

I. INTRODUCTION

A. Purpose

Resource Conservation Element policies promote sustained economic health through long-term resource protection and cooperation between local agencies in attaining environmental objectives.

B. Consistency with Other Elements

The Resource Conservation Element is consistent with the Land Use and Open Space Elements in that all three seek to conserve and maintain the long-term productivity of natural resources.

C. Scope and Organization

The Resource Conservation Element addresses the conservation of water; air quality; soil and agricultural land; nonagricultural plant and wildlife communities; minerals and energy; and solid waste management, source reduction, and recycling.

The Resource Conservation Element does not address forests, fisheries, or geothermal energy since these resources are not present in Kings County.

II. WATER

The most important element for the economic survival of Kings County is the availability, beneficial use, and conservation of its water. A major portion of Kings County has been identified by the California Department of Water Resources as having a critical groundwater overdraft condition. Average rainfall in the area is ten inches per year, although drought conditions may further decrease this figure.

Approximately thirty-two percent of the 1.4 million acre feet of water used annually in Kings County for all purposes is obtained from groundwater. Groundwater is replenished from natural precipitation, stream and creek flows, imported

water, and underground flows which vary annually depending on hydrologic conditions.

The "Natural Resource and Conservation" land use designation includes only that land which is environmentally sensitive due to the existence of natural watercourses, drainage basins, sloughs, vernal pools, alkali sinks, moist swales, springs, and other seasonal wetlands; or other natural lands containing water features. The designation provides permanent open space to protect these watercourses from the proliferation of growth, and thereby protect water quality. Its policies apply equally to lands under public and private ownership.

GOAL 11: Beneficially use, conserve, and protect water resources to assure an adequate long-term supply of water.
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Objective 11.1: Avoid the placement of potential pollution sources in areas that have the potential to foster groundwater recharge.

Policy 11a: Cooperate with local agencies in the preservation and purchase of natural sloughs for use as water recharge and drainage basins.

Objective 11.2: Protect groundwater quality by applying development standards which seek to prevent pollution of surface or groundwater and net loss of natural water features.

Policy 11b: Require subdivisions to connect to the sewer and water services of a city or community services district.

Policy 11c: Support measures to ensure that water users do not unreasonably use groundwater resources.

Policy 11d: Protect groundwater by requiring the installation of wells in conformity with the California Water Code, the Kings County Well Ordinance, and other pertinent state and local requirements.

Policy 11e: Work with other municipalities to acquire surface water as mitigation and offset for future urban growth.

GOAL 12: Protect the Kings River.

Objective 12.1: Maintain the existing Kings River water conveyance system and its use as a designated floodway; encourage the preservation of riparian habitat along the Kings River consistent with state and federally mandated flood control purposes.

Policy 12a: Classify the Kings River channel as a designated floodway pursuant to its adoption as such by the State Reclamation Board in 1971. Recognize the Kings River Conservation District's responsibility to maintain the Kings River channels and levees for flood control purposes. On land within the floodway, allow farming and other uses that are consistent with the designated floodway regulations of the State Reclamation Board.

Policy 12b: Apply the "Natural Resource and Conservation" land use designation along the Kings River and in environmentally sensitive areas having existing natural watercourses, drainage basins, sloughs, or other natural water features. The only permitted uses on land so designated include uses such as flood control channels, water pumping stations, irrigation ditches, water recharge basins, limited open public recreational uses such as passive riverside parks, related incidental structures, and agricultural crop and livestock production that does not include permanent structures. The application of this designation shall be subject to administration of the encroachment permit process by the Kings River Conservation District for areas along the Kings River designated floodway.

III. AIR QUALITY

Pollution comes from many sources, including residential, industrial, transportation, and agricultural activities; transport from other regions; and natural conditions. The San Joaquin Valley is susceptible to air pollution, especially when pollutants are concentrated during temperature inversions.

Significant contributors to San Joaquin Valley air pollution include the region's geographic location and topographic features, climactic conditions, population growth, and economic activities.

