARM BUREAU  
P O BOX 748  
VISALIA CA 93279

TULARE COUNTY HOUSING AUTHORITY  
5140 W CYPRESS AVE  
VISALIA CA 93277

TULARE CO FLOOD CONTROL DISTRICT  
5961 SO MOONEY BLVD  
VISALIA CA 93277

# Tulare County General Plan

April 25, 2006

## NOTICE OF PREPARATION



(California Code of Regulations, Title 14, (CEQA Guidelines) Sections 15082(a), 15103, 15375)

To: State Agencies  
Responsible Agencies  
Local and Public Agencies  
Trustee Agencies  
Interested Parties

From: Tulare County Resource Management Agency  
5961 South Mooney Boulevard  
Visalia, CA 93277

Subject: NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT

The Tulare County Resource Management Agency will be the Lead Agency and will prepare an Environmental Impact Report (EIR) for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, and location, and the probable/potential environmental effects of the proposed project are contained in the attached materials. A copy of the Initial Study is attached.

Due to the time limits mandated by State Law, your response must be sent at the earliest possible date but not later than May 29, 2006.

Please send your response to Theresa Szymanis, Chief Planner, Tulare County Resource Management Agency, at the address shown above. We will need the name for a contact person in your agency.

Project Title: Tulare County General Plan Update

Project Applicant: Tulare County Resource Management Agency

Project Location: Tulare County

Signature: Signed copy on file with Tulare County

Date: 4/25/06

Theresa Szymanis, AICP  
Chief Planner, Tulare County Resources Management Agency  
(559) 733-6291



Tulare County General Plan Update

*Please see the next page.*

## PROJECT OVERVIEW



### EIR Scoping Meeting

Tulare County has set up a meeting to receive public input on the scope of the General Plan environmental impact report (EIR). At this meeting, individuals, agencies, and organizations can provide the County with their input on the content and analysis conducted for the General Plan EIR.

**Date:** Monday May 1, 2006

**Time:** 1:30 PM

**Place:** Planning Commission  
Chambers  
Tulare County Resource  
Management Agency  
5961 South Mooney Blvd.  
Visalia, CA, 93277-9394

### 1. Project Title

Tulare County General Plan

### 2. Lead Agency

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

### 3. Contact Person

Theresa Szymanis, AICP  
Chief Planner, RMA  
(559) 733-6291

### 4. Project Location

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 is the second leading agricultural-producing county 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 contains 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 (Figure 1, Regional Location).

### 5. Project Sponsor

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

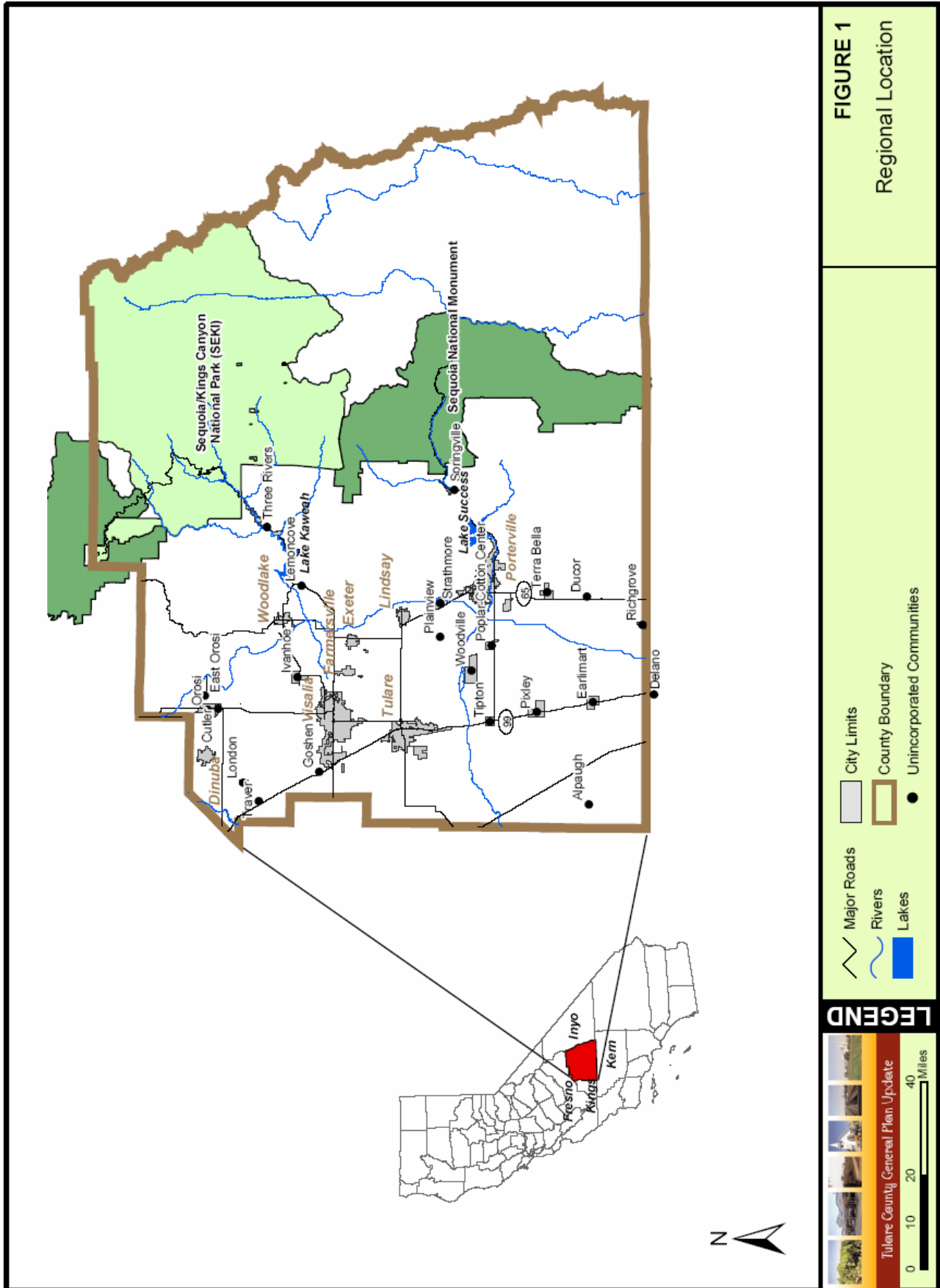
### 6. General Plan Designations

Multiple designations

### 7. Zoning Designations

Multiple designations







## 8. Description of Project

### Existing Plans

The County of Tulare (County) is the Lead Agency for the preparation of an Environmental Impact Report (EIR) for the County's 2030 General Plan Update project (Proposed Project). The Proposed Project represents a comprehensive update to the County's existing General Plan.

The existing General Plan consists of countywide topical elements and regionally specific elements. The countywide General Plan includes the following topical elements. The year of the last update is shown in parenthesis.

- Land Use (1964);
- Transportation/Circulation (1964);
- Environmental Resource Management (including Open Space/Recreation/Conservation, 1972);
- Seismic Safety (1975);
- Scenic Highways (1975);
- Safety (1975);
- Water and Liquid Waste Management (1981);
- Urban Boundaries (1983);
- Aviation and Airport Systems (1985);
- Noise (1988); and
- Housing (2003).

Ten regional planning areas have been designated for the implementation of plans to guide growth for all areas outside incorporated cities. The following lists the ten regional planning areas and identify the areas that have adopted plans:

- Mountain Framework (Regional Plan) (unadopted);
- Rural Valley Lands Plan (RVLP) (Regional Plan) (updated 1995);
- Kings River Plan (1982);
- Foothill Growth Management Plan (Regional Plan) (1981);
- Great Western Divide North Half Plan (1990);
- Kennedy Meadows Plan (1986);
- Redwood Mountain Plan (unadopted);
- South Sierra Plan (unadopted);

- Upper Balch Park Plan (unadopted);
- Great Western Divide South Half Plan (unadopted); and
- Posey Plan (unadopted).

Of the ten regional plans, only the Rural Valley Lands Plan, Kings River Plan, Foothill Growth Management Plan, Great Western Divide North Half Plan, and Kennedy Meadows Plan have been adopted. The remaining six areas for which plans have not been adopted are all located in the eastern half of the county, and consist mainly of federally-owned lands.

The EIR being prepared on the Proposed Project will be in compliance with the California Environmental Quality Act (CEQA) and CEQA Guidelines. CEQA Section 15082 states that once a decision is made to prepare an EIR; the Lead Agency (Tulare County for this project) must prepare a Notice of Preparation (NOP) to inform all responsible and trustee agencies that an EIR will be prepared. The purpose of this NOP is to provide responsible and trustee agencies as well as public service providers, interested organizations, and interested persons with sufficient information describing the proposed project and the potential environmental effects to enable them to make a meaningful response to the County concerning the scope and content of the information to be included in the EIR.

### Summary

The Tulare County Association of Governments (TCAG) has developed a set of population projections for the county overall with a breakdown for each city within the county. These projections were based on information from the U.S. Census and the California Department of Finance. Using the 2000 Census as a basis, TCAG projected that the County as a whole would grow from a population of 368,021 to a 2030 population of 630,000. This is an increase of 261,979 persons between 2000 and 2030.

### General Plan Background

State law requires each city and county to prepare and adopt a comprehensive and long-range general plan for its physical development (Government Code Section 65300). This 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. It may also include other topics of local interest, as chosen by the County (Government Code Section 65303). Together, the seven mandated elements of a general plan form a comprehensive set of planning policies.

A general plan is designed to serve as the jurisdiction's "constitution" or "blueprint", and provides the County with a comprehensive and consistent framework for decision making. Decision makers in the County will use the General Plan to provide direction when making future land use, resource, and public service decisions. All future plans must be consistent with the General Plan. This includes specific plans, rezonings, subdivisions, conditional use permits, building permits, public works projects, and zoning decisions.

The Tulare County General Plan Update and the update process serve several important purposes:

- Create opportunities for meaningful public participation in the planning and decision-making process.
- Describe current conditions and trends impacting the county.
- Identify planning issues, opportunities, and challenges that should be addressed through the General Plan.
- Explore and evaluate the implications of land use and policy alternatives.
- Ensure that the General Plan is current, internally consistent, and easy to use.
- Provide guidance in the planning and evaluation of future land and resource decisions.
- Serve as a vision and framework for the coordinated future growth in Tulare County.

## Public Input into Alternatives Development

During preparation of the General Plan, input from the public will be a vital and ongoing component. There will be five series of community workshops during the development of the General Plan, organized into three steps:

- Step 1. Topical Alternatives
- Step 2. Land Use Alternatives
- Step 3. General Plan Review

Each series of workshops was/will be held in multiple locations throughout the county to ensure everyone has a chance to be involved.

Step #1 relates to "Topical Alternatives." That is, alternatives that address a topic of interest, like economic development. During the first workshop series, the public was asked to identify the key challenges and opportunities that will face the County in the coming years. Generally, all the workshops demonstrated concerns about air and water quality. The availability of water was also a key issue. There was also concern about the image

and economic impacts of the continued conversion of agricultural land to residential development. As in many Central Valley communities, people identified the need to diversify the economic base and provide higher paying year-round employment.

The leading assets identified at workshops featured the County's natural and cultural diversity. Natural and working landscapes (farms) were both linked to an overall quality of life, and also as part of a growing visitor industry. Outstanding farming due to high quality soils was an obvious choice too. The people and communities of the County were put forward as popular assets.

Following the first series of workshops, Workshops 2 and 3 focused on land use alternatives.

From the list of issues and opportunities gathered during Workshop 1, the consulting team, County staff, and the Technical Advisory Committee (TAC) were able to identify 11 topics that were key areas of interest with the public. These 11 "topical issues" were stated in the form of a question and used during Workshop 4 to get public input on the potential solutions or actions that they felt the County should evaluate as part of the General Plan. The 11 topical issues are shown below.

Workshop Series #1 was used to identify the wide range of opportunities and issues that should be discussed during the preparation of the General Plan. While all input will be used, a majority of the input was found to fall into 11 key issue areas.

For each of the 11 key issues, a question was developed to capture the essence of the public's input. These questions formed the basis of the topical alternatives discussion in this section. The following are the 11 key issues and their related questions.

### Workshop Step #1 Topical Alternatives

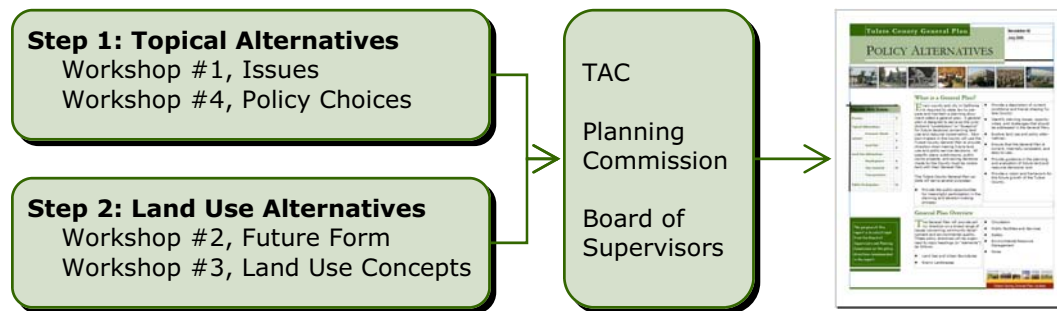
#1 Lindsay  
Visalia  
Goshen  
Visalia EDC  
Orosi  
Springville  
Tipton

#4 Tulare  
Three Rivers

### Workshop Step #2 Land Use Alternatives

#2 Orosi  
Pixley  
Lindsay

#3 Dinuba  
Porterville  
Tipton



**A. Air Quality.** What specific land use and transportation measures should the County undertake to reduce air pollution?

**B. Water Supply.** What measures can the County take to reduce groundwater overdraft/depletion and improve groundwater quality?

**C. Water Quality.** What can the County do to ensure an adequate water supply to meet future needs?

**D. Education and Training.** How can the County encourage higher education and training?

**E. Infrastructure.** How can the County prevent deterioration of current infrastructure and meet the needs of new development?

**F. Economic Diversity.** How can the County promote economic diversification?

**G. Expanding Tourism.** How can the County expand the tourism industry utilizing existing recreational resources?

**H. Natural Resources.** How can the County meet the needs of a growing population and protect natural resources?

**I. Planning Consistency.** How can the County achieve greater consistency among plans?

**J. Housing for All Incomes.** How can the County provide housing opportunities for all income levels?

**K. Agriculture.** What is the future of agriculture in Tulare County?

**L. Land Use.** What growth patterns will the County use to accommodate future development?

## Technical Advisory Committee Input

The TAC has been involved in each step of the development of the General Plan update. To date, 11 workshops have been held with the TAC. Each of these workshops was open to the public.

The following is a summary of the topics covered at each TAC workshop. Further information on each TAC meeting can be found on the General Plan website at [www.westplanning.com/docs/tulare](http://www.westplanning.com/docs/tulare).

1. General Plan Introduction
2. Preliminary Issues Report
3. Alternative Futures
4. Background Report / Policy Choices
5. Sub-TAC Reports / Policy Scenarios
6. Alternative Futures
7. Topical Issues / Land Use Concepts
8. Topical Issues / Land Use Concepts
9. Policy Framework
10. CEQA Alternatives / Community Profiles
11. Communities / Hamlets



## Policy Direction

In addition to the Public Workshops, workshops with the Board of Supervisors, Planning Commission, and TAC were conducted to help identify the primary guiding principles that would set the foundation for the goals, policies, and implementation measures developed for the various elements of this updated General Plan. The following is a summary of the guidance provided.

## Value Statements for 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.

## Key Policy Direction

Based on the input received, the Board also approved the following key policy directions to be used in developing the General Plan:

- Provide opportunity for small unincorporated communities to grow.
- Reduce rural residential development potential.
- Facilitate privately funded upgrading of facilities in unincorporated communities in conjunction with new development.
- Allow existing, outdated agricultural facilities in rural areas to be used for new businesses (including non-agricultural uses) if they provide employment.
- Preserve open space separators between cities and communities, particularly along State Route 99.

## Topical Issues - Key Goals

Based on input from Workshop 4 and subsequent discussions with the TAC, Planning Commission, and Board of Supervisors, the 11 topical issues were refined into four key topic areas:

- Economic Development
- Land Use
- Infrastructure
- Natural Resources

Based on the value statements and key policy inputs, the Board also accepted a set of key goal statements for each of the four topical issue areas. These are as follows.

### Economic Development

- **Private Investment.** To create opportunities for private investment that improves the quality of life of county residents.
- **Economic Diversification.** To diversify sustainable economic opportunities in the county's unincorporated towns and places and incorporated cities.
- **Protect Agricultural Economy.** To protect, expand and diversify the county's agricultural economy.

### Land Use

- **Enhancing Communities.** To pursue land uses which improve the economic vitality and livability of Tulare County's communities.
- **Urban-Rural Interface.** To protect valuable agricultural uses and scenic natural lands from urban encroachment when these provide a benefit to the County.
- **Rural Separators.** To maintain rural landscape separators between Tulare County's towns and cities.

### Infrastructure

- **Mobility Needs.** To develop and maintain regional system of roads that support existing and future mobility needs of residents and commerce.
- **Urban Infrastructure.** To develop, maintain and revitalize quality urban infrastructure for unincorporated towns and places.
- **Community Facilities and Services.** To develop, maintain and revitalize quality public facilities and services for unincorporated towns and places.

## Natural and Scenic Resources

- **Water.** To protect the supply and quality of urban, agricultural and environmental water serving Tulare County.
- **Air Quality.** To pursue economic, land use and transportation policies that improve air quality in Tulare County.
- **Scenic Resources.** To protect and feature Tulare County's scenic working and natural landscapes.
- **Natural Resources.** Provide for the appropriate utilization of natural resources in the County.

## General Plan Documents

The Tulare County General Plan update includes the preparation of a number of major documents. These documents can be divided into two sets: General Plan documents (adopted); and General Plan supporting documents used to assist in the decision-making process, but not a part of the adopted General Plan.

### Adopted General Plan Documents

**General Plan Executive Summary.** This document provides an overview of the General Plan and its component documents. It describes the Planning Area, summarizes the General Plan's objectives, provides a brief overview of existing conditions, summarizes the issues raised during the preparation of the General Plan, and summarizes the environmental impacts associated with the General Plan.

**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.

**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. The Background Report will also provide the existing conditions information to be used to support and development of the EIR.

## 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 TAC, and County staff.

**Environmental Impact Report.** The EIR prepared for the General Plan is designed to meet the requirements of CEQA. The Board of Supervisors, Planning Commission, the public, and interested agencies will use the EIR during review of the draft General Plan in order to understand the potential environmental implications associated with implementation of the General Plan.

## General Plan Organization

The Tulare County General Plan sets out a hierarchy of goals, policies, and implementation programs designed to guide future development in the county. To provide an 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.

In each element, goals and policies are numbered according to the topic they address. In the following discussion, a one-, two-, or three-letter acronym is given to identify 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."

The Goals and Policies Report is organized as described on the following pages.





## A. General Plan Framework

This component is an overview of the Goals and Policies Report, providing a profile of Tulare County and establishing a planning framework for the County.

### Tulare County Overview

The introduction covers general plans in California, the design of the Tulare County General Plan, and organization of this Goals and Policies Report. This section also provides a brief profile of the communities and cities that make up Tulare County. These profiles provide insight into demographics, economics, history, public services and facilities, and infrastructure.

### Planning Framework

PF

This element provides the framework for planning in the county, including a description of regional planning and community planning areas. This element will describe the creation of community growth boundaries in relation to city and unincorporated communities, define parameters for growth in unincorporated areas outside of communities (including guidance on new towns), and describe the relationship between unincorporated areas and cities.



## B. Tulare County Prosperity

This component includes the elements that shape the county's land use and economic futures.

### Economic Development

ED

This element establishes the goals, policies, and implementation measures to encourage and guide economic development within the county.

### Agriculture

AG

As a key component of the county's economy, this element will provide a single location to draw together the range of policy tools needed to protect and enhance this segment of the county's future.

### Land Use

LU

This element establishes the policy direction that will be used to guide the development of residential, commercial, industrial, and other land uses in the county.

### Housing (existing element)

H

In compliance with the detailed requirements of State law, this element identifies housing needs and sets out policies and programs to meet those needs.



## C. Tulare County Environment

This component covers topics related to natural and cultural resources and public health and safety.

### Scenic Landscapes

SL

This element covers the organizing features, such as rural landscapes, scenic corridors, and urban forms that make Tulare County unique.

### Natural and Cultural Resources

NCR

This element identifies goals, policies, and implementation measures to ensure the appropriate use, enjoyment, and protection of natural and cultural resources in Tulare County.

### Air Quality

AQ

This element covers issues related to the protection and improvement of air quality in the county.

<b>HS</b>	<p><b>Health and Safety</b></p> <p>This element presents the goals, policies, and implementation measures as they apply to noise, geologic/seismic hazards, flood hazards, man-made hazards, and emergency operations plans.</p>
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## D. Tulare County Infrastructure

This section covers the infrastructure systems necessary to ensure adequate services and capacity of desired growth.

<b>TC</b>	<p><b>Transportation and Circulation</b></p> <p>This element identifies goals, policies, and implementation measures to ensure that transportation and circulation needs are met within the county.</p>
<b>PFS</b>	<p><b>Public Facilities and Services</b></p> <p>This element presents goals, policies, and implementation measures to ensure the provision of such public facilities and services as water, solid waste, wastewater, electricity and gas, fire protection, telecommunications, law enforcement, and schools.</p>

## CEQA Alternatives

The CEQA Guidelines require analysis of a range of reasonable alternatives to the project (General Plan), or to the location of the project, which would feasibly attain most of the project's basic objectives and avoid or substantially lessen any of the significant effects of the project.

For the General Plan EIR, a key factor in driving environmental impacts will be the distribution of population in the County. While the General Plan will be designed to foster flexibility (i.e., it will not dictate a specific level of growth to any community), the EIR does need to look at potential futures that could be achieved. In development of the General Plan, the broader discussion of population growth was used to establish a range of alternatives. These alternatives, quantified on the next page, look at potential shifts in population growth between three areas: incorporated cities, unincorporated communities, and other unincorporated growth (which includes hamlets).

## Tulare County General Plan Update Alternatives Population Distribution

2000 Population		
City/County	2000 Population	2000 Population Distribution
Cities (UABs)	258,463	70.2%
County	109,558	29.8%
Communities	56,239	15.3%
Other	53,319	14.5%
<b>TOTAL</b>	<b>368,021</b>	<b>100.0%</b>

Source: TCAG 2003 Databook

<b>2000 Population</b>	<b>368,021</b>
<b>Net New Growth</b>	<b>261,979</b>
<b>2030 Population</b>	<b>630,000</b>

Source: TCAG 2003 Databook; CA DOF, 2004

For each alternative, the percentages shown in the heading are for cities (within their UAB), unincorporated communities, and other unincorporated areas, respectively.

Alternative 1 City Increase (85% / 10% / 5%)				
City/County	Percent of Net Growth	2000-2030 Net Growth	2030 Population	2030 Population Distribution
Cities (UABs)	85.0%	222,682	481,145	76.4%
County	15.0%	39,297	148,855	23.6%
Communities	10.0%	26,198	82,437	13.1%
Other	5.0%	13,099	66,418	10.5%
<b>TOTAL</b>	<b>100.0%</b>	<b>261,979</b>	<b>630,000</b>	<b>100.0%</b>

Alternative 2 Continued Growth (70.2% / 15.3% / 14.5%)				
City/County	Percent of Net Growth	2000-2030 Net Growth	2030 Population	2030 Population Distribution
Cities (UABs)	70.2%	183,989	442,452	70.2%
County	29.8%	77,990	187,548	29.8%
Communities	15.3%	40,034	96,273	15.3%
Other	14.5%	37,956	91,275	14.5%
<b>TOTAL</b>	<b>100.0%</b>	<b>261,979</b>	<b>630,000</b>	<b>100.0%</b>

Alternative 3 County Focused (70% / 25% / 5%)				
City/County	Percent of Net Growth	2000-2030 Net Growth	2030 Population	2030 Population Distribution
Cities (UABs)	70.0%	183,385	441,848	70.1%
County	30.0%	78,594	188,152	29.9%
Communities	25.0%	65,495	121,734	19.3%
Other	5.0%	13,099	66,418	10.5%
<b>TOTAL</b>	<b>100.0%</b>	<b>261,979</b>	<b>630,000</b>	<b>100.0%</b>

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

### Population Trends

The population projections used here were developed based on future population levels predicted for the county by the State Department of Finance. These population estimates are based on known and estimated demographic trends, including births, deaths, and migration into the county.

These numbers do not project outside factors that could change who migrates into the county. For instance, a large retirement community could attract new population to the county that demographic trends would not predict. This would have the affect of increasing the total future population in the county.



## 9. Surrounding Land Uses / Setting

Tulare County is surrounded by Fresno County to the north and Kern County to the south. Kings County is located on the west 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.

## 10. Other public Agencies Whose Approval is Required

The following table identifies the permits and other approvals known at the present time to be required from agencies in order to process the project.

Agency	Approvals
California Division of Mines and Geology (CDMG)	Safety Element
California Office of Emergency Services	Safety Element
California Department of Forestry (CDF)	Safety Element
California Department of Conservation, State Mining and Geology Board	Safety Element
Office of the Secretary, Resources Agency	Open Space Element
California Department of Transportation (Caltrans)	Circulation Element

## Environmental Factors Potentially Impacted

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Agriculture Resources	<input type="checkbox"/> Air Quality
<input type="checkbox"/> Biological Resources	<input type="checkbox"/> Cultural Resources	<input type="checkbox"/> Geology /Soils
<input type="checkbox"/> Hazards & Hazardous Materials	<input type="checkbox"/> Hydrology / Water Quality	<input type="checkbox"/> Land Use / Planning
<input type="checkbox"/> Mineral Resources	<input type="checkbox"/> Noise	<input type="checkbox"/> Population / Housing
<input type="checkbox"/> Public Services	<input type="checkbox"/> Recreation	<input type="checkbox"/> Transportation/Traffic
<input type="checkbox"/> Utilities / Service Systems	<input type="checkbox"/> Mandatory Findings of Significance	

DETERMINATION: (To be completed by the Lead Agency)  
On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

*Signed copy on file with Tulare County*

Theresa Szymanis, Chief Planner, Resources Management Agency

*4/25/06*

Date

## Evaluation of Environmental Impacts

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
  - 2) All answers must take account of the whole action involved, including off site as well as on site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
  - 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
  - 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures, "Earlier Analyses," as described in (5) below may be cross-referenced).
  - 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
    - a) Earlier Analysis Used. Identify and state where they are available for review.
    - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
  - 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
  - 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
  - 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
  - 9) The explanation of each issue should identify:
    - a) The significance criteria or threshold, if any, used to evaluate each question; and
    - b) The mitigation measure identified, if any, to reduce the impact to less than significance
- The General Plan EIR will address the range of impacts that could result from adoption and implementation of the Tulare County 2030 General Plan. This section provides a short summary of the potential impacts that will be analyzed in the EIR.

## Environmental Impacts to be Evaluated in the General Plan EIR

### Overview

The General Plan EIR will deal with environmental issues on a countywide basis and will provide the information, structure, and direction for addressing issues in more detail within subsequent environmental documents prepared for specific projects. The key to successful streamlining of subsequent environmental review lies in establishing the structure and process for that review in the General Plan EIR, and then implementing that process within the Resource Management Agency.

Several concepts are fundamental to this tiering process for environmental review:

- **Associating issues with the appropriate level of planning review.** For example, certain aspects of air quality are clearly addressed on a regional level through the General Plan EIR. These include coordination with assumptions made in the applicable Clean Air Plan and identifying regional strategies related to air quality planning such as providing balanced land uses. Identifying and resolving these regional issues at the General Plan level EIR will allow specific projects to be reviewed with greater ease and reliance on more standardized measures for maintenance and improvement of air quality.
- **Integrating mitigation programs with other planning processes.** Environmental mitigation measures can and should flow naturally as conditions of approval within the authority of the County allowed by planning and permit law, independently of CEQA. By identifying the mechanisms and agencies responsible for implementing mitigation within the General Plan EIR, more effective reviews and approvals can be accomplished for later projects.
- **Recognizing that some specific issues will always warrant review at the individual project level.** For some site-specific issues, there is little utility in gathering precise information at the General Plan level. Conditions affecting certain biological resources, or the context of cultural resources, or the need and accessibility to certain mineral resources, are likely to change within a few years time. Direction within the General Plan EIR can focus subsequent reviews on these issues as appropriate, and make the future processing of projects more consistent and efficient.

### Evaluation of Environmental Impacts

#### Aesthetic, Visual and Scenic Resource Impacts

Scenic resources within Tulare County include the natural beauty associated with the Sierra Nevada and foothills areas, and the man-made alterations in the central and western portions of the County that provide much of the agricultural identity of the region. There are no designated state scenic highways within the County, but State Route (SR) 198 (east of SR 99) and SR 190 (east of SR 65) are eligible for designation. Both of these routes include agricultural as well as foothill and mountainous scenic resources. Open water views are part of the recreational value at the Lake Kaweah and Lake Success. The views of open fields, planted crops, and orchards are part of the variety and identity of the County as an agricultural area.

The EIR section dealing with aesthetics will be based in part on information from the current General Plan and related reports, and also on consultations with County staff and information gained through citizen input. The analysis of potential visual effects will identify potential conflicts between future land use patterns and the maintenance of scenic resources. The significance of these effects depends both on the nature of the resources and on the land use and experience of the viewers involved. The approach used will be similar to that used by the U.S. Forest Service or the Bureau of Land Management in analyzing visual resources, but with less detail since it must address the County as a whole in a programmatic fashion.

Results will be presented in maps that identify the locations and generally important observation points for visual resources. Photographs will be used to illustrate typical scenic resources, typical visual impacts, and the types of measures available to reduce impacts. Care will be taken to distinguish between those measures that are appropriate for inclusion within the General Plan as policy direction, and those types of measures that can be considered in the review of subsequent specific projects.

#### Agriculture and Open Space Impacts

The EIR will include an evaluation of the effects of proposed land uses on agricultural lands and services, and contrast those effects with the current land use designations and County policies as well as with other alternatives. The actual mapping and inventorying tasks for this evaluation will be drawn from existing County mapping resources.

The preservation of agricultural lands is one of those regional issue that can best be addressed at the General Plan level, instead of leaving the evaluation up to the review of individual projects. Throughout the Central

Valley, a conflict exists between preserving agricultural land and providing land to accommodate affordable housing and appropriate development as part of economic stability. The current policies and programs for agricultural land preservation within Tulare County will be reviewed, and will be placed in a regional and long-term perspective. Combined with citizen input, county-wide solutions can be identified within the General Plan Update. Some loss of agricultural lands may be inevitable as the future population is accommodated. The loss may be partially offset by the preservation of the most productive and valuable areas. The EIR will address these impacts, and will balance them with the mitigation provided within the General Plan Update. Depending on the final results, it may be determined that the future loss of some agricultural lands is a significant and unavoidable impact, in which case the EIR will also provide appropriate background and supporting information to facilitate the preparation of necessary findings.

The results of the analysis in the EIR will combine mapping of agricultural areas and designations with general tabulations of acreages to allow a general comparison of the changes in agricultural lands under various alternatives.

### Air Quality Impacts

This EIR section will summarize the regional air quality setting, including climate and topography, ambient air quality, and the regulatory setting (regional standards and planning efforts). Air Quality emissions associated with the General Plan Update will be estimated and inventoried using the most recent California Air Resources Board methods for the evaluation of land use and traffic generation. This presentation will be limited to an inventory and estimate of total emissions of criteria pollutants and will not involve modeling or dispersion analysis of growth. The San Joaquin Valley Air Pollution Control District will be consulted in this process to ensure consistency with the District's accepted procedures and projections.

