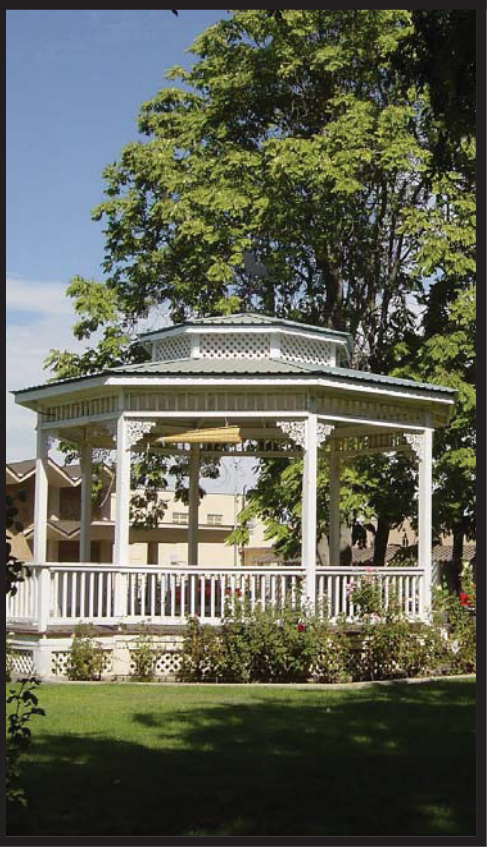
June 2009

City of Coalinga

General Plan 2005 - 2025



City of Coalinga General Plan

2005-2025

June 2009

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1

GENERAL PLAN OVERVIEW

This section sets the stage for the 2025 General Plan Update, providing a brief overview of Coalinga's history, the General Plan Update and discussing the legal framework and requirements of a General Plan.

COALINGA'S HISTORY

For many centuries numerous tribes of Indians, all belonging to the Yokut, inhabited the San Joaquin Valley. Although it is not clear when the first people made their way to Coalinga, it is known that the Tache (Tachi) one of the largest of all the Yukot tribes, found a permanent water supply at a place called Posa Chanet near the City's present site. From this encampment, they scoured the hills for trade goods. They discovered oil seeps and thick tar. Oil was to be an important item to early inhabitants of the Pleasant Valley. Seepages in the area provided asphalt used to line baskets and was a good traded among other tribes. Eventually, Spaniards and Basques who wanted the land for its cattle and sheep grazing potential displaced the Indians.

As new settlers came to the west seeking a new life and greater opportunities, interest in oil seepages inspired an "oil rush" to the area in 1865. In 1867 a specialized oil-drilling rig, shipped from the east coast, began drilling for oil north of the present site of Coalinga. However, shipping problems caused early interest to die down; the world had not yet discovered the full potential of petroleum.

In the late 1800's, stories of sheepherders who burned rocks at night to keep warm drew the attention of Messer's Robins and Rollins, English second sons. Excited by the promise of coal in the area, they established a mine in a slash of hillside where the Coalinga Rifle Range now exists. From the first, it wasn't profitable. The coal was actually an oil soaked rock called shale, producing two scoops of ash for every one burned. However, the potential of coal from the mine and more in nearby Priest Valley was enough to induce the Southern Pacific (SP) Railroad to extend its frost-free southern route. It crossed Huron and stretched slightly beyond the Coalinga area to a place called Alcalde.

There is debate about how Coalinga got its name. The usual version is that while deposits of oil saturated shale or "coal" in the hills nearby were being mined "Coaling Station A" "Coaling Station B" and "Coaling Station C" were situated along the rail line for loading purposes. "Coaling Station A" was eventually shortened to "Coalinga." This story does not stand close scrutiny and a more likely explanation is that Coalinga was given the final "a" for musical effect. The truth may never be known, since the great quake and fire in San Francisco in 1906 destroyed the SP Railroads office and all its records. Whatever the origin, it is known that the name "Coalinga" was in use fairly quickly after the rail line opened in July 1988. On October 5, 1888 The Railroad Gazette announced: "The extension west from Huron in Fresno County, Cal., has been completed for about 21 miles. A new town called "Coalinga" has been laid out at the end of the track."

The extension of the railroad coincided with a significant worldwide interest in oil production; the second oil rush of 1890. By 1910, Coalinga was the third largest shipping point for the railroad in California with nearly all tonnage connected to oil production.

The town grew quickly during these years. In 1889 the Coalinga post office was established. In 1891 Southern Pacific Railroad purchased the 160-acre homestead of M. L. Curtis for the sum of $900 and laid out the town site of Coalinga as a square cut diagonally by the railroad tracks. Street numbers from one to eight went north to south, and letters A to H from west to east. The Coalinga Women's Improvement Society later changed the alphabetical names to botanical ones. A succession of historically important wells, starting from the discovery well called "Blue Goose" in 1897, was developed. This and subsequent discoveries brought "boomers" into Coalinga by the thousands.

With over 15 years of continuous prosperity behind them, a handful of local citizens began the process of incorporation, which was completed in April 1906. In 1909, the Coalinga Chamber of Commerce was organized and in its first report dated April 16, 1910, they excitedly spoke about the promise of the City. The Coalinga oil field was the largest in California. In September 1909, the Silver Tip well, locate just one-half mile from the City limits, blew with the greatest gusher known in California at that time. This discovery caused enough excitement among the financiers of California that the Los Angeles Stock Exchange was closed on a Friday in November and a special excursion train traveled to Coalinga so that potential investors could marvel at the sight.

During the early years of production, several important developments happened in Coalinga. In 1904 a six-inch oil pipeline was laid from Coalinga all the way to Monterey on the coast (104 miles) for the purposes of providing tanker oil to be sold to overseas buyers. The pipeline was built in 90 days, and crossed two mountain ranges with a maximum elevation of over 2,000 feet. In 1916, Coalinga oilfield workers fought for and won the industry's first 8-hour workday. In 1919 A&W Root Beer was formulated in downtown Coalinga. During World War II, Signal Hill oil in Long Beach was brought in. The supply was so great that the existing pipeline flow from Coalinga to the Los Angeles refineries was reversed and the excess Signal Hill oil was stored in a massive tank farm called Caliola about 10 miles east of Coalinga. Coalinga's oil field was to produce men and companies who were to become some of the giants of the industry including R.

C. Baker, founder of Baker Oil Tools. His original buildings in Coalinga are now home of the R. C. Baker Memorial Museum. It focuses not only on oil, but all phases of pioneer life in the Coalinga area.

In those early days, there was no one to provide natural gas to customers in Coalinga. The City simply contracted with nearby oil companies to supply natural gas from their wells, which was then re-sold to City residents. To this day, Coalinga is one of just a handful of cities to operate this utility. Natural gas is currently purchased from major suppliers for residents.

From the outset, it was said that whiskey was easier to get than water in Coalinga. The natural well water supplies had high amounts of dissolved minerals in it, making it suitable for only the most basic uses of washing and irrigating. To meet this challenge, Coalinga's drinking water was imported. Until 1960, the major source of drinking water was water wells in Armona owned by Southern Pacific. This water was shipped, 44 miles, to Coalinga in tank cars for distribution. "A dime a bucket, and carry it yourself" was the cry. In time, a municipal water service was provided for the central area of town, leading to Coalinga's famous third faucet (hot, cold and drinking).

In 1960 Coalinga was the site selected for experimental systems to soften hard water to a point where it was palatable for human consumption. The first of these was an ionic system that was later replaced by the reverse osmosis method. The third faucet was utilized until April 1972 when Coalinga received its first delivery of San Luis Canal water from the state water system.

While oil was the staple of the local economy, agriculture always played an important part. Before 1972 agriculture was limited to cotton and other salt water resistant crops. With the arrival of canal water, the area has become a region of specialty crops including lettuce, tomatoes, asparagus and a variety of nut and fruit trees.

On May 2, 1983 a magnitude 6.7 earthquake hit Coalinga. Buildings constructed from bricks from the 1906 San Francisco quake, toppled. Houses slipped off their raised foundations, chimneys fell and a significant portion of the business district was leveled. The quake caused over $31 million in damage and the City was left with numerous vacant parcels and city-owned lots. Miraculously, there was not a single fatality from the quake, marking it for all time as "the miracle of Coalinga."

While there was open speculation Coalinga would not survive the disaster, the earthquake became the catalyst that inspired revitalization. In 1988, to replace the one destroyed in the earthquake, the residents approved a bond issue for a new $14 million community hospital facility. Coalinga completed an 800-acre annexation to include Pleasant Valley State Prison and the new airport in the City Limits in 1991. In 1994, the Department of Corrections located a major prison facility in Pleasant Valley. With this as an economic base, the City developed a 40-acre industrial park. To address concerns about proximity to schools and associated noise hazards, the airport was relocated four miles to the east. A brand new $8 million airport facility, with a 100' by 5,000' runway, was built in 1996. In 2001 the College Farms, a 180-acre site devoted to school related operations with agriculture, was relocated north of the old airport. The

site has since been optioned to be sold to a developer. The Coalinga Regional Medical Center was completed in 2002 and construction of a new mental health facility, the Coalinga State Hospital, was completed in the Spring of 2005. Both the Unified School District and West Hills College have passed bond measures. In the oilfields, a process of steam injection promises to produce 2.3 billion more barrels of oil, perhaps as much as has already been mined.

Since the 1983 earthquake, significant efforts have been made to rebuild and revitalize this City. These efforts, combined with Coalinga's central geographic location and proximity to the busy I-5 corridor, approximately 12 miles to the east, are expected to diversify the City's economy as state growth continues. As the City celebrates its centennial, it is clear that Coalinga is more than "the boom town that lived" it is "the boom town that thrives."

GUIDING PRINCIPLES

2025 GENERAL PLAN UPDATE

The Coalinga General Plan underwent a thorough update in 1994. The 2025 update has been prompted by growth pressure outside the City's northern corporate limits and Sphere of Influence and the problematic format of the existing 1994 General Plan. The update is necessary to ensure the General Plan accurately portrays growth patterns, population figures and land uses in the City.

The General Plan is predicated on a number of principles adopted by a Joint Planning Commission/City Council Committee at the start of the General Plan Update process, in May 2002. These principles, intended to help guide the City's future, include the following:

- **Protect City Center:** Protect and enhance the Downtown as the City's commercial, civic, cultural and recreational center while acknowledging its historical qualities.
- **Encourage Job Growth:** Encourage the expansion of existing businesses and actively seek to attract industries and businesses that create jobs and generate revenue for the City.
- **Support Redevelopment:** Support new residential and commercial infill development on vacant land within the established City core and encourage re-use or redevelopment of underutilized parcels.
- **Maintain City Control:** Maintain City control of land within, and adjacent to, the City's Sphere of Influence (SOI) through long range planning efforts to expand the SOI and oppose urban scale development outside the City limits.

- **Support Educational, Medical and Airport Facilities:** Encourage, support and expand high quality educational, medical and airport facilities needed to meet the needs of the City's expanding resident and tourist population.
- **Provide Housing Type Diversity:** Provide a diversity of housing types and lot sizes within the City to enable citizens from a wide range of economic levels and age groups to live within its boundaries.
- **Accommodate Growth:** Provide an adequate land supply within the Sphere of Influence to accommodate a build-out population of by the year 2020.
- **Protect Future Urbanization Areas:** Identify Future Urban Areas outside the SOI that are anticipated for urbanization beyond the 2020 time frame of the current General Plan.
- **Promote Smart Growth Objectives:** Establish sustainable development guidelines that encourage compact neighborhood design which offers a mix of uses within close proximity.

The guiding principles are used as a foundation to establish goals to guide the City's decision-making and manage future growth. The goals are accompanied by specific policies, which are supported by implementation measures incorporated into the City's annual work programs and Capital Improvement Program. Based on the adopted Guiding Principles described above, a number of *Community Vision Statements* (listed below) defining the values and vision for the community were developed. The Statements were adopted as part of the City's Annual Budget goals for fiscal year 2005-2006 and will be adopted again through 2006-2007.

Coalinga aspires to be a city that:

- Maintains the spectacular view of the valley and surrounding hills that forms the backdrop to the community. It preserves its natural beauty, environmental quality, and vital natural resources through appropriate stewardship of the land ensuring visual and physical harmony between the natural and man-made environment.
- Preserves its general open, rural, low profile, uncrowded character punctuated with ample open space, large setbacks, panoramic views and pristine vistas of the surrounding hills.
- Promotes urban design features that provide artful integration of building sites with the environment emphasizing earth-tone colors, desert architecture, exterior building materials, monument signs, large building setbacks, appropriate landscaping, berms and other features that hide or reduce the visibility of negative urban features such as parking lots.
- Includes a variety of residents varied in age, family makeup, income levels, and interests who can commonly enjoy the beauty, economic opportunities, recreational activities and cultural amenities of the City and surrounding regions.
- Provides choices in housing types and densities in a variety of neighborhoods seamlessly integrated and well insulated from high volume roadways, noise, and nonresidential land uses. Neighborhoods harmonize and compliment one another through good urban design,

architectural standards, and landscaping where residents can fulfill their varied individual housing needs and dreams of home ownership. Housing fosters a sense of neighborhood among residents and a sense of community through landscaped linkages with surrounding neighborhoods, parks and pristine areas.

- Provides a practical, landscaped, aesthetically pleasing, and environmentally sensitive transportation circulation network that includes roads, bike paths, walkways, and trails that are easily accessible and efficiently and safely transport residents and visitors throughout the City and surrounding region. The circulation system, especially major corridors, will provide panoramic views of the community's surrounding environment and will avoid blocking these views with walls, fences, overhead power lines or other visually negative features. The circulation system will be landscaped and will link neighborhoods, parks, schools, libraries, shopping areas, topographic features, pristine primitive areas and wildlife habitat.
- Views economic development as the sustained creation of community wealth and the generation of tax revenues through the retention, expansion, and development of diversified business opportunities that are compatible with the environment, community values and community vision. Quaint shops, neighborhood commercial developments, office developments, light industrial enterprises, restaurants, motels and walking malls are in harmony with Coalinga's small town character, scenic beauty and natural resources which are the foundation of its economic strength and quality of life.
- Interacts and works with other governmental entities for the mutual benefit of the City, county, region, state and nation.
- Provides creative, orderly, and efficient community facilities and municipal services that meet the needs of residents and visitors. Community facilities are sensitively and successfully integrated into the natural environment with necessary municipal and public utility services including police, fire, emergency medical, water, wastewater, storm water, electrical power, natural gas, cable television, communications, library, cemetery, building, community development, solid waste and public education services implemented at the lowest possible cost.
- Develops a convenient and comprehensive system of neighborhood parks, community parks, athletic parks, primitive natural areas, green belts, open space, bike paths, trails, scenic vistas and other recreational opportunities that meets the needs of the citizens and enriches the lives of residents and visitors. Indoor and outdoor parks and recreation facilities that will be adaptable to changes in the population, and provide beauty and functional efficiency to complement the City's natural environment and the needs of its citizens.
- Collects, restores, preserves its natural, cultural, and geologic heritage and displays, artifacts, histories, maps and structures relating to the early Native American inhabitants, pioneer settlers, railroad workers, coal miners and oil workers of Coalinga.

- Provides outstanding cultural activities that serve the entire region and that will touch and enrich the lives of citizens and visitors. The arts and the environment play equal and complementary roles in realizing a culturally animated future. They act as a stimulus to civic pride and involvement and provide vigor and zest to the community's quality of life.

Natural Hazard Mitigation Plan

In addition to the Guiding Principles described above, the City of Coalinga and the *Coalinga-Huron Unified School District Natural Hazard Mitigation Plan* (Ralph Anderson & Associates 2005) identifies a number of goals intended to reduce the impact of natural disasters should they occur in the future. These goals include:

- Protect Life and Property;
- Public Awareness;
- Partnership and Implementation; and
- Provision of Adequate Emergency Services.

The Plan also outlines action items to implement the goals. The action items are listed as activities that the City and District can use to reduce risk and include an estimate of the timeline for implementation.

In November 2005 the City adopted the *Natural Hazard Mitigation Plan* and authorized the City to submit the Plan to the Governor's Office of Emergency Services (OES) and Federal Emergency Management Agency (FEMA). The goals and action items put forward in the *Natural Hazard Mitigation Plan* have been incorporated into this General Plan update.

Community Involvement

As part of the strategic planning, implementation and evaluation criteria adopted in the City's Annual Budget, the City emphasizes the importance of community input in the design-making process. Community values are an integral component of the planning process. Per the Annual Budget Plan, community values must be acknowledged, honored and constantly defended to ensure that change and development occur in accordance with the community vision. The community values held by the residents, community leaders and elected officials determine the City's character, urban design features and ultimately shape the development of the City.

Citizen participation played an important role in preparing the Coalinga 2025 General Plan Update. Throughout the preparation stage, numerous residents, business owners and various civic and professional organizations were consulted. Citizens were involved with issue identification and goal formulation through attendance at the General Plan Update Community workshops and public hearings.

The Coalinga Planning Commission and City Council played a key role in providing direction regarding the content of the General Plan. Discussions at public workshops assisted in identification and refinement of planning issues and development of a preferred land use map.

General Plan Requirements

A General Plan expresses the community's goals for the future distribution and character of land uses and development, both public and private. California planning law requires the City to prepare and adopt a "comprehensive, long-term General Plan for [its] physical development" (Government Code §65300). The General Plan is required to be comprehensive in terms of issues addressed and must include the City's entire physical planning area. It is required to be long-term and internally consistent. Toward this end planning activities including zoning approvals and amendments, subdivision approvals, capital improvements, and redevelopment activities need to conform to the City's General Plan. Preparing, adopting, implementing and maintaining a General Plan serves to:

- Identify the community's land use, circulation, environmental, and economic goals and policies as they relate to land use and development.
- Provide a basis for local government decision-making including decisions on development approvals and exactions.
- Provide citizens with opportunities to participate in the planning and decision making processes of their community.
- Inform citizens, developers, decision makers, and other cities and counties of the ground rules that guide development within the community.

The General Plan bridges the gap between community values, policies, and goals and physical decisions such as subdivisions, land development and public works. California law (Government Code §65302) requires the General Plan include a statement of policies for each of the following elements: Land Use, Circulation, Housing, Conservation, Open Space and Noise and Safety.

The typical content of the required elements are described below:

- **Land Use:** Designates the general distribution and intensity of land uses, including the general location, extent of use, and type of housing, businesses, industry, open space, education, public buildings and parks.
- **Circulation:** Identifies the general location and nature of existing and proposed circulation, including roadways (e.g. arterial, collector, and local streets), highways, transit, and other transportation facilities and modes.
- **Housing:** Assesses the current and projected housing needs of all segments of the community and identifies land and programs to provide adequate housing to meet those needs. The City of Coalinga's Housing Element was updated separately in 2003 and

certified by the State in 2004 therefore, has not been included in the 2025 General Plan Update process.

- **Open Space:** Identifies open space resources and provides action programs and techniques for preserving open space areas for natural resources, outdoor recreation, public health and safety and agricultural activities.
- **Conservation:** Identifies conservation resources and issues and provides measures for conservation, development, and use of natural and cultural resources including creeks, sensitive habitat, archaeological resources and historic structures.
- **Noise:** Identifies and evaluates noise sources in the community and develops methods to mitigate existing and foreseeable noise problems.
- **Safety:** Establishes policies to protect the community from risks associated with seismic, geologic, flood and fire hazards.

In addition topics outlined above, recent legislation in the form of Assembly Bill 32 (AB 32), the California Global Warming Solutions Act of 2006, has prompted the California Attorney General to send comment letters to local lead agencies regarding the need for analysis of greenhouse gas emissions (GHG) in General Plans.

Government Code §65301(a) provides that a General Plan may be adopted in any format deemed appropriate by the legislative body as long as all seven topics are covered. The exception is the Housing Element, which is required by State guidelines to contain extensive mandatory data and analysis as well as a five-year plan for meeting housing goals and objectives. In order to minimize redundancies in the General Plan, combining elements or organizing the plan by issue often makes sense. General Plans may also include additional, optional topics as necessary to address local issues relevant to the physical development of the community.

The General Plan is the foundation in the hierarchy of local government law regulating land use. Subordinate to the General Plan are Specific Plans, Master Plans, and Special Planning Area projects as well as zoning amendments, subdivision maps, development permits, and other approvals relating to development of specific properties. These planning and development efforts must conform to the City's adopted General Plan.

Organization of The 2025 Coalinga General Plan

The Coalinga General Plan is primarily a policy document. The document addresses the state-mandated requirements and local issues through inclusion of the following elements: Land Use; Open Space and Conservation; Circulation; Safety, Air Quality and Noise; and Public Facilities and Services.

Table 1-1, on the following page, outlines the organization of the General Plan.

TABLE 1-1
GENERAL PLAN ORGANIZATION

Coalinga GP Elements	Required GP Elements	Optional GP Elements	Topics Covered
Chapter 2: Land Use	Land Use		Development patterns, residential neighborhoods, community character
Chapter 3: Open Space and Conservation	Open Space, Conservation		Open space, agriculture, habitat and natural resource conservation
Chapter 4: Circulation	Circulation		Traffic, street network, transit service, trails
Chapter 5: Safety, Air Quality and Noise	Safety, Noise	Air Quality	Development in hazardous areas, fire protection, hazardous materials, Seismicity, flood control, noise, climate change (including GHG emissions)
Chapter 6: Public Facilities/ Services		Public Facilities/ Services	Public facilities, utility services, major infrastructure systems
Separate: Housing	Housing		Population, housing needs

Goals, policies and implementation measures to guide short and long-range decision-making are provided for each of the elements. The goals represent the ultimate end towards which an effort is directed and are general in nature with the intention of providing policy direction. The policies represent an official statement providing more specific direction to guide actions. The implementation measures are the actions to be fulfilled to achieve the goals and policies.

General Plan Amendments

Recognizing the dynamic nature of the General Plan, state law provides for periodic review of the document to ensure it is consistent with the conditions, values, expectations and needs of the community. The General Plan Guidelines state:

> *The General Plan is a dynamic document because it is based on community values and an understanding of existing and projected conditions and needs, all of which continually change. Local governments should plan for change by establishing formal procedures for regularly monitoring, reviewing and amending the General Plan.*

The General Plan will be amended from time to time as City goals become more defined, as they shift, or as state law dictates. In addition, periodic revision of the Housing Element will reflect

revisions in state requirements. A comprehensive update of the Housing Element is scheduled to occur every five years. The following process must be followed in reviewing and approving any proposed General Plan Amendments.

Amendment Applications

Applications to amend the General Plan shall be accompanied by detailed information to document the scope and impact of the amendment request. This information must include revised text, tables, and diagrams for all affected elements. For example, a change to the Land Use Element must include an analysis of impacts to the Housing and Circulation Elements. Pursuant to the requirements of CEQA, all amendment applications shall include an environmental initial study and analysis for consistency with the certified General Plan Environmental Impact Report (GPEIR) and mitigation monitoring program.

Since a significant amount of public resources have been invested in the preparation of the General Plan and EIR, any proposals to amend the General Plan must document the need for such changes. The application shall include a discussion of the environmental, economic, or technical issues that justify the need to amend the General Plan.

Any application to amend the General Plan must be accompanied by studies analyzing the amendment's effects, relative to the adopted General Plan and EIR. At a minimum the following issues must be addressed and supported by studies and/or other factual information in the application:

1) The proposed amendment is in the public interest.
2) The proposed amendment is in conformance with the adopted General Plan goals, policies and implementation measures as well as the overall intent of the General Plan.
3) The proposed amendment is compatible with existing development, neighborhoods, and the environment.
4) The proposed amendment complies with current CEQA requirements.
5) The proposed amendment is consistent with the adopted EIR and mitigation-monitoring program.

Staff Analysis

City staff will review the materials and provide a staff report to the Planning Commission. Staff may request additional information beyond the studies mentioned above. The staff report will analyze whether the proposed amendment is consistent with the General Plan and whether the need to amend the General Plan can be supported by the conclusions and supplemental studies, if required.

Amendment Cycles

Consistent with California Government Code §65358(b) and Public Resources Code § 30514) no element of the General Plan shall be amended more than four (4) times per calendar year. Two cycles of amendments shall be reserved for City use and the remaining two cycles shall be available for other amendment applications. More than one amendment application may be considered during a cycle provided it is heard on the same public hearing date. As potentially applicable to the Coalinga General Plan, this amendment limitation does not apply to:

- Amendments requested and necessary for affordable housing (§ 65358(c))
- Any amendment necessary to comply with a court decision in a case involving the legal adequacy of the general plan (§ 65358(d)(1))
- Amendments after January 1, 1984, to bring a general plan into compliance with an airport land use plan (§ 65302.3).
- Amendments needed in connection with the adoption of a comprehensive development plan under the Urban Development Incentive Act (Health and Safety Code §56032(d)).

Exceptions

Minor adjustments to General Plan boundaries and diagrams may be approved with a simplified process that does not require additional studies. Minor adjustments include changes that modify boundaries to follow more logical locations without increasing density or changing entitlements. For example, a minor adjustment might include moving a land use boundary from one side of the street to the other or an interpretation of where a land use boundary bisects a property. The City Council, by resolution, will establish the procedures and rules for this simplified process.

