

MEMORANDUM

To:	Planning and Steering Committee Land Use and Water Supply Work Group	cc:	
From:	Matt Zidar/Elias Tijerina	Date:	February 7, 2007
Subject:	Draft Technical Memorandum- Review of City and County General Plans		
Project Reference:	304 – Upper Kings Water Forum IRWMP		

INTRODUCTION TO REVIEW OF CITY AND COUNTY GENERAL PLANS

The purpose of this memorandum is to document the review of City and County General Plan goals, objectives, policies, and programs. The review specifically evaluated how each general plan recognizes regional water resources issues; incorporates water management strategies; and could be supported by the Kings Basin Integrated Regional Water Management Plan (IRWMP) being developed by the Upper Kings Basin Water Forum (Forum).

The California Department of Water Resources is recommending that lands use planning be one of the water management strategies that should be included in an IRWMP. The technical memorandum identifies the policy “drivers” that provide a basis for integrating land use and water supply plans and planning process. These policy drivers are presented first. This is followed by the evaluation of the local general plans and a discussion specific to the Fresno and Tulare County General Plans. The memorandum concludes with observations and findings of the review.

Under California law, the management of land use is the responsibility of local government. City and county general plans and the associated goals, policies, objectives and programs define land use planning requirements for each jurisdiction. By law, general plans guide land use decisions at the city and county level, and by their very nature, are comprehensive and integrated across the full spectrum of land, water and natural resources management elements. The breadth of the general plans may results in less detailed or comprehensive review of regional water issues. The city and county general plans, and the land use planning process, provide local government with an opportunity to integrate land use and water supply decisions and meet the goals of the cities, counties and the IRWMP.

POLICY DRIVERS

This section briefly explains the primary policy drivers that provide the basis for integrating land use and water supply plans and planning process. There are a number of policy drivers that provide the motivation for improving communication and coordination on project-level decisions and during the development review process conducted by each city and county. In

the past, many project and policy decisions surrounding land use and water supplies were made independently. Court precedence¹ and legislative decisions have changed the requirements on land use and water agencies. Changes to the Government Code and the Water Code require local governments to determine whether there will be enough water to supply a proposed development project before it can be approved, and regional water management is becoming the norm, and increased the requirements related to interagency consultation and information required prior to making decisions. A higher standard of evidence is now needed to make critical land and water resources decisions, and the trend is towards resolving land and water management issues at regional scale, whether through shared projects or shared decision making.

The state's criteria for obtaining bond funding also requires that an IRWMP evaluate how land use and water supply planning can be better integrated. The State, through the Office of Planning and Research (OPR), also has provided guidelines related to how cities and counties could develop a water element to their general plan. The California Environmental Quality Act (CEQA) requirements for evaluating water supply availability and water supply projects is also in a state of flux, and increasingly more rigorous analysis is needed to demonstrate that there is a reliable and sustainable water supply for new development.

URBAN WATER MANAGEMENT PLANS AND SB610/SB221

Many of the water supply coordination issues for new development are now addressed in the state's Water Code² through requirements for the preparation and approval of Urban Water Management Plans every five years and as a result of Senate Bill 610 (Costa) and Senate Bill 221 (Kuehl) enacted in 2001. Increased coordination will also be necessary among all levels of government to coordinate inter-agency planning, to develop databases, and to interpret and share data and information. SB 610/SB 221 amended state law, effective January 1, 2002, to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610/SB 221 are companion measures which seek to promote more collaborative planning between local water suppliers and cities and counties. The changes in the Water Code also require verification of sufficient water supplies as a condition of approval for development; compel urban water suppliers to provide more information on groundwater reliability if used as a supply; and require average and drought year conditions be addressed.

¹ Several major court decisions have interpreted CEQA in way that place more requirements on land use and water planners. See *Planning and Conservation League v Dep't of Water Resources*, 83 Cal. App. 4th 892 (2000) (disapproving contract reformation between DWR and State Water Project (SWP) contractors; *Santa Clarita Org for Planning and the Environment (SCOPE) v Count of Los Angeles*, 106 Cal. App. 4th 715 (2003) (finding that CEQA prohibits reliance on "paper water", specifically water from the SWP; recent California Supreme Court ruling, *Vineyard Area Citizens For Responsible Growth, Inc. V City Of Rancho Cordova, Sunrise Douglas Property Owner Assn., Super. Ct. No. 02CS01214., Cal. App. 3rd C044653* (2007).

² SB 610 water supply requirements were codified at Water Code § 10910. The Water Code sections 10610-10656 require that every urban water supplier that provides over 3,000 acre-feet of water annually, should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry and multiple dry years.

SB 610 requires a water supply assessment for any development project or related land use plan of more than 500 housing units, 500,000 square feet of retail use, 250,000 square feet of office use, 500 hotel rooms, 40 acres, or 650,000 square feet of business park use or a mixed-use project with any combination equal to the scale noted above. The water supply assessment needs to be part of any CEQA document prepared for the project (EIR or negative declaration). If there is not adequate water to reliably supply the project (and all the other present and future water demands anticipated) in normal, dry, and multiple dry years, new water sources need to be identified.

SB 221 prohibits any land use agency from approving a subdivision map of more than 500 housing units (or a proposed subdivisions of less than 500 units if the project represents 10 percent or more of all connections of a smaller water purveyor—one with fewer than 5,000 connections) unless there is written verification from a water provider that a sufficient and reliable water supply is available.

LAFCO AND THE CORTESE-HETZBERG-KNOX ACT

Local Agency Formation Commissions (LAFCOs) are tasked with ensuring water supplies are available at the time when city or special district boundaries are to be amended. The Cortese-Hetzberg-Knox (CHK) Act passed in 2000 amended the Government Code³ and requires all spheres of influence to be updated every five years. Prior to updating a sphere, the LAFCO is required to approve a Municipal Service Review (MSR) for public services provided within the sphere. Proposals for reorganization are subject to the CHK and to review by the LAFCO.

The LAFCO is required by state law to review and make a determination of approval or denial of all annexations or other changes of organization to cities and special districts. LAFCOs serve as the legislature’s watchdog, operating at the intersection of land use, services (including water), finance, and governance. LAFCOs are tasked with balancing competing stakeholder interests of: 1) discouraging sprawl; 2) preserving open space and prime agricultural lands; and 3) efficiently providing government services.

Important changes and added responsibility include requirements to determine that there are timely and availability water supplies; prepare comprehensive water services reviews; and assess firm yield water supply availability, reliability and quality for annexations and extension of services. The legislature also tasked LAFCO’s with considering water and wastewater management regionally, including evaluating the ability of public facilities to meet current and future service needs, or to extend services outside of existing boundaries.

IRWMP

State funding for water related projects is increasingly contingent on having the project defined in an IRWMP. State standards and guidelines for IRWMPs require review of how land use and water supply plans are integrated, or how such plans may be better integrated. Land use planning is one of the water management strategies for inclusion in an IRWMP, and the Kings

³ SB 221 was codified at Bus. and Prof. Code § 11010; and Govt. Code §§ 65867.5, 66455.3 and 66473.7. The Water Supply Assessment and written verification of water supply under Government Code section 66473.7.

IRWMP will need to discuss how local agency planning documents relate to the IRWMP water management strategies and the dynamics between the two levels of planning documents⁴.

WATER ELEMENT OF GENERAL PLAN RECOMMENDATION OF OPR

The State of California General Plan Guidelines, updated in 2003 (OPR), recommends that local governments consider preparing an optional Water Element in their general plans. The OPR Guidelines seek to be consistent with other state requirements intended to improve the coordination between water supply and land use planning processes at the local level. This includes the requirements for cities to prepare Urban Water Management Plans (UWMPs) and the SB61/SB221 legislation discussed above. UWMPs define current and future water demands and quantify the available sources to meet those demands, while the SB610/SB 221 set requirements on new development. A comprehensive city general plan could incorporate the UWMP and codify the city requirements for compliance with SB610/SB 221. The laws are intended to improve the assessment of water supplies during the local planning process before approval of land use projects and commitment of water supplies, thus providing increased certainty to the cities, developers, and the people who ultimately rely on the water supply. The OPR guidelines recommend the Water Element of a general plan include the information and establish goals and objectives in the following areas.

Water Supply and Demand

- Inventory of existing water demands, supplies, and providers, water use efficiency, recycling, transfers, and conjunctive use.
- Analysis of future water demands based on general plan land use build-out.
- Assessment of future opportunities for water use efficiency (conservation), recycling of water, water transfers, conjunctive use of groundwater and surface water, additional storage or water development projects, and other potential increases in water entitlements and supply.
- Assessment of any shortfalls in future water demands based on wet, normal, dry, and multiple dry year types and contingency plans for drought conditions.
- Inventory of existing ordinances that implement water management issues.

Water Quality

- Groundwater contamination from specific sources, such as underground tanks, known spills, contamination sites, or landfills, or from generalized sources, such as septic systems.
- Sedimentation and related pollutants from land based activities throughout the watershed, including resource extraction, such as logging or vineyard development, or grading for land development.
- Wastewater treatment and industrial discharges from point sources.
- Urban and rural stormwater runoff and related nonpoint-source pollutants.

⁴ IRWM Plan Standards, Appendix A to Integrated Regional Water Management Plan Grant Guidelines, November 2004. Also see scoring criteria for implementation grants.

Other Water Elements

- Wastewater treatment and disposal;
- Watershed features and processes;
- Flood management;
- Stormwater management; and
- Interagency coordination and collaboration.

APPROACH TO THE GENERAL PLAN REVIEW

The analysis of the city and county general plans reviewed:

- Where or if city or county general plans address the regional water management issues as identified by the Forum;
- How or if the general plans are using water management strategies recommended by DWR for inclusion in the IRWMP; and
- Where general plan goals, and objectives could be supported by the IRWMP, or where the IRWMP goals and objectives are not recognized in a general plan.

The following criteria were used to evaluate the general plans.

1. Issues- Do the city or county general plans recognize or place priority on the issues that have been identified in the IRWMP?
 - a. 2 - Recognizes the issues
 - b. 1 - Partially recognizes the issue
 - c. 0 - Does not recognize the issue
2. Regional Goals and Objectives- Are the IRWMP goals consistent and compatible with existing county or city general plan goals and objectives?
 - a. 2 - IRWMP fully supports, is consistent, and is compatible with the goals and objectives of the city or county general plan
 - b. 1 - IRWMP goal is partially consistent
 - c. 0 - not consistent in that the IRWMP goals are not recognized in the city or county general plan.
3. Water Management Strategies – Do the city or county general plan recommend goals, policies or objectives that serve to integrate or make use of the water management strategies recommended for inclusion in the IRWMP?
 - a. 2 - recognizes and makes use of the strategy and defines how such a strategy will be implemented
 - b. 1 - partly recognizes strategy, but does not clearly explain how such a strategy will be implemented
 - c. 0 - does not recognize or make use of the strategy

Each general plan was reviewed using these criteria and individual review sheets were prepared. The review notes indicate where an IRWMP issues was addressed; which city or

county general plan goal, objective or policy is supported by the IRWMP or where the general plans do not recognize IRWMP goals; and how the city or county is using the various water management strategies being considered for incorporation in the Kings. The general plans use a range of approaches to defining implementation strategies or actions, assigning responsibility, or establishing timeline for meeting goals and objectives. The individual reviews were then summarized as presented in Table 1.

TULARE AND FRESNO GENERAL PLANS

This section contains a brief overview of the Fresno and Tulare County general plans. For the sake of brevity, only the county general plans are summarized here to emphasize the regional perspective of the plans. The key policies of the County of Tulare and Fresno General Plans are attached (Attachments A and B) to provide examples of regional goals and objectives. The county general plans are described in terms of whether it recognizes IRWMP issues, the consistency between IRWMP and the general plan goals and objectives, and how the IRWMP and general plan implement and integrate water management strategies.

Tulare General Plan

The Tulare General Plan has been recently updated and is in draft form for public review and comment. Tulare's Water Resources Element addresses the conservation and safety elements mandated by state; and the Environmental Resources element addresses required open space and conservation requirements. Each of the elements of the general plan list goals and specific objectives, then define more detailed implementation strategies which serve to define who and when actions should occur. Specific area plans are also used to add geographic detail.

Issues

A background reports was prepared in 2004 to focus attention on key issues and support policy development. The report recognizes all of the issues adopted by the Water Forum for consideration in the Upper Kings IRWMP.

Tulare County General Plan Goals and Objectives

The IRWMP goals are very consistent with the Tulare County General Plan goals and objectives. The Tulare General Plan defines specific objectives to meet the stated goals and to integrate goals across elements. The goals and objectives for the Water Resources; Public Facilities and Services; Health and Safety; and Environmental Resources elements are attached to provide an example of how the goals, policies, and implementation strategies where integrated (Attachment A). They also serve as examples for the Water Forum to consider when establishing the IRWMP implementation plan and recommending policy solutions.

The IRWMP should seek to support and compliment the Tulare County goals and objectives for the overlapping areas covered by both the IRWMP and Tulare General Plan, specifically, within the service area of the AID. The general plan emphasizes integration with other plans, and for coordinating and cooperating with other agencies and regional efforts (e.g.; air and water planning), and defines the County's responsibilities and priorities. The IRWMP will use the Tulare County General Plan as the standard for review when evaluation IRWMP projects proposed in the AID area and to ensure consistency between the plans. In addition, the IRWMP

Table 1. IRWMP Goals and Related Issues Comparison to the Local General Plans

IRWMP GOALS AND ISSUES	Regional Issues								Regional Goals					Water Management Strategies																						
	Groundwater Overdraft	Water Supply Reliability	Degradation of Water Quality	Urban Development	Protection of Water Rights	Sustaining the Agricultural Economy	Protection of Life and Property from Flooding	Protection of the Environment	Halt and Ultimately Reverse the Current Overdraft and Provide for Sustainable Management of Surface and Groundwater	Increase the Water Supply Reliability, Enhance Operational Flexibility, and Reduce System Constraints	Improve and Protect Water Quality	Provide Additional Flood Protection	Protect and Enhance Aquatic Ecosystems and Wildlife Habitat	Conjunctive Use & Groundwater Management										Ecosystem			Flood Plain		Water Quality		Other					
General Plans													Groundwater Management	Conjunctive Use	Water Recycling	Water Supply Reliability	Imported Water	Surface Water Treatment	Wastewater Treatment	Water Transfers	Conveyance Facilities	Land Acquisition	Surface Storage	Water Conservation	Desalination	Ecosystem Restoration	Environmental and Habitat Protection and Improvement	Wetlands Enhancement and Creation	Flood Management	Storm Water Capture and Management	Water Quality Protection and Improvement	NPS Pollution Control	Watershed Planning	Land Use Planning	Recreation and Public Access	
Fresno Co.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	2	2	2	2	2	2	2	2	0	2	2	2	2	2	1	0	2	2	2	
Tulare Co.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	2	2	2	2	2	2	2	2	2	2	
Fresno	2	2	2	2	0	2	2	2	2	2	2	2	2	2	2	2	2	0	0	2	0	2	2	1	2	0	0	2	0	2	2	2	2	0	2	2
Clovis	2	2	2	2	0	2	2	1	2	2	2	2	2	2	2	2	2	0	2	2	0	2	1	0	2	0	2	2	0	2	2	2	0	2	2	
Selma	1	2	2	2	0	2	2	2	2	2	2	0	2	0	2	0	0	0	0	2	1	2	2	0	0	0	0	2	0	1	2	1	0	0	0	2
Kingsburg	0	1	1	2	0	1	1	2	0	0	0	1	1	0	1	0	1	0	0	2	0	0	2	0	0	0	0	0	0	0	2	2	0	0	0	2
Sanger	2	0	2	0	0	2	1	1	0	2	2	1	2	2	2	1	0	0	0	2	0	2	0	0	1	0	0	2	2	2	2	2	2	1	0	2
Reedley	0	0	1	1	0	2	2	0	0	0	1	2	0	0	2	2	0	0	0	2	0	2	0	0	1	0	0	2	0	2	0	0	0	0	0	2
Dinuba	2	2	2	2	0	2	2	0	2	2	2	2	1	0	2	2	2	0	0	2	0	2	0	0	2	0	0	0	0	2	2	1	0	0	0	0

will provide a strategy for Tulare County to be included in an Upper Kings IRWMP where such inclusion is a requirement for seeking funding.

Tulare County General Plan Implementation Strategies

The Tulare General plan defined implementing strategies that provide details on how the goals and objectives would be implemented. The document is internally consistent and cross-referenced, and policies and implementing strategies compliment each other. The subject or substance of the Tulare General Plan implementation strategies that are related to elements in the IRWMP program elements area listed below.

Water Resources

- Develop an ordinance and permit process to regulate the extraction and exportation of groundwater from Tulare County. Including provisions for findings that extraction would not increase overdraft; and action would not adversely affect the long term storage or transmission of groundwater within the aquifer; exceed the safe yield; result in injury of reasonableness or beneficial uses; affect replenishment, storage or restoration project.
- Requires all water resources impacts to be mitigated.
- Recommends that watershed planning be conducted on a complete regional and watershed basis.
- Participate in coordinated local, regional and statewide groundwater monitoring and planning programs.
- Develop groundwater and surface water monitoring partnerships.
- Work with federal, state, and local agencies to improve local groundwater pollution detection and monitoring.
- Avoid destruction of established recharge sites through such means as clustering development to leave such areas in open space, avoidance of lining channels and streams, alteration of existing agricultural practices.
- Protect groundwater recharge areas in the County by carefully regulating the type of development within these areas.
- Amend County ordinances to include development standards which protect groundwater basins and surface water drainage areas and provide incentives for use of conservation techniques.
- Study the feasibility of establishing development or design standards for the protection of groundwater recharge areas, such as placing limitation on the amount of impervious surfaces, or other planning and zoning techniques.

Environmental Resources Management

- Defines how zoning will be used to protect natural areas.
- Uses National Diversity Data Base (NDDB) as standard to identify potential conflicts with sensitive natural communities or special status species.
- Requires site surveys, wetlands delineation, and plans to protect areas for preservation of sensitive natural vegetation and wildlife.

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- Requires local, state, and federal cooperation and plan integration.
 - Requires dedication of buffers and open space for riparian and wetlands areas.
 - Seeks to acquire and preserve vernal pools.
 - Enlarge and maintain wetlands preserves.
 - Extensive mineral management policies.
 - Defines process and approach to acquire parklands.
 - Contains shoreline development standards.
 - Development of parks master plan.
 - Acquisition of scenic and open space easements.
 - Requires definition of groundwater and soils conditions prior to development.

Fresno General Plan

The Fresno General Plan and Background report was updated in 2000. The optional water element section was not included however the water resources element address conservation and safety elements mandated by state; and the environmental resources element addresses required open space and conservation requirements. Each of the elements of the general plan list goals and specific objectives, then define more detailed implementation strategies which serve to define who and when actions should occur.

Issues

The 2000 General Plan Background Report addresses all the key issues adopted by the Water Forum for consideration in the Upper Kings IRWMP with the exception of protection of water rights.

Fresno County General Plan Goals and Objectives

The IRWMP goals are consistent with the Fresno County General Plan goals and objectives. The Fresno General Plan defines specific objectives to meet the stated goals and to integrate goals across elements. The goals and objectives for the Water Resources; Public Facilities and Services; Health and Safety; and Environmental Resources elements are attached to provide an example of how the goals, policies, and implementation strategies where integrated.

The general plan emphasizes integration with other plans, and for coordinating and cooperating with other agencies and regional efforts (e.g.; air and water planning), and defines the County's responsibilities and priorities. Key policies are presented in Attachment B.

Fresno County General Plan Implementation Strategies

The Fresno General plan defined implementing program identifying the responsible agency and a time frame. The implementation program describes how each policy or range of policies will be implemented.

Water Resources

- Develop, implement and maintain a water sustainability plan.

- Establish and maintain a centralized water resource database for surface and groundwater that includes the water budget, groundwater monitoring data, and the groundwater recharge site inventory.
- Develop, implement and maintain a groundwater monitoring program. Information from this program shall be provided to the Board of Supervisors during the annual General Plan review.
- Develop, implement, and maintain land use plans to preserve for recharge purpose those lands identified as suitable for groundwater recharge in the water resource database inventory.

Environmental Resources Management

- Shall work toward the acquisition of creek corridors, wetlands, and areas rich in wildlife or of a fragile ecological nature as public open space where such areas cannot be effectively preserved through the regulatory process.
- Adopt an ordinance for riparian protection zones identifying allowable activities in riparian protection zones and allowable mitigation techniques. (See Policy OS-D.4)
- Compile inventories of ecologically significant resource areas based on the California Wildlife Habitats Relationships (WHR) system.
- Maintain current maps that indicate the extent of significant habitat for important fish and game species, as these maps are made available by the California Department of Fish and Game (CDFG).
- Prepare and maintain an updated list of State and Federal rare, threatened, and endangered plant species known or suspected to occur in the county.
- Make the Fresno County Oak Management Guidelines and other educational resources available to landowners located in oak woodland habitat. (See Policy OS-F.11)
- Work with local, State, and Federal agencies to complete a comprehensive inventory of all parks and recreation areas and services in the county and to identify other areas suitable for park acquisition and development as funds permit.

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FINDINGS AND OBSERVATIONS

This section discusses the results of the review of the city and county general plans and the observations and findings of the review. Table 1 presented previously provides a summary of the review results. General observations include:

- County general plans take a more regional view than the city plans and tend to recognize and seek to resolve regional water resources, water quality, flood, environmental resources issues.
- Long term plans and strategies to mitigate overdraft are generally not recognized in city general plans. City plans focus on capacity of water and wastewater utilities and capital facility needs, and generally do not recognize regional overdraft. As a result, impacts of new development or existing use are generally

not recognized and strategies to resolve the regional issues are not incorporated into many of the city general plans. The exception is the larger cities of Fresno and Clovis because the impacts of groundwater extractions are more readily observed at existing levels of development, and the effects are happening today rather than out somewhere on the planning horizon.