The EIR will address potential air quality effects associated with implementation of the General Plan Update and identify appropriate measures to reduce those effects. The foundation for the mitigation measures will be drawn from the Reasonably Available Control Measures (RACM) developed by the Transportation Planning Agency and adopted by Tulare County in March 2002. Although many of these measures are more applicable to the incorporated cities within the County, all possible measures will be screened.

Most of the air quality results will be presented in a series of summary tables that list the resulting vehicle emissions. The significance of the results will be explained by considering the County's relative contribution

to air emissions within the larger air basin, and by evaluating trends that have occurred and are expected. The most important aspect of the analysis within the EIR will involve documenting consistency between the General Plan Update and the SJAPCD Clean Air Plan assumptions, and then providing direction for using this determination in subsequent environmental reviews for individual projects that are consistent with the General Plan Update.

### Biological Resource Impacts

The EIR will address potential biological resource issues associated with the General Plan Update. A generalized assessment of impacts will be developed by estimating the approximate acreage of various habitat types that would be converted to other land uses over the time horizon of the General Plan Update. Regional aspects of mitigation will be discussed through an evaluation of the open space proposals and policies in the General Plan Update. For many site-specific biological resources, it will remain necessary for subsequent projects to include surveys and specific mitigation programs. The EIR will provide direction regarding the need for this type of subsequent work so that the efforts may be focused on site-specific resources.

Generalized maps of biological resources will be provided, based on existing information. It must be emphasized, however, that these maps will focus on major habitat types and cannot substitute for site-specific surveys in biologically sensitive areas.

### Cultural Resource Impacts

The evaluation of cultural resources will be based on the inventory of historic and prehistoric information contained in the Background Report. It is not reasonable to prepare a complete survey for the entire County, or even to conduct a thorough record search of the entire County. The general pattern of prehistoric resources can be presented and information on known cultural resources—particularly sites listed in state and national registers—can be summarized. This information will be used to identify, in general terms, the potential impacts to cultural resources from changing land uses as proposed in the General Plan Update.

Some mitigation in the form of preservation of sites within open space areas may be identifiable, but the more important role of this EIR will be to describe the requirements for subsequent review of cultural resources in specific projects. In almost all cases, significant impacts to cultural resources can be mitigated through careful planning, project review, and attention to recovering information from sites that may be affected by future development. This mitigation process will be described and linked to the current planning and project



review procedures in the County.

This section will also discuss Senate Bill 18 compliance and input provided through coordination with Native American groups in Tulare County.

### Geologic and Natural Resource Impacts

Information from the current seismic safety element, geologic mapping, and soils data compiled as part of the Background Report (related to agricultural soils), will be used to characterize the regional geologic conditions, constraints, and resources. Staff from the County, Natural Resource Conservation District, and other agencies will be consulted as necessary. Mineral resources will be discussed in a later section.

Potential impacts related to geology and soils will be described, and erosion leading to loss of soil and unwanted sediment deposition that may be caused by future development. Mitigation measures for these impacts are already incorporated into applicable building codes, grading review procedures, and other mechanisms that apply to development processing and approval. The EIR will review these procedures in the County, and specifically identify them as part of the mitigation discussion within this topic.

### Hazards and Health and Safety Impacts

The Background Report will include an inventory and description of the major hazards that may affect human safety within the County. These include earthquakes and related soil hazards, flooding, wildland fires, and human-made hazards. The last category includes the presence of hazardous materials and wastes associated with some land uses, and safety issues associated with airports within the County. Potential impacts related to these safety issues will be discussed in the EIR. All of these hazards are addressed in current regulatory programs, and the applicable regulations and how they are applied will be discussed in the EIR. The network of safety regulations provides the mitigation for potential impacts within this topic, and the EIR will explain how this mitigation is implemented. In some instances, the mitigation will involve direction related to the review of subsequent projects.

### Hydrologic and Water Quality Impacts

Information regarding hydrology and water quality will be drawn primarily from the Central Valley Regional Water Quality Control Board Basin Plan, supplemented with data and information available from the current General Plan project, project-level EIRs within the County, and other regional studies. The EIR will address effects of land use changes and future development on water resources both in terms of quantity (consumption of

groundwater) and quality (the potential to release contaminants to surface and groundwater). Information used in the EIR will also originate from the consultation process involving water agencies (required by Government Code Section 65352.5). The adequacy of long-term water supplies will be addressed in this process, and will be supported by groundwater basin information available in the County. For most water quality issues, mitigation measures are present in the regulatory and review programs that are already in place. The EIR will identify these programs and the point at which they apply to different types of projects.

### Land Use and Planning Impacts

The EIR discussion for land use and planning will be drawn from the inventory and analysis prepared for the Background Report. Changes in land use designation are an anticipated major component of the General Plan Update, so the EIR analysis of this issue will focus on changes themselves, and how they are responsive to demographic and planning issues. These include the provision of housing, the preservation of agricultural land, and the balance of land uses to promote efficient transportation. In this regard, the alternatives analysis of the EIR will be important for comparing the overall effectiveness of the plan alternatives in responding to planning needs.

### Mineral and Natural Resources Impacts

Mineral resource information for the EIR will be drawn from the Background Report. This will provide a background for the aggregate mineral needs and supply within the County. Other resources that will be addressed in this section of the EIR include water, which will also reference the discussion in the Hydrologic and Water Quality Impacts section, and energy. The impacts in terms of general demand for these resources will be identified in the EIR. The planning process, subsequent review processes, and responsibilities of other agencies will all be identified as components of mitigation to help minimize the demands for these resources and to help ensure their accessibility when needed.

### Noise Impacts

The approach for updating information will rely on using as much of the current Noise Element as possible, augmented by survey and calculation updates provided in the Background Report. The EIR work will be focused on analyzing the noise conditions that have changed and the extent to which current and future noise levels may pose constraints on future land uses. Preparation of the Noise Element will use procedures from the Federal Highway Administration for estimating noise levels from vehicle traffic, and the OPR/Office of Noise Control guidelines for preparing Noise Elements. This prior work

will provide most of the existing conditions and impacts sections for the EIR. Tables giving the calculated distances from roadways to specific contours will illustrate these results.

Mitigation for noise impacts typically involves a progression as follows:

- Establishing appropriate land uses that are compatible with anticipated noise levels
- Identifying typical setbacks and other design measures that can be used where high noise levels are expected
- Using berms and noise walls when appropriate,
- Relying on structural noise insulation measures in some instances

The General Plan Update EIR will focus on the first of these measures, and describe how the remaining are accomplished in the planning and review for subsequent projects.

### Population and Housing Impacts

Although update of the Housing Element is not part of this work effort, the General Plan Update will produce an update of population and demographic information that will be important for planning and environmental assessment purposes. The EIR will use this information generated in the Background Report to evaluate the responsiveness of the General Plan Update to population and housing needs.

### Public Facilities and Service Impacts

This EIR section will address those services generally provided to the population by public agencies. These include the construction of flood control channels by county districts, the management of solid waste, the provision of police and fire protection services, schools, libraries, water and wastewater services. The identification and description of these service agencies will be drawn from the work in the Background Report. The description of impacts and mitigation will also be drawn from the prior work, which will include utility master planning and service reviews. The EIR will address potential additional demands on public services and utilities resulting from implementation of the General Plan Update. The main function of the EIR for this topic will be to identify how these service issues should be reviewed and addressed in subsequent projects. With proper planning at this General Plan Update stage, the subsequent reviews should be straightforward and not require substantial additional environmental documentation.

This EIR section will also deal with the utilities and services usually provided by private companies. Besides

water and wastewater services, the main systems to be discussed in this section include energy (provided mainly by Southern California Edison, Southern California Gas, and Pacific Gas and Electric) and telecommunications (provided by AT&T, SBC, and Sprint).

### Recreation Impacts

The EIR assessment of park and recreation effects will rely on current information provided by County staff regarding the size, locations, and facilities contained within County park areas. As the County population is anticipated to increase, the General Plan Update should provide for additional park and recreation facilities to continue at least the same level of service to the population. The EIR will also recognize the unique recreational opportunities in Tulare County provided by the National Forest, National Parks, and Wilderness Areas.

### Traffic and Circulation Impacts

The Traffic and Circulation section of the EIR will provide a summary of the findings of the traffic analysis prepared in the Background Report. The impacts and mitigation will be developed iteratively in that process, and will result in the identification of appropriate amendments for the Circulation Element. The EIR section will focus on identifying the implementation measures necessary to provide the improvements identified in the Circulation Element. The role of alternate transportation modes will also be addressed, since early planning for transit, bicycle, and pedestrian facilities is important for their development and use to help reduce vehicle traffic.

### Other Mandatory CEQA Sections

The EIR will include all of the discussions required for EIRs by Article 9 of the CEQA Guidelines. As a brief overview, the EIR will include the following:

- **Executive Summary.** This section will provide a summary of the entire EIR and include a discussion of the project's objectives; a description of the proposed General Plan Update; a summary of the environmental setting; a tabulated summary of environmental impacts and mitigation measures; and a discussion of alternatives considered, areas of controversy, and issues remaining to be resolved.
- **Introduction.** The introduction to the EIR will contain the project's objectives, a description of the proposed General Plan Update and general setting, and an overview of the EIR process and involvement of other responsible or trustee agencies.
- **Impacts and Mitigation Measures.** Building on the

existing setting information provided in the Background Report, the EIR will contain a set of impact criteria/thresholds that will be based on those previously identified in County EIRs and other adopted thresholds of significance. These criteria/thresholds will be used to assess impact significance. Adverse impacts that meet or exceed these criteria will be considered significant. The EIR will also describe all impacts in terms of their short or long-term effect, and present them in a logical discussion that the general public can understand. These discussions will be provided within the topical chapters described above.

- **Alternatives Analysis.** The EIR will address the population distribution alternatives described earlier and a No Project Alternative. The No Project Alternative will be based on the continued use of the existing General Plan for policy guidance in the County.

**Cumulative Impact.** The EIR will evaluate cumulative impacts based on planning documents and regional forecasts for the study area. The EIR will also estimate and discuss the contribution of the General Plan Update to the overall cumulative impact. Mitigation measures (mitigation policies) to minimize any cumulative impacts will also be developed.

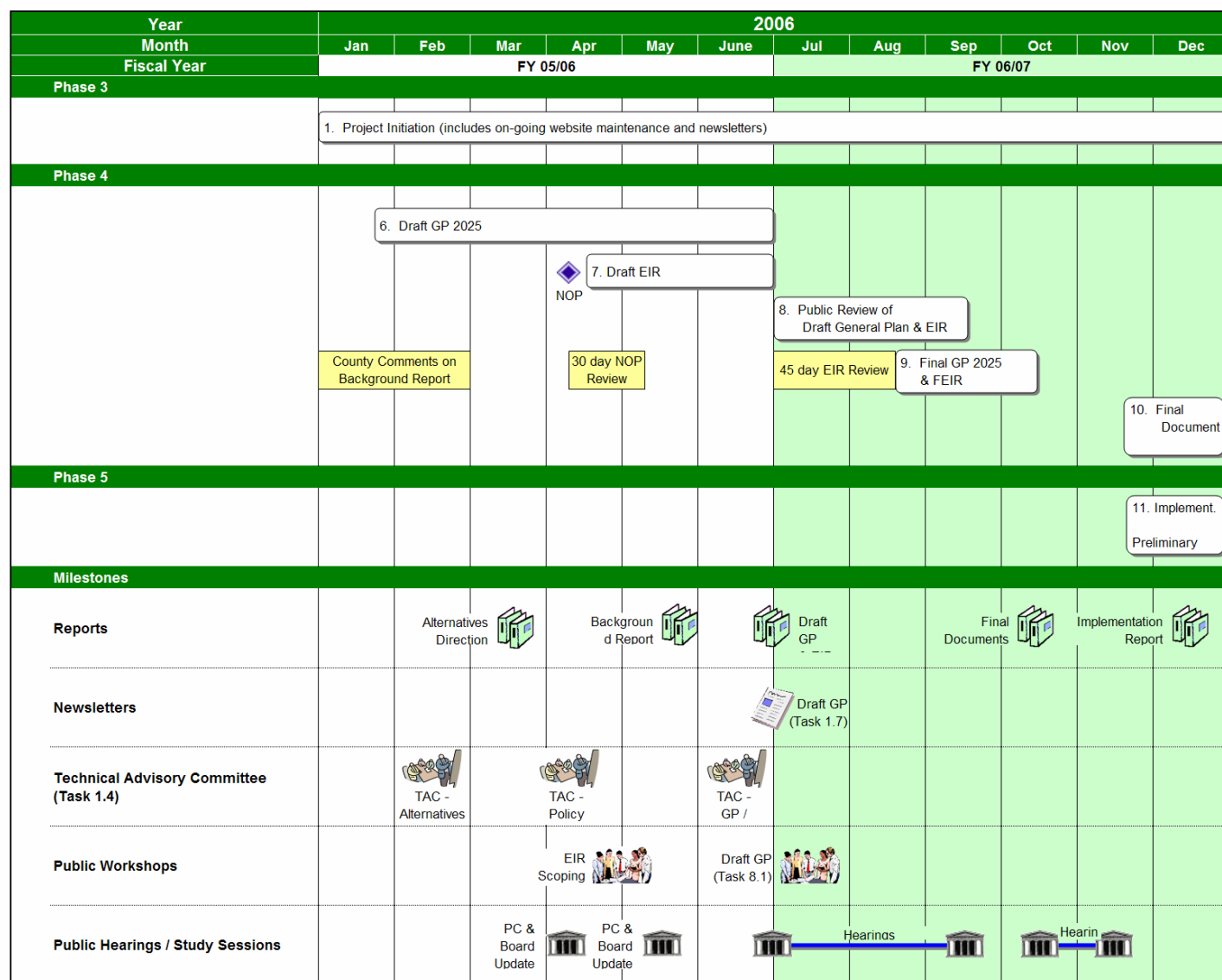
- **Other Statutory Sections.** In addition to the sections referenced above, the EIR will provide all other required CEQA sections, such as areas of controversy and significant unavoidable impacts.



## General Plan Schedule

The General Plan update remains on-track for completion by the end of 2006. The Goals and Policies Report and EIR are both expected to be published for public review in early July 2006. To introduce these documents and provide opportunities for public input, community workshops will be held in several locations in the County.

Public hearings with the Planning Commission and Board of Supervisors will be held in two sets. The first set will review the draft General Plan documents and provide opportunities for the public to find out more about the General Plan and provide comments on the documents. A second set of hearings will be held to finalize the General Plan and discuss the findings of the final EIR.



### Project Schedule

## TULARE COUNTY GENERAL PLAN 2030 AND EIR

Tulare County, California

Mintier & Associates  
Matrix Design Group  
URS  
RACESTUDIO  
Omni-Means  
Applied Development Economics  
Land Use Associates

## Potential Environmental Impacts

The following impacts could potentially result from implementation of the General Plan Update and will be evaluated in the EIR.

### Aesthetics

*The project may:*

- Have adverse effects on scenic vistas.
- Damage scenic resources.
- Degrade the existing visual character or quality of the site and its surroundings.
- Create a new source of substantial light or glare.

### Agriculture Resources

*The project may:*

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses.
- Conflict with existing zoning for agricultural use, or a Williamson Act contract.
- Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use.

### Air Quality

*The project may:*

- Conflict with or obstruct implementation of the applicable air quality plan.
- Result in a net increase of any criteria pollutant for which the project region is non-attainment under the federal or state ambient air quality standard.
- Expose sensitive receptors to substantial pollutant concentrations.
- Create objectionable odors affecting a substantial number of people.

### Biological Resources

*The project may:*

- Have a substantial adverse effect on any species identified as a candidate for special or sensitive status in local or regional plans, policies, or regulations, or by the California Dept. of Fish and Game or U.S. Fish and

Wildlife Service.

- Have a substantial adverse effect on riparian habitat.
- Have a substantial adverse effect on federally protect wetlands.
- Interfere 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.

### Cultural Resources

*The project may:*

- Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5.
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.
- Directly or indirectly destroy a unique paleontological resource or site or unique geological feature.

### Geology and Soils

*The project may:*

- Expose people or structures to landslides.
- Result in substantial soil erosion or the loss of topsoil.
- Be located on a geological 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.
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994).
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

### Hazards and Hazardous Materials

*The project may:*

- Emit hazardous emissions or handle hazardous or acutely hazardous materials, sub-

stances, or waste within ¼ mile of an existing or proposed school.

- 
- Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.
- For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- Expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

### Hydrology and Water Quality

*The project may:*

- Substantially deplete groundwater supplies or interfere with groundwater recharge.
- Substantially alter the existing drainage pattern of the site or area, in a manner that could result in substantial erosion or siltation on or off site.
- Substantially alter the existing drainage pattern of the site or area in a manner that could result in flooding on or off site.
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
- Otherwise substantially degrade water quality.
- Place housing within a 100-year flood hazard area.
- Place within a 100-year flood hazard area structures that would impede or redirect flood flows.
- Expose people or structures to a significant risk of loss, injury, or death involving flooding.
- Inundated by seiche, tsunami, or mudflow.

### Mineral Resources

*The project may:*

- Result in the loss of availability of a known mineral resource that would be of value to the region.

- 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.

### Noise

*The project may:*

- Expose persons to 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.
- For a project located within an airport land use plan expose people residing or working in the project area to excessive noise levels.
- For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.

### Population and Housing

*The project may:*

- Induce substantial population growth in an area, either directly or indirectly.

### Public Services

*The project may:*

- Create in increase in demand for new or expanded public facilities and services such as Fire protection, Police protection, Schools, Parks, and other public facilities, which may cause potentially significant environmental impacts.

### Recreation

*The project may:*

- 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.
- Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

## Transportation/Traffic

*The Project may:*

- Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system.
- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways.

## Utilities and Service Systems

*The project may:*

- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects .
- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.



## Tulare County General Plan Update

Tulare County, Countywide Planning Division  
5961 South Mooney Blvd.  
Visalia, CA 93277

people  
gente

possibilities  
posibilidades

prosperity  
prosperidad



## Tulare County General Plan Update

Tulare County continues to invite your participation in the final stages of the General Plan Update, beginning with an Environmental Impact Report (EIR) Scoping Meeting. Join us for a discussion of anticipated environmental issues for the General Plan and provide us with your views on what should be covered by the EIR.

Public Workshops and Public Hearings are also scheduled for late Summer and Fall, respectively. These forums will give interested parties the opportunity to express your opinions regarding the General Plan.

El Condado de Tulare le invita a participar en la fase final del Plan General, comenzando con un reunión del Informe del Impacto Ambiental (IIA). Acompañenos para hablar sobre asuntos ambientales por el Plan General y díganos sus opiniones y lo que usted piensa que debe estar incluido en el IIA.

El Condado tiene planeado mas reuniones publicas por verano y otoño tambien. Estas reuniones le darán a todos la oportunidad de decir sus opiniones sobre el Plan General.

Vamos a tener una persona que habla Español.

# Tulare County's Future Depends On Your Help Today

## General Plan EIR Public Scoping Meeting

**May 1, 2006  
1:30 PM**

Government Plaza  
PC Meeting Rooms A & B  
5961 S. Mooney Blvd.  
Visalia, CA

## Future Public Workshops/Hearings

Public Workshops will begin in the late Summer and Public Hearings will commence this Fall. When dates are confirmed they will be posted on our website.

**Look for details at our General Plan website at [www.westplanning.com/docs/tulare](http://www.westplanning.com/docs/tulare)**

**Questions? / ¿Preguntas? 559-733-6291**





# Tulare County General Plan Update

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## **Tulare County General Plan EIR Scoping Meeting**

May 1, 2006, 1:30 P.M. Conference Rooms A & B,  
Government Plaza, 5961 S. Mooney Blvd., Visalia, CA

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Meeting commenced at 1:35

### **Theresa Szymanis, Tulare County RMA**

(Introduces Staff) Staff is here to listen to the comments made by the public. This meeting is not a dialogue session. Prior to this meeting the County sent out over 225 NOP's and 300 postcards to notify the public about the Scoping Meeting and future meetings. Translation services are available for this meeting.

### **Ted Holzem, Mintier and Associates**

The purpose of meeting is to get information from the public on what they want in the EIR. The EIR is available online for access. The proposed alternatives are shown in the NOP. The city-centered alternative directs growth to existing city limits. The second alternative assumes continued growth within the County. Alternative three is the County focused growth that sends more pop to existing communities within the County. The NOP describes key issues brought up in General Plan process. The General plan is divided into different sections. This EIR is a Program EIR; it is an umbrella analysis. The public can now make comments.

### **Del Strange, Woodlake**

States that he asked for all available General Plan information and was unaware that the NOP was available. Spoke with Jason Waters on several occasions. Does not have the NOP and does not feel confident in commenting at this time. Requested the meeting be rescheduled after everyone had a chance to review the NOP.

### **George Finney, RMA**

Indicates to Del Strange that the meeting is not a public hearing but an EIR Scoping Meeting. Comments can be made in writing on the website.

**Del Strange, Woodlake**

The County should reschedule the meeting. States that he requested all information regarding the General Plan before the NOP was available.

**George Finney**

Has anyone called the staff to request an NOP?

**Public**

No one has called to request an NOP.

**Julie Bigham, Woodlake**

The notices should have indicated the NOP was available online. Indicates that she was unaware the NOP was unavailable. How can we make comments without reading the NOP?

**George Finney, RMA**

This is not a meeting to discuss the accuracy of the NOP. The NOP is not the function of this meeting.

**Theresa Szymanis, RMA**

The postcard indicates that the information is available online.

**Janet Lazarus, Tulare**

We don't understand the County terminology. Words like NOP and EIR Scoping Meeting are difficult for the public to understand. We have been on Internet trying to get information. The County mailed only 300 notices but there are 400,000 people in the County. Why did you only mail to 1% of the people? You would have better input if you put notices in the newspaper. Stated that she called for information and spoke with Theresa Szymanis but was not informed about the NOP.

**Ted Holzem, Mintier and Associates**

States that the purpose of this meeting is to get additional comments on the EIR. We need comments on what should be included on the EIR. Comments should be related to the EIR. Reminds public that the EIR has not been completed.



**Richard Harriman, Fresno, Valley Advocates Inc.**

States that he did receive the postcard but was unaware that the NOP was available. The EIR should also be provided in Spanish or a summary of the EIR should be provided in Spanish. States that his comments are based on strengths and inadequacies of the current General Plan.

The GP should include an Air Quality Element. There should be a specific Air Quality Element and it shouldn't be merged into the ERME. An Agriculture Element should be included in the General Plan as well. An Economic Element is also necessary.

County needs to include/analyze long-term permanent open space, such as the work that was done in the Foothill Growth Management Plan, but includes a stronger open space designation. The County should focus on the city based alternatives. The EIR should analyze or provide that the existing cities do not grow together. We should avoid the merging of communities to preserve open space between these communities.

The EIR should also include an analysis of the effects of global warming and the effects of greenhouse gasses. We should mitigate impacts to air quality because they will be significant. States that he will not accept a non-mitigating finding for impacts that cause air quality to worsen. There are feasible ways to cut down emissions. Mitigation measures to lessen air quality impacts should include alternative fuels, bio-diesel, bio-mass, etc. An air quality trust should be a consideration for the County.

Habitat surrounding riparian habitat (Kings River, Tule River, as other seasonal streams/rivers) should be included in the EIR. The Kings River Plan should be "beefed up". We need to look at a more comprehensive plan to protect the Kings River and other rivers/streams. An analysis of the Kings River Plan and the impacts of the rivers that feed the Tulare Lake should also be examined. A cumulative impact analysis of the effects of dams should be included (i.e., raising of the Terminus Dam).

**Brad Caudill, Tulare County Farm Bureau**

County should include an analysis of the impacts of the GP scenarios on the agricultural/urban interface and the right to farm.

**Betsy Tunnel, Kingsburg**

Landowners need rights and tourists need to feel that this part of California is a different place. Agriculture needs to be protected from poor air and poor water quality to protect uniqueness.

**John Pehrson, Exeter**

The plan should include a mineral resources element and conservation element. Do you know if Kimberly Lobe has received the draft mineral resources element?

**Theresa Szymanis, RMA**

We have a committee reviewing these things.

**John Pehrson, Exeter**

There should be a conservation easement idea in the GP. Water should not be exported out of Tulare County. The EIR needs to review flood control measures to ensure they are adequate.

**Don Manro, Tulare**

States that he hasn't seen draft elements or maps.

**George Finney, RMA**

There is no draft element yet to review. There will not be documentation ready for public review for at least a month.

**Don Manro, Tulare**

There should be a policy that states that no new cities should be planned. City centered option is the best alternative. Tulare County's relies imports, such as petroleum fuels, should be analyzed as a limited resource and sustainable energy should be reviewed and analyzed as a source for energy. County needs an EIR alternative addressing an insufficient fuel scenario.

**George Finney, RMA**

General Plan Updates, like the County is doing, requires an Air quality element. The requirement is specific to this part of the state. TCAG is helping out with the air quality element.

**Julie Bigham, Woodlake**

Water quantity should be analyzed in detail, as there is an overdraft water situation that continues to worsen (loss of 6 inches/year). EIR should analyze how to deal with/mitigate for depleting water sources. The County should look at the water situation with the Yokhol Valley project. The subdividing of agricultural land should

be analyzed as a loss to farmland. Many of our farmlands are have been subdivided and converted to mini residential communities.

**Greg Kirkpatrick, Visalia**

States that he is not speaking on behalf of the city. It seems like city centered alt has been abandoned. Therefore, all three alternatives need to be analyzed with special attention paid to the fiscal cost associated with each alternative, specifically cost versus revenue, and include the offer that Visalia has made for cost sharing. Revenue sharing agreement could address infrastructure needs in many of the communities within the County.

VMT and Air Quality impacts should be analyzed across the three Alternatives. Infrastructure costs and traffic impacts should be included as well. Visalia's General Plan includes mitigation programs for agriculture impacts. The Visalia General Plan used mitigation programs like: Concentric Urban growth within growth Boundaries, increased densities/infill, and an agricultural mitigation program. The County must avoid non-mitigable impacts. The County should meet together with cities to form Agricultural Mitigation Programs.

**Christine Foster, Visalia Asthma Coalition**

We should have city centric growth in the County because it takes advantage of exiting infrastructure and transit. The GP needs to address how to reduce air and water quality issues associated with growth. There should be few exceptions in the EIR regarding impacts to air quality. Solar energy should be included in new development. We need to look at the impact of trees on the environment. Trees help clean the air, etc.

**Richard Harriman, Fresno, Valley Advocates**

The baseline analysis for the VMT should be clear. Alternative energy sources should be included examined. We should examine the economic impacts of alternative fuel vehicles and solar power. The economic element should include an analysis of what agricultural land is really worth based on different types of agricultural products (more high end or organic products versus lower grade product).

**Theresa Szymanis, RMA**

The public may comment by mail or through the General Plan website.

**Terry Manning, Yokhol**

The County needs to review what is more important; Valley agriculture or Foothill Grazing. There has been a de-emphasis of the importance of foothill agriculture.

Cattle are the third highest agricultural item in Tulare County. The Foothills are an important part of that industry. Agricultural conversion over the past 5 years was 6500 acres, most of it in prime agriculture land due to the location of cities. The City centered growth should be the preferred alternative.

The County should focus on bringing infrastructure to small communities. The population and cumulative impacts of new towns should be included in the EIR. The County should not bring people to the foothills that bring traffic and poor water and air quality.

**Scott Cochran, TCAG**

TCAG's Regional Blueprint gives a 50-year vision that takes a regional look at many of the issues discussed during this meeting.

**Richard Harriman, Fresno, Valley Advocates**

The County needs to look at the multifaceted complexity of economics, not just agriculture. We must look at difference between resource extractive vs. resource exploitation. Knowledge based industries, production of alternative energy, and education can ensure there are enough jobs for future residents. Quality, lifelong learning needs to be available.

If we use city-centered concept we need to grow up rather than out. The water use and impacts of the Boswell project should be included.

**George Finney, RMA**

Yokhol is a different project but impacts will be looked at.

**Twila Trotter, California Hot Springs**

Is sludge dumping and mega dairies allowed in the County? We should avoid becoming like Bakersfield.

**George Finney, RMA**

Explains to Twila that the County is the largest agriculture-producing county in the world and that there are large dairies in the County.

**Greg Kirkpatrick, Visalia**

Visalia has adopted a Downtown Southeast Specific Plan that will increase its urban densities and provide for more housing. Need to review urban densities.

**Betsy Tunnel, Kingsburg**

The County should review dairies as a source for energy (i.e. methane). The energy could mitigate impacts of the dairies. The SJVAQCD will be providing rules for dairies and the types of mitigation they can use.

**Peyton Ellas, Springville**

The County should include an analysis of the cumulative economic impact caused by agricultural/open space conversion as it relates to the loss to tourism and the loss to agriculture as an industry.

**Adjournment**



**From:** "Lynne Silva" <LSILVA@mp.usbr.gov>  
**To:** <TSzymanis@co.tulare.ca.us>  
**Date:** 4/26/2006 9:59:06 AM  
**Subject:** Central Valley Project Water

Dear Ms. Szymanis,  
Tulare County has a contract with the U.S. Bureau of Reclamation for Central Valley Project water (Contract # 14-06-200-8293A-IR10). The General Plan EIR should include a discussion of current water supplies and future water needs to support development. If Central Valley Project 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. Please add me to your mailing list at the address below. Reclamation thanks you for the opportunity to comment on future planning in Tulare County.

Lynne Silva  
Environmental Protection Specialist  
U.S. Bureau of Reclamation  
South Central California Area Office, Fresno  
1243 N Street  
Fresno, CA 93721  
559-487-5807 - Direct Line  
559-288-8799 - Cell  
559-487-5116 - SCCAO Main Office  
lsilva@mp.usbr.gov

4/29

Theresa

Thank you for the opportunity to read and respond to the NOP for the environmental document for the GP update. Should one of the impacts resulting from the project be accelerated deterioration of the County road system? You are probably covered on the increased capacity needed but maintenance will be a problem as well.

Please see me if questions.

Britt



In

Page 1 of 21



## Public Comm

## Tulare County General Plan Update

## Send Us Your Comments

As a community member, your input is essential to creating a General Plan that aspirations of the people who live, work, or own property in Tulare County. You provide input by attending community workshops, public hearings, or contacting County's General Plan staff. You can contact the County directly by calling or writing Theresa Szymanis:

Theresa Szymanis, AICP  
Countywide Planning Manager  
5961 S. Mooney Blvd.  
Visalia, CA 93277  
Phone: (559) 733-6291 x-4201  
Fax: (559) 730-2653  
[TSzymanis@co.tulare.ca.us](mailto:TSzymanis@co.tulare.ca.us)

You can also use the form below to send us an e-mail message. By filling in this information, you will also be added to our mailing list for the General Plan update.

Name

see attached

Address

Address (cont'd)

City

State

Zip Code

Phone

Email

Comment

Would not  
accept the 11.  
e-mail...

☒ Add me to your mailing list

Send Comments

yes

Robert Krase  
132 E. MORTON AVE.  
PORTERVILLE, CA 93257  
784-2351  
[KRASE@KRASELAW.COM](mailto:KRASE@KRASELAW.COM)

(3 pages including this one)

**TSymanis@co.tulare.ca.us, Scoping, Tulare County General Plan Update**

---

To: TSymanis@co.tulare.ca.us  
From: Robert Krase <krase@kraselaw.com>  
Subject: Scoping, Tulare County General Plan Update  
Cc:  
Bcc: michalreed@hotmail.com, ellis@earthlink.com  
Attached:

May 1, 2006, Scoping, Tulare County General Plan Update

The following issues should be within the scope of the General Plan and addressed by the General Plan:

1. Measurable criteria for open space should be established so that the impact of any development project on open space is consistent and not so influenced by politics. Such criteria should include, but not necessarily be limited to the following:

- a) No ridge top building to preserve the scenic skyline;
- b) Creation of adequate wildlife corridors;
- c) Protection of waterways and riparian habitats;
- d) Protection of special features, such as vernal pools, critical species, etc.