Air pollution occurs in the form of particulates and gases. Particulates are generated mainly by construction, grading, and agricultural activities. Gases come primarily from industrial emissions and vehicle exhaust. During windy conditions dust is generated from disturbed and undisturbed ground and may be a major source of particulates.

The sources of air pollution can be either stationary or mobile. Mobile sources such as motor vehicles produce most nonparticulate air pollution. Mobile source air pollution, regulated by the state, can be reduced through the use of Transportation Control Measures (TCM's) to improve traffic flow and

reduce the number of vehicle trips. It can also be controlled through reduced commuting, as more jobs become available locally and more commuters share rides. The primary sources of stationary air pollution are agricultural and industrial activities, and residential wood stoves and fireplaces.

Kings County should conduct an Air Quality study in conjunction with the cities, under the auspices of the Kings County Regional Planning Agency. This document should be based on the model Air Quality Element prepared by the San Joaquin Valley Unified Air Pollution Control District and integrated into the General Plan as appropriate.

GOAL 13: Protect human health and preserve the environment by achieving good air quality.

Objective 13.1: Implement air quality standards that protect human health and prevent crop, plant, and property damage.

Policy 13a: Encourage the reduction of air pollution through increased use of public transit, park and ride lots, ridesharing and vanpooling, bicycles, and walking. Minimize single-occupant motor vehicle use. Encourage public and private agencies to provide satisfactory modes of public transit.

Policy 13b: Require that commercial and industrial development minimize air pollution emissions by using Best Available Control Technology (BACT).

Policy 13c: Refer development projects to the San Joaquin Valley Unified Air Pollution Control District as appropriate for their review and comment. Consider their suggestions and requirements as conditions of approval.

Policy 13d: When approving proposed changes in land use designations, require mitigation of air pollution emissions.

Policy 13e: Implement TCM's according to the timetable adopted by the San Joaquin Valley Unified Air Pollution Control District in their San Joaquin Valley Air Quality Attainment Plan, and as identified in the Kings County Regional Transportation Plan and described in the Circulation Element of this General Plan.

Policy 13f: Prevent the siting of potential sources of nuisance odors in the vicinity of residential areas or other sensitive land uses such as schools.

Policy 13g: Under the auspices of the Kings County Regional Planning Agency and in conjunction with the cities, conduct an air quality study. Base the resulting document on

the model Air Quality Element prepared by the San Joaquin Valley Unified Air Pollution Control District, and integrate it into the General Plan as appropriate.

IV. SOIL

Soil resource policies, intended to maintain agricultural productivity, are administered largely by Resource Conservation Districts (RCD's) rather than by the County.

A. Conservation of Land with Soil Suitable for Agriculture

Important farmland soils are located throughout Kings County, primarily on the San Joaquin Valley

floor. Soil, climate, topography, and water availability combine to make Kings County a highly productive agricultural area. However, good agricultural land is often desirable for building sites since it is generally flat with few physical constraints, and is often located near existing expanding communities.

GOAL 14: Encourage the conservation of soil resources to protect their longterm agricultural productivity.

Objective 14.1: Conserve prime agricultural soils; avoid their conversion to nonagricultural use.

Policy 14a: Apply one of the three Agriculture land use designations to areas with productive and potentially productive agricultural soils and grazing land.

B. Preservation of Soil

Much of the irrigated land in the San Joaquin Valley is affected by salt, although the amount and type of salts varies depending on the type of soil and the amount of irrigation water used. The presence of salt in soil decreases the availability of water to a plant. Some plants can tolerate more salts than others. A knowledge of salt-tolerant plants is useful to match crops with growing conditions. Leaching is probably the best method used to control salt. Other methods include crop rotation, subsurface drains, and soil amendments.

Wind erosion is a problem on the west side of the Central Valley. Loss of topsoil as dust blown into the air contributes to the loss of crops, damage to the public health including the dissemination of spores causing Valley fever, automobile accidents, and damage to public facilities. Most wind erosion occurs between March and June. Soil can be protected from wind erosion by maintaining adequate growing vegetation, depositing crop residues to cover the soil, and maintaining adequate soil moisture from irrigation and tillage to keep the soil stable.