- Localized impacts to regional water distribution infrastructure as a result of new development are an issue for the irrigation districts both in terms of protecting existing distribution infrastructure, and from use of the irrigation canals by cities for conveyance of flood water.
- Most general plans seek to ensure that new development has a safe and sustainable water supply, and that there are no impacts to existing users of the resources. City general plans some times lack specifics and assurances on how this is to be accomplished. Cities and counties need to ensure that water supply and water resources related impacts are mitigated during the development review process and policies could be strengthened to that end. Cities also need to recognize the contribution to overdraft from existing and planned levels of development.
- Cities need help in mitigating impacts from city use of groundwater. Cities, counties and water districts need to work together to develop new supplies and manage existing supplies to ensure groundwater is managed properly and long term water supply plans are in place to ensure reliability in all types of hydrologic conditions.
- There is a need for collaboration and cooperation in developing regional policy solutions and infrastructure.

A number of statewide trends in water and land use policy can be observed and include:

- Emphasis on integrated land use and water supply planning process and plans supported by case law and legislation.
- Changing emphasis from developing new water to managing existing supplies through complex arrangements that include conservation, recycling, off stream reservoir storage, conjunctive use of surface and groundwater, groundwater banking, and water transfers.
- Change from single purpose entities such as water purveyors and districts to multi-agency, multi- level (local, state, federal), and multi- stakeholder solutions.
- Recognition that water for environmental purposes is integral to the system and ecological interests must be represented during planning for projects to succeed.

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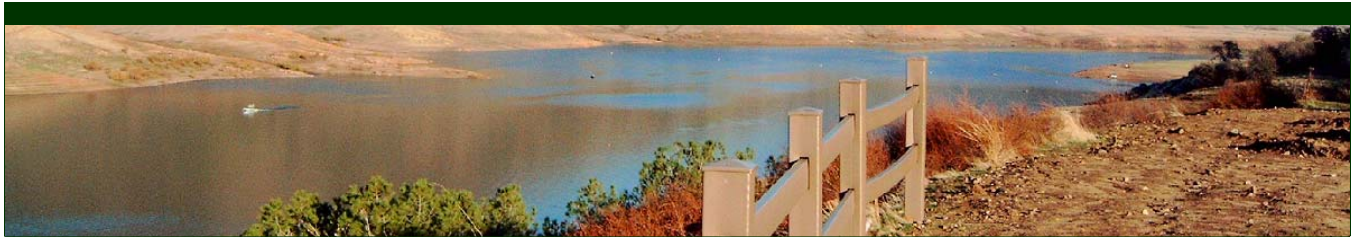
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11. Water Resources

The Water Resources Element is divided into the following sections:

- General (Section 11.1)
- Water Quality (Section 11.2)
- Water Supply (Section 11.3)
- Implementation Measures (Section 11.4)

Policies in this element discussing the management of water resources are relative to the areas of water usage that the County has regulatory control, such as the approval of new land use development. The policies in this element should not be construed to insert the County into the allocation or management of water resources. This is a complicated system over which the County does not have direct regulatory control.

Key Terms

The following terms are used throughout this element to describe water resource issues.

Acre-foot. The amount of water needed to cover one acre with one foot of water, or approximately 325,851 gallons. In the course of a year the average three-person household uses 0.538 acre-feet of water based on the national average daily per capita water usage of 160 gallons.

Appropriated Right. The right to put to reasonable beneficial use, a quantity of water subordinate to the use thereof by prior appropriators and defined riparian diverters.

Aquifer. A geologic formation that stores water underground and yields significant quantities of water to wells or springs.

Central Valley Project (CVP). Authorized in 1933, the CVP, operated by the United States Bureau of Reclamation, is the largest water storage and delivery system in California, comprising 29 of the state's 58 counties. The project's features include 18

federal reservoirs and 4 additional reservoirs jointly owned with the State Water Project.

Class 1 Water. That supply of water stored in or flowing through Millerton Lake which, subject to defined contingencies, is available for delivery from Millerton Lake and the Friant-Kern and Madera Canals as a dependable water supply during each year.

Class 2 Water. That supply of water which can be made available, subject to defined contingencies, for delivery from Millerton Lake and Friant-Kern and Madera Canals in addition to the supply of Class 1 Water. Because of its uncertainty as to availability and time of occurrence, such water is undependable in character and is furnished only if, as, and when it can be made available as determined by the Department of the Interior, Bureau of Reclamation.

Confined Aquifer. A water-bearing subsurface stratum that is bounded above and below by formations of impermeable, or relatively impermeable, soil or rock.

Groundwater Basin. A groundwater reservoir, defined by an overlying land surface and the underlying aquifers that contain water stored in the reservoir. In some cases, the boundaries of successively deeper aquifers may differ and make it difficult to define the limits of the basin.

Groundwater Export. An export of groundwater is defined as the extraction and transfer of groundwater, through natural waterways or man-made conveyance, of one (1) or more acre-feet per year of water to a use outside of Tulare County.

Groundwater Overdraft. The condition of a groundwater basin in which the amount of water withdrawn (by pumping) exceeds the amount of water that recharges the basin.

Groundwater Recharge. The natural or intentional infiltration of surface water into the zone of saturation (i.e., into groundwater).

Non-Transient System. A water system serving customers who will be exposed to the water supply for an extended period of time.

Reasonable Beneficial Use. This is the measure and limit of an appropriative right.

Safe Yield. The maximum dependable draft that can be made continuously on a source of groundwater supply during a period of years during which the probable driest period or period of greatest deficiency in water supply is likely to occur.

Transient System. A water system serving customers who will be exposed to the water supply for only a short period of time.

Safe Drinking Water Act (SDWA). The SDWA, administered by the U.S. Environmental Protection Agency in coordination with the states, is the chief Federal legislation regulating drinking water quality.

State Water Project (SWP). Authorized in 1960, the SWP facilities include 20 dams, 662 miles of aqueduct, and 26 power and pumping plants. Major facilities include the multi-purpose Oroville Dam and Reservoir on the Feather River, the California Aqueduct, South Bay Aqueduct, North Bay Aqueduct, and a share of the State-Federal San Luis Reservoir.

Tulare Lake Basin. The State Department of Water Resources subdivides the state into ten hydrologic regions for planning purposes, corresponding to the state's major drainage basins. Tulare County is located entirely within the Tulare Lake Basin. This basin is closed in that it does not discharge into the ocean.

Unconfined Aquifer. An aquifer without an upper confining layer of impermeable soil or rock material. The water table is exposed to the atmosphere through a series of interconnected openings in the overlying permeable soil and/or rock layers and is in equilibrium with atmospheric pressure. Therefore,

the groundwater is not under pressure, and the water level in a well is the same as the water table outside the well.

Existing Conditions Overview

Demands for water resources within Tulare County are met from four major sources: groundwater, local streams and rivers, imported surface water, and imported surface water by exchange.

Tulare County is located entirely within the Tulare Lake Basin, the closed drainage basin at the south end of the San Joaquin Valley, south of the San Joaquin River watershed, encompassing basins draining to Kern, Tulare, and Buena Vista Lakes.

Groundwater in the Valley portions of Tulare County occurs in an unconfined state throughout, and in a confined state beneath its western portion. Extensive alluvial fans associated with the Kings, Kaweah, and Tule Rivers provide highly permeable areas in which groundwater in the unconfined aquifer system is readily replenished. Interfan areas between the streams contain less permeable surface soils and subsurface deposits, impeding groundwater recharge and causing well yields to be relatively low. The mineral quality of groundwater in Tulare County is generally satisfactory for all uses.

The Department of Water Resources has estimated the groundwater overdraft by hydrologic region. For the Tulare Lake Basin, the total overdraft is estimated at 820,000 acre-feet per year, the greatest overdraft projected in the state, and 56 percent of the statewide total overdraft. This overdraft is due to reductions of surface supplies in recent years by Delta export restrictions, Endangered Species Act requirements, and other factors.

The groundwater overdraft is most pronounced along the western boundary of the county, as manifested by a lowering of pressure levels in the confined aquifers. There is also a progressive lowering of ground water levels along the easterly margins of the Valley basin, particularly in the southerly part of the Kern-Tulare Water District. There are 19 entities in Tulare County with active programs of groundwater management.

Surface water supplies for the Tulare Lake Basin include developed supplies from the CVP, the SWP, rivers, and local projects. In addition to water from the San Joaquin River delivered by the Friant Kern Canal, other significant rivers and streams serving Tulare County are the Kings, Kaweah, Tule, Kern (mountain areas only), and White Rivers and Deer Creek.

The predominant water supply system providing service to the foothill and mountain regions of the county are individual systems. Principal among these systems are those which utilize groundwater which is, in most cases, untreated. There exist, however, some limited treatment systems, which are typically maintained by a commercial service contract.

The mineral quality of groundwater extracted for use in Tulare County is generally satisfactory for crop irrigation. The salinity of groundwater typically increases in a westward direction across the San Joaquin Valley. For the Kings River watershed, groundwater along the foothill fringe tends to be high in nitrates, reducing in intensity as the flow extends into the valley floor. The Kaweah River watershed tends to be high in chloride and nitrate concentrations, which also dilute as the groundwater flows into the valley area. The east side of the valley floor in the Tule River watershed contains the highest population of individuals impacted by lower quality groundwater of any area in the county. In the Deer Creek/White River watershed, water quality along the foothills is characterized by diminished quality from nitrates, phenols, and salts. Like other areas, this impact decreases moving west from the foothills.

11.1 General

WR-1	To provide for the current and long-range water needs of the county and for the protection of the quality and quantity of surface and groundwater resources. <i>[New Goal]</i>
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WR-1.1 Groundwater Withdrawal

The County shall cooperate with water agencies and management agencies during land development

processes to manage the groundwater resources within the county through ordinances, project approvals, and agreements, to ensure an adequate, safe, and economically viable groundwater supply for existing and future development within the county. *[New Policy based on ERME IV-C; Groundwater; Recommendation 1] [ERME; Pg 38]*

WR-1.2 Groundwater Monitoring

The County shall support the collection of monitoring data for facilities or uses that are potential sources of groundwater pollution as part of project approvals, including residential and industrial development. *[New Policy]*

WR-1.3 Water Export Outside County

The County shall restrict the export of groundwater and surface water resources currently allocated to users within the County to cities and service providers outside the county whenever feasible. The County shall strive for a “no net loss” where there may be water exchanges serving a public purpose allowed, but these agreements shall not result in the net loss of water from the County. *[New Policy]*

WR-1.4 Conversion of Agricultural Water Resources

For new urban development, the County shall discourage the transfer of water used for agricultural purposes (within the prior ten years) for domestic consumption unless all of the following are met:

- The water remaining for the agricultural operation is sufficient to maintain the land as an economically viable agricultural use; and
- The reduction in infiltration from agricultural activities as a source of groundwater recharge will not significantly impact the groundwater basin; and
- The water transferred to the domestic use is equivalent to an amount saved by the agricultural use through implementation of a conservation program (such as installing drip irrigation) or conversion to less water intensive crops. *[New Policy]*

WR-1.5 Expand Use of Reclaimed Wastewater

To augment groundwater supplies and to conserve potable water for domestic purposes, the County shall seek opportunities to expand groundwater recharge efforts. [Revised Existing Water Resources Policy 2.2]

WR-1.6 Expand Use of Reclaimed Water

The County shall encourage the use of tertiary treated wastewater and household gray water for irrigation of agricultural lands, recreation and open space areas, and large landscaped areas as a means of reducing demand for groundwater resources. [Revised Existing Water Resources Policy 2.2]

WR-1.7 Collection of Additional Groundwater Information

The County shall support additional studies focused on furthering the understanding of individual groundwater source areas and basins. [New Policy]

WR-1.8 Groundwater Basin Management

The County shall take an active role in cooperating in the management of the County's groundwater resources. [New Policy]

WR-1.9 Collection of Additional Surface Water Information

The County shall support the additional collection of water quality and flow information for the County's major drainages as part of project approvals.. [New Policy based on ERME IV-B; Land Resources; Recommendation 8] [ERME; Pg 23(modified)]

WR-1.10 Channel Modification

Channel modification shall be discouraged in streams and rivers where it increases the rate of flow, rate of sediment transport, erosive capacity, have adverse effect on aquatic life or modify necessary groundwater recharge. [ERME IV-C; Soils; Recommendation 7] [ERME; Pg 59]

11.2 Water Quality

WR-2

To provide for the current and long-range water needs of the county and for the protection of the quality of surface water and groundwater resources. [New Goal]

WR-2.1 Protect Water Quality

All major land use and development plans should be evaluated as to their potential to create surface and groundwater contamination hazards from point and non-point sources. The County shall confer with other appropriate agencies, as necessary, to assure adequate water quality review to prevent soil erosion; direct discharge of potentially harmful substances; ground leaching from storage of raw materials, petroleum products, or wastes; floating debris; and runoff from the site.[New Policy based on ERME; Water; Issue 1] [ERME; Pg 27]

WR-2.2 NPDES Enforcement

The County shall continue to monitor and enforce provisions to control non-point source water pollution contained in the United States Environmental Protection Agency NPDES program as implemented by the Water Quality Control Board. [New Policy]

WR-2.3 Best Management Practices

The County shall continue to require the use of feasible and practical best management practices (BMPs) and other mitigation measures designed to protect surface water and groundwater from the adverse effects of construction activities and urban runoff in coordination with the Water Quality Control Board. [New Policy]

WR-2.4 Construction Site Sediment Control

The County shall continue to enforce provisions to control erosion and sediment from construction sites. [New Policy]

WR-2.5 Major Drainage Management

The County shall continue to promote protection of each individual drainage basin within the County based in the basins unique hydrologic and use characteristics. [New Policy based on ERME IV-B; Land Resources; Recommendation 9] [ERME; Pg 24], [ERME IV-C; Surface Water; Recommendation 20] [ERME; Pg 53]

WR-2.6 Degraded Water Resources

The County shall encourage and support the identification of degraded surface water and groundwater resources and promote restoration where appropriate. [New Policy]

WR-2.7 Industrial and Agricultural Production

The County shall work with agricultural and industrial concerns to ensure that water contamination and waste products are handled in a manner that protects the long-term viability of water resources in the County. *[New Policy]*

WR-2.8 Point Source Control

The County shall work with the Regional Water Quality Control Board to ensure that all point source pollutants are adequately mitigated (as part of the CEQA review and project approval process) and monitored to ensure long-term compliance. *[New Policy]*

11.3 Water Supply

WR-3	<p>To provide a sustainable, long-term supply of water resources to meet domestic, agricultural, industrial, and recreational needs and to assure that new development is consistent with available water resources. <i>[New Goal]</i></p>
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WR-3.1 Develop Additional Water Sources

The County shall encourage the identification and development of additional water sources through the expansion of water storage reservoirs, development of groundwater banking, and promotion of water conservation programs. *[New Policy]*

WR-3.2 Develop Comprehensive Groundwater Management Plan

The County shall work with other agencies and organizations that share water management responsibilities in the County to enhance modeling efforts and ensure that a comprehensive groundwater management plan and implementation program for the entire valley floor area is maintained. *[New Policy]*

WR-3.3 Adequate Water Availability

The County shall review new development proposals to ensure the intensity and timing of growth will be consistent with the availability of adequate water supplies. Projects must provide

evidence of adequate water availability or a will serve letter prior to approval of the tentative map or other entitlement. *[New Policy]*

WR-3.4 Water Resource Planning

The County shall continue participation in all state, regional and local water resource planning efforts affecting water resource supply and quality. *[New Policy]*

WR-3.5 Use of Native and Drought Tolerant Landscaping

The County shall encourage the use of low water consuming, drought-tolerant and native landscaping and emphasize the importance of utilizing water conserving watering techniques, such as night watering. *[New Policy]*

WR-3.6 Agricultural Irrigation Efficiency

The County shall support educational programs targeted at reducing water consumption on agricultural lands and enhancing groundwater recharge. *[New Policy]*

WR-3.7 Emergency Water Conservation Plan

The County shall develop an emergency water conservation plan for County operated water systems to identify appropriate conservation policies that can be implemented during times of water shortages caused by drought, loss of one or more major sources of supply, contamination of one or more sources of supply, or other natural or man-made events. *[New Policy]*

WR-3.8 Educational Programs

The County shall encourage the development of educational programs, both by water purveyors and public agencies, to increase public awareness of water conservation opportunities and the potential benefits of implementing conservation measures and programs. *[New Policy]*

WR-3.9 Establish Critical Water Supply Areas

The County shall designate Critical Water Supply Areas to include the specific areas used by a municipality or community for its water supply system, areas critical to groundwater recharge, and other areas possessing a vital role in the management of the water resources in the county. *[New Policy]*

WR-3.10 Diversion of Surface Water

Diversions of surface water or runoff from precipitation going to identified recharge areas shall be prevented where such diversions may cause a reduction in surface water available for needed groundwater recharge. *[New Program based on ERME IV-C; Groundwater; Recommendation 3] [ERME; Pg 38]*

WR-3.11 Policy Impacts to Water Resources

The County shall monitor actions taken at the federal and State level which impact water resources in order to evaluate the effects of these actions on the County's resources. *[New Policy]*

WR-3.12 Joint Water Projects with Neighboring Counties

Tulare County will work with neighboring counties to promote development of joint water projects, such as a cross-valley canal, and other efforts to expand water supply. *[ERME IV-C; Surface Water; Recommendation 18] [ERME; Pg 53]*

11.4 Implementation Measures

The following table documents the implementation measures included with the General Plan to implement the goals and policies included in this element.

Implementation	Implements What Policy	Who is Responsible	2007-2010	2010-2015	2015-2030	On-Going
<p>1. County staff shall develop an ordinance that will regulate the extraction and exportation of groundwater from Tulare County. The ordinance will set up a permit process for groundwater export. Conditions considered for this permit will include:</p> <ul style="list-style-type: none"> ▪ Find and determine that the extraction will not substantially increase the overdraft of the groundwater underlying the County ▪ Will not adversely affect the long-term ability for storage or transmission of groundwater within the aquifer; ▪ Will not (together with other extractions) exceed the safe yield of the groundwater underlying the County unless the safe yield is exceeded only by extractions in connection with a conjunctive use program approved by the County; ▪ Will not otherwise operate to the injury of the reasonable and beneficial uses of overlying groundwater users; ▪ Will not result in an injury to a water replenishment, storage, or restoration project operating in accordance with statutory authorization; and ▪ Find that the applicant has provided for mitigation which will offset any adverse effect that is determined to exist. [<i>New Program</i>] 	WR-1.1 WR-1.2	RMA, Planning	■			
<p>2. Solid waste disposal areas shall not be located where there is possibility of ground or surface water contamination. (At least four feet above the highest recorded water table where there is a surface mantle of finely grained natural soil, well compacted, and at least ten feet above the water table where there is disposal of toxic wastes. [<i>ERME; Water; Issue 1; Recommendation 1</i>] [<i>ERME; Pg 27</i>], [<i>ERME IV-C; Groundwater; Recommendation 5</i>] [<i>ERME; Pg 38</i>])</p>	WR-1.1 WR-1.2 WR-1.8	RMA, Planning				■

Tulare County General Plan

	Implementation	Implements What Policy	Who is Responsible	2007-2010	2010-2015	2015-2030	On-Going
3.	The County shall assure that all watershed planning is done on a complete regional and watershed basis, and that such planning is comprehensive in considering all land uses in a balanced proportion. <i>[ERME IV-C; Surface Water; Recommendation 20] [ERME; Pg 53]</i>	WR-1.1 WR-1.7 WR-2.5 WR-3.4	RMA, Planning				■
4.	Where feasible, the County shall participate in coordinated local, regional, and statewide groundwater monitoring and planning programs. <i>[New Program]</i>	WR-1.2	Tulare County				■
5.	The County shall encourage active participation by local stakeholders and develop groundwater monitoring partnerships with local groundwater users and developers. <i>[New Program]</i>	WR-1.2	RMA, HHSA – Environmental Health				■
6.	The County shall work with federal, state, and local agencies to improve local groundwater pollution detection and monitoring. <i>[New Program]</i>	WR-1.2 WR-1.7	RMA, HHSA – Environmental Health				■
7.	The County shall encourage responsible agencies and organizations to instal and monitor additional groundwater monitoring wells in areas where data gaps exist. <i>[New Program]</i>	WR-1.2 WR-1.7	RMA	■			
8.	The County shall avoid destruction of established recharge sites through such means as clustering development to leave such areas in open space, avoidance of lining channels and streams, alteration of existing agricultural practices, or substitution made of drainage methods that will transport polluted waters away from such sites. <i>[ERME; Water; Issue 2; Recommendation 9] [ERME; Pg 28]</i>	WR-1.2 WR-1.5 WR-1.10 WR-3.2	RMA, Planning				■
9.	The County shall incorporate provisions for the use of reclaimed wastewater, water conserving appliances, drought tolerant landscaping, and other water conservation techniques into the County’s building, zoning, and subdivision ordinances. <i>[ERME IV-C; Surface Water; Recommendation 19] [ERME; Pg 53]</i>	WR-1.5 WR-3.5 WR-3.6 WR-3.8	RMA, Planning				■
10.	The County shall identify and evaluate conditions within established watersheds which are causing deterioration of the water supply or declining water yields. The County shall	WR-1.7 WR-1.8	RMA, Planning	■			