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.

2. Similar to open space, specific criteria should be resolved to preserve agricultural land. While there has been repeated lip service to preserving agricultural land, in practice there has been little protection.

3. 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. As Tulare County becomes more densely populated, more emphasis must be given to public park land in areas west of the Sequoia National Forest. Right now there is lack of river access to the Tule and Kaweah rivers and lack of recreational land in the lower foothills.

4. The scoping also needs to deal directly with piecemeal development outside of existing villages and hamlets. An example would be Montgomery Ranch near/at Springville. The piecemeal development has in effect resulted in the creation of a small settlement, without any commercial infrastructure and without any reasonable sewage plant. A development of that scope should not have been allowed without sewage treatment facilities and should not have been allowed to rely upon septic systems. Piece-meal development should be anticipated.

Again, there must be specific criteria so that political influence would not allow a developer to evade the General Plan's requirements. There has to be more E.I.R. requirements for development in new areas because even when the initial development is relatively small and insignificant, past history has shown that it almost always generates subsequent development of the entire vicinity. Therefore there must be more emphasis on E.I.R.'s, and monitoring

**TSymanis@co.tulare.ca.us, Scoping, Tulare County General Plan Update**

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developments outside of existing developed areas, and more enforcement of requirements for items such as proper sewage disposal and provision of services.



STATE OF CALIFORNIA

Governor's Office of Planning and Research  
State Clearinghouse and Planning Unit

Arnold  
Schwarzenegger  
Governor

Notice of Preparation

April 28, 2006

To: Reviewing Agencies  
Re: Tulare County General Plan Update  
SCH# 2006041162

Attached for your review and comment is the Notice of Preparation (NOP) for the Tulare County General Plan Update draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

**Theresa Szymanis**  
**Tulare County Resource Management Agency**  
**5961 S. Mooney Boulevard**  
**Visalia, CA 93277**

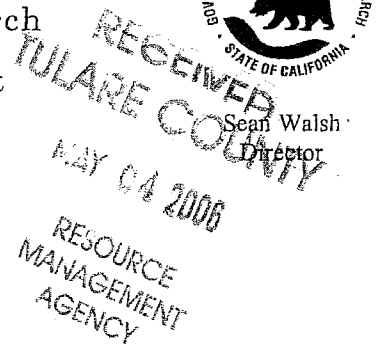
with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan  
Project Analyst, State Clearinghouse

Attachments  
cc: Lead Agency



**Document Details Report  
State Clearinghouse Data Base**

**SCH#** 2006041162  
**Project Title** Tulare County General Plan Update  
**Lead Agency** Tulare County Resource Management Agency

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**Type** NOP Notice of Preparation  
**Description** The proposed project represents a comprehensive update to the County's existing General Plan. The existing General Plan consists of countywide topical elements and regionally specific elements. The countywide General Plan includes the following topical elements.

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**Lead Agency Contact**

**Name** Theresa Szymanis  
**Agency** Tulare County Resource Management Agency  
**Phone** (559) 733-6291 **Fax**  
**email**  
**Address** 5961 S. Mooney Boulevard  
**City** Visalia **State** CA **Zip** 93277

---

**Project Location**

**County** Tulare  
**City**  
**Region**  
**Cross Streets**  
**Parcel No.**  
**Township**

**Range**

**Section**

**Base**

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**Proximity to:**

**Highways**  
**Airports**  
**Railways**  
**Waterways**  
**Schools**  
**Land Use** Multiple Designations/Multiple Designations

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**Project Issues** Air Quality; Water Supply; Water Quality; Housing; Agricultural Land; Landuse

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**Reviewing Agencies** Resources Agency; Department of Conservation; Department of Parks and Recreation; Office of Historic Preservation; Department of Water Resources; Department of Fish and Game, Region 4; Department of Health Services; Office of Emergency Services; Native American Heritage Commission; California Highway Patrol; Department of Housing and Community Development; Caltrans, District 6; Department of Toxic Substances Control; Regional Water Quality Control Bd., Region 5 (Fresno)

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**Date Received** 04/28/2006 **Start of Review** 04/28/2006 **End of Review** 05/30/2006

JUN#		Regional Water Quality Control Board (RWQCB)	
		<input type="checkbox"/> RWQCB 1 Cathleen Hudson North Coast Region (1)	
		<input type="checkbox"/> RWQCB 2 Environmental Document Coordinator San Francisco Bay Region (2)	
		<input type="checkbox"/> RWQCB 3 Central Coast Region (3)	
		<input type="checkbox"/> RWQCB 4 Teresa Rodgers Los Angeles Region (4)	
		<input type="checkbox"/> RWQCB 5S Central Valley Region (5)	
		<input checked="" type="checkbox"/> RWQCB 5F Central Valley Region (5) Fresno Branch Office	
		<input type="checkbox"/> RWQCB 5R Central Valley Region (5) Redding Branch Office	
		<input type="checkbox"/> RWQCB 6 Lahontan Region (6)	
		<input type="checkbox"/> RWQCB 6V Lahontan Region (6) Victorville Branch Office	
		<input type="checkbox"/> RWQCB 7 Colorado River Basin Region (7)	
		<input type="checkbox"/> RWQCB 8 Santa Ana Region (8)	
		<input type="checkbox"/> RWQCB 9 San Diego Region (9)	
		<input type="checkbox"/> Other	
JUN#		Regional Water Quality Control Board (RWQCB)	
		<input type="checkbox"/> Caltrans, District 8 Dan Kopulsky	
		<input type="checkbox"/> Caltrans, District 9 Gayle Rosander	
		<input type="checkbox"/> Caltrans, District 10 Tom Dumas	
		<input type="checkbox"/> Caltrans, District 11 Mario Orso	
		<input type="checkbox"/> Caltrans, District 12 Bob Joseph	
		<u>Cal EPA</u>	
		<u>Air Resources Board</u>	
		<input type="checkbox"/> Airport Projects Jim Lerner	
		<input type="checkbox"/> Transportation Projects Kurt Karperos	
		<input type="checkbox"/> Industrial Projects Mike Tollstrup	
		<input type="checkbox"/> California Integrated Waste Management Board Sue O'Leary	
		<input type="checkbox"/> State Water Resources Control Board Jim Hockenberry Division of Financial Assistance	
		<input type="checkbox"/> State Water Resources Control Board Student Intern, 401 Water Quality Certification Unit Division of Water Quality	
		<input type="checkbox"/> State Water Resources Control Board Steven Herrera Division of Water Rights	
		<input checked="" type="checkbox"/> Dept. of Toxic Substances Control CEQA Tracking Center	
		<input type="checkbox"/> Department of Pesticide Regulation	
JUN#		Regional Water Quality Control Board (RWQCB)	
		<input type="checkbox"/> Public Utilities Commission Ken Lewis	
		<input type="checkbox"/> State Lands Commission Jean Sarho	
		<input type="checkbox"/> Tahoe Regional Planning Agency (TRPA) Cherry Jacques	
		<u>Business, Trans &amp; Housing</u>	
		<input type="checkbox"/> Caltrans - Division of Aeronautics Sandy Hesnard	
		<input type="checkbox"/> Caltrans - Planning Terri Pencovic	
		<input checked="" type="checkbox"/> California Highway Patrol Shirley Kelly Office of Special Projects	
		<input checked="" type="checkbox"/> Housing & Community Development Lisa Nichols Housing Policy Division	
		<u>Dept. of Transportation</u>	
		<input type="checkbox"/> Caltrans, District 1 Rex Jackman	
		<input type="checkbox"/> Caltrans, District 2 Marcelino Gonzalez	
		<input type="checkbox"/> Caltrans, District 3 Jeff Pulverman	
		<input type="checkbox"/> Caltrans, District 4 Tim Sable	
		<input type="checkbox"/> Caltrans, District 5 David Murray	
		<input checked="" type="checkbox"/> Caltrans, District 6 Marc Birnbaum	
		<input type="checkbox"/> Caltrans, District 7 Cheryl J. Powell	
JUN#		Regional Water Quality Control Board (RWQCB)	
		<input type="checkbox"/> Fish & Game Region 3 Robert Floerke	
		<input checked="" type="checkbox"/> Fish & Game Region 4 Julie Vance	
		<input type="checkbox"/> Fish & Game Region 5 Don Chadwick Habitat Conservation Program	
		<input type="checkbox"/> Fish & Game Region 6 Gabrina Gatchel Habitat Conservation Program	
		<input type="checkbox"/> Fish & Game Region 6 I/M Tammy Allen Inyo/Mono, Habitat Conservation Program	
		<input type="checkbox"/> Dept. of Fish & Game M George Isaac Marine Region	
		<u>Other Departments</u>	
		<input type="checkbox"/> Food & Agriculture Steve Shaffer Dept. of Food and Agriculture	
		<input type="checkbox"/> Dept. of General Services Public School Construction	
		<input type="checkbox"/> Dept. of General Services Robert Sleppy Environmental Services Section	
		<input checked="" type="checkbox"/> Dept. of Health Services Veronica Malloy Dept. of Health/Drinking Water	
		<u>Independent Commissions/Boards</u>	
		<input type="checkbox"/> Delta Protection Commission Debby Eddy	
		<input checked="" type="checkbox"/> Office of Emergency Services Dennis Castrillo	
		<input type="checkbox"/> Governor's Office of Planning & Research State Clearinghouse	
		<input checked="" type="checkbox"/> Native American Heritage Comm. Debbie Treadway	
JUN#		Regional Water Quality Control Board (RWQCB)	
		<u>Resources Agency</u>	
		<input type="checkbox"/> Resources Agency Nadell Gayou	
		<input type="checkbox"/> Dept. of Boating & Waterways David Johnson	
		<input type="checkbox"/> California Coastal Commission Elizabeth A. Fuchs	
		<input type="checkbox"/> Colorado River Board Gerald R. Zimmerman	
		<input type="checkbox"/> Dept. of Conservation Roseanne Taylor	
		<input type="checkbox"/> California Energy Commission Paul Richins	
		<input type="checkbox"/> Dept. of Forestry & Fire Protection Allen Robertson	
		<input type="checkbox"/> Office of Historic Preservation Wayne Donaldson	
		<input type="checkbox"/> Dept of Parks & Recreation Environmental Stewardship Section	
		<input type="checkbox"/> Reclamation Board DeeDee Jones	
		<input type="checkbox"/> S.F. Bay Conservation & Dev't. Comm. Steve McAdam	
		<input type="checkbox"/> Dept. of Water Resources Resources Agency Nadell Gayou	
		<u>Conservancy</u>	
		<u>Fish and Game</u>	
		<input type="checkbox"/> Depart. of Fish & Game Scott Flint Environmental Services Division	
		<input type="checkbox"/> Fish & Game Region 1 Donald Koch	
		<input type="checkbox"/> Fish & Game Region 2 Banky Curtis	
Last Updated on 04/25/06			

May 17, 2006

Theresa Szymanis  
Division Manager, Countywide Planning  
Resource Management Agency  
5961 South Mooney Boulevard  
Visalia, CA 93277

RECEIVED  
TULARE COUNTY

MAY 19 2006

RESOURCE  
MANAGEMENT  
AGENCY

Dear Ms. Szymanis,

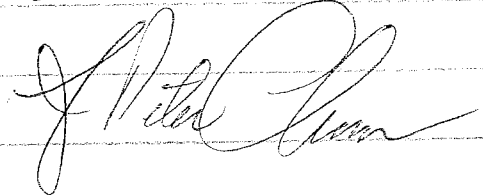
Regarding the Environmental Impact (EIR) for the General Plan:

- The General Plan should include a stronger, permanent open space designation.
- The city focused alternative is the best choice as an overall framework.
- The EIR should include mitigation to avoid merger of communities.
- The county should consider the air quality effects of growth as a whole (cumulatively) rather than project by project.
- Analysis of habitat buffers around riparian zones, vernal pools, and other sensitive zones.
- "Ability to farm" instead of "Right to farm" should be the basis of ag/urban interface.
- Loss of open space should include in its analysis the value of the ag commodity as a whole in Tulare County - soil quality should not be the primary factor in determining growth corridors. (Cattle and calves ranked third in value to the county in 2005. Loss of rangeland would affect this commodity.)

- Loss of open space should include in its analysis economic impact through loss of tourist revenue (both current and potential) and ability of communities to develop alternative industries.
- The EIR should include stringent water conservation consideration. Surface water is now fully allocated (actually over-allocated.) Increase population will increase demand for surface water. Global warming will cause the lessened snowpack to melt earlier, causing less water to flow in the rivers and streams in the Summer and Fall. New open air swimming pools and golf courses should be banned.
- Analysis of New Town criteria should include population and housing need and impact of the "additive" population.
- Large projects should include indicators of EIR success as milestones to completion.

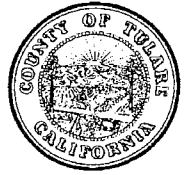
Sincerely,

Carole A. Clum



Carole & Peter Clum  
45638 South Fork Drive  
Three Rivers, CA 93271





## INTEROFFICE MEMORANDUM

---

May 22, 2006

TO: Theresa Szymanis, Project Planner  
Tulare County Resource Management Agency

FROM: Jason LoBue, Staff  
Tulare County Airport Land Use Commission Staff

Subject: NOTICE OR PREPARATION (NOP): Tulare County General Plan

Thank you for your recent submission of the NOP to the Tulare County Airport Land Use Commission (ALUC). Staff has reviewed the project and has the following comments:

Over the next several years there will be additional developments to several public-use airports within Tulare County. An example of this is Visalia Municipal Airport, which will be lengthening its runway. Such expansions and other development activities may have an impact on the environment and may be necessary in the Environmental Impact Report (EIR) for the Tulare County General Plan. The Tulare County Comprehensive Airport Land Use Plan (CALUP) provides policy and guidance to staff to determine conforming land use around public-use airports within Tulare County. ALUC Staff is planning on updating the Tulare County CALUP and is required by law to conform to the County General Plan. A list of airport projects can be supplied if necessary to your project, so a proper environmental impact from aviation expansion can be included in your EIR. Thank you for submitting your proposal for review and consideration.

Respectfully,

A handwritten signature in black ink, appearing to read "J. LoBue", with a stylized flourish at the end.

Jason LoBue  
ALUC  
559.733.6291 x4208

23 May, 2006


TO:

Teresa Szymanis  
Division Manager,  
Planning Management Agency  
5961 South Mooney Blvd.  
Visalia, CA 93277

I have written earlier this year to Board of Supervisors to state my concern about several projects currently under consideration by County staff. I understand that the revised General Plan is in final stages of preparation, and these comments refer to where new growth needs to be directed in coming years. I attended two of the public meetings that were held on this subject, and here repeat the opinion held by most of the people I talk with that new growth must be sent to existing urban areas.

There are a wide range of reasons for this. Issues of roads, water, other infrastructure, value of tourism and recreation in future economy, enlarging a base for new enterprises/business, and maintenance of the overall appeal of the lower and upper foothill regions for long term distinctiveness of the County. So, here I simply again urge all those involved in drafting general plan sections to not incorporate something to encourage new communities, well beyond the present concentrations of development. Any provision for such "leapfrog" growth (if it seems absolutely imperative that the idea must be at least mentioned) must be constrained and limited by clearly defined criteria. Certainly, to begin with, "Why...", and demonstrable need for such building. And "Why Not....confine to presently built up core areas"? This latter was clearly and consistently the wish of those at the public hearings, and of those presently discussing what lies ahead for the County.

Sincerely,

  
Joan Stewart,  
Springville, CA.

RECEIVED  
TULARE COUNTY

MAY 23 2006

RESOURCE  
MANAGEMENT  
AGENCY

May 25, 2006

To: Theresa Szymanis

From: Maya Ricci

Please note that 2 similar versions of this letter are presented to you by Tulare County Citizens for Responsible Growth and Wildplaces.

As we are a very divergent and diverse group we became a little chaotic and crossed communications electronically, thus panicked for a brief moment and feared we'd lost the transmission.

Essentially the letter intent is well meaning....

Thanks much for your work and indulgence.

Would you be kind enough to e-mail acknowledgment of receipt?

Sincerely,



Maya Ricci  
P.O. Box 636  
Three Rivers, CA. 93271

Phone: 906-4356

e-mail: [mayaricci3@sbcglobal.net](mailto:mayaricci3@sbcglobal.net)

RECEIVED  
TULARE COUNTY  
MAY 25 2006  
RESOURCE  
MANAGEMENT  
AGENCY

May 25, 2006

Theresa Szymanis, AICP, Chief Planner  
Tulare County Resources Management Agency  
5961 South Mooney Boulevard  
Visalia, CA 93277

**RE: Notice of Preparation for Tulare County General Plan Update**

Dear Ms. Syzmanis,

Thank you for the opportunity to comment on the Notice of Preparation for the Tulare County General Plan Update. On behalf of Tulare County Alliance for Responsible Growth, we urge you, the Board of Supervisors and the Planning Commission to adhere to the vision for compact, town-city centered growth, agriculture and open space preservation, and clean air and water that was called for in numerous public hearings and articulated in the City-centered General Plan Alternative.

Given that population growth and its associated pressures are of overriding importance in Tulare County we ask that the General Plan reflect bold leadership and provide strong parameters for directing growth.

We oppose the inclusion of “new town policies” in the General Plan, on the basis that such an element would undermine and even negate the County’s stated goals of protecting the “agricultural economy,” “beauty of the county,” and the “health and safety of its residents.” However, if such an element is included, it should be based on predetermined potential geographic locations and contain rigorous prerequisite conditions and performance standards to help mitigate the destructive impacts of “new town development.”

Tulare County Citizens for Responsible Growth is a coalition of Tulare County residents, farmers, conservationists and local businesses working to ensure that future growth protects our natural resources, preserves our heritage economy, and creates thriving, healthy cities and towns.

**We believe there are a number of key issues that must be examined in the EIR:**

- **Project definition:** CEQA requires that the project definition include the whole of an action that has the potential to harm the environment. The proposed location of the project is a key aspect of this definition, because it is frequently the site of the project that dictates the harm it may cause (*CEQA Guidelines Section 15378*). If the new town policies do not identify specific sites where new towns can be built, or the projected size and scope of these new towns, but rather creates guidelines for them to be built virtually anywhere in the county, it will be very difficult to develop a project description that complies with CEQA.

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with each of the environmental impacts. Indicators should measure not simply whether or not mitigation is being done, but rather should measure whether or not mitigation is actually **achieving the desired outcomes** in terms of minimizing or eliminating adverse environmental impacts. Set intervals for measuring indicators should be determined, as well as actions to be taken if desired outcomes are not being achieved.

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- **Additional Issues:** In addition, though these are not required by CEQA, we believe review should include an examination of impacts to:
  1. agriculture and tourism economies, affordable housing supply,
  2. education,
  3. jobs-housing balance.
  4. **meeting the population growth trends by matching the demographic needs of the county residents**

These issues were consistently identified as major concerns in the community workshops conducted over the course of the General Plan update.

### **City-Centered Growth Alternative: the Right Direction for Our County**

Tulare County Citizens for Responsible Growth supports the City-centered growth alternative, as recommended by the Planning Commission, because it will:

- Preserve farmland, open space, wildlife habitat and other natural resources
- Maintain the County's agricultural and tourist economies Minimize infrastructure costs associated with sprawling, low-density, auto-dependent development
- Protect air quality by encouraging the use of alternative transportation

We are not alone in our support of the city-centered growth alternative. This alternative received overwhelming support at the many public workshops hosted by the County. It is also supported by a plurality of cities in Tulare County, as well as Tulare County's own Planning Commission.

### **New Town Element Threatens Tulare County's Future**

We oppose the creation of new town policies in the General Plan, because such an element would severely compromise the County's stated goal of preserving prime farmland and open space. New town policies will encourage leapfrog development and undermine efforts to revitalize struggling city and town centers through infill development. It will mean longer commutes, polarized communities, emergency and health care strains on the already inadequate infrastructure, and it will deal a major blow to two of the County's most important economies: agriculture and tourism.

**We urge you to seriously reconsider the creation of the new town element, and instead to focus on implementing the vision of the city-centered growth alternative.**

However, if the County is determined to move forward with new town policies, then we offer the following suggestions to minimize the damage these new towns will create. Our suggestions are based on the idea that new towns should only be created:

1. In discrete locations identified by the General Plan
2. when certain **prerequisite conditions** are met, and
3. the new towns themselves should be held to the highest **performance standards**.

We suggest that both the prerequisite conditions and performance standards be included as policies in the new town element of the General Plan only when the environmental data can considerably define and support the need.

#### **Prerequisite Conditions for New Town Development:**

The following prerequisite conditions, or triggers, should be met before the County Board of Supervisors approves a specific plan, Planned Community designation, or any other development approvals for a new town project.

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  1. Sheriff response time and personnel per capita
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  5. Appropriate health care facilities and services
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the state, cities and other government entities will not change dramatically in the next five years.

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- **Housing Needs:** The County must demonstrate that needed housing units to be provided by the new town could not feasibly be built in or adjacent to an existing community. This determination should be based on information provided in the County's housing element, as well as the housing elements of the city or cities within a 30-mile sphere of the proposed new town site.
- **Agriculture Master Plan:** The County must first have adopted and implemented an Agricultural Master Plan to address long-term viability of agriculture in the County, before approving a new town that will result in the loss of productive agricultural land. The Master Plan should identify near-term measures to protect ag land from incompatible development; establish mechanisms to protect ag land such as a mitigation program; ongoing programs to ensure the economic viability of local agriculture including local farm-to-market programs, promotion of agro-tourism, and technical assistance.
- **Water Supply:** The County must find that water supply for the County is stable and predictable. The County must have an adopted groundwater-monitoring program for all areas that rely upon groundwater. Before approving a new town, the County must make a finding that groundwater levels and in-stream flows in the area are stable, and that the new town will not result in a net decrease in groundwater supply.

#### **Performance standards for new towns:**

**In addition to the prerequisite conditions described above, the new town element should also prescribe performance standards that every new town proposal must adhere to. Achievement of the performance standards should be ensured through**



**regular monitoring, and the granting of PD permits and other project permits should be contingent upon the achievement of these performance standards.**

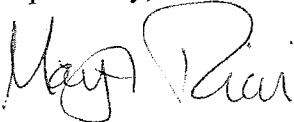
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- **Clustering/Density:** New towns should cluster development along transportation corridors and already-disturbed areas. To minimize the footprint of new development and create new communities that are walkable and transit-oriented, new towns should achieve a minimum density ranging from 10 – 20 dwelling units per acre. Development should be mixed-use, with basic services, retail and appropriate jobs located within or adjacent to residential neighborhoods.
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- **Air quality protection:** New town developments must adopt every feasible mitigation measure that will reduce emissions, with a particular emphasis on reducing daily car trips. A minimum of 50% of daily trips within and originating in the new town must be accomplished by alternative transportation (see section on alternative transportation).
- **Alternative Transportation:** To meet air quality goals, reduce traffic improve community livability, health and safety; all new towns should be designed to maximize use of alternative transportation modes such as walking, bicycling and transit. No less than 50% of daily trips within and originating in new towns should be accomplished by alternative

transportation. Funding for alternative transportation should include not only infrastructure costs for establishing new transit, carpool and bike/ped facilities, but should also include ongoing funding for operations, maintenance and monitoring. Neighborhoods should be designed to cluster jobs, retail, services and higher-density housing within walking distance of multi-modal transit “nodes.”

- **Water Quality Protection and Monitoring:** Every new town shall be required to establish specific and comprehensive water quality management and monitoring plan. Development shall use surface stormwater collection systems, including swales, detention ponds and energy dissipaters to slow runoff and improve stormwater quality. Other BMPs should be incorporated into project design to further enhance the removal of pollutants from runoff. Regular and ongoing monitoring of groundwater levels and contaminants shall be undertaken to ensure that no adverse impacts are occurring.
- **Wildlife and fish protection** – New town development shall not result in any significant impacts to biological resources. The efficacy of habitat protection and restoration measures shall be measured on an ongoing basis to ensure no changes to distribution or abundance of fish and wildlife.
- **Open Space Protection and Restoration:** New town development shall permanently protect and restore, if necessary, environmentally sensitive areas including riparian woodlands, oak woodlands, floodplains, steep slopes (30 percent or greater), unstable geology, unique archeological/historical sites, wildlife habitats and scenic vistas, as well as buffer zones of adequate size to ensure that the integrity of protected areas is maintained at or above existing levels.

Thank you again for the opportunity to comment upon the Notice of Preparation for the Tulare County General Plan Update . . .

Respectfully,



Maya Ricci for

**TULARE COUNTY CITIZENS FOR RESPONSIBLE GROWTH**

CC: Tulare County Board of Supervisors  
Tulare County Planning Commission



# County of Fresno

Department of Public Works and Planning  
**ALAN WEAVER**  
Director

May 23, 2006

Theresa Szymanis  
Chief Planner, Tulare County RMA  
5961 South Mooney Boulevard  
Visalia, CA 93277

RECEIVED  
TULARE COUNTY  
MAY 26 2006  
RESOURCE  
MANAGEMENT  
AGENCY

Dear Ms Szymanis:

Subject: Tulare County General Plan Update

The County of Fresno appreciates the opportunity to review and comment on the Tulare County General Plan Update. Based on the County's review of the project, we do not have any comments on the proposed project.

If you have any questions you may email me at [bsholars@co.fresno.ca.us](mailto:bsholars@co.fresno.ca.us) or call me at (559) 443-5342.

Sincerely,

Briza Sholars, Planning and Resource Analyst  
Development Services Division

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c: Theresa Acosta-Mena, Senior Staff Analyst, Environmental Analysis Unit

## DEVELOPMENT SERVICES DIVISION

2220 Tulare Street, Sixth Floor / Fresno, California 93721 / Phone (559) 262-4055 / 262-4029 / 262-4302 / 262-4022 FAX 262-4893  
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ECOLOGICAL RESTORATION AND EDUCATION

RECEIVED  
TULARE COUNTY  
MAY 26 2006

RESOURCE  
MANAGEMENT  
AGENCY

Theresa Syzmanis, Chief Planner  
Tulare County Resource Management Agency  
5961 South Mooney Boulevard  
Visalia, CA 93277

**RE: Notice of Preparation for Tulare County General Plan Update**

May 23, 2006

Thank you for the opportunity to comment on the Notice of Preparation for the Tulare County General Plan Update. WildPlaces fully endorses the recommendations presented to you by the Tulare County Citizens for Responsible Growth. In addition, we have in the letter below, also added our comment on assisting the county in complying with CEQA requirements to develop an Oak Woodland Management Plan. We urge you, the Board of Supervisors and the Planning Commission, to adhere to the vision for compact, city centered growth, agriculture (including rangeland) and open space preservation, and clean air and water that was called for in numerous public hearings and articulated in the City-centered General Plan Alternative.

Given that population growth and its associated pressures are of overriding importance in Tulare County we ask that the General Plan reflect bold leadership and provide strong parameters for directing growth.

We oppose the inclusion of "new town policies" in the General Plan, on the basis that such an element would undermine and even negate the County's stated goals of protecting the "agricultural economy," "beauty of the county," and the "health and safety of its residents." However, if such an element is included, it should be based on predetermined potential geographic locations and contain rigorous prerequisite conditions and performance standards to help mitigate the destructive impacts of "new town development."

Tulare County Citizens for Responsible Growth is a coalition of Tulare County residents, farmers, conservationists and local businesses working to ensure that future growth protects our natural resources, preserves our heritage economy, and creates thriving, healthy cities and towns.

**We believe there are a number of key issues which must be examined in the EIR:**

- **Project definition:** CEQA requires that the project definition include the whole of an action that has the potential to harm the environment. The proposed location of the project is a key aspect of this definition, because it is frequently the site of the project which dictates the harm it may cause (*CEQA Guidelines Section 15378*). If the new town policies do not identify specific sites where new towns can be built, or the projected size and scope of these new towns, but rather creates guidelines for them to be built virtually anywhere in the county, it will be very difficult to develop a project description that complies with CEQA.

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**Performance standards for new towns:**

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○  
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In addition to the above all growth in the county should be guided by the following. The following should become part of the county's Oak Woodlands Management Plan. We have used references from throughout the state where appropriate.

- **Oak woodlands identification and protection:**  
**Oak Woodlands Protection Standards:**

State Law: (CEQA sec1.2.1083.4B) requires that a county with oak woodlands, in an Oak Woodlands Management Plan, a provision that requires mitigation of any conversion of oak woodlands and would require that the plan contain specified mitigation alternatives and procedures to minimize impacts to oak woodlands in specified areas. Further language suggests protection of areas used by wildlife, and those near riparian zones and those that include snags.

Therefore, the following steps should be included in the updated General Plan, both to fully comply with State Law and to present a clear and consistent plan for the future:

**Add an Oak Woodlands Management Plan as part of Conservation/Open Space Element of General Plan, and conform the FGMP to its requirements.**

**The Oak Woodlands Management Plan shall include:**

- identify oak woodlands
- identify protection as the best mitigation alternative.
- where protection is not possible or feasible, include mitigation alternatives found in the state law (see specific mitigation alternatives).
  - restore former oak woodlands provided at least twice as many trees will be restored as the project removes.
  - Contribute funds to the Oak Woodlands Conservation Fund
  - A county shall require the planting of three seedlings for each oak tree that is removed...requirements for the planting, care, maintenance, monitoring and replanting of dead or diseased trees are incorporated into the mitigation.

(this is not an inclusive list from the state law, section 1.2.1083B-E)

### **1) Identify Oak Woodlands:**

**The county shall retain existing oak woodland and individual valley, black and live oak as part of residential, commercial, industrial and agricultural land division approvals. The blue oak, black oak, and live oak woodland communities in Tulare County are found in the regions included in the Foothill Growth Management Plan (Springville, Three Rivers, Lemoncove, East Porterville, etc.) Groves of black oak are found in the area included in the Mountain Plan. Individual heritage trees and groves of valley oak are found throughout the valley floor, commonly included in the Rural Valley Lands Plan.**

*(see Napa County General Plan, and Ventura County General Plan, adapted)*

### **2) Mitigation**

- identify preservation as best mitigation alternative
- where preservation is not possible, the following guidelines shall be used in determining measures which comply or provide additional protection to oak woodlands throughout the county.

### **Implementation:**

**An area shall be determined an oak woodland if there is evidence of significant historic oak canopy vegetation and recent (within seven years) removal of vegetation or if area is surrounded by contiguous oak woodland on at least three sides and there is no geologic or other natural characteristic that would indicate the area was never oak woodland habitat.**

### **from Current Tulare County General Plan:**

**Goal 9.H: Protect the natural features of the foothills by directing development to selected areas.**

**Policies:**

9. H.9 - Restrict the removal of natural vegetation, except for wildland fire prevention purposes.

9. H.12 Prohibit unnecessary removal of native trees on development sites prior to approval of development plans to control erosion, preserve wildlife habitat, and maintain natural the natural character of developing areas.

9. H.15 Rare and Endangered Species and wildlife of special concern should be identified and their habitat protected against encroachment by development.