Goal 15: Encourage soil conservation and management practices that maintain the productivity of the soil.

Objective 15.1: Ensure that land use decisions are compatible with the control of soil erosion and the maintenance of soil quality.

Policy 15a: Require erosion control measures for any development involving construction or grading near waterways, or on land with slopes over 10 percent. Require that improvements such as roads and driveways be designed to retain natural vegetation and topography to the extent feasible.

V. NATURAL PLANT AND ANIMAL COMMUNITIES

A. Natural Plant and Animal Habitats

Natural habitat areas provide food and cover for wildlife species and are a vital part of the basic conservation principle. Birds, mammals, fish, reptiles, amphibians, and invertebrates depend upon favorable natural habitat for their survival.

The California Department of Fish and Game is a state trustee agency charged with managing and protecting fish and wildlife species and habitats, and sensitive plant and animal species which are

protected by state and federal law. Projects which result in adverse impacts to listed species must obtain a Fish and Game management

permit. Mitigation measures may be required to reduce project impacts on sensitive plants, animals, and habitats. More detailed information pertaining to Kings County is contained in the report, "Biological Resources Survey," summarized in Appendix 3 and incorporated in full herein by reference.

GOAL 16: Preserve land that contains important natural plant and animal habitats.
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Objective 16.1: Require that development in or adjacent to important natural plant and animal habitats be consistent with the preservation of that habitat.

Policy 16a: Require development to locate on sites adjacent to previously developed areas. Require development in areas containing sensitive natural wildlife habitats or relatively undisturbed natural habitat to be developed consistent with state and federal guidelines.

Policy 16b: Prevent the net degradation of natural plant and wildlife habitat as required by state and federal law.

Policy 16c: If new development or other actions are likely to result in incidental take of any threatened or endangered animal species, require project applicants to consult with the California Department of Fish and Game and the United States Fish and Wildlife Service and to obtain appropriate authority for such take pursuant to Endangered Species Act requirements.

Policy 16d: Require developers to mitigate unavoidable significant adverse impacts on rare and endangered species and their habitat. Mitigation could include habitat improvement or protection, acquisition of other habitat, or payment to an appropriate agency to purchase, improve, or protect such habitat.

Policy 16e: Use Appendix 3 to the General Plan for guidance as to specific steps to be followed relating to the mitigation of impacts on wildlife habitat. Under these procedures development projects are required to work with the California Department of Fish and Game and the United States Fish and Wildlife Service to mitigate potential impacts to wildlife habitat.

1. Wetlands

Wetlands, or areas saturated with moisture such as freshwater marshes and vernal pools, provide habitat for many plant and animal species and serve as the base of a food chain which supports

numerous types of fish, birds, and mammals. Loss of wetlands destroys wildlife and decreases hunting, fishing, and recreational opportunities. If current reclamation and drainage practices continue, then the federal and state goal of preserving them may not be met.

GOAL 17: Maintain the quality of natural wetland areas identified by the California Department of Fish and Game and the United States Fish and Wildlife Service.

Objective 17.1: Maintain compatible land uses in natural wetland habitats designated by state and federal agencies.

Policy 17a: Follow state and federal guidelines for the protection of natural wetlands. Require developers to obtain authorization from the appropriate local, state, or federal agency prior to commencement of any wetland fill activities.

Policy 17b: Use the California Environmental Quality Act (CEQA) process to assess wetland resources; require mitigation measures for development which could adversely impact a designated wetland.

Policy 17c: Exempt prior converted wetlands from consideration as wetlands under the County planning process, except as required by state and federal regulations.

2. Riparian Environments

Areas along natural streams, or adjacent to other natural bodies of water, may be referred to as riparian environments. These areas offer wildlife a rich source of insect and plant food, shelter and nesting sites, and water. The plant cover regulates water temperature and provides a nursery habitat for fish.