11. Water Resources

Implementation	Implements What Policy	Who is Responsible	2007- 2010	2010- 2015	2015- 2030	On- Going
institute the necessary revisions to regulatory documents (Zoning Ordinance, Subdivision Ordinance, etc.) to mitigate these issues. [ERME IV-C; Surface Water; Recommendation 11] [ERME; Pg 53]						
11. Development projects involving drainage alterations shall be constructed to minimize soil erosion and silt transport. [ERME IV-C; Groundwater; Recommendation 7] [ERME; Pg 38]	WR-1.10 WR-2.1 WR-2.2 WR-2.3 WR-2.4	RMA, Planning				■
12. During preliminary and final road location surveys, roads (excluding bridges and culverts) shall be planned away from natural drainage channels. Stream crossing points should involve a minimum disturbance to banks and existing channels and excessive cuts and accumulations of waste soil near natural drainages avoided. [ERME IV-C; Surface Water; Recommendation 13] [ERME; Pg 53]	WR-1.10 WR-2.6	RMA, Planning				■
13. Groundwater and soil conditions shall be identified prior to subdividing or road and building construction and such development properly engineered to control or avoid potential land slides in areas of unstable soil, as well as to prevent unnecessary substantial amounts of soil erosion. [ERME IV-C; Groundwater; Recommendation 6] [ERME; Pg 38]	WR-2.1 WR-2.2 WR-2.3 WR-2.4	RMA, Planning				■
14. Designs, which respect natural topography and vegetation, can usually achieve effective flood control while retaining the dynamic flow and functional integrity of a natural waterway. Further channeling, straightening and lining waterways should be prohibited until alternative multipurpose modes of treatment such as wider berms and landscaped levees in combination with recreation amenities are provided. [ERME IV-C; Surface Water; Recommendation 10] [ERME; Pg 53]	WR-2.2	RMA, Planning				■
15. The County shall consider the feasibility of adopt an ordinance to require new development proposals to provide suitable evidence of long term water availability or will serve letter prior to approval of the tentative map or other entitlement. For subdivisions proposing to use	WR-3.3	RMA, Planning	■			

Tulare County General Plan

Implementation	Implements What Policy	Who is Responsible	2007-2010	2010-2015	2015-2030	On-Going
well water, the new ordinance shall eliminate current waiver provisions and require well pump tests to demonstrate water supply capabilities. <i>[New Program]</i>						
16. The County shall consider reactivating the Tulare County Water Commission with expanded advisory responsibilities to the Board of Supervisors and other County agencies and staff.	WR-3.4	Board of Supervisors	■			
17. The County shall maintain and implement its water conserving landscape ordinance, which requires the use of native and drought-resistant planting materials and efficient irrigation systems in new development and establish incentives within this ordinance for compliance. <i>[New Program]</i>	WR-3.5	RMA, Planning	■			
18. As part of the County's Emergency Water Conservation Plan, a priority of consumptive uses for various water sources shall be developed to ensure availability of adequate supplies to meet public health and safety needs, and for resource protection. Suggested priority: <ul style="list-style-type: none"> ■ Potable water supply, fire protection, domestic uses. ■ Resource protection and preservation. ■ Industrial, irrigation, and commercial uses. ■ Water oriented or water enhanced recreation. ■ Air conditioning. <i>[ERME IV-C; Surface Water; Recommendation 3] [ERME; Pg 52 (Modified)]</i> 	WR-3.7	RMA, Environmental Health				■
19. The County shall develop an education program to inform residents of water conservation techniques and the importance of water quality and adequate water supplies. Programs may include informational flyers, community workshops, technology transfer fairs, and other various means of education and information dissemination. <i>[New Program [Based on ERME IV-C; Surface Water; Recommendation 6] [ERME; Pg 52]</i>	WR-3.8	RMA, Planning	■			
20. The County shall protect groundwater recharge areas in the County by carefully regulating the type of development within these areas. Regulations may include, but are not limited to,	WR-3.9	RMA, Planning				■

11. Water Resources

Implementation	Implements What Policy	Who is Responsible	2007- 2010	2010- 2015	2015- 2030	On- Going
<p>the limitation of structural coverage and impervious surfaces and prohibition of uses with the potential to discharge harmful pollutants, increase erosion, or create other impacts degrading water quality. <i>[New Program based on ERME IV-C; Groundwater; Recommendation 2] [ERME; Pg 38]</i></p>						
21. The County shall amend County ordinances to include development standards which protect groundwater basins and surface water drainage areas and provide incentives for use of conservation techniques. <i>[New Program]</i>	WR-3.9	RMA, Planning	■			
22. . The County shall study the feasibility of establishing development or design standards for the protection of groundwater recharge areas, such as placing limitation on the amount of impervious surfaces, or other planning and zoning techniques. <i>[New Program]</i>	WR-3.10	RMA, Planning	■			

Please see the next page.



8. Environmental Resource Management

The Environmental Resource Management element is divided into the following sections:

- Biological Resources (Section 8.1)
- Mineral Resources - Surface Mining (Section 8.2)
- Mineral Resources - Other (Section 8.3)
- Energy Resources (Section 8.4)
- Recreation and Open Space Resources (Section 8.5)
- Cultural Resources (Section 8.6)
- Soil Resources (Section 8.7)
- Implementation Measures (Section 8.8)
- Mineral Resources Appendix B (Section 8.9)



For water resource issues, see Section 11, Water Resources.

Key Terms

The following terms are used throughout this element to describe natural and cultural resource issues.

Active Recreation. This term is used to refer to sites that have been modified with structures or facilities designed for their enjoyment, such as a playground or recreation center.

Agricultural. Agricultural activities are defined to include the production of food, feed, forage, fiber, and oilseed crops and are lands available for use as cropland, pastureland, rangeland, and commercial timber.

Clustered Development. Development in which a number of dwelling units are placed in closer proximity than usual, or are attached, with the purpose of retaining an open-space area.

Commercial Recreation Facilities. Facilities serving recreational needs but operated for private profit

(e.g., private campgrounds, riding stables, tourist attractions, amusement parks).

Critical Habitat. Critical habitat is the natural environment designated by the USFWS, as required for the conservation of a Federally-listed species. These habitats are specifically protected under the Federal Endangered Species Act. (16 USC 1532, 50 CFR 424.02). The designation of a critical habitat is a formal process that involves the posting of a draft proposal in the Federal register of the critical habitat designation, a public comment period, and a final determination.

Cultural Resources. Cultural resources consist of tangible or observable evidence of past human activity, found in direct association with a geographic location, including tangible properties possessing intangible, traditional cultural values. Cultural resources may include buildings, structures, objects, sites, areas, places, records, or manuscripts which are historically or archaeologically significant.

Ethnohistoric Resources. Ethnohistoric resources are Native American objects, sites, buildings, or structures that resulted after the arrival of European settlers in California. Ethnohistory began at different times at different places within California. Generally, ethnohistoric resources were produced beginning 1770 to 1850, to roughly 1900.

Farmland Security Zone. An area created within an agricultural preserve by a board of supervisors (board) upon request by a landowner or group of landowners. An agricultural preserve defines the boundary of an area within which a city or county will enter into Williamson Act contracts with landowners. The boundary is designated by resolution of the board or city council having jurisdiction. Agricultural preserves are generally at least 100 acres in size.



For Agricultural Issues and Definitions, see Section 14, Agriculture.

Major Waterway. Any navigable body of water.

Mineral Resources. Mineral resources are defined as naturally occurring materials in the earth that can be utilized for commercial purposes.

MRZ-2. Areas underlain by mineral deposits where geologic data indicate that significant mineral deposits are located or likely to be located. Defined by the State Geologist (see SMARA also).

Recreation Area. Any public or private space set aside or primarily oriented to recreational use.

Ridgeline. A long, narrow chain of hills or mountains.

Riparian. The interface between land and a flowing surface water body. They are typically characterized by hydrophilic vegetation and are often subject to flooding. Riparian zones are significant in ecology, environmental management, and civil engineering due to their role in soil conservation, their biodiversity, and the influence they have on aquatic ecosystems. Riparian zones occur in many forms including grassland, woodland, wetland, or even non-vegetative.

Paleontological Resources. Paleontological resources are any fossilized remains, traces, or imprints of organisms, preserved in or on the earth's crust, that are of paleontological interest and that provide information about the history of life on earth, with the exception of materials associated with an archaeological resource (as defined in Section 3(1) of the Archaeological Resources Protection Act of 1979 (16 U.S.C. 470bb[1]), or any cultural item as defined in Section 2 of the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001).

Passive Recreation. Areas used in their natural state with few structures or facilities other than parking and trails.

Sensitive Habitat. A sensitive habitat is especially diverse, regionally uncommon, or of special concern

to local, State, and Federal agencies. Elimination or substantial degradation of such a community would constitute a significant impact under CEQA. The California Department of Fish and Game (DFG) monitors the condition of some sensitive natural communities in its Natural Diversity Database (NDDDB).

Sensitive Natural Community. A sensitive natural community is a biological community that is regionally rare, provides important habitat opportunities for wildlife, or is of special concern to local, State, or Federal agencies. The California Environmental Quality Act (CEQA) identifies the elimination or substantial degradation of such communities as a significant impact (CERES 2004). Based on Federal and State regulations, wetlands and critical habitat are examples of sensitive natural communities.

Special-Status Species. Special-status species are those plants and animals that, because of their recognized rarity or vulnerability to habitat loss or population decline, are recognized by Federal, State, or other agencies. Some of these species receive specific protection that is defined by Federal or State endangered species legislation. Others have been designated as "sensitive" on the basis of adopted policies and expertise of State resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. These species are referred to collectively as "special status species" in this report, following a convention that has developed in practice but has no official sanction. For the purposes of this assessment, the term "special-status" includes those species that are:

- Federally-listed or proposed under the Federal Endangered Species Act (50 CFR 17.11-17.12);
- Candidates for listing under the Federal Endangered Species Act (61 FR 7596-7613);
- State-listed or proposed under the California Endangered Species Act (14 CCR 670.5);
- Species listed by the U.S. Fish and Wildlife Service (USFWS) or the California Department of Fish and Game (CDFG) as a species of

8. Environmental Resource Management

concern (USFWS), rare (CDFG), or of special concern (CDFG);

- Fully protected animals, as defined by the State of California (California Fish and Game Code Section 3511, 4700, and 5050);
- Species that meet the definition of threatened, endangered, or rare under California Environmental Quality Act (CEQA Guidelines Section 15380);
- Plants listed as rare or endangered under the California Native Plant Protection Act (California Fish and Game Code Section 1900 et seq.); and
- Plants listed by the California Native Plant Society (CNPS) as rare, threatened, or endangered (List 1A and List 2 status plants in Skinner and Pavlik 1994).

SMARA. SMARA contains provisions for the inventory of mineral lands in the State of California. The State Geologist, in accordance with the State Board's Guidelines for Classification and Designation of Mineral Lands, must classify Mineral Resource Zones (MRZ).

Vernal Pools. Seasonally flooded depression found on soils with an impermeable layer such as hardpan, claypan, or volcanic basalts. While the pools are shallow enough to dry up each session, the unique soil characteristics allow water to remain in pools longer than surrounding uplands. Plant and animal life within these pools is characterized by species specifically adapted to the cycles of wetting and drying.

Viewshed. A viewshed is the area that can be seen from a given vantage point and viewing direction. A viewshed is composed of foreground items (items close to the viewer) that are seen in detail, and background items (items at some distance from the viewer) that frame the view. If a person is moving, as when traveling along a roadway (a view corridor), the viewshed changes as the person moves, with the foreground items changing rapidly and the background items remaining fairly consistent for a long period of time.

Watercourse. Any flowing body of water. These can include rivers, streams, and brooks.

Waters of the U.S. This is also a term defined in Section 404 of the Clean Water Act, referring to those hydric features that are regulated by the Clean Water Act but are not defined as wetlands (33 CFR 328.4). Waters of the U.S. include lakes, rivers, and intermittent streams. To be considered under the jurisdiction of the ACOE, these features must exhibit an identified bed and bank and an ordinary high-water mark. A permit from the ACOE is required under Section 404 of the Clean Water Act for any action affecting other waters of the U.S. (33 USC 1344 and EPA 2004).

Waters of the State. This term is defined in the Porter-Cologne Act as "any surface or groundwater, including saline waters, within the boundaries of the state" (California Water Code Section 13000 et seq.). Waters of the state includes all wetlands, including those not listed under the Clean Water Act, such as isolated wetlands. The Regional Water Quality Control Board enforces the Porter-Cologne Act and is charged with protecting waters of the State.

Wetlands. The Federal government defines wetlands in Section 404 of the Clean Water Act as "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support (and do support, under normal circumstances) a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3[b] and 40 CFR 230.3). The definition of wetlands requires three wetland identification parameters are present: wetland hydrology, hydric soils, and hydrophytic vegetation. The U.S. Army Corps of Engineers (ACOE) is the responsible agency for regulating wetlands under Section 404 of the Clean Water Act, while the Environmental Protection Agency (EPA) has overall responsibility for the Act (ACOE, 2002).

Williamson Act. The Williamson Act, also known as the California Land Conservation Act, is a voluntary program that allows property owners to have their property assessed on the basis of agricultural production rather than current market value. The purpose of the Act is to encourage property owners to continue to use their property in agricultural

activities to prevent their premature conversion to urban uses. Also see Farmland Security Zones.

Williamson Act Contract. A contract between a landowner and a city or county to restrict land to agricultural or open space uses in return for lower than normal property tax assessments. The minimum term for a Williamson Act contract is 10 years. Since the term automatically renews on each anniversary date of the contract, the actual term can be indefinite.

Existing Conditions Overview

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. Nestled among the scenic resources provided by its extensive topographic relief (elevations range from approximately 200 feet to the highest point in the lower 48 states at 14,505 feet above sea level), Tulare County enjoys a varied landscape exhibiting diverse ecosystems and habitats including the Pacific Flyway. A broad-scale method of classifying the landscape is by eco-region. This method is used by the U.S. Forest Service (USFS) and relates to the California Manual of Vegetation and U.S. Geological Survey (USGS) Major Land Resources Area system. The eco-region approach evaluates the land from a wide range of interrelated environmental variables including topography, soils, hydrology, flora, and fauna.

Tulare County falls into three eco-regions that trend generally north-south. These sections apportion the county in a north-south pattern. The majority of the western portion of the county comprises the Great Valley Section, the majority of the eastern portion of the county falls in the Sierra Nevada Section, and a band between these two sections comprises the Sierra Nevada Foothill Area (USFS 2004).

Mineral Resources. In addition to biological resources, Tulare County also has important mineral resources. Economically, the most important minerals that are extracted in Tulare County are sand, gravel, crushed rock, and natural gas. Other minerals that could be mined commercially include tungsten and relatively small amounts of chromite,

copper, gold, lead, manganese, silver, zinc, barite, feldspar, limestone, and silica. Aggregate resources are the most valuable mineral resource in the county because it is a major component of the Portland cement coERMet (PCC) and asphaltic coERMet (AC). PCC and AC are essential to constructing roads, buildings, and providing for other infrastructure needs. There are three streams that have provided the main source of high quality sand and gravel in Tulare County to make PCC and AC. They include the Kaweah River, Lewis Creek, and the Tule River. The highest quality deposits are located at the Kaweah and Tule Rivers.

Recreation Resources. For recreation, there are 13 parks that are owned and operated by Tulare County. These parks are quite diverse, ranging from 3 acres to 160 acres in size. In addition to County parks, the county has extensive recreation and open space resources from Sequoia National Forest and Monument and the Sequoia and Kings Canyon National Parks. The only State Park in Tulare County is Colonel Allensworth State Historic Park, which contains a museum and visitor center. The Mountain Home State Forest consists of 4,807 acres of parkland containing a number of Giant Sequoias, and is located just east of Porterville. The Forest is a Demonstration Forest, which is considered timberland that is managed for forestry education, research, and recreation. Two Federal recreational areas are also in Tulare County: Lake Kaweah and Lake Success.

Cultural Resources. Tulare County lies within a culturally rich province of the San Joaquin Valley. Studies of the prehistory of the area show inhabitants of the San Joaquin Valley maintained fairly dense populations situated along the banks of major waterways, wetlands, and streams. Tulare County was inhabited by aboriginal California Indian groups consisting of the Southern Valley Yokuts, Foothill Yokuts, Monache, and Tubatulabal. Of the five main groups inhabiting the Tulare County area, the Southern Valley Yokuts occupied the largest territory.

California's coast was initially explored by Spanish (and a few Russian) military expeditions during the late 1500s. However, European settlement did not occur until the arrival into southern California of

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land-based expeditions originating from Spanish Mexico starting in the 1760s. Early settlement in the Tulare County area focused on ranching. In 1872, the Southern Pacific Railroad entered Tulare County, connecting the San Joaquin Valley with markets in the north and east. About the same time, valley settlers constructed a series of water conveyance systems (canals, dams, and ditches) across the valley. With ample water supplies and the assurance of rail transport for commodities such as grain, row crops, and fruit, a number of farming colonies soon appeared throughout the region.

The colonies grew to become cities such as Tulare, Visalia, Porterville, and Hanford. Visalia, the County seat, became the service, processing, and distribution center for the growing number of farms, dairies, and cattle ranches. By 1900, Tulare County boasted a population of about 18,000. New transportation links such as SR 99 (completed during the 1950s), affordable housing, light industry, and agricultural commerce brought steady growth to the valley. The U.S. Census Bureau estimated the 2003 Tulare County population to be 390,791.

8.1 Biological Resources

ERM-1

To preserve and protect sensitive significant habitats, enhance biodiversity, and promote healthy ecosystems throughout the county.
[*New Goal*]

ERM-1.1 Protection of Rare and Endangered Species

The County shall ensure the protection of environmentally sensitive wildlife and plant life, including those species designated as rare, threatened, and/or endangered by State and/or Federal government, through compatible land use development. [*New Policy based on ERME IV-C; Biological Resources; Issue 12, and ERME; Pg 32*]

ERM-1.2 Development in Environmentally Sensitive Areas

The County shall limit development within areas that contain a moderate to high potential for sensitive habitat, and direct development into less significant habitat areas. Development in natural habitats shall be controlled so as to minimize erosion and maximize beneficial vegetative growth. [*New Policy based on EMRE; Water; Issue 3; Recommendation 3, ERME; Pg 28*]

ERM-1.3 Encourage Cluster Development

When reviewing development proposals, the County shall encourage cluster development in areas with moderate to high potential for sensitive habitat. [*New Policy*]

ERM-1.4 Protect Riparian Areas

The County shall protect riparian areas through habitat preservation, designation as open space or recreational land uses, bank stabilization, and development controls. [*New Policy*]

ERM-1.5 Riparian Management Plans and Mineral Reclamation Plans

The County shall require mineral Reclamation Plans and other management plans include measures to protect and maintain riparian resources and habitats. [*New Policy*]

ERM-1.6 Management of Wetlands

The County shall support the management of wetland and riparian plant communities for passive recreation, groundwater recharge, and wildlife habitats. *[New Policy]*

ERM-1.7 Encourage Planting of Native Vegetation

The County shall encourage the planting of native trees, shrubs, and grasslands in order to preserve the visual integrity of the landscape, provide habitat conditions suitable for native vegetation and wildlife, and ensure that a maximum number and variety of well-adapted plants are maintained. *[New Policy]*

ERM-1.8 Open Space Buffers

The County shall require buffer areas between development projects and significant watercourses, riparian vegetation, wetlands, and other sensitive habitats and natural communities. These buffers should be required to dedicate, as public open space, the buffer strip necessary to continue the existence of the waterways and riparian habitat in their natural state. *[New Policy based on EMRE policies]*

ERM-1.9 Coordination on Management of Adjacent Lands

Work with other government land management agencies (such as the Bureau of Land Management, US Forest Service, National Park Service) to preserve and protect biological resources while maintaining the ability to utilize and enjoy the natural resources in the County. *[New Policy]*

ERM-1.10 Appropriate Access for Recreation

The County shall encourage appropriate access to resource-managed lands. *[New Policy]*

ERM-1.11 Hunting and Fishing

The County shall provide opportunities for hunting and fishing activities within the County pursuant to appropriate regulations of the California Fish & Game Code. *[New Policy]*

ERM-1.12 Management of Oak Woodland Communities

The County shall support the conservation and management of oak woodland communities and their habitats. *[New Policy]*

ERM-1.13 Pesticides

Tulare County health authorities, in cooperation with state and federal agencies, shall evaluate the side effects of new materials and techniques in pesticide controls to limit effects on natural resources. *[ERME IV-C; Pesticides; Recommendation 1] [ERME; Pg 131, Modified]*

8.2 Mineral Resources - Surface Mining

ERM-2

To conserve and protect areas containing identified and/or potential mineral deposits for future use and encourage the development of identified and/or potential mineral deposits while giving consideration to values relating to water resources, air quality, agriculture, traffic, biotic, recreation, aesthetic enjoyment, and other public interest values. This shall include minimizing the impact of surface mining activities within the site and on surrounding land uses and the environment, the impact of surrounding land uses on existing and/or potential surface mining sites, and recognizing the need to protect mineral deposits from encroachment by incompatible uses to ensure that surface mining operations comply with the requirements of the regulatory framework and the timely reclamation and subsequent beneficial use(s) of mined lands. *[New Goal based on MRPAC June 28, 2006]*

ERM-2.1 Conserve Mineral Deposits

Emphasize the conservation of identified and/or potential mineral deposits, recognizing the need for identifying, permitting, and maintaining a 50 year supply of locally available Portland Cement Concrete (PCC) grade aggregate. *[MRPAC June 28, 2006]*

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ERM-2.2 Recognize Mineral Deposits

Recognize as a part of the General Plan those areas which have identified and/or potential mineral deposits. [MRPAC June 28, 2006]

ERM-2.3 Future Resource Development

Provide for the conservation of identified and/or potential mineral deposits within Tulare County as areas for future resource development. Recognize that mineral deposits are significantly limited within Tulare County and that they play an important role in support of the economy of the County. [MRPAC June 28, 2006]

ERM-2.4 Identify New Resources

Encourage exploration, evaluation, identification, and development of previously unrecognized but potentially significant hard rock resources for production of crushed stone aggregate. [MRPAC June 28, 2006]

ERM-2.5 Emphasize Development

Emphasize the development of identified and/or potential mineral deposits. [MRPAC June 28, 2006]

ERM-2.6 Streamline Process

Create a streamlined and timely permitting process for the mining industry, which will help encourage long-range planning and the reasonable amortization of investments. [MRPAC June 28, 2006]

ERM-2.7 Adjacent Uses/Services

Ensure that the surface mining approval process takes into consideration water resources, air quality, agriculture, traffic, biotic, recreation, aesthetic enjoyment, and other public interest values. [MRPAC June 28, 2006]

ERM-2.8 Minimize Adverse Impacts

Minimize the adverse effects on environmental features such as water quality and quantity, air quality, flood plains, geophysical characteristics, biotic, archaeological and aesthetic factors. [MRPAC June 28, 2006]