Severability Clause

In the event any goal, policy, or implementation measure or portion of any element of the General Plan is held invalid or unconstitutional by a California or Federal Court of competent jurisdiction, such portions shall be deemed separate, distinct, and independent provisions, and the invalidity of such provisions shall not affect the validity of the remaining portions.

Related Planning Considerations

Regional Planning

Coalinga is one of fifteen incorporated cities in Fresno County. Each jurisdiction carries a responsibility to coordinate its General Plan with regional planning efforts to ensure consistent planning decisions as well as attainment of regional circulation, environmental and housing goals. The principal regional agencies with planning policies and standards that may affect the City of Coalinga are shown in **Table 1-2** on the following page.

TABLE 1-2
REGIONAL PLANNING RESPONSIBILITIES

Agency	Planning Responsibilities
Fresno County	Responsible for the planning of lands directly outside incorporated city limits.
Fresno County Council of Governments (FCOG)	Responsible for fostering inter-governmental communications and cooperation, undertaking comprehensive regional planning with an emphasis on transportation, providing for citizen involvement in the planning process, and providing technical services to the member agencies.
Local Agency Formation Commission of Fresno County (LAFCO)	Responsible for determining, adopting and periodically reviewing and updating city's Sphere of Influence and considering annexation requests.
Regional Water Quality Control Board (RWQCB)	Responsible for preserving, enhancing and restoring the quality of State's water resources and ensuring proper allocation and efficient use.
Integrated Waste Management Authority	Responsible for solid waste reduction and collection, as well as the siting and management of solid waste facilities.
I-5 Business Development Corridor	Responsible for attracting new businesses to the area and assisting existing businesses in solving their problems and achieving success.
Fresno County Economic Opportunities Commission	Responsible for assisting the development of anti poverty action projects by public agencies, non-profit organization or indigent groups so as to create more self-sufficient, independent members of the community.
Fresno County Rural Transit Agency	Responsible for providing transit services to the thirteen rural incorporated cities of Fresno County, unincorporated rural communities and neighboring counties.
Fresno County Community Health Department	Responsible for providing health promotion, surveillance, and disease prevention services to protect the health of the public, population groups and individuals.
San Joaquin Valley Air Pollution Control District	Responsible for establishing and implementing policies and programs for the attainment of federal and state air quality standards.
California Department of Transportation (Caltrans)	Responsible for the design, construction, maintenance and operation of the California State Highway System, as well as that portion of the Interstate Highway System within the state's boundaries.

The following paragraphs briefly discuss specific regional plans and policies that may affect the future development of the City of Coalinga.

San Joaquin Valley Air Quality Attainment Plan (Air Quality): The San Joaquin Valley Air compounds and nitrogen oxides, the two precursors to ozone. In addition to control measures, the Plan includes information about air quality trends and about emission forecasts.

Transportation Control Measures (Transportation Control): As an outgrowth of the Fresno County Air Quality Attainment Plan, the City of Coalinga is obligated to implement various transportation control measures which serve to alleviate traffic congestion and reduce photochemical smog. A number of these measures such as jobs/housing balance recommendations influence policy direction for the distribution of land uses within the City and have been included in this General Plan.

Fresno County Congestion Management Plan (Congestion Management): State law requires Fresno County create a Congestion Management Program (CMP) prior to the County receiving gas tax monies, made available through Proposition 111. The CMP represents an effort to manage traffic congestion by coordinating transportation, land use, and air quality programs in Fresno County. As part of this program, the City of Coalinga is required to adopt their own land use impact program and establish policies to maintain Level of Service (LOS) standards.

Seismic Hazards Mapping Act (Seismic Hazards): The Seismic Hazards Mapping Act of 1990 calls for the delineation of seismic hazard zones including areas of high potential for liquefaction, earthquake induced landslides, and other ground failures. The principal role of the State is to identify seismic hazard study zones. Based on State prepared maps, the local government is charged with adopting policies to reduce the extent of earthquake damage.

City of Coalinga Emergency Management Plan (Emergency Management): The Emergency Management Plan provides the basis for disaster response planning in Coalinga. The Plan is continually updated to address the jurisdiction's planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and nuclear defense operations. Operational data including a listing of resources, key personnel, essential facilities, contacts, and other data needed for conducting emergency operations are also provided.

Fresno County Hazardous Waste Management Plan (Hazardous Waste): The Hazardous Waste Management Plan is designed to ensure safe, effective, and economical facilities for the management of hazardous wastes are available when they are needed. To attain this goal the Plan establishes goals, policies, and programs to encourage the safe handling, storage, and transportation of hazardous materials.

Coalinga Regional Plan (Land Use): The Coalinga Regional Plan identifies expectations regarding development in the southwestern portion of Fresno County, excluding land within the City of Coalinga.

Coalinga-Huron Parks and Recreation Master Plan (Parks and Recreation): The Parks and Recreation District Master Plan forms a framework for the future provision and operation of active and passive parks, pedestrian and bicycle paths, recreation and leisure programs, and community service facilities which physically relate to parks provisions. This Plan includes two parts: an inventory of existing recreation facilities in Coalinga and a plan that specifies improvements for the future operation of each facility. In addition, the Plan includes a summary of proposed expenditures and available funding sources.

Community Redevelopment Law (Redevelopment): California, through the Community Redevelopment Law (Health and Safety Code §33000 et. seq.) authorizes a City to form a redevelopment agency to undertake redevelopment projects to revitalize blighted areas. An adopted Redevelopment Plan provides additional tools to a City and its agency to effectuate productive change in blighted areas of the community. These include the use of tax increment, property acquisition, consolidation of small parcels, joint public-private partnerships, clearance of land and resale to developers, and relocation of tenants. A minimum of twenty percent of the tax increment, in most cases, is used for the development of low and moderate-income housing.

The Coalinga Redevelopment Plan was initially developed to help the City rebuild after the 1983 earthquake. The Redevelopment Plan includes a five-year implementation plan; the most recent update occurred on May 5, 2005. The Redevelopment Plan Area is shown on **Figure 1-1**.

City/County Tax Sharing Agreement (Annexation and Tax Sharing Agreement)

In 2008, the City of Coalinga, County of Fresno, and Coalinga Redevelopment Agency executed a Memorandum of Understanding (MOU) to jointly share tax revenues resulting from development annexed into the City after the date of the MOU. The agreement applies to areas identified within the City's SOI adopted at the time of execution of the MOU (see **Figure 1-1**).

The intent of the MOU is to distribute equitably the increased revenues from new development. The MOU also states the County will: (1) not approve any discretionary development permits for new urban development within the City's Sphere of Influence (SOI) unless that development has first been referred to the City for annexation, and (2) oppose the creation of new governmental entities within the City's SOI. Provisions are made for development in the SOI that are not annexed to the City; however, development standards comparable to the City's must be applied to such development.

The MOU also addresses development for an extensive area outside of the City's corporate and adopted SOI boundaries. The City and County agree to consult on any policy changes that may impact land use or public services in this area. In addition, the City must be given the opportunity to respond to any land use/service related document before such a document is presented to the County Planning Commission. The County agrees to solicit comments from the City in the preparation of any environmental Initial Study undertaken within the area.

Any change in the City's SOI requires the mutual consent of both the City and the County prior to submission to LAFCO. The agreement applies only to the areas identified in Map 3 (the City's adopted SOI at the time of execution of the MOU) unless and until the parties agree to amend the MOU.

Environmental Review

Adoption of a General Plan is considered a "project" under CEQA. As such, the potential impacts of adoption of the General Plan must be identified and analyzed. In conjunction with the preparation of the General Plan, a GPEIR has been prepared consistent with all CEQA requirements.

Recent legislation in the form of AB 32 established a requirement for analysis of greenhouse gas emissions (GHG) in CEQA documents. The California Attorney General in comments to local agencies has indicated that CEQA documents prepared for General Plans must address climate change and include mitigation that to offset GHG emissions from the Plan. The City's intent has been to create a self-mitigating General Plan. As such, to the greatest extent possible, policies and programs are incorporated into the General Plan that would reduce potential impacts identified in the GPEIR to a less than significant level.

Consistent with Section 15152 of the CEQA Guidelines, the Coalinga GPEIR may be used for "tiering." Projects determined to be consistent with the General Plan and EIR may incorporate the relevant analysis, mitigation, and overriding considerations into subsequent EIRs or Negative Declarations.

Subsequent Actions

Immediately following the adoption of the General Plan, the City will begin the process of amending the Zoning Ordinance and Map to achieve consistency with the General Plan. The City will be preparing Downtown Design Guidelines for the Downtown Commercial Overlay District that will encourage the preservation and re-use of historic buildings in to various commercial and professional office uses, as well as, the enhanced standards for commercial development along Coalinga Plaza and Elm Street.

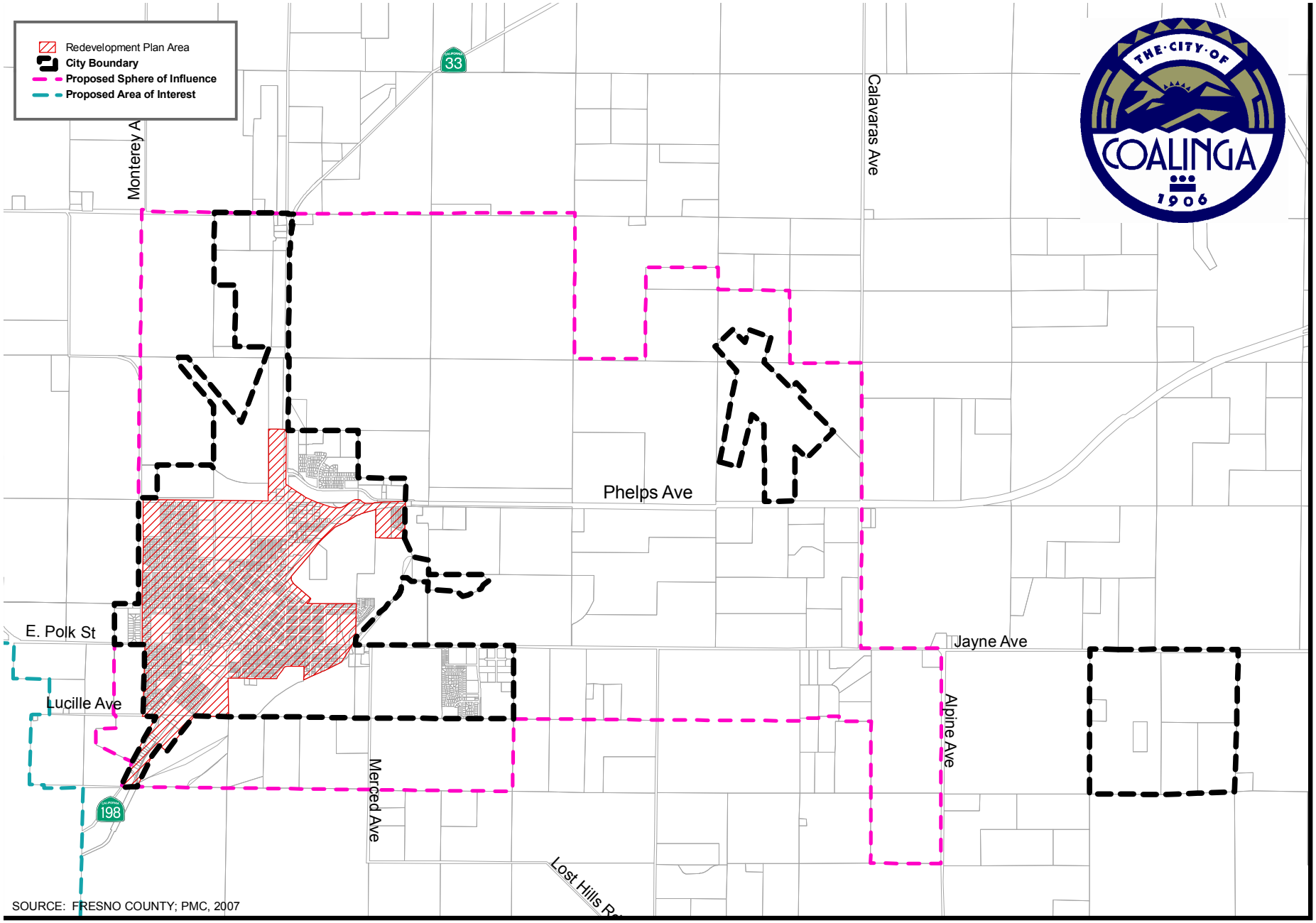


FIGURE 1-1
REDEVELOPMENT PLAN AREA

CHAPTER

2

LAND USE ELEMENT

INTRODUCTION

The purpose of the Land Use Element is to designate the general distribution, location and intensity of land use including housing, commercial, business, industry, open space, conservation areas, recreation areas and public facilities within the City of Coalinga and its future growth area**.** The Land Use Diagram, presented in this Element, illustrates this pattern of development envisioned by the City. Together, the text and land use diagram of this Element provide the foundation for land use decision making through the year 2025.

The Land Use Element is the broadest of the elements and is the basis for coherent land use policy development. Goals and policies set forth in the Land Use Element simultaneously shape and reflect the policies and implementation measures contained in the other General Plan Elements found in Chapter 3: Open Space and Conservation; Chapter 4: Circulation; Chapter 5: Safety, Air Quality, and Noise; 6: Public Facilities and Services; and the separate Housing Element.

Although all elements in the General Plan carry equal weight, the Land Use Element is typically the most referenced and is often perceived as most representative of the "General Plan." The Land Use Element provides planners, the general public and decision makers with a long-term context to help guide short-term actions such as zoning, development proposals and infrastructure planning. It also outlines strategies for achieving the type of community envisioned by the community.

ORGANIZATION OF THE ELEMENT

This Element is organized into eight main sections described below:

- **Introduction.** This section includes an overview of the contents of the Land Use Element, as discussion of state law requirements and a description of Coalinga's planning boundaries.

- **Background and Setting.** This section provides a description of the current land use setting, anticipated growth projections and community vision for future development.
- **Land Use Designations.** Text explanations of the various existing, revised and new land use designations are provided within this section.
- **Special Planning Areas.** This section provides guidance for the development or redevelopment of specific geographic areas within Coalinga that have been designated as special planning areas.
- **Zoning Classifications.** Establishes the corresponding Zoning Classifications consistent with the General Plan Land Use Designations
- **Summary of Land Use Changes.** Land uses changes within the planning area as a result of this General Plan Update are summarized within this section.
- **Future Growth Under the 2025 General Plan.** This section describes the potential growth of the community and projects the maximum buildout potential under the proposed land use designations.
- **Land Use Goals, Policies and Implementation Measures.** This section outlines Coalinga's overall land use goals, and the policies and implementation measures designed to attain these goals.

Requirements of the Land Use Element

California Government Code Section 65302(a) requires that a Land Use element be included in a General Plan and outlines the issues that must be addressed. Consistent with Section 65302(a), the Land Use Element should address each of the following issues as relevant:

- The distribution of housing, business, and industry;
- The distribution of open space areas, including agriculture;
- The distribution of natural resources;
- The distribution of recreation areas and places of scenic beauty;
- The distribution of educational facilities;
- The distribution of public buildings and grounds;
- The distribution of solid and liquid waste disposal facilities;
- Areas subject to flooding; and
- Other categories of public and private uses of land.

The land use element, as each of the elements in the General Plan, is also required to be fully integrated and must be consistent with each of the other elements. This Element has been prepared in conformance with all mandatory requirements of state law.

PLANNING BOUNDARIES

Land use boundaries have been established with regard to both physical/environmental constraints and growth projections for the community. Anticipated growth areas are located primarily between the historic core of the City and the prison and airport sites to the east, as well as to the northeast along Highway 198, where access to utilities and services is linked directly to the City. Land west of Coalinga should not be considered a growth area due to a number of constraints. These growth constraints include: contaminated soils and numerous other environmental constraints due to oil production; uneven topography which would require substantial grading; and, limited existing infrastructure.

Boundaries considered in this General Plan Update include: (1) City Limits; (2) Sphere of Influence (SOI); and, (3) Area of Interest (AOI). Only the land within the existing City Limits combined with the SOI constitutes Coalinga's Planning Area for the purposes of this 2025 General Plan Update. The AOI is identified in the land use maps, but is not anticipated for development in the 2005-2025 General Plan timeframe. The geographic areas and planning boundaries considered in the General Plan are described below in **Table 2-1** and are illustrated on **Figure 2-1**, **Planning Boundaries**.

TABLE 2-1
PLANNING BOUNDARIES (ACRES)

Boundary	Current[1]	Proposed[2]	Increase	%Increase
City Limits	3,848	3,848	0	0
Sphere of Influence	2,288	8,589	6,301	275%
Subtotal (Planning Area)	*6,136*	*12,436*	*6,301*	***102%***
Area of Interest	11,581	41,279	29,698	256%
TOTAL	**17,717**	**53,715**	**35,999**	**203%**

Source: 1. PMC, Existing Land Use Map (PMC, Land_Use_GP_2004_ 06-01-06.shp) May 2009
2. PMC, Land Use Diagram GIS layer (land_use_diagram_ 02-28-08.shp) May 2009
Notes: The areas above include estimated street and road areas.
Numbers have been rounded up from the GIS calculations.

City Limits

The City Limits is that area over which the City has direct land use planning and zoning control, as well as service responsibilities. Approximately 3,848 acres of land lie within the existing Coalinga City Limits.

Sphere of Influence

The Sphere of Influence (SOI) is a legally defined area established by the Fresno County Local Agency Formation Commission (LAFCO) used to designate the future incorporated boundary and service area for a city or special district within a specific period of time. The City of Coalinga's

General Plan Planning Area includes land within the incorporated City Limits and unincorporated land within the Sphere of Influence (SOI) surrounding the City. Within the SOI, the municipality is empowered to plan and annex land for future uses, services and facility improvements. The City can make recommendations to the County on land use policy within the SOI area; however, the County has final jurisdiction.

The 1994 SOI encompassed approximately 2,288 acres (3.6 square miles) outside the City Limits. The City's currently proposed SOI has been expanded to include an additional 6,301 acres of land for a total proposed SOI of 8,589 acres (13.4 square miles). This SOI boundary reflects the City's calculation of the amount of land needed to accommodate projected growth through the General Plan's 2005-2025 timeframe consistent with the goals, policies and implementation measures presented in this Element. The City expects property and new development within the SOI will be annexed prior to 2025.

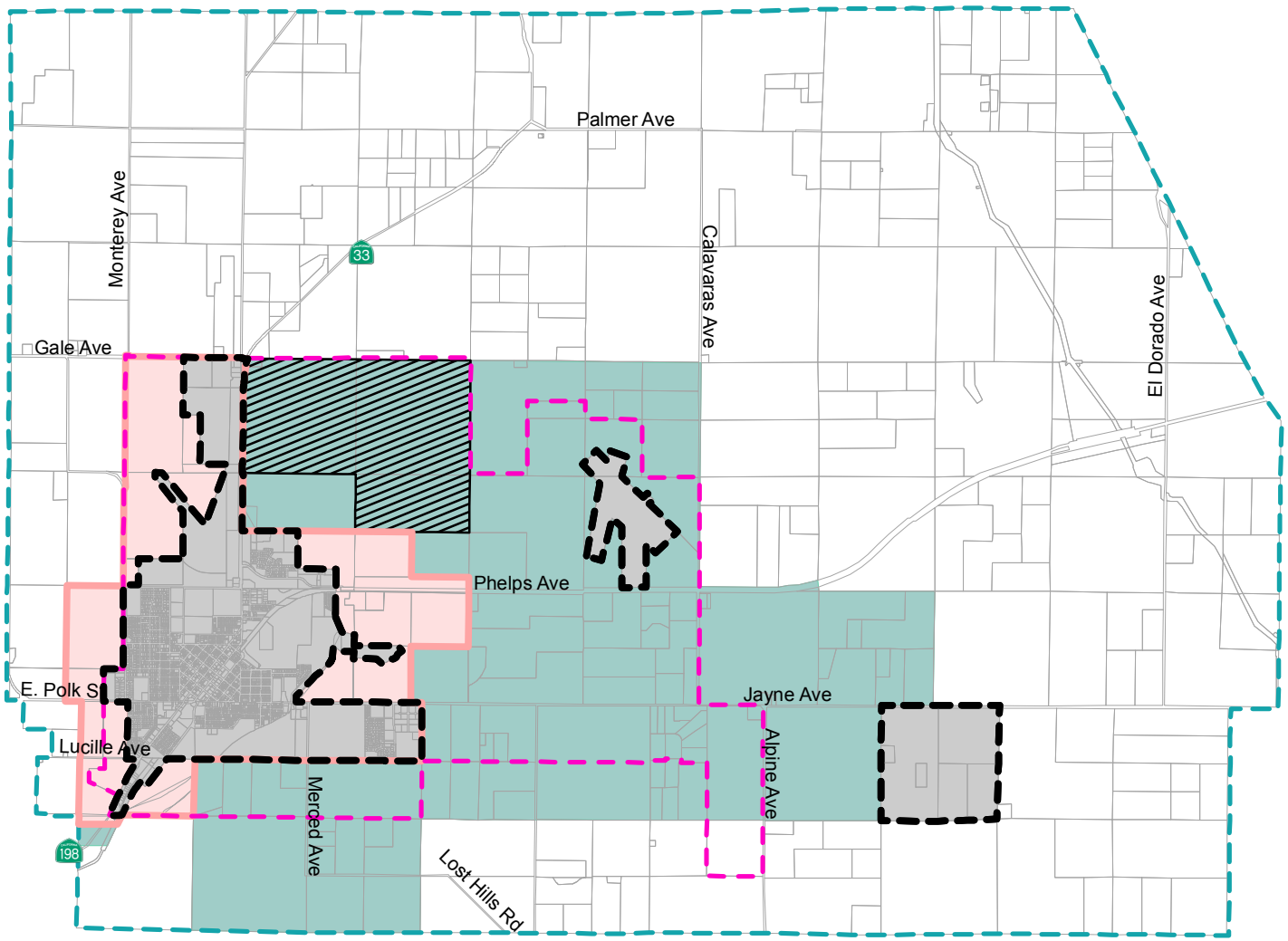
Area of Interest

The Area of Interest (AOI) is an informal designation established by LAFCO, with the assistance of the City and Fresno County. The AOI is a general area of concern within which planning decisions and other governmental actions of the County may have an impact on the City of Coalinga. The AOI provides a linkage among the new airport, prison, Interstate 5 and other areas in the SOI.

The AOI is much larger than the SOI and is beyond the Planning Area evaluated in this General Plan. The 1994 AOI encompassed 11,581 acres of land (approximately 18 square miles) that extended beyond the 1994 SOI. The AOI has been enlarged as part of this Update to include 41,146 acres of land (approximately 64 square miles) that extends beyond the proposed SOI. The City provides water service to a small portion of the AOI north of the City Limits along Highway 33/198. The County currently has land use and zoning jurisdiction within the AOI. The City however, may ask Fresno County to provide notification of any land use considerations in this area.

Future Study Area

The Future Study Area is territory within the AOI that may warrant inclusion in the SOI in future years. This area has been identified as the probable direction and location of growth beyond the 2005-2025 General Plan timeframe, but prior to 2045. The City does not plan to annex these properties during the 2005-2025 timeframe; however, these areas should be prioritized for development during the next General Plan Update Future study would need to be completed prior to inclusion of these areas in the SOI.



T:_GIS\Fresno_County\Mxds\Coalinga\From3x\Figure 2-1 Planning Boundaries2.mxd

SOURCE: FRESNO COUNTY; PMC, 2007

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FIGURE 2-1
PLANNING BOUNDARIES

Background and Setting

The Coalinga General Plan underwent a thorough update in 1994. Currently, the City is experiencing significant growth pressure within the City Limits as well as outside the City's northern cooperate limits and Sphere of Influence. This growth has caused the City to reexamine the land use patterns and assumptions put forward in the 1994 General Plan. The 2025 Update is necessary to ensure that the General Plan accurately portrays growth patterns, population figures and land uses in the City. This section describes the existing land use as put forward in the 1994 General Plan, current growth projections, including proposed development, and the community's vision for the future.

Description of Existing Land Use – The 1994 General Plan

The City of Coalinga's City Limits currently contains approximately 3,812 acres. The City's land use designations are illustrated on **Figure 2-2 Existing Land Use (1994 General Plan)** and are described below in **Table 2-2**.

Table 2-2 (June 2009)
1994 General Plan Land Use Acreage

Land Use	City Limits	SOI	Total
Estate Residential (ER)	29.38	178.88	208.26
Residential Single Family (RSF)	778.87	637.44	1416.31
Residential Multi-Family – Low Density (RML)	130.44	0	130.44
Residential Multi-Family – Medium Density (RMM)	117.36	0	117.36
Mixed Use (MX)	55.26	0	55.26
Commercial General (CG)	73.24	14.59	87.83
Commercial Service (CS)	26.61	0	26.61
Manufacturing/Business (MB)	134.29	0	134.29
Public Facilities (PF)	1,207.53	0	1,207.53
Recreation (REC)	126.12	66.69	192.81
Open Space/Conservation (O)	376.85	413.79	790.64
Agricultural (A)	354.87	920.12	1274.99
Subtotal	*3,410.82*	*2,231.51*	*5,642.33*
Streets right of ways etc (estimated)	437.56	56.92	494.48
TOTAL	3,848.38	2,288.43	6,136.81

Source: PMC, Existing Land Use Map (PMC, Land_Use_GP_2004.shp) June 2009

Population and Growth

According to the US Census Bureau, 6,593 persons resided in Coalinga in 1980. By 1990, this number had risen to 8,212. This represents an average annual growth rate of approximately 2.2% from 1980 to 1990. Between 1990 and 2000, the annual growth rate was significantly higher, averaging 3.6% annually, with the population increasing to 11,668 persons in 2000.