**Suggested Revision:**  
**Add policy:**

**Development in the vicinity of oak woodlands must be designed and sited to maximize the long-term preservation of the trees. The county should develop oak canopy protection regulations.**

**Significant oak woodlands must be retained and heritage trees must be protected. The county shall educate and encourage farmers, developers and other landowners to preserve natural vegetation in and adjacent to cultivated and developed areas. The county shall support the protection of valuable lands by developing tree regulations.**

**Development in the vicinity of significant oak woodlands shall be designed and sited to maximize the long-term preservation of the trees and the integrity of their natural setting.**

(see San Joaquin County General Plan, adapted)

**There are extensive areas of unfragmented oak woodland remaining in the unincorporated area of the county. Efforts shall be made to protect these and other large unfragmented communities, particularly where these areas also include valley/foothill riparian habitats.**

(see Placer County General Plan, adapted)

**Policy:**

**Project sites supporting oak woodlands should be evaluated to determine whether project-related impacts would result in fragmentation of a contiguous stand either on the site or on adjacent parcels. The conservation of this community should be a priority.**

(see Placer County General Plan, adapted)

**Implementation:**

**Individual Trees may be protected for aesthetic or soil-retention purposes. However, protection of individual trees in a fragmented, developed environment does not reduce or eliminate the responsibility for the function and value-loss of intact oak woodlands if they were present on the site prior to construction.**

(see Placer County General Plan, adapted)

**Goal 9.D: Provide recreation and open space opportunities both for local residents and for the visiting public.**

**Policies:**

9.D.1 Identify those environmentally sensitive areas within development corridors which should be maintained as open space such as areas characterized by floodplains, steep slopes (30 percent or greater), unstable geology, unique archeological/historical sites, special wildlife habitats, and scenic vistas.

9.D.2. Protection of unique open space areas such as riparian woodlands, oak groves, interesting rock formations, and scenic vistas, shall be encouraged.

**Implementation:** The Site Review Committee shall review proposed projects to determine if on-site environmentally sensitive areas are protected.


**suggested revision: Revise Policy 9.D.2. to state:**

**Protection of unique open space areas such as riparian woodlands, oak woodlands, interesting rock formations, and scenic vistas, shall be encouraged**

**Conclusion**

Thank you again for the opportunity to comment upon the Notice of Preparation for the Tulare County General Plan Update.

Sincerely,



Mehmet McMillan  
Director  
WildPlaces

*Glenn J. Morris, Springville  
member,  
Tulare County Citizens  
for Responsible Growth  
WildPlaces*

CC: Tulare County Board of Supervisors  
Tulare County Planning Commission  
Visalia Times Delta  
Fresno Bee  
Valley Voice  
Southern Sierra Messenger  
Porterville Recorder

A Project of I.H.C.

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35549 Highway 190 • P.O. Box 853, Springville, CA 93265 • (559) 539-5263 •  
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STATE OF CALIFORNIA, RESOURCES AGENCY

ARNOLD SCHWARZENEGGER, GOVERNOR



# DEPARTMENT OF CONSERVATION

## DIVISION OF LAND RESOURCE PROTECTION

801 K STREET • MS 18-01 • SACRAMENTO, CALIFORNIA 95814

PHONE 916 / 324-0850 • FAX 916 / 327-3430 • TDD 916 / 324-2555 • WEB SITE [conservation.ca.gov](http://conservation.ca.gov)

May 25, 2006

Theresa Szymanis, AICP, Chief Planner  
Tulare County Resource Management Agency  
5691 South Mooney Boulevard  
Visalia, CA 93277

Subject: Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR)  
for the Tulare County General Plan Update **SCH# 2006041152**

Dear Ms. Szymanis:

The Department of Conservation's Division of Land Resource Protection (Division) monitors farmland conversion on a statewide basis and administers the California Land Conservation (Williamson) Act and other agricultural land conservation programs. The Division has reviewed the above NOP and offers the following recommendations for the DEIR with respect to the project's potential impacts on agricultural land.

The proposed project involves a comprehensive General Plan Update (GPU) for the Tulare County planning area. The NOP notes that one key value statement for the GPU is that the County will protect its agricultural economy while diversifying employment opportunities. The NOP also notes that some agricultural land conversion may be necessary to accommodate future population growth, however, some of the land loss may be offset by preservation of the most agriculturally productive and valuable areas. Therefore, the Division recommends that, at a minimum, the following items be specifically addressed to document and treat project impacts on agricultural land and land use.

### Agricultural Setting of the Project

The DEIR should describe the project setting in terms of the actual and potential agricultural productivity of the land. In addition to existing county mapping resources, the GPU should also utilize information from the Division's Tulare County Important Farmland Map, which defines farmland according to soil attributes and land use. In addition, we recommend including the following information to characterize the agricultural land resource setting of the planning area.

- Current and past agricultural use of areas within the county. Include data on the types of crops grown, and crop yields and farmgate sales values.

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- To help describe the full agricultural resource value of the soils on the site, we recommend the use of economic multipliers to assess the total contribution of the county's potential or actual agricultural production to the local, regional and state economies. State and Federal agencies such as the UC Cooperative Extension Service and USDA are sources of economic multipliers.

#### Project Impacts on Agricultural Land

- Type, amount, and location of farmland conversion resulting directly and indirectly (growth-inducement) from project implementation.
- Impacts on current and future agricultural operations; e.g., land-use conflicts, increases in land values and taxes, vandalism, etc.
- Incremental project impacts leading to cumulatively considerable impacts on agricultural land. This would include impacts from the proposed project as well as impacts from past, current and probable future projects.

Future site-specific project impacts on agricultural resources may also be quantified and qualified by use of established thresholds of significance (California Code of Regulations Section 15064.7). The Division has developed a California version of the USDA Land Evaluation and Site Assessment (LESA) Model, a semi-quantitative rating system for establishing the environmental significance of project-specific impacts on farmland. The model may also be used to rate the relative value of alternative project sites. The LESA Model is available on the Division's website noted later in this letter.

#### Williamson Act Lands

A project is deemed to be of statewide, regional or area-wide significance if it will result in cancellation of a Williamson Act contract for a parcel of 100 or more acres [California Code of Regulations Section 15206(b)(3)]. Since lands under Williamson Act contract and in agricultural preserves exist within the county, the Division recommends that the following information be provided in the DEIR:

- A map detailing the location of agricultural preserves and contracted land within each preserve. The DEIR should also tabulate the number of Williamson Act acres, according to land type (e.g., prime or non-prime agricultural land), which could be impacted directly or indirectly by the project.
- A general discussion of Williamson Act contracts that may be terminated in order to accommodate the project. The DEIR should discuss the impacts that termination of Williamson Act contracts would have on nearby properties also under contract; i.e., growth-inducing impacts (in the sense that the removal of contract protection not only lifts a barrier to development, but results in higher property taxes, and thus, an incentive to shift to a more intensive land use, such as urban development.)

As a general rule, land can be withdrawn from Williamson Act contract only through the nine-year nonrenewal process. Immediate termination via cancellation is reserved for

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"extraordinary," unforeseen situations (See *Sierra Club v. City of Hayward* (1981) 28 Cal.3d 840, 852-855). The County must approve a request for contract cancellation, and base that approval on specific findings that are supported by substantial evidence (Government Code Section 51282). If Williamson Act contract cancellations will be proposed, we recommend that a discussion of the findings be included in the DEIR. Finally, the notice of the hearing to approve the tentative cancellation, and a copy of the landowner's petition, must be mailed to the Director of the Department of Conservation ten (10) working days prior to the hearing. (The notice should be mailed to Bridgett Luther, Director, Department of Conservation, c/o Division of Land Resource Protection, 801 K Street MS #8-01, Sacramento, CA 95814-3528.)

- An agricultural preserve is a zone authorized by the Williamson Act, and established by the local government, to designate land qualified to be placed under the Act's 10-year contracts. Preserves are also intended to create a setting for contract-protected lands that is conducive to continuing agricultural use. Therefore, the uses of agricultural preserve land must be restricted by zoning or other means so as not to be incompatible with the agricultural use of contracted land within the preserve (Government Code Section 51230). The DEIR should also discuss any proposed general plan designation or zoning within agricultural preserves affected by the GPU.

#### Mitigation Measures and Alternatives

The DEIR should discuss any feasible alternatives to the project that would lessen or avoid farmland conversion impacts. Similarly, while the direct conversion of agricultural land is often deemed to be an unavoidable impact as also noted in the NOP, mitigation measures must be considered.

The Division recommends that the County consider the purchase of agricultural conservation easements on land of at least equal quality and size as partial compensation for the direct loss of agricultural land, as well as for the mitigation of growth inducing and cumulative impacts on agricultural land. Selection of lands to be encumbered by easements should also include criteria for strategic protection of the most valuable, productive and threatened agricultural lands.

Mitigation using conservation easements can be implemented by at least two alternative approaches: the outright purchase of conservation easements tied to individual projects, or via the donation of mitigation fees to a local, regional or statewide organization or agency, including land trusts and conservancies, whose purpose includes the purchase, holding and maintenance of agricultural conservation easements. For example, the California Farmland Conservancy Program is authorized to accept donations of funds if the Department of Conservation is the designated beneficiary and it agrees to use the funds for purposes of the program in a county specified by the donor. Whatever the approach, the conversion of agricultural land should be deemed an impact of at least regional significance and the search for mitigation lands not be limited to areas near the development.



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May 25, 2006  
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Information about conservation easements is available on the Division's website, or by contacting the Division at the address and phone number listed below. The Division's website address is:

<http://www.conservation.ca.gov/DLRP>

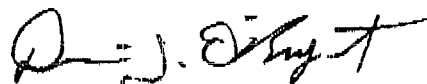
Of course, the use of conservation easements is only one form of mitigation that should be considered. The following mitigation measures could also be considered:

- Increasing home density or clustering residential units to allow a greater portion of the development site to remain in agricultural production.
- Protecting nearby farmland from premature conversion through the use of less than permanent long-term restrictions on use such as 20-year Farmland Security Zone contracts (Government Code Section 51296) or 10-year Williamson Act contracts (Government Code Section 51200 et seq.).
- Establishing buffers such as setbacks, berms, greenbelts, and open space areas to separate farmland from incompatible urban uses.
- Investing in the commercial viability of the remaining agricultural land in the project area through a mitigation bank which invests in agricultural infrastructure, water supplies and marketing.

The Department believes that the most effective approach to farmland conservation and impact mitigation is one that is integrated with general plan policies. For example, the measures suggested above could be most effectively applied as part of a comprehensive agricultural land conservation element in the County's general plan. Mitigation policies could then be applied systematically toward larger goals of sustaining an agricultural land resource base and economy. Within the context of a general plan mitigation strategy, other measures could be considered, such as the use of transfer of development credits, mitigation banking, and economic incentives for continuing agricultural uses.

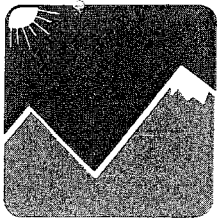
Thank you for the opportunity to comment on the NOP. If you have questions on our comments, or require technical assistance or information on agricultural land conservation, please contact the Division at 801 K Street, MS 18-01, Sacramento, California 95814; or phone (916) 324-0850.

Sincerely,



Dennis J. O'Bryant  
Acting Assistant Director

cc: Tulare County RCD  
3530 West Orchard Court  
Visalia, CA 93277



San Joaquin Valley  
Air Pollution Control District

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RESOURCE  
MANAGEMENT  
AGENCY

Reference No. C20060986

May 25, 2006

Theresa Szymanis  
Tulare County Resource Management Agency  
5961 South Mooney Blvd  
Visalia, CA 93277

Subject: Notice of Preparation of a Draft Environmental Impact Report  
Tulare County General Plan Update

Dear Ms. Szymanis:

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the project referenced above and offers the following comments:

The entire San Joaquin Valley Air Basin (SJVAB) is designated non-attainment for ozone and particulate matter (PM10 and PM2.5). This project will contribute to the overall decline in air quality due to construction activities, increases in motor vehicle traffic and other operational emissions associated with new development. For large projects such as specific plans and major general plan updates, the District recommends using the regional transportation model to quantify mobile source emissions. If the regional transportation model is not available, the URBEMIS 2002 Version 8.7 program can be used to calculate project area and operational emissions with modifications to the default data inputs. URBEMIS can be downloaded from [www.urbemis.com](http://www.urbemis.com) or the South Coast Air Quality Management District's website at <http://www.aqmd.gov/ceqa/urbemis.html>. The build-out of the general plan will make it more difficult to meet mandated emission reductions and air quality standards. A concerted effort should be made to reduce project-related emissions as outlined below:

AB 170 (Reyes) requires cities and counties in the San Joaquin Valley to include an air quality element or air quality implementation strategies in their general plans. The District prepared the Air Quality Guidelines for General Plans (Guidelines) to assist in addressing this new requirement. The County is required to forward the air quality element or its equivalent to the District for review. Contact the District to obtain a copy of the Guidelines.

**The District recommends that the air quality section of the EIR have four main components:**

**1. Description of the regulatory environment and existing air quality conditions impacting the area.**

This section should be concise and contain information that is pertinent to analysis of the project. The District has several sources of information available to assist with the existing air quality and regulatory environment section of the EIR. The District's *Guide for Assessing and Mitigating Air Quality Impacts, 2002 Revision* (GAMAQI) contains discussions regarding the existing air quality conditions and trends of the SJVAB, including those pollutants of particular concern: ozone, PM10, and carbon monoxide. In addition, it provides an overview of the regulatory environment governing air quality at the federal, state, and regional levels. The most recent air quality data for the District is

available at the California Air Resources Board (CARB) website at <http://www.arb.ca.gov/html/age&m.htm>. The air quality section of EPA's Region 9 (which includes information on the SJVAB) can be found at <http://www.epa.gov/region09/air/index.html>. Additionally, this section should also contain a discussion regarding growth projections that Tulare County provided to the District (through the Tulare Council of Governments) for inclusion in the Ozone and PM10 Attainment Plans and any impacts this project will have on Federal Conformity for Tulare County and the San Joaquin Valley Air Basin. Lastly, this section should clearly describe the air pollution regulatory authority of the District and ARB for the various emission sources in the plan area.

2. **Estimates of existing emissions and projected pollutant emissions related to the increase in project source emissions and vehicle use, along with an analysis of the effects of these increases.** The AQIA prepared for the EIR should include the methodology, model assumptions, inputs and results for pollutant emissions. The cumulative impact analyses should consider current existing and planned development both within the project area and in surrounding areas. The EIR needs to address the short-term and long term, local and regional adverse air quality impacts associated with the operation of construction equipment (ROG, NOx, CO, and PM10) and emissions generated from stationary, area and mobile sources. The EIR should provide emissions projections for the project at build out and for one or more intermediate years (including ongoing emissions from each previous phase).

**Ozone Precursors-** As stated earlier, the District recommends using the regional transportation model to quantify mobile source emissions, but in some cases it may be possible to use the URBEMIS 2002 Version 8.7 program to calculate project area and operational emissions and to identify mitigation measures that reduce impacts. URBEMIS can be downloaded from [www.urbemis.com](http://www.urbemis.com) or the South Coast Air Quality Management District's website at <http://www.aqmd.gov/ceqa/urbemis.html>. The County of Tulare or its consultant is encouraged to consult with District staff for assistance in determining appropriate methodology and model inputs.

**Hazardous Air Pollutants (HAPs)-** The air analysis should discuss District regulations for identifying and reducing HAPs and should describe how the County of Tulare would address future projects with sensitive receptors near existing HAP sources and the siting of new HAP sources in the plan area. Potential HAPs sources include project equipment, operations, and vehicles (the Air Resources Board (ARB) has designated diesel particulate emissions as a toxic air contaminant). On page 43 of the District's *Guide for Assessing and Mitigating Air Quality Impacts, 2002 Revision* (GAMAQI), the District addresses and defines sensitive receptors with respect to CEQA. If the project is near sensitive receptors and HAPs are a concern, the project developer should perform a Health Risk Assessment (HRA). HRA guidelines promulgated by the California Office of Environmental Health Hazard Assessment (OEHHA) and OEHHA toxicity criteria must be used. The District recommends use of the latest version of the Hot Spots Analysis and Reporting Program (HARP) released by the Air Resources Board for a health risk assessment because it is the only software that is compliant with the OEHHA guidelines. An HRA should include a discussion of the toxic risk associated with the proposed project, including project equipment, operations, and vehicles. The GAMAQI defines the significance levels for toxic impacts as a cancer risk greater than 10 in a million and/or a hazard index (HI) of 1.0 or greater for chronic non-carcinogenic or acute risks. The project consultant should contact the District to review the proposed modeling approach before modeling begins. For more information on hazardous air pollutants (HAPs) analyses, please contact Mr. Leland Villalvazo, Supervising Air Quality Specialist, at (559) 230-6000 or [hramodeler@valleyair.org](mailto:hramodeler@valleyair.org).

**Carbon Monoxide Hotspot Analysis-** Results of the traffic study should be used to identify intersections and corridors with high levels of congestion that may result in a CO hot spot. CO hot spots should be screened using a protocol developed by the Institute of Transportation Studies at University of California Davis entitled Transportation Project-Level Carbon Monoxide Protocol. Locations that are predicted by the CO Protocol to experience high levels of CO should be modeled using the dispersion model CALINE4. The procedure for using EMFAC 2002 to calculate emission factors to be used in the CALINE4 modeling can be downloaded at the Caltrans Division of Environmental Analysis site <http://www.gov.ca.gov/hq/env/air/emfac.htm>.

**Odor Analysis-** If there are existing odor sources that may impact future development in the plan area, the District recommends preparing an odor analysis. The procedure outlined in the "Guide for Assessing and Mitigating Air Quality Impacts" (GAMAQI) includes the following:

- Identify the location of sensitive receptors (including residences).
- Compare the distance to the nearest sensitive receptor to the distances in Table 4.2 of the GAMAQI. If the sensitive receptors are further away than the distances given in Table 4.2, no further analysis is required. The results should be documented in the EIR.
- Obtain any odor complaints against the facility or similar facilities from the local District office and the county's environmental health department.
- Review the complaints to determine the location of complainants relative to the facility.
- Identify any sensitive receptors at similar distances.
- Determine if emissions of odoriferous compounds will increase or decrease with implementation of the project.
- Draw any reasonable conclusions as to the probability that the project will generate odor complaints based on this analysis of complaint history.

Note that the emission of odiferous compounds should be mitigated as much as feasible if it is anticipated that the project will have a significant impact. For more information on odor impact analyses, please contact Mr. Leland Villalvazo, Supervising Air Quality Specialist, at (559) 230-6000, or [hramodeler@valleyair.org](mailto:hramodeler@valleyair.org).

3. **Identify and discuss existing District regulations that apply to the plan area.** The EIR should identify and discuss all existing District regulations that reduce the air quality impacts of the project. It would be appropriate to discuss proposed rules that are being developed that would apply to the proposed project. Current rules and regulations are available on the District's website at <http://www.valleyair.org/rules/1ruleslist.htm>. District rules and regulations are periodically revised, and new regulations are promulgated. The District strongly advises the County of Tulare or its consultant to contact the District for any rule updates and new rules when the project development begins. Current District rules and regulations applicable to the proposed project are requirements.

The EIR should discuss the permitting requirements of the District. Any equipment subject to the District's Permit to Operate (PTO) requirements must obtain an Authority to Construct (ATC) from the District. Construction of equipment, which requires an ATC, and intimately related appurtenances such as foundations and utility hookups for the equipment, cannot begin until an ATC is obtained. Construction or installation of equipment not requiring a District permit is not subject to this ATC requirement. For further information, contact the District's Small Business Assistance Office at (559) 230-5888, or our Permit Services Section at (559) 230-6000.

The following rules and regulations have been adopted by the District to reduce emissions throughout the San Joaquin Valley, and are required for many development projects. Current District rules can be found at <http://www.valleyair.org/rules/1ruleslist.htm>.

**Regulation VIII** (Fugitive PM10 Prohibitions) Rules 8011-8081 are designed to reduce PM10 emissions (predominantly dust/dirt) generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and track out, landfill operations, etc. The District's compliance assistance bulletin for construction sites can be found at <http://www.valleyair.org/busind/comply/PM10/Reg%20VIII%20CAB.pdf>.

**Rule 2201** (New and Modified Stationary Source Review Rule) This rule applies to all new stationary sources and all modifications of existing stationary sources which are subject to the District permit requirements and after construction emit or may emit one or more affected pollutant. The applicant must contact the District's Small Business Assistance Office at (559) 230-5888 to receive additional information/instructions.

**Rule 4002** (National Emission Standards for Hazardous Air Pollutants) In the event that any portion of an existing building will be renovated, partially demolished or removed, the project will be subject to District Rule 4002. Prior to any demolition activity, an asbestos survey of existing structures on the

project site may be required to identify the presence of any asbestos containing building material (ACBM). Any identified ACBM having the potential for disturbance must be removed by a certified asbestos contractor in accordance with CAL-OSHA requirements. If you have any questions concerning asbestos related requirements, please contact Mr. Brian Dodds at (559) 230-5962 or CAL-OSHA at (559) 454-1295. The District's Asbestos Requirements Bulletin can be found at <http://valleyair.org/busind/comply/asbestosbuln.htm>.

**Rule 4101** (Visible Emissions) This rule prohibits emissions of visible air contaminants to the atmosphere and applies to any source operation that emits or may emit air contaminants. The applicant must contact the District's Small Business Assistance Office at (559) 230-5888 to receive additional information/instructions.

**Rule 4102** (Nuisance) This rule applies to any source operation that emits or may emit air contaminants or other materials. In the event that the project or construction of the project creates a public nuisance, it could be in violation and be subject to District enforcement action.

**Rule 4103** (Open Burning) This rule regulates the use of open burning and specifies the types of materials that may be open burned. Agricultural material shall not be burned when the land use is converting from agriculture to non-agricultural purposes (e.g., commercial, industrial, institutional, or residential uses). Section 5.1 of this rule prohibits the burning of trees and other vegetative (non-agricultural) material whenever the land is being developed for non-agricultural purposes. In the event that the project applicant burned or burns agricultural material, it would be in violation of Rule 4103 and be subject to District enforcement action.

**Rule 4601** (Architectural Coatings) This rule limits volatile organic compounds from architectural coatings by specifying architectural coatings storage, clean up and labeling requirements.

**Rule 4901** (Wood Burning Fireplaces and Wood Burning Heaters) This rule limits PM10 and PM2.5 emissions from residential development. Construction plans for residential developments may be affected by section 5.3, specifically:

§5.3 Limitations on Wood Burning Fireplaces or Wood Burning Heaters in New Residential Developments.

Beginning January 1, 2004,

5.3.1 No person shall install a wood burning fireplace in a new residential development with a density greater than two (2) dwelling units per acre.

5.3.2 No person shall install more than two (2) EPA Phase II Certified wood burning heaters per acre in any new residential development with a density equal to or greater than three (3) dwelling units per acre.

5.3.3 No person shall install more than one (1) wood burning fireplace or wood burning heater per dwelling unit in any new residential development with a density equal to or less than two (2) dwelling units per acre.

More information about Rule 4901 can be found on our website at [www.valleyair.org](http://www.valleyair.org). For compliance assistance, please contact Mr. Wayne Clarke, Air Quality Compliance Manager, at (559) 230-5968.

**Rule 9510** (Indirect Source Review) This rule was adopted to reduce the impacts of growth in emissions from all new development in the San Joaquin Valley. Rule 9510 requires applicants subject to the rule to provide information that enables the District to quantify construction, area and operational PM10 and NOx emissions, and potentially mitigate a portion of those emissions. An application must be filed with the District no later than concurrent with application with a local agency for the final discretionary approval. For more information and instruction, please contact the District's ISR staff by phone at (559) 230-5800 or by email at [ISR@valleyair.org](mailto:ISR@valleyair.org).

4. **Identify and discuss all feasible measures that will reduce air quality impacts generated by the project.** "Feasible" means "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors: (California Code of Regulations (CCR § 15364)). The California Environmental Quality Act (CEQA) requires that EIRs "describe measures which could minimize significant adverse

impacts" (CCR §15126(c)). Additionally, the CCR requires that "a public agency should not approve a project as proposed if there are feasible alternatives or mitigation measures that would substantially lessen any significant effects that the project would have on the environment " (CCR § 15021(a)(2)). For each potential adverse impact, mitigation measures should be identified to reduce impacts below air quality threshold levels of significance. Therefore, the EIR should identify which mitigation measures will be included in the project, and how each mitigation measure will be implemented. The reduction of air quality impacts from implementation of mitigation measures should be quantified to the extent possible. If a measure cannot be quantified a qualitative discussion should be provided explaining the benefits of the proposed mitigation measure. The EIR should discuss how project design modifications could reduce project impacts.

Mitigation measures are emission reduction measures beyond those required in Section 3, above. This section should provide an analysis of existing mass transit/bicycle access to or near the site, and discuss if additional infrastructure will be needed. The section should identify which mitigation measures will be included in the project, and how each mitigation measure will be implemented. Site design, equipment alternatives, construction and operational measures that would reduce emissions should be identified. It should also analyze opportunities to mitigate urban heat island effects. The reduction of air quality impacts from implementation of mitigation measures should be quantified when possible. The EIR should discuss how the project design would encourage alternative transportation (including car pool parking), pedestrian and bicycle access/infrastructure, smart growth design, energy efficient project and building design, reduce urban heat island impacts, and include business programs that further reduce air pollution in the valley (such as carpooling). Mitigation measures must be included in the EIR that reduce the emissions of reactive organic gases, nitrogen oxides, and PM10 to the fullest extent possible. Site design and building construction measures that would reduce air quality impacts should be included. The Districts GAMAQI describes these features. The current GAMAQI can be found at [http://www.valleyair.org/transportation/ceqa\\_guidance\\_documents.htm](http://www.valleyair.org/transportation/ceqa_guidance_documents.htm). The Local Government Commission (LGC) website, <http://www.lgc.org>, contains valuable information and resources on subjects from street design to energy efficiency. The use of the principles of the document *Landscape of Choice* is encouraged to reduce air quality impacts. *Landscape of Choice* can be found at <http://www.farmlandinfo.org/fic/ft/fresno.pdf>.

The District encourages innovation in measures to reduce air quality impacts. There are a number of features that could be incorporated into the design/operation of this project to provide additional reductions of the overall level of emissions. (Note: Some of the measures may already exist as County of Tulare development standards. Any measure selected should be implemented to the fullest extent possible.) The suggestions listed below should not be considered all-inclusive and remain options that the agency with the land-use authority should consider for incorporation into the project.

- Trees should be carefully selected and located to protect the buildings from energy consuming environmental conditions, and to shade paved areas. Trees should be selected to shade paved areas that will shade 50% of the area within 15 years. Also, large canopy shade trees should be planted adjacent to all sidewalks thirty foot on center and at a ratio of one tree for each five parking spaces. Structural soil should be used under paved areas to improve tree growth. For more information on structural soil see <http://www.hort.cornell.edu/uhi/outreach/csc/>. For more information on tree selection see <http://www.ufe.org/>. For more information on urban forestry see <http://www.coolcommunities.org/>, and <http://wcufre.ucdavis.edu/>, and [http://www.lgc.org/bookstore/energy/downloads/sjv\\_tree\\_guidelines.pdf](http://www.lgc.org/bookstore/energy/downloads/sjv_tree_guidelines.pdf).
- If transit service is available to the project site, improvements should be made to encourage its use. If transit service is not currently available, but is planned for the area in the future, easements should be reserved to provide for future improvements such as bus turnouts, loading areas, route signs and shade structures. Appropriations made to facilitate public or mass transit will help mitigate trips generated by the project. Direct pedestrian access to the main entrance of the project from existing or potential public transit stops and provide appropriately designed sidewalks. Such access should consist of paved walkways or ramps and should be physically separated from parking areas and vehicle access routes.

- Multi-story parking facilities should be considered instead of open parking lots to reduce exposed concrete surface. Alternatively, parking may be incorporated into the structure by building parking as the first floor or as a basement level. Large expanses of exposed concrete in parking lots exacerbate the “heat island” effect as well as widen the distance patrons and employees must cross. “Heat islands” created by this and similar projects contribute to the reduced air quality in the valley by heating ozone precursors.
- The District encourages applicants and fleet operators using the facility to take advantage of the District's Heavy-Duty Engine program to reduce project emissions. The Heavy Duty program provides incentives for the replacement of older diesel engines with new, cleaner, fuel-efficient diesel engines. The program also provides incentives for the re-power of older, heavy-duty trucks with cleaner diesel engines or alternative fuel engines. New alternative fuel heavy-duty trucks also qualify. For more information regarding this program contact the District at (559) 230-5858 or visit our website at <http://www.valleyair.org/transportation/heavydutyidx.htm>.
- Sidewalks and bikeways should be installed throughout as much of the project as possible to encourage walking and bicycling. Connections to nearby public uses and commercial areas should be made as direct as possible to promote walking for some trips. Pedestrian and bike-oriented design reduces motor vehicle usage and their effects on air quality. Sidewalks and bikeways should be designed to separate pedestrian and bicycle pathways from vehicle paths. Sidewalks and bikeways should be designed to be accommodating and appropriately sized for anticipated future pedestrian and bicycle use. Such pathways should be easy to navigate, designed to facilitate pedestrian movement through the project, and create a safe environment for all potential users (pedestrian, bicycle and disabled) from obstacles and automobiles. Pedestrian walkways should be created to connect all buildings throughout the project. The walkways should create a safe and inviting walking environment for people wishing to walk from one building to another. Walkways should be installed to direct pedestrians from the street sidewalk to the building(s). Safe and convenient pathways should be provided for pedestrian movement in large parking lots. Sidewalks should be designed for high visibility (brightly painted, different color of concrete, etc.) when crossing parking lots, streets and similar vehicle paths. Clearly marked and highly visible pedestrian accesses create a safer environment for both pedestrians and vehicles. Pathways through the project should be built in anticipation of future growth/development.
- As many energy conserving and emission reducing features as possible should be included in the project. Energy conservation measures include both energy conservation through design and operational energy conservation. Examples include (but are not limited to): increased energy efficiency (above California Title 24 Requirements, see <http://www.energy.ca.gov/title24/>), energy efficient windows (double pane and/or Low-E), use Low and No-VOC coatings and paints (see South Coast's site for No-VOC Coatings at <http://www.aqmd.gov/prdas/brochures/paintguide.html>), high-albedo (reflecting) roofing material (see <http://eetd.lbl.gov/coolroof/>), cool paving as “Heat islands” created by this and similar projects contribute to the reduced air quality in the valley by heating ozone precursors (see <http://www.harc.edu/harc/Projects/CoolHouston/> and <http://eandc.lbl.gov/heatisland/>) radiant heat barrier (see <http://www.eere.energy.gov/consumerinfo/refbriefs/bc7.html>), energy efficient lighting, appliances, heating and cooling systems (see <http://www.energystar.gov/>), install solar water-heating system(s)), install photovoltaic cells, programmable thermostat(s) for all heating and cooling systems, awnings or other shading mechanism for windows, walkway overhangs, utilize day lighting (natural lighting) systems such as skylights, light shelves, interior transom windows, etc. (see <http://www.advancedbuildings.org>), utilize passive solar cooling and heating designs (e.g. natural convection, thermal flywheels, see [http://www.eere.energy.gov/RE/solar\\_passive.html](http://www.eere.energy.gov/RE/solar_passive.html)), electrical outlets around the exterior of the unit(s) to encourage use of electric landscape maintenance equipment, on-site employee cafeterias or eating areas, low or non-polluting landscape maintenance equipment (e.g. electric lawn mowers, reel mowers, leaf vacuums, electric trimmers and edgers, etc.), exits to adjoining streets should be designed to reduce time to re-enter traffic from the project site (more information can be found at: <http://www.consumerenergycenter.org/index.html>, <http://www.sustainable.doe.gov/>, <http://www.lgc.org>, and <http://www.ciwm.ca.gov/GreenBuilding/>)

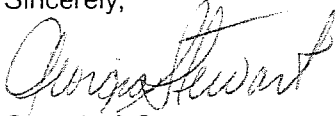
- Applicant/tenants should implement measures to reduce the amount of single occupancy vehicle employee traffic to and from the project area that further reduce air pollution in the valley. This could include such provisions as encouraging employees to rideshare or carpool to the project site through preferential parking spaces for employees who participate in carpooling or vanpooling, incorporating a compressed workweek schedule, guaranteed ride home, carpool matching programs, shower/changing facilities, providing free transit passes, providing an alternative-transit information center, and having a dedicated employee transportation coordinator. Check out the "Spare the Air" section of our website [www.valleyair.org](http://www.valleyair.org).
- Applicants should implement measures to reduce the amount of single occupancy vehicle visitor traffic to and from the project area that further reduce air pollution in the valley. This could include reducing the parking spot supply, implementing a parking charge, including sufficient bicycle-parking facilities in a covered secure area (at least one space per 20 vehicle parking spaces).
- Projects should include as many clean alternative energy features as possible to promote energy self-sufficiency. Examples include (but are not limited to): photovoltaic cells, solar thermal electricity systems, small wind turbines, etc. Rebate and incentive programs are offered for alternative energy equipment. More information can found at <http://www.dsireusa.org/>, <http://rredc.nrel.gov/>, and <http://www.energy.ca.gov/renewables/>.
- Idle reduction technologies save fuel and reduce diesel emissions from idling trucks and construction equipment. Applicants should incorporate idle reduction strategies that reduce the main propulsion engine idling time through alternative technologies. U.S. Environmental Protection Agency's website <http://www.epa.gov/otaq/smartway/idlingtechnologies.htm> contains examples of such technologies can be found on the. Idle reduction mitigation measures include: the applicant/tenant(s) should require that all diesel engines be shut off when not in use on the premises to reduce emissions from idling; if Truck Refrigeration Units (TRU's) will be utilized, provide an alternative energy source for the TRU to allow diesel engines to be completely turned off; and electrify truck-parking areas to allow trucks with sleeper cabs to use electric heating and cooling to eliminate the need to idle their diesel engines.
- Construction activity mitigation measures include: limit area subject to excavation, grading, and other construction activity at any one time, limit the hours of operation of heavy duty equipment and/or the amount of equipment in use, replace fossil-fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set), curtail construction during periods of high ambient pollutant concentrations (this may include ceasing of construction activity during the peak-hour of vehicular traffic on adjacent roadways, and "Spare the Air Days" declared by the District), implement activity management (e.g. rescheduling activities to reduce short-term impacts), during the smog season (May through October) lengthen the construction period to minimize the number of vehicles and equipment operating at the same time, off-road trucks should be equipped with on-road engines when possible, and minimize obstruction of traffic on adjacent roadways.
- Applicants should use diesel equipment fueled by alternative diesel fuel blends or Ultra Low Sulfur Diesel (ULSD). The CARB has verified specific alternative diesel fuel blends for NOx and PM emission reduction. Only fuels that have been certified by CARB should be used. Information on biodiesel can be found on CARB's website at <http://www.arb.ca.gov/fuels/diesel/altdiesel/altdiesel.htm> and the EPA's website at <http://www.epa.gov/oms/models/biodsl.htm>. The applicant should also use CARB certified alternative fueled engines in construction equipment where practicable. Alternative fueled equipment may be powered by Compressed Natural Gas (CNG), Liquid Propane Gas (LPG), electric motors, or other ARB certified off-road technologies. To find engines certified by the CARB, see their certification website <http://www.arb.ca.gov/msprog/offroad/cert/cert.php>. For more information on any of the technologies listed above, please contact Mr. Chris Acree, Senior Air Quality Specialist, at (559) 230-5829.