ERM-2.9 Minimize Hazards and Nuisances

Minimize the hazards and nuisances to persons and properties in the area during extraction, processing and reclamation operations. [MRPAC June 28, 2006]

ERM-2.10 Compatibility

Develop mineral deposits in a manner compatible with surrounding land uses. [MRPAC June 28, 2006]

ERM-2.11 Adjacent Development

Proposed incompatible land uses shall not be allowed on lands adjacent to identified or potential mineral deposits, or along key access roads, unless adequate mitigation measures are adopted. [MRPAC June 28, 2006]

ERM-2.12 Conditions of Approval

Procedures shall be established to ensure compliance with conditions of approval on all active and idle mines. [MRPAC June 28, 2006]

ERM-2.13 Approved Limits

Procedures shall be established to ensure that vested interest mining operations remain within their approved area and/or production limits. [MRPAC June 28, 2006]

ERM-2.14 SMARA Requirements

All surface mines, unless otherwise exempted, shall be subject to reclamation plans that meet SMARA requirements. Reclamation procedures shall restore the site for future beneficial use of the land. Mine reclamation costs should be born by the mine operator, and guaranteed by financial assurances set aside for restoration procedures. [MRPAC June 28, 2006]

8.3 Mineral Resources - Other

ERM-3

To protect the current and future extraction of mineral resources that are important to the county's economy while minimizing impacts of this use on the public and the environment. [ERME IV-B; Land; Issue 8] [ERME; Pg 30, Modified]

ERM-3.1 Environmental Contamination

All mining operations shall be required to take precautions to avoid contamination from wastes or incidents related to the storage and disposal of hazardous materials, or general operating activity at the site. [New Policy]

ERM-3.2 Limited In-City Mining

Within UDBs, new commercial mining operations should be limited due to environmental and compatibility concerns. *[New Policy]*

ERM-3.3 Small-Scale Oil and Gas Extraction

The County shall permit by special use permit small-scale oil and gas extraction activities and facilities that can be demonstrated to not have a significant adverse effect on surrounding or adjacent land and are within an established oil and gas field outside of a UDB. *[New Policy]*

ERM-3.4 Oil and Gas Extraction

Facilities related to oil and gas extraction and processing may be allowed in identified oil and gas fields subject to a special use permit. The extraction shall demonstrate that it will be compatible with surrounding land uses and land use designations. *[New Policy]*

ERM-3.5 Reclamation of Oil and Gas Sites

The County shall require the timely reclamation of oil and gas development sites upon termination of such activities to facilitate the conversion of the land to its primary land use as designated by the General Plan. Reclamation costs shall be born by the mine operator, and guaranteed by financial assurances set aside for restoration procedures. *[New Policy, MRPAC Goals, Policies, Implementation Measures, and Development Standards, Goal F and associated policies]*

8.4 Energy Resources

ERM-4

To encourage energy conservation in new and existing developments throughout the county. *[New Goal]*

ERM-4.1 Energy Conservation Measures

The County shall encourage the use of solar energy, solar hot water panels, energy conservation features in new construction and renovation of existing structures in accordance with state law. *[New Policy]*

ERM-4.2 Streetscape and Parking Area Improvements for Energy Conservation

The County shall encourage the planting of shade trees along streets and within parking areas of new

development to reduce radiation heating. *[New Policy]*

ERM-4.3 Local and State Programs

The County shall participate, to the extent feasible, in local and state programs that strive to reduce the consumption of natural or man-made energy sources. *[New Policy]*

ERM-4.4 Promote Energy Conservation Awareness

The County should coordinate with local utility providers to provide public education on energy conservation programs. *[New Policy]*

ERM-4.5 Advance Planning

The County shall participate with energy providers in identifying long range energy strategies and facilities. *[New Policy] [Amended per Staff Comments July 27, 2006]*

ERM-4.6 Renewable Energy

The County shall support efforts, when appropriately sited, for the development of alternative energy resources, such as wind and solar energy generation. *[New Policy]*



See Agriculture section 2 for additional information. *[added per Staff Comments July 27, 2006]*

8.5 Recreation and Open Space Resources

ERM-5

To provide a parks, recreation, and open space system that serves the recreational needs of county residents and visitors, with special emphasis on recreation related to Environmental Resource Management. *[ERMI IV-B; Recreation; Recommendation 1] [ERMI; Pg. 22, Modified]*

ERM-5.1 Parks as Community Focal Points

The County should strengthen the role of County parks as community focal points by providing community center/recreation buildings to existing parks, where feasible. *[New Policy]*

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ERM-5.2 Park Amenities

The County shall provide a broad range of active and passive recreational needs within community parks. When possible, this should include active sports fields and facilities, community center/recreation buildings, children's play areas, multi-use areas and trails, sitting areas, and other specialized uses as appropriate. *[New Policy]*

ERM-5.3 Park Dedication Requirements

The County shall require the dedication of land and/or payment of fees, in accordance with local authority and State law (e.g., Quimby Act), to ensure funding for the acquisition and development of public recreation facilities. *[New Policy]*

ERM-5.4 Park-Related Organizations

The County shall consider the use of existing entities or the creation of assessment districts, landscape and lighting districts, County service areas, community facilities districts, homeowners associations or other types of districts to generate funds for the acquisition and development of parkland and/or historical properties as development occurs in the County. *[New Policy]*

ERM-5.5 Collocated Facilities

The County shall encourage the development of parks near public facilities such as schools, community halls, libraries, museums, prehistoric sites, and open space areas and shall encourage joint-use agreements whenever possible. *[New Policy]*

ERM-5.6 Location and Size Criteria for Parks

Park types used in Tulare County are defined as follows:

- **Neighborhood Play Lots (Pocket Parks).** The smallest park type, these are typically included as part of a new development to serve the neighborhood in which they are contained. Typical size is one acre or less. If a park of this type is not accessible to the general public, it can not be counted towards the park dedication requirements of the County. Can be found in communities, hamlets, and other unincorporated areas.
- **Neighborhood Parks.** Neighborhood parks typically contain a playground and tot lot for

2-5 year olds and 5-12 year olds, one basketball court or two half-courts, baseball field(s), an open grassy area for informal sports activities (e.g., soccer), and meandering concrete paths that contain low-level lighting for walking or jogging. In addition, neighborhood parks typically have picnic tables and a small group picnic shelter. These park types are in the range of 10 to 15 acres and serve an area within a ½ mile radius. Neighborhood parks can be found in communities, hamlets, and other unincorporated areas.

- **Community Parks.** Community parks are designed to serve the needs of the community as a whole. These facilities can contain the same facilities as the neighborhood park. In addition, these parks can contain sports facilities with night lighting, community centers, swimming pools, and facilities of special interest to the community. These parks are typically 15 to 40 acres in size and serve an area within a 2 mile radius. Community parks can be found in communities and large hamlets.
- **Regional Parks.** Regional parks are facilities designed to address the needs of the County as a whole. These facilities may have an active recreation component (play area, group picnic area, etc.), but the majority of their area is maintained for passive recreation (such as hiking or horseback riding) and natural resource enjoyment. Regional parks are typically over 200 acres in size, but smaller facilities may be appropriate for specific sites of regional interest.

The following guidelines should be observed in creating and locating County parks:

- The County shall strive to maintain an overall standard of five to nine acres of County-owned improved parkland per 1,000 population in the unincorporated portions of the county.
- Neighborhood play lots (pocket parks) are encouraged as part of new subdivision

applications as a project amenity, but are not included in the calculation of dedication requirements for the project.

- Neighborhood parks at three acres per 1,000 population, if adjoining an elementary school and six acres per 1,000 population if separate. [ERME IV-C; Open Space; Policy 3; Pg. 101]
- Community parks at one-acre per 1,000 population if adjoining a high school and two acres per 1,000 population this if separate. [ERME IV-C; Open Space; Policy 4; Pg. 101]
- Regional parks at one-acre per 1,000 population.
- Only public park facilities shall be counted toward countywide parkland standards.
- A quarter mile walking radius is the goal for neighborhood parks. [ERME IV-C; Open Space; Policy 7; Pg. 101]



See Public Facilities Section 1 for additional information

ERM-5.7 Public Water Access

The County shall give a high priority to the acquisition of public access rights to water bodies. Acquisition of multi-purpose sites, such as the protection of drainage ways, wildlife habitats, and scenic assets, shall be encouraged. In the lakefront areas of Lake Success and Lake Kaweah, special consideration should be given to matching recreational needs of the community with lake access. [ERME IV-C; Surface Water; Recommendation 8] [ERME; Pg 53]

LU-5.8 Waterway Development

The County, in approving recreational facilities along major waterways, shall require a buffer of at least 150 feet from the high-water line edge/bank and screening vegetation as necessary to address land use compatibility issues. [New Policy]

ERM-5.9 Encourage Development of Private Recreation Facilities

The County should encourage private interests to establish new commercial recreation opportunities in the County. The intensity of such development should not exceed the ability of the natural environment of the site and its surroundings to accommodate the new development and should be compatible with surrounding land uses.

Such facilities may include, but are not limited to, campgrounds, destination resorts, hotels, handball and racquetball courts, skeet clubs and facilities, hunting and fishing clubs, equestrian facilities, and recreational camps. [New Policy]

ERM-5.10 Recreational Facilities for Special Use Groups

The County should encourage the provision of recreation facilities and activities for special use groups such as physically disabled, mentally handicapped, and senior citizens. [New Policy]

ERM-5.11 Cooperation with Federal and State Agencies

The County shall work with federal and state agencies that manage land within the County, as appropriate. [New Policy]

ERM-5.12 Meet Changing Recreational Needs

The County shall promote the continued and expanded use of national forest, national park, and other recreational areas to meet the recreational needs of County residents. [New Policy]

ERM-5.13 Funding for Recreational Areas and Facilities

The County shall support the continued maintenance and improvement of existing recreational facilities and expansion of new recreational facilities opportunities for County, state, and federal lands. The County shall strive to obtain adequate funding to improve and maintain existing parks as well as construct new facilities. [New Policy]

ERM-5.14 Park Design

The County shall make efforts to involve community members in the design and development of all park facilities. [New Policy]

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ERM-5.15 Open Space Preservation

The County shall preserve natural open space resources through the concentration of development in existing communities, use of cluster development techniques, maintaining large lot sizes in agricultural areas, avoiding conversion of lands currently used for agricultural production, limiting development in areas constrained by natural hazards, and encouraging agricultural and ranching interests to maintain natural habitat in open space areas where the terrain or soil is not conducive to agricultural production. [New Policy]

ERM-5.16 Regional Recreation Planning

Tulare County shall, on a cooperative, regionally planned basis, provide for regional recreation needs in fair proportion to the demand from each county, specifically Fresno, King, and Kern Counties. [ERME IV-C; Open Space; Recommendation 12; Pg. 110, Modified] [ERME IV-C; Open Space; Policy 13; Pg. 102]

ERM-5.17 Activity Prioritization

Where necessary, one or more conflicting recreational uses shall be restricted, or prohibited, and a priority of uses established. This is particularly important in water-oriented sports, where such uses as power-boating, swimming, sailing, canoeing, water skiing, skin diving, and fishing all compete for the same water and cannot safely co-exist if concentrations become too great. [ERME; Recreation; Issue 10; Recommendation 15] [EMRE; pg 32, Modified]

ERM-5.18 Interagency Cooperation

The County shall cooperate with Federal land management agencies to develop and promote the establishment of Three Rivers and Springville as gateway communities. [New Policy]



See Transportation and Circulation Section 5 for additional information

8.6 Cultural Resources

ERM-6

To manage and protect sites of cultural and archaeological importance for the benefit of present and future generations. [New Goal]

ERM-6.1 Evaluation of Cultural and Archaeological Resources

The County should participate in and support efforts to identify its significant cultural and archaeological resources using appropriate State and Federal standards. [New Policy]

ERM-6.2 Protection of Resources with Potential State or Federal Designations

The County should encourage the protection of cultural and archaeological sites with potential for placement on the National Register of Historic Places and/or inclusion in the California State Office of Historic Preservation's California Points of Interest and California Inventory of Historic Resources. Such sites may be of statewide or local significance and have anthropological, cultural, military, political, architectural, economic, scientific, religious, or other values. [New Policy]

ERM-6.3 Alteration of Sites with Identified Cultural Resources

When planning any development or alteration of a site with identified cultural or archaeological resources, consideration should be given to ways of protecting the resources. Development should be permitted in these areas only after a site specific investigation has been conducted pursuant to CEQA to define the extent and value of resource, and mitigation measures proposed for any impacts the development may have on the resource. [New Policy]

ERM-6.4 Mitigation

If preservation of cultural resources is not feasible, every effort shall be made to mitigate impacts, including relocation of structures, adaptive reuse, preservation of facades, and thorough documentation and archival of records. [New Policy]

ERM-6.5 Cultural Resources Education Programs

The County should support local, state, and national education programs on cultural and archaeological resources. [New Policy]

ERM-6.6 Historic Structures and Sites

The County shall support public and private efforts to preserve, rehabilitate, and continue the use of historic structures. [New Policy]

ERM-6.7 Cooperation of Property Owners

The County should encourage the cooperation of property owners to treat cultural resources as assets rather than liabilities, and encourage public support for the preservation of these resources. *[New Policy]*

ERM-6.8 Solicit Input from Local Native Americans

The County shall continue to solicit input from the local Native American communities in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance. *[New Policy]*

ERM-6.9 Confidentiality of Archaeological Sites

The County shall, within its power, maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts. *[New Policy]*

ERM-6.10 Grading Cultural Resources Sites

The County shall ensure all grading activities conform to the County's Grading Ordinance and California Code of Regulations, Title 20, Section 2501 et seq. *[New Policy]*

8.7 Soil Resources

ERM-7

To preserve and protect soil resources in the county for agricultural and timber productivity and protect public health and safety. *[New Goal]*

ERM-7.1 Soil Conservation

The County of Tulare shall establish the proper controls and ordinances for soil conservation. *[ERME IV-C; Soils; Recommendation 9] [ERME; Pg 59, Modified]*

ERM-7.2 Soil Productivity

The County shall encourage landowners to participate in programs that reduce soil erosion and increase soil productivity. To this end, the County shall promote coordination between the Natural Resources Conservation Service, Resource Conservation Districts, UC Cooperative Extension,

and other similar agencies and organizations. *[New Policy]*

ERM-7.3 Protection of Soils on Slopes

Building and road construction on slopes of more than 30 percent shall be prohibited, and development proposals on slopes of 5-30 percent should be required to be accompanied by plans for control or prevention of erosion, alteration of surface water runoff, and increase of soil slippage, and wildfire occurrence. *[ERME IV-C; Soils; Recommendation 5] [ERME; Pg 59, Modified]*

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8.8 Implementation Measures

The following table documents the implementation measures included with the General Plan to implement the goals and policies included in this element.

Implementation	Implements What Policy	Who is Responsible	2007-2010	2010-2015	2015-2030	On-Going
1. The County shall encourage and support public education that will alert citizens of the County to the types of plant and animal life which need protection and preservation. Methods of public education could include printed material, speakers, and displays, made available through the news media, local educators, County facilities (such as libraries), or the internet. <i>[ERME IV-C; Implementation; Issue 16; Recommendation 1] [ERME; Pg 34, Modified]</i>	ERM-1.1	RMA	■			■
2. The County shall incorporate provisions within the Zoning Ordinance for the designation of Natural Areas designed to protect natural habitats. Using this provision the County shall designate a portion of Golden Trout Creek as a Natural Area for the observation of the native golden trout in its natural setting. <i>[ERME IV-C; Biological Resources; Issue 12; Recommendation 3] [ERME; Pg 33, Modified]</i>	ERM-1.1 ERM-1.4 ERM-1.5 ERM-1.6	RMA, Planning		■		
3. The County shall review development proposals against the California NDDDB, and other available studies provided by the California Department of Fish and Game, and consult, as appropriate, with the California Department of Fish and Game and U.S. Fish and Wildlife to assist in identifying potential conflicts with sensitive natural communities or special status species. <i>[New Implementation] [Amended per Staff Comments July 27, 2006]</i>	ERM-1.1 ERM-1.2	RMA, Planning				■
4. On project sites that have the potential to contain species of local or regional concern, sensitive natural communities or special-status species, the County shall require the project applicant to have the site surveyed and mapped by a qualified biologist. A report on the finding of this survey shall be submitted to the County as part of the application and environmental review process. <i>[New Implementation]</i>	ERM-1.1 ERM-1.2	RMA, Planning				■

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Implementation	Implements What Policy	Who is Responsible	2007-2010	2010-2015	2015-2030	On-Going
5. On project sites with the potential to contain wetland resources, a wetland delineation study shall be prepared using the protocol defined by the Corps of Engineers. A report on the findings of this survey shall be submitted to the County as part of the application process and environmental review process. <i>[New Implementation]</i>	ERM-1.1 ERM-1.2 ERM -1.6	RMA, Planning				■
6. The County shall require a plan to protect areas for the preservation of sensitive natural vegetation and wildlife and a bond for guarantee to be submitted prior to the time of construction of any project that will designate the natural vegetative growth to be retained and/or destroyed and ascertain possible harmful effects, which may be remedied by careful construction practices. <i>[ERME IV-C; Vegetation; Recommendation 6] [ERME; Pg 87, Modified] [Amended per Staff Comments July 27, 2006]</i>	ERM-1.1 ERM-1.2	RMA, Planning				■
7. The County shall work cooperatively with the California Department of Fish and Game to develop a joint study which will identify in Tulare County the following: <ul style="list-style-type: none"> ▪ Significant habitat to be preserved in a natural state for the survival of rare and endangered species. ▪ Fish and game habitat desirable for meeting the quantity of demand for fishing and hunting. Wildlife habitat needed for meeting the quantity of demand for recreational, educational and scientific observation, scenic enjoyment and appreciation of open space. <i>[ERME IV-B; Fish and Wildlife; Recommendation 1] [ERME; Pg 21, Modified]</i>	ERM-1.1 ERM-1.2 ERM-1.4 ERM-1.6 ERM-1.7 ERM-1.8 ERM-1.9 ERM-1.12	RMA, Planning	■			

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Implementation	Implements What Policy	Who is Responsible	2007-2010	2010-2015	2015-2030	On-Going
8. The County shall incorporate into the Zoning Ordinance requirements for the dedication of buffers as public open space for riparian and wetland areas for development or other discretionary permits where the development or activity will impact a riparian area. Special attention should be given to preservation of trout habitat. Buffer requirements shall be at least 100 feet from the edge of the riparian area. Larger setbacks may be required if recommended by biological studies of the site. <i>[ERME IV-C; Biological Resources; Recommendation 9; Pg. 126, Modified]</i>	ERM-1.4 ERM-1.8	RMA, Planning				
9. The County shall actively pursue a program of acquisition or preservation of vernal pools. This can be done through a variety of mechanisms, including establishing conservation easements and trusts. <i>[ERME IV-C; Biological Resources; Issue 12; Recommendation 6] [ERME; Pg 33, Modified]</i>	ERM-1.6	RMA, Planning		■		■
10. The County shall continue efforts to maintain and enlarge wetland preserves, which provide waterfowl habitat necessary to the maintenance of the flyway route through the valley. Such wetlands should also be protected through stormwater management programs, erosion control, and public education. <i>[ERME; Water; Issue 3; Recommendation 4] [ERME; Pg 28, Modified]</i>	ERM-1.6	RMA, Planning	■			
11. The County shall develop a list of native vegetation to be used as a landscape pallet for use by citizens and developers. <i>[New Implementation]</i>	ERM-1.7	RMA, Planning	■			
12. The County shall classify and preserve private lands which are prime timber lands and reserve them for that use, while at the same time, encouraging compatible recreation and open space uses. <i>[ERME IV-C; Vegetation; Recommendation 1] [ERME; Pg 86, Modified]</i>	ERM-1.10	RMA, Planning		■		■

Tulare County General Plan

Implementation	Implements What Policy	Who is Responsible	2007-2010	2010-2015	2015-2030	On-Going
13. The County shall protect oak trees throughout the foothill and mountain areas. Preservation methods may include agreements with the owner, conservation easements, and purchase of the property by the County or other organization such as the Sequoia Riverlands Trust. <i>[ERME IV-C; Biological Resources; Issue 12; Recommendation 5] [ERME; Pg 33, Modified]</i>	ERM-1.12	RMA, Planning				■
14. The County shall establish a program to require the replacement planting of native oaks where oak woodlands are proposed for alteration by development projects.	ERM-1.12	RMA, Planning	■			
15. The County shall institute an enforcement program that provides consequences for the destruction of wildlife, natural biological control organisms, and other damages beyond the boundaries of the control area resulting from the inappropriate application of pesticides or herbicides. This should include damages caused by wind drift, also those caused by irrigation waters impregnated with pesticides or herbicides, which are ejected into waterways and public bodies. <i>[ERME IV-C; Pesticides; Recommendation 2] [ERME; Pg 131, Modified]</i>	ERM-1.13	Environmental Health	■			
16. The County shall promote a public relations program which will explain typical agricultural operations and the County's Right to Farm stance for new home buyers. <i>[ERME IV-C; Pesticides; Recommendation 3] [ERME; Pg 131, Modified]</i>	ERM-1.13	RMA, Planning	■			■
17. Tulare County shall establish procedures to allow for the timely recognition of identified and/or potential mineral deposits to be recognized by the Board of Supervisors, so that said deposits may be protected from future incompatible land uses. <i>[MRPAC June 28, 2006]</i>	ERM-2.1 ERM-2.2 ERM-2.3	RMA, Planning				