The City's population in 2000 included 805 persons living in group quarters (persons not living in households). Group quarters include institutions such as correctional facilities, nursing homes

and juvenile institutions. In 2000, the Pleasant Valley State Prison was annexed by the City, which dramatically increased the population living in group quarters in Coalinga. According to the State Department of Corrections and Rehabilitation, this facility houses approximately 5,188 inmates (2004-2005 fiscal year).

The City of Coalinga continues to grow. It is now estimated that 17,081 people reside in the City, with 11,217 persons (65.7% of the population) in households and 5,864 persons (34.3%) living in group quarters. Approximately 3,527 (91%) of the 3,874 households in the City are occupied, for an average household size of 3.18 persons per unit (Department of Finance 2005). Should the growth rate continue at a 3 to 4% rate over the next twenty years, as many as 22,188 residents (an additional 10,971) may be living in the City (not including group quarters) by the year 2025. The 2005-2025 estimated annual growth rate is presented in **Table 2-3,** below, and graphically illustrated in **Figure 2-3**.

TABLE 2-3
ESTIMATED ANNUAL GROWTH (EXCLUDING GROUP QUARTERS) 2005-2025

Year	Population	Annual Growth Rate
2005	11,217	3.2%
2006	11,576	3.2%
2007	11,946	3.4%
2008	12,353	3.4%
2009	12,773	3.6%
2010	13,232	3.6%
2011	13,709	3.8%
2012	14,230	3.8%
2013	14,770	4.0%
2014	15,361	4.0%
2015	15,976	3.8%
2016	16,583	3.8%
2017	17,213	3.6%
2018	17,833	3.6%
2019	18,474	3.4%
2020	19,103	3.2%
2021	19,714	3.0%
2022	20,305	3.0%
2023	20,914	3.0%
2024	21,542	3.0%
2025	22,188 (a 20-year increase of 10,971 persons)	
Average Annual Growth 2005-2025		**3.5%**

Source: PMC2008 Department of Finance 2005

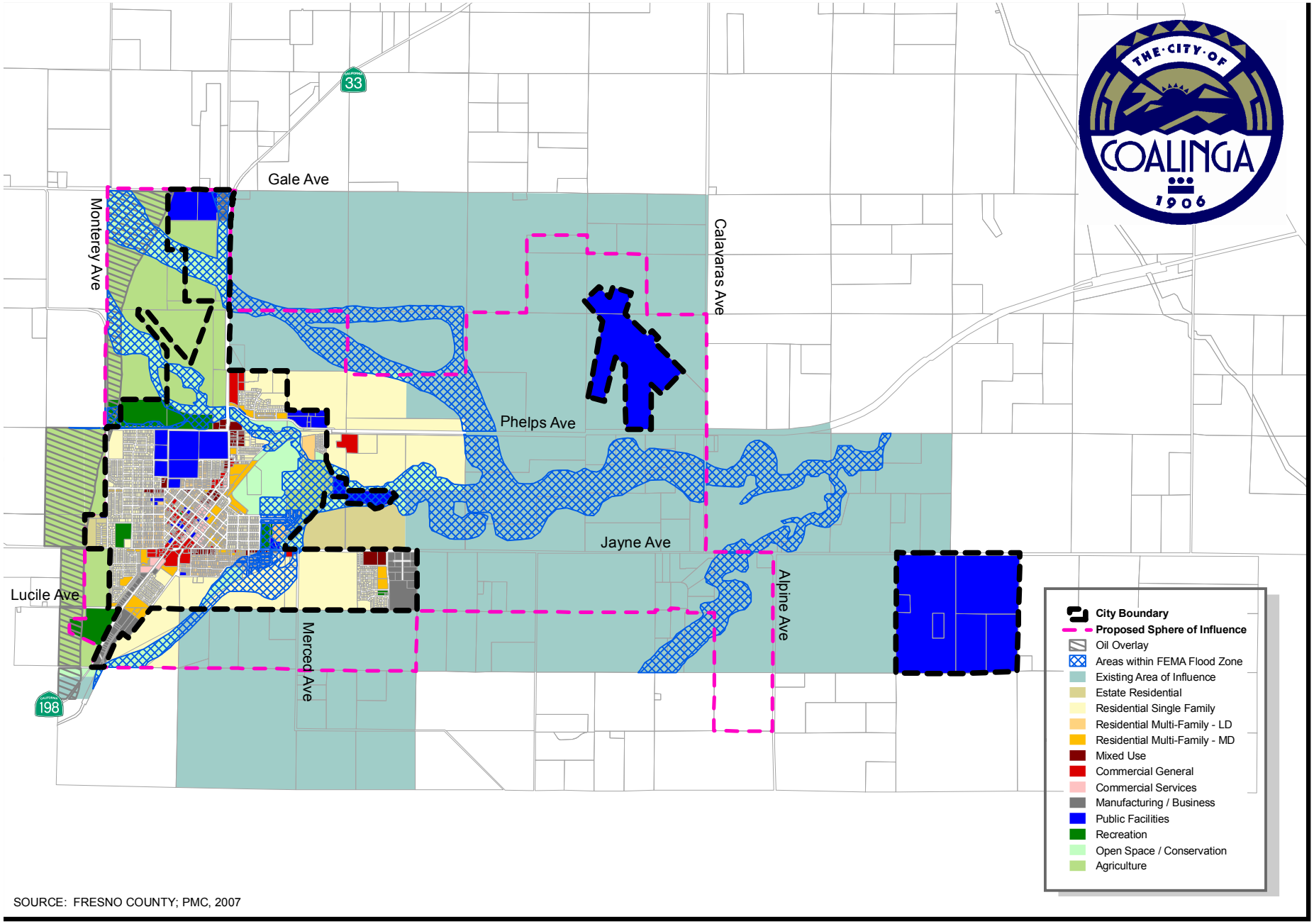
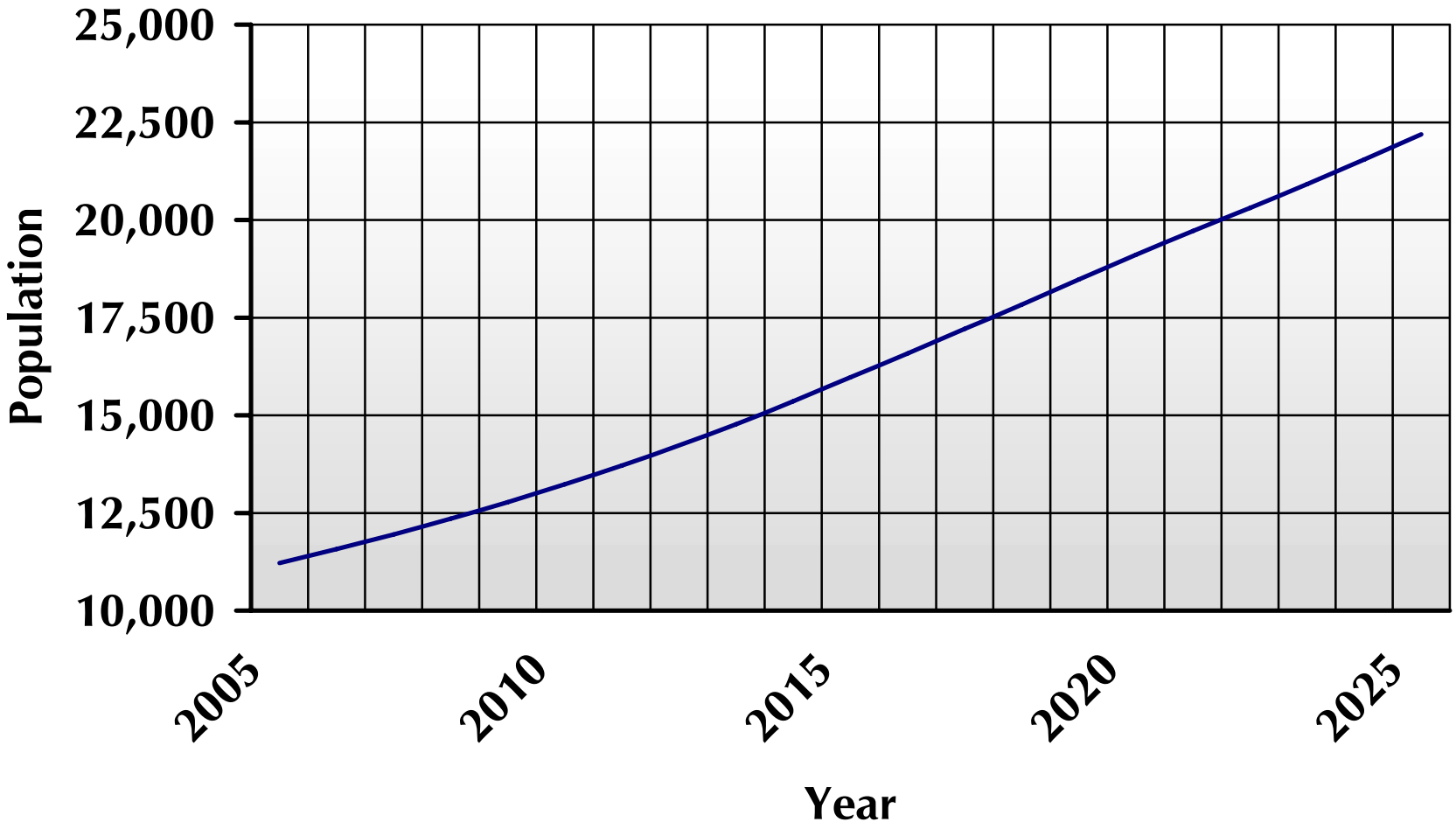


FIGURE 2-2
EXISTING LAND USE (1994 GENERAL PLAN)

FIGURE 2-3
ESTIMATED ANNUAL GROWTH (EXCLUDING GROUP QUARTERS) 2005-2025



There is good reason to believe that Coalinga's future growth will exceed historic growth rates. Several development proposals featuring residential components are currently proposed in the City. Should these developments go forward, 38,858 persons could be added to the City's population by 2025 (excluding group quarters). This would increase the current population of 11,217 persons in households (Department of Finance 2005) to 50,075 over a 20-year period. The City's population would grow at an average annual rate of approximately 7.8%. These proposals are shown on **Figure 2-4** and described below in **Table 2-4**.

TABLE 2-4
CURRENT DEVELOPMENT PROPOSALS WITH RESIDENTIAL COMPONENTS

Project	Acres	General Plan Land Use	Dwelling Units	Population[1,2]
Foreseeable Development – Within Existing City Limits				
Juniper Ridge	24	RHD	217	651
School Farms	296	RSF, RMD, RHD, MX	955	2,865
Promontory Pt. II & III	28	RSF	75	225
Dorothy Allen III	14	RSF	48	144
Posa Chanet III	13	RSF	45	135
Warthan Creek	107	RSF	351	1,053
Stallion Springs	27	RSF	95	285
Senior Living Facility[2]	7	RHD	94	188
Subtotal	*516*	*--*	*1,880*	*5,546*
Possible Future Development – Outside Existing City Limits				
Los Gatos Creek	3,310	RE, RSF, RMD, RHD, IND, CG, PF, REC	10,068	30,204
Warthan Heights	276	RSF, RMD	1,036	3,108
Subtotal	*3,586*	*--*	*11,104*	*33,312*
TOTAL	**4,102**	**--**	**12,984**	**38,858**

Source: City of Coalinga, June 2006; February 2008
Notes: 1. Population estimates assume 3.0 persons per household based on the January 2005 Department of Finance estimate of 3.18 persons per household
2. Group quarters; population estimates assume 2.0 persons per unit.

Population and Growth Assumptions

Certain basic assumptions can be made concerning future growth expectations by utilizing past development trends, estimated growth rates and current development proposals facing the City. These basic assumptions include:

- Development projects currently proposed to the City will be completed by 2025. The population increase due to currently proposed development would be approximately 38,858 persons (38,670 persons excluding group quarters) over the next 20 years.

- Although much of Coalinga's projected growth during the 2005-2025 General Plan timeframe will be accommodated by current proposals, it is reasonable to assume that some additional growth will occur both independent of, and in support of, these developments. This General Plan assumes that this growth would be approximately half of the historic 3 to 4% growth rate (see **Table 2-3** presented earlier), or an increase of 5,486 persons over 20 years.
- Based on the two assumptions above, growth in Coalinga will result in approximately **44,156** additional residents (38,670 + 5,486), excluding group quarters, by the year 2025.
- The population per household will continue at approximately 3.0 persons per unit.
- To accommodate the anticipated growth of 44,156 additional residents over 20 years, 14,719 dwelling units would be required.
- Buildout of reasonably foreseeable development projects (**Table 2-4**, presented earlier) will result in the construction of 12,890 new dwelling units accommodating 38,670 persons (excluding group quarters).
- Even with the development of reasonably foreseeable projects, estimated growth would require an additional 1,829 dwelling units (14,719 – 12,890) for approximately 5,486 residents be built in Coalinga over the next twenty years (assuming 3.0 persons per household).
- Based on the assumptions above, the population of Coalinga could reach **55,373** residents by the year 2025 (11,217 currently living in households + 44,156 additional residents).
- Based on the assumptions above, buildout of reasonably foreseeable development projects plus estimated additional annual growth will result in the construction of more than 14,719 dwelling units (12,890 proposed + 1,829) by the year 2025.

Therefore, the 2025 General Plan Update assumes that the population of Coalinga could reach 55,373 residents (excluding group quarters) by the year 2025. This population growth may be accompanied by the development of 14,719 additional dwelling units. The 2025 General Plan Update anticipates the City's projected level of growth, while avoiding harm to the environment and improving the overall quality of life in Coalinga, through the following guiding principals:

- Confining growth to areas that create a logical extension of the City and do not result in haphazard or scattered leap-frog style development is important to encourage infill type development and to establish an effective connection between existing development;
- Planning growth around the City's established core, enabling the efficient use of existing roadway patterns, utility infrastructure, commercial areas, and recreational space; and,
- Accommodating increases in population within a relatively small area as compared to the area encompassed in Coalinga's entire Area of Interest (AOI).

Effects of the anticipated growth are described and have been planned for within each of the Elements of the General Plan and the General Plan Environmental Impact Report.

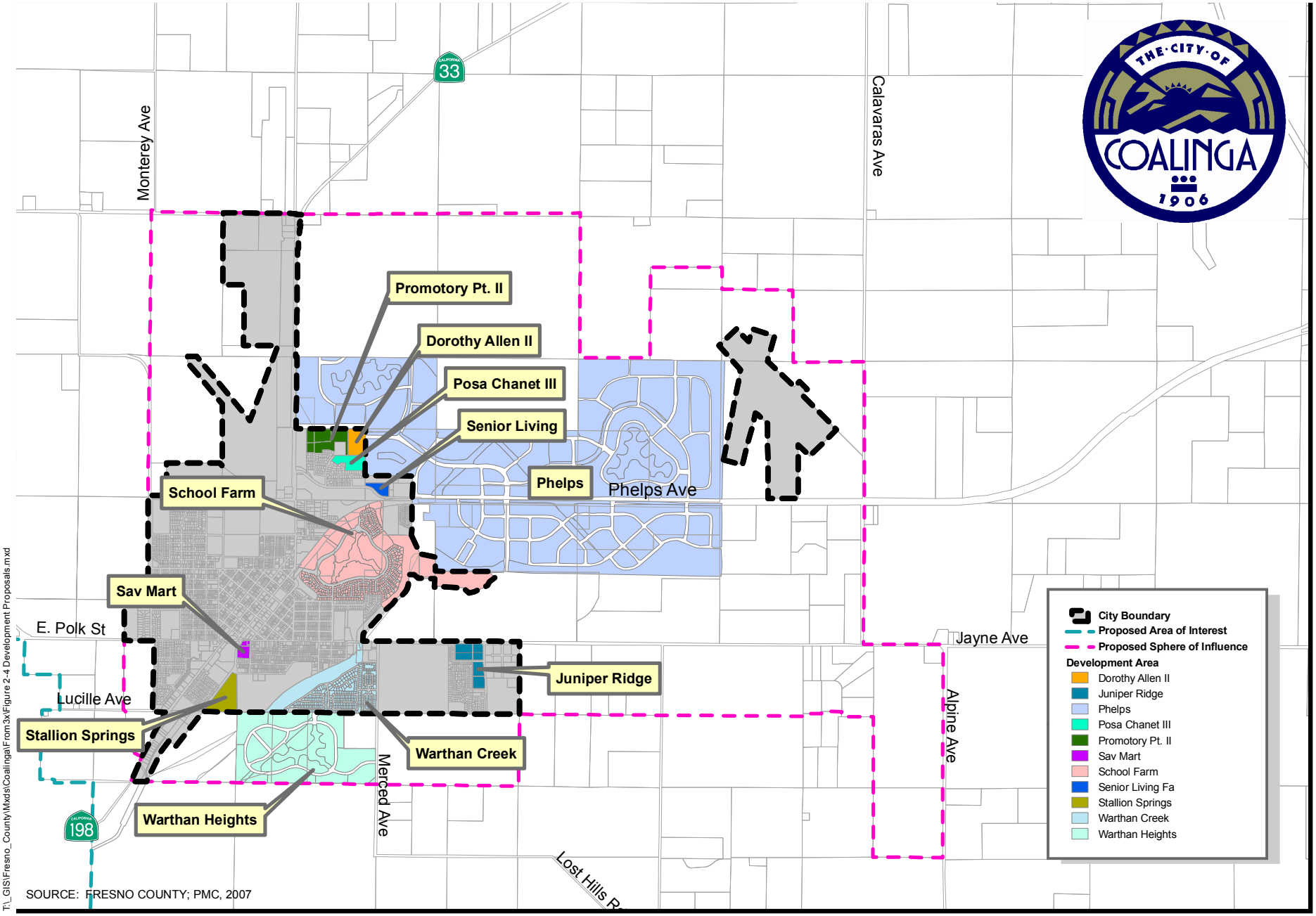


FIGURE 2-4
DEVELOPMENT PROPOSALS

COMMUNITY VISION

Citizen participation played an important role in preparing the Coalinga 2025 General Plan Update. Throughout the preparation stage, numerous residents, business owners and various civic and professional organizations were involved with issue identification and goal formulation through attendance at the General Plan Update community workshops and public hearings.

As described in Chapter 1 of this General Plan, a number of Community Vision Statements defining the values and vision for the community were developed based on the City's adopted Guiding Principles. Core values as described in the Community Vision Statements that pertain most directly to the Land Use Element are summarized below:

- Coalinga preserves its general open, rural, low profile, uncrowded character punctuated with ample open space, large setbacks, panoramic views and pristine vistas of the surrounding hill ensuring visual and physical harmony between the natural and man-made environment.
- Coalinga promotes urban design features that provide artful integration of building sites with the environment.
- Coalinga includes a variety of residents varied in age, family makeup, income levels, and interests who can commonly enjoy the beauty, economic opportunities, recreational activities and cultural amenities of the City and surrounding regions.
- Coalinga provides choices in housing types and densities in a variety of neighborhoods seamlessly integrated and well-insulated from high-volume roadways, noise and nonresidential land uses.
- Coalinga neighborhoods harmonize and compliment one another through good urban design, architectural standards and landscaping.
- Coalinga is a place where residents can fulfill their varied individual housing needs and dreams of home ownership.
- Housing in Coalinga fosters a sense of neighborhood among residents and a sense of community through landscaped linkages with surrounding neighborhoods, parks and pristine areas.
- Economic development in Coalinga is viewed as the sustained creation of community wealth and the generation of tax revenues through the retention, expansion and development of diversified business opportunities that are compatible with the environment, community values and community vision.
- Quaint shops, neighborhood commercial developments, office developments, light industrial enterprises, restaurants, motels and walking malls are in harmony with Coalinga's small town character, scenic beauty and natural resources which are the foundation of its economic strength and quality of life.

- Coalinga interacts and works with other governmental entities for the mutual benefit of the City, county, region, state and nation.

Community Vision Statements that are not related to land use are discussed in the appropriate element of this Update. The values put forward in the Community Vision Statements are incorporated into the goals, policies and implementation measures of this General Plan.

Land Use Designations

This section of the Land Use Element describes land use designations used throughout the City of Coalinga. By defining the various land uses, this portion of the Element provides clear direction for the various types of potential development that will fulfill Coalinga's vision for community growth through 2025.

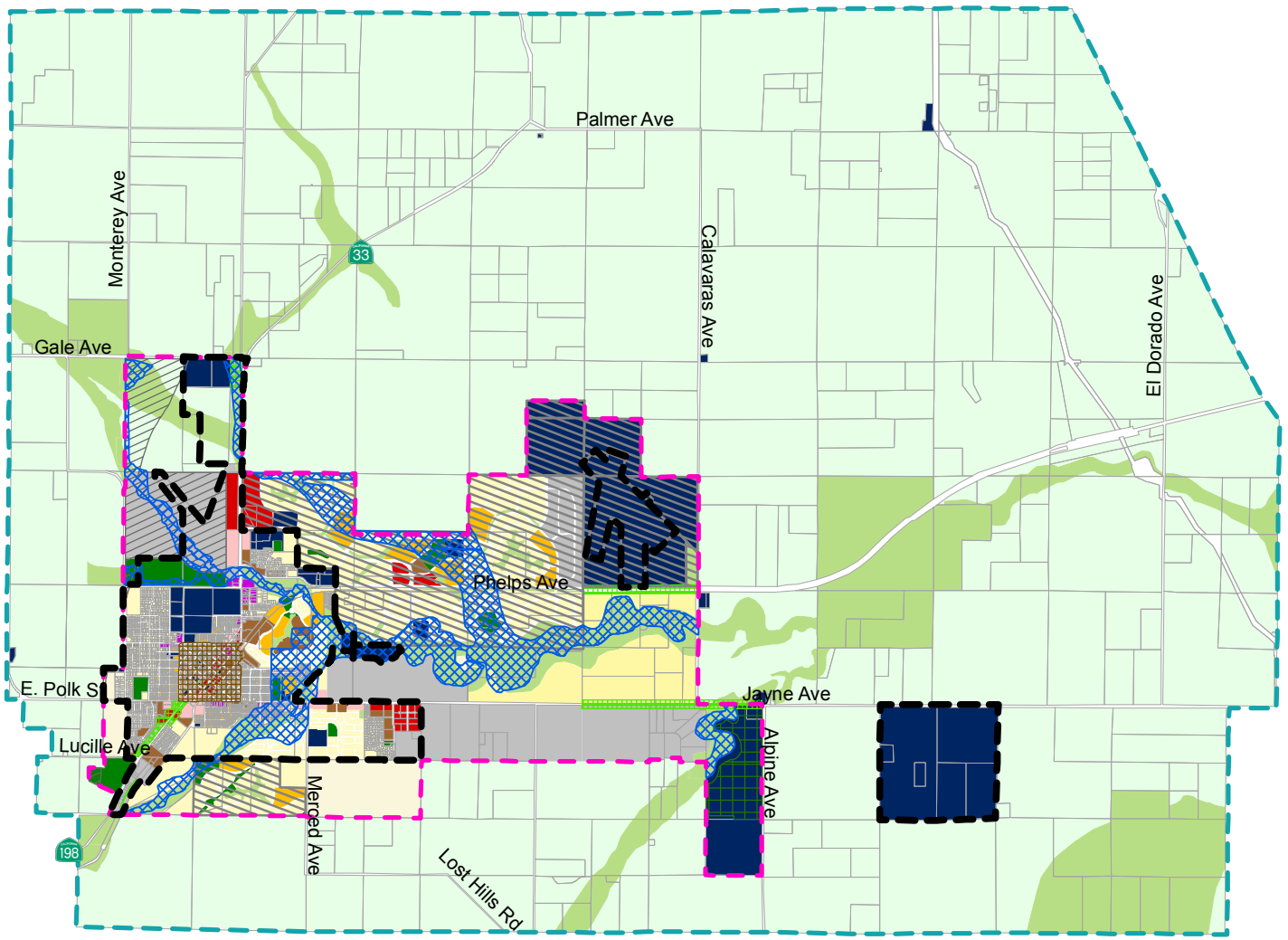
The designations have also been applied to those lands outside the City Limits, but within the Area of Interest as a statement of the City's preferred policy. The geographic distribution of the various land use designations are shown on **Figures 2-5A**, **Land Use Diagram** and **2-5B, Land Use Diagram – SOI** and summarized at the end of this subsection. The classifications of land are adopted as General Plan policy and are intentionally broad to allow flexibility in project planning. This also allows more than one zoning district to be consistent within a single designation.

Residential Land Use Designations

This section provides a description of each of the land use designations that provide for residential uses including: Residential Ranchette, Residential Estate, Residential Single Family, Residential Medium Density, Residential High Density and Mixed Use Density ranges have been included for each designation. Density is calculated on a gross acreage basis unless subject to a Master Plan. Gross acreage includes all properties designated residential and excludes existing right-of-way and all non-residential designations. Where a park, trails, common area landscaping, or other facility of community benefit is provided within a residential designation, the City may approve the transfer of density to contiguous lands proposed for concurrent development.