The riparian environment is especially vulnerable to fluctuations in the water supply. Practices which control water flow or waterway vegetation can

change the riparian environment while attaining essential water delivery and flood control functions for the public good.

Plants and trees serve as filters for sediment and pesticides, stabilize banks, and keep soils loose and permeable, allowing aquifers below streams to be recharged. Elimination of natural plant communities along streams can increase surface runoff and siltation, creating a stream environment detrimental to fish.

GOAL 18 : Protect and manage riparian environments as valuable resources.

Objective 18.1: Ensure that, in development decisions affecting riparian environments, the conservation of fish and wildlife habitat and the protection of scenic qualities are balanced with other purposes representing basic health, safety, and economic needs.

Policy 18a: Designate the Kings River as a resource conservation area, implemented by use of the Natural Resource and Conservation zone district.

Policy 18b: Encourage the Kings River Conservation District to avoid substantial alteration of the Kings River channel and its riparian vegetation, consistent with their flood control responsibilities.

Policy 18c: Evaluate the potential impact on the riparian environment of proposed development adjacent to the Kings River, beyond the boundaries of the designated floodway. Conservation of fish and wildlife habitat and protection of scenic qualities should be the guiding principle.

Policy 18d: Prohibit development within riparian environments over which the County has jurisdiction. However, allow or consider for approval if it is determined that significant disturbance of the riparian environment would not occur, the following passive uses or activities:
Streamside maintenance for mandated flood control or water delivery purposes;
Road and utility line crossings;
Grazing and similar agricultural production activities not involving structures or cultivation;
Vegetation removal for integrated pest management programs under guidelines
Passive recreational uses such as riverside parks and bikeways

Policy 18e: Refer all discretionary permit applications for projects along the Kings River and Cross Creek to the appropriate local, state, and federal agencies for review and approval.

B. Threatened and Endangered Species

Plants help reduce surface runoff, retain soils and maintain streambanks, provide wildlife habitat, and maintain a healthy and diverse physical environment.

Conversion of land to urban use can seriously disturb native vegetation, force wildlife onto

marginal lands, introduce non-native plant species, and in some cases prevent necessary natural wildfires.

Many plants and animals in danger of extinction due to the loss or alteration of their habitat are protected by state and federal law. These threatened and endangered plant and animal species frequently provide essential links in the natural ecosystem.

Goal 19: Balance the protection of the County's diverse plant and animal communities with the County's economic needs.

Objective 19.1: Require mitigation measures to protect important plant and wildlife habitats.

Policy 19a: In the initial project review for development permits, complete the inquiry process outlined in Appendix 3 to determine whether the project is likely to have a significant adverse impact on any threatened or endangered species habitat locations, and to assure appropriate consideration of habitat preservation by development. Maintain current copies of California Department of Fish and Game and United States Fish and Wildlife Service maps showing locations of known threatened and endangered species habitat. If shown to be necessary, require the developer to consult with the California Department of Fish and Game, the United States Fish and Wildlife Service, and the United States Army Corps of Engineers as to potential impacts, appropriate mitigation measures, and required permits.

Policy 19b: Require as a primary objective in the review of development projects the preservation of healthy native oaks and other healthy native trees.

Policy 19c: Maintain to the maximum extent practicable the natural plant communities utilized as habitat by threatened and endangered species (see Appendix 3 for a listing and map of these plant communities).

C. Freshwater Recreational Fishing

Recreational fishing in Kings County occurs primarily along the banks of the Kings River, which is administered by the State Reclamation Board, and at three County-maintained locations along the California Aqueduct, near Kettleman City, and near the Avenal Cutoff (see the Open Space Element, Figure 14, for locations).

Agriculture, water diversion, and land development impact the Kings River and the California Aqueduct and can reduce recreational fishing resources. Sedimentation, loss of riparian vegetation, and streambank erosion can also damage recreational fishing habitat.

GOAL 20: Manage natural stream environments to provide protection for fish habitat.

Objective 20.1: Protect freshwater recreational fishing along the Kings River and the California Aqueduct by balancing agricultural and development needs with the protection of these resources.