8. Environmental Resource Management

Implementation	Implements What Policy	Who is Responsible	2007- 2010	2010- 2015	2015- 2030	On- Going
<p>18. RMA staff shall report annually to the Planning Commission and Board of Supervisors with updated information from the California Geological Survey on the following: 1) update annual production/consumption figures for construction grade rock, sand & gravel usage in Tulare County; 2) projected 50 year requirements for construction grade rock, sand & gravel in Tulare County; 3) update actual permitted reserves in Tulare County and the status of any pending applications for new mining permits or modification of existing permits; and 4) summary of projected remaining life of permitted reserves in Tulare County. [MRPAC June 28, 2006]</p>	<p>ERM-2.1 ERM-2.2 ERM-2.3 ERM-2.4</p>	<p>RMA, Planning</p>				
<p>19. An Appendix "A" is hereby created as a part of the Mineral Resources section of the Environmental Resource Management Element of the Tulare County General Plan to receive approved classification reports transmitted by the State Mining and Geology Board, as adopted pursuant to Measure 23. [MRPAC June 28, 2006]</p>	<p>ERM-2.2 ERM-2.3 ERM-2.4 ERM-2.5</p>	<p>RMA, Planning</p>				
<p>20. Potential alluvial and hard rock mineral deposits shall be incorporated as part of the Environmental Resource Management Element of the Tulare County General Plan by amendment to the Open Space Plan Map with property specific overlays. Future identified sites shall be incorporated, with approval, into the Mineral Resources section of the Environmental Resource Management Element. [MRPAC June 28, 2006]</p>	<p>ERM-2.4</p>	<p>RMA, Planning</p>				

Tulare County General Plan

Implementation	Implements What Policy	Who is Responsible	2007-2010	2010-2015	2015-2030	On-Going
<p>21. The location of mineral deposits within the County shall be determined and the results shall be identified on an overlay map, to be maintained and updated by Tulare County. Prior to permitting a use which would threaten the potential to extract minerals from identified or potential mineral areas, Tulare County shall prepare a statement of overriding considerations.</p>	<p>ERM-2.1 ERM-2.2 ERM-2.3 ERM-2.4</p>	<p>RMA, Planning</p>				
<p>(1) Tulare County shall coordinate with the Office of Mine Reclamation, California Department of Conservation, and the State Geological Survey on projects which may threaten the potential to extract mineral resources. [MRPAC June 28, 2006]</p>						
<p>22. Except as provided by SMARA, or required by Tulare County Ordinance or policy resolution, no new commercial, industrial, or residential development deemed to be an incompatible land use shall be permitted in areas containing identified and/or potential mineral deposits. (See Mineral Resources Appendix at the end of this element for definitions and examples of compatible and incompatible land uses from the California Public Resources Code, Division 2, Chapter 9, section 3675)</p>	<p>ERM-2.9 ERM-2.10 ERM-2.11 ERM-2.14</p>	<p>RMA, Planning</p>				
<p>(1) Tulare County shall devise procedures by way of Ordinance to mitigate significant conflicts arising from incompatible land uses.</p>						
<p>(a) Land uses considered compatible with mining include, but are not limited to, agriculture, agriculturally related industry, heavy industry, silviculture, grazing, recreation, and open space.</p>						
<p>(b) Land uses which are not compatible with mining include, but are not limited to, high density residential development, public facilities, impact-sensitive industry, and commercial uses.</p>						
<p>(See Mineral Resources Appendix at the end of this element for California Public Resources Code, Division 2, Chapter 9, section 3675 definitions of compatible and incompatible development.)</p>						

8. Environmental Resource Management

Implementation	Implements What Policy	Who is Responsible	2007- 2010	2010- 2015	2015- 2030	On- Going
<p>Prior to permitting a use which would threaten the potential to extract minerals from identified or potential mineral areas, Tulare County shall prepare a statement of overriding considerations, stating public benefits and specifying its reasons for permitting the proposed use. [MRPAC June 28, 2006]</p>						
<p>23. Tulare County shall include a statement of purpose in the Tulare County Zoning Ordinance describing the role of surface mining in the local economy, as well as the benefits of appropriate reclamation, as defined by SMARA regulations and guidelines. [MRPAC June 28, 2006]</p>	ERM-2.14	RMA, Planning				
<p>24. All surface mines, unless otherwise exempted, shall obtain a surface mining permit and an approved reclamation plan, in accordance with the Surface Mining and Reclamation Act (SMARA) requirements. (See Mineral Resources Appendix at the end of this element for detailed standards). [MRPAC June 28, 2006]</p>	ERM-2.12 ERM-2.3	RMA, Planning				
<p>25. Tulare County shall establish procedures to provide for a thorough and comprehensive pre-application process that will allow for a more predictable surface mine and reclamation permitting process. [MRPAC June 28, 2006]</p>	ERM-2.6	RMA, Planning				
<p>26. Tulare County may enter into Memorandums of Understanding (MOUs), or develop other protocols for coordination with agencies of jurisdiction for the purposes of coordinating and simplifying the administration and processing of both SMARA and California Environmental Quality Act (CEQA) documents. [MRPAC June 28, 2006]</p>	ERM-2.12 ERM-2.13	RMA, Planning				

Tulare County General Plan

Implementation	Implements What Policy	Who is Responsible	2007-2010	2010-2015	2015-2030	On-Going
<p>27. Tulare County shall establish procedures to provide for minor modifications to surface mining permits and reclamation plans, provided the modifications do not materially affect the determination of the decision-making administrative approvals. Such modifications shall be noted on the approved plans and shall be initialed by the Resource Management Agency Director or designee. Any proposed modifications that change conditions of approval will require public notice.</p>	ERM-2.6	RMA, Planning				
<p>28. Tulare County shall establish procedures to allow for associated uses otherwise requiring a Special Use Permit, such as rock crushers, batch plants, concrete and asphalt recycling, trucking operations, and other appurtenant uses to be processed as a part of surface mining permits and/or reclamation plans, where applicable.</p> <p>(1) Sorting, crushing, reducing, storage, recycling, refining, or other processing of minerals, or the operation of a truck depot or an asphalt or concrete batch plant, may be permitted through a surface mining permit approved for surface mining operations in lieu of requiring a special use permit, when such uses are found by the appropriate decision-making body to be a reasonably necessary adjunct to the mining operations. [MRPAC June 28, 2006]</p>	ERM-2.12	RMA, Planning				
<p>29. Tulare County shall establish procedures to assure compliance with State SMARA review requirements. [MRPAC June 28, 2006]</p>	ERM-2.14	RMA, Planning				
<p>30. The Planning staff shall periodically review the standard conditions of approval for surface mine and reclamation plans. [MRPAC June 28, 2006]</p>	ERM-2.12	RMA, Planning				
<p>31. Tulare County shall process all new surface mining permits and/or reclamation plans in a manner consistent with CEQA, focusing on water resources, air quality, agriculture, traffic, biotic, recreation, aesthetic enjoyment, and other public interest values. [MRPAC June 28, 2006]</p>	ERM-3.1	RMA, Planning				

8. Environmental Resource Management

Implementation	Implements What Policy	Who is Responsible	2007- 2010	2010- 2015	2015- 2030	On- Going
<p>32. Conditions should be imposed as a part of the permit application process which consider the potentially adverse environmental effects of surface mining operations, pursuant to CEQA. (See Mineral Resources Appendix at the end of this element for a list of Standard Conditions of Approval)</p> <p>(1) When the initial study and/or scoping process indicates the possibility of adverse impacts to water resources, including surface and underground water, no surface mining permit or reclamation plan shall be approved until the applicant has provided:</p> <p style="margin-left: 40px;">a. A hydrogeological report prepared by a qualified and impartial consultant retained by the County, and paid for by the applicant which identifies all the hydrologic and geologic features pertinent to water resources and the potential adverse quality, quantity, and flood-related risks. The County shall provide for professional independent peer review of such reports.</p> <p style="margin-left: 40px;">b. The hydrogeological report shall identify mitigation measures necessary to achieve quality and quantity characteristics of water resources at levels deemed acceptable by State and Federal water regulatory agencies, and in line with local historical data and in conformance with water rights law.</p> <p style="margin-left: 40px;">c. If at any time it is reasonably demonstrated that there is a significant negative impact to an offsite water supply, the mine operator shall be required to cease and desist all mining activity. Mining shall not be permitted to resume until the negative impact in question has been fully mitigated <i>or resolved</i>. [MRPAC June 28, 2006]</p>	ERM-2.12	RMA, Planning				

Tulare County General Plan

Implementation	Implements What Policy	Who is Responsible	2007-2010	2010-2015	2015-2030	On-Going
33. Conditions to minimize or eliminate the potential adverse impact of the operation on surrounding properties, covering such issues as access, noise, air quality, water quality and quantity, public health and safety, aesthetics, natural resources, and the socioeconomic setting, pursuant to CEQA and SMARA, should be imposed as a part of the permit process. [MRPAC June 28, 2006]	ERM-2.9 ERM-2.10 ERM-2.11 ERM-2.12	RMA, Planning				
34. Tulare County shall establish criteria for all new surface mining permits so as to guide mineral deposit development toward areas containing compatible land uses. [MRPAC June 28, 2006]	ERM-2.11	RMA, Planning				
35. Conditions to minimize or eliminate the potential adverse impact of development on identified and/or potential mineral deposits, covering such issues as access, traffic, noise, water quality and quantity, air quality, public health and safety, aesthetics, natural resources, and the socioeconomic setting, pursuant to CEQA and SMARA, shall be imposed as a part of the permit process. [MRPAC June 28, 2006]	ERM-2.10 ERM-2.14	RMA, Planning				
36. The owner/operator shall obtain all necessary permits and comply with all local, State, and Federal agency codes, policies, and regulations. [MRPAC June 28, 2006]	ERM-2.14	RMA, Planning				
37. Consistent with SMARA requirements, Tulare County shall conduct an annual inspection of all extraction sites.	ERM-2.14	RMA, Planning				
(1) All general conditions and all special conditions of approval of the surface mining permit and approved reclamation plan must be complied with at all times in order to continue the uses allowed. [MRPAC June 28, 2006]						
38. An initial review of compliance shall be conducted by the Tulare County Resource Management Agency Director or designee six months after the granting of the permit. Annual reviews shall be conducted throughout the life of the permit thereafter. [MRPAC June 28, 2006]	ERM-2.13	RMA, Planning				

8. Environmental Resource Management

Implementation	Implements What Policy	Who is Responsible	2007- 2010	2010- 2015	2015- 2030	On- Going
39. Tulare County shall establish procedures to bring a surface mining operation into compliance in the event it fails to comply with any conditions of approval. Procedures shall be established to promptly abate illegal mining operations conducted without permits. [MRPAC June 28, 2006]	ERM-2.6	RMA, Planning				
40. "The County shall ensure that the air pollution variance system is actively enforced in order to uphold established rules and regulations. Air pollution inspectors shall have cease and desist powers in order to stop offenders promptly upon discovery. [Air Quality Policy #AQ-4.8, from Tulare County General Plan Update Admin. Draft May 21, 2006 (new policy) p.9-6]	ERM-2.12	RMA, Planning				
41. Tulare County shall establish procedures to allow the Zoning Administrator to approve surface mining permits and reclamation plans for existing vested interest mining operations. [MRPAC June 28, 2006]	ERM-2.6	RMA, Planning				
42. Reclamation plans shall provide for an appropriate and beneficial use of the land, consistent with the Tulare County General Plan, subsequent to the completion of surface mining activities. [MRPAC June 28, 2006]	ERM-2.10	RMA, Planning				
43. Financial assurances shall be required as a part of the reclamation plan approval process. Said assurances shall be reviewed on an annual basis by the lead agency, and adjusted as necessary, to assure that sufficient funds are maintained to carry out the reclamation plan, as provided for in Measure 42. [MRPAC June 28, 2006]	ERM-2.12	RMA, Planning				
44. Areas containing mineral springs and seeps, where such seeps and springs appear to be vital to the continuation of wildlife in the area, shall be protected. Protection techniques may include avoidance and or setback requirements. [ERME IV-C; Biological Resources; Recommendation 7; Pg. 126], [ERME IV-C; Biological Resources; Issue 12; Recommendation 4] [ERME; Pg 33, Modified]	ERM-2.9 ERM-3.1	RMA, Planning	■			

Tulare County General Plan

Implementation	Implements What Policy	Who is Responsible	2007-2010	2010-2015	2015-2030	On-Going
45. When considering developments proposed for areas adjacent to the Kaweah and Tule Rivers, Lewis Creek, and other waterways with aggregate potential, such development shall be planned to not hinder future extraction of these commercially important minerals. <i>[ERME IV-B; Land; Issue 8; Recommendation 5]</i> <i>[ERME; Pg 30, Modified]</i>	ERM-2.10 ERM-2.11	RMA, Planning				■
46. For all new mining operations or expansions requiring new or amended permits from the County, the County will require submittal and approval of a reclamation plan, in accordance with SMARA requirements. Reclamation should be done on a phased basis as extraction from phases are completed (as opposed to reclamation at the end closure of the mine). <i>[New Implementation]</i>	ERM-2.14	RMA, Planning				■
47. For all new mining operations or expansions requiring new or amended permits from the County, the reclamation plan shall be accompanied by a financing plan and securities for reclamation, as agreed by the County, and in accordance with SMARA requirements. <i>[New Implementation]</i>	ERM-2.14	RMA, Planning				■
48. The County Board of Supervisors shall establish and adjust, as appropriate, a park development impact fee based on a level of service to provide for funding that meets the actual cost, park acquisition, and development. <i>[New Implementation]</i>	ERM-5.3 ERM-5.6	RMA, Planning	■			■
49. The County shall encourage Community Service Districts (CSD), or similar local entities to assume parkland acquisition, development, operations, and maintenance functions in established areas.. <i>[New Implementation]</i>	ERM-5.1 thru ERM-5.17	RMA, Planning				■
50. When appropriate, based on the size of the development or if new park facilities are installed as part of an approved residential project, the County shall require the creation of a service district or landscaping and lighting district to maintain the park and its facilities. <i>[New Implementation]</i>	ERM-5.1 thru ERM-5.17	RMA, Planning				■

8. Environmental Resource Management

Implementation	Implements What Policy	Who is Responsible	2007- 2010	2010- 2015	2015- 2030	On- Going
51. Access to suitable recreation land shall be obtained through various types of acquisition and public private joint agreement arrangements, as applicable. Maximum efforts should be concentrated upon acquisition of recreation sites within one hour's travel time from urban concentrations throughout the County and sites that can be developed for intensive use. <i>[ERME; Recreation; Issue 10; Recommendation 8] [ERME; Pg 31, Modified]</i>	ERM-5.6 ERM-5.10	RMA, Planning				■
52. The County shall develop a shoreline development standards regulating uses along water bodies and waterways, such as well drilling, location of septic tanks, building setbacks, lot sizes, public access, and encouragement of protection of scenic and recreational assets. <i>[ERME; Water; Issue 1; Recommendation 1] [ERME; Water; Issue 2; Recommendation 5] [ERME; Pg 27, Modified]</i>	ERM-5.7	RMA, Planning	■			
53. Developers of new subdivisions who propose to build public recreation facilities shall be required to post adequate bonds or cash deposits to assure completion of the entire facility. <i>[ERME; Recreation; Issue 10; Recommendation 14] [ERME; Pg 32, Modified]</i>	ERM-5.10	RMA, Planning				■
54. Tulare County shall initiate the development of a park master plan to cover facilities needed to serve the unincorporated communities and hamlets and regional park needs in the county. Emphasis should be given to classifying and quantifying the present and future needs of all socio-economic groups and visitors, with special emphasis on deficiencies in recreation for low-income residents. An inventory of potential park and recreation areas should be made and a program of priorities established with proposed methods of financing. <i>[ERMI IV-B; Recreation; Recommendation 1] [ERMI; Pg. 22, Modified] [ERME IV-C; Open Space; Recommendation 4; Pg. 109, Modified]</i>	ERM-5.10	RMA, Planning	■			

Tulare County General Plan

Implementation	Implements What Policy	Who is Responsible	2007-2010	2010-2015	2015-2030	On-Going
55. Scenic and open space easements shall be acquired through subdivision and development approvals including, but not limited to, wooded areas, flood plains, scenic and historic sites, shorelines, and other recreation areas. <i>[ERME; Recreation; Issue 10; Recommendation 13] [ERME; Pg 32, Modified] [ERME IV-C; Open Space; Recommendation 6; Pg. 109, [ERME IV-C; Open Space; Policy 12; Pg. 102, Modified]</i>	ERM-5.14	RMA, Planning				■
56. The County shall incorporate provisions into development regulations that in the event archaeological resources are discovered during site excavation, grading, or construction, work on the site will be suspended until the significance of the features can be determined by a qualified archaeologist. If significant resources are determined to exist, the archaeologist shall make recommendations for protection or recovery of the resource. <i>[New Implementation]</i>	ERM-6.1 ERM-6.2 ERM-6.3 ERM-6.4 ERM-6.9	RMA, Planning	■			
57. The County shall maintain a Historic Site Preservation Committee. This committee shall include representatives from each community that have an interest in and knowledge of historic preservation. Activities of the committee include: <ul style="list-style-type: none"> ▪ Inventory historical sites and buildings worthy of preservation. ▪ Advisory group to the Board of Supervisors and the Planning Commission. ▪ Review and comment on development proposals that threaten to encroach on historical assets. ▪ Determine appropriate locations for potential status as a Certified Local Government (CLG). <i>[ERME; Recreation; Issue 10; Recommendation 5.] [ERME; Pg 31, Modified]</i> 	ERM-6.2 ERM-6.6 ERM-6.8	RMA, Planning				■

8. Environmental Resource Management

Implementation	Implements What Policy	Who is Responsible	2007- 2010	2010- 2015	2015- 2030	On- Going
58. The County shall maintain county-wide coverage of soil resources in order to assure detailed and up-to-date mapping. Mapping should identify areas of: <ol style="list-style-type: none"> a. Soil and rock units that will support large structures without costly and special engineering design; b. Soils that present foundation problems because of excess plasticity, high shrink-swell properties, saturation with large volumes of water, or subsidence danger resulting from either too much or too little water; c. Highly corrosive soil and rock units; d. Highly acid or alkaline soils.; and, e. Location of oil and mining resources [ERME IV-C; Soils; Recommendation 8], [ERME; Pg 59] [ERME IV-C; Soils; Recommendation 3] [ERME; Pg 59, Modified] 	ERM-7.1 ERM-7.2	RMA, Planning		■		
59. The County shall adopt standards applicable to all types of man-made disruption, including drainage alternations of soils and subsurface geological features in order to minimize erosion and sedimentation problems. [ERME IV-C; Soils; Recommendation 4] [ERME; Pg 59]	ERM-7.1 ERM-7.2	RMA, Planning	■			
60. Groundwater and soil conditions shall be identified prior to subdividing and road and building construction and such development properly engineered to control potential landslides in areas of unstable soils as well as substantial amounts of soil erosion. [ERME IV-B; Land; Issue 7; Recommendation 4] [ERME; Pg 30]	ERM-7.1 ERM-7.2	RMA, Planning				■

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PUBLIC FACILITIES AND SERVICES ELEMENT



INTRODUCTION

Fresno County development is dependent on a complex network of public facilities and services. Each type of service has a unique set of constraints and issues and must adapt to growth and change differently. The General Plan sets out policies and implementation programs to respond to this variety of issues and constraints. Since the major themes of the General Plan include directing urban growth to existing communities, limiting the intrusion of development onto productive agricultural land, and limiting the spread of rural residential development, demand for public facilities and services will be controlled.

The Public Facilities and Services Element is organized accordingly into ten sections: General Public Facilities and Services; Funding; Water Supply and Delivery; Wastewater Collection, Treatment, and Disposal; Storm Drainage and Flood Control; Landfills, Transfer Stations, and Solid Waste Processing Facilities; Law Enforcement; Fire Protection and Emergency Medical Services; School and Library Facilities; and Utilities.

A. GENERAL PUBLIC FACILITIES AND SERVICES

Modern development requires a wide range of publicly-provided facilities and services, such as water, wastewater disposal, storm drainage, and garbage collection. The General Plan seeks to provide for the logical and efficient extension of these services as new development occurs.

Policies in this section seek to ensure public facilities and services are available in a timely fashion to serve new development. Related policies are included in Section LU-E, Non-Agricultural Rural Development; Section LU-F, Urban Development Patterns; LU-G, Incorporated City, Fringe Area and Unincorporated Community Development; Section PF-B, Funding; Section PF-C, Water Supply and Delivery; Section PF-D, Wastewater Collection, Treatment, and Disposal; and PF-E, Storm Drainage and Flood Control.

Goal PF-A To ensure the timely development of public facilities and to maintain an adequate level of service to meet the needs of existing and future development.

Policies

Policy PF-A.1 The County shall ensure through the development review process that public facilities and services will be developed, operational, and available to serve new development. The County shall not approve new development where existing facilities are inadequate unless the applicant can demonstrate that all necessary public facilities will be installed or adequately financed and maintained (through fees or other means).

Policy PF-A.2 The County shall require new industrial development to be served by community sewer, stormwater, and water systems where such systems are available or can feasibly be provided.

Definitions for the Public Facilities and Services Element

Capital Improvement Program (CIP): A plan that matches the costs of future projects such as water, sewers, roads, and storm drainage to anticipated revenues. It is a governmental timetable for constructing the permanent improvements and includes timing of the projects, their costs, and the methods for financing.

Composting: To convert a mixture of decaying organic matter into fertilizer or soil amendment.

Municipal Solid Waste: All solid wastes generated by residential, commercial, and industrial sources, as well as all solid waste generated at construction and demolition sites and at food-processing facilities, which are collected and transported under the authorization of a jurisdiction or are self-hauled.

Individual On-site Sewage Disposal Systems: A sewage-disposal system that includes a settling tank through which liquid sewage flows and in which solid sewage settles and is decomposed by bacteria in the absence of oxygen. On-site (septic) systems are often used for individual-home waste disposal where an urban sewer system is not available.

Inert Waste Disposal Site: A tract of land which is used for the disposal of inert solid waste which includes rock, concrete, brick, sand, soil, fines, asphalt, and unsorted construction and demolition wastes. Inert solid waste shall not contain hazardous waste or soluble pollutants at concentrations in excess of applicable water quality objectives, and shall not contain significant quantities of decomposable waste.

Public and Quasi-Public Facilities: Institutional, academic, governmental, and community service uses either publicly owned or operated by non-profit organizations.

Regional Landfill: A landfill designed to serve multiple entities (i.e., several cities and unincorporated areas).

Resource Recovery Facility: A solid waste facility designed to utilize a mixed stream of municipal solid waste for conversion to energy or as fuel for conversion to energy after other reusable solid wastes have been reclaimed.