Residential Ranchette (RR) – 0 to 0.1 DU/Acre

This designation applies to large-lot developments, with a minimum parcel size of ten (10) acres and one single-family residence per lot, located north of the developed portions of the community along Highway 198/33. Equestrian-oriented developments with public linkages to trail systems are strongly encouraged in this designation. Upon annexation into the City Limits, these areas will be served by City water; however, in all likelihood they will not be serviced by City sewer.



T:_GIS\Fresno_County\Mxds\Coalinga\From3x\Figure 2-5a Land Use Diagram.mxd

SOURCE: FRESNO COUNTY; PMC, 2007

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FIGURE 2-5A
LAND USE DIAGRAM

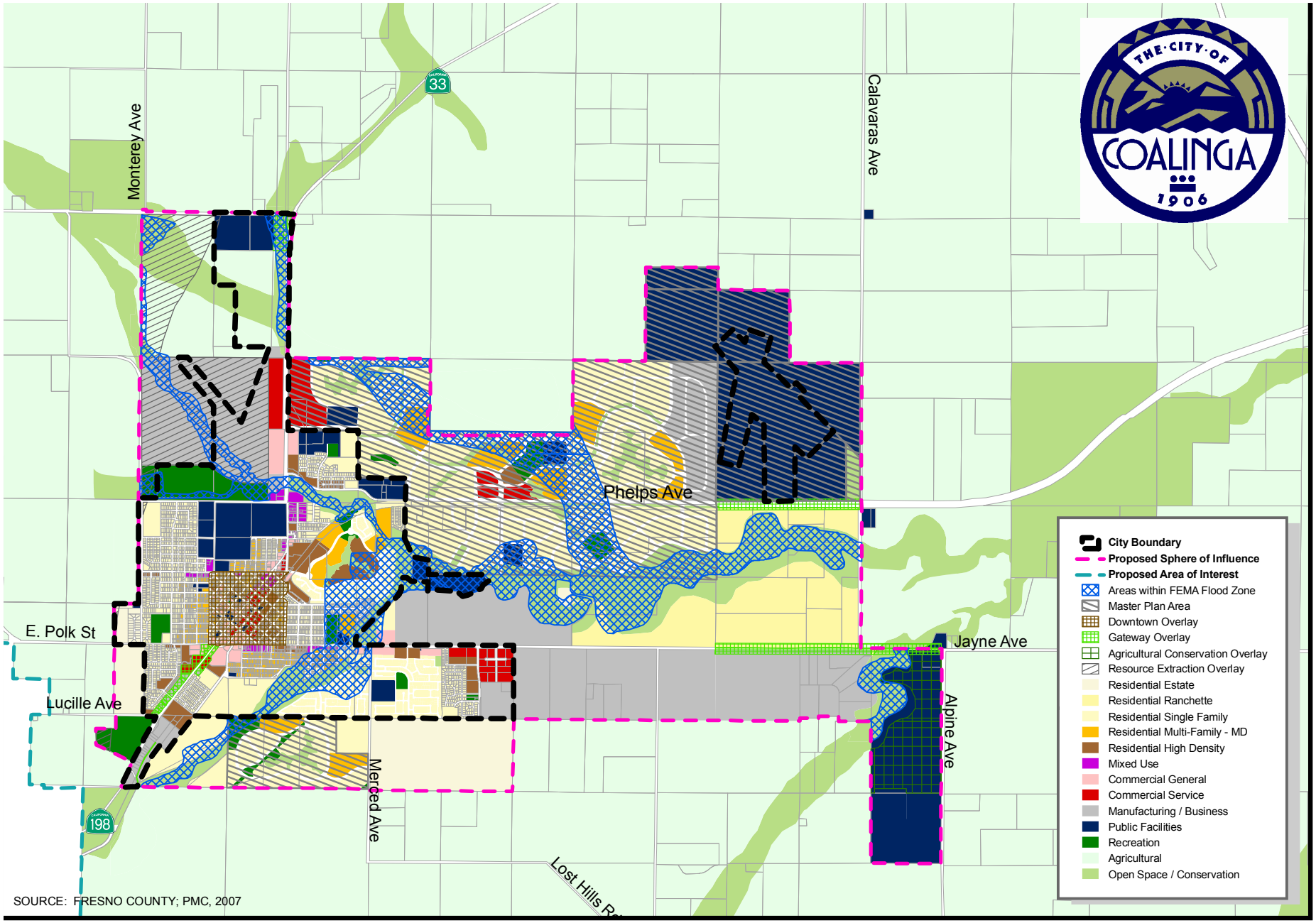

FIGURE 2-5B
LAND USE DIAGRAM

Residential Estate (RE) – 0.2 to 2.0 DU/Acre

This designation applies to large-lot developments containing one single-family residence per lot. This designation applies largely to areas to the east and south of developed portions of the City and is intended to serve as a buffer between higher density urban areas and agricultural lands. Equestrian-oriented developments with public linkages to trail systems and Urban Ranches, (2.5 - acre to 5.0-acre lots for one single-family dwellings and out buildings that allow for the recreational use and keeping of large animals (horses)) are strongly encouraged in this designation. Clustering development is encouraged in this land use designation to preserve natural features and/or provide community amenities (including parks and trails).

Residential Single Family (RSF) – 2.1 to 5.0 DU/Acre

This designation applies to traditional single-family detached housing units. Development requires a full range of urban services and public improvements. Development on large parcels should be located in areas with minimal environmental constraints. The use of clustering techniques is encouraged.

Residential Medium Density (RMD) – 5.1 to 15 DU/Acre

This designation applies to higher-density, single-family small-lot subdivisions and a variety of attached homes intended to meet the needs of "workforce housing." Homes may be individually owned or rented. Low and moderate-income housing can be developed at this density with density bonuses to reduce housing costs. Common amenities such as pools, landscaping, tot lots, trails and open space should be included.

Residential High Density (RHD) – 15.1 to 25.0 DU/Acre

Higher density multi-family structures, including condominiums and apartments, are allowed in this designation. Low and moderate-income housing can be developed at this density with density bonuses to reduce housing costs. Common amenities such as pools, landscaping, tot lots, trails and open space should be included.

Mixed Use (MX) – 0.0 to 15.0 DU/Acre

This designation encourages a mix of residential and commercial uses. Commercial uses should be primarily retail or office in nature. This designation typically applies to urbanized portions of the community as well as infill and redevelopment projects.

All uses allowed in the Commercial General (CG) and Commercial Service (CS) designations are allowed in the MX designation. Exclusive residential development and mixed-use residential/commercial development are subject to the Planned Development Combining Designation (P-D) zoning requirements. Residential uses on a given parcel must not exceed 15 dwelling units/gross acre as described under the RMD General Plan designation.

Commercial Land Use Designations

This section provides a description of each of the official commercial land use designations.

Commercial General (CG)

The Commercial General land use designation indicates areas of concentrated retail, generally located adjacent to major streets, such as Elm Avenue at Polk Street. The CG designation permits food, drug, clothing and other retail uses and services including small restaurants, laundry outlets among other services. Hotels, motels, and medical and professional offices are permitted in CG areas, subject to zoning regulations.

Commercial Service (CS)

The Commercial Service land use designation allows a full range of retail and service uses that usually require a single-purpose trip to visit one commercial establishment. Repair facilities, building materials, industrial suppliers, auto and accessory dealers, light manufacturing/distributing, and wholesale and/or retail outlets are permitted in this designation.

Other Designations

This section provides a description of each of the official non-residential and non-commercial land use designations. These designations are intended to concentrate businesses, industries and services in appropriate locations that serve the community, rely on existing infrastructure, and protect residential neighborhoods. Site-specific zoning requirements are often required to mitigate impacts associated with these high intensity uses.

Manufacturing/Business (MB)

Large and small-scale businesses involved in manufacturing, distribution or services fall within this designation. City zoning regulations establish light and heavy manufacturing uses covered in this designation. Office/manufacturing "condominiums" and wholesale-to-the-public outlets are allowed in the MB designation.

Public Facilities (PF)

The Public Facilities land use designation includes City, County and other government agency properties including the post office, Civic Center, public schools, public playgrounds and fire stations. Public utility right-of-ways are also included.

Recreation (REC)

The Recreation land use designation applies to public and private recreational facilities including public parks, golf courses and equestrian centers.

Open Space/Conservation (OS)

Properties with significant wildlife or habitat value or areas that have considerable physical constraints included in this designation are: Floodway or floodplains; fault rupture hazard areas; unstable geologic or soils conditions; hazardous materials; and wildlife corridors or habitat areas.

Residential uses are generally not allowed in the Open Space/Conservation land use designation. However, if all other economic uses are infeasible then one single-family residence may be allowed, subject to City Council approval. No commercial uses, except equestrian boarding, equestrian training and limited agricultural uses, are allowed within this designation. Passive recreational uses, including bicycle and hiking trails, are highly encouraged.

Agriculture (AG)

This designation is designed for intensive agricultural and related uses. Development density is one (1) home per twenty (20) gross acres.

Land Use Summary – 2025 Land Use Diagram

The geographic distribution of the various land use designations described above as they occur in the 2005-2025 Land Use Diagram (**Figure 2-5)**, and are summarized in **Table 2-5** below.

TABLE 2-5
LAND USE DIAGRAM ACREAGES (NO OVERLAY DESIGNATION)

Land Use	Area in Acres		
	City Limits	SOI*	Total
Residential Ranchette (RR)	0.00	522.48	522.48
Residential Estate (RE)	29.77	465.69	495.46
Residential Single Family (RSF)	680.88	2,392.81	3,073.69
Residential Multi-Family- Medium Density (RMD)	170.95	167.67	338.62
Residential High Density (RHD)	168.40	30.94	199.34
Mixed Use (MX)	41.14	0.00	41.14
Commercial General (CG)	95.91	70.49	166.40
Commercial Service (CS)	98.85	89.13	187.98
Manufacturing/Business (MB)	298.58	1,375.46	1,674.04
Public Facilities (PF)	1,219.88	1,130.81	2,350.69
Recreation (REC)	144.55	659.63	804.18
Open Space/Conservation (OS)	264.54	979.71	1,244.25
Agricultural (AG)	94.91	243.04	337.95
Subtotal	*3,308.36*	*8,127.86*	*11,436.22*
Streets right of ways etc (estimated)	536.4	460.1	996.5
TOTAL	3,844.76	8,587.96	12.432.72

Source: PMC, Land Use Diagram GIS layer (land_use_diagram.shp) June 2009

Special Planning Areas

In addition to the land use designations described above, Coalinga recognizes that certain geographic areas within and around the City merit special consideration. The establishment of Special Planning Areas provides additional direction for the development of these lands. Most of the Special Planning Areas described below are identified as "overlay" designations on the Land Use Map to acknowledge the need for additional land use regulation over and beyond what is provided for by the underlying land use designation. Lands within the overlay designation would adhere to the regulations of both the underlying designation as well as the overlay designation. Special Planning Areas subject to overlay designations are described in this subsection. Additional Special Planning Areas, which warrant special consideration but are not subject to a Land Use Overlay designation, are also described.

Areas with overlay designations, and additional planning areas that are not subject to overlay designations are illustrates and summarized at the end of this subsection.

Mixed-Use Planning Areas

Master Plan Growth Overlay

New large-scale development (twenty acres or more) located outside the historical core and within a Master Plan Growth Area, is required to be master planned through the Specific Plan or Planned Development Combining Designation (P-D) process. Master planning these areas will ensure the provision of utilities, parks, roadways and other public facilities. The master planning of these areas is addressed in a comprehensive fashion in this General Plan. Two Master Plan Growth Areas have been identified thus far. Land use designations have been approximated for these areas. Urban development is expected to occur in these areas during the 20-year planning period.

Downtown Mixed Use Overlay

Coalinga's Downtown Area generally includes the square shaped area between Van Ness Street to the north, Polk Street to the south, Sunset Street to the west and Hayes Street to the east. This area is bisected by Highway 33 and is considered to be the historic commercial core of the city. A mix of retail, service, office and government uses have grown along the Highway forming a commercial spine through the Downtown. The concentrated mix of services has allowed this portion of the Downtown to evolve into a pedestrian-orientated focal point of the City.

This area has its own unique characteristics that require individualized development parameters. The specialized development procedures will serve to preserve the integrity of Coalinga's central Downtown, while encouraging its continued vitality and economic strength.

The underlying General Plan designations include Public Facility, Commercial and Residential. The City supports an intensification of both commercial and residential uses within the Downtown

Mixed-Use Area. Projects that combine residential and commercial uses have the advantage of presenting street level shopping and services, while increasing the general activity in the Downtown through upstairs residences. Design guidelines for the Downtown area currently being drafted by the City and area anticipated for completion in early 2007. Other mixed-use development requirements will be adopted when the zoning ordinance is updated.

Airport Master Plan Area

The *Airport Master Plan* (2005) for the Coalinga Municipal Airport (herein; referred to as the "Airport") was initiated in order to determine the type and extent of aviation facilities needed at the Airport through the year 2025 and to accommodate the required development. The Airport is located four miles east-northeast from the center of the City of Coalinga in the southwest portion of Fresno County, and is located on about 1,002 acres of land at an elevation of 622 feet above mean sea level.

Gateway Planning Areas

Gateway Overlay

Areas that serve as the northern and southern entrances to the City serve as "gateways" to the community. These areas should be aesthetically attractive and designed to provide welcoming entrances to the City. Prior to adoption of the General Plan, the City shall apply the Gateway Overlay designation to the easternmost portions of Phelps Avenue adjacent to the Airport and proposed residential zone, and Jayne Avenue from Calaveras Avenue to San Joaquin Avenue. The Gateway Overlay is intended to require the provision of pleasing signage or monumentation, attractive landscaping and greater attention to building design. Gateway design should reflect and reinforce Coalinga's history and community character. Agricultural Areas

Agricultural Areas

Agricultural Conservation Overlay

The Agricultural Conservation Overlay Designation applies to the area north of the proposed wastewater treatment site. Urban development in this area discouraged.

Natural Resource Planning Areas

Flood Hazard Overlay

The Flood Hazard Overlay Designation applies to land within the 100-year floodplain of Los Gatos Creek and Warthan Creek. Land within the floodplain is typically designated Open Space and is subject to the City Floodplain Management Ordinance. Development within the Flood Hazard Overlay should be limited to multi-use trails and passive recreation uses. A limited amount of development may be allowed in the Flood Hazard Overlay, subject to the Floodplain Management Ordinance.

Resource Extraction Overlay

The Resource Extraction Overlay designation applies to land involved in natural resource extraction including oil production and quarrying. Urban development in these areas should be limited to compatible industrial uses. Residential uses are highly discouraged in these areas.

Summary

Table 2-6, below, summarizes the acreages of the various land uses in combination with the overlay designation as illustrated in the Land Use Diagram. These areas are illustrated on **Figure 2-6**, **Special Planning Areas.**

TABLE 2-6
CITY OF COALINGA LAND USE DIAGRAM ACREAGES (WITH OVERLAY DESIGNATIONS)

Land Use	Land Use and Overlay	Area in Acres		
		City Limits	Future Growth Area (SOI) [1]	Total
Residential Ranchette (RR)	RR	0	483.35	**483.35**
	RR-Flood Hazard	0	10.23	**10.23**
	RR-Gateway	0	28.9	**28.9**
RR Totals		0	522.48	**522.48**
Residential Estate (RE)	RE	26.39	390.06	**416.45**
	RE-Flood Hazard	0	3.26	**3.26**
	RE-Master Plan	0	72.37	**72.37**
	RE-Resource Extraction	3.38	0	**3.38**
RE Totals		29.77	465.69	**495.46**
Residential Single Family (RSF)	RSF	582.41	120.06	**702.47**
	RSF-Downtown	9.72	0	**9.72**
	RSF-Flood Hazard	85.87	17.57	**103.44**
	RSF-Gateway	0	0.22	**0.22**
	RSF-Master Plan	2.14	1,816.30	**1818.44**
	RSF-Flood Hazard Master Plan	0	438.64	**438.64**
	RSF-Gateway Master Plan	0	0.02	**0.02**
	RSF-Resource Extraction	0.74	0	**0.74**
RSF Totals		**680.88**	**2,392.81**	**3,073.69**
Residential Multi Family Medium Density (RMD)	RMD	126.12	1.7	**127.82**
	RMD-Downtown	17.49	0	**17.49**
	RMD-Flood Hazard	27.34	0	**27.34**
	RMD-Master Plan	0	127.62	**127.62**
	RMD-Flood Hazard Master Plan	0	38.35	**38.35**
RMD Totals		170.95	167.67	**338.62**

Land Use	Land Use and Overlay	Area in Acres		
		City Limits	Future Growth Area (SOI) [1]	Total
Residential High Density (RHD)	RHD	130.22	0.05	**130.27**
	RHD-Downtown	19.41	0	**19.41**
	RHD-Flood Hazard	18.77	0.54	**19.31**
	RHD-Master Plan	0	18.11	**18.11**
	RHD-Flood Hazard Master Plan	0	12.24	**12.24**
RHD Totals		**168.4**	**30.94**	**199.34**
Mixed Use	MX	32.66	0	**32.66**
	MX-Downtown	6.27	0	**6.27**
	MX-Flood Hazard	2.21	0	**2.21**
MX Totals		**41.14**	**0**	**41.14**
Commercial General (CG)	CG	68.01	65.91	**133.92**
	CG-Downtown	23.12	0	**23.12**
	CG-Flood Hazard	0.75	4.58	**5.33**
	CG-Gateway	4.03	0	**4.03**
CG Totals		**95.91**	**70.49**	**166.4**
Commercial Services (CS)	CS	74.03	0	**74.03**
	CS-Downtown	16.18	0	**16.18**
	CS-Gateway	8.64	0	**8.64**
	CS-Master Plan	0	87.7	**87.7**
	CS-Flood Hazard Master Plan	0	1.43	**1.43**
CS Totals		**98.85**	**89.13**	**187.98**
Manufacturing / Business (MB)	MB	81.46	913.71	**995.17**
	MB-Flood Hazard	6.34	3.46	**9.8**
	MB-Gateway	13.32	21.38	**34.7**
	MB-Master Plan	24	149.74	**173.74**
	MB-Gateway Master Plan	0.27	0	**0.27**
	MB-Resource Extraction	135.54	238.56	**374.1**
	MB-Flood Hazard Gateway	13.01	0	**13.01**
	MB-Resource Extraction Flood Hazard	24.63	48.62	**73.25**
MB Totals		**298.57**	**1,375.47**	**1,674.04**
Public Facilities (PF)	PF	903.64	156.67	**1060.31**
	PF-Agricultural Conservation	0	211	**211**
	PF-Downtown	6.55	0	**6.55**
	PF-Flood Hazard	48.52	0	**48.52**
	PF-Gateway	0.02	0	**0.02**
	PF-Master Plan	257.50	736.04	**993.54**
	PF-Resource Extraction	2.11	0	**2.11**
	PF-Agricultural Conservation Flood Hazard	0	0.7	**0.7**
	PF-Agricultural Conservation Gateway	0	3.57	**3.57**

Land Use	Land Use and Overlay	Area in Acres		
		City Limits	Future Growth Area (SOI) [1]	Total
	PF-Flood Hazard Master Plan	0	16.56	**16.56**
	PF-Gateway Master Plan	1.57	6.27	**7.81**
PF Totals		**1,219.88**	**1,130.81**	**2,350.69**
Recreation (REC)	REC	97.89	44.03	**141.92**
	REC-Downtown	0.33	0	**0.33**
	REC-Flood Hazard	45.98	4.37	**50.35**
	REC-Gateway	0	0.36	**0.36**
	REC-Master Plan	0	490.83	**490.83**
	REC-Resource Extraction	0.19	12.97	**13.16**
	REC-Flood Hazard Master Plan	0	100.18	**100.18**
	REC-Gateway Master Plan	0	0.01	**0.01**
	REC-Resource Extraction Flood Hazard	0.16	6.88	**7.04**
REC Totals		**144.55**	**659.63**	**804.18**
Open Space / Conservation (OS)	OS	111.46	278.16	**389.62**
	OS-Downtown	0.59	0	**0.59**
	OS-Flood Hazard	152.48	430.85	**583.33**
	OS-Gateway	0	3.64	**3.64**
	OS-Master Plan	0	71.12	**71.12**
	OS-Resource Extraction	0	73.76	**73.76**
	OS-Flood Hazard Gateway	0	1.71	**1.71**
	OS-Flood Hazard Master Plan	0	91.23	**91.23**
	OS-Gateway Master Plan	0	0.89	**0.89**
	OS-Resource Extraction Flood Hazard	0	28.36	**28.36**
OS Totals		**264.53**	**979.72**	**1,244.25**
Agricultural (AG)	AG	94.66	135.11	**229.77**
	AG-Flood Hazard	0.25	2.24	**2.49**
	AG-Master Plan	0	5.07	**5.07**
	AG-Resource Extraction	0	91.2	**91.2**
	AG-Resource Extraction Flood Hazard	0	9.42	**9.42**
AG Totals		**94.91**	**243.04**	**337.95**
Subtotals		***3,308.34***	***8,127.88***	***11,436.22***
Streets Right of Ways etc. (Estimated)		**536.4**	**460.1**	**996.5**
LAND USES TOTAL		**3,844.74**	**8,587.98**	**12,432.72**

Source: PMC, Land Use Diagram GIS layer (land_use_diagram..shp) June 2009

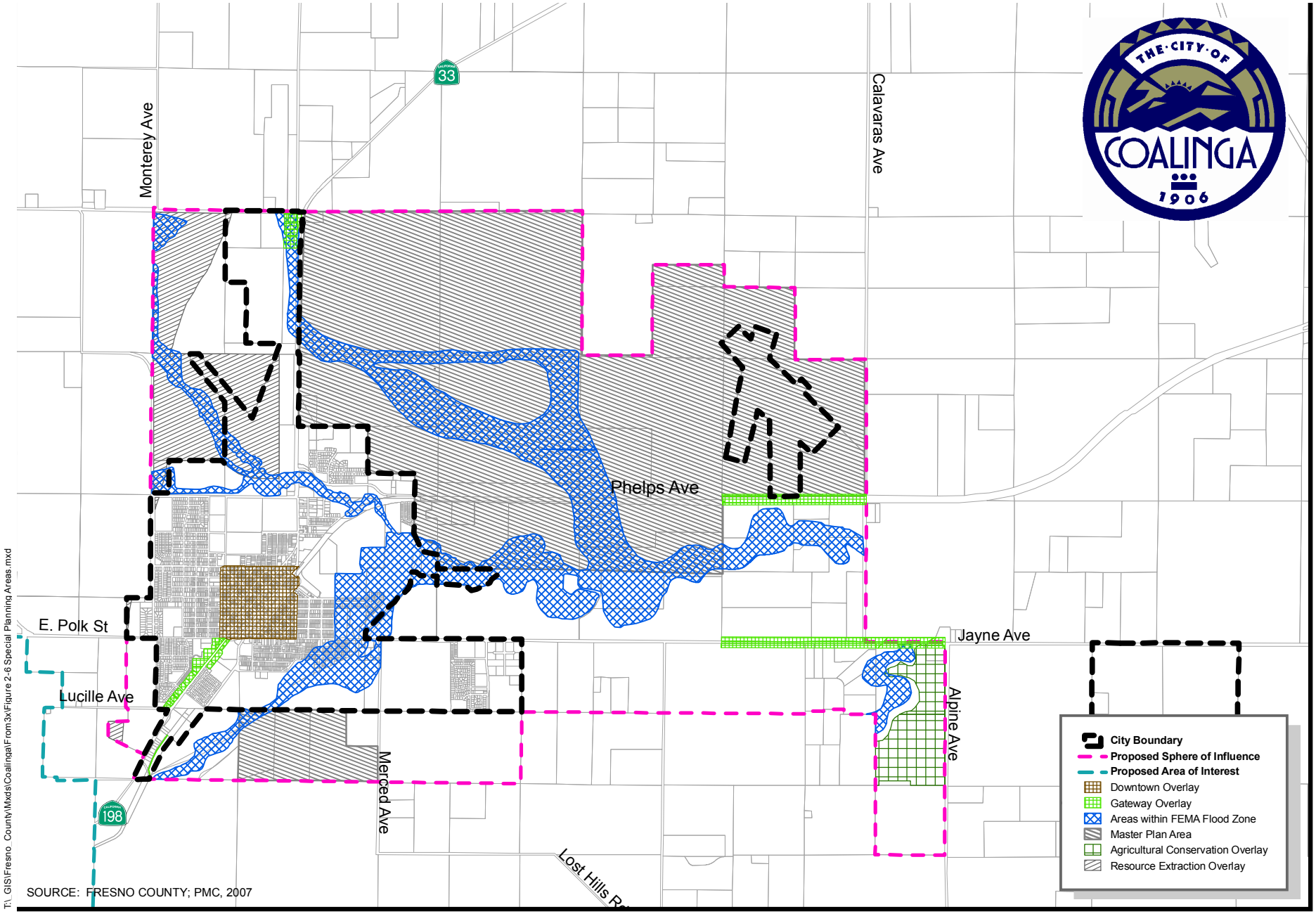

FIGURE 2-6
SPECIAL PLANNING AREAS (OVERLAY DESIGNATIONS)

OTHER SPECIAL PLANNING AREAS (NOT SUBJECT TO OVERLAY DESIGNATION)

Special Planning areas subject to overlay designations are described previously in this Element. Additional Special Planning Areas, which warrant special consideration but are not subject to a Land Use Overlay designation, are described below.