Policy 20a: Encourage design of public and private projects which will minimize damage to the Kings River.

VI. MINERALS AND ENERGY

There are currently no mineral extraction activities occurring in Kings County. Previously, the only local mineral mining operations were an open pit gypsum mine and a mercury mine, but they have ceased operation. Open pit mining is regulated by the State Surface Mining and Reclamation Act, which requires a local permit and a reclamation plan. These requirements are implemented through the conditional use permit process of the County Zoning Ordinance.

Oil and gas production in Kings County has diminished over the past 25 years. This trend is likely to continue. The county's mild climate and agricultural economy make solar heating and waste-to-energy projects feasible. Sources of biomass, or raw material suitable for conversion to energy, could include manure from dairy operations and municipal waste at landfill sites.

GOAL 21: Encourage the development of energy sources, oil and gas production, and the extraction of mineral resources which do not degrade environmental quality.

Objective 21.1: Promote the development of alternative energy sources, including solar and biomass energy.

Policy 21a: Review proposed biomass energy projects through the conditional use permit process of the County Zoning Ordinance, and ensure that such projects meet all air quality requirements.

Policy 21b: Encourage developers to be innovative in providing landscaping that modifies microclimates, thus reducing energy consumption.

Objective 21.2: Provide for the development of mining and mineral extraction.

Policy 21c: Implement the Surface Mining and Reclamation Act by requiring all mining operations, including surface mining, to secure a Conditional Use Permit, pursuant to the Kings County Zoning Ordinance, prior to beginning any mining operation.

Objective 21.3: Encourage oil and gas companies to restore wellsites to their original condition after use.

Policy 21d: Additional restrictions in the General Agricultural areas of the county will not be imposed on oil and gas exploration as long as the oil companies involved continue to restore sites to their original condition after use.

VII. SOLID WASTE MANAGEMENT, SOURCE REDUCTION, AND RECYCLING

Policies pertaining to solid waste, source reduction, and recycling are identified in the Source Reduction and Recycling Element (SRRE) and the Household Hazardous Waste Element (HHWE) of the Kings

County Integrated Waste Management Plan, and are made a part of this element by reference (see Land Use Element, Table 12 and Figure 3, for information pertaining to waste disposal sites).

VIII. IMPLEMENTATION

Resource Conservation Program

1:

Follow the evaluation process outlined in the "Biological Resources Survey," summarized in Appendix 3 and incorporated into this General Plan by reference, to determine the need for biological assessments for discretionary permits on projects that may impact wetlands or the habitats of any of the special status plant or animal species that occur in Kings County.

Resource Conservation Program

2:

Require environmental assessments to address in detail the effects of proposed projects on affected species or natural areas.

Resource Conservation Program

3:

Critically review environmental impact reports prepared by other agencies for projects in resource conservation areas.

Emphasize the finite nature of agricultural lands and the cumulative impact of irreversible decisions. Insist on knowledgeable preparation and qualified review of impact reports for major projects which affect land use, air quality, water use and quality, plant and wildlife habitat, and human health.

Resource Conservation Program

4:

Improve local air quality through reduced use of motor vehicles. Implement mandatory Transportation Control Measures as part of project mitigation measures. Implement ridesharing and other mandatory air quality improvement measures. Implementation of these measures is coordinated through the San Joaquin Valley Unified Air Pollution

control District and Kings county regional Transportation Planning Agency.

Resource Conservation Program

5:

Encourage reversion to acreage of nonconforming undeveloped parcels in rural areas.

Resource Conservation Program

6:

(Removed from the General Plan by General Plan Amendment 96-01, August 27, 1996.)

Resource Conservation Program

7:

Staff recommends that after adoption of the General Plan, Kings County conduct an Air Quality study in conjunction with the cities, under the auspices of the Kings County Regional Planning Agency. This document should be based on the model Air Quality Element prepared by the San Joaquin Valley Unified Air Pollution Control District and integrated into the General Plan as appropriate.