Solid Waste: All putrescible and nonputrescible solid, semisolid, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semisolid wastes, and other discarded solid and semisolid wastes. Solid waste does not include hazardous waste.

Solid Waste Facility: A place, location, tract of land, area, or premises which is in use or intended to be used or which has been used for the disposal or management of municipal solid waste. Solid waste facilities do not include facilities for management of segregated separated waste for salvage or recovery, including segregated agricultural waste.

Transfer/Processing Stations: Solid waste facilities designed to: receive municipal solid wastes; temporarily store, separate, convert, or otherwise process the materials in the solid wastes; or to transfer the solid wastes directly from smaller vehicles to larger vehicles for transport. Excluded from this definition are facilities whose principal function is to receive, store, convert, or otherwise process wastes which have already been separated for reuse and are not intended for disposal (i.e., "recycling center").

Policy PF-A.3 The County shall require new urban commercial and urban-density residential development to be served by community sewer, stormwater, and water systems.

Policy PF-A.4 The County shall encourage the placement of irrigation canals and utility lines underground as urban residential, commercial, and industrial development takes place.

Policy PF-A.5 The County shall oppose the creation of new governmental entities within cities and their spheres of influence and will support efforts to consolidate existing special purpose districts.

Policy PF-A.6 The County shall encourage the cities to consult the County on policy changes which may have an impact on growth or the provision of urban services.

Implementation Programs

Program PF-A.A The County shall ensure that infrastructure plans or area facilities plans are prepared in conjunction with any new or expanded community or specific plans and are reviewed and updated as needed. Such plans shall contain phasing and facility improvement time lines.

Responsibility: County Administrative Officer
 Planning & Resource Management Department
 Public Works Department

Time Frame: Annually

B. FUNDING

In the past, Federal and State grants paid for many improvements and expansions of public facilities, but this type of funding has dwindled in recent years. Generally, expansion of facilities or the development of new facilities is the responsibility of the private developer. Public entities are responsible for operation and maintenance of such facilities in accordance with all State, Federal and local laws. Residents and property owners within the service area are responsible for the costs of operation and maintenance of public facilities and services which are usually collected as assessments, charges, and fees for service. The occasional need to upgrade or replace capital facilities may be funded by service fees, surcharge fees, assessments, grants, loans, bonds or other financial instruments.

Policies in this section seek to ensure that new development pays its fair share of the cost of new facilities; that there are adequate funding sources for new facilities and services; and that public financing is equitable, financially feasible, and consistent with County guidelines, policies, and existing fee programs. The policies also seek to ensure that public facilities are constructed in accordance with an approved public facilities plan and in accordance with approved standards of the County or special district. Related policies are included in Section LU-E, Non-Agricultural Rural Development; Section LU-F, Urban Development Patterns; and Section LU-G, Incorporated City, City Fringe Area, and Unincorporated Community Development.

Goal PF-B To ensure that adopted facility and service standards are achieved and maintained through the use of equitable funding methods.

Policies

Policy PF-B.1 The County shall require that new development pays its fair share of the cost of developing new facilities and services and upgrading existing public facilities and services; exceptions may be made when new development generates significant public benefits (e.g., low income housing) and when alternative sources of funding can be identified to offset foregone revenues.

Policy PF-B.2 The County shall seek broad-based funding sources for public facilities and services that benefit current and future residents of the county.

Policy PF-B.3 The County shall require that new development pays the costs of mitigating impacts on existing County facilities to the extent capacity is provided through existing infrastructure networks.

- Policy PF-B.4 The County shall require a public financing plan be in place prior to the start of construction of new development to ensure that all required public improvements are adequately funded and provided in a timely manner.
- Policy PF-B.5 The County shall ensure that public financing be equitable, financially feasible, and consistent with County guidelines, policies, and existing fee programs.
- Policy PF-B.6 If the County forms public financing districts, the County shall efficiently utilize bond proceeds, subject to the requirements of the County's policy for use of public financing for private development projects.
- Policy PF-B.7 The County shall allocate the cost of public improvements to all benefiting properties and, to the extent that a landowner is required to pay for facility oversizing, the County shall utilize reimbursement mechanisms to maintain equity among all benefiting property owners.

Implementation Programs

- Program PF-B.A The County shall prepare and adopt a Capital Improvement Program (CIP) for designing and constructing County facilities. Roadways shall be included in the separate Roadway Improvement Plan (RIP). The CIP should be updated at least every five (5) years, or concurrently with the approval of any significant amendments to the General Plan.

Responsibility: County Administrative Officer
 Planning & Resource Management Department
 Public Works Department
 Board of Supervisors

Time Frame: FY 01-02; every five (5) years thereafter

- Program PF-B.B The County shall develop and adopt ordinances specifying acceptable methods for new development to pay for new capital facilities and expanded services. Possible mechanisms include development fees, assessment districts, land/facility dedications, county service areas, and community facilities districts. (See Policies PF-B.1 and PF-B.3)

Responsibility: County Administrative Officer
 Planning & Resource Management Department
 Public Works Department
 Board of Supervisors

Time Frame: FY 01-02; 02-03

C. WATER SUPPLY AND DELIVERY

Water supply and delivery is one of the most critical issues for Fresno County and is essential to the environment, economy, and quality of life in Fresno County. Readily available groundwater and the development of facilities for the storage and conveyance of surface water have allowed Fresno County to grow and prosper as the nation's premier agricultural region. Fresno County's agriculture and its many dependent businesses are sustained by an affordable and reliable water supply made possible through conjunctive use of groundwater and stored surface water. In addition, the ready availability of high quality groundwater allows most residents, municipalities, and industries within Fresno County to meet their water supply needs without expensive delivery and treatment infrastructure.

However, there are a number of factors affecting the county's existing water resources. Throughout much of the county, groundwater is in a state of overdraft. In some county areas, contamination from natural or manmade sources has reduced groundwater quality such that its use requires treatment. Increased contamination of surface water sources is also an emerging concern. There are also concerns regarding the import and export of surface water that could affect long-term supplies. Finally, there is the increase in water demand that will accompany the county's anticipated growth.

Policies in this section seek to ensure an adequate water supply for both domestic and agricultural users by providing necessary facility improvements, ensuring water availability, and utilizing water conservation measures. Related policies are included in Section OS-A, Water Resources; Section PF-B, Funding; and Section PF-E, Storm Drainage and Flood Control.

Goal PF-C To ensure the availability of an adequate and safe water supply for domestic and agricultural consumption.

Policies

General

- Policy PF-C.1 The County shall actively engage in efforts and support the efforts of others to retain existing water supplies within Fresno County.
- Policy PF-C.2 The County shall actively engage in efforts and support the efforts of others to import flood, surplus, and other available waters for use in Fresno County.
- Policy PF-C.3 To reduce demand on the county's groundwater resources, the County shall encourage the use of surface water to the maximum extent feasible.
- Policy PF-C.4 The County shall support efforts to expand groundwater and/or surface water storage that benefits Fresno County.
- Policy PF-C.5 The County shall develop a County water budget to determine long-term needs and to determine whether existing and planned water resource enhancements will meet the county's needs over the twenty (20) year General Plan horizon.
- Policy PF-C.6 The County shall support water banking when the program has local sponsorship and involvement and provides new benefits to the County.
- Policy PF-C.7 The County shall recommend to all cities and urban areas within the county that they adopt the most cost-effective urban best management practices (BMPs) published and updated by the California Urban Water Agencies, California Department of Water Resources, or other appropriate agencies as a means of meeting some of the future water supply needs.

- Policy PF-C.8 The County shall require preparation of water master plans for areas undergoing urban growth.
- Policy PF-C.9 The County shall work with local irrigation districts to preserve local water rights and supply.
- Policy PF-C.10 The County shall require any community water system in new residential subdivisions to be owned and operated by a public entity.
- Policy PF-C.11 The County shall assure an on-going water supply to help sustain agriculture and accommodate future growth by allocation of resources necessary to carry out the water resource management programs.

Domestic Water Supply

- Policy PF-C.12 The County shall approve new development only if an adequate sustainable water supply to serve such development is demonstrated.
- Policy PF-C.13 In those areas identified as having severe groundwater level declines or limited groundwater availability, the County shall limit development to uses that do not have high water usage or that can be served by a surface water supply.
- Policy PF-C.14 The County shall require that water supplies serving new development meet US Environmental Protection Agency and California Department of Health Services and other water quality and quantity standards.
- Policy PF-C.15 The County shall require that surface water used to serve new development be treated in accordance with the requirements of the California Surface Water Treatment Rule (California Code of Regulations, Title 22, Division 4, Chapter 17).
- Policy PF-C.16 If the cumulative effects of more intensive land use proposals are detrimental to the water supplies of surrounding areas, the County shall require approval of the project to be dependent upon adequate mitigation. The County shall require that costs of mitigating such adverse impacts to water supplies be borne proportionately by all parties to the proposal.
- Policy PF-C.17 The County shall, prior to consideration of any discretionary project related to land use, undertake a water supply evaluation. The evaluation shall include the following:
- a. A determination that the water supply is adequate to meet the highest demand that could be permitted on the lands in question. If surface water is proposed, it must come from a reliable source and the supply must be made "firm" by water banking or other suitable arrangement. If groundwater is proposed, a hydrogeologic investigation may be required to confirm the availability of water in amounts necessary to meet project demand. If the lands in question lie in an area of limited groundwater, a hydrogeologic investigation shall be required.

- b. A determination of the impact that use of the proposed water supply will have on other water users in Fresno County. If use of surface water is proposed, its use must not have a significant negative impact on agriculture or other water users within Fresno County. If use of groundwater is proposed, a hydrogeologic investigation may be required. If the lands in question lie in an area of limited groundwater, a hydrogeologic investigation shall be required. Should the investigation determine that significant pumping-related physical impacts will extend beyond the boundary of the property in question, those impacts shall be mitigated.
- c. A determination that the proposed water supply is sustainable or that there is an acceptable plan to achieve sustainability. The plan must be structured such that it is economically, environmentally, and technically feasible. In addition, its implementation must occur prior to long-term and/or irreversible physical impacts, or significant economic hardship, to surrounding water users.

Policy PF-C.18 In the case of lands entitled to surface water, the County shall approve only land use-related projects that provide for or participate in effective utilization of the surface water entitlement such as:

- a. Constructing facilities for the treatment and delivery of surface water to lands in question;
- b. Developing facilities for groundwater recharge of the surface water entitlement;
- c. Participating in the activities of a public agency charged with the responsibility for recharge of available water supplies for the beneficial use of the subject lands.

Policy PF-C.19 The County shall discourage the proliferation of small community water systems.

Policy PF-C.20 The County shall not permit new private water wells within areas served by a public water system.

Agricultural Water Supply

Policy PF-C.21 The County shall promote the use of surface water for agricultural use to reduce groundwater table reductions.

Water Transfer Policies

Policy PF-C.22 The County supports short-term water transfers as a means for local water agencies to maintain flexibility in meeting water supply requirements. The County shall support long-term transfer, assignment, or sale of water and/or water entitlements to users outside of the County only under the following circumstances:

- a. The impacts of the transfer on Fresno County are mitigated;
- b. The transfer is part of a long-term solution to the region's water supply shortfall; and

- c. The transfer will not result in a net decrease in the availability of surface and/or groundwater to water users within Fresno County.

Policy PF-C.23 The County shall regulate the transfer of groundwater for use outside of Fresno County. The regulation shall extend to the substitution of groundwater for transferred surface water.

Policy PF-C.24 The County shall encourage the transfer of unused or surplus agricultural water to urban uses within Fresno County.

Water Conservation

Policy PF-C.25 The County shall require that all new development within the County use water conservation technologies, methods, and practices as established by the County.

Policy PF-C.26 The County shall encourage the use of reclaimed water where economically, environmentally, and technically feasible.

Policy PF-C.27 The County shall adopt, and recommend to all cities that they also adopt, the most cost-effective urban best water conservation management practices circulated and updated by the California Urban Water Agencies, California Department of Water Resources, or other appropriate agencies.

Policy PF-C.28 The County shall encourage agricultural water conservation where economically, environmentally, and technically feasible.

Policy PF-C.29 The County shall, in order to reduce excessive water usage, require tiered water pricing within County Service Areas and County Waterworks Districts.

Policy PF-C.30 The County shall generally not approve land use-related projects that incorporate a man-made lake or pond that will be sustained by the use of groundwater.

Implementation Programs

Program PF-C.A The County shall develop a process for resolution of water supply problems and apply the process when areas of need are identified.

Responsibility: Planning & Resource Management Department
 Time Frame: FY 01-02

Program PF-C.B The County shall adopt a well construction and destruction ordinance that will include among other requirements the mapping of location information on abandoned wells in the County GIS database and which includes a procedure for ensuring that abandoned wells are properly destroyed.

Responsibility: Planning & Resource Management Department
 Community Health Department
 Time Frame: FY 02-03

Program PF-C.C The County shall prepare or cause to be prepared water master plans for water delivery systems for areas undergoing urban growth. The County shall have approved such plans prior to implementation. (See Policy PF-C.8)

Responsibility: Public Works Department, Surveyor's Office
Planning & Resource Management Department
Time Frame: As needed

Program PF-C.D The County shall develop and implement a tiered water pricing structure for County Service Areas and Waterworks Districts. (See Policy PF-C.29)

Responsibility: Public Works Department
Planning & Resource Management Department
Time Frame: FY 02-03

Program PF-C.E The County shall establish water demand standards based on types and sizes of uses to serve as a basis for determining the adequacy of a proposed water supply for new development. (See Policy PF-C.14)

Responsibility: Public Works Department
Time Frame: FY 01-02

Program PF-C.F The County shall establish a review and/or regulatory process for proposed transfers of surface water to areas outside of the county and for substitution of groundwater for transferred surface water. (See Policy PF-C.23)

Responsibility: Planning & Resource Management Department
Time Frame: FY 00-01

Program PF-C.G The County shall develop a list of water conservation technologies, methods, and practices that maximize the beneficial use of water resources. The County shall review and update the list periodically to eliminate practices that no longer prove beneficial and add new technologies that become available. (See Policy PF-C.28)

Responsibility: Planning & Resource Management Department
Time Frame: FY 01-02

D. WASTEWATER COLLECTION, TREATMENT, AND DISPOSAL

Cities and special districts own and operate numerous wastewater collection systems throughout the county. Residents in rural areas that are not served by centralized systems use on-site septic systems. Industries are required to provide treatment or pre-treatment of their wastewater and obtain separate discharge permits from the Central Valley California Regional Water Quality Control Board (Regional Board). Many unincorporated communities have elected to form special districts to provide sewage collection and wastewater treatment, as well as other services. Approximately 30 of these districts provide wastewater services. The County owns and operates ten wastewater treatment facilities on behalf of water works districts and county service areas.

Fresno County's Mandatory Sewer Connection Ordinance requires connection to public sewer systems where they are available, precluding the issuance of permits for installation of individual on-site septic systems in such cases. In areas where public systems become available where they did not previously exist, structures served by individual septic systems must be connected to the public system within three years, or sooner if the existing facilities pose a health risk.

Policies in this section seek to ensure the safe disposal of wastewater by promoting efficient water use and reduced wastewater system demand in centralized systems and by ensuring safe development, operation, and maintenance of on-site septic systems. Related policies are included in Section OS-A, Water Resources, and Section PF-B, Funding.

Goal PF-D To ensure adequate wastewater collection and treatment and the safe disposal of wastewater.

Policies

- Policy PF-D.1 The County shall encourage the installation of public wastewater treatment facilities in existing communities that are experiencing repeated septic system failures and lack sufficient area for septic system repair or replacement and/or are posing a potential threat to groundwater.
- Policy PF-D.2 The County shall require that any new community sewer and wastewater treatment facilities serving residential subdivisions be owned and maintained by a County Service Area or other public entity approved by the County.
- Policy PF-D.3 The County shall require that any new community wastewater treatment facility meet the policy standard of Policy OS-A.28.
- Policy PF-D.4 The County shall limit the expansion of unincorporated, urban density communities to areas where community wastewater treatment facilities can be provided.
- Policy PF-D.5 The County shall promote efficient water use and reduced wastewater system demand by:
- a. Requiring water-conserving design and equipment in new construction;
 - b. Encouraging retrofitting with water-conserving devices; and
 - c. Designing wastewater systems to minimize inflow and infiltration, to the extent economically feasible.
- Policy PF-D.6 The County shall permit individual on-site sewage disposal systems on parcels that have the area, soils, and other characteristics that permit installation of such disposal facilities without threatening surface or groundwater quality or posing any other health hazards and where community sewer service is not available and cannot be provided.
- Policy PF-D.7 The County shall require preparation of sewer master plans for wastewater treatment facilities for areas experiencing urban growth.

Implementation Programs

Program PF-D.A The County shall prepare or cause to be prepared a sewer master plan for wastewater treatment facilities for areas experiencing urban growth. The County shall have approved such plans prior to implementation. (See Policy PF-D.7)

Responsibility: Public Works Department, Surveyor's Office
 Planning & Resource Management Department
 Time Frame: As needed

E. STORM DRAINAGE AND FLOOD CONTROL

Flooding is a natural occurrence in the Central Valley because it is the drainage basin for thousands of watershed acres of Sierra Nevada and Coast Range foothills and mountains. Flooding in Fresno County occurs primarily along the Kings River in the central-eastern portion of the county and some sections of the San Joaquin River and along many of the foothill streams along the east and west sides of the valley.

The valley floor of Fresno County has many challenges concerning storm drainage and flood control due to its mountain watersheds and the flat topography of the central valley floor. During the winter and spring months, river and stream systems in Fresno County swell with heavy rainfall and snow melt runoff. Diverting and retaining this water for groundwater replenishment is crucial for not only public safety but maintaining an adequate water supply for domestic and agricultural uses.

Policies in this section seek to ensure safe, efficient, and environmentally-sound means to drain stormwater and provide flood control by providing necessary facility improvements, ensuring adequate funding, providing a means to detain/retain runoff, and ensuring the facilities meet State environmental regulations. Related policies are included in Section HS-C, Flood Hazards; Section OS-A, Water Resources; and Section PF-B, Funding.

Goal PF-E To provide efficient, cost-effective, and environmentally-sound storm drainage and flood control facilities that protect both life and property and to divert and retain stormwater runoff for groundwater replenishment.

Policies

Policy PF-E.1 The County shall coordinate with the agencies responsible for flood control or storm drainage to assure that construction and acquisition of flood control and drainage facilities are adequate for future urban growth authorized by the County General Plan and city general plans.

Policy PF-E.2 The County shall encourage the agencies responsible for flood control of storm drainage to coordinate the multiple use of flood control and drainage facilities with other public agencies.

Policy PF-E.3 The County shall encourage the Fresno Metropolitan Flood Control District to spread the cost of construction and acquisition of flood control and drainage facilities in the most equitable manner consistent with the growth and needs of this area.

- Policy PF-E.4 The County shall encourage the local agencies responsible for flood control or storm drainage to require that storm drainage systems be developed and expanded to meet the needs of existing and planned development.
- Policy PF-E.5 The County shall only approve land use-related projects that will not render inoperative any existing canal, encroach upon natural channels, and/or restrict natural channels in such a way as to increase potential flooding damage.
- Policy PF-E.6 The County shall require that drainage facilities be installed concurrently with and as a condition of development activity to ensure the protection of the new improvements as well as existing development that might exist within the watershed.
- Policy PF-E.7 The County shall require new development to pay its fair share of the costs of Fresno County storm drainage and flood control improvements within unincorporated areas.
- Policy PF-E.8 The County shall encourage the local agencies responsible for flood control or storm drainage to precisely locate drainage facilities well in advance of anticipated construction, thereby facilitating timely installation and encouraging multiple construction projects to be combined, reducing the incidence of disruption of existing facilities.
- Policy PF-E.9 The County shall require new development to provide protection from the 100-year flood as a minimum.
- Policy PF-E.10 In growth areas within the jurisdiction of a local agency responsible for flood control or storm drainage, the County shall encourage that agency to design drainage facilities as if the entire areas of service were developed to the pattern reflected in the adopted General Plans to assure that the facilities will be adequate as the land use intensifies.
- Policy PF-E.11 The County shall encourage project designs that minimize drainage concentrations and maintain, to the extent feasible, natural site drainage patterns.
- Policy PF-E.12 The County shall coordinate with the local agencies responsible for flood control or storm drainage to ensure that future drainage system discharges comply with applicable State and Federal pollutant discharge requirements.
- Policy PF-E.13 The County shall encourage the use of natural storm water drainage systems to preserve and enhance natural drainage features.
- Policy PF-E.14 The County shall encourage the use of retention-recharge basins for the conservation of water and the recharging of the groundwater supply.
- Policy PF-E.15 The County should require that retention-recharge basins be suitably landscaped to complement adjacent areas and should, wherever possible, be made available to the community to augment open space and recreation needs.

- Policy PF-E.16 The County shall minimize sedimentation and erosion through control of grading, cutting of trees, removal of vegetation, placement of roads and bridges, and use of off-road vehicles. The County shall discourage grading activities during the rainy season, unless adequately mitigated, to avoid sedimentation of creeks and damage to riparian habitat.
- Policy PF-E.17 The County shall encourage the local agencies responsible for flood control or storm drainage retention-recharge basins located in soil strata strongly conducive to groundwater recharge to develop and operate those basins in such a way as to facilitate year-round groundwater recharge.
- Policy PF-E.18 The County shall encourage the local agencies responsible for flood control or storm drainage to plan retention-recharge basins on the principle that the minimum number will be the most economical to acquire, develop, operate, and maintain.
- Policy PF-E.19 In areas where urbanization or drainage conditions preclude the acquisition and use of retention-recharge basins, the County shall encourage the local agencies responsible for flood control or storm water drainage to discharge storm or drainage water into major canals and other natural water courses subject to the following conditions:
- a. The volume of discharge is within the limits of the capacity of the canal or natural water course to carry the water.
 - b. The discharge complies with the requirements of applicable state and federal regulations (e.g., National Pollution Discharge Elimination System).
 - c. The agency responsible for ownership, operation, or maintenance of the canal or natural water course approves of the discharge.
- Policy PF-E.20 The County shall require new development of facilities near rivers, creeks, reservoirs, or substantial aquifer recharge areas to mitigate any potential impacts of release of pollutants in flood waters, flowing rivers, streams, creeks, or reservoir waters.
- Policy PF-E.21 The County shall require the use of feasible and practical best management practices (BMPs) to protect streams from the adverse effects of construction activities, and shall encourage the urban storm drainage systems and agricultural activities to use BMPs.
- Policy PF-E.22 The County shall encourage the local agencies responsible for flood control or storm drainage to control obnoxious odors or mosquito breeding conditions connected with any agency facility by appropriate measures.