Future Industrial Planning Areas (North and South areas)

Industrially designated areas are an essential part of a growing community. As reflected in several goals and policies included in this Chapter, industrial areas are needed in order to provide a stable economy including the provision of job opportunities without compromising community character.

Draft Coalinga Habitat Conservation Plan (CHCP)

Certain areas within the existing City limits and proposed SOI provide habitat for various federally and state listed species. These areas were identified the in the Draft Coalinga Habitat Conservation Plan, prepared in 2005. The intent of the CHCP is to provide strategies for species and habitat conservation, while allowing for continued development.

Under Section 10 of the Endangered Species Act, a Habitat Conservation Plan (HCP) accompanies an incidental take permit for non-Federal activities that will result in "take" of federally threatened or endangered wildlife. An adopted HCP would allow for streamlined permitting at the local level, sharing of costs among participants, and conservation and stewardship of sensitive biotic resources.

The proposed General Plan includes policies requiring the City to coordinate with appropriate agencies to complete the CHCP process once the General Plan has been approved. As approval of the CHCP may be many years off, the General Plan includes some strategies put forward in the Draft CHCP, as appropriate and consistent with community and City direction, to provide guidance to the City in the interim.

Redevelopment Project Area

The Redevelopment Project Area is that area over which the City's Redevelopment Agency has the authority to undertake redevelopment projects to revitalize blighted areas.

Tax Sharing Agreement Area

The Tax Sharing Agreement Area is addressed in the 2008 Memorandum of Understanding (MOU) between the City of Coalinga, County of Fresno and Coalinga Redevelopment Agency. The Tax Sharing Agreement Area is that area over which the entities have agreed to jointly share tax revenues resulting from development in areas annexed into the City after the date of the MOU. This area is consistent with the 1994 SOI adopted at the time of execution of the MOU.

ZONING CLASSIFICATIONS

Table 2-7 establishes the corresponding Zoning Classifications consistent with the General Plan land use designations. As described above, the General Plan designations are intentionally broad which allows for more than one zoning district to be consistent within a single land use designation.

TABLE 2-7
GENERAL PLAN LAND USE AND ZONING DESIGNATION

1994 Land Use Designation	2025 Land Use Designation	Corresponding Zoning Classification
---	RR	AE-10
ER	RE	R-H
RSF	RSF	R-1
RML	RMD	R-2, T-P
RMM	RHD	R-2, R-3, T-P
MX	MX	C-P, C-4, C-5, R-2, R-3
CG	CG	C-1, C-4, C-5
CS	CS	C-1, C-4, C-5, C-M
MB	MB	C-M, M-1, M-3
PF	PF	Any Zone
RC	REC	O
O	OS	O
A	AG	AE-20

Summary of Land Use Changes

A number of land use designation changes have been incorporated into the 2025 General Plan Update. Land use designations and abbreviations have been modified for ease of use. A new Residential High Density designation has been added. Acreages of most land use categories increased although Residential Family and Agricultural areas decreased significantly. Land uses changes within the planning area are summarized in **Table 2-8** below. A summary of specific land use changes follows the table.

Table 2-8
Land Use Changes Within Planning Area

1994 Designation (2025 Designation)	1994 GP[1]		2025 GP Update[2]		Increase (Decrease) Difference[3]	
	Acres	%	Acres	%	Acres	%
Residential Ranchette – (RR)	NA	NA	522.48	4.20%	522.48	100%
Estate Residential ER (RE)	208.26	3.39%	495.46	3.99%	287.20	58%
Residential Single Family RSF (RSF)	1,416.31	23.08%	3,073.69	24.72%	1657.38	54%
Residential Multi-Family – Low Density RML (RMD)	130.44	2.13%	0	0.00%	-130.44	(100%)
Residential Multi-Family – Medium Density RML (RMD)	117.36	1.91%	338.62	2.72%	221.26	65%
Residential High Density – RMM (RHD)	NA	NA	199.34	1.60%	199.34	100%
Mixed Use MX (MX)	55.26	0.90%	41.14	0.33%	-14.12	(26%)
Commercial General CG (CG)	87.83	1.43%	166.4	1.34%	78.57	47%
Commercial Service CS (CS)	26.61	0.43%	187.98	1.51%	161.37	86%
Manufacturing/Business MB (MB)	134.29	2.19%	1,674.04	13.47%	1,539.75	92%
Public Facilities PF (PF)	1,435.37	19.68%	2,350.69	18.91%	1,143.16	49%
Recreation RC (REC)	192.81	3.14%	804.18	6.47%	611.37	76%
Open Space/Conservation O (OS)	1,255.21	12.88%	1,244.25	10.01%	453.61	36%
Agricultural A (AG)	1,274.99	20.78%	337.95	2.72%	-937.04	(73%)
Subtotal	*5,642.33*	*92.80%*	*11,436.22*	*87.79%*	*5,793.89*	51%
Streets right of ways etc (estimated)	494.48	7.20%	996.5	8.01%	501.72	50%
Planning Area Total	**6,136.81**	**100.00%**	**12,432.72**	**95.80%**	**6,295.61**	**---**

Source: 1. *PMC, Existing Land Use Map (PMC, Land_Use_GP_2004.shp) June 2009*
2. *PMC, Land Use Diagram GIS layer (land_use_diagram.shp) June 2009*
3. *Percentages represent the increase or decrease the amount of land designated for specific use from the adopted General Plan*

Specific land use changes as depicted in **Table 2-8**, above, include the following:

- A new Residential Ranchette (RR) land use designation has been applied to lots south of Phelps toward the eastern edge of the proposed SOI. This area was not previously considered in the General Plan.
- The Residential Multi-Family - Low Density RML (RMD) category has been eliminated and much of this has been redesignated as Residential Multi-Family- Medium Density RML (RMD).
- Residential Single Family (RSF) lands have increased slightly as the SOI has been expanded with residential uses. Within the previous Planning Area, some areas south of Jayne Avenue previously identified as RSF have been designated to Open Space (OS) and Public Facilities (PF).
- Commercial Services (CS) have increased five-fold primarily as a result of re-designating Commercial General (CG) land within and south of the Downtown core. In addition, 22 acres of residential land along Jayne Avenue towards the eastern extents of the City and 22 acres of agricultural land along Highway 33 in the northern extent of the City was also re-designated.
- Manufacturing/Business areas have nearly increased ten times primarily due to the growth of the SOI and the designation as MB within this area particularly to the north and east of the City.
- Agricultural (AG) lands have decreased as a result of converting the sports complex on the north side of Cambridge to Recreation (REC), land north of the City Limits along the Highway 198/33 Corridor to Manufacturing/Business.

Future Growth

The General Plan establishes general uses and densities of land within the City. From the Land Use Diagram, presented earlier as **Figures 2-5A** and **B**, and the acreages as presented earlier in **Tables 2-5** and **2-6**, it is possible to estimate the maximum population, number of new homes, and acreages of non-residential uses that could result from the General Plan buildout within the City and within the Planning Area. This section describes the maximum growth that would be possible in the City under the 2025 Land Use Diagram.

Maximum Growth under the General Plan

The maximum development potential of the City at total buildout was determined by summing the maximum number of possible residential dwelling units, then multiplying that total by an average 3.0 persons per household, using estimates based on the 2005 Department of Finance estimate of 3.18 persons per household. The maximum buildout potential described herein assumes all undeveloped lands within the future growth area would be developed at maximum allowable intensities as described in the Land Use Designation discussion of this Element.

Table 2-9, below, shows the total acres of land for each residential designation, the total number of dwelling units based on maximum allowable densities and population estimates based on an average persons per household number. This table also documents this information for lands within the City, within the future growth area (SOI) and provides a total of these areas as considered the future Planning Area. The population estimates are based on an assumption of 3.0 persons per residential unit.

TABLE 2-9
MAXIMUM RESIDENTIAL BUILDOUT POTENTIAL

Land Use	DU's[1]	City Limits			Future Growth Area (SOI)			TOTAL		
		Acres[3]	DU's	Pop.[2]	Acres[3]	DU's	Pop.	Acres	DU's	Pop.
Residential Ranchette (RR)	0.1	0	0	0	523	52	156	523	52	156
Residential Estate (RE)	2	30	60	180	464	928	2,784	494	988	2,964
Residential Single Family (RSF)	5	681	3,405	10,215	2,393	11,960	35,880	3,074	15,365	46,095
Residential Medium Density (RMD)	15	171	2,565	7,695	168	2,520	7,560	339	5,085	15,255
Residential High Density (RHD)	25	168	4,200	12,600	31	775	2,325	199	4,975	14,925
Mixed Use	15	41	615	1,845	0	0	0	41	615	1,845
TOTAL	**N/A**	**1,091**	**10,845**	**32,535**	**3,579**	**16,235**	**48,705**	**4,670**	**27,080**	**81,240**

Source: PMC, Land Use Diagram GIS layer (land_use_diagram.shp) June 2009

Notes:
1. *Maximum number of Dwelling Units allowed by this element.*
2. *Population estimates assume 3.0 persons per household.*
3. *Average is rounded up fro GIS calculations (land_use_diagram.shp) June 2009*

As described in **Table 2-9** above, if Coalinga's residential land were built to its maximum potential, with the density of each dwelling unit matching the persons per household as stated above, the total population within the 2005 incorporated City Limits could exceed 32,000 persons, while the population within the SOI could exceed 48,000 persons.

The calculated maximum buildout potential for the entire Planning Area under this General Plan is approximately 81,256 persons. The following factors, however, may reduce the potential buildout to a level below the theoretical calculations: site-specific constraints, design requirements and market factors.

Table 2-10, Non Residential Maximum Build- out Potential, shows the potential buildout for non-residential uses such as commercial, manufacturing, public facilities, recreation, open space and agriculture. The table identifies total acres of land designated for the various non-residential uses.

TABLE 2-10
MAXIMUM NON-RESIDENTIAL BUILDOUT POTENTIAL (NO OVERLAY DESIGNATION)

Land Use	City Limits		Future Growth Area		Total	
	Acres[1]	Employees	Acres[1]	Employees	Acres[1]	Employees
Commercial General (CG)	96	384	70	280	166	664
Commercial Service (CS)	99	396	89	356	188	752
Manufacturing/Business (MB)	299	1,196	1,375	5,500	1,674	6,696
Public Facilities (PF)	1,219	4,876	1,131	4,524	2,350	9,400
Recreation (REC)	145	580	660	2,640	805	3,220
Open Space and Conservation (OS)	264	1,056	980	3,920	1,244	4,976
Agriculture (AG)	95	380	243	972	338	1,352
TOTAL	**2,217**	**8,868**	**4,548**	**18,192**	**6,765**	**27,060**

Source: PMC, Existing Land Use Map (PMC, Land_Use_GP.shp) June 2009
Notes: 1. Average is rounded up from GIS Calculations (land_use_diagram.shp) June 2009
2. *Assumes 4.0 employees per acre of land.*

As indicated in **Table 2-10**, the core employment generating uses for the City are Manufacturing/Business and Public Facilities, which comprise a combined total of 6,596 acres.

Land Use Goals, Policies and Implementation Measures

The following Land Use goals, policies, and implementation measures have been established to guide short and long-range decision-making by the community.

I. General Land Use Policies

Goal LU1
Preservation of the City's small town character and neighborhood quality and long-term economic vitality of the community.

Policy LU1-1
The City shall encourage proposals that preserve and enhance the open, rural small town character and neighborhood quality that makes Coalinga a special place.

Implementation Measure LU1-1.1
The City shall define areas of visual sensitivity throughout the City including, but not limited to, open space, scenic vistas and panoramic viewsheds. These areas shall be defined as Scenic Resources. The Zoning Ordinance shall be revised to require that future development employ planning principles (including, but not limited to, use of setbacks, building design, siting and materials) that ensure that new development does not detract from, or otherwise impact, Coalinga's scenic resources.

Implementation Measure LU1-1.2
The City shall review the Zoning Ordinance and application requirements to ensure that new development will support the character and enhance the functionality of the City.

Implementation Measure LU1-1.3
New infill development shall demonstrate consistency with the density, scale, appearance and rural community character of Coalinga's existing neighborhoods during project review.

Implementation Measure LU1-1.4
The City shall prepare and maintain zoning standards that encourage infill development and intensification of land use through the reuse, redevelopment or mixed-use of vacant, underutilized sites where infrastructure supports such use.

Implementation Measure LU1-1.5
Establish City-wide Architectural Design Guidelines that preserve the small-town, rural character of Coalinga. These guidelines should promote urban design features that provide artful integration of building sites with the environment emphasizing earth-tone colors, desert architecture, historic building facades, exterior building materials, monument signs,

large building setbacks, appropriate landscaping, berms and other features that hide or reduce the visibility of negative urban features such as parking lots.

Implementation Measure LU1-1.6
Adopt specific design standards for entry signs, landscaping and other appropriate amenities in the Gateway Overlay areas.

Implementation Measure LU1-1.7
Develop and implement a Historic Landmark Ordinance.

Implementation Measure LU1-1.8
New development should be required to provide art, payment of art impact or in lieu fees, form an art committee, or a combination of these steps, to ensure the provision of public art. Within one (1) year of adoption of the General Plan Update, the City should develop and implement a Public Art Ordinance, outlining these provisions and requirements.

Implementation Measure LU1-1.9
The City shall periodically review the Zoning Ordinance and application requirements to ensure that open space/conservation and recreation areas of various sizes throughout the City of Coalinga are preserved and promoted.

Implementation Measure LU1-1.10
New development proposals shall be located within or adjacent to the City limits in accordance with the proposed phases to provide for orderly expansion of the City.

Implementation Measure LU1-1.11
The City shall develop guidelines for the preparation of lighting plans. In order to minimize light trespass and greater overall light levels in the city, new development and projects making significant parking lot improvements or proposing new lighting shall be required to prepare a lighting plan for review by City planning staff. The guidelines shall include the following provisions for lighting plans:

a. *All lighting fixtures shall be shielded so that neither the lamp nor the related reflector interior surface is visible from offsite.*
b. *All lights to be downcast except where other types of lighting are warranted for public safety reasons.*
c. *Escape of light to the atmosphere should be minimized.*
d. *Low intensity, indirect light sources should be encouraged, except where other types of lighting is warranted for public safety reasons.*
e. *On-demand lighting systems should be encouraged.*
f. *Mercury, metal halide, and similar intense and bright lights should not be permitted except where their need is specifically approved and their source of light is restricted.*

Policy LU1-2
Retain and expand diversified business opportunities that are compatible with the environment, community values and community vision of the City.

Implementation Measure LU1-2.1
Establish and implement a business visitation program to assess the business climate and identify the unique needs of business owners in the City.

Implementation Measure LU1-2.2
Pursue federal, state, and private grant opportunities to provide financial assistance in the form of grants and/or low-interest loans to assist businesses whose operations are consistent with the community vision of the City.

Policy LU1-3
Attract new businesses to the City that are compatible with the community vision and improve the balance among commercial, professional office, and industrial businesses so that the needs of Coalinga residents are provided for without compromising the community character.

Implementation Measure LU1-3.1
Identify specific goals and targets for business attraction over the next twenty years, in five-year increments.

Implementation Measure LU1-3.2
Prepare and distribute marketing information to developers, businesses interests and commercial real estate brokers identifying the City's economic development targets and available sites.

Implementation Measure LU1-3.3
Attend business development fairs, expositions, and trade shows to promote economic development opportunities in Coalinga.

Implementation Measure LU1-3.4
Provide sufficient tracts of land at a variety of sizes available for industrial and commercial uses in order to provide a stable economy.

Implementation Measure LU1-3.5
Provide specific goals, funding and targets to establish a regional Commercial and Business Park.

Implementation Measure LU1-3.6
Prepare an economic development strategy to encourage retail and service businesses that serve the regional population.

Implementation Measure LU1-3.7
Amend Zoning Ordinance to encourage major office uses such as corporate headquarters, regional service centers, research and development facilities and major community facilities.

Policy LU1-4
Fiscal impacts of development shall be considered to ensure that the there are adequate resources for providing all required public facilities, infrastructure and services.

Implementation Measure LU1-4.1
The City shall adopt appropriate thresholds, standards and requirements for a Fiscal Impact Analysis. An evaluation of the financial impacts of new development, including the cost of providing community services and public facilities, should be considered during the review of all project proposals. Projects with the potential for significant fiscal impacts shall be required to submit a Fiscal Impact Analysis to the City as part of the application submittal.

Implementation Measure LU1-4.2
The City shall adopt a Capital Improvement Program to evaluate the municipal service needs of the City through 2025. The Program shall identify state, federal, and other potential funding sources to assist in funding identified improvement projects.

Implementation Measure LU1-4.3
The City shall establish a development fee structure that provides the revenue to implement the Capital Improvement Program.

Implementation Measure LU1-4.4
Review City ordinances and make necessary amendments to implement a park in-lieu fee, parkland dedication, or other requirements permitted by law to ensure that new developments provide their fair share of park and recreation facilities.

Implementation Measure LU1-4.5
The City's participation in a Joint Powers Authority (JPA) with the Coalinga-Huron Parks and Recreation District for the operation and management of the parks in the City may be considered when joint facilities are proposed.

Implementation Measure LU1-4.6
Maintain and update as needed Master Plans for Water, Natural Gas, Stormwater, Drainage, Sewer and Public Facilities including schools.

Implementation Measure LU1-4.7
New development shall be required to pay fees to the City that represent the fair share cost of installation, operation and/or maintenances of public facilities or services.

Policy LU1-5
Encourage consistent and comprehensive planning for the City.

Implementation Measure LU1-5.1
The City shall establish a periodic schedule to update the City's Land Use Diagram.

Implementation Measures LU-5.2
The City shall revise and correct its current Land Use Diagram to provide a comprehensive, accurate, and appropriate illustration of the City's land uses. This Diagram shall be developed with contemporary GIS technology mapping systems to be consistent with federal, state and local maps and data.

Implementation Measure LU1-5.3
Following the adoption of the General Plan, the City shall prepare a revision of the Zoning Code that establishes zoning districts and overlays, revises the zoning map and adopts requirements for special planning areas.

Implementation Measure LU1-5.4
Periodically review the Land Use Diagram to ensure that there is an adequate mix of residential and commercial uses to provide both jobs and housing to existing and future residents of the City of Coalinga.

Implementation Measure LU1-5.5
Within one (1) year, the City shall develop Mixed Use Design Overlay design guidelines and regulations including Master Plan Growth Areas, Downtown Mixed Use, Gateway Overlay, Agricultural Conservation Overlay, Flood Hazard, Habitat Conservation Overlay and Resource Extraction Overlay.

Implementation Measure LU1-5.6
Require the preparation of a Master Plan for all areas located within Master Plan Growth Overlay Areas as identified on ***Figure 2-6****, Special Planning Areas. These areas shall be reviewed every five years (or as needed) to determine if amendments are needed.*

Implementation Measure LU1-5.7
Development proposals involving annexation requests shall be required to be contiguous to existing development and/or demonstrate appropriateness of siting to ensure that premature or "leapfrog" development is avoided.

Implementation Measure LU1-5.8
Development proposals shall be reviewed to ensure compliance with all current federal, state and local regulations and to ensure that impacts have been mitigated to the extent feasible.

Implementation Measure LU1-5.9
Commercial development shall be pursued in conjunction with residential growth in order to maintain a well balanced jobs/housing ratio that helps to prevent residents from commuting out of town for employment opportunities.

Policy LU1-6
The City shall encourage proposals that help to create a more sustainable community.

Implementation Measure LU1-6.1
The City should adopt green building guidelines in the Zoning Ordinance.

Policy LU1-7
The City shall provide leadership for sustainability within the community by encouraging green practices for municipal buildings and landscapes.

Implementation Measure LU1-7.1
The City should evaluate existing municipal buildings, facilities and landscaping for energy and water use, with the aim of implementing renovation/retrofit projects to reduce resource consumption.

II. Residential Land Use Policies

The following goals, policies and implementation measures relate directly to residential uses.

Goal LU2
Provide creative, high-quality choices in housing types and densities in a variety of neighborhoods where residents can fulfill their varied individual housing needs and dreams of home ownership. Neighborhoods are well-insulated from high volume roadways, noise, and nonresidential land uses and harmonize and compliment one another through good urban design, architectural standards, landscaping and connectivity with surrounding neighborhoods, parks and pristine areas. New neighborhoods foster a sense of community.

Policy LU2-1
Favorable consideration shall be given to developments which further the City's goal of accommodating a broad range of housing types and densities in a variety of neighborhoods within the City.

Implementation Measure LU2-1.1
Adopt and implement a Density Bonus Ordinance that allows for at least a 25% increase in density for housing restricted to low and moderate-income families in accordance with state statutes.

Implementation Measure LU2-1.2
Amend the Zoning Ordinance to provide incentives such as fee reductions, density bonuses, or reductions in zoning standards to new housing developments that demonstrate high-quality design, or creative design solutions, or provide amenities of community benefit.

Implementation Measure LU2-1.3
Use the Planned Development, Master Plan or Specific Plan process to encourage a variety of single-family and multi-family housing types that meet the needs of the City of Coalinga.

Policy LU2-2
Neighborhoods shall be well insulated from high-volume roadways, noise, and nonresidential land uses.

Implementation Measure LU2-2.1
Review and amend the Zoning Ordinance and application submittal requirements to require that new development provide adequate setbacks to ensure land use compatibility with surrounding properties.

Implementation Measure LU2-2.2
Review and amend the Zoning Ordinance and application submittal requirements to require the provision of adequate buffers to ensure land use compatibility with surrounding properties. Buffering techniques may include landscaping, setbacks and screening. The use of soundwalls is discouraged, and should only be used if other techniques are proved infeasible or inadequate.

Implementation Measure LU2-2.3
The City shall require that landscaped buffers be maintained by a Lighting and Landscaping District (LLD) or other mechanism.

Policy LU2-3
The City shall encourage residential development projects to utilize Traditional Neighborhood Development (TND) and other design principals that foster a sense of neighborhood among residents and a sense of community linkages.

Implementation Measure LU2-3.1
The City shall develop and adopt Residential Deign Guidelines that includes TND, smart growth and other design principals that foster a sense of community among neighborhoods.

Implementation Measure LU2-3.2
Subdivisions and streets should be named to reflect Coalinga's identity, history and geography.

III. COMMERCIAL – GENERAL POLICIES

Goal LU3
High-quality commercial development in the City that provides for the needs of residents and encourages regional retail shopping.

Policy LU3-1
The City shall encourage commercial development that contributes to the character, attractiveness, well-being and economic prosperity of the City.

Implementation Measure LU3-1.1
The City shall prepare and adopt guidelines requiring design standards for various scales and types of commercial development including requirements for historic building facades, materials, colors, lighting, landscaping and reduction of impacts to surrounding properties.

Implementation Measure LU3-1.2
Development conditions should reflect that fiscal impacts have been considered in accordance with Implementation Measure LU1-4.1 and are among the conditions of approval.

Implementation Measure LU3-1.3
Development conditions should reflect that elements of the City's Capital Improvement Program have been considered and contributions to implement infrastructure projects are among the conditions of approval

Policy LU3-2
Sites for planned commercial uses shall be designated on the Land Use Diagram, and shall take into consideration parcel size, location and accessibility to both residential areas and major transportation corridors.

Implementation Measure LU3-2.1
The Land Use Diagram shall be reviewed every five years (or as needed) to ensure that there is an adequate mix of parcel sizes, locations, zoning and infrastructure to provide adequate commercial development to serve the needs of the City's residents and visitors.

Implementation Measure LU3-2.2
Review and amend the Zoning Ordinance and maps to encourage the siting of highway commercial uses such as gas stations, restaurants, motels and convenience stores in areas convenient to regional travelers.

Goal LU4
Retention and expansion of older, existing commercial centers and establishments.

Policy LU4-1
New commercial development should be sited in areas that will minimize negative impacts to on existing retailers and the Downtown Core.

Implementation Measure LU4-1.1
Review and amend the Zoning Ordinance and maps to encourage the siting of regional or subregional centers supporting high volume (big box) retail outlets in areas convenient to regional travelers that will minimize negative impacts on existing retailers and the Downtown Core.

Implementation Measure LU4-1.2
Review and amend the Zoning Ordinance and maps to encourage the establishment of connections between the older commercial district along Elm Avenue and Coalinga Plaza and newly developing commercial uses along Elm Avenue and Polk Street.

Implementation Measure LU4-1.3
Review and amend the Zoning Ordinance and maps to discourage commercial land uses along major corridors that may detract from the prosperity existing retailers or the Downtown Core.

Implementation Measure LU4-1.4
The City shall require that any big box retail proposal application include a market study and impact assessment.

IV. COMMERCIAL

Downtown

Goal LU4
A thriving historic Downtown that is the symbolic and functional, center of the City's business, professional, governmental and social activities that provides for the needs of residents and tourists.