- Construction equipment should have engines that meet the current off-road engine emission standard (as certified by CARB), or be re-powered with an engine that meets this standard. Tier I, Tier II and Tier III engines have significantly less NOx and PM emissions compared to uncontrolled engines. To find engines certified by CARB, see <http://www.arb.ca.gov/msprog/offroad/cert/cert.php>. This site lists engines by type, then manufacturer. The "Executive Order" shows what Tier the engine is certified as. Rule 9510 requires construction exhaust emissions to be reduced by 20% for NOx and 45% for PM10 when compared to the statewide fleet average or to pay an in-lieu mitigation fee. For more information on heavy-duty engines, please contact Mr. Thomas Astone, Air Quality Specialist, at (559) 230-5800.

District staff is available to meet with you and/or the applicant to further discuss the regulatory requirements that are associated with this project. If you have any questions or require further information, please call me at (559) 230-5937 or Mr. Dave Mitchell, Planning Manager, at (559) 230-5807 and provide the reference number at the top of this letter.

Sincerely,



Georgia A Stewart  
Air Quality Specialist  
Central Region

C: file

# CENTER ON RACE, POVERTY & THE ENVIRONMENT

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1302 JEFFERSON STREET, SUITE 2  
DELANO, CA 93215

PHONE: (661) 720-9140  
FAX: (661) 720-9483

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TULARE COUNTY

MAY 26 2006

RESOURCE  
MANAGEMENT  
AGENCY

RALPH SANTIAGO ABASCAL (1934-1997)  
DIRECTOR 1990-1997

LUKE W. COLE  
DIRECTOR

SUSANA DE ANDA  
COMMUNITY ORGANIZER

CAROLINE FARRELL  
DIRECTING ATTORNEY

LAUREL FIRESTONE  
EQUAL JUSTICE WORKS FELLOW/STAFF ATTORNEY

AVINASH KAR  
RALPH SANTIAGO ABASCAL FELLOW/STAFF ATTORNEY

LUPE MARTINEZ  
DIRECTOR OF ORGANIZING

BRENT NEWELL  
STAFF ATTORNEY

May 25, 2006

Teresa Szymanis  
Chief Planner  
Tulare County Resource Management Agency  
5961 South Mooney Blvd.  
Visalia, CA 93277

**Re: Notice of Preparation of an Environmental Impact Report for Tulare County's  
General Plan Update**

Dear Ms. Szymanis:

The Center on Race, Poverty & the Environment submits these comments on the Notice of Preparation of the Environmental Impact Report (EIR) for Tulare County's General Plan Update. Overall the County's goals, values and policy objectives are laudable. These comments are meant to further clarify the County's goals and to suggest additional analysis the County can include in its EIR to ensure the General Plan is implemented for the benefit of all Tulare County residents.

**Topical Issues- Key Goals**

*Land Use- Enhancing Communities:* Currently the language reads: "To pursue land uses which improve the economic vitality and livability of Tulare County communities." Community has a specific meaning within the Tulare County General Plan Update. There are other land use designations that are distinguished from communities such as hamlets and places. The Key Goal on land use should provide for the vitality and livability of these existing areas as well.

*Infrastructure-Urban Infrastructure:* The current language reads: "To develop, maintain and

revitalize quality urban infrastructure for unincorporated towns and places.” Here, the County should define what is meant by urban infrastructure- whether that is a descriptive for the type of infrastructure the County is providing or whether it is distinction between urban and rural. Also, the County should be consistent with its land use designations. The County seems to be defining locations into communities, hamlets and places as oppose to towns.

*Infrastructure- Community Facilities and Services:* Currently, the language reads: “To develop, maintain and revitalize quality public facilities and services for unincorporated towns and places.” Here again, the County should be consistent with its land use designations. The County seems to be defining locations into communities, hamlets and places as oppose to towns.

*Natural and Scenic Resources- Water:* The current language is “To protect the supply and quality of urban, agricultural and environmental water serving Tulare County.” Again, the County should define specifically what is meant by urban.

### **Environmental Impacts to Be Evaluated in the General Plan EIR**

*Agriculture and Open Space Impacts:* In this section of the EIR, the County should discuss the possibility of conservation easements to mitigate the loss of farm land. Also, the County should analyze impacts to and from agriculture with the urbanization of farmland and consider imposing buffer zones when housing developments that are built next to farmland.

*Air Quality Impacts:* The Notice of Preparation states that the air analysis will not include modeling or dispersion analysis of growth. Why not? The County’s alternatives are based on different growth patterns in the County. The County cannot adequately determine which is the environmentally superior alternative without analyzing their impacts with modeling. Also, the County states that air mitigation measures will be based on the Transportation Planning Agency’s Reasonably Available Control Measures. All reasonably feasibly mitigation measures should be discussed in the EIR even if they are not included within the Transportation Planning Agency’s measures. As the County states, many of these measures are more applicably to the incorporated cities outside of the County’s General Plan. Feasible measures applicable to the more rural areas in the County should be considered as well.

*Hazards and Health and Safety Impacts:* The County should discuss impacts from pesticide use within this section of the EIR and analyze the feasibility of buffer zones or protective zones between existing communities, hamlets, place and agricultural operations.

*Hydrologic and Water Quality Impacts:* In addition to discussing water resources in terms of water quality and consumption, the EIR should also analyze the availability of water resources in the areas where growth is projected.

*Recreation Impacts:* The County should consider whether or not to adopt the Quimby Act allowing for open space in conjunction with increased housing development.

*Alternatives:* The County is proposing to examine two types of alternatives - the No Project Alternative and population distribution alternatives. Once the policies are developed, the County should consider examining policy alternatives that may be environmentally superior to the proposed policies.

## **Potential Environmental Impacts**

Below, CRPE suggests some additional impacts for the County to consider in the EIR.

### *Air Quality*

- Violate any air quality standard or contribute to an existing or projected air quality violation.
- Create or contribute to a toxic “hot spot.”

### *Biology*

- Adversely impact, either directly or through habitat modifications, any endangered, rare or threatened species.
- Have a substantial adverse effect on riparian habitat or sensitive natural community.

### *Cultural Resources*

- Disturb human remains.
- Expose people or structures to landslides, earthquakes, flooding or wildfires.

### *Hazards and Hazardous Materials*

- Create a significant hazard to the public or environment through the routine transport, use or disposal of hazardous materials.
- Create a significant hazard to the public or environment through the reasonably foreseeable upset and accident conditions involving the release of hazardous material into the environment.
- For projects located within an airport land use plan or within two miles of a public airport, would the project result in a safety hazard for people within the project area.

### *Hydrology and Water Quality*

- Violate any water quality standard or waste discharge requirement.

### *Land Use and Planning*

- Physically divide an established community.
- Conflict with any applicable land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect.
- Conflict with any applicable habitat conservation plan.

### *Population and Housing*

- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

### *Transportation/Traffic*

- Substantially increase hazards to a traffic design feature (such as sharp turns) or incompatible uses (e.g. farm equipment).
- Result in inadequate emergency access.
- Conflict with adopted state, regional or local policies supporting alternative transportation.

### *Utilities and Service Systems*

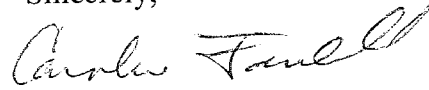
- Exceed wastewater treatment requirements of the Regional Water Quality Control Board.
- Sufficient water supplies are available to serve the project from existing entitlements and resources.
- Comply with federal, state, and local statutes and regulations related to solid waste and recycling.

### **Conclusion**

The County should ensure the General Plan Update's Environmental Impact Report considers all the possible environmental impacts from the General Plan's policies to ensure that the

County's values and goals are realized with implementation.

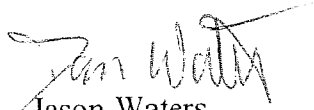
Sincerely,

A handwritten signature in cursive script, appearing to read "Caroline Farrell".

Caroline Farrell  
Laurel Firestone  
Attorneys at Law

### **Comments Received After May 29<sup>th</sup> Deadline**

Comments regarding the Notice of Preparation were accepted after the May 29<sup>th</sup> deadline on account of the May 29<sup>th</sup> Memorial Day holiday. Comments were accepted until 5:30 on May 30<sup>th</sup>.



Jason Waters

RECEIVED  
TULARE COUNTY

Del Strange  
20870 Avenue 322  
Woodlake, CA 93286  
May 29, 2006

MAY 30 2006

Theresa Szymanis, AICP  
Chief Planner  
County of Tulare  
RESOURCE MANAGEMENT AGENCY  
5961 S. Mooney Blvd.  
Visalia, CA 93277-9394

RESOURCE  
MANAGEMENT  
AGENCY

RE: Comments on Scope of Environmental Impact Report (EIR) for the  
Tulare County General Plan 2030 Update (Project).

Dear Ms. Szymanis:

The above-referenced Project is extremely important to the future of Tulare County. As such, I respectfully submit the following comments on the scope of work required for the EIR for this Project.

Due to the complexity of the various issues that need to be addressed in the General Plan, the following require separate elements:

1. Water Supply (Quantity) and Water Quality
2. Air Quality
3. Flood Control
4. Agriculture
5. Land Use
6. Open Space (Conservation)
7. Economic
8. Transportation and Circulation
9. Mineral Resources
10. Alternative Energy (Alternative fuels, Solar, etc.)

Each of these elements require careful and comprehensive study and analysis, including its relationship to growth and values, the quality of life of the people of Tulare County, global warming issues, a comprehensive cumulative impacts analysis, establish a range of viable alternatives, economic analysis and sources of funding.

The following are specific comments:

#### WATER SUPPLY AND WATER QUALITY

In Tulare County, groundwater is a tremendously vital resource that provides us with drinking water as well as irrigation water to support the county's number one industry -- agriculture. Water is the backbone of Tulare County's economy.

We have been feeling the limits of our water supply in the county in recent decades. We recently went through an extended drought



(1987 - 1994). Our banked groundwater supplies become especially valuable during such drought cycles.

Currently, with growth comes the demand for more water. However, the water supply is not increasing and is finite.

As more and more suburbanites water their lawns, wash their clothes and take showers, less water is available to grow crops and tend livestock in the county.

Consequently, there is a dire need for a detailed Water Budget for Tulare County. Issues such as a balance between groundwater and surface water supply and demand, groundwater overdraft and new and existing sources of water for the people of Tulare County must be addressed. In addition, water quality issues must be considered, including dairy discharges, suburban runoff, etc.

Furthermore, a county-wide Water Master Plan with current data and information is desperately needed.

The long-term solution to Tulare County's water dilemma is to balance the uses of groundwater and surface waters. Too much demand is being placed upon our groundwater resources as is evidenced by the long-term overdraft condition. The water table levels in the Kaweah Groundwater Basin are declining an average of one-half foot per year with no reversal in sight.

With the tremendous housing boom recently, demand is outpacing supply. New and existing groundwater recharge basins are not able to correct this problem. Even if we were to triple the total area of groundwater recharge basins in Tulare County, I seriously doubt that water levels would reverse direction.

In my opinion, the only solution is to increase the use of surface waters while decreasing the use of groundwater. The groundwater aquifer has a limited capacity and we've taxed it beyond its limits. If this trend continues, we seriously risk the possibility that land subsidence may occur in significant areas of the county, including the City of Visalia. The City of Tulare has already experienced a settling of the land.

Once subsidence occurs, the groundwater aquifer collapses and will never again hold as much groundwater as before. The capacity for groundwater storage would be permanently reduced. This is a situation that the people of Tulare County cannot afford to let happen. The water resources in this semi-arid region are limited!

Besides, Tulare County is a net importer of water to meet its current demands with almost 50 percent of total water use being imported. What would happen if this outside water source were to dry up?

The only viable alternative, as I see it, is for all water users that can possibly do so, to switch from groundwater use to surface water use. This would allow the groundwater aquifer to recover for use during periods of drought or when surface water was limited, as it should be. Our groundwater supplies should be banked for times of emergency when needed, also helping to prevent further subsidence of the land and damage to the groundwater aquifer.

Farmers should use surface water as much as possible, leaving groundwater in reserve only for periods when surface water is not available.

Cities and communities should use surface water as much as possible while saving groundwater for periods when surface water is not available. Perhaps one-half of municipal water should come from surface water sources. Yes, the cost of treatment will increase; however, it's a small price to pay for assurance of long-term water supplies.

In addition to the above, there are other secondary methods to help keep Tulare County's water resources stable and available to its people when needed. Developing new and improved methods and facilities of groundwater recharge can help. Encouraging maximum conservation of water resources. Restricting growth to only that density which can be supported by existing water supplies even in drought years.

Furthermore, public facilities likely to generate urban growth should be prohibited in areas where development should not occur, such as primary flood plains, major aquifer recharge areas, predominantly agricultural areas and areas of regional, state-wide or national open space interest.

Also, a county-wide program of public education should be pursued in order to ensure a broad understanding of critical water-related issues.

Within the Water Supply and Water Quality element, there must be a Water Resources Policy section established to protect those areas sensitive to groundwater recharge and source of supply (origin). Identifiable groundwater recharge areas must be protected from ground surface covering which would reduce porosity or preclude percolation.

This can be accomplished by designating areas of significant groundwater resources which are of regional or Statewide importance requiring protection under classification as a Groundwater Protection Zone. The county can contact the California Environmental Protection Agency to request such classification and designation.

It should be required by the county that the State Hydrogeologist classify areas within Tulare County as to groundwater importance and content, regardless of commitment to incompatible land uses, and designate areas of significance to groundwater resources which are of regional or Statewide importance as Groundwater Protection Zone(s).

Protection of groundwater sources and recharge areas should be assured by their designation on Open Space Protection Maps and as Groundwater Protection Areas, as encouraged by the State EPA, and consideration of their value when conflicting land uses are proposed.

Surface waters which serve as substantial recharge sources for groundwater basins should be maintained at levels of purity suitable for agricultural and domestic use, except that certain particulate materials may be tolerated because of natural filtration.

As has been determined by the Board of Supervisors a number of years ago, there is a need for extensive hydrogeologic studies of the county's primary aquifer at its origins where recharge begins and surface mining activities have taken place. An analysis of the

permanent changes to the groundwater system in the Upper Kaweah Basin due to surface mining activities is desperately needed. The study and analysis should be conducted by an unbiased certified hydrogeologist contracted by the county. Such a study should be included as part of this Project's EIR.

The EIR should also address the following.

To what extent will the Project:

1. Encourage further groundwater depletion and overdraft or interfere with groundwater recharge, such that there will be a net deficit in aquifer volume or a lowering of the groundwater table level within any groundwater basin in the county?
2. Result in the loss of groundwater recharge or extraction capabilities?
3. Alter existing drainage patterns in a manner that could result in:
  - A. Erosion or siltation?
  - B. Flooding?
4. Degrade water quality or violate any water quality standards or Waste Discharge Requirements, or otherwise degrade water quality?
5. Place within a 100-year flood hazard area:
  - A. Housing?
  - B. Structures that would impede or redirect flood flows?
6. Expose people or structures to a risk of loss, injury, or death involving flooding, including flooding as a result of a levee or dam failure?
7. Result in land subsidence due to drought conditions and over-pumping of groundwater due to increased demands?
8. Affect the county's water budget, both surface water and groundwater, as it relates to each sector of water users?

#### AIR QUALITY

An air quality analysis needs to be conducted that takes into consideration the Project and global warming, green house gases, alternate fuels, dairy emissions, the full-range of air quality constituents, etc.

The EIR should also address the following.

To what extent will the Project:

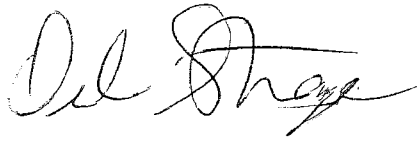
1. Violate any air quality standard or contribute to an existing or projected air quality violation?
2. Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Please include all of the above appropriate issues and needed studies and analyses in the Project EIR.

Feel free to contact me should you have any questions or need clarification on any matter.

Thank you for the opportunity to comment.

Sincerely,

A handwritten signature in cursive script, appearing to read "Del Strange". The signature is written in dark ink and is positioned to the right of the word "Sincerely,".

13 signatures  
May 18, 2006

Theresa Szymanis  
Division Manager, Countywide Planning  
Resource Management Agency  
5961 South Mooney Blvd.  
Visalia, CA 93277

RECEIVED  
TULARE COUNTY

MAY 30 2006

RESOURCE  
MANAGEMENT  
AGENCY

Dear Ms. Szymanis:

Regarding the Environmental Impact Report (EIR) for the General Plan:

- The General Plan should include a stronger permanent open space designation.
- The city-focused alternative is the best choice as an overall framework *for population growth.*
- The EIR should include mitigation to avoid merger of communities.
- The county should consider the air quality effects of growth as a whole (cumulatively) rather than project by project.
- Analysis of habitat buffers around riparian corridors, vernal pools, and other sensitive zones should be conducted.
- "Ability to Farm" instead of "Right to Farm" should be the new basis of ag/urban interface.
- Loss of open space should include in its analysis the value of the agricultural commodity as a whole in Tulare County; soil quality should not be the primary factor in determining growth corridors. (Cattle and calves ranked third in value to the county in 2005. Loss of rangeland would affect this commodity).
- Loss of open space should include in its analysis economic impact through loss of tourist revenue (both current and potential) and ability of communities to develop alternative industries.
- The EIR should include stringent water conservation measures. Surface water, which is now fully allocated will not be able to meet the needs of increased population.
- The probable effects of global warming and the possibility of future multiple-year drought cycles should be taken into consideration.
- Analysis of new town criteria should include population and housing needs and the impact dramatic population increase.

- Large projects should require indicators of EIR success as they affect quality of life and irreversible impact on the environment, and any approved projects should be monitored and held accountable for any violation of strict EIR guidelines both in the development of the project and after the completion of the project.

Sincerely,

Marion Reich  
MARION REICH

43000 Sierra Drive  
Three Rivers CA 93271

RMA'S fax #  
730-2653

May 30, 2006  
5pm

collected by  
Jason & me  
To check to him  
earlier about  
fixing the to them

To Jason Waters or  
Theresa Szymanski

pls find a total of 3 pages.

Comments on the NOP for the General  
Plan.

Thank you,  
Julie

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TULARE COUNTY

MAY 30 2006

RESOURCE  
MANAGEMENT  
AGENCY

## **Valley Citizens' for Water**

20488 Ave. 322  
Woodlake, California 93286

May 30, 2006

Dear Theresa Szymanis,

Valley Citizens for Water (VCW) has several comments on the Notice of Preparation (NOP) of the General Plan Update. Water, Tulare County's most precious resource, is being used faster than it can be replenished. This is a significant impact on our environment now and especially in the future due to the huge population increase expected for Tulare County.

The General Plan is to point out issues of importance and to identify mitigation measures to lessen these impacts. VCW is very concerned with water quantity and quality because without this precious resource Tulare County will dry up and blow away.

### **Problems and Questions:**

1. We are in a serious overdraft situation. Our water table is dropping 6 to 8 inches per year. In 1956, the water table was 58 feet. In 2004, the level has dropped to 115 feet.
2. How do we house an additional 260,000 thirsty people over the next 30 years when we can not rectify our dwindling water resource now?
3. With the increase of storage at Lake Kaweah, who is getting the additional water?
4. How is the Boswell Yokohl Valley Project going to impact our water resources? Where will they be getting their water? How much water is needed for a new city of 30,000? Can Agricultural waters be used for cities? If Boswell is sucking water from Lake Kaweah or Friant Kern Canal to quench this city's water needs, will there be a shut-off valve?  
This project seems to be detrimental to all those folks downstream who were here first.
5. How much water is being used in the increased dairy production in Tulare County? Isn't it true that approximately 250 gallons of water is being used daily per head of cattle?
6. Flooding is another problem Tulare County residents may face, when there is too much water. Visalia has obtained a study of the County's levees and flood areas. This study should be an eye opener. The study is complete, however Visalia is not sharing this important information. Public dollars paid for this study, and it needs to be disclosed. How can any mitigation measures be accurate if information of importance is hidden? The levees are in very poor shape which puts an untold number of Tulare County residents at great risk.

The solution to our water depletion problem can not and should not be placed on one or two agencies. Tulare County has wrestled with this problem for a long time now and no matter what we have done our water resource is still being depleted at an alarming rate. Wouldn't the best solution be to rectify the situation before addind more people to the mix? VCW sees the problem getting worse not better. Workable plans that have been in place for years have not worked, therefore please do not repeat "previous plans" in the mitigation measures. Solutions may be possible but it calls for a county wide ideas, participation and implementation.



Kaweah Delta Water Conservation District (KDWCD), has a Groundwater Management Plan which was adopted in 1995. Eleven years later, the question is, has it worked? How many more recharge basins can we have here in Tulare County, awaiting those few wet years? Mitigation measures need to real solutions not just plans that do not work. We have had two wet years in a row. Has our banking all the excess water in recharge basins helped any? KDWCD should be accountable and have this information. Please check with them.

Solutions:

1. Agriculture is what drives Tulare County. Acre per acre, residential areas use more water than growers. Many growers get there irrigation water from surface water (if available), as opposed to pumping water from the ground. Kaweah Delta Water Conservation District (KDWCD) tells us, that drip irrigation conserves water, however it doesn't recharge the groundwater. When a grower uses flood irrigation it uses more water however it recharges the groundwater. Which is the best way for growers to go, flood irrigation, micro sprinklers or drip?
2. A major water conservation project for everyone needs to be implemented. When people are informed of a problem, most help out to solve the problem. Water meters, fines for excess users, native landscaping on all new housing projects are a must.
3. Use of the additional water storage at Lake Kaweah. Who gets to use this water?
4. Mining must be kept out of the aquifer and any under laying water channels. Mineral resources can be retrieved from hard rock mining.
5. We can not bank on the Temperance Dam expansion. Unanswered questions are, who's going to pay for this project and who gets the use of this additional water?
6. Water purchases are not possible to solve our potential water crisis as many counties in California are faced with a water shortage also.

Thank you for allowing us to respond to the NOP and if you have any questions you may reach me at 564-0801.

Sincerely,



Julie Bigham  
Spokesperson

Sierra Village  
26 Rotterdam Ct.  
Visalia, CA 93277  
May 23, 2006

Theresa Szymanis, Chief Planner  
5961 South Mooney Blvd.  
Visalia, CA 93277

Dear Ms. Szymanis:

Re EIR Tulare County General Plan Update

In preparing the EIR for the new Tulare County General Plan, I feel that it is very important to adopt the "city focused growth" plan that will maintain the open space for agriculture that is so important to our county and the valley.


In addition with regard to air quality, growth as a whole should be considered rather than on a project by project basis. We're making progress, but allowing sprawl can't help but make our air dirtier.

The EIR should also take into consideration the need for buffers between communities so that as people move into the county the towns do not run into each other in the way that Southern California has done.

Most importantly a strict analysis of New Town criteria should include population and housing need. Are new towns warranted by expected population growth? Wouldn't that growth be better accommodated by directing it to existing communities? Consider carefully the impact of the additional population on pristine land.

Much of the beauty of Tulare County lies in its open spaces and land devoted to agriculture. I hope the new General Plan will protect our unique qualities.

Thank you for your consideration.

  
Margaret Schoettler

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SIERRA CLUB

Kern-Kaweah Chapter

Mineral King Group  
PO Box 3543  
Visalia CA 93278-3543

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CP

29-May-06

Theresa Szymanis  
Tulare County Resource Management Agency  
5961 South Mooney Boulevard  
Visalia CA 93277

RE: NOP TULARE COUNTY GENERAL PLAN

The Sierra Club, Mineral King Group, recognizes that past growth has forced major changes in Tulare County and that future growth will continue to exert additional changes in coming decades. We believe that growth can be managed and directed in a manner where community and quality of life can be preserved and passed on to future generations. We believe that the county is at a crossroads where it can choose to travel the path towards sprawl, pollution, and loss of wildlife, or travel the path to protect community, clean air, water, and environment. To that end, we offer our comments in the hope that county decision-makers are as committed as we are to preserving the natural beauty of our county.

**Land Use.** The EIR should state as policy that future growth shall be city-centered. This concept was strongly supported by citizens participating in General Plan Workshops conducted around the county in 2005. Directing growth towards existing cities and communities will prevent sprawl, which protects unrestricted conversion of agriculture. Higher density development, including smaller lots, should be emphasized.

**Agriculture.** Cattle ranching should be recognized as prime agriculture. Cattle is consistently among the top 10 crops in the county, and was ranked No. 3 in 2004 and 2005. The EIR should recognize that cattle ranch land is just as prime as dairy, citrus, and grape farmlands. The EIR should recognize that conversion of cattle ranch land in foothills rate as critical as conversion of crop farmlands on the valley floor.

The EIR should explore farmland conversion mitigation measures, such as mitigation fees and conservation easements. The impacts of farmland conversion, especially if it is a new town, should be mitigated to the maximum possible. The EIR should define a policy for General Plan amendments and zone changes from agricultural use to residential use, which should include impact fees for these changes.

**Biological Resources.** Biological diversity should be protected. The foothills and valley floor contain rivers, creeks, waterways, and remnants of wetlands, woodlands, vernal pools and riparian forests that are habitat to a rich array of plants and animals. Centuries-old oak trees beautify the landscape as a tribute to our wild land heritage and should be given maximum protection. In General Plan Workshops and in hearings such as the Tulare Irrigation District canal, citizens have expressed a desire to protect our wildlife legacy. The EIR should recognize the value of our biological resources, identify critical habitat, and utilize every possible means to avoid disruption to this habitat. The means could be development fees, land trusts, grants,

easements, and acquisition as county parks and preserves as a method of mitigation for development.


**Housing.** Principles of smart growth should become a policy and goal statement in the EIR. Smart growth sustains community identity and nourishes the human environment. A strong, healthy community is walkable, has green space and parks for recreation, contains mixed-use with shopping, entertainment and restaurants, jobs and a mix of homes for a wide range of residents. Smart growth is about well-designed higher density that can reduce congestion and commuting time, improve air quality, and protect our natural resources. Sprawl is expensive due to the cost of infrastructure and services such as fire, police, and schools. Compact development reduces these costs. The General Plan policy should strive to attain a specific percentage of growth in communities as smart growth by updating the zoning laws to allow for higher density and mixed use. It should change the economic climate by tax deferrals and reductions, fee waivers, and density bonuses.

**Energy.** There should be consideration of solar panels and other alternative energy sources. Solar energy benefits air quality and could generate enough energy to help mitigate the need to build upgraded electric facilities and new power plants. The use of solar panels can help offset CO2 emissions from new developments and new power plants. Already, developers in the city of Bakersfield have agreed to install solar in model homes and offer this to potential buyers. In the city of Fresno, a developer has installed solar in each home in a small subdivision. The General Plan policy should strive to attain a certain percentage of buildings with solar panels.

There should be consideration of green building design and energy efficient buildings. Energy conservation should be a primary goal. This should include water conservation that encourages xeriscaping rather than lawnscapeing.

**Air Quality.** Air pollution associated with project should be completely mitigated. The SJVAPCD recently adopted the ISR rule for new projects in the San Joaquin Valley; however, this rule will not completely offset the air pollution associated with the project. ISR mitigates only 50% of Nox and PM10 emissions and does not mitigate ROG at all. The EIR should determine mitigation for the other 50% of Nox and PM10 and all of the ROG emissions. Mitigation measures may include air quality mitigation fees that can be used to fund air pollution reduction projects (such as replacing old school buses) to completely offset the air pollution associated with the project. The EIR should explore that as a condition of development a requirement that the developer pay a fee into such a fund. Alternatives to the fund could be including design measures in the project (solar, bikeways, walking trails, etc.) that would reduce air quality impacts and which should be explored in the EIR.

**Cumulative Impacts.** The EIR should assess the cumulative impacts, based on different scenarios. These scenarios could be the city-centered approach, the rural development approach, the new towns approach, etc. Impacts should be offset with mitigation to the maximum possible. The scenario with the least impact should be the preferred.



Mary Moy  
Conservation Chair  
Sierra Club, Mineral King Group

**DEPARTMENT OF TRANSPORTATION**

1352 WEST OLIVE AVENUE  
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6-TUL-GEN  
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GENERAL PLAN UP-DATE

Ms. Theresa Szymanis, AICP  
Division Manager, Countywide Planning  
County of Tulare  
Resource Management Agency  
5961 S. Mooney Boulevard  
Visalia, CA 93277

Dear Ms. Szymanis:

Thank you for the opportunity to review the Notice of Preparation (NOP) of the Tulare County General Plan Update Environmental Impact Report (EIR). The County Board of Supervisors has authorized staff to study and bring up to date the General Plan. Caltrans has the following comments:

Based on the information provided in the NOP, it is anticipated that State facilities within the study area boundary would be impacted by the proposed project. It is recommended that the Draft EIR, 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. The report should also determine any fair share costs that should be paid by project proponents towards future State improvements. In order to mitigate impacts, when a project is filed, a financing plan should be required. The plan should identify the financing measures necessary to carry out the various elements of the development plan. The elements should include the construction and maintenance of open space and recreation, State, local and private transportation, sewage, water, drainage and any other infrastructure and public services, and any other appropriate regulations, programs or public works projects. The financing plan would be evaluated, modified and expanded over time as the planning process evolves through the various levels with the intent that each of the development projects "pay their fair share" over the long term so as not to be a financial burden on the County or State.