Implementation Programs

Program PF-E.A The County shall work with responsible flood control agencies to pursue adoption of appropriate regulations and programs as necessary and appropriate to implement required actions under State and Federal stormwater quality programs. (See Policy PF-E.13)

Responsibility: Public Works Department
 Planning & Resource Management Department
 Board of Supervisors
 Time Frame: Ongoing

F. LANDFILLS, TRANSFER STATIONS, AND SOLID WASTE PROCESSING FACILITIES

The siting of solid waste facilities in the United States has become increasingly difficult in recent years. Proper siting of solid waste facilities such as landfills, transfer and processing stations, and resource recovery facilities is crucial to ensure protection of the environment and to meet the increasingly stringent legislative requirements for such facilities.

Fresno County operates two active solid waste disposal facilities or landfills: the American Avenue Landfill and the Coalinga Landfill. These landfills have a service area of 6,000 square miles. Portions of the unincorporated areas of the county also use the Clovis Landfill and the Orange Avenue Landfill. Only a small portion of the unincorporated county's solid waste is taken to these facilities, as the Clovis Landfill serves mainly the city of Clovis, and the Orange Avenue Landfill serves mainly the city of Fresno.

Policies in this section reaffirm and incorporate the goals and policies of the County Integrated Waste Management Plan and the Memorandum of Understanding (MOU) executed between the Cities of Fresno and Clovis and the County of Fresno, which address solid waste disposal and facilities. Related policies are included in Section HS-F, Hazardous Materials.

Goal PF-F To ensure the safe and efficient disposal or recycling of solid waste generated in the county in an effort to protect the public health and safety.

Policies

Policy PF-F.1 The County shall continue to promote maximum use of solid waste source reduction, reuse, recycling, composting, and environmentally-safe transformation of wastes.

Policy PF-F.2 The County shall locate all new solid waste facilities including disposal sites, resource recovery facilities, transfer facilities, processing facilities, composting facilities, and other similar facilities in areas where potential environmental impacts can be mitigated and the facilities are compatible with surrounding land uses. Site selection for solid waste facilities shall be guided by the following criteria:

OPEN SPACE AND CONSERVATION ELEMENT



INTRODUCTION

The Open Space and Conservation Element is concerned with protecting and preserving natural resources, preserving open space areas, managing the production of commodity resources, protecting and enhancing cultural resources, and providing recreational opportunities.

The Open Space and Conservation Element sets out goals, policies, and implementation measures under three main headings: Productive Resources, Natural Resources, and Recreation and Cultural Resources. Productive Resources encompasses three sections: Water Resources; Forest Resources; and Mineral Resources. Natural Resources encompasses four sections: Wetland and Riparian Areas; Fish and Wildlife Habitat; Vegetation; and Air Quality. Finally, Recreation and Cultural Resources encompasses five sections: Parks and Recreation; Recreational Trails; Historic; Cultural; and Geologic Resources; Scenic Resources; and Scenic Roadways.

PRODUCTIVE RESOURCES

A. WATER RESOURCES

Fresno County is large and geographically diverse. The mountainous eastern region of the county receives up to 70 inches of precipitation annually, mostly in snowfall. Many small mountain lakes and streams in this region are tributaries to the San Joaquin and Kings Rivers which flow into the Central Valley. The valley and western portions of the county, by contrast, are extremely arid, with less than 10 inches of annual rainfall. Groundwater conditions and quality vary widely across the county.

There are a number of factors affecting the county's existing water resources. Throughout much of the county, groundwater is in a state of overdraft. In some county areas, contamination from natural or manmade sources has reduced groundwater quality such that its use requires treatment. Supplies of imported surface water have been reduced due to changing regulations, and there is growing pressure to allow long-term transfers of water out of the county. Finally, there is the increase in water demand that will accompany the county's anticipated growth.

Policies in this section seek to protect and enhance the surface water and groundwater resources in the county. The policies address broad water planning issues, groundwater recharge, the relationship of land use decisions to water issues, and water quality problems. Related policies are included in Section HS-C, Flood Hazards; Section PF-C, Water Supply and Delivery; Section PF-E, Storm Drainage and Flood Control; Section OS-D, Wetland and Riparian Areas; and Section LU-C, River Influence Areas. Other relevant policies are included in the Kings River Regional Plan.

Goal OS-A To protect and enhance the water quality and quantity in Fresno County's streams, creeks, and groundwater basins.

Definitions for the Open Space and Conservation Element

Archeological: Relating to the material remains of past human life, culture, or activities.

California Environmental Quality Act (CEQA): A State law requiring the State and local agencies to regulate activities with consideration for environmental protection. If a proposed activity has the potential for a significant adverse environmental impact, an environmental impact report (EIR) must be prepared and certified as to its adequacy before taking action on the proposed project.

Commercial Recreation Facilities: Facilities serving recreational needs but operated for private profit (e.g., riding stables, tourist attractions, amusement parks).

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

Consumptive Use: The component of water lost to evaporation or transpiration through agricultural, municipal, and industrial uses, including maintenance leaching, and the deep percolation to a usable water source.

Geological: Pertaining to rock or solid matter.

Habitat: The natural environment of a plant or animal.

Open Space Land: Any parcel or area of land or water that is essentially unimproved and devoted to an open space use for the purposes of: 1) the preservation of natural resources; 2) the managed production of resources; 3) outdoor recreation; or 4) public health and safety.

Rare or Endangered Species: A species of animal or plant listed in Sections 670.2 or 670.5, Title 14, California Administrative Code or Title 50, Code of Federal Regulations, Section 17.11 or Section 17.2, pursuant to the Federal Endangered Species Act designating species as rare, threatened, or endangered.

Riparian Habitat: The land and plants bordering a watercourse or lake.

River or Stream: A natural watercourse as designated by a solid line or dash and three dots symbol shown on the United States Geological Survey map most recently published, or any well-defined channel with distinguishable bed and bank that shows evidence of having contained flowing water as indicated by scourer deposit of rock, sand, gravel, soil, or debris.

Scenic Vista: An area designated, signed, and accessible to the public for purposes of viewing and sightseeing.

Vernal Pool: Ephemeral wetlands that form in shallow depressions in the ground which are underlain by a substrate that restricts water percolation. These depressions fill with rainwater during the fall and winter and can remain inundated until spring or early summer.

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

Watershed: The total area above a given point on a watercourse that contributes water to the flow of the watercourse; the entire region drained by a watercourse.

Wetland: Areas that are permanently wet or periodically covered with shallow water, such as saltwater and freshwater marshes, open or closed brackish marshes, swamps, mud flats, vernal pools, and fens. This also includes wetlands under the jurisdiction of the US Army Corps of Engineers which encompasses vernal pools and other areas with hydrology, soils, and vegetation meeting Federal regulatory standards.

Policies

General

- Policy OS-A.1 The County shall develop, implement, and maintain a plan for achieving water resource sustainability, including a strategy to address overdraft and the needs of anticipated growth.
- Policy OS-A.2 The County shall provide active leadership in the regional coordination of water resource management efforts affecting Fresno County and shall continue to monitor and participate in, as appropriate, regional activities affecting water resources, groundwater, and water quality.
- Policy OS-A.3 The County shall provide active leadership in efforts to protect, enhance, monitor, and manage groundwater resources within its boundaries.
- Policy OS-A.4 The County shall update, implement, and maintain its Groundwater Management Plan.
- Policy OS-A.5 The Fresno County Water Advisory Committee shall provide advice to the Board of Supervisors on water resource management issues.
- Policy OS-A.6 The County shall support efforts to create additional water storage that benefits Fresno County, and is economically, environmentally, and technically feasible.
- Policy OS-A.7 The County shall develop a repository for the collection of County water resource information and shall establish and maintain a centralized water resource database. The database shall incorporate surface and groundwater data and provide for the public dissemination of water resource information.
- Policy OS-A.8 The County shall develop and maintain a water budget (i.e., an accounting of all inflows and outflows of water into a specified area) for the County to aid in the determination of existing and future water resource needs. The water budget shall be incorporated into the County Geographic Information System (GIS) and included in the water resource database.
- Policy OS-A.9 The County shall develop, implement, and maintain a program for monitoring groundwater quantity and quality within its boundaries. The results of the program shall be reported annually and shall be included in the water resource database.
- Policy OS-A.10 The County shall develop and maintain an inventory of sites within the county that are suitable for groundwater recharge. The sites shall be incorporated into the County GIS and included in the water resource database.
- Policy OS-A.11 The County shall develop and implement public education programs designed to increase public participation in water conservation and water quality awareness.

- Policy OS-A.12 The County shall promote preservation and enhancement of water quality by encouraging landowners to follow the “Fresno County Voluntary Rangeland and Foothill Water Quality Guidelines.”

Groundwater Recharge

- Policy OS-A.13 The County shall encourage, where economically, environmentally, and technically feasible, efforts aimed at directly or indirectly recharging the county's groundwater.

- Policy OS-A.14 The County shall support and/or engage in water banking (i.e., recharge and subsequent extraction for direct and/or indirect use on lands away from the recharge area) based on the following criteria:

- a. The amount of extracted water will never exceed the amount recharged;
- b. The water banking program will result in no net loss of water resources within Fresno County;
- c. The water banking program will not have a negative impact on other water users within Fresno County;
- d. The water banking program will not create, increase, or spread groundwater contamination; and
- e. The water banking program includes sponsorship, monitoring, and reporting by a local public agency;
- f. The groundwater banking program will not cause or increase land subsidence;
- g. The water banking program will not have a negative impact on agriculture within Fresno County; and
- h. The water banking program will provide a net benefit to Fresno County.

- Policy OS-A.15 The County shall, to the maximum extent possible, maintain local groundwater management authority and pursue the elimination of unwarranted institutional, regulatory, permitting, and policy barriers to groundwater recharge within Fresno County.

- Policy OS-A.16 The County shall permit and encourage, where economically, environmentally, and technically feasible, over-irrigation of surface water as a means to maximize groundwater recharge.

- Policy OS-A.17 The County shall directly and/or indirectly participate in the development, implementation, and maintenance of a program to recharge the aquifers underlying the county. The program shall make use of flood and other waters to offset existing and future groundwater pumping.

Land Use

- Policy OS-A.18 The County shall require that natural watercourses are integrated into new development in such a way that they are accessible to the public and provide a positive visual element and a buffer area between waterways and urban development in an effort to protect water quality and riparian areas.

- Policy OS-A.19 The County shall require the protection of floodplain lands and, where appropriate, acquire public easements for purposes of flood protection, public safety, wildlife preservation, groundwater recharge, access, and recreation.
- Policy OS-A.20 The County shall support the policies of the San Joaquin River Parkway Master Plan to protect the San Joaquin River as an aquatic habitat, recreational amenity, aesthetic resource, and water source. (See Policy OS-H.12)
- Policy OS-A.21 The County shall, where economically, environmentally, and technically feasible, encourage the multiple use of public lands, including County lands, to include groundwater recharge.
- Policy OS-A.22 The County shall not approve the creation of new parcels that rely on the use of septic systems of a design not found in the California Plumbing Code. (California Code of Regulations, Title 24, Part 5).

Water Quality

- Policy OS-A.23 The County shall protect groundwater resources from contamination and overdraft by pursuing the following efforts:
- a. Identifying and controlling sources of potential contamination;
 - b. Protecting important groundwater recharge areas;
 - c. Encouraging water conservation efforts and supporting the use of surface water for urban and agricultural uses wherever feasible;
 - d. Encouraging the use of treated wastewater for groundwater recharge and other purposes (e.g., irrigation, landscaping, commercial, and non-domestic uses);
 - e. Supporting consumptive use where it can be demonstrated that this use does not exceed safe yield and is appropriately balanced with surface water supply to the same area;
 - f. Considering areas where recharge potential is determined to be high for designation as open space; and
 - g. Developing conjunctive use of surface and groundwater.
- Policy OS-A.24 The County shall require new development near rivers, creeks, reservoirs, or substantial aquifer recharge areas to mitigate any potential impacts of release of pollutants in storm waters, flowing river, stream, creek, or reservoir waters.
- Policy OS-A.25 The County shall minimize sedimentation and erosion through control of grading, cutting of trees, removal of vegetation, placement of roads and bridges, and use of off-road vehicles. The County shall discourage grading activities during the rainy season unless adequately mitigated to avoid sedimentation of creeks and damage to riparian habitat.
- Policy OS-A.26 The County shall continue to require the use of feasible and practical best management practices (BMPs) to protect streams from the adverse effects of construction activities and urban runoff.

- Policy OS-A.27 The County shall monitor water quality regularly and take necessary measures to prevent contamination, including the prevention of hazardous materials from entering the wastewater system.
- Policy OS-A.28 The County shall only approve new wastewater treatment facilities that will not result in degradation of surface water or groundwater. The County shall generally require treatment to tertiary or higher levels.
- Policy OS-A.29 In areas with increased potential for groundwater degradation (e.g., areas with prime percolation capabilities, coarse soils, and/or shallow groundwater), the County shall only approve land uses with low risk of degrading groundwater.
- Policy OS-A.30 The County shall support efforts to require the U.S. Bureau of Reclamation to provide San Joaquin Valley agricultural drainage facilities as intended in the authorization of the Central Valley Project.

Implementation Programs

- Program OS-A.A The County shall develop, implement and maintain a water sustainability plan (see Policy OS-A.1).

Responsibility: Planning & Resource Management Department
Time Frame: FY 01-02; Ongoing

- Program OS-A.B The County shall establish and maintain a centralized water resource database for surface and groundwater that includes the water budget, groundwater monitoring data, and the groundwater recharge site inventory. (See Policies OS-A.7 through OS-A.10)

Responsibility: Planning & Resource Management Department
Time Frame: FY 01-02; Ongoing

- Program OS-A.C The County shall develop, implement and maintain a groundwater monitoring program. Information from this program shall be provided to the Board of Supervisors during the annual General Plan review. (See Policy OS-A.9)

Responsibility: Planning & Resource Management Department
Time Frame: FY 01-02; Ongoing

- Program OS-A.D The County shall develop, implement, and maintain land use plans to preserve for recharge purpose those lands identified as suitable for groundwater recharge in the water resource database inventory. (Policy OS-A.10)

Responsibility: Planning & Resource Management Department
Time Frame: FY 02-03

NATURAL RESOURCES

D. WETLAND AND RIPARIAN AREAS

The rivers and streams that flow from the Sierra Nevada mountains historically meandered through broad floodplains in the San Joaquin Valley. Because of urbanization and agriculture, these broad floodplains have been restricted to narrower belts along the rivers and streams or otherwise modified for flood control. Within this modified landscape, remaining riparian habitat is of great value to resident and migratory animal species as it provides corridors and linkages to and from the biotic regions of the county. The numerous essential habitat elements provided by the remaining riparian/riverine corridors in Fresno County make them perhaps the most significant contributor to wildlife habitat throughout the county.

The San Joaquin Valley area of Fresno County still contains large wetlands and wildlife refuge areas, while the foothills east of the city of Fresno contain vernal pools. These areas support many specialized plant and animal species.

Policies in this section seek to protect riparian and wetland habitats in the county while allowing compatible uses where appropriate. Related policies are included in Section LU-C, River Influence Areas; Section OS-A, Water Resources; Section OS-E, Fish and Wildlife Habitat; and Section OS-F, Vegetation.

Goal OS-D To conserve the function and values of wetland communities and related riparian areas throughout Fresno County while allowing compatible uses where appropriate. Protection of these resource functions will positively affect aesthetics, water quality, floodplain management, ecological function, and recreation/tourism.

Policies

- Policy OS-D.1 The County shall support the “no-net-loss” wetlands policies of the US Army Corps of Engineers, the US Fish and Wildlife Service, and the California Department of Fish and Game. Coordination with these agencies at all levels of project review shall continue to ensure that appropriate mitigation measures and the concerns of these agencies are adequately addressed.
- Policy OS-D.2 The County shall require new development to fully mitigate wetland loss for function and value in regulated wetlands to achieve “no-net-loss” through any combination of avoidance, minimization, or compensation. The County shall support mitigation banking programs that provide the opportunity to mitigate impacts to rare, threatened, and endangered species and/or the habitat which supports these species in wetland and riparian areas.
- Policy OS-D.3 The County shall require development to be designed in such a manner that pollutants and siltation do not significantly degrade the area, value, or function of wetlands. The County shall require new developments to implement the use of Best Management Practices (BMPs) to aid in this effort.

- Policy OS-D.4 The County shall require riparian protection zones around natural watercourses and shall recognize that these areas provide highly valuable wildlife habitat. Riparian protection zones shall include the bed and bank of both low- and high-flow channels and associated riparian vegetation, the band of riparian vegetation outside the high-flow channel, and buffers of 100 feet in width as measured from the top of the bank of unvegetated channels and 50 feet in width as measured from the outer edge of the dripline of riparian vegetation.
- Policy OS-D.5 The County shall strive to identify and conserve remaining upland habitat areas adjacent to wetland and riparian areas that are critical to the feeding, hibernation, or nesting of wildlife species associated with these wetland and riparian areas.
- Policy OS-D.6 The County shall require new private or public developments to preserve and enhance existing native riparian habitat unless public safety concerns require removal of habitat for flood control or other purposes. In cases where new private or public development results in modification or destruction of riparian habitat for purposes of flood control, the developers shall be responsible for creating new riparian habitats within or near the project area. Adjacency to the project area shall be defined as being within the same watershed sub-basin as the project site. Compensation shall be at a ratio of three (3) acres of new habitat for every one (1) acre destroyed.
- Policy OS-D.7 The County shall support the management of wetland and riparian plant communities for passive recreation, groundwater recharge, nutrient storage, and wildlife habitats.
- Policy OS-D.8 The County should consider the acquisition of wetland, meadows, and riparian habitat areas for parks limited to passive recreational activities as a method of wildlife conservation.

Implementation Programs

Program OS-D.A The County shall work toward the acquisition by public agencies or private non-profit conservation organizations of creek corridors, wetlands, and areas rich in wildlife or of a fragile ecological nature as public open space where such areas cannot be effectively preserved through the regulatory process. Such protection may take the form of fee acquisition or protective easements and may be carried out in cooperation with other local, State, and Federal agencies and private entities. Acquisition shall include provisions for maintenance and management in perpetuity. (See Policies OS-D.2 and OS-D.8)

Responsibility: Planning & Resource Management Department
Time Frame: Ongoing

Program OS-D.B The County shall adopt an ordinance for riparian protection zones identifying allowable activities in riparian protection zones and allowable mitigation techniques. (See Policy OS-D.4)

Responsibility: Planning & Resource Management Department
Time Frame: FY 02-03

E. FISH AND WILDLIFE HABITAT

Fresno County is unique among California counties in the range of habitats that it encompasses. The County cuts an east/west cross-section across central California that includes the spine of the Sierra Nevada Mountains, the foothills of the Sierra Nevada, the Central Valley, and a small portion of the inner Coast Range. Fresno County's different regions can be described in terms of 29 distinct habitat types based on the composition and structure of vegetation found in each area. Within these habitats, there is a close relationship between natural vegetation and wildlife. The disruption of natural vegetation areas alters the food chain upon which many animals are dependent. The preservation of natural vegetation areas is, therefore, key abundance and well-being of many wildlife species.

Policies in this section seek to protect natural areas and to preserve the diversity of habitat in the county. Related policies are included in Section OS-A, Water Resources; Section OS-B, Forest Resources; Section OS-D, Wetland and Riparian Areas; Section OS-F, Vegetation; and Section LU-C, River Influence Areas.

Goal OS-E To help protect, restore, and enhance habitats in Fresno County that support fish and wildlife species so that populations are maintained at viable levels.

Policies

Policy OS-E.1 The County shall support efforts to avoid the "net" loss of important wildlife habitat where practicable. In cases where habitat loss cannot be avoided, the County shall impose adequate mitigation for the loss of wildlife habitat that is critical to supporting special-status species and/or other valuable or unique wildlife resources. Mitigation shall be at sufficient ratios to replace the function, and value of the habitat that was removed or degraded. Mitigation may be achieved through any combination of creation, restoration, conservation easements, and/or mitigation banking. Conservation easements should include provisions for maintenance and management in perpetuity. The County shall recommend coordination with the US Fish and Wildlife Service and the California Department of Fish and Game to ensure that appropriate mitigation measures and the concerns of these agencies are adequately addressed. Important habitat and habitat components include nesting, breeding, and foraging areas, important spawning grounds, migratory routes, migratory stopover areas, oak woodlands, vernal pools, wildlife movement corridors, and other unique wildlife habitats (e.g., alkali scrub) critical to protecting and sustaining wildlife populations.

Policy OS-E.2 The County shall require adequate buffer zones between construction activities and significant wildlife resources, including both onsite habitats that are purposely avoided and significant habitats that are adjacent to the project site, in order to avoid the degradation and disruption of critical life cycle activities such as breeding and feeding. The width of the buffer zone should vary depending on the location, species, etc. A final determination shall be made based on informal consultation with the US Fish and Wildlife Service and/or the California Department of Fish and Game.