Policy LU5-1
The City shall actively encourage expanded commercial/retail shopping opportunities and employment generating uses in the Downtown area, generally defined as the square-shaped area between Van Ness Street to the north, Polk Street to the south, Sunset Street to the west and Hayes Street to the east, especially infill development.

Implementation Measure LU5-1.1
Identify the boundaries of the historic Downtown Core and amend the Zoning and/or General Plan maps to reflect the new boundaries.

Implementation Measure LU5.1.2
Prepare a Downtown Master Plan establishing specific zoning and/or design standards for the City's historic Downtown Core.

Implementation Measure LU5-1.3
Concentrate business services and public buildings and spaces in a functional and efficient manner, creating an attractive center for retail services and social activities.

Policy LU5-2
The City shall enhance the City's historic Downtown Core by creating an efficient, attractive, and pedestrian-oriented area that reflects the City's historic character while providing a diverse mix of uses.

Implementation Measure LU5-2.1
Develop a comprehensive Streetscape and Pedestrian Access Plan for the Downtown Core that promotes an efficient, pedestrian friendly, landscaped framework for business, governmental, shopping and social activities.

Implementation Measure LU5-2.2
Establish Architectural Design Guidelines for the Downtown Core that promotes a vibrant and diverse downtown and provides a framework to enhance the character and identity of Coalinga's downtown.

Implementation Measure LU5-2.3
The historic Downtown contains structures that exemplify the historic character of the City of Coalinga. The City shall establish guidelines for the identification and treatment of sites, buildings and landmarks within the Downtown to ensure that the conversion, re-use, or renovation of these structures does not destroy or significantly alter the character of the structures.

V. MANUFACTURING AND BUSINESS

Goal LU6
Maintain adequate, appropriately located land for the development of high quality manufacturing and business to maintain a job/housing balance throughout the City.

Policy LU6-1
Minimize conflicts between industry and other land uses by concentrating industrial activity within the areas identified on the Land Use Diagram.

Implementation Measure LU6-1.1
The Manufacturing/Business land use designation within the Land Use Diagram shall be periodically reviewed to ensure that there are adequate areas to support adequate industrial development to support a job housing balance in the City.

Policy LU6-2
Businesses involved in natural resource extraction including oil production and quarrying should be located in areas identified as being within the Resource Extraction Overlay as delineated on the Land Use Diagram.

Implementation Measure LU6-2.1
Consistent with the requirements of Implementation Measure LU1-5.3, within one (1) year, the City shall develop Resource Extraction Overlay guidelines and regulations identifying the type, intensity and size of uses that should be located within Resource Extraction Overlay.

Implementation Measure LU6-2.2
The City shall review the Zoning Ordinance to ensure that businesses involved in natural resource extraction shall be located within the Resource Extraction Overlay Designation.

Policy LU6-3
The City shall not support the extension of quarry operations southward.

Implementation Measure LU6-3.1
Quarry operations must be located within areas identified as being within the Resource Extraction Overlay as delineated on the Land Use Diagram.

Implementation Measure LU6-3.2
Areas identified as being within the Resource Extraction Overlay shall not be extended southward to accommodate quarry operations.

Policy LU6-3
The City shall support the development of new clean industries that do not generate large amounts of pollution, waste, or utilize large amounts of hazardous materials.

Implementation Measure LU6-3.1
The City shall amend the Zoning Ordinance to include definitions and standards for clean technology and provide mechanisms for providing incentives to developers that utilize these technologies.

VI. AGRICULTURE

Goal LU7
The viability of the agricultural lands surrounding the City are preserved and protected while allowing for the planned growth within the City's Planning Area.

Policy LU7-1
New Development on the fringes of the City shall recognize the right of agriculture to exist and continue to operate in proximity to the development. Residential deed restrictions may be required which inform future residents of the right of agriculture to continue within the limits of the law without interference or protest from nearby property owners.

Implementation Measure LU7-1.1
Development proposals located adjacent to any land zoned for agricultural use or with prime soil, or under Williamson Act contract shall be required to address the potential conflict with neighboring agricultural uses, and the City shall determine whether there is sufficient cause to require Deed restrictions to protect the right of agriculture to continue.

Implementation Measure LU7-1.2
Within one (1) year, the City has a "Right to Farm" Ordinance.

Implementation Measure LU7-1.3
Prior to annexation of any new lands, the City shall coordinate with the Department of Conservation and local Resource Conservation Districts to develop a Farmland in lieu Fee Program to offset impacts associated with conversion of agricultural lands. The in lieu Fee Program shall set up guidelines for fee establishment, collection, tracking of use, and status of fees and net use of properties obtained/farmed under this program.

Policy LU7-2
The City recognizes the loss of farmland as a result of urbanization of the City of Coalinga as a significant and unavoidable impact and shall require development projects to mitigate for the loss of farmland.

Implementation Measure LU7-.2.1
Development projects shall be required to mitigate for loss of farmland by either (1) granting a farmland conservation easement to or for the benefit of the City and/or a qualifying entity approved by the City, at a 1:1 ratio for each acre developed or an equivalent as specified in a development agreement between the project applicant and the City, or (2) by payment of an in lieu fee as established by the City, which shall be reviewed and adjusted periodically to ensure that the fee is adequate to offset the cost of purchasing farmland conservation easements at a 1:1 ratio or a proportionate share of an agricultural buffer zone around the City's planned growth area or, (3) as negotiated by LAFCO and/or the Department of Conservation, and the City during the annexation process.

The City shall prepare Agricultural Conservation Guidelines identifying requirements for conservation easements, including timing of conservation easements, location of land to be preserved, including consideration of an agricultural buffer zone around the City's planned growth area, land mitigation ratio and quality and minimum standards for conservation easements.

The Agricultural Conservation Guidelines would include the following elements:

A. *Timing of conservation easements*

Direct acquisition of conservation easements by a project applicant shall occur on or before the issuance of certificates of occupancy for the project or as specified in a development agreement between the project applicant and the City. These conservation easements shall be acquired for the benefit of the City. Preservation of off-site farmland may be done for the entire project at one time, or alternatively, may be done in increments with the build-out of the project as specified in a development agreement with the City.

B. *Location of Land to be Preserved*

The farmland to be preserved through this program shall be located in Pleasant Valley, in proximity to the land being impacted, and on similar soil types, to the extent feasible. Those lands directly north and south of the City's SOI, identified as Prime in **Figure 3-2** (presented in the Open Space and Conservation Element of this General Plan), would meet this requirement and should be considered ideal candidates for farmland mitigation sites.

C. Land Mitigation Ratio and Quality

The ratio of farmland to be preserved to farmland developed at the project site shall be a 1:1 ratio or an equivalent as specified in a development agreement between the project applicant and the City. Easements obtained by the Project Applicant must preserve either Farmland of Statewide Importance or Prime Farmland or be within an agricultural buffer zone around the City's planned growth area.

D. Minimum Standards for Conservation Easements

While the specific terms of each individual conservation easement necessarily vary, the following standards must be met before the City will accept any easement as mitigation:

a) If the land to be developed is designated as Farmland of Statewide Importance, so the conservation easement(s) acquired shall preserve either Farmland of Statewide Importance or Prime Farmland, or be within an agricultural buffer zone around the City's planned growth area.

b) All owners of the agricultural mitigation land shall execute the document encumbering the land.

c) The document shall be recordable and contain an accurate legal description of the agricultural mitigation land.

d) The document shall prohibit any activity which substantially impairs or diminishes the agricultural productivity of the land.

e) The document shall protect any existing water rights necessary to maintain agricultural uses on the land covered by the document, and retain such water rights for ongoing use on the agricultural mitigation land.

f) The Applicant shall pay to the City an agricultural mitigation monitoring fee to cover the costs of administering, monitoring and enforcing the document in an amount determined by the receiving entity, not to exceed 10% of the easement price paid by the applicant, or a different amount approved by the City Council not to exceed 15% of the easement price paid by the applicant.

g) The City shall be named a beneficiary under any document conveying the interest in the agricultural mitigation land to an entity acceptable to the City.

h) Interests in agricultural mitigation land shall be held in trust by an entity acceptable to the City and/or the City in perpetuity. The entity shall not sell, lease, or convey any interest in agricultural mitigation land which it shall acquire without the prior written approval of the City.

i) If any qualifying entity owning an interest in agricultural mitigation land ceases to exist, the duty to hold, administer, monitor and enforce the interest shall be transferred to another entity acceptable to the City or to the City.

E. In Lieu Fees

In lieu fees for the conservation of farmland shall be paid to the City and/or qualifying entity approved by the City prior to or upon close of escrow of development (for each residential structure and each commercial, office, and industrial building) within the project approval of grading permits. The City's continuing consultations with conservation agencies and organizations, as well as an assessment of the geographic area will suggest a reasonable current market value for any agricultural land conservation easement. Fees will be collected on or before the issuance of grading permits. The applicant may also pay the entire in lieu fees as specified in a development agreement with the City amount prior to issuance of the first grading permit.

VII. Additional Goals and Policies

Please see Chapters 3-6 for policies related to Open Space and Conservation (Chapter 3), Circulation (Chapter 4), Safety Air Quality and Noise (Chapter 5) and Public Facilities and Services (Chapter 6).

CHAPTER

3

OPEN SPACE AND CONSERVATION ELEMENT

INTRODUCTION

The Open Space and Conservation Element focuses on the identification, protection and management of open space and provides direction regarding the conservation, development and utilization of natural resources. Valuable resources in the City of Coalinga include, agricultural and rangeland, Gatos and Warthan Creek, minerals and fossil fuels, a variety of biological species, scenic areas and archaeological, cultural and historic resources.

Related issues that are not included in this element include parks, recreational trails, water supply and hazards. These issues are addressed in other Elements of this General Plan.

ORGANIZATION OF THE ELEMENT

- **Introduction**. This section includes an overview of the contents of the Element and a discussion of state law requirements.
- **Background and Setting.** This section provides a description of the current setting.
- **Special Planning Areas and Resources**. This section identifies specific geographic areas within the Coalinga area that significant resource value and/or are strategic to conservation planning of the City.
- **Open Space and Conservation Goals, Policies and Implementation Measures.** This section outlines Coalinga's overall land use goals and the policies and implementation measures designed to attain these goals.

REQUIREMENTS OF THE OPEN SPACE AND CONSERVATION ELEMENTS

California Government Code requires that General Plans include an Open Space Element and a Conservation Element either as separate or combined elements. The requirements for the Open Space Element as outlined in Government Code Sections 65302[e] and 65560 et seq. are similar

to those in the Conservation Element (Government Code Section 65302(d)). Because the two Elements overlap in content and function, they have been combined in this General Plan.

Generally, "open space" refers to any land or water area that remains in a predominantly natural or undeveloped state and is generally free of structures. The Land Use Element of this General Plan more specifically defines open space and conservation lands as properties with significant wildlife or habitat value or areas that have considerable physical constraints, including floodways or floodplains, fault rupture hazard areas, unstable geologic or soils conditions, hazardous materials and wildlife corridors or habitat areas

Government Code specifies that a General Plan must address four categories of open space including:

- Open space for the preservation of natural resources
- Open space used for the managed production of resources,
- Open space for outdoor recreation, including but not limited to, areas of outstanding scenic, historic and cultural value; and
- Open space for public health and safety.

The Conservation Element, according to State requirements, must contain goals and policies to protect and maintain natural resources such as soils, wildlife and minerals and prevent wasteful resource exploitation, degradation and destruction.

In adopting these requirements, the Legislature found that the preservation of open space land is necessary not only for the maintenance of the economy of the State but also for the continued availability of land for the production of food and fiber, for the enjoyment of scenic beauty, for recreation and for the use of natural resources. The Legislature further found that it is in the public interest to discourage unnecessary or premature conversion of open space.

In accordance with State requirements, this Element addresses the management, protection and preservation of open space. Related issues such as parks, recreational trails, water supply and hazards are addressed in other Elements within this General Plan. Parks and parkland dedication requirements are discussed in the Public Facilities and Services Element. A discussion of trail-oriented recreational uses and trail routes is included in the Circulation Element. A discussion of water, water bodies, hydraulic forces and hazardous or special conditions is included in the Safety Element.

The Open Space and Conservation Element, as each of the Elements in the General Plan, is required to be fully integrated and consistent with each of the other elements. This Element has been prepared in conformance with all mandatory requirements of state law.

Background and Setting

Coalinga is located in Pleasant Valley, at the base of the coast mountain ranges, on the western side of California's Central Valley. The City is located approximately 100 miles north-northwest of Bakersfield and encompasses approximately 3,165 acres at the confluence of Los Gatos and Warthan Creeks. These stream channels run along the northeast and southeast edges of town, partially defining the boundaries of the urban area. Vegetation along the stream channels from their headwaters to Pleasant Valley varies considerably: from no obvious obligate riparian vegetation; to occasional stands of large cottonwoods, marsh-like reaches with rushes and other small plants but no trees; to sparse to dense stands of small and large tamarisks. Cottonwoods and mesquite are native to the area. Another common species, tamarisk, is an invasive, introduced plant that is an aggressive competitor with native vegetation, and provides little value as habitat for native wildlife.[1]

Before the arrival of the Spanish in the 18th century, perennial grasslands characterized the vegetation of the area with scattered oaks near the foothills. With the introduction of cattle and farming activities, much of the native grassland has either been destroyed by conversion to croplands or replaced by non-native annual grasslands better able to withstand intense grazing pressures.

Pleasant Valley originally supported large herds of pronghorn antelope and tule elk; however, these species are no longer present. Mule deer, kit fox, wild boars, coyotes, bobcat and badgers inhabit the surrounding hills. California ground squirrels, black-tailed jackrabbits and desert cottontails are abundant. Turtles, small fish, frogs and aquatic insects are observable in stream reaches with surface water in the canyons above town. The area also has the potential for several sensitive plant and wildlife species including California jewelflower, Palmate bird's beak, San Joaquin kit foxes and blunt-nosed leopard lizards.

Soils

The soils found in the foothills and mountain areas are thin and highly susceptible to erosion from wind and water. The vegetative cover is generally sparse, limiting the carrying capacity of the land for grazing. Topsoils in the northeastern portion of Pleasant Valley are very fertile and underlain with by extremely deep alluvial silt. The fertility of the soils in other areas of the Pleasant Valley is threatened by the application of poor quality ground water, which progressively increases salt concentrations. Soils within the City of Coalinga, Sphere of Influence (SOI) and Area of Interest (AOI) are generally characterized as having limitations for development. Limitations include expansive, collapsible and corrosive soils. The degrees of erodibility vary throughout the Coalinga area.

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[1] *City of Coalinga, Management Plan for Warthan Creek and Los Gatos Creek, Natural Resources Services, Redwood Community Action Agency, 1990.*

The safety element contains a further discussion of the potential soils-related hazards and applicable goals, policies and implementation measures.

Agricultural and Rangeland Resources

Most of the land within the Pleasant Valley is considered prime agricultural land, while that outside is considered rangeland. Agricultural land includes land that has been plowed, disked, or irrigated for crop production. Rangeland generally includes land with natural vegetation, dominated by valley saltbush scrub and annual grasslands.

Minerals and Other Natural Resources

Coalinga's history is deeply rooted in the minerals and other natural resources known to occur in the area. Extracted resources include fossil fuels such as oil and coal, aggregate products such as sand and gravel and other metals and minerals.

Oil development in the Coalinga area began as early as 1864, when efforts were made to produce oil from hand-dug oil wells. Today, extensive oil recovery operations are located mostly to the north of the City. Oil companies such as Chevron USA, Union Oil Company, Shell Production and Santa Fe Energy have substantial land holdings in the area. Coal, in the form of lignite, occurs northwest and southwest of Coalinga but has not been commercially mined for 100 years.

Asbestos is surface-mined in large quantities approximately 20 miles northwest of Coalinga. The serpentine host rock in which it is found covers approximately 2,000 square miles, and as much as 50% of this rock could be asbestos. Total reserves are not known, but the deposit has been estimated to contain more than 100 million tons of ore. This area is one of the nation's principal producers of asbestos and contains one of the world's largest deposits of short-fiber asbestos.

Scenic Resources

The City of Coalinga is located in a broad valley on the eastern side of the coast mountain range, along the western edge of California's Central Valley. The visual setting of the area is characterized by the wide, flat valley floor bounded by rolling foothills primarily to the west and south. The City is generally surrounded by rural open space, with agriculture, oil production, scattered ranches and residences making up the visual landscape. The vegetation of the landscape surrounding the city is generally that of tilled or grazed grassland, agricultural crops, sparse trees and scattered riparian corridors. As viewed from most parts of the city, the low hills to the west are a visual backdrop and offer a degree of scenic and topographic interest. The Los Gatos and Warthan Creeks create vegetated riparian corridors visible through town and the adjacent countryside. The visual fabric of the City is largely defined by a balanced mix of low multi-story structures in the downtown and commercial area, with single and multi-family residential surrounding the downtown center.

Archaeological Resources

The City of Coalinga and surrounding areas are located within the ethnographic territory of the Southern Yokuts people. The Southern Yokuts homeland was centered near water sources including the Tulare, Buena Vista, and Kern Lakes and connecting sloughs and rivers. Population density was very low in areas removed from main water courses and lakes (Wallace 1978).

Earliest evidence of human occupation of the region consists of spear points, including fluted points found on the shores of Tulare Lake. These points potentially date back to 12,000 to 10,000 before present (BP). The earliest radiocarbon date in the region is 8,000 BP and was obtained from a buried site on the shores of Buena Vista Lake. Three archaeological components have been defined for the Coalinga area: 1) Early Horizon (8,000 to 4,500 BP), 2) Middle Horizon (4,500 to 3,000 BP) and 3) Late Horizon (3,000 BP to 1,500 BP). The Late Horizon may represent peoples who are a precursor to the Yokuts culture (Morratto; 1984).

Cultural and Historic Resources

The 1983 earthquake caused more than $30 million in damages and destroyed most of the historically significant buildings in the area. Of 139 buildings in the 8-block downtown commercial district, 59 collapsed or were heavily damaged. The most severe damage occurred to the old (usually pre-1930) 1- and 2-story buildings of unreinforced brick masonry wall construction, with floors and roofs of wood. More than 800 single-family houses were destroyed or incurred major damage. Most of these domestic buildings were of unreinforced adobe construction.

Special Planning Areas and Resources

Coalinga recognizes that certain geographic areas within and around the City merit special consideration due to the potential presence, or potential to support special status species and or/habitat. These areas are described below.

Coalinga Habitat Conservation Plan (CHCP)

On March 20, 1997, the Coalinga City Council authorized preparation of the CHCP, in recognition of the many federally and state-listed species, as well as other sensitive species within the Coalinga vicinity. The maximum CHCP Permit Area consists of approximately 10,429 acres (16.3 square miles) which encompass all land within the City limits and the land designated in the City's Sphere of Influence (SOI). A draft of the CHCP was released for public and agency review in 2005. As of yet, 2008, the CHCP has not yet been adopted, and little more has been done in Coalinga's HCP process.

Adoption of the CHCP would benefit the City as the adopted CHCP, upon local, state and federal agency approval, would provide a streamlined, predictable permit process; consistent, defined

compensation obligations and mitigation measures; cost-sharing among the participants; and careful stewardship of biological resources, and compliance with Endangered Species Act (ESA) and California Endangered Species Act (CESA). The purpose of the CHCP is to meet the requirements of the ESA by avoiding, minimizing, and mitigating impacts on listed species and their habitats, ensuring protection of other sensitive species and reducing potential conflicts between sensitive species and development. The CHCP will include mitigation measures designed to avoid and minimize take of sensitive species and their habitat and to mitigate for unavoidable incidental take.

Within the CHCP Area there is potential for several sensitive plant and wildlife species to occur. Plant communities may be regarded as sensitive for one or more of the following reasons:

- They may provide habitat for rare plants or wildlife,
- There may have been extensive historic and ongoing losses of acreage throughout the region, or
- They may be considered important elements of local aesthetic value and natural heritage.

The California Department of Fish and Game (CDFG) classify sensitive species into the following groups:

- **Candidate Species.** One that the Fish and Game Commission (CFGC) formally has noticed as being under review by the CDFG to determine whether listing it as threatened or endangered is warranted, or when it is the subject of a proposed rulemaking by the Commission to list as threatened or endangered.
- **Rare Species.** One that is in such small numbers throughout all or a significant portion of its range that it may become endangered if its present environment worsens.
- **Threatened Species.** One that is not presently facing extinction but is likely to become an endangered species in the foreseeable future, in the absence of special protection and management efforts. Any wildlife listed as "rare" by the Commission on or before January 1, 1985 is considered a "threatened" species.
- **Endangered Species.** One that is in serious danger of becoming extinct throughout all, or a significant portion of, its range due to one or more causes including loss or change of habitat, overexploitation, predation, competition or disease.

A list of sensitive plants and wildlife from the Pleasant Valley Area, that have the potential to occur within the Habitat Conservation Plan Area, are listed in **Tables 3-1** and **3-2** presented on the following pages. .

TABLE 3-1
SENSITIVE PLANT SPECIES WITH POTENTIAL TO OCCUR WITHIN THE COALINGA HABITAT CONSERVATION PLAN (CHCP) AREA

Scientific Name	Common Name	Status
Amsinckia furcata	Forked fiddleneck	1B, C2
Atriplex cordulata	Heart-leaf saltbrush	1B, C2
Atriplex joaquiniana		1B, C2
Atriplex miniscula		1B, C2
Atriplex tularensis	Bakersfield saltbrush	1B, E, C1
Atriplex vallicola	Lost Hills saltbrush	1B, C2
Caulanthus californicus	California jewelflower	1B, E, E
Cirsium crassicaule	Slough thistle	1B, C2
Cordylanthus palmatus	Palmate bird's beak	1B, E, E
Delphinium recurvatum	Recurved larkspur	1B, C2
Eriastrum hooveri	Hoover's wooly-star	1B, T
Hollisteria lanata	Hollisteria	C2
Lambertia congdonii	San Joaquin wooly-threads	1B, T
Lepidium jaredii	Jared's pepper-grass	RC2

Source: Draft CHCP 2005
Notes:
CNPS = California Native Plant Society
1B = Plants rare and endangered in Calif. and elsewhere
2 = Plants rare, threatened, or endangered in Calif. but more common elsewhere
CDFG = California Department of Fish and Game
E = Endangered
T = Threatened
R = Rare
USFWS = U.S. Fish and Wildlife Service
E = Endangered
PE = Proposed for endangered status
PT = Proposed for threatened status
C1, C2 = Candidate list

TABLE 3-2
SENSITIVE WILDLIFE SPECIES WITH POTENTIAL TO OCCUR WITHIN THE COALINGA HABITAT CONSERVATION PLAN (CHCP) AREA

Scientific Name	Common Name	Status
INVERTEBRATES		
Branchinecta lynchi	Vernal Pool Fairy Shrimp	FT, SA
Linderiella occidentalis	California linderiella	SA
Lytta morrisoni	Morrison's blister beetle	FC2, SA
Coelus gracilis	San Joaquin dune beetle	FC1, SA
Aegiala concinna	Ciervo aegialian scarab beetle	FC1, SA
Eucerceris ruficeps	Redheaded sphecid wasp	FC1, SA
Desmocerus californicus dimorphus	Valley elderberry longhorn beetle	T, SA
Lytta hoppingii	Hopping's blister beetle	FC2
AMPHIBIANS		
Ambystoma tirgrinum californiense	California tiger salamander	FC2, CSC
Rana aurora draytoni	California red-legged frog	FC1, CSC
Rana boylii	Foothill yellow-legged frog	FC2, CSC
Scaphiopus hammondii hammondii	Western spadefoot toad	1R, CSC
TERRESTRIAL REPTILES		
Clemmys marmorata pallida	Southwestern pond turtle	CSC, FC1
Gambelia sila	Blunt-nosed leopard lizard	SE, FE
Phrynosoma coronatum frontale	California horned lizard	CSC
Thamnphis hammondii	Two-striped garter snake	CSC, FC2
Clemmys marmorata marmorata	Northwestrn pond turtle	FC2, CSC
BIRDS		
Circus cyanus	Northern harrier (breeding)	CSC, MBTA
Accipiter cooperi	Cooper's hawk (breeding)	CSC, MBTA
Buteo swainsoni	Swainson's hawk (breeding)	ST, FC3, MBTA
Buteo regalis	Ferruginous hawk (breeding)	FC2, CSC, SA, MBTA
Aquila chrysaetos	Golden eagle (breeding)	CSC, MBTA
Falco mexicanus	Prairie falcon (breeding)	CSC, MBTA
Charadrius montanus	Mountain plover (wintering)	FC2, CSC, MBTA
Athene cunicularia	Burrowing owl and burrow sites	CSC, SA, MBTA
Asio otus	Long-eared owl	CSC, MBTA
Asio flammeus	Short-eared owl	CSC, MBTA

Scientific Name	Common Name	Status
Toxostoma lecontei	Le Conte's thrasher	CSC, MBTA
Agelaius tricolor	Tricolored blackbird	FC2, CSC, MBTA
Charadrius alexandrius nivosus	Western snowy plover	PT, CSC, MBTA
Lanius ludovicianus	Loggerhead shrike	FC2, CSC, MBTA
MAMMALS		
Ammospermophilus nelsoni	San Joaquin antelope squirrel	ST, FC2
Dipodomys ingens	Giant Kangaroo rat	SE, FE
Dipodomys nitratoides brevinasus	Short-nosed kangaroo rat	CSC, FC1
Vulpes macrotis mutica	San Joaquin kit fox	ST, FE
Taxidea taxus	American badger	CSC
Eumops perotis californicus	Greater western mastiff bat	FC2, CSC
Plecotus townsendii townsendii	Pacific western big-eared bat	FC2, CSC
Perognathus inornatus	San Joaquin pocket mouse	FC2, CSC

Source: Draft CHCP 2005
Notes:
FC3c = Includes taxa that are now considered to be more abundant and/or widespread than previously thought
FSS = Federal (BLM, USFS) sensitive
1R = Recommended to become federal candidate
CSC = CDFG species of special concern
SP = Fully protected species in Calif.
SA = CNDDB Special animal
MBTA = Bird protected under the Migratory bird Treaty Act.
CFGC = California Fish and Game Commission
SE = Designated as endangered by the CFGC
ST = Designated as threatened by CFGC
FE = Designated as endangered by the USFWS
FT = Designated as threatened by the USFWS
PE = Proposed endangered by USFWS
FC1, FC2 = Designated as candidate by USFWS

Open Space

The rural setting and geographic location of Coalinga offers extensive passive open space beyond the City. Although much of the land surrounding the City is in private ownership, the Bureau of Land Management (BLM) manages substantial acreage, which provides limited passive and active open space opportunities.