The State of California has an adopted Transportation Concept Report (TCR) for each of the State Routes that designates the ultimate right-of-way cross-section upgrades in the future. Caltrans request that the County of Tulare adopt the TCR in order to give guidance to the developer to insure orderly development and private property rights while preserving and insuring the ultimate State and local road systems for the future.

Most of the interchanges in the County will need improvements to accommodate the future growth of the community. Caltrans is currently in the process of developing conceptual layouts for future improvements of the interchanges. It is recommended that the local agency adopt the changes into the Circulation Element. Some of the local streets closest to the ramp intersections

may need to be closed, and any new connections to local roads should be located at least 525 feet from a ramp intersection.

A traffic and financial study will be needed to determine the ultimate configuration of each of the interchanges needing improvements. Either the County or the proponent of any project that will significantly impact the current interchange should prepare these studies. Until a financial and traffic study is completed, the County should not take any action that would jeopardize the future acquisition of right-of-way for roadway purposes.

An encroachment permit must be obtained for all proposed activities for placement of encroachments within, under or over the State highway rights-of-way. Activity and work planned in the State right-of-way shall be performed to State standards and specifications, at no cost to the State. Engineering plans, calculations, specifications, and reports (documents) shall be stamped and signed by a licensed Engineer or Architect. Engineering documents for encroachment permit activity and work in the State right-of-way may be submitted using English Units. The Permit Department and the Environmental Planning Branch will review and approve the activity and work in the State right-of-way before an encroachment permit is issued. Encroachment permits will be issued in accordance with Streets and Highway Codes, Section 671.5, "Time Limitations." Encroachment permits do not run with the land. A change of ownership requires a new permit application.

It is recommended that the County of Tulare consider a Development Impact Mitigation Program similar to the Cities of Tulare and Visalia. The mitigation program would secure funding for a zone of benefit for the future improvements to local and State facilities necessitated by the accumulated impacts of development. The project proponent would contribute per the Development Mitigation Program to the improvements of the before mentioned State Route facilities.

Please be advised that any future development adjacent to a State Route, whether the entitlement is deemed by the lead agency to be discretionary or ministerial should be sent to Caltrans for review. Please send a response to our comments and a copy of the Council resolution related to the proposed project. If you have any questions, please call me at (559) 488-7306.

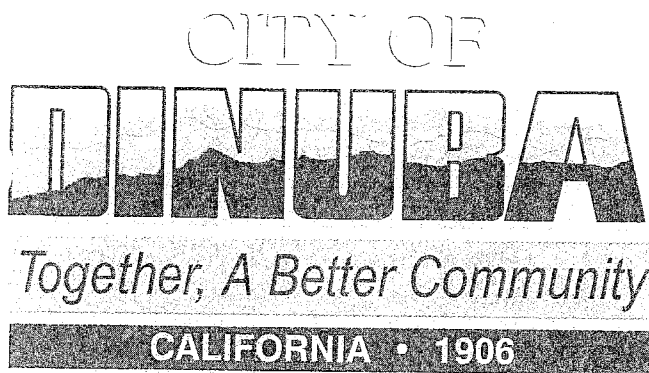
Sincerely,



AL DIAS  
Office of Transportation Planning  
District 6

C: Mr. Britt L. Fussel, P.E., County of Tulare  
Assistant Director-Engineering

Mr. Ted Smalley, Executive Secretary  
Tulare County Association of Governments



City Manager  
559/591-5904

City Attorney  
559/437-1770

Administrative Services  
559/591-5900

Development Services  
559/591-5906

Dinuba Vocational Center  
559/596-2170

Fire/Ambulance Services  
559/591-5931

Parks & Community Services  
559/591-5940

Police Services  
559/591-5914

Public Works Services  
559/591-5924

*Celebrating 100 years of Service 1906 - 2006*

May 30, 2006

Theresa Szymanis, Chief Planner  
Tulare County Resource Management Agency  
5961 South Mooney Boulevard  
Visalia, CA 93277

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Dear Ms. Szymanis,

The City of Dinuba would like to thank you for the opportunity to comment on the Notice of Preparation of an Environmental Impact Report for the Tulare County General Plan Update. Below are our brief comments:

On page 16: Aesthetic, Visual and Scenic Resource Impacts; The DEIR should include discussions of other significantly traveled east-west and north-south county roads, such as Avenue 416 outside of Dinuba's city limits, or Road 80 from south of Dinuba to Visalia as both of these roads offer significant views of the Sierra Nevada. This landmark feature can be seen from a west to east perspective on Avenue 416 (which is "Mountain View Avenue" in Fresno County and "El Monte Way" in Dinuba) and Road 80 from a north/south perspective.

On pages 16 and 17: Agriculture and Open Space Impacts, The DEIR should investigate the possibility of using land trusts, conservation contracts, and conservation easements to not only protect agricultural resources, but to also provide physical buffers between cities or other uses (e.g., dairies, industrial uses (e.g., an ethanol plant)).

On page 17: Air Quality Impacts, In addition to primary and secondarily formed stationary and mobile sources of air pollutants, the DEIR should contain a discussion on other air quality impacts not related to the Federal Clean Air Act's criteria pollutants (i.e., Ozone, PM10, PM2.5) such as hazardous air pollutants (HAPs), toxics emissions, and odor (especially from dairies). The physical siting of these sources could potentially impact downwind urban and rural uses.

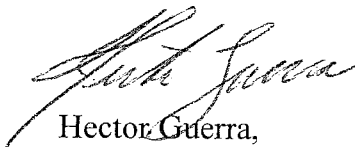
On page 17: Biological Resource Impact, Will the General Plan Update include updates to the county's Habitat Conservation Plan? If so, the DEIR should contain a discussion and/or maps of critical habitat areas near incorporated cities' growth-paths.

On page 18: Land Use and Planning Impacts, the DEIR should contain a discussion on Urban Development Boundaries and the physical impacts of land use decisions within proximity of incorporated cities. Perhaps a discussion of Sphere of Influences may also be appropriate while discussing physical growth constraints.

On page 19, Traffic and Circulation Impacts, public safety should also be evaluated as increasing traffic along major thoroughfares (e.g., Road 80 between Visalia and Dinuba, and Avenue 416 from the Fresno County line to Dinuba). Roadway widths, left and right turn lanes, vehicle speed limits, and agricultural equipment on roadways all effect safety and are all relative to the physical parameters of roadways. Improving these facilities to accommodate probable increases in traffic will allow for quicker and safer travel on these highly used roads.

Thank you for the opportunity to comment on the Notice of Preparation of an Environmental Impact Report for the Tulare County General Plan Update. If you have any questions, please call me at 591-5906.

Sincerely,



Hector Guerra,  
Principal Planner

c: file





Linda Adams  
Secretary

# California Regional Water Quality Control Board Central Valley Region

Robert Schneider, Chair



Arnold  
Schwarzenegger  
Governor

Fresno Branch Office  
1685 E Street, Fresno, California 93706  
(559) 445-5116 • Fax (559) 445-5910  
<http://www.waterboards.ca.gov/centralvalley>

30 May 2006

Tulare County  
Resource Management Agency  
Theresa Szymanis  
5961 S. Mooney Boulevard  
Visalia, CA 93277

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## RESPONSE TO NOTICE OF PREPARATION OF ENVIRONMENTAL IMPACT REPORT FOR TULARE COUNTY GENERAL PLAN

Thank you for the opportunity to comment on Tulare County's 3 May 2006, Notice of Preparation (NOP) for the Tulare County General Plan. The General Plan will provide direction for future land use, resource, and public services; future specific plans, rezoning, subdivisions, use permits, building permits, public works projects, and zoning decisions will be consistent with the General Plan. Our comments are submitted in compliance with California Environmental Quality Act (CEQA) *Guidelines* §15096, which requires CEQA responsible agencies to specify the environmental information germane to their statutory responsibilities, and lead agencies to include that information in their Environmental Impact Reports (EIR).

The County's General Plan is important to the work of the Central Valley Regional Water Quality Control Board (Regional Water Board) because managing the water quality<sup>1</sup> effects of urban development is a large part of our non-point source, storm water, and water quality certification work. Many of the waters currently on this Regional Water Board's list of impaired waterbodies are degraded by conditions within the control of local planning and agencies.

Future projects authorized by the General Plan will require permits issued by the Regional Water Boards. Our present comments focus primarily on discharges regulated under our Federal Clean Water Act (CWA) section 401 and storm water programs. Required Water Board entitlements appear to include,

- Fill or dredged material discharges CWA section 401 water quality certification for federal waters, or Waste discharge requirements for non-federal waters.
- Storm water and other wastewater discharges CWA section 402 NPDES permit.
- Other Waste discharge requirements or other permits for discharges that may affect ground water such as from proposed solid waste transfer facilities.

<sup>1</sup> California Water Code section 13050(g)

Specific technical comments are provided in the following attachments to this letter:

- Attachment 1, *Identification of Potential Water Quality Impacts and Required Analyses*, diagrams and lists the potential effects of land development on water quality and identifies our related information needs.
- Attachment 2, *The Ahwahnee Water Principles for Resources Efficient land Use*, provides policy-level principles to address water supply and water quality problems associated with urban development in California.
- Attachment 3, *Low Impact Development References*, provides links to technical references on maintaining the natural hydrograph, a key factor in maintaining watershed values.
- Attachment 4, *Terrestrial Habitat Connectivity Related To Wetland, Riparian, and Other Aquatic Resources*, provides information and references on the importance of stream corridors, wetlands, and other waterbodies in maintaining local and regional habitat connectivity.

More general advice regarding the information germane to our statutory responsibilities follows:

### **Identification of Affected Waters.**

Please map at a regional scale all waters of the State, as defined by CWA section 13050(e), potentially affected by the development proposed to be authorized by the General Plan, and list them in appropriate tabular format, organized by waterbody type. Include wetlands, riparian areas as defined by the National Academy of Sciences<sup>2</sup>, and "isolated" waters. For waterbodies expected to be directly affected, identify the approximate acreage and (for drainage features) the number of linear feet directly impacted and sum the total affected acres and linear feet by waterbody type. Identify any "isolated" wetlands or other waters excluded from federal jurisdiction by court decisions<sup>3</sup>.

### **Effects of Urban Development on Water Quality**

Poorly planned urban development degrades water quality through a series of interrelated effects. The primary impacts of poorly planned development projects on water quality are:

- direct physical impacts of filling and excavation to wetlands, riparian areas, and other waters,
- generation of urban pollutants during and after construction;
- alteration of flow regimes and groundwater recharge by impervious surfaces and stormwater collector systems;

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<sup>2</sup> Riparian areas are transitional between terrestrial and aquatic ecosystems and are distinguished by gradients in biophysical conditions, ecological process, and biota. They are areas through which surface and subsurface hydrology connect water bodies with their adjacent uplands. They include those portions of terrestrial ecosystems that significantly influence exchanges of energy and matter with aquatic ecosystems (i.e., a zone of influence). Riparian areas are adjacent to perennial, intermittent, and ephemeral streams, lakes, and estuarine-marine shorelines. (National Research Bureau of the National Academy of Sciences. 2002. *Riparian Areas: Functions and Strategies for Management*. National Academy Press, 2102 Constitution Avenue, N. W., Washington, D. C., 20418).

<sup>3</sup>E.g., U.S. Supreme Court, *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 2001.

- disruption of watershed-level aquatic functions, including pollutant removal, floodwater retention, and habitat connectivity.

These impacts typically result in degraded water quality, increased flooding, destabilized stream channels, and engineered solutions to disrupted flow patterns, culminating in near-total loss of natural functions and societal values in the affected basins.

### **Scope and Level of Needed Analyses.**

Analysis of water quality is complicated due to the many components that degrade water quality, but understanding these effects within the projects authorized by the General Plan is essential to managing them.

To fulfill our statutory responsibilities in permitting discharges associated with development authorized by this General Plan, the Regional Water Board needs to understand how projects conducted under the General Plan will avoid or minimize each potential cause of water quality degradation, what effects will remain unmitigated, and the magnitude of the remaining adverse effects. Quantification of impacts should be as definitive as possible, using appropriate modeling and adequate data. Modeling approaches should be documented and data deficiencies or other factors affecting the reliability of the results identified and characterized.

### **Hydrologic Disruption as a Driving Variable.**

Because increased runoff from developed areas is the key variable driving a number of other adverse impacts (as displayed and discussed in Attachment 1, *Impacts Identification*), attention to maintaining the pre-development hydrograph will prevent or minimize other problems and will limit the need for other analyses and mitigation in the Draft Environmental Impact Report (DEIR). Please include measures to maintain the pre-project hydrograph in the alternatives analyses in the DEIR (see below). Please also document potential cumulative impacts to watershed hydrology from existing and planned development in the area (e.g., from city planning areas).

### **Alternatives Analysis.**

The County's General Plan can authorize development with the potential to cause major water quality impacts, or can implement a low-impact planning approach to minimize those effects. Please include in the alternatives analysis of the DEIR a low-impact approach based on the principles and examples referenced in Attachment 2, *Ahwahnee Water Principles* and Attachment 3, *Low Impact Development References*. Such an approach generally involves more compact development that:

- minimizes generation of urban pollutants;
- preserves the amenity and other values of natural waters;
- maintains natural waters, drainage paths, landscape features and other water-holding areas to promote stormwater retention and groundwater recharge;
- designs communities and landscaping to minimize stormwater generation, runoff, and concentration; promote groundwater recharge; and reduce water demand;
- promotes water conservation and re-use.

### **Habitat Connectivity.**

Riparian corridors and other waters within the regulatory purview of the State and Regional Water Boards play an important role in maintaining habitat connectivity. Attachment 3, *Terrestrial Habitat Connectivity Related To Wetland, Riparian, and Other Aquatic Resources*, provides information and references on this subject. Aquatic habitat may also be fragmented by impacts to streams or other waterbodies.

Please 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 through mitigation measures. Include information regarding any sensitive plant and animal species that likely utilize the corridors. Please identify any impacts to riparian or other waters that could compromise future remediation of existing connectivity barriers. Information to and in these analyses, is contained in the information and literature referenced in Attachment 3, including recent data on the role of riparian corridors as movement corridors in California.

Again, thank you for this opportunity to comment. We welcome the opportunity to work with the County to make the General Plan an example of planning for environmental sustainability in California. If we may clarify any of our comments or be of further assistance, please contact Margarita Gordus at (559) 445-6046



W. DALE HARVEY  
Sr. WRC ENGINEER

### **Attachments**

Cc: Tim Vendlinski, Chief (WTR-8), U.S. Environmental Protection Agency, Region 9, San Francisco  
Kathy Norton, Regulatory Unit, Department of the Army, Corps of Engineers, Sacramento  
Oscar Balaguer, Water Quality Certification Unit Chief, Division of Water Quality, State Water Resources Control Board, Sacramento  
W.E. Loudermilk, Regional Manager, San Joaquin Valley-Southern Sierra Region, California Department of Fish and Game, Fresno

**California Regional Water Quality Control Board  
Central Valley Region**

**Tulare County General Plan Update:  
Identification of Potential Water Quality Impacts  
and Required Analyses**

**Comments on Notice of Preparation:  
Tulare County General Plan Update**

May 2006

## Urban Development: Potential Water Quality Impacts and Required Analyses

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*The degraded character of urban streams does not result from any single factor, but rather from the interaction of a variety of detrimental effects.*

Klein, 1979

Urban development degrades water quality through a complex of interrelated causes and effects which, unmanaged, ultimately destroy the physical, chemical, and biological integrity of the watersheds in which they occur. The primary adverse impacts of poorly planned development projects on water quality are:

- the direct impacts to aquatic, wetland, and riparian habitat and other beneficial uses;
- generation of construction-related and post-construction pollutants;
- alteration of flow regimes and groundwater recharge as a result of impervious surfaces and storm drain collection systems;
- disruption of watershed level aquatic functions, including pollutant removal, floodwater retention, and habitat connectivity.

These factors have historically resulted in a cycle of destabilized stream channels, poor water quality, fragmented aquatic and terrestrial habitat, and engineered solutions to disrupted flow patterns, culminating in loss of natural functions and societal values in the affected basins.

The number and variability of the pathways through which water quality degradation can occur complicates analysis, but understanding how these pathways operate within the specific context of each project is essential to effectively mitigating the adverse effects. Fortunately, avoidance or minimization of any causal link will obviate or reduce subsequent effects and needed analyses, and a relatively small number of key variables mediate most of the pathways causing water quality degradation.

This Enclosure consists of a flowchart diagram (Figure 1) displaying the factors potentially affecting water quality, and a table (Table 1) characterizing them.

**Figure 1** begins on the left with three activities which are associated with urbanization: filling, construction (construction and post-construction phases), and channelization. Figure 1 ends on the right with the resulting impaired beneficial uses and the potential for increased maintenance and property damage. In between are intermediate processes. Cause-and-effect relationships, which include synergistic and cumulative effects, are shown by arrows.

**Table 1** briefly describes the causes and effects displayed in Figure 1, provides literature citations for each of the effects, and identifies for each effect the types of project-specific information needed to assess and mitigate each adverse impact to water quality.

# POTENTIAL EFFECTS OF URBAN DEVELOPMENT ON BENEFICIAL USES

This diagram shows how urban development can affect beneficial uses of water.

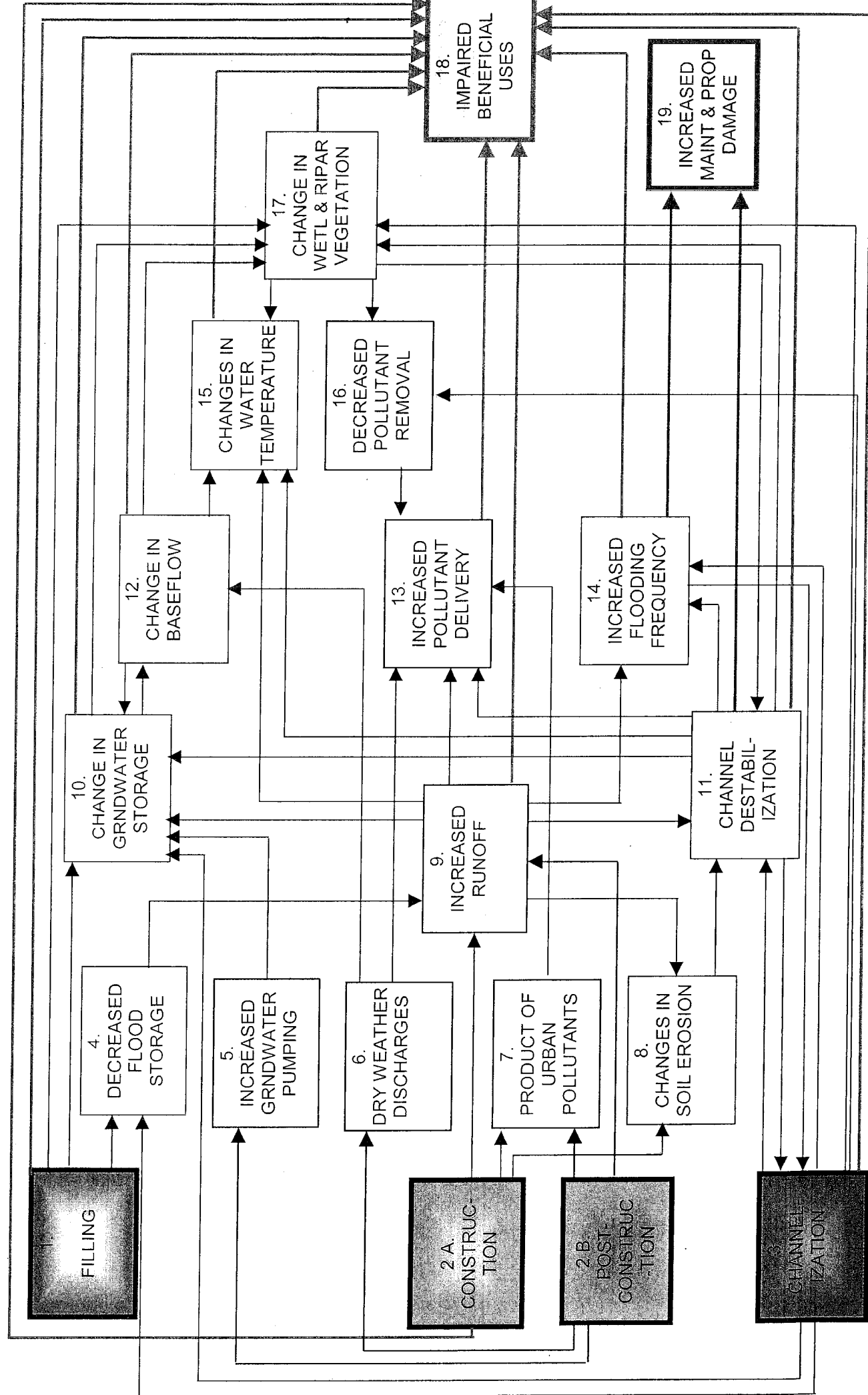


Figure 1

TABLE 1

### Centennial Project: Identification of Potential Water Quality Impacts and Required Analyses

CAUSE	EFFECT	NEEDED ANALYSES
<b>1. FILL &amp; EXCAVATION</b> Fill or excavation in wetlands, riparian areas, or other waters of the state.	<b>A. Decreased Flood Storage.</b> Fill can impinge on the natural storage volume of ephemeral, intermittent, and perennial channels, backwaters, and wetlands, reducing capacity to retain runoff. <sup>1</sup>	1) Quantify reduced flood storage in each affected basin. 2) Identify mitigation.
	<b>B. Change in Groundwater Storage.</b> Fill and excavation can decrease groundwater recharge and cause lower water tables by changing soil percolation characteristics and reducing the area of standing water in recharge basins. <sup>2</sup> Linear excavation (e.g., for utility lines) can act as a conduit to drain groundwater and locally lower watertables.	1) Quantify groundwater response to changes in percolation. 2) Identify locations where linear alignments could act to dewater shallow aquifers. 3) Identify mitigation.
	<b>C. Change in Wetland and Riparian Vegetation.</b> Fill and excavation can bury or remove vegetation and can change site features to prevent reestablishment of characteristic species.	1) Identify and map types and areal extents of affected vegetation. 2) Identify mitigation.
	<b>D. Impaired Beneficial Uses.</b> Fill can directly impair beneficial uses by reducing water area and changing hydrology, geomorphology, substrate, and other waterbody characteristics. In addition, projects which fragment habitat and reduce wildlife movement along riparian and other corridors can degrade remaining patches of wetlands and other habitat by changing their physical characteristics and by isolating and exposing small populations of plants and animals, resulting in local or regional extinctions. <sup>3</sup>	1) Document types, areal extents, and (for drainage features) lengths of affected waters. 2) Characterize and map at project-area and regional scales existing wildlands, along with riparian corridors and other water features supporting habitat connectivity. 3) Identify effects of fill on terrestrial and aquatic habitat connectivity (refer to Enclosure 3). 4) Identify watershed-level effects on pollutant removal and flood retention. 5) Identify mitigation.
<b>2A. CONSTRUCTION</b> Clearing, grading, and construction of structures and facilities.	<b>A. Production of Urban Pollutants.</b> Construction can produce pollutants through improper use and disposal of toxic construction materials.	1) Identify mitigation for inclusion in stormwater pollution prevention plan.
	<b>B. Change in Soil Erosion.</b> Active construction can dramatically increase soil erosion by exposing and destabilizing soils. Erosion is compounded by the increased runoff typically accompanying construction. <sup>6</sup>	1) Identify location and extent of planned grading. Display proximity and slope relationships to receiving drainages. 2) Document erodibility of soils and subsoils in areas proposed for grading. 3) Quantify amount and duration of increased sediment loadings to each affected drainage. 4) Identify mitigation.



CAUSE	EFFECT	NEEDED ANALYSES
2B. POST-CONSTRUCTION Ongoing effects of constructed environment.	<b>C. Increased Runoff.</b> Construction can increase both the total and peak volume of stormwater runoff by removing vegetation, compacting soil, exposing dense subsoil, creating steep graded slopes, and eliminating terrain depressions and ephemeral and intermittent drainages that would naturally slow the movement of stormwater. <sup>9</sup>	1) Quantify total and peak volumes of increased runoff for each affected drainage 2) Identify mitigation.
	<b>D. Impaired Beneficial Uses.</b> Projects which fragment habitat and reduce wildlife movement along riparian and other corridors can degrade remaining patches of wetlands and other habitat by changing their physical characteristics and by isolating and exposing small populations of plants and animals, resulting in local or regional extinctions. <sup>11</sup>	1) Characterize and map at project-area and regional scales existing wildlands, along with riparian corridors and other water features supporting habitat connectivity. 2) Identify effects of construction on terrestrial and aquatic habitat connectivity (refer to Enclosure 3). 3) Identify mitigation.
	<b>A. Dry weather discharge.</b> Construction can cause dry-season "nuisance" runoff from activities such as landscape irrigation <sup>5</sup> , sidewalk and vehicle washing, and basement dewatering.	1) Characterize volumes, seasonality, and other pertinent characteristics of "nuisance" flows for each affected drainage.
	<b>B. Increased Groundwater Pumping.</b> Construction can cause increased groundwater pumping for domestic or landscape use. <sup>4</sup>	1) Quantify and map locations of increased pumping.
	<b>C. Production of Urban Pollutants.</b> After construction, urban areas can generate pesticides, nutrients, oxygen-demanding substances, heavy metals, petroleum hydrocarbons, bacteria, viruses, and other pollutants from activities such as landscape care and vehicle operation and maintenance. <sup>7</sup>	1) Quantify projected increase in pollution production in each affected basin. 2) Identify mitigation.
	<b>D. Change in Soil Erosion.</b> After construction, erosion can be reduced to below natural levels because soils are covered with buildings and pavement, and runoff is routed through storm drains. <sup>8</sup>	1) Quantify reduction of natural sediment delivery rates to each affected basin. 2) Identify mitigation.

CAUSE	EFFECT	NEEDED ANALYSES
	<b>E. Increased Runoff.</b> After construction, maintained landscapes and impervious surfaces such as roofs and streets increase total and peak runoff. The increased flows move quickly over paved surfaces and are collected, concentrated, and further accelerated in stormdrain systems. The combination of increased flows and more efficient transport causes a higher, "flashy", more rapidly peaking and falling hydrograph, especially for smaller, more frequent floods. <sup>10</sup>	1) Quantify project-induced changes in total and peak runoff rates to each affected drainage. 2) Identify mitigation.
<b>3. CHANNELIZATION</b> Engineered changes in channel structure or morphology to stabilize banks, prevent flooding, or increase flow conveyance.	<b>A. Decreased Flood Storage.</b> Channelization can reduce flood storage within a basin by restricting flows to the active channel, thereby preventing detention of floodwater in backwaters and on the adjacent floodplain. <sup>12</sup>	1) Quantify and map reductions in flood storage in each affected basin. 2) Identify mitigation.
	<b>B. Change in Groundwater Storage.</b> Lining channel bottoms can change groundwater storage by reducing percolation and groundwater recharge. <sup>13</sup> Deepening natural channels can drain adjacent shallow water tables. <sup>14</sup>	1) Quantify and map locations of reduction in recharge rates. 2) Quantify effects on channelization on shallow water tables and associated wetlands. 3) Identify mitigation.
	<b>C. Channel Destabilization.</b> Channelization can cause channel destabilization by changing the balance between the stream's flow, sediment load, and channel form. Destabilization tends to affect entire stream systems. For example, channelization can concentrate and synchronize peak flows from tributary streams, causing increased channel erosion both above and below the channelized reach. The eroded sediment is then deposited downstream when the flow slows down, where it may initiate further destabilization. <sup>15</sup>	1) Quantify basin-level hydrologic and fluvial geomorphic effects of channelization in each affected drainage. 2) Identify mitigation.
	<b>D. Increased Flooding Frequency.</b> Constricted channels (e.g., in leveed sections) can cause water to back up, resulting in localized upstream flooding. Rapid passage of floodwaters through "improved" channels can increase flooding downstream by concentrating and synchronizing tributary peaks. <sup>16</sup>	1) Quantify basin-level hydrologic effect of channelization on each affected basin, including changes in flood return frequencies. 2) Identify mitigation.
	<b>E. Decreased Pollutant Removal.</b> Channelization can decrease natural pollutant removal by reducing instream structural complexity and turbulent-flow aeration, increasing flow velocity, reducing overbank flow, and by causing change in vegetation. <sup>17</sup>	1) Map waters lost to channelization in each affected drainage and characterize type, areal extent, and pollutant removal value. 2) Quantify affect on pollutant loadings to each affected waterbody and downstream receiving waters. 3) Identify mitigation.
	<b>F. Change in Wetland and Riparian Vegetation.</b> Channelization and associated maintenance can directly destroy wetland and riparian vegetation and can change site features to prevent reestablishment of characteristic species. <sup>18</sup>	1) Map and Identify types and areas of affected vegetation. 2) Identify mitigation.