- Policy OS-E.3 The County shall require development in areas known to have particular value for wildlife to be carefully planned and, where possible, located so that the value of the habitat for wildlife is maintained.
- Policy OS-E.4 The County shall encourage private landowners to adopt sound wildlife habitat management practices, as recommended by the California Department of Fish and Game officials and the U.S. Fish and Wildlife Service.
- Policy OS-E.5 The County shall support preservation of habitats of rare, threatened, endangered, and/or other special-status species including fisheries. The County shall consider developing a formal Habitat Conservation Plan in consultation with Federal and State agencies, as well as other resource conservation organizations. Such a plan should provide a mechanism for the acquisition and management of lands that support special-status species.
- Policy OS-E.6 The County shall ensure the conservation of large, continuous expanses of native vegetation to provide suitable habitat for maintaining abundant and diverse wildlife populations, as long as this preservation does not threaten the economic well-being of the county.
- Policy OS-E.7 The County shall continue to closely monitor pesticide use in areas adjacent to habitats of special-status plants and animals.
- Policy OS-E.8 The County shall promote effective methods of pest (e.g., ground squirrel) control on croplands bordering sensitive habitat that do not place special-status species at risk, such as the San Joaquin kit fox.
- Policy OS-E.9 Prior to approval of discretionary development permits, the County shall require, as part of any required environmental review process, a biological resources evaluation of the project site by a qualified biologist. The evaluation shall be based upon field reconnaissance performed at the appropriate time of year to determine the presence or absence of significant resources and/or special-status plants or animals. Such evaluation will consider the potential for significant impact on these resources and will either identify feasible mitigation measures or indicate why mitigation is not feasible.
- Policy OS-E.10 The County shall support State and Federal programs to acquire significant fish and wildlife habitat areas for permanent protection and/or passive recreation use.
- Policy OS-E.11 The County shall protect significant aquatic habitats against excessive water withdrawals that could endanger special-status fish and wildlife or would interrupt normal migratory patterns.
- Policy OS-E.12 The County shall ensure the protection of fish and wildlife habitats from environmentally-degrading effluents originating from mining and construction activities that are adjacent to aquatic habitats.

- Policy OS-E.13 The County should protect to the maximum extent practicable wetlands, riparian habitat, and meadows since they are recognized as essential habitats for birds and wildlife.
- Policy OS-E.14 The County shall require a minimum 200-foot-wide wildlife corridor along particular stretches of the San Joaquin River and Kings River, whenever possible. The exact locations for the corridors should be determined based on the results of biological evaluations of these watercourses. Exceptions may be necessary where the minimum width is infeasible due to topography or other physical constraints. In these instances, an offsetting expansion on the opposite side of the river should be considered.
- Policy OS-E.15 The County should preserve, to the maximum extent practicable, significant wildlife migration routes such as the North Kings Deer Herd migration corridors and fawn production areas.
- Policy OS-E.16 Areas that have unusually high value for fish and wildlife propagation should be preserved in a natural state to the maximum possible extent.
- Policy OS-E.17 The County should preserve, to the maximum possible extent, areas defined as habitats for rare or endangered animal and plant species in a natural state consistent with State and Federal endangered species laws.
- Policy OS-E.18 The County should preserve areas identified as habitats for rare or endangered plant and animal species primarily through the use of open space easements and appropriate zoning that restrict development in these sensitive areas.

Implementation Programs

- Program OS-E.A The County shall compile inventories of ecologically significant resource areas, including unique natural areas, wetlands, riparian areas, and habitats for special-status plants and animals from existing data sources. The inventories shall be presented when area plans, specific plans, or other project development proposals are considered by the County. The classification system shall be based on the California Wildlife Habitats Relationships (WHR) system and shall identify appropriate buffer zones around the identified resource areas in order to account for periodic, seasonal, or ecological changes. The maps shall be revised on a regular basis to reflect the availability of new information from other agencies, changes in definition, or any other changes. (See Policies OS-E.1, OS-E.2, and OS-E.5)

Responsibility: Planning & Resource Management Department
Time frame: Ongoing

- Program OS-E.B The County shall maintain current maps that indicate the extent of significant habitat for important fish and game species, as these maps are made available by the California Department of Fish and Game (CDFG). The relative importance of these game species shall be determined by the County, in consultation with CDFG, based on relevant ecological, recreational, and economic considerations. These maps shall be used by the

County to evaluate proposed area plans, specific plans, and any other project development proposals to determine the compatibility of development with maintenance and enhancement of important fish and game species. (See Policy OS-E.2)

Responsibility: Planning & Resource Management Department

Time frame: Ongoing

F. VEGETATION

Beyond providing habitat for wildlife as addressed in the two previous sections, Fresno County's native vegetation such as oak woodlands must be managed to maintain its diversity and health for ecological as well as aesthetic reasons.

Policies in this section seek to protect native vegetation resources primarily on private land within the county. Related policies are included in Section OS-A, Water Resources; Section OS-B, Forest Resources; Section OS-D, Wetland and Riparian Areas; Section OS-E, Fish and Wildlife Habitat; and Section LU-C, River Influence Areas.

Goal OS-F To preserve and protect the valuable vegetation resources of Fresno County.

Policies

- Policy OS-F.1 The County shall encourage landowners and developers to preserve the integrity of existing terrain and natural vegetation in visually-sensitive areas such as hillsides and ridges, and along important transportation corridors, consistent with fire hazard and property line clearing requirements.
- Policy OS-F.2 The County shall require developers to use native and compatible non-native plant species, especially drought-resistant species, to the extent possible, in fulfilling landscaping requirements imposed as conditions of discretionary permit approval or for project mitigation.
- Policy OS-F.3 The County shall support the preservation of significant areas of natural vegetation, including, but not limited to, oak woodlands, riparian areas, and vernal pools.
- Policy OS-F.4 The County shall ensure that landmark trees are preserved and protected whenever possible.
- Policy OS-F.5 The County shall establish procedures for identifying and preserving rare, threatened, and endangered plant species that may be adversely affected by public or private development projects. As part of this process, the County shall require, as part of the environmental review process, a biological resources evaluation of the project site by a qualified biologist. The evaluation shall be based on field reconnaissance performed at the appropriate time of year to determine the presence or absence of significant plant resources and/or special-status plant species. Such evaluation shall consider the potential for significant impact on these resources and shall either identify feasible mitigation measures or indicate why mitigation is not feasible.

- Policy OS-F.6 The County shall require that development on hillsides be limited to maintain valuable natural vegetation, especially forests and open grasslands, and to control erosion.
- Policy OS-F.7 The County shall require developers to take into account a site's natural topography with respect to the design and siting of all physical improvements in order to minimize grading.
- Policy OS-F.8 The County should encourage landowners to maintain natural vegetation or plant suitable vegetation along fence lines, drainage and irrigation ditches and on unused or marginal land for the benefit of wildlife.
- Policy OS-F.9 The County shall support the continued use of prescribed burning to mimic the effects of natural fires to reduce fuel volumes and associated fire hazards to human residents and to enhance the health of biotic communities.
- Policy OS-F.10 The County shall require that new developments preserve natural woodlands to the maximum extent possible.
- Policy OS-F.11 The County shall promote the preservation and management of oak woodlands by encouraging landowners to follow the Fresno County Oak Management Guidelines shown below and to prepare an Oak Management Plan for their property.

Implementation Programs

- Program OS-F.A The County shall prepare and maintain an updated list of State and Federal rare, threatened, and endangered plant species known or suspected to occur in the county. The following other uncommon or special-status species which occur or may occur in the County should also be included on the list: 1) plant species included in the California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California; and 2) species of special concern as designated by California Department of Fish and Game. In addition to updating the list as new information becomes available, the list should be reviewed and amended at least once every two years. (See Policy OS-F.5)

Responsibility: Planning & Resource Management Department
Time Frame: FY 00-01; every two years thereafter

- Program OS-F.B The County shall make the Fresno County Oak Management Guidelines and other educational resources available to landowners located in oak woodland habitat. (See Policy OS-F.11)

Responsibility: Planning & Resource Management Department
Time Frame: Ongoing

Fresno County Oak Woodlands Management Guidelines (Policy OS-F.11)

1. When Building Within Oak Woodlands:

- Develop an Oak Woodland Management Plan to retain existing oaks, preserve agriculture, retain wildlife corridors, and enhance soil and water conservation practices.
- Avoid tree root compaction during construction by limiting heavy equipment in root zones.
- Carefully plan roads, cuts and fills, building foundations, and septic systems to avoid damage to tree roots. Design roads and consolidate utility services to minimize erosion and sedimentation to downstream sources. Also, consider reseeded any disturbed ground.
- Avoid landscaping which requires irrigation within ten (10) feet of the trunk of an existing oak tree to prevent root rot.
- Consider replacing trees whose removal during construction was avoidable.
- Use fire-inhibiting and drought-tolerant and oak-compatible landscaping wherever possible.

2. Take Steps to Increase Fire Safety on Wooded Parcels:

- Recognize fire as a natural feature of the oak woodland landscape and plan accordingly.
- Set up a continuous management program as a part of your Oak Woodland Management Plan to maintain a fire-safe property environment.
- Identify and manage trees to be fire-safe.
- Recognize the impact of steep slopes on fire safety.
- Develop a fire-safe and oak-friendly landscape plan for your home or business.
- Create "Defensible Space" around buildings. Defensible space is that area which lies between a structure and an oncoming wildfire where the vegetation has been modified to reduce the wildfire threat and which provides an opportunity for firefighters to safely defend a structure.

3. When Implementing Range Improvement Practices in Oak Woodlands:

- When using prescribed fire as a range improvement practice, obtain professional assistance to maximize benefits and minimize risk.
- When converting oak woodlands to other agricultural uses, consider incorporating an oak retention component or a conservation easement in your Oak Woodland Management Plan.
- Develop water sources--ponds, troughs, seeps, and springs for livestock and wildlife.

4. When Harvesting Oaks for Fuel or Range Improvement, Plan Your Harvest to:

- Maintain an average canopy cover of 10 to 30 percent depending on site, elevation, and precipitation.
- Retain some oak trees of all sizes and species represented at the site and in clusters where possible.
- When safety permits, leave old hollow trees and those actively being used for nesting, roosting, or feeding.
- Where low fire risk and aesthetics allow, pile limbs and brush to provide wildlife cover.
- Where commercial or extensive harvest is being contemplated, seek professional advice.

Adopted by the Fresno County Board of Supervisors on March 10, 1998 (Resolution # 98-150).

G. AIR QUALITY

Air quality in Fresno County is a key element in defining the quality of life for county residents. Air pollution adversely affects human health, degrades the natural and built environments, causes agricultural losses, and changes the earth's climate. Air quality is a global problem that must be addressed by all levels of government.

The linkages between land use patterns, transportation systems, and air quality are the primary means for local governments to address air quality issues. The main method of local control over air quality in Fresno County is the reduction of the number of vehicular miles traveled (VMT) and resulting vehicular emissions. Thus, Fresno's air quality strategy focuses on ways to reduce air pollutants by promoting compact efficient development patterns that support transit use, walking, and bicycling as alternatives to single occupant vehicle use. This type of land use

Implementation Programs

Program OS-G.A The County shall review the Guide for Assessing and Mitigating Air Quality Impacts published by the SJVUAPCD and adopt procedures for performing air quality impact analysis and mitigation measures with any modifications deemed appropriate. (See Policy OS-G.1)

Responsibility: Planning & Resource Management Department
Time Frame: FY 02-03

Program OS-G.B The County shall adopt a package of programs to reduce its employees' work-related vehicular trips.

Responsibility: County Administrative Officer
Planning & Resource Management Department
Time Frame: FY 02-03

Program OS-G.C The County shall amend its Subdivision and Grading Ordinances and Development Standards to address dust control measures for new development, access roads, and parking areas. (See Policies OS-G.13 and OS-G.14)

Responsibility: Planning & Resource Management Department
Public Works Department
Time Frame: FY 02-03

RECREATION AND CULTURAL RESOURCES

H. PARKS AND RECREATION

Fresno County has a wide variety of recreational resources. The county contains regional parks, State and national parks, national forests, wilderness areas, and other resources. The primary responsibility for development and maintenance of the County park system lies with the County's General Services Department.

Policies in this section seek to enhance recreational opportunities in the county by encouraging the further development of public and private recreation lands, and requiring development to help fund additional parks and recreation facilities. Related policies are included in Section LU-C, River Influence Areas; Section OS-I, Recreational Trails; and Section OS-K, Scenic Resources.

Goal OS-H To designate land for and promote the development and expansion of public and private recreational facilities to serve the needs of residents and visitors.

Policies

Policy OS-H.1 The County shall promote the continued and expanded use of national forest, national park, and other recreational areas to meet the recreational needs of County residents.

HEALTH AND SAFETY ELEMENT



INTRODUCTION

Planning for growth and development requires the consideration of a wide range of public safety issues. Safety hazards are naturally induced, such as seismic and geologic hazards, flooding, and wildland fire hazards. Some hazards are the result of natural hazards that are exacerbated by human activity and alteration of the natural environment, such as dam failure, urban fires, and development in sensitive areas such as floodplains or areas subject to erosion and landslides. Finally, some hazards are manmade, including airport crash hazards, hazardous materials, and crime. In addition to safety issues related to hazardous conditions, the planning process should account for other issues related to community health and safety, such as noise exposure.

Many of the health and safety risks associated with development can be avoided through locational decisions made at the planning stages of development, while others may be lessened through the use of mitigation measures in the planning and land use regulation process. This element outlines Fresno County's strategy for ensuring the maintenance of a healthy and safe physical environment.

The Health and Safety Element is divided into seven sections: Emergency Management and Response; Fire Hazards; Flood Hazards; Seismic and Geological Hazards; Airport Hazards; Hazardous Materials; and Noise.

A. EMERGENCY MANAGEMENT AND RESPONSE

Although Fresno County seeks to minimize hazards and reduce safety risks, in the event of an emergency, quick and effective response is vital. The County's Emergency Response Program is designed to respond to a wide range of emergency situations.

Policies in this section seek to create an effective emergency response and management system for Fresno County through periodic evaluation of the Emergency Response Program, by ensuring that vital public infrastructure is designed to remain operational during and after a major disaster event, by siting critical emergency response facilities as far from potential disaster impact areas as is practical, and through continuing public education and outreach on emergency preparedness and disaster response programs. Related policies are included in Section PF-H, Fire Protection and Emergency Medical Services.

Goal HS-A To protect public health and safety by preparing for, responding to, and recovering from the effects of natural or technological disasters.

Policies

Policy HS-A.1 The County shall, through the Fresno County Operational Area Master Emergency Services Plan, maintain the capability to effectively respond to emergency incidents, including maintenance of an emergency operations center.

- Policy HS-A.2 The County shall, within its authority and to the best of its ability, ensure that emergency dispatch centers, emergency operations centers, communications systems, vital utilities, and other essential public facilities necessary for the continuity of government are designed in a manner that will allow them to remain operational during and following an earthquake or other disaster.
- Policy HS-A.3 The County shall ensure that the siting of critical emergency response facilities such as hospitals, fire stations, sheriffs' offices and substations, dispatch centers, emergency operations centers, and other emergency service facilities and utilities are sited and designed to minimize their exposure and susceptibility to flooding, seismic and geological effects, fire, avalanche, and explosions as required by State regulations. Exception to this policy shall be allowed on the condition that the only alternative location would be so distant as to jeopardize the safety of the community, given that precautions are taken to protect the facility.
- Policy HS-A.4 The County shall continue to conduct programs to inform the general public of emergency preparedness and disaster response procedures.

Implementation Programs

Program HS-A.A The County shall maintain agreements with other local, State, and Federal agencies to provide coordinated disaster response.

Responsibility: Sheriff's Office
County Administrative Officer
Public Works Department
County Fire District
County Office of Emergency Services

Time Frame: Ongoing

Program HS-A.B The County shall continue to monitor and periodically evaluate County emergency planning, operations, and training capabilities. (See Policy HS-A.1)

Responsibility: County Office of Emergency Services

Time Frame: Ongoing

Program HS-A.C The County shall continue to periodically evaluate County-owned safety and emergency management facilities and public utility systems for susceptibility to damage due to flood inundation or seismic or geologic hazards and implement corrective actions should problems be identified. (See Policies HS-A.2 and HS-A.3)

Responsibility: Public Works Department
Planning & Resource Management Department
County Office of Emergency Services

Time Frame: Ongoing

Program HS-A.D The County shall continue to conduct programs to inform the general public of emergency preparedness and disaster response procedures. (See Policy HS-A.4)

Responsibility: Planning & Resource Management Department
 Time Frame: Ongoing

C. FLOOD HAZARDS

Flooding is a natural occurrence in the Central Valley because it is the drainage basin for thousands of watershed acres of Sierra Nevada and Coast Range foothills and mountains. Flooding in Fresno County occurs primarily along the Kings River in the central-eastern portion of the county, some sections of the San Joaquin River, and many of the foothill streams along the east and west sides of the valley. A variety of mechanisms are currently employed to reduce flood damage in flood prone areas, including flood control reservoirs, levee systems, and watershed treatment.

Policies in this section are designed to minimize flood hazards by restricting development in flood prone areas, requiring development that does occur in floodplains to be designed to avoid flood damage, and through public education about flood hazards. Related policies are included in Section PF-E, Storm Drainage and Flood Control, and Section LU-C, River Influence Areas.

Goal HS-C To minimize the risk of loss of life, injury, and damage resulting from flood hazards.

Policies

- Policy HS-C.1 The County shall encourage the Fresno Metropolitan Flood Control District to control stormwater flows originating in the streams of the Fresno County Stream Group, generally located east and north of the Fresno-Clovis urban area, by dams or other storage means prior to entering the Fresno-Clovis Metropolitan area.
- Policy HS-C.2 The County shall require that the design and location of dams and levees be in accordance with applicable design standards and specifications and accepted design and construction practices.
- Policy HS-C.3 The County shall promote a floodplain management approach in flood hazard areas that are presently undeveloped by giving priority to regulation of land uses over development of structural controls as a method of reducing flood damage.
- Policy HS-C.4 The County shall encourage the performance of appropriate investigations to determine the 100-year water surface elevations for the San Joaquin River, taking into account recent storm events and existing channel conditions, to identify the potential extent and risk of flooding. New development, including public infrastructure projects, shall not be allowed along the river until the risk of flooding at the site has been determined and appropriate flood risk reduction measures identified.
- Policy HS-C.5 Where existing development is located in a flood hazard area, the County shall require that construction of flood control facilities proceed only after a complete review of the environmental effects and a project cost/benefit analysis.

- Policy HS-C.6 The County shall promote flood control measures that maintain natural conditions within the 100-year floodplain of rivers and streams and, to the extent possible, combine flood control, recreation, water quality, and open space functions. Existing irrigation canals shall be used to the extent possible to remove excess stormwater. Retention-recharge basins should be located to best utilize natural drainage patterns.
- Policy HS-C.7 The County shall continue to participate in the Federal Flood Insurance Program by ensuring compliance with applicable requirements.
- Policy HS-C.8 During the building permit review process, the County shall ensure project compliance with applicable Federal Emergency Management Agency (FEMA) standards pertaining to residential and non-residential development in the floodplain, floodway, or floodway fringe.
- Policy HS-C.9 The County shall prohibit the construction of essential facilities in the 100-year floodplain, unless it can be demonstrated that the facility can be safely operated and accessed during flood events.
- Policy HS-C.10 The County shall require that all placement of structures and/or floodproofing be done in a manner that will not cause floodwaters to be diverted onto adjacent property, increase flood hazards to other property, or otherwise adversely affect other property.
- Policy HS-C.11 The County shall encourage open space uses in all flood hazard areas. Land Conservation contracts and open space and scenic easements should be made available to property owners.
- Policy HS-C.12 The County shall consider dam failure inundation maps of all reservoirs in making land use and related decisions.
- Policy HS-C.13 The County shall continue public awareness programs to inform the general public and potentially affected property owners of flood hazards and potential dam failure inundation.

Implementation Programs

Program HS-C.A The County shall continue to participate in the Federal Flood Insurance Program. The County shall maintain flood hazard maps and other relevant floodplain data and shall revise or update this information as new information becomes available. In the County's review of applications for building permits and discretionary permits and proposals for capital improvement projects, the County shall determine whether the proposed project is within the 100-year floodplain based on these maps. (See Policy HS-C.7)

Responsibility: Public Works Department
Planning & Resource Management Department
Time Frame: Ongoing

Program HS-C.B The County shall continue to implement and enforce its Floodplain Management Ordinance. (See Policy HS-C.8)

Responsibility: Public Works Department
Planning & Resource Management Department
Time Frame: Ongoing

Program HS-C.C The County shall continue to develop and review relevant dam failure evacuation plans and continue to provide public information on dam failure preparedness. (See Policy HS-C.13)

Responsibility: Public Works Department
County Office of Emergency Services
Time Frame: Ongoing

D. SEISMIC AND GEOLOGICAL HAZARDS

There are a number of active and potentially-active faults within and adjacent to Fresno County. Although most of Fresno County is situated within an area of relatively low seismic activity by comparison to other areas of the state, the faults and fault systems that lie along the eastern and western boundaries of the county, as well as other regional faults, have the potential to produce high-magnitude earthquakes throughout the county. The principle earthquake hazard is groundshaking. Older buildings constructed before building codes were established and newer buildings constructed before earthquake-resistant provisions were included in the building codes are the most likely to be damaged during an earthquake. Other geologic hazards in Fresno County include landslides, subsidence, expansive soils and erosion, and volcanic hazards.

Policies in this section seek to ensure that new buildings and facilities are designed to withstand seismic and geologic hazards.

Goal HS-D To minimize the loss of life, injury, and property damage due to seismic and geologic hazards.

Policies

Policy HS-D.1 The County shall continue to support scientific geologic investigations that refine, enlarge, and improve the body of knowledge on active fault zones, unstable areas, severe groundshaking, avalanche potential, and other hazardous geologic conditions in Fresno County.

Policy HS-D.2 The County shall ensure that the General Plan and/or County Ordinance Code is revised, as necessary, to incorporate geologic hazard areas formally designated by the State Geologist (e.g., Earthquake Fault Zones and Seismic Hazard Zones). Development in such areas, including public infrastructure projects, shall not be allowed until compliance with the investigation and mitigation requirements established by the State Geologist can be demonstrated.

Policy HS-D.3 The County shall require that a soils engineering and geologic-seismic analysis be prepared by a California-registered engineer or engineering geologist prior to permitting development, including public infrastructure