The stream corridors and watersheds of the Los Gatos and Warthan Creeks offer open space opportunities for residents and have been designated as such. Properties with fault rupture hazards, unstable geologic or soils conditions, hazardous materials and wildlife corridors or habitat areas have also been designated open space.

Conservation Bank

The City of Coalinga developed the Conservation Bank as a way to streamline the acquisition of compensation land. The City can use the Conservation Bank to buy land in large parcels from willing sellers, resulting in a per acre cost for the conservation land that may be less than the impact fee collected by the City. The City plans to continue acquisition of land for inclusion in the Coalinga Conservation Bank to meet future needs for projects permitted under an adopted CHCP and possibly for projects outside of the CHCP scope. The Coalinga Conservation Bank is described in a separate Conservation Bank Agreement between the City of Coalinga, CDFG and USFWS.

Area of Critical Environmental Concern

Federal land within the Pleasant Valley area, including all Bureau of Land Management (BLM) land in the CHCP Conservation Area and south into the Kettleman Hills, is part of the Panoche/Coalinga Area of Critical Environmental Concern (ACEC), which consists of about 43,000 acres in western Fresno County. Identification of ACECs was authorized in Section 202 (c)(3) of the Federal Land Policy and Management Act of 1976. ACECs are areas on BLM lands where special management is needed to protect and prevent irreparable damage to important historic, cultural, and scenic values, fish or wildlife resources or other natural systems or processes; or to protect human life and safety from natural hazards. ACECs are managed for the long-term conservation of the plants and animals and the natural communities on which they depend, but may allow for a variety of land uses managed in a compatible manner.

Near the CHCP Permit Area, BLM manages approximately 6,180 acres of public land and approximately 7,640 acres of mineral split estate land (where the minerals are federally owned and a private party or state or local government owns the surface). The Management Plan for the Panoche/Coalinga Area of Critical Environmental Concern (BLM 1987) recognizes significant habitat areas for sensitive plants and animals and recommends measures for the management of them, including guidelines for surface disturbing activities, limitations on grazing, policies for land acquisition and monitoring requirements.

Recovery Plan Area

A Recovery Plan for Upland Species of the San Joaquin Valley (USFWS 1998) has been prepared for upland species in the San Joaquin Valley. Criteria were developed to guide mitigation and compensation efforts for many relevant species covered in the Draft CHCP (2005). Table 11 and Figure 72 in the Recovery Plan identify the Kettleman Hills to Anticline Ridge, as an area of "private farmland/links with Coalinga and Guijarral Hills and the rest of natural lands on the west edge of the Valley" and an area "where connectivity and linkages should be promoted" between the Kettleman Hills to the south and the Ciervo/Panoche area to the north (Figure 73 in the Recovery Plan). Under the proposed CHCP, conservation would support the goals of the Recovery Plan.

Pleasant Valley Ecological Reserve

CDFG owns and manages approximately 1,000 acres in the Guijarral Hills as habitat for San Joaquin kit foxes, blunt-nosed leopard lizards and other listed species in the area. At this time, a management plan for the area is in preparation.

Warthan Creek and Los Gatos Creek

A management plan for Warthan Creek and Los Gatos Creek was prepared in 1990 at the request of the City of Coalinga by Redwood Community Action Agency (1990). The plan covers only the parts of the creeks located in the City of Coalinga's SOI in 1990. The plan identifies methods to protect and enhance the natural resource values of the creeks and recommends a multi-use approach allowing: recreation, floodways, natural habitat and open space activities. The recommendations address the protection of wildlife habitat and suggest approaches to use the streams as potential wildlife movement corridors and foraging areas.

Implementation of the plan would also reduce potential hazards associated with flooding, erosion and sedimentation. The policy related to vegetation management encourages the reproduction and growth of native plants and discourages the establishment and growth of non-native plants within the stream zones. The wildlife habitat policy calls for restoration and management of stream zones as habitat for native wildlife species, integrated with other allowable uses. As of November 1994, the plan had been implemented over about half the length of Los Gatos Creek and Warthan Creek within the City of Coalinga.

Coalinga Airport Kit Fox Habitat Management Area

In compliance with the Biological Opinion issued by the USFWS (1992) for construction of the Coalinga Airport, 360 acres were dedicated as a Kit Fox Management Area (KFMA) and buffer areas were established between the KFMA and adjacent land uses. There is a 500-foot wide buffer along the west side of Calaveras Avenue beginning at Phelps Avenue and extending one mile northward to include the length of airport lands bound by Calaveras Avenue. There also is a 300-foot wide buffer between the KFMA and the planned and potential future airport facilities. The land required for this potential expansion plus 300 feet around it is treated as buffer so that the 360 acres of KFMA lands will not be diminished or impacted by potential future expansion.

Prime Farmland

Most of the land within the Pleasant Valley is considered prime agricultural land, while that outside is considered rangeland. Uses on rangeland include livestock grazing and oil and gas extraction. Important Farmland within the Planning Area is illustrated on **Figure 3-1.**

Williamson Act Land

It is anticipated that all of the agricultural land under Williamson Act contracts within the proposed SOI, 6,061 acres, will eventually be converted to urban use and be removed from the

Williamson Act program by the Year 2025 through the implementation of the General Plan Update. Williamson Act Lands within the Planning Area are illustrated on **Figure 3-2.**

Resources Extraction Areas

Resources that have been historically extracted in the region include fossil fuels such as oil and coal, aggregate products such as sand and gravel and other metals and minerals. Today resource extraction is limited primarily to oil and asbestos. However, extensive oil recovery operations are located mostly to the north of the City. Asbestos is surface-mined in large quantities approximately 20 miles northwest of Coalinga.

Viewing Corridors

The City's principal travel corridors including Highway 198/33, Highway 33/Jayne Avenue and Phelps Avenue act as key vantage points for viewing the City's scenic resources:

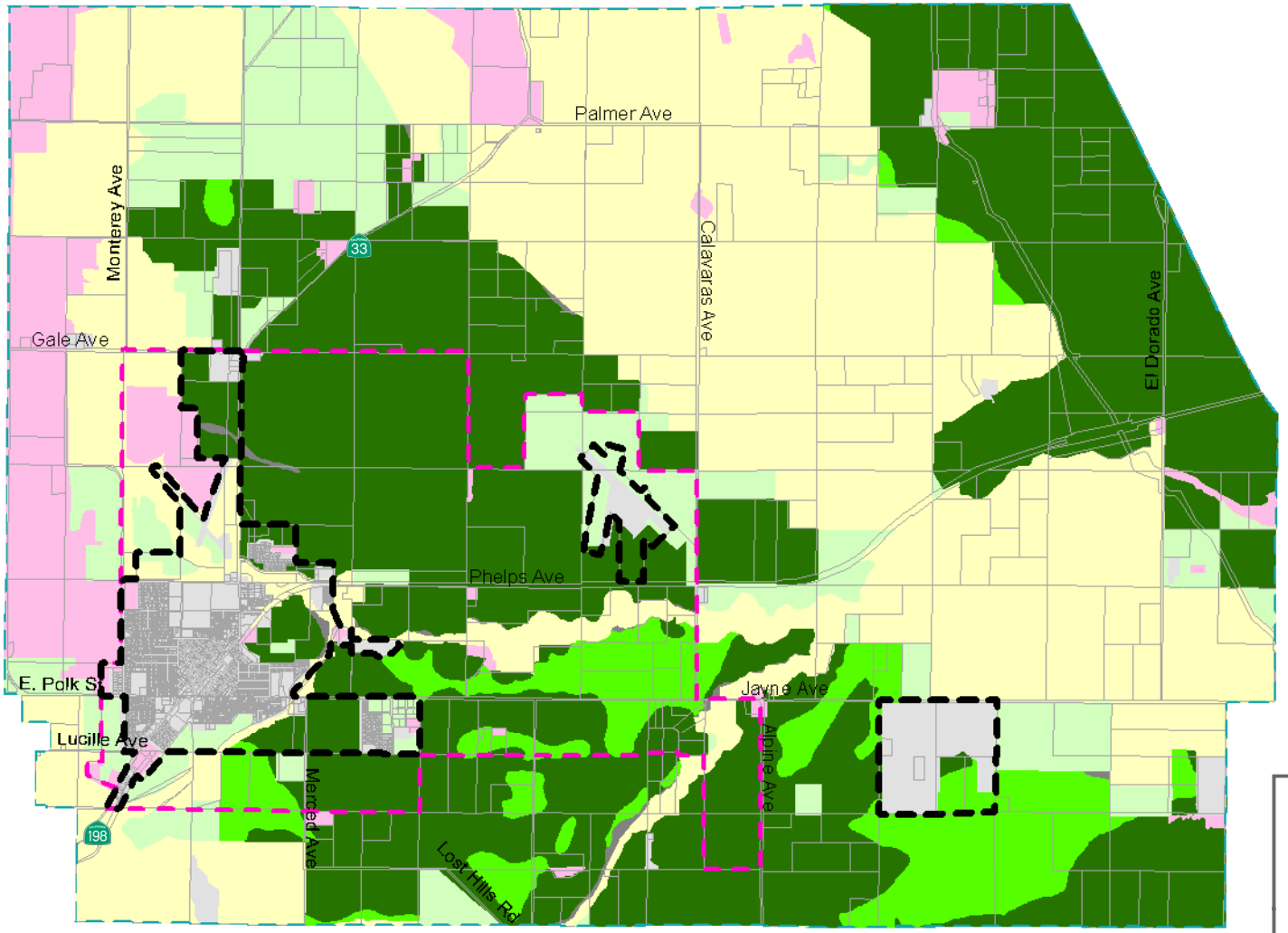
- Highway 198/33 is the major public viewing corridor traversing the City in a north-northeast/south-southwest direction. Northeast and southwest of the City, the highway offers views of rolling hills, natural landscape and agricultural areas. The California Department of Transportation lists Highway 198 between Interstate 5 and the western Fresno County Line as an Eligible State Scenic Highway.
- Highway 33/Jayne Avenue is the major public viewing corridor traversing the City in an east/west direction. West of the City, the highway offers views of rolling hills, natural landscape and agricultural areas.
- Phelps Avenue is the major public viewing corridor traversing the northern portion of the City in an east/west direction. West of the City, Phelps Avenue offers views of rolling hills, natural landscape and agricultural areas.

Archaeological Sites

Archaeological investigations and surveys in the immediate Coalinga area have identified archaeological sites to the west and southwest along Los Gatos and Warthan Creeks. An additional site, FRE-49, exists east of the junction of Los Gatos and Jacalitos Creeks, approximately three (3) miles outside the City. Undiscovered archaeological remains may be present in undeveloped or undisturbed areas. In areas where extensive agriculture has occurred, the potential for finding significant archaeological resources is considered very remote.

Historic Sites

The National Register of Historic Places lists two sites of historical significance in the Coalinga area, the Birdwell Rock Petroglyph Site and Coalinga Polk Street School. Resources considered to be of local significance include the RC Baker Memorial Museum and the Wooden Walking Beam.



T:_GIS\Fresno_County\Mxds\Coalinga\From3x\Figure 3-1 Important Farmland.mxd

SOURCE: CA FARMLAND MAPPING AND MONITORING PROGRAM (FMMP), 2004; FRESNO COUNTY; PMC, 2007

0 4000 8000

SCALE IN FEET

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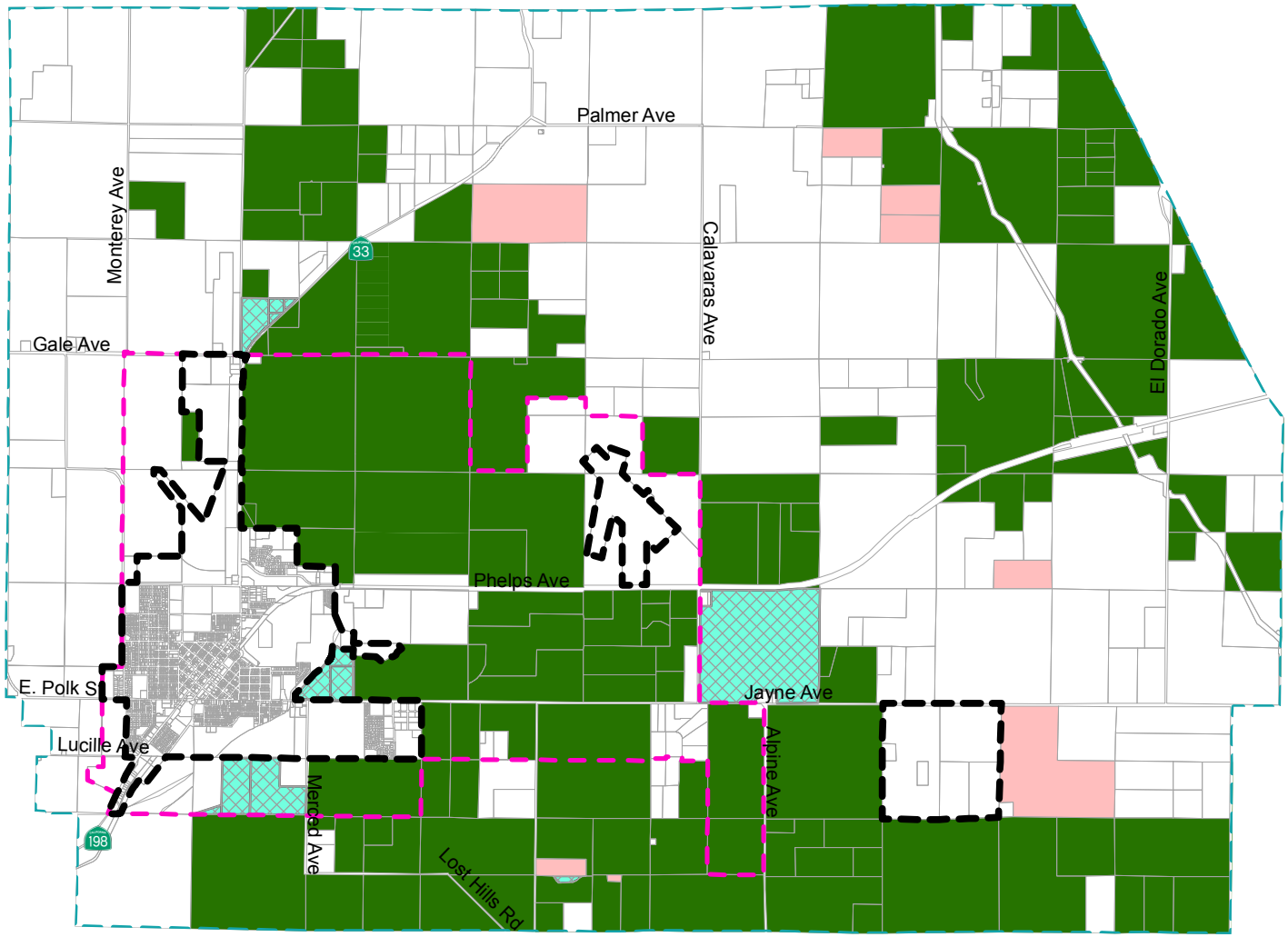
FIGURE 3-1
IMPORTANT FARMLAND



SOURCE: CA DEPT. OF CONSERVATION, 2005; PMC, 2007

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T:_GIS\Fresno_County\Mxds\Coalinga\From3x\Figure 3-2 Williamson Act Land.mxd

FIGURE 3-2
WILLIAMSON ACT LAND

Open Space and Conservation Goals, Policies and Implementation Measures

The following Community Vision Statements define the values and vision for the community and along with the guiding principles in Chapter 1 of this General Plan, provide the foundation for open space and conservation goals, policies and implementation measures.

- Maintains the spectacular view of the valley and surrounding hills that forms the backdrop to the community. It preserves its natural beauty, environmental quality and vital natural resources through appropriate stewardship of the land ensuring visual and physical harmony between the natural and man-made environment.
- Preserves its general open, rural, low profile, uncrowded character punctuated with ample open space, large setbacks, panoramic views and pristine vistas of the surrounding hills.
- Collects, restores, preserves its natural, cultural and geologic heritage and displays, artifacts, histories, maps and structures relating to the early Native American inhabitants, pioneer settlers, railroad workers, coal miners and oil workers of Coalinga.
- Provides outstanding cultural activities that serve the entire region and that will touch and enrich the lives of citizens and visitors. The arts and the environment play equal and complementary roles in realizing a culturally animated future. They act as a stimulus to civic pride and involvement and provide vigor and zest to the community's quality of life.

The following goals, policies and implementation measures have been established to guide short and long-range decision making by the community.

Goal OSC1
Preservation of Coalinga's sensitive wildlife habitats and open space lands to the greatest extent possible.

Policy OSC1-1
Secure a diverse network of open land encompassing valuable natural and agricultural resources within and around the Coalinga urban area. Valuable resources include creek corridors, wetlands, native grassland communities and woodlands, wildlife habitat and corridors, groundwater resources, hills and ridgelines, open-space settings for cultural resources and prime agricultural soils and economically viable farmland.

Implementation Measure OSC1-1.1
Pursue opportunities for additional open space land in the form of parkland dedication, public open space easements, leaseholds, land donations/dedications and gift annuities.

Implementation Measure OSC1-2.2
Create an Open Space Ordinance that includes open space development criteria for private and public projects.

Policy OSC1-2
Encourage the protection of streams, riparian corridors and unique or sensitive habitats.

Implementation Measure OSC1-2.1
Designate streams, riparian corridors and unique or sensitive habitats as Open Space.

Implementation Measure OSC1-2.2
Adopt a stream setback ordinance and development standards that minimize impacts to streams and riparian corridors.

Implementation Measure OSC1-2.3
Continue to develop and expand the Coalinga Conservation Bank in an effort to protect sensitive environments.

Implementation Measure OSC1-2.4
Continue to acquire land for inclusion in the Coalinga Reserve.

Implementation Measure OSC1-2.5
The City shall support "no-net-loss" wetlands policies of the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, and the California Department of Fish and Game. The City shall require new development to fully mitigate wetland loss for function and value in regulated wetlands through any combination of avoidance, minimization, or compensation. The City shall also support mitigation banking programs that can 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. Coordination with 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 OSC1-3
Protect special-status plant and animal species and their habitat in accordance with local, state, and federal regulations.

Implementation Measure OSC1-3.1
As part of the environmental review process for future development projects, the City shall require applicants to provide an evaluation of biological resources for those projects located within or directly adjacent to known sensitive habitats. These habitats include those documented or recognized by the City, CDFG, and/or the USFWS (e.g., wetlands, riparian zones, special-status species habitat, rare plants).

This biological resources evaluation shall be conducted by a qualified biologist. Such an evaluation will consider the potential for significant impacts on biological resources and will identify feasible mitigation measures or indicate why mitigation is not feasible.

Implementation Measure OSC1-3.2
Create and maintain a database inventory, with maps, of known populations of special-status plant and animal occurrences and suitable habitat within the City boundary. The database shall also include locations of known kit fox dens.

Implementation Measure OSC1-3.3
Develop an environmental education program for the general public and development community that provides information, materials and resources (i.e., brochures, websites, displays and presentations) about local special-status species, their habitat requirements, and measures that landowners can take to protect these species. The materials prepared for this program shall be developed in conjunction with and reviewed by USFWS and CDFG for accuracy and consistency. The materials shall be reviewed every five years, updated as necessary, and redistributed. The materials shall also be updated and redistributed when the status of any of these species changes, or if guidelines for their protection change substantially.

Implementation Measure OSC1-3.4
A worker education and training program shall be conducted prior to construction for those projects which have the potential to disturb natural resources. The program shall be conducted by a qualified biologist for all construction personnel and would discuss sensitive species and habitats which have the potential to occur in the construction area, as well. The program shall explain the importance of minimizing disturbance and adhering to other disturbance minimizing measures.

Implementation Measure OSC1-3.5
Until such time as a Habitat Conservation Plan (HCP) is adopted, the City shall require applicants to coordinate with U.S. 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.

Implementation Measure OSC1-3.6
Coordinate with the USFWS and other applicable agencies to complete the CHCP process, including environmental review. Begin the process within one (1) year of General Plan approval.

Policy OSC1-4
Preserve and enhance habitat linkages recognized by regulatory agencies and/or identified during the development review process.

Implementation Measure OSC1-4.1
The City shall work with willing landowners to acquire land in fee title or conservation easements in order to expand the Coalinga Reserve in the Kettleman Hills/ Guijarral Hills/ Anticline Ridge habitat linkage.

Implementation Measure OSC1-4.2
The City shall require a minimum 100-foot setback from those natural watercourses such as Los Gatos, Zapato Chino, Jacalitos and Warthan creeks.

Implementation Measure OSC1-4.3
The City shall retain a qualified biologist to conduct annual surveys within the Coalinga Reserve to identify areas of habitat (other than annual grassland) where invasive non-native vegetation exceeds 20% coverage. These areas with more than 20% coverage by invasive species shall be treated using methods that do not cause surface disturbance and are in accordance with State and Federal laws and regulations.

Implementation Measure OSC1-4.4
The City 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.

Implementation Measure OSC1-4.5
The City shall require developers 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, the developers shall be responsible for creating new riparian habitats within or near the project area. Appropriate mitigation shall be developed in coordination with regulatory agencies.

Policy OSC1-5
Encourage the protection of threatened and endangered species and their habitat addressed in the adopted Coalinga Habitat Conservation Plan (CHCP), while allowing for continued development. Until such time as the CHCP is adopted, the City shall look to the Draft CHCP (2005) for guidance.

Implementation Measure OSC1-5.1
Modify existing or create new development standards that incorporate the mitigation measures included in the adopted CHCP to ensure that all new development under jurisdiction of the City of Coalinga within the CHCP Overlay to complies with the terms and conditions of the Coalinga HCP.

Implementation Measure OSC1-5.2
Create and maintain an inventory of known populations of the species covered by the adopted CHCP.

Implementation Measure OSC1-5.3
Develop an environmental education program for the general public and development community that provides information materials and resources (i.e., brochures, websites,

displays and presentations) about the ecological resources in the adopted CHCP area, including photographs, species descriptions and habitat needs.

Implementation Measure OSC1-5.4
Require pre-construction worker education and training programs for projects in the adopted CHCP plan area.

Goal OSC2
Expand community understanding, appreciation and support for historic and archaeological resources to ensure long-term protection of cultural resources.

Policy OSC2-1
Identify and protect significant historic and archaeological resources in the City of Coalinga.

Implementation Measure OSC2-1.1
Establish and maintain a database and map of recorded significant historic and archaeological sites and other areas likely to contain cultural resources. Specific archaeological site information will be kept confidential to protect the resources. The City may provide generalized maps showing known areas of archaeological sensitivity for public use.

Implementation Measure OSC2-1.2
Develop and maintain standards concerning when and how to conduct archaeological and cultural resource surveys and the preferred methods of artifact preservation. Coordinate with local Native American Indian tribes to establish standards for mitigation and monitoring of impacted archeological and cultural resources.

Implementation Measure OSC2-1.3
Require a Phase I Archaeological Surface Survey for development within a culturally or archaeologically sensitive area. A qualified archaeologist shall conduct site surveys prior to determination of potential environmental impacts of the project.

Implementation Measure OSC2-1.4
Require a mitigation plan to protect those properties that contain archaeologically or culturally sensitive resources to protect the resources. Possible mitigation measures include but are not limited to: presence of a qualified professional during initial grading or trenching; project redesign; covering with a layer of fill; excavation, removal and curation in an appropriate facility under the direction of a qualified professional; and preservation through easement or dedication.

Implementation Measure OSC2-1.5
Cease all earth-moving work if cultural resources are unearthed during grading and construction activities, until a qualified archeologist can determine the significance of the resource and recommend alternative mitigation measures.

Goal OSC3
Protection of visually accessible scenic resources in Coalinga.