CAUSE	EFFECT	NEEDED ANALYSES
	<p><b>G. Impaired Beneficial Uses.</b> Channelization and associated maintenance can directly impair beneficial uses by reducing waterbody area; increasing stream velocity; disrupting riffle and pool sequences, cover, and other structural features; changing substrate; cutting off nutrient inputs to and from backwaters and riparian wetlands, dewatering upstream reaches, and reducing aesthetic and recreational value. Reduced overbank flooding can adversely affect reproduction of riparian vegetation and wetland and riparian functions.<sup>19</sup> Channelization can inhibit the movement of fish, other aquatic biota, and wildlife, and thus isolate and reduce the viability of populations up and downstream.<sup>20</sup> Construction of channels can introduce sediment, nutrients, and toxics into the water column.<sup>21</sup></p>	<p>1) Identify direct and indirect effects of proposed channelization projects on beneficial uses. 2) Characterize and display at project-area and regional scales existing wildlands, along with riparian corridors and other water features supporting habitat connectivity. 3) Identify effects of channelization on terrestrial and aquatic habitat connectivity. 4) Identify mitigation.</p>
4. DECREASED FLOOD STORAGE	<p><b>A. Increased Runoff.</b> Reduced flood storage on the floodplain and in channels, swales, wetlands, backwaters, and other natural depressions increases and accelerates runoff.<sup>22</sup></p>	<p>1) Quantify total and peak volumes of increase runoff for each affected drainage. 2) Identify mitigation.</p>
5. INCREASED GROUNDWATER PUMPING	<p><b>A. Change in Groundwater Storage.</b> Increased groundwater pumping can lower watertables locally or in distant donor basins.<sup>23</sup></p>	<p>1) Quantify and map locations of project-induced changes in groundwater levels. 2) Identify mitigation.</p>
6. DRY WEATHER DISCHARGE	<p><b>A. Change in Baseflow.</b> Dry weather runoff from urban activities can increase dry-period streamflows.<sup>24</sup></p> <p><b>B. Increased Pollutant Delivery.</b> Dry weather runoff can carry the pollutants generated by the activity causing the flow, e.g., pesticides, nutrients, and petrochemicals from landscape maintenance and cleaning sidewalks and vehicles. Collection of polluted dry weather flows in catch basins may result in shock loadings when it is displaced by subsequent storm flows.<sup>25</sup></p>	<p>1) Quantify hydrologic effects of dry weather flows on the baseflow of each affected drainage.</p> <p>1) Quantify and characterize pollutant loadings from activities generating dry weather runoff to each affected drainage. 2) Identify mitigation.</p>
7. PRODUCTION OF URBAN POLLUTANTS	<p><b>A. Increased Pollutant Delivery.</b> Increased production of urban pollutants can cause increased delivery of pollutants to surface and groundwater.<sup>26</sup></p>	<p>1) Quantify and characterize pollutant loadings from to each affected drainage. 2) Identify mitigation.</p>

CAUSE	EFFECT	NEEDED ANALYSES
8. CHANGE IN SOIL EROSION	<p><b>A. Channel Destabilization.</b> Changes in upland soil erosion can destabilize stream channels by changing the amount of sediment carried into the stream. The stream may then erode or aggrade its channel to balance its available energy with the changes in its sediment load.</p> <p>1. Increased sediment from construction causes channel aggradation, changing stream cross sections and redirecting flows.<sup>27</sup></p> <p>2. Decreased sediment from a paved watershed can cause channel incision and/or side-cutting. The effect may be compounded by increased runoff from the paved watershed. Aggradation may occur downstream where the flow slows and deposits the eroded sediment, which may deflect flows against the channel banks and cause further bank erosion.<sup>28</sup></p>	<p>1) Conduct geomorphologic analysis of channel response to increases in construction-related sediment.</p> <p>2) Conduct geomorphologic analysis of channel response to long-term reductions in sediment delivery to each affected drainage.</p> <p>3) Identify mitigation.</p> <p><u>Note:</u> Sediment as a pollutant is considered in No. 7, "Production of Urban Pollutants".</p>
	<p><b>9. INCREASED RUNOFF</b></p> <p><b>A. Change in Soil Erosion.</b> Increased runoff can dramatically increase soil erosion by causing greater runoff velocities which more effectively displace and carry soil particles. Construction-related soil destabilization can compound the effect.<sup>29</sup></p> <p><b>B. Change in Groundwater Storage.</b> Increased runoff can reduce groundwater recharge and lower water tables, since water draining from impervious surface is unable to percolate to groundwater at that location.<sup>30</sup></p> <p><b>C. Channel Destabilization.</b> Increased peak runoff can destabilize channels by increasing the flow velocity and erosive power of the stream. Head cutting, incision and/or widening of the channel, and associated sideslope failures can result. Reduced sediment input as a result of change in soil erosion rates can compound the effect.<sup>31</sup> In small streams, increased runoff may also dislodge logs and other channel features that help to define the channel.<sup>32</sup></p> <p><b>D. Increased Pollutant Delivery.</b> Increased runoff increases pollutant delivery because it can more effectively carry particulate and soluble pollutants to receiving waters. Increased flow velocity reduces contact time with soil and vegetation that might otherwise remove pollutants.<sup>33</sup></p> <p><b>E. Increased Flooding Frequency</b> Increased runoff and greater transport efficiency result in higher peak flows from storms of a given return period.<sup>34</sup></p>	<p>1) Quantify increases in sheet and gully erosion resulting from increased runoff.</p> <p>2) Identify mitigation.</p> <p>1) Map locations of and quantify losses of recharge and water table response.</p> <p>2) Identify mitigation.</p> <p>1) Quantify channel geomorphic response to increased runoff for each affected drainage.</p> <p>2) Identify mitigation.</p> <p>1) Quantify types and quantities of increased pollutant loadings to each affected drainage.</p> <p>2) Identify mitigation.</p> <p>1) Quantify basin level hydrologic effect of increased runoff on each affected basin, including changes in flood return frequencies.</p> <p>2) Identify mitigation.</p>

CAUSE	EFFECT	NEEDED ANALYSES
	<b>F. Change in Water Temperature.</b> Increased runoff from urban areas can raise the temperature of receiving waters because runoff from impervious surfaces is often warmer than runoff from pervious surfaces or subsurface flow. <sup>35</sup>	1) Model increase in water temperature along stream profile of each affected drainage. 2) Identify mitigation.
	<b>G. Impaired Beneficial Uses.</b> Increased runoff can impair habitat values by flushing fish and invertebrates out of streams, <sup>36</sup> increasing water level fluctuations and the velocity of flows entering wetlands, <sup>37</sup> and causing salinity changes in estuaries and other nearshore marine waters. <sup>38</sup>	1) Identify direct effects of increased flow on aquatic biota, hydrologic regimes of adjacent wetlands, and salinity of marine receiving waters for each affected drainage. 2) Identify mitigation.
	<b>10. CHANGE IN GROUNDWATER STORAGE</b>	
	<b>A. Change in Baseflow.</b> Changes in watertable level can cause changes in the dry weather baseflow of streams fed by groundwater. <sup>39</sup>	1) Quantify for each affected drainage the changes in baseflow associated with lowered water tables and map locations. 2) Identify mitigation.
	<b>B. Change in Wetland and Riparian Vegetation.</b> A lowered watertable can dry up wetlands, stress or kill mature riparian vegetation, and reduce or eliminate seedling survival. <sup>40</sup>	1) Identify types and areas of wetlands and riparian areas that would be affected by expected lowering of shallow water tables and map locations. 2) Identify mitigation.
	<b>C. Impaired Beneficial Uses.</b> A lowered watertable can impair water supply and other beneficial uses which use groundwater. Seawater intrusion is possible in coastal areas. <sup>41</sup> Aquifer compaction and subsidence can also occur. <sup>42</sup> Wetland and riparian areas can be dewatered, harming associated vegetation and habitats. <sup>43</sup>	1) Identify affects of expected water table lowering on water supply and other beneficial uses and map locations. 2) Identify mitigation.
<b>11. CHANNEL DESTABILIZATION</b>	<b>A. Channelization.</b> Channel erosion can threaten property and structures, leading to placement of riprap or other engineered stabilization of critical sections. <sup>45</sup>	1) Identify stream reaches in which project-induced channel destabilization may require channelization. 2) Identify mitigation.
	<b>B. Change in Groundwater Storage.</b> Channel incision can dewater shallow aquifers adjacent to the channel. <sup>46</sup>	1) Identify and map stream reaches in which project-induced stream incision may dewater shallow aquifers. 2) Identify mitigation.
	<b>C. Increased Pollutant Delivery.</b> Channel erosion can result in increased suspended solids and turbidity in the water column. <sup>47</sup>	1) Identify and map stream reaches subject to project-induced destabilization, quantify changes in channel dimension, and volume of eroded material for each affected basin. 2) Identify mitigation.
	<b>D. Increased Flooding Frequency.</b> Channel aggradation can cause local flooding by diverting flows and decreasing a stream's flow capacity. <sup>48</sup>	1) Identify and map stream reaches in which project-induced channel destabilization may cause aggradation and associated flooding. 2) Identify mitigation.
	<b>E. Change in Water Temperature.</b> Bank erosion and aggradation can increase water temperature by creating a broader channel with shallow flows, increased water surface relative to flow volume, and a smaller proportion of shaded water surface. As a result, summer water temperatures and daily and seasonal temperature fluctuations tend to be greater. <sup>49</sup>	1) Identify and map stream reaches in which project-induced destabilization can increase water temperature. 2) Identify mitigation.

CAUSE	EFFECT	NEEDED ANALYSES
	<b>F. Change in Wetland and Riparian Vegetation.</b> Channel destabilization can encroach on riparian wetlands and undermine streamside vegetation. <sup>50</sup>	1) Identify, characterize, and map wetland and riparian areas subject to encroachment by channel destabilization; 2) Identify mitigation.
	<b>G. Impaired Beneficial Uses.</b> Channel destabilization can reduce or eliminate habitat, recreation, esthetic values, and other uses by affecting deep pools, pool-riffle ratios, undercut banks, substrate suitability, and other structural features. <sup>51</sup>	1) Identify, characterize, and map stream reaches in which channel destabilization can directly impair beneficial uses. 2) Identify mitigation.
	<b>H. Increased Maintenance and Property Damage.</b> Channel erosion can undermine streamside buildings, bridges, utility crossings, and other property. Aggradation can bury diversion structures and other infrastructure and may require removal to maintain flow capacity.	1) Identify and map stream reaches in which destabilization may cause increased maintenance and property damage. 2) Identify mitigation.
	<b>12. CHANGE IN BASEFLOW</b>	
	<b>A. Change in Groundwater Storage.</b> Reduced stream baseflow can decrease groundwater recharge by reducing wetted area and the amount of water available for recharge in stream channels. <sup>52</sup>	1) Identify and map affected stream reaches. 2) Quantify losses of recharge and water table response. 3) Identify mitigation.
	<b>B. Change in Water Temperature.</b> Decreased baseflow, typically resulting from change in groundwater storage, can cause elevated and fluctuating stream temperature because groundwater usually enters the stream at cool, stable temperatures. <sup>53</sup>	1) Identify and map affected stream reaches; 2) Quantify temperature effects along stream profile. 3) Identify mitigation.
	<b>C. Change in Wetland and Riparian Vegetation</b> Decreased stream baseflow can cause riparian vegetation to shift to upland species. <sup>54</sup>	1) Characterize and map affected riparian areas. 2) Identify mitigation.
	<b>D. Impaired Beneficial Uses.</b> 1. Decreases in the amount or duration of baseflow can impair habitat quality by eliminating aquatic and riparian habitat area, reducing flow velocities, and otherwise disrupting the life cycles of plants and animals which are dependent on water. <sup>55</sup> 2. Increases in baseflow resulting from dry weather discharge can impair waterbodies such as seasonal wetlands, vernal pools, and intermittent streams which are naturally defined by seasonal water availability.	1) Identify and map affected waterbody segments. 2) Characterize and quantify changes in baseflow. 3) Identify direct effects on beneficial uses 4) Identify mitigation.
<b>13. INCREASED POLLUTANT DELIVERY</b>	<b>A. Impaired Beneficial Uses.</b> Urban pollutants can impair many beneficial uses, e.g., water supply, recreation, fish and wildlife habitat, and shellfish production. <sup>56</sup>	1) Identify direct effects of increased pollutant loadings on beneficial uses in each affected waterbody segment. 2) Identify mitigation.
<b>14. INCREASED FLOODING FREQUENCY</b>	<b>A. Channelization.</b> Increased flooding can lead to channelization of the critical section to more efficiently pass flood flows. <sup>57</sup>	1) Identify stream reaches in which project-induced flooding may require channelization. 2) Identify mitigation.

CAUSE	EFFECT	NEEDED ANALYSES
15. INCREASED WATER TEMPERATURE	<b>B. Impaired Beneficial Uses.</b> Increased flooding can impair habitat, <sup>58</sup> water supplies, navigation, and other beneficial uses.	1) Identify stream reaches in which project-induced flooding may impair beneficial uses. 2) Identify mitigation.
	<b>C. Increased Maintenance and Property Damage.</b> Increased flood frequency can result in more maintenance and flood damage.	1) Identify stream reaches in which project-induced flooding may increase maintenance and property damage. 2) Identify mitigation.
	<b>A. Impaired Beneficial Uses.</b> Increased water temperature can directly stress aquatic biota and can also affect other parameters associated with habitat quality, such as dissolved oxygen concentration and rate of chemical reactions. <sup>59</sup>	1) Identify and map affected waterbody segments. 2) Quantify temperature changes. 3) Characterize effects on beneficial uses. 4) Identify mitigation.
16. DECREASED POLLUTANT REMOVAL	<b>A. Increased Pollutant Delivery.</b> Less removal of pollutants by natural processes can result in greater concentrations of pollutants in receiving waters. <sup>60</sup>	1) Quantify effects to pollutant loadings for each affected waterbody. 2) Identify mitigation.
17. CHANGE IN WETLAND AND RIPARIAN VEGETATION	<b>A. Channel Destabilization.</b> Loss of vegetation and its associated anchoring root masses can destabilize channel banks and other geomorphic features. <sup>61</sup>	1) Characterize and map affected geomorphic features. 2) Identify mitigation.
	<b>B. Change in Water Temperature.</b> Loss of riparian vegetation can increase maximum water temperature by exposing more water surface to the sun. Daily and seasonal temperature fluctuations also tend to be greater. <sup>62</sup>	1) Identify and map stream reaches in which loss of riparian vegetation can increase water temperature. 2) Identify mitigation.
	<b>C. Decreased Pollutant Removal.</b> Removal of vegetation adjacent to a waterbody can reduce removal of pollutants from the waterbody and from the overland flow draining to the waterbody. <sup>63</sup>	1) Describe type, areal extent, and pollutant removal value of affected vegetation and map location. 2) Identify mitigation.
	<b>D. Impaired Beneficial Uses.</b> Loss of vegetation directly impairs the quality of aquatic and riparian habitat by reducing cover, structural diversity, and nutrient sources. <sup>64</sup> Removal of vegetation can also fragment and isolate remaining patches of habitat, resulting in decreased habitat value over large areas. <sup>65</sup>	1) Identify affected waterbody segments. 2) Characterize direct effects of vegetation loss on beneficial uses. 3) Characterize and display at project-area and regional scales existing wildlands, along with riparian corridors and other water features supporting habitat connectivity. 4) Identify effects of vegetation change on terrestrial and aquatic habitat connectivity. 5) Identify mitigation.

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## REFERENCES

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- Arnold, C.L, Boison, P. J., Patton, P.C. Sawmill Brook: An Example of Rapid Geomorphic Change Related to Urbanization. *Journal of Geology* 90:155-166; 1982.
- Booth, D. B. Stream-Channel Incision Following Drainage-Basin Urbanization. *Water Resources Bulletin: American Water Resources Association* 26(3):407-417; 1990.
- Borchardt, D., Statzner, B. Ecological Impact of Urban Stormwater Runoff Studied In Experimental Flumes: Population Loss by Drift and Availability of Refugial Space. *Aquatic Science* 52(4):299-314; 1990.
- Burke, V. J. and Gibbons, J. W. Terrestrial Buffer Zones and Wetland Conservation: A Case Study of Freshwater Turtles in a Carolina Bay. *Conservation Biology* 9(6):1365-1369; 1995.
- California State Water Resources Control Board [SWRCB]. Hydromodification, Wetlands, and Riparian Areas Technical Advisory Committee Report. Sacramento, California; 1994a November.
- California State Water Resources Control Board [SWRCB]. Urban Runoff Technical Advisory Committee Report. Sacramento, California; 1994b November.
- Dodd, C. K. Jr. and Cade, B. S. Movement Patterns and the Conservation of Amphibians Breeding in Small Temporary Wetlands. *Conservation Biology* 12(2):331-339; 1998.
- Dunne, T. and Leopold, L. B. *Water In Environmental Planning*. San Francisco: W.H. Freeman and Co.; 1978.
- Findley, C. S. and Houlahan, J. Anthropogenic Correlates of Species Richness in Southeastern Ontario Wetlands. *Conservation Biology* 11(4):1000-1009; 1997.
- Graf, W. L. The Impact of Suburbanization on Fluvial Geomorphology. *Water Resources Research* 11(5):690-692; 1975.
- Hilty, J. A. and Merenlender, A. M. Use of Riparian Corridors and Vineyards by Mammalian Predators in Northern California. *Conservation Biology* 18(1):126-135; 2004 February.
- Hollis, G. E. The Effect of Urbanization on Floods of Different Recurrence Interval. *Water Resources Research* 11(3):431-435; 1975.
- Joyal, L. A., McCollough, M. and Hunter, M. L. Jr. Landscape Ecology Approaches to Wetland Species Conservation: A Case Study of Two Turtle Species in Southern Maine. *Conservation Biology* 15(6):1755-1762; 2001.
- Klein, R. D. Urbanization and Stream Quality Impairment. *Water Resources Bulletin* 15(4):948-963; 1979.
- Knutson, K. L. and Naef, V. L. Management Recommendations for Washington's Priority Habitats: Riparian. Washington Dept. of Fish and Wildlife. Olympia, WA; 1997 December.
- Kondolf, G. M. and Keller, E.A. Management of Urbanizing Watersheds. California Watersheds at the Urban Interface: Proceedings of the Third Biennial Conference, University of California Water Resources Center, Report No. 75. Watershed Management Council; 1991 April.
- Mount, Jeffrey F. *California Rivers and Streams*. Berkeley: University of California Press; 1995.
- National Research Council. Compensating for Wetland Losses Under the Clean Water Act. Committee on Mitigating Wetland Losses. National Academy Press. Washington, D.C.; 2001, p. 42.
- Nature Conservancy. Landscape-Scale Wetland Management and Restoration Site Conservation Roundtable. Ecological Management and Restoration Program; Conservation Science Division. July 2000, p. 10.
- Noss, R.F. and Cooperrider, A.Y. *Saving Nature's Legacy; Protecting and Restoring Biodiversity*. Washington, D.C. Island Press: pp. 33-34, 50-54, 59-62; 1994.
- Parmesan, C. and Yohe, G. A Globally Coherent Fingerprint of Climate Change Impacts Across Natural Systems. *Science* 421(2): 37-42; 2003 January.



Patton, P. C. Geomorphic-Hydrologic Methods for Assessing Flood Potential in Southern New England: Institute of Water Resources Completion Report. A-078-CONN. 1981.

Pounds, J. A. and Puschendorf, R. Clouded futures. *Nature* 427: 107-109; 2004 February.

Root, T. L., Price, J. T., Hall, K. R., Schnieder, S. H., Rosenzweig, C. and Pounds, A. Fingerprints of Global warming on Wild Animals and Plants. *Science* 421(2):57-60; 2003 January.

Saunders, D. E., Hobbs R. J., and Margules, C. R. Biological Consequences of Ecosystem Fragmentation: A Review. *Conservation Biology* 5(1) 18-32; 1991 March.

Schueler, T. Urban Pesticides: From the Lawn to the Stream. *Watershed Protection Techniques*. 2(1); 1995 Fall. [Online]. Available from: <http://www.pipeline.com/~mrrunoff/imperv.htm>.

Schueler, T. The Importance of Imperviousness. *Watershed Protection Techniques*. 1(3); 1994 Fall. [Online]. Available from: <http://www.pipeline.com/~mrrunoff/imperv.htm>.

Semlitsch, R. D. Biological Delineation of Terrestrial Buffer Zones for Pond Breeding Salamanders. *Conservation Biology* 12(4):1113-1119; 1997.

Semlitsch, R. D. and Bodie, J. R. Are Small, Isolated Wetlands Expendable? *Conservation Biology* 12(5), 1998, pp.1129-1133.

Soulé, M. E. Land Use Planning and Wildlife Maintenance, Guidelines for Conserving Wildlife in an Urban Landscape. *Journal of the American Planning Association* 57(3):313-323; 1991.

Soulé, M. E. The Effects of Habitat Fragmentation on Chaparral Plants and Vertebrates. *Oikos* 63:39-47; 1992.

Terrene Institute. Urbanization and Water Quality. Washington D.C.; 1994 March.

United States Environmental Protection Agency [USEPA] (1). Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters. Washington D.C.: Office of Water, EPA-840-B-92-002; 1993a January.

United States Environmental Protection Agency [USEPA] (2). Natural Wetlands and Urban Stormwater: Potential Impacts and Management. Washington D.C.: Office of Water, EPA-843R-001; 1993b February.

United States Federal Interagency Stream Restoration Working Group. Stream Corridor Restoration: Principles, Practices, and Processes; 1998 October. [Online]. Available from: [http://www.usda.gov/stream\\_restoration](http://www.usda.gov/stream_restoration). Printed copy available from: National Technical Information Service (NTIS), Springfield, VA.

United States Fish and Wildlife Service [USFWS]. Manual of Stream Channelization Impacts on Fish and Wildlife. Biological Services Program; 1982 July.

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## ENDNOTES

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- <sup>1</sup> Terrene Institute 1994, pp.1, 26.  
USEPA 1993b, pp. 15-17.  
USEPA 1993a pp. 4-5 – 4-10.
- <sup>2</sup> Ca SWRCB 1994a, p. 22.  
Terrene Institute, 1994, p. 1.
- <sup>3</sup> Knutson 1997, p. 71.  
Soulé 1991.  
US Fed Interag Str Rest Wk Gp 1998, pp. 2-80 - 2-82.  
Soulé 1992.  
Noss and Cooperrider 1994, 33-34, 50-54, 59-62, 61-62.  
Saunders et al 1991.
- <sup>4</sup> Dunne and Leopold 1978, p. 223.  
Kondolf and Curry 1986.
- <sup>5</sup> Mount 1995, pp. 288, 290.
- <sup>6</sup> Dunne and Leopold 1978, pp. 511, 516-17.  
USEPA 1993b, p.15-16.
- <sup>7</sup> Knutson 1997, p. 70.  
USEPA 1993b, p. 15-16.  
Mount 1995, p. 288, 290.  
Ca SWRCB 1994b, P. 3.  
Schueller 1994.  
Schueller, 1995.  
USEPA 1993a pp. 4-5 – 4-10.
- <sup>8</sup> Booth 1990.  
Arnold et al, 1882.  
Dunne and Leopold 1978, pp. 511, 515-518, 693.  
US Fed Interag Str Rest Wk Gp 1998, p. 3-24.  
Mount 1995, p. 288.  
Kondolf and Keller 1991.  
Klein 1979.  
Graf 1975.  
USEPA 1993a p. 4-5 – 4-10.
- <sup>9</sup> Dunne and Leopold 1978, p. 517, 694.  
US Fed Interag Str Rest Wk Gp 1998, pp. 1-15, 2-12.  
USEPA 1993b, pp. 15, 17, 29.  
USEPA 1993a PP 4-5 – 4-10.  
Terrene Institute 1994, pp.1, 26.

<sup>10</sup> Ca SWRCB 1994b, p. 3  
Knutson 1997, p.67.  
US Fed Interag Str Rest Wk Gp 1998, pp. 1-15, 2-12, 3-15, 3-22, 3-23.  
USEPA 1993b, p.3, 15, 29, 30.  
Dunne and Leopold 1978, pp. 275, 327, 687, 693, 695.  
Klein 1979.  
Hollis 1975.  
Graf 1975.  
Mount 1995, pp. 287-292.  
Kondolf and Keller 1991.  
Booth 1990.  
Arnold et al 1982.  
Schueller 1994.  
USEPA 1993a pp. 4-5 – 4-10.

<sup>11</sup> Knutson 1997, p. 71.  
Soulé 1991.  
US Fed Interag Str Rest Wk Gp 1998, pp. 2-80 - 2-82.  
Soulé 1992.  
Noss and Cooperrider 1994, 33-34, 50-54, 59-62, 61-62.  
Saunders et al 1991.

<sup>12</sup> USFWS 1982, p. 34.  
Mount 1995, p. 306.  
Arnold et al 1982.

<sup>13</sup> USFWS 1982, p. 73.

<sup>14</sup> Dunne and Leopold 1978, p.404.  
USFWS 1982, p. 37.  
USEPA 1993a pp.6-4 – 6-6

<sup>15</sup> Cal SWRCB 1994a, p. 31.  
USFWS 1982, pp.19, 26-28, 34, 39, 100.  
Dunne and Leopold 1978, p. 404, 703, 707.  
Mount 1995, p. 287, 302, 305.  
USEPA 1993b.

<sup>16</sup> Dunne and Leopold 1978, p. 404.  
Mount 1995, p. 287.  
Kondolf and Keller, 1991.

<sup>17</sup> USFWS 1982, p. 27.  
USEPA 1993a pp.6-4 – 6-6

<sup>18</sup> USFWS 1982, pp.32, 39, 46, 47, 54, 73.  
USEPA 1993a pp.6-4 – 6-6

<sup>19</sup> Terrene Institute 1994, p.4.  
US Fed Interag Str Rest Wk Gp 1998, p.3-8.  
USFWS 1982, pp. 26-28, 32, 33, 45-63, 73, 95ff.  
Dunne and Leopold 1978, p.707.  
Mount 1995, p. 308.  
USEPA 1993a pp.6-4 – 6-6

- <sup>20</sup> USFWS 1982, p. 97.  
USEPA 1993a pp.6-4 – 6-6.  
Knutson 1997, p. 71.  
Soulé 1991.  
US Fed Interag Str Rest Wk Gp 1998, pp. 2-80 - 2-82.  
Soulé 1992.  
Noss and Cooperrider 1994, 33-34, 50-54, 59-62, 61-62.  
Saunders et al 1991.
- <sup>21</sup> USFWS 1982, p. 37.  
Mount 1995, p. 309.
- <sup>22</sup> Mount 1995, p. 306.  
Arnold et al 1982.
- <sup>23</sup> Kondolf and Curry 1986.
- <sup>24</sup> Mount 1995, pp. 290.
- <sup>25</sup> Mount 1995, p. 289.
- <sup>26</sup> Knutson 1997, p. 70.  
Terrene Institute 1994, pp.1-3.  
USFWS 1982, p.43.  
US Fed Interag Str Rest Wk Gp 1998, p. 3-25.  
USEPA 1993(1) pp. 4-5 – 4-10.
- <sup>27</sup> Dunne and Leopold 1978, p.687, 697.  
Mount 1995, pp.288, 305.  
Terrene Institute 1994, p.2.  
Graf 1975.
- <sup>28</sup> Dunne and Leopold 1978, p.687, 697.  
Mount 1995, pp.288, 305.  
Terrene Institute 1994, p.2.  
US Fed Interag Str Rest Wk Gp 1998, p.3-25.  
Arnold et al 1982.
- <sup>29</sup> Dunne and Leopold 1978, pp. 511-513.
- <sup>30</sup> Ca SWRCB 1994b, p. 2.  
US Fed Interag Str Rest Wk Gp 1998, pp. 1-15, 3-24.  
USEPA 1993b, pp.3, 17, 29, 30.  
Terrene Institute 1994, p.1.  
Dunne and Leopold 1978, p. 275, 277  
Klein 1979.  
USEPA 1993a pp. 4-5 – 4-10.

- <sup>31</sup> USEPA 1993b, pp. 3, 30.  
Ca SWRCB 1994a, p.31.  
Ca SWRCB 1994b, p. 4.  
Knutson 1997, pp. 67, 70.  
US Fed Interag Str Rest Wk Gp 1998, pp. 3-24, 3-25.  
Dunne and Leopold 1978, p. 277, 695, 697, 699.  
Mount 1995, pp. 287.  
Kondolf and Keller 1991.  
Booth 1990.  
Arnold et al, 1982.  
Klein 1979.  
Graf 1975.  
Schueller 1994.  
USEPA 1993a pp. 4-5 – 4-10.
- <sup>32</sup> Booth 1990.  
Patton 1981, cited in Arnold et al 1982.
- <sup>33</sup> Knutson 1997, p.70.  
Terrene Institute, 1994, p.1.  
USEPA 1993b, p. 15, 32.
- <sup>34</sup> Ca SWRCB 1994a, p.31.  
Ca SWRCB 1994b, p. 3.  
Dunne and Leopold 1978, pp. 276-77, 695.  
USEPA 1993b, p.17.  
Mount 1995, p. 290-291.  
Booth 1990.  
Kondolf and Keller 1991.  
Arnold et al 1982.  
Klein 1979.  
Schueller 1994. USEPA 1993a pp. 4-5 – 4-10.
- <sup>35</sup> Ca SWRCB 1994b, p. 4.  
Terrene Institute 1994, p.4.  
US Fed Interag Str Rest Wk Gp 1998, p.3-27.  
Knutson 1997, pp.70, 70-71.  
Schueller 1994.  
USEPA 1993a pp. 4-5 – 4-10.
- <sup>36</sup> Klein 1979,  
Borchardt and Statzner 1990.
- <sup>37</sup> USEPA 1993b, pp.30, 35-38.
- <sup>38</sup> USEPA 1993a pp. 4-5 – 4-10
- <sup>39</sup> Ca SWRCB 1994b, p. 3.  
USEPA 1993b, pp. 3, 29, 30.  
US Fed Interag Str Rest Wk Gp 1998, pp. 1-15, 3-24.  
Dunne and Leopold 1978, pp. 225, 277.  
USFWS 1982, p.34.  
USEPA 1993b, p. 17, 30.  
Klein 1979.  
USEPA 1993a pp. 4-5 – 4-10.
- <sup>40</sup> USFWS 1982, p. 73.  
Kondolf and Curry 1986.

- <sup>41</sup> Dunne and Leopold 1978, p. 225
- <sup>42</sup> Dunne and Leopold 1978, p. 227-229.
- <sup>43</sup> USEPA 1993b, p. 30.  
USEPA 1993a pp.6-4 – 6-6
- <sup>44</sup> Ca SWRCB 1994a, p. 31.  
Dunne and Leopold 1978, p. 404.  
Mount 1995, p. 305.  
USEPA 1993b, p.30.  
USFWS 1982, pp.39, 100.  
Arnold et al 1982.
- <sup>45</sup> Dunne and Leopold 1978, p.703.  
Mount 1995, p. 287.  
USEPA 1993a pp. 4-5 – 4-10.
- <sup>46</sup> Ca SWRCB 1994a, p. 31
- <sup>47</sup> US Fed Interag Str Rest Wk Gp 1998, pp. 3-24, 3-25.  
Dunne and Leopold 1978, pp. 694-695, 697.
- <sup>48</sup> Mount 1995, p. 305.
- <sup>49</sup> Knutson 1997, p.71.  
Klein 1979.
- <sup>50</sup> Ca SWRCB 1994b, p. 3.  
US Fed Interag Str Rest Wk Gp 1998, p.3-24 – 3-25.  
USFWS 1982, p.100.  
Knutson 1997, p.70.
- <sup>51</sup> Ca SWRCB 1994a, p. 31.  
Knutson 1997, p.70.  
US Fed Interag Str Rest Wk Gp 1998, p. 3-26.  
USEPA 1993b, p.3.  
USFWS 1982, p.56-57  
Klein 1979.  
Borchardt and Statzner 1990.  
Schueller 1994.
- <sup>52</sup> USFWS 1982, p.69.
- <sup>53</sup> Klein 1979.
- <sup>54</sup> USEPA 1993b, p.37.
- <sup>55</sup> USEPA 1993b, p.30, 37.  
Klein 1979.
- <sup>56</sup> Ca SWRCB 1994b, p. 4.  
USEPA 1993b, pp.15, 32, 37, 38.  
Borchardt and Statzner 1990.  
USEPA 1993a pp. 4-5 – 4-10.
- <sup>57</sup> Mount 1995, pp.287, 305.
- <sup>58</sup> USEPA 1993b, pp.36-38.  
Schueller 1994.
- <sup>59</sup> Terrene Institute 1994, p.4.  
USFWS 1982, pp.39, 56.
- <sup>60</sup> Ca SWRCB 1994a, p.22.

- <sup>61</sup> Terrene Institute 1994, p.26.  
US Fed Interag Str Rest Wk Gp 1998, pp.3-14, 3-16.  
USFWS 1982, pp.54, 73.  
Knutson 1997, p.69.  
Kondolf and Curry 1986.
- <sup>62</sup> Terrene Institute 1994, p.26.  
USFWS 1982, pp. 39, 54.  
Knutson 1997, pp. 69, 71.  
US Fed Interag Str Rest Wk Gp 1998, pp. 3-16, 3-25.  
Mount 1995, p.308.  
Klein 1979.  
USEPA 1993A pp. 4-5 – 4-10.
- <sup>63</sup> Ca SWRCB 1994a, p. 22.  
Knutson 1997, p.69.  
Terrene Institute 1994, p. 26.  
US Fed Interag Str Rest Wk Gp 1998, pp. 2-9, 3-27.  
USFWS 1982, pp. 54, 62.
- <sup>64</sup> Ca SWRCB 1994a, p.22.  
Knutson 1997, pp.19-38, 69.  
USFWS 1982, p.54.
- <sup>65</sup> Burke 1995, pp. 1365-1369  
Dodd 1998, pp. 331-339  
Findley 1997, pp. 1000-1009  
Hilty 2004, pp. 126-135  
Joyal 2001, pp. 1755-1762  
Knutson 1997, p. 32, 71.  
National Research Council 2001, p. 42  
Nature Conservancy 2000, p. 10  
Noss 1994, pp. 33-34, 50-54, 59-62  
Parmesan 2003, pp. 37-42  
Pounds 2004, pp. 107-109  
Root 2003, pp. 57-60  
Saunders 1991, pp. 18-32  
Semlitsch 1997, pp. 1113-1119  
Semlitsch 1998, pp. 1129-1133  
Soulé 1991, pp. 313-323  
Soulé 1992, pp. 39-47  
US Fed Interag Str Rest Wk Gp 1998, pp. 2-80 - 2-82.

**California Regional Water Quality Control Board  
Central Valley Region**

**Tulare County General Plan Update:  
The Ahwahnee Water Principles for Resource  
Efficient Land Use**

**Comments on Notice of Preparation:  
Tulare County General Plan Update**

May 2006



# **The Ahwahnee Water Principles for Resource Efficient Land Use**

## **Preamble**

Cities and counties are facing major challenges with water contamination, storm water runoff, flood damage liability, and concerns about whether there will be enough reliable water for current residents as well as for new development. These issues impact city and county budgets and taxpayers. Fortunately there are a number of stewardship actions that cities and counties can take that reduce costs and improve the reliability and quality of our water resources.

The Water Principles below complement the Ahwahnee Principles for Resource-Efficient Communities that were developed in 1991. Many cities and counties are already using them to improve the vitality and prosperity of their communities.

## **Community Principles**

1. Community design should be compact, mixed use, walkable and transit-oriented so that automobile-generated urban runoff pollutants are minimized and the open lands that absorb water are preserved to the maximum extent possible. (See the Ahwahnee Principles for Resource-Efficient Communities)
2. Natural resources such as wetlands, flood plains, recharge zones, riparian areas, open space, and native habitats should be identified, preserved and restored as valued assets for flood protection, water quality improvement, groundwater recharge, habitat, and overall long-term water resource sustainability.
3. Water holding areas such as creek beds, recessed athletic fields, ponds, cisterns, and other features that serve to recharge groundwater, reduce runoff, improve water quality and decrease flooding should be incorporated into the urban landscape.
4. All aspects of landscaping from the selection of plants to soil preparation and the installation of irrigation systems should be designed to reduce water demand, retain runoff, decrease flooding, and recharge groundwater.
5. Permeable surfaces should be used for hardscape. Impervious surfaces such as driveways, streets, and parking lots should be minimized so that land is available to absorb storm water, reduce polluted urban runoff, recharge groundwater and reduce flooding.
6. Dual plumbing that allows graywater from showers, sinks and washers to be reused for landscape irrigation should be included in the infrastructure of new development.
7. Community design should maximize the use of recycled water for appropriate applications including outdoor irrigation, toilet flushing, and commercial and industrial processes. Purple pipe should be installed in all

- new construction and remodeled buildings in anticipation of the future availability of recycled water.
8. Urban water conservation technologies such as low-flow toilets, efficient clothes washers, and more efficient water-using industrial equipment should be incorporated in all new construction and retrofitted in remodeled buildings.
  9. Ground water treatment and brackish water desalination should be pursued when necessary to maximize locally available, drought-proof water supplies.

## **Implementation Principles**

1. Water supply agencies should be consulted early in the land use decision-making process regarding technology, demographics and growth projections.
2. City and county officials, the watershed council, LAFCO, special districts and other stakeholders sharing watersheds should collaborate to take advantage of the benefits and synergies of water resource planning at a watershed level.
3. The best, multi-benefit and integrated strategies and projects should be identified and implemented before less integrated proposals, unless urgency demands otherwise.
4. From start to finish, projects and programs should involve the public, build relationships, and increase the sharing of and access to information.
5. Plans, programs, projects and policies should be monitored and evaluated to determine if the expected results are achieved and to improve future practices.

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*(Adopted in 2005)*

For more information, contact the LGC Center for  
Livable Communities: 916-448-1198, ext 321.

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**California Regional Water Quality Control Board  
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**Low Impact Development References**

**Comments on Notice of Preparation:  
Tulare County General Plan Update**

May 2006

# CA NEMO Partnership Resource List

he California  
EMO Partnership  
an educational  
rogram for land  
se decision makers  
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se to natural  
source protection.

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ember of the National  
EMO Network.



**Start at the Source: Design Guidance Manual for Stormwater Quality Protection** (1999), and the companion handbook, **Using Start at the Source to Comply with Development Standards** (2003). By the Bay Area Stormwater Management Agencies Association (BASMAA). Download at [http://www.scvurppp-w2k.com/basmaa\\_satsm.htm](http://www.scvurppp-w2k.com/basmaa_satsm.htm)

**Stormwater Best Management Practices (BMPs) Handbooks** (2003), by the California Stormwater Quality Association (CASQA). These four handbooks include a **New Development and Redevelopment Handbook**. Download at <http://www.cabmphandbooks.com/>

**Better Site Design: A Handbook for Changing Development Rules in Your Community** (1998). **Consensus Agreement on Model Development Principles to Protect Our Streams, Lakes, & Wetlands** (1991). Publications by the Center for Watershed Protection; order at <http://centerforwatershedprotection.goemerchant7.com/>

**The Model Urban Runoff Program: A How-to Guide for Developing Urban Runoff Programs for Small Municipalities**. Download from the California Coastal Commission website at <http://www.coastal.ca.gov/la/murp.html>

**Clearing and Grading Strategies for Urban Watersheds** (1995), by The Metropolitan Washington Council of Governments. Order at <http://www.mwcog.org/publications/>

**Wildlife Reserves and Corridors in the Urban Environment: A Guide to Ecological Landscape Planning and Resource Conservation** (1989), by Lowell Adams and Louise Dove. Order from the Urban Wildlife Resources Bookstore at <http://users.erols.com/urbanwildlife/bookstor.htm>

**Growing Greener: Putting Conservation into Local Codes** (1997), by Randall Arendt. Download at Natural Lands Trust, Inc. Download at [www.natlands.org/pdf/files/growinggreener.pdf](http://www.natlands.org/pdf/files/growinggreener.pdf)

**Institutional Aspects of Urban Runoff Management: A Guide for Program Development and Implementation** (1997), by Eric Livingston and Earl Shaver. Order from the Watershed Management Institute at <http://home.att.net/~ericlivingston/>

The Low Impact Development Center [www.lowimpactdevelopment.org](http://www.lowimpactdevelopment.org)

**Low-Impact Development Design Strategies: An Integrated Design Approach** (EPA-841-B-00-003). **Low-Impact Development Hydrologic Analysis** (EPA-841-B-00-002). By the Prince George's County, Maryland, Department of Environmental Resources. Both publications can be ordered free of charge through EPA's National Service Center for Environmental Publications at [www.epa.gov/ncepihom/index.htm](http://www.epa.gov/ncepihom/index.htm)

**Residential Streets** (2001), published by the American Society of Civil Engineers. Order at <http://www.pubs.asce.org/BOOKdisplay.cgi?9991135>

**Street Design Guidelines for Healthy Neighborhoods**, by the Local Government Commission's Center for Livable Communities. Order at [http://www.lgc.org/bookstore/land\\_use/publications/healthystreets.html](http://www.lgc.org/bookstore/land_use/publications/healthystreets.html)

The Congress for the New Urbanism. [www.sonic.net/abcaia/narrow.htm](http://www.sonic.net/abcaia/narrow.htm)

**Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters** (1993). **National Management Measures to Control Nonpoint Source Pollution from Urban Areas** (updated version). Publications by the U.S. EPA. Download at <http://www.epa.gov/owow/nps/urbanmm/index.html>

**Second Nature: Adapting LA's Landscape for Sustainable Living** (1999), by TreePeople. Order at <http://www.treepeople.org/vfp.dll?OakTree~getPage~&PNPK=21>

**California Regional Water Quality Control Board  
Central Valley Region**

**Terrestrial Habitat Connectivity Related To  
Wetland, Riparian, and Other Aquatic  
Resources**

**Comments on Notice of Preparation:  
Tulare County General Plan Update**

## **Terrestrial Habitat Connectivity Related To Wetland, Riparian and Other Aquatic Resources,**

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"Habitat connectivity" refers to the need for plant and animal populations to have some mobility over the landscape, i.e., to avoid becoming "isolated" or "disjunct."<sup>ii</sup> In recent decades a large body of research has demonstrated that such "isolated" populations face a high probability of eventual extinction, even if their immediate habitats are spared.<sup>iii</sup> In general, the smaller such an isolated population, the more quickly it will die out. Urban development typically fragments habitat by creating artificial landscapes which are movement barriers for most species. Unless mitigation measures are taken, isolated, non-viable populations are created as buildings, roads, and landscaping cut off lines of movement.

In the context of wetlands, "habitat connectivity" refers to three related phenomena:

- a. The need of some animals to have access to both wetland and upland habitats at different parts of their life cycle. Some wetland animals, e.g., some amphibians and turtles, require access at different seasons and/or at different life stages to both wetland and to nearby upland. Preserving the wetland but not access to upland habitat will locally exterminate such species.<sup>iii</sup>
- b. The ecological relationship between separate wetlands. Some wetland communities and their associated species comprise networks of "patches" throughout a landscape. Wetland plants and animals are adapted to the presence of wetland complexes within a watershed and are dependent on moving among the wetlands within the complex, either regularly or in response to environmental stressors such as flood or drought, local food shortage, predator pressure, or influx of pollution. Removing one such water from the complex will reduce the biological quality of the rest, and at some point the simplified wetland complex will be incapable of supporting at least some of the species, even though some wetlands remain.<sup>iv</sup>
- c. The role wetlands and riparian corridors play in allowing larger-scale movements. Some strategically located wetlands and especially continuous strips of riparian habitat along streams facilitate connectivity at watershed and regional scales for terrestrial as well as aquatic and amphibious species.

As noted above, habitat connectivity is critical to biodiversity maintenance, and will become more so because of global warming. Significant range shifts and other responses to global warming have already occurred. The ability of biotic populations to move across the landscape may be critical to their survival in coming decades.<sup>v</sup>

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<sup>i</sup> Such mobility may occur at the level of the individual organism (e.g., a bird or turtle travelling between separated wetlands) and/or of the population (e.g., a plant species colonizing a new wetland through seed dispersal); and over different time scales.

<sup>ii</sup> For the effects of habitat fragmentation and population isolation on the survival of plants and animals, see for example:

K. L. Knutson and V.L. Naef, *Management Recommendations for Washington's Priority Habitats: Riparian*, Washington Dept. of Fish and Wildlife, Olympia, WA, December 1997, p. 71.

R.F Noss and A.Y Cooperrider, *Saving Nature's Legacy; Protecting and Restoring Biodiversity*, Washington, D.C., Island Press, 1994, pp. 33-34, 50-54, 59-62, 61-62.

D.E. Saunders, R.J. Hobbs, and C.R. Margules, "Biological Consequences of Ecosystem Fragmentation: A Review," *Conservation Biology* 5(1), March 1991, pp. 18-32.

Michael E. Soulé, "Land Use Planning and Wildlife Maintenance, Guidelines for Conserving Wildlife in an Urban Landscape," *Journal of the American Planning Association* 57(3), 1991, pp. 313-323.

Michael E. Soulé, "The Effects of Habitat Fragmentation on Chaparral Plants and Vertebrates," *Oikos* 63, 1992, pp. 39-47.

United States Federal Interagency Stream Restoration Working Group, *Stream Corridor Restoration: Principles, Practices, and Processes*, October 1998, [Online]. Available from: [http://www.usda.gov/stream\\_restoration](http://www.usda.gov/stream_restoration). Printed copy available from: National Technical Information Service (NTIS), Springfield, VA, pp. 2-80, 2-82.

<sup>iii</sup> Regarding the relationship between wetland/riparian and upland habitats, see for example:

Vincent J. Burke and J. Whitfield Gibbons, "Terrestrial Buffer Zones and Wetland Conservation: A Case Study of Freshwater Turtles in a Carolina Bay," *Conservation Biology* 9(6), 1995, pp. 1365-1369;

C. Kenneth Dodd, Jr. and Brian S. Cade, "Movement Patterns and the Conservation of Amphibians Breeding in Small Temporary Wetlands," *Conservation Biology* 12(2), 1998, pp. 331-339;

Raymond D. Semlitsch, "Biological Delineation of Terrestrial Buffer Zones for Pond Breeding Salamanders," *Conservation Biology* 12(4), 1997, pp. 1113-1119.

Hilty, J. A. and Merenlender, A. M. Use of Riparian Corridors and Vineyards by Mammalian Predators in Northern California. *Conservation Biology* 18(1) 126-135; 2004 February.

<sup>iv</sup> Regarding the ecological relationship between separated wetlands, see for example:

C. Scott Findley and Jeff Houlahan, "Anthropogenic Correlates of Species Richness in Southeastern Ontario Wetlands," *Conservation Biology* 11(4), 1997, pp. 1000-1009;

Lisa A. Joyal, Mark McCollough, and Malcom L. Hunter, Jr., "Landscape Ecology Approaches to Wetland Species Conservation: A Case Study of Two Turtle Species in Southern Maine," *Conservation Biology* 15(6), 2001, pp. 1755-1762;

Raymond D. Semlitsch and J. Russell Bodie, "Are Small, Isolated Wetlands Expendable?" *Conservation Biology* 12(5), 1998, pp. 1129-1133;

National Research Council, *op. cit.*, 2001, p. 42;

Nature Conservancy, *op. cit.*, July 2000, p. 10.

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<sup>v</sup> Recent reports comprehensively review observed effects of global change on plant and animal range shifts, advancement of spring events, and other responses. See:

Terry L. Root, Jeff T. Price, Kimberly R. Hall, Stephen H. Schneider, Cynthia Rosenzweig, and Alan Pounds, "Fingerprints of Global warming on Wild Animals and Plants," *Science* 421:2, January 2003, pp. 57-60.

Camille Parmesan and Gary Yohe, "A Globally Coherent Fingerprint of Climate Change Impacts cross Natural Systems," *Science* 421:2, January 2003, pp. 37-42.

Thomas, et al. "Extinction risk from climate change", *Nature* 427, January 2004, pp. 145-148





# County of Fresno

Department of Public Works and Planning  
**ALAN WEAVER**  
Director

May 25, 2006

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**JUN 01 2006**

**RESOURCE  
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Theresa Szymanis  
Chief Planner, Tulare County RMA  
5961 South Mooney Boulevard  
Visalia, CA 93277

Dear Ms Szymanis:

Subject: Tulare County General Plan Update

This letter supercedes the letter of 05/23/06. The County of Fresno appreciates the opportunity to review and comment on the Tulare County General Plan Update. Based on the County's review of the project, the County's Design Division would like to have an opportunity to review a Traffic Impact Study for this project.

If you have any questions you may email me at [bsholars@co.fresno.ca.us](mailto:bsholars@co.fresno.ca.us) or call me at (559) 443-5342.

Sincerely,

Briza Sholars, Planning and Resource Analyst  
Development Services Division

G:\4360Devs&Pln\EnvPlan\OAR\Tulare County\Tulare County RMA\General Plan\Comment Letter2.doc

## DEVELOPMENT SERVICES DIVISION

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# California Regional Water Quality Control Board Central Valley Region

Robert Schneider, Chair



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2 June 2006

Ms. Theresa Szymanis, Chief Planner  
Tulare County Resource Management Agency  
5961 South Mooney Blvd.  
Visalia, CA 93277-9394

## **NOTICE OF PREPARATION FOR DRAFT ENVIRONMENTAL IMPACT REPORT, TULARE COUNTY GENERAL PLAN UPDATE (SCH #2006041162), TULARE COUNTY**

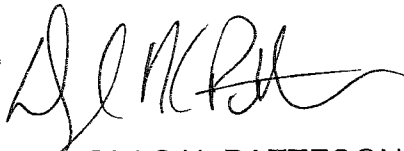
Regional Board staff has reviewed the Notice of Preparation (NOP) for the Draft Environmental Impact Report (Draft EIR), Tulare County General Plan Update, dated 25 April 2006, received on 3 May 2006. The NOP presents an opportunity for comment on the comprehensive update to the County's existing General Plan.

The Regional Board is concerned about the protection of water supply and quality for urban, agricultural and environmental uses for Tulare County. These staff comments concern future development and the potential impact to water quality, based on the *Water Quality Control Plan for the Tulare Lake Basin, Second Edition* (Basin Plan). The Basin Plan includes water quality objectives (standards) to protect beneficial uses and includes numeric and narrative objectives for chemical constituents in, and toxicity and tastes and odors of, groundwater. The objectives state groundwater shall not contain chemical constituents in concentrations that adversely affect any beneficial use, including any exceedance of maximum contaminant levels specified in Title 22, California Code of Regulations, as necessary for domestic supply. The Basin Plan requires application of the most stringent objective for each constituent to protect the beneficial uses (i.e., domestic drinking water, agricultural supply, etc.)

Ideally, the County should require existing and proposed developments to be connected to a regional wastewater treatment facility (WWTF), or connect to the WWTF when feasible. The Basin plan contains a policy regarding consolidation of wastewater treatment facilities that states, "[p]roliferation of small treatment plants in developed areas is undesirable. Most small communities do not have adequate resources to properly manage, treat and dispose of wastewater in an urban environment. Typical problems involve nuisance and ground water pollution. Small communities and development close to other small communities may be able to construct and operate a joint wastewater treatment facility with greater treatment ability, opportunity for reclamation, and for lower cost."

urbanized area (including unincorporated areas). Such small MS4s must obtain an NPDES Phase II municipal permit by March 2003 and comply with its terms for storm water management and control. The Phase II storm water minimum requirements include public education and outreach, public involvement and participation, illicit discharge detection and elimination, pollution prevention and good housekeeping in municipal operations, construction site urban runoff control, and post-construction management in new development and redevelopment.

If you have any questions concerning these comments, please contact Edward Balch at (559) 445-5548.



DOUGLAS K. PATTESON  
Senior Water Resource Control Engineer  
RCE No. 55985

cc: State Clearinghouse, Sacramento



## DEPARTMENT OF CONSERVATION

## DIVISION OF LAND RESOURCE PROTECTION

801 K STREET • MS 18-01 • SACRAMENTO, CALIFORNIA 95814

PHONE 916 / 324-0850 • FAX 916 / 327-3430 • TDD 916 / 324-2555 • WEB SITE [conservation.ca.gov](http://conservation.ca.gov)RECEIVED  
TULARE COUNTY

JUN - 5 2006

RESOURCE  
MANAGEMENT  
AGENCY

May 25, 2006

Theresa Szymanis, AICP, Chief Planner  
Tulare County Resource Management Agency  
5691 South Mooney Boulevard  
Visalia, CA 93277

Subject: Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR)  
for the Tulare County General Plan Update **SCH# 2006041162**

Dear Ms. Szymanis:

The Department of Conservation's Division of Land Resource Protection (Division) monitors farmland conversion on a statewide basis and administers the California Land Conservation (Williamson) Act and other agricultural land conservation programs. The Division has reviewed the above NOP and offers the following recommendations for the DEIR with respect to the project's potential impacts on agricultural land.

The proposed project involves a comprehensive General Plan Update (GPU) for the Tulare County planning area. The NOP notes that one key value statement for the GPU is that the County will protect its agricultural economy while diversifying employment opportunities. The NOP also notes that some agricultural land conversion may be necessary to accommodate future population growth, however, some of the land loss may be offset by preservation of the most agriculturally productive and valuable areas. Therefore, the Division recommends that, at a minimum, the following items be specifically addressed to document and treat project impacts on agricultural land and land use.

#### Agricultural Setting of the Project

The DEIR should describe the project setting in terms of the actual and potential agricultural productivity of the land. In addition to existing county mapping resources, the GPU should also utilize information from the Division's Tulare County Important Farmland Map, which defines farmland according to soil attributes and land use. In addition, we recommend including the following information to characterize the agricultural land resource setting of the planning area.

- Current and past agricultural use of areas within the county. Include data on the types of crops grown, and crop yields and farmgate sales values.

"extraordinary," unforeseen situations (See *Sierra Club v. City of Hayward* (1981) 28 Cal.3d 840, 852-855). The County must approve a request for contract cancellation, and base that approval on specific findings that are supported by substantial evidence (Government Code Section 51282). If Williamson Act contract cancellations will be proposed, we recommend that a discussion of the findings be included in the DEIR. Finally, the notice of the hearing to approve the tentative cancellation, and a copy of the landowner's petition, must be mailed to the Director of the Department of Conservation ten (10) working days prior to the hearing. (The notice should be mailed to Bridgett Luther, Director, Department of Conservation, c/o Division of Land Resource Protection, 801 K Street MS 18-01, Sacramento, CA 95814-3528.)

- An agricultural preserve is a zone authorized by the Williamson Act, and established by the local government, to designate land qualified to be placed under the Act's 10-year contracts. Preserves are also intended to create a setting for contract-protected lands that is conducive to continuing agricultural use. Therefore, the uses of agricultural preserve land must be restricted by zoning or other means so as not to be incompatible with the agricultural use of contracted land within the preserve (Government Code Section 51230). The DEIR should also discuss any proposed general plan designation or zoning within agricultural preserves affected by the GPU.

#### Mitigation Measures and Alternatives

The DEIR should discuss any feasible alternatives to the project that would lessen or avoid farmland conversion impacts. Similarly, while the direct conversion of agricultural land is often deemed to be an unavoidable impact as also noted in the NOP, mitigation measures must be considered.

The Division recommends that the County consider the purchase of agricultural conservation easements on land of at least equal quality and size as partial compensation for the direct loss of agricultural land, as well as for the mitigation of growth inducing and cumulative impacts on agricultural land. Selection of lands to be encumbered by easements should also include criteria for strategic protection of the most valuable, productive and threatened agricultural lands.

Mitigation using conservation easements can be implemented by at least two alternative approaches: the outright purchase of conservation easements tied to individual projects, or via the donation of mitigation fees to a local, regional or statewide organization or agency, including land trusts and conservancies, whose purpose includes the purchase, holding and maintenance of agricultural conservation easements. For example, the California Farmland Conservancy Program is authorized to accept donations of funds if the Department of Conservation is the designated beneficiary and it agrees to use the funds for purposes of the program in a county specified by the donor. Whatever the approach, the conversion of agricultural land should be deemed an impact of at least regional significance and the search for mitigation lands not be limited to areas near the development.

Mail to:

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Hal Cypert	Support Services
Roger Hunt	Administrative Services

HENRY HASH, DIRECTOR

THOMAS W. SHERRY, ASSOCIATED DIRECTOR

July 7, 2006

RE: Receipt of NOP Comments

We have received your response to the General Plan 2030 Notice of Preparation of an Environmental Impact Report. Your comments will be read and considered in accordance with CEQA Guidelines Sec. 15082. We thank you for taking the time to respond to the Notice of Preparation.

Sincerely,

A handwritten signature in black ink that reads "Jason Waters". The signature is stylized with a large, sweeping initial "J" and "W".

Jason Waters  
Planner, Tulare County Resource Management Agency  
(559) 733-6291





# Appendix D

## Air Quality Analysis





**Table AQ-1: Air Quality Analysis for Mobile Emissions**  
**Tulare County On-Road Emissions - Year 2007**

EMFAC2007 Emission Factors (g/mi)

35 mph	LDA	LDT	MDT	HDT	BUS	MCY
ROG	0.177	0.252	0.199	0.818	0.75	2.402
NOx	0.27	0.469	0.78	12.398	7.262	0.834
CO	4.14	5.799	4.363	6.234	7.935	30.319
CO2	390.436	466.381	619.381	1669.355	1530.949	112.7
PM10	0.031	0.039	0.04	0.566	0.126	0.042

55 mph	LDA	LDT	MDT	HDT	BUS	MCY
ROG	0.162	0.23	0.164	0.715	0.506	3.69
NOx	0.281	0.505	0.931	13.038	10.281	0.965
CO	3.859	5.653	4.232	4.969	8.039	64.388
CO2	397.093	473.709	629.43	1547.68	1535.964	99.213
PM10	0.03	0.036	0.036	0.583	0.103	0.058

65 mph	LDA	LDT	MDT	HDT	BUS	MCY
ROG	0.209	0.295	0.202	0.995	0.532	6.033
NOx	0.315	0.591	1.196	14.565	15.603	1.033
CO	4.585	7.027	5.319	6.2	11.289	128.146
CO2	485.447	577.422	771.999	1599.436	1638.533	104.303
PM10	0.032	0.04	0.039	0.763	0.111	0.088

Emissions = Emission Factor x Miles/Day

*Mobile Emissions for the Year 2007 - Assuming 20% @ 35mph, 60% @ 55mph, 20% @ 65mph*

		ROG	NOx	CO	CO2	PM10	
LDA	2007 emissions (grams/mile)		0.1744	0.2856	4.0604	413.4324	0.0306
	2007 emissions (pounds/mile)		3.84E-04	6.30E-04	8.95E-03	9.11E-01	1.55E-03
	VTM/Day			Mobile Emissions (lbs/day)			
	5150315.7	1980.20	3242.81	46103.35	4694271.07	7968.72	
LDT		ROG	NOx	CO	CO2	PM10	
	2007 emissions (grams/mile)		0.2474	0.515	5.957	492.986	0.0374
	2007 emissions (pounds/mile)		5.45E-04	1.14E-03	1.31E-02	1.09E+00	1.56E-03
	VTM/Day			Mobile Emissions (lbs/day)			
MDT	3467948.1	1891.48	3937.40	45543.88	3769094.05	5417.70	
		ROG	NOx	CO	CO2	PM10	
	2007 emissions (grams/mile)		0.1786	0.9538	4.4756	655.934	0.0374
	2007 emissions (pounds/mile)		3.94E-04	2.10E-03	9.87E-03	1.45E+00	1.56E-03
HDT	VTM/Day			Mobile Emissions (lbs/day)			
	805059.37	316.99	1692.84	7943.45	1164173.89	1257.68	
		ROG	NOx	CO	CO2	PM10	
	2007 emissions (grams/mile)		0.7916	13.2154	5.4682	1582.3662	0.6156
BUS	2007 emissions (pounds/mile)		1.75E-03	2.91E-02	1.21E-02	3.49E+00	2.84E-03
	VTM/Day			Mobile Emissions (lbs/day)			
	278674.4	486.33	8119.09	3359.47	972151.32	790.58	
		ROG	NOx	CO	CO2	PM10	
MCY	2007 emissions (grams/mile)		0.56	10.7416	8.6682	1555.4748	0.1092
	2007 emissions (pounds/mile)		1.23E-03	2.37E-02	1.91E-02	3.43E+00	1.72E-03
	VTM/Day			Mobile Emissions (lbs/day)			
	412850.96	509.70	9776.70	7889.55	1415748.41	710.31	
		ROG	NOx	CO	CO2	PM10	
	2007 emissions (grams/mile)		3.901	0.9524	70.3258	102.9284	0.0608
	2007 emissions (pounds/mile)		8.60E-03	2.10E-03	1.55E-01	2.27E-01	1.61E-03
	VTM/Day			Mobile Emissions (lbs/day)			
	206425.48	1775.29	433.42	32004.26	46841.23	333.13	

2007 - Operational Traffic Total Emissions (lbs/day)					
ROG	NOx	CO	CO2	PM10	
6,960	27,202	142,844	12,062,280	16,478	
2007 - Operational Traffic Total Emissions (tons/year)					
ROG	NOx	CO	CO2	PM10	
1.270	4,964	26,069	1,997,046	3,007	

\* Note: CO2 in metric tons

Paved Road  
 lbs/VMT  
 Entrained  
 PM10  
 0.001479769

Year 2007  
 Total Daily VMT = 10,321,274

Trip Percentages by Category (from URBEMIS default)		
Type	Percent	# VMT
LDA	49.90%	5150315.726
LDT	33.60%	3467948.064
MDT	7.80%	805059.372
HDT	2.70%	278674.398
BUS	4.00%	412850.96
MCY	2.00%	206425.48
Total	100.00%	10321274

**Table AQ-2: Air Quality Analysis for Mobile Emissions**  
**Tulare County On-Road Emissions - Year 2030**

EMFAC2007 Emission Factors (g/mi)

35 mph	LDA	LDT	MDT	HDT	BUS	MCY
ROG	0.009	0.016	0.024	0.195	0.636	1.828
NOx	0.03	0.057	0.124	1.601	5.771	0.7
CO	0.563	0.901	1.034	1.158	8.029	16.247
CO2	385.552	482.063	621.818	1659.481	1527.216	139.91
PM10	0.03	0.038	0.041	0.128	0.099	0.024

55 mph	LDA	LDT	MDT	HDT	BUS	MCY
ROG	0.008	0.014	0.019	0.13	0.427	2.725
NOx	0.028	0.056	0.144	1.493	7.964	0.79
CO	0.424	0.682	0.791	1.22	8.147	28.462
CO2	392.544	490.472	632.365	1540.962	1531.837	171.389
PM10	0.029	0.036	0.038	0.15	0.082	0.031

65 mph	LDA	LDT	MDT	HDT	BUS	MCY
ROG	0.01	0.017	0.024	0.126	0.448	4.496
NOx	0.031	0.063	0.184	1.707	11.676	0.879
CO	0.375	0.609	0.727	1.486	11.441	52.879
CO2	479.469	599.307	781.252	1592.56	1626.345	235.755
PM10	0.031	0.04	0.042	0.177	0.088	0.044

Emissions = Emission Factor x Miles/Day

**Mobile Emissions for the Year 2030 - Assuming 20% @ 35mph, 60% @ 55mph, 20% @ 65mph**

		ROG	NOx	CO	CO2	PM10	
LDA	2030 emissions (grams/mile)		0.0086	0.029	0.442	408.5306	0.0296
	2030 emissions (pounds/mile)		1.90E-05	6.39E-05	9.74E-04	9.01E-01	1.55E-03
	VTM/Day						
	8808892.9	167.01	563.18	8583.68	7933699.10	13609.96	
LDT		ROG	NOx	CO	CO2	PM10	
	2030 emissions (grams/mile)		0.015	0.0576	0.7112	510.5572	0.0372
	2030 emissions (pounds/mile)		3.31E-05	1.27E-04	1.57E-03	1.13E+00	1.56E-03
	VTM/Day						
MDT		ROG	NOx	CO	CO2	PM10	
	2030 emissions (grams/mile)		0.021	0.148	0.8268	660.033	0.0394
	2030 emissions (pounds/mile)		4.63E-05	3.26E-04	1.82E-03	1.46E+00	1.57E-03
	VTM/Day						
HDT		ROG	NOx	CO	CO2	PM10	
	2030 emissions (grams/mile)		0.1422	1.5574	1.2608	1574.9854	0.151
	2030 emissions (pounds/mile)		3.13E-04	3.43E-03	2.78E-03	3.47E+00	1.81E-03
	VTM/Day						
BUS		ROG	NOx	CO	CO2	PM10	
	2030 emissions (grams/mile)		0.473	8.2678	8.7822	1549.8144	0.0866
	2030 emissions (pounds/mile)		1.04E-03	1.82E-02	1.94E-02	3.42E+00	1.67E-03
	VTM/Day						
MCY		ROG	NOx	CO	CO2	PM10	
	2030 emissions (grams/mile)		2.8998	0.7898	30.9024	177.9664	0.0322
	2030 emissions (pounds/mile)		6.39E-03	1.74E-03	6.81E-02	3.92E-01	1.55E-03
	VTM/Day						

2030 - Operational Traffic Total Emissions (lbs/day)					
ROG	NOx	CO	CO2	PM10	
3,570	16,888	59,443	20,819,696	27,622	
2030 - Operational Traffic Total Emissions (tons/year)					
ROG	NOx	CO	CO2	PM10	
652	3,082	10,848	3,446,934	5,041	

\* Note: CO2 in metric tons

Paved Road  
lbs/VTM  
Entrained  
PM10  
0.001479769

Year 2030  
Total Daily VMT = 17,653,092

Trip Percentages by Category (from URBEMIS default)		
Type	Percent	# VMT
LDA	49.90%	8808892.91
LDT	33.60%	5931438.91
MDT	7.80%	1376941.18
HDT	2.70%	476633.484
BUS	4.00%	706123.68
MCY	2.00%	353061.84
Total	100.00%	17653092