Policy OSC3-1
Recognize agricultural and rural landscapes as important visual resources.

Implementation Measure OSC3-1.1
Review development applications for discretionary actions to determine aesthetic impacts and visual compatibility with the surrounding landscape.

Policy OSC3-2
Encourage preservation and enhancement of views of the Jacalitos Hills, Guijarral Hills and the Kettleman Hills to the extent possible.

Implementation Measure OSC3-2.1
Establish development standards that minimize visual impacts and protect visually accessible scenic resources.

Policy OSC3-3
Encourage protection and enhancement of scenic views adjacent to and visible from public roads and highways including Highway 198/33, Highway 33/Jayne Avenue and Phelps Avenue.

Implementation Measure OSC3-3.1
Prior to annexation of any lands into the City, develop a Scenic Resources Plan to identify and designate scenic corridors along public roads and highways that have unique or outstanding scenic attributes such as views of prominent hills, mountains, stands of trees; and the Los Gatos, Warthan and Jacalitos Creek corridors unless a Scenic Resources Evaluation of the project is included with the project application for City consideration.

Goal OSC4
Protection of existing mineral and oil gas resource extraction activities and areas.

Policy OSC4-1
Recognize existing mineral resource areas as important economic and natural resources.

Implementation Measure OSC4-1.1
Identify areas where mineral or petroleum extraction occurs, is proposed to occur, or where petroleum or mineral reserves of statewide significance exist, as defined by the State Geologist.

Implementation Measure OSC4-1.2
Require adequate buffering around existing extraction and energy production areas so that incompatible land uses will not be developed on adjacent properties such that the mineral extraction or energy production facilities may become dangerous or detrimental to public health and safety.

CHAPTER

4

CIRCULATION ELEMENT

INTRODUCTION

The Circulation Element provides a long-range plan for the transportation of goods and people within the City using a structured network of highways, streets and trails. This includes the following modes of transportation:

- Transit
- Bicycles
- Pedestrians
- Motorized vehicles

The Circulation Element accommodates the projected traffic generation that will result from future land use activities identified in the Land Use Element. A discussion of adequacy and availability of local public utilities and facilities has been included in the Public Facilities and Services Element. Air pollution and air quality impacts are discussed in the Air Quality Element.

This Element balances the need to provide efficient and reliable ways to move people in a practical and landscaped transportation circulation network that includes roads, bike paths, walkways and trails that are easily accessible, efficient and safe. The circulation system, especially major corridors, will provide panoramic views of the community's surrounding environment and will avoid blocking these views with walls, fences, overhead power lines other visually negative features. The circulation system will link neighborhoods, parks, schools, libraries, shopping areas, topographic features, pristine primitive areas and wildlife circulation.

Organization of the Element

This Element is organized into eight main sections described below:

- **Introduction.** This section includes an overview of the contents of the Circulation Element and a discussion of state law requirements
- **Background and Setting.** This section provides a description of the current setting.
- **General Plan Buildout Conditions**. This section provides a description of the anticipated circulation system under General Plan Buildout conditions.
- **Alternative Transportation**. This section provides guidance for the development or alternative transportation including the use of public transit, as well as bicycling, walking and equestrian trails.
- **Circulation Goals, Policies and Implementation Measures.** This section outlines Coalinga's overall circulation goals, and the policies and implementation measures designed to attain these goals.

Requirements of the Circulation Element

The Circulation Element is one of the seven mandated general plan elements identified in State planning and zoning law. Section 65302(b) of the California Government Code specifies that each General Plan must include "a circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the land use element of the plan." The Coalinga Circulation Element meets these requirements.

California Government Code Section 65401 specifies that all public works projects must be in conformity with the General Plan. In practice, this will require that the City, during adoption of the Capital Improvement Program (CIP), as recommended by this Update, make findings that the proposed CIP is in conformance with the General Plan, including the Circulation Element.

The land use element, as each of the elements in the General Plan, is also required to be fully integrated and must be consistent with each of the other elements. This Element has been prepared in conformance with all mandatory requirements of state law.

Background and Setting

Coalinga's street system is composed of arterials, collectors, and local streets. The system consists of a general pattern of arterial streets located at approximately one-mile intervals with collectors at one-half mile intervals. The existing street network is illustrated on **Figure 4-1**. As shown, several unique features characterize the existing street system in Coalinga:

- **Off-Set Intersections:** The original grid in the City's commercial core runs diagonal to a surrounding north-south grid, resulting in multiple off-set intersections on Washington, Sunset, Polk and Hayes Streets. This type of intersection represents a constraint in that it has a lower traffic capacity than aligned intersections; it impacts the capacity of the intersecting streets; and it represents a safety concern and a source of confusion for visitors to Coalinga.
- **Valley Gutters:** Many streets in Coalinga are extremely wide with "valley" gutters at intersections. Valley gutters represent a constraint because they require vehicles to slow considerably, regardless of stop signage. While this is probably a benefit on residential streets because it slows traffic, on collector or arterial streets it can act as an impediment to smooth traffic flow.
- **Through Traffic Patterns:** Two State highways, State Route (SR) 33 and 198, traverse the City providing regional access. The state highways increase external bypass or through traffic and consume capacity for Coalinga's growth. Furthermore, increased through traffic may impact the quality and character of some neighborhoods. Additional through traffic may also be viewed as an important economic stimulus for the City's retail business.

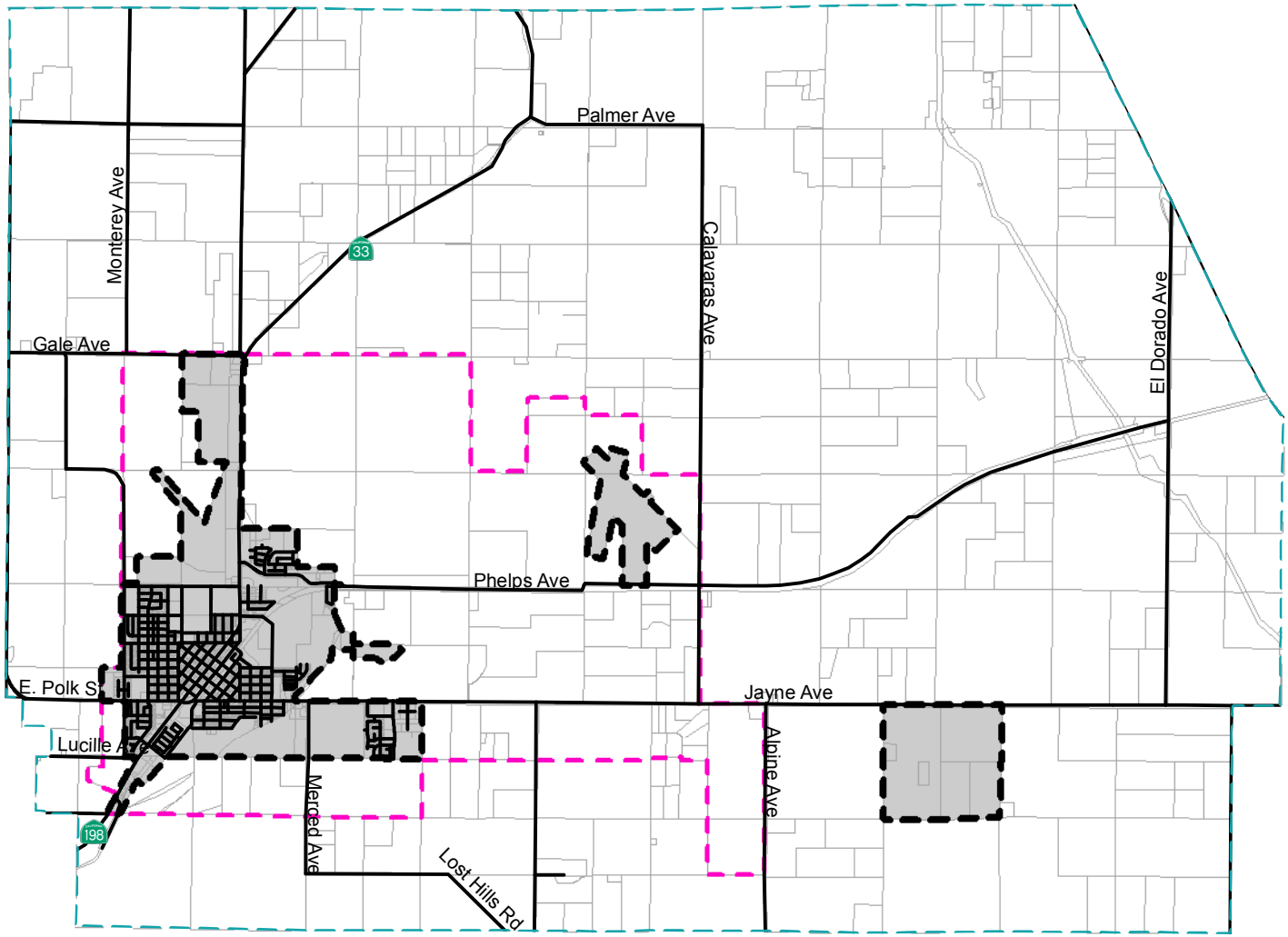
Street Classifications

The Circulation Plan classifies roadways based on their intended function and projected traffic levels, which determine the appropriate type of design and number of lanes for the route.

Specific existing and future roadway classifications are depicted on **Figure 4-2**. **Table 4-1**, presented on the following page, describes the different classes of roads recognized by the General Plan.

TABLE 4-1
GENERAL PLAN ROADWAY CLASSIFICATIONS

Roadway Type	Description
Arterial	Arterials provide for circulation between major activity centers and residential areas in the City and beyond; they also provide access to freeways. They are further subdivided into two categories:
Major Arterial	Usually carry the highest volumes and/or longest trip in the City. Major arterials are high-capacity, moderately high-speed routes, typically two or four lanes wide (with up to six lanes where warranted by traffic volumes). Arterials also include regional highways. For high capacity, major arterials in the urban areas should have medians between intersections and additional lanes at intersections. Service to abutting properties may be provided but should be subordinate to through-travel needs; access points should be consolidated where possible.
Minor Arterial	Typically interconnect with and augment the major arterial system, and serve trips of moderate length. Minor arterials permit access to abutting properties, but traffic capacity needs are equally important. Minor arterials are typically two lanes wide and their design is similar to that of collectors except for additional space for separating bicycles from other traffic. To minimize roadway width and right-of-way, minor arterials are usually undivided (no median). Left-turn lanes should be provided at intersections, and a continuous two-way left turn lane may be provided mid-block to improve traffic flow.
Collector	Collectors channel traffic from residential or commercial areas to arterials. Residences, commercial or public activities, typically front on to them. They are usually two-lane streets, and maximum acceptable volumes are often dictated by resident concerns about intrusion rather than traffic capacity considerations. Collector lanes typically measure 12 feet in width, with sidewalks measuring 5 feet.
Local	Local streets have the sole function of providing access to adjoining land uses. All streets not otherwise depicted on the circulation plan are local streets. Local roadways are typically two-lane streets, with each lane measuring 20 feet wide. Typical sidewalk widths for local streets are five feet.



SOURCE: FRESNO COUNTY; PMC, 2007

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SCALE IN FEET

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T:_GIS\Fresno_County\Mxds\Coalinga\From3x\Figure 4-1 Existing Street Network.mxd

FIGURE 4-1
EXISTING STREET NETWORK

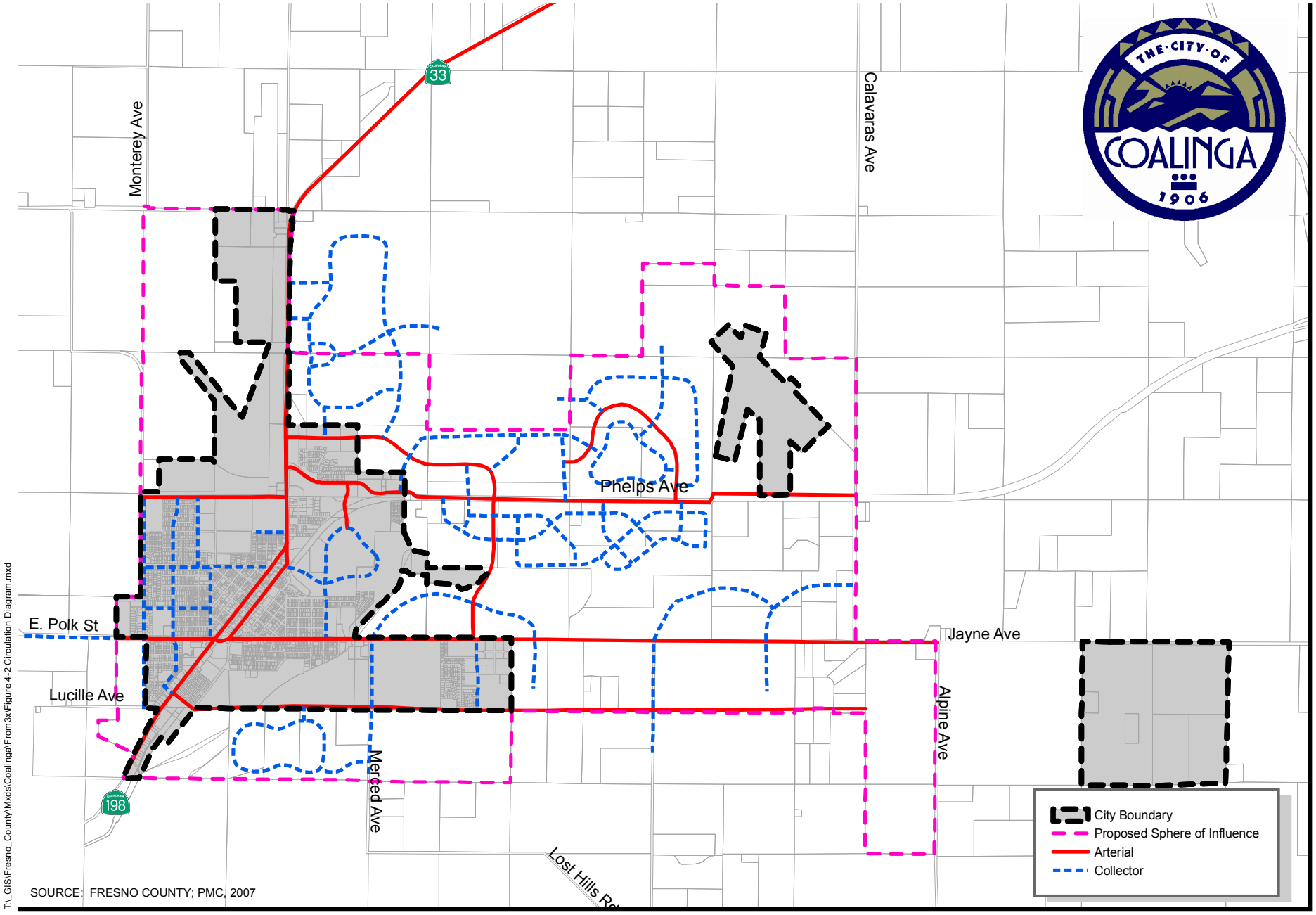


FIGURE 4-2
CIRCULATION DIAGRAM

LEVEL OF SERVICE

Traffic operations are evaluated by determining Level of Service (LOS), a qualitative measure of traffic operating conditions, whereby a grade of "A" through "F" is assigned to an intersection or roadway segment representing progressively worsening traffic conditions. The City of Coalinga General Plan indicates that LOS "D" is the applicable minimum design standard. Currently, all streets and roads within the City of Coalinga operate at LOS C or better. 5th Avenue to Hayes Street and Hayes Street to Garfield Street operates as LOS C. All other streets operate at LOS A or B. The study completed by KD Anderson (August, 2008) developed information regarding Levels of Services using the procedures contained in the 2000 Highway Capacity Manual (HCM).

Level of Service can be calculated for different types of traffic facilities including segments of city streets and highways and for specific street intersections. **Table 4-2,** below, presents the general characteristics of each Level of Service grade at intersections and on roadway segments. Published methodologies for determining Level of Service are predicated on hourly traffic volumes on these facilities. For this study, information regarding intersection Levels of Service has been developed using the procedures contained in the 2000 Highway Capacity Manual (HCM).

TABLE 4-2
LEVEL OF SERVICE (LOS) DEFINITIONS – INTERSECTIONS

LOS	Signalized Intersection	Unsignalized Intersection	Roadway (Daily)
"A"	Uncongested operations, all queues clear in a single-signal cycle. Delay $\leq$ 10.0 sec v/c $<$ 0.60	Little or no delay. Delay $\leq$ 10 sec/veh	Completely free flow.
"B"	Uncongested operations, all queues clear in a single cycle. Delay $>$ 10.0 sec and $\leq$ 20.0 sec 0.60 $<$ v/c $\leq$ 0.70	Short traffic delays. Delay $>$ 10 sec/veh and $\leq$ 15 sec/veh	Free flow, presence of other vehicles noticeable.
"C"	Light congestion, occasional backups on critical approaches. Delay $>$ 20.0 sec and $\leq$ 35.0 sec 0.70 $<$ v/c $\leq$ 0.80	Average traffic delays. Delay $>$ 15 sec/veh and $\leq$ 25 sec/veh	Ability to maneuver and select operating speed affected.
"D"	Significant congestion of critical approaches but intersection functional. Cars required to wait through more than one cycle during short peaks. No long queues formed. Delay $>$ 35.0 sec and $\leq$ 55.0 sec 0.80 $<$ v/c $\leq$ 0.90	Long traffic delays. Delay $>$ 25 sec/veh and $\leq$ 35 sec/veh	Unstable flow, speeds and ability to maneuver restricted.

LOS	Signalized Intersection	Unsignalized Intersection	Roadway (Daily)
"E"	Severe congestion with some long standing queues on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements. Traffic queue may block nearby intersection(s) upstream of critical approach(es). Delay > 55.0 sec and ≤ 80.0 sec 0.90 < v/c ≤ 1.00	Very long traffic delays, failure, extreme congestion. Delay > 35 sec/veh and ≤ 50 sec/veh	At or near capacity, flow quite unstable.
"F"	Total breakdown, stop-and-go operation. Delay > 80.0 sec v/c > 1.00	Intersection blocked by external causes. Delay > 50 sec/veh	Forced flow, breakdown.

Sources: 2000 Highway Capacity Manual, Transportation Research Board (TRB) Special Report 209
Overall Level of Service for unsignalized intersections is "worst case" of delay experienced by all motorists

While assessment of peak hour conditions is standard, for planning level traffic studies it is also beneficial to describe Levels of Service based on the average daily traffic volumes occurring on major city streets and state highways. Use of daily volumes is common for General Plan analysis as it permits relatively quick assessment of circulation system needs.

Level of Service thresholds for streets and highways in Coalinga were developed based on review of several sources. Because there is no uniform national standard to equate daily traffic volumes on urban streets to specific Levels of Service, the existing City of Coalinga General Plan EIR and its background references and Caltrans guidelines were considered. While Caltrans has no recommendations in this area, general thresholds originally developed by the Florida Department of Transportation (FDOT) are most applicable. The daily Level of Service thresholds developed by FDOT have been used by many California agencies.

Level of Service thresholds are based on daily volume where developed in a manner that accounts for the presence of features that affect urban traffic flow. These thresholds are employed to identify the number of through travel lanes that would typically be expected on each street.

Resulting LOS thresholds are shown in **Table 4-3,** presented on the following page.

TABLE 4-3
GENERAL LOS THRESHOLDS BASED ON DAILY TRAFFIC VOLUMES

Street Classification	Lanes	Control	Daily Traffic Volume at LOS				
			A	B	C	D	E
Collector	2	Undivided	4,000	5,800	7,700	11,600	12,900
	2+	Undivided	4,600	7,000	9,200	13,700	15,450
Arterial	2+	Divided	6,500	9,000	11,200	15,400	16,300
	4+	Divided	13,800	19,000	26,000	32,700	34,200
	6+	Divided	20,700	28,500	40,300	49,200	51,800

Source: KD Anderson (August, 2008)

EXISTING ROAD NETWORK AND TRAFFIC CONDITIONS

The existing road network in Coalinga consists of arterials, collectors, and local streets. Two State highways, SR 33 and 198, also serve as arterials in the Coalinga area. Major elements of the road network are described below in **Table 4-4**.

TABLE 4-4
EXISTING ROAD NETWORK

Roadway	Description
Arterials	
State Route 33	Provides connection to Interstate 5 (I-5) north of Coalinga (designated as SR 33/198 before splitting into separate highways near I-5) and to the City of Avenal to the south. Also designated Elm Avenue through the downtown area; designated Polk Street west of Juniper Ridge Boulevard; and designated Jayne Avenue east of the City. SR 33 is the main connector between the City and the Pleasant Valley State Prison and the Coalinga State Hospital. East of Merced Avenue, the road is a two lane rural highway. West of Merced Avenue, it is a two lane suburban arterial. SR 33 traverses a primarily residential area in the eastern part of the City. Polk Street extends west of Elm Avenue where it serves as a collector providing access to residential areas on the west side of the City.
State Route 198	Provides access to I-5 north of Coalinga (shared designation as SR 33/198 most of this route). Also extends south and west of the City providing connection to the southern portion of Monterey County. SR 198 is a two lane rural highway. Designated SR 198 south of Polk Street and SR 33/198 north of Polk Street.
Elm Avenue	The major north-south arterial serving the City. Designated SR 198 south of Polk Street and SR 33/198 north of Polk Street. Elm Avenue is a two lane rural highway in the southern portion of the City (SR 198). Widens to include a two-way left turn lane north of Lucille Avenue. Widens to a four lane arterial from just south of Polk Street through the City to just north of Cambridge Avenue. Construction is currently in progress to widen Elm Avenue to a four lane arterial from north of Cambridge to north of Phelps Avenue, which

Roadway	Description
	includes a major bridge widening over Los Gatos Creek. Left turn channelization is provided on the four lane section in the vicinity of Polk Street. Major traffic control along Elm Avenue includes a traffic signal at Polk Street and an all-way stop control at 5th and 3rd Streets.
5th Street	Two lane arterial between Elm Avenue and Polk Street. Carries the majority of traffic from the east leg of Polk Street to the north leg of Elm Avenue. West of Elm Avenue, 5th Street serves a downtown circulation function with diagonal parking on both sides of the street.
Forest Avenue	Two lane arterial parallel to Elm Avenue. Serves a residential area southeast of the Elm Avenue/Polk Street intersection. Crosses Polk Street and runs parallel to Elm Avenue one block east, in the downtown area. Provides primarily a local circulation function for downtown.
Phelps Avenue	Two lane east-west arterial that extends east from Elm Avenue. Provides access between the City and the airport. Phelps Avenue has suburban arterial characteristics between Elm Avenue and the existing City limits. East of Coalinga, Phelps Avenue is a two lane rural highway.
Cambridge Avenue	Two lane east-west arterial that extends from Monterey Avenue in the northwestern corner of the City to Elm Avenue. Provides the primary access to Cambridge High School and Coalinga Middle School. Stop control at the intersection with Elm Avenue.
Collectors	
Monterey Avenue	Two lane north-south collector along the western City limits. Serves as the western boundary of the existing residential area in the western portion of the City. Extends north from the City limits into oil fields located north and east of Coalinga.
California Street	Two lane north-south collector in the existing residential area on the west side of the City. Extends from Polk Street on the south to Cambridge Avenue on the north. Provides primary access to elementary schools in the northwestern area of the City.
Garfield Street	Two lane north-south collector that extends into a residential area south of Polk Street on the east side of the City. Also extends north from Polk Street into the residential area just east of downtown. Access to the school farm complex is gated to prevent through traffic from traveling through the school farm site between Garfield Street and Cherry Lane.
Cherry Lane	Two lane east-west collector street that extends along the southerly boundary of West Hills College, west of Elm Avenue. Also provides access to the school farm, east of Elm Avenue. Approaches to Elm Avenue are controlled by stop signs. The west leg of Cherry Lane is offset slightly to the north of the east leg at its intersection with Elm.
Merced Avenue	Two lane north-south collector that extends south from Polk Street. Merced Avenue has characteristics similar to a two lane rural highway.
Van Ness Avenue	Two lane east-west collector that extends west from Elm Avenue. Becomes Washington Street west of Sunset Avenue and terminates at Monterey Avenue at the western City limits. Provides access to existing residential areas in the northwest portion of the City.
Juniper Ridge Boulevard	Provides access to a business park on the east and a residential area to the west.

General Plan Buildout Conditions

There are currently eight foreseeable developments proposals within existing City limits and two possible future developments outside of existing City Limits as part of this Update. These include a possible 1,786 dwelling units (excluding group quarters) within the existing city limits and an additional 11,104, outside of existing city limits, for a total buildout of reasonably foreseeable development projects of 12,890 new dwelling units (excluding group quarters). Based on the future growth assumptions outlined in the Land Use Element of this Update, buildout of reasonably foreseeable development projects plus estimated additional annual growth will result in the construction of more than 14,719 dwelling units (12,890 proposed +1,829 needed to accommodate anticipated additional growth) by the year 2025.

Using employment density factors and trip generation rates provided by the Fresno Council of Governments, build out of the Plan could generate as many as 389,854 daily automobile trips.

Future Local Traffic Operations

Based on a 2008 Traffic/Transportation Study conducted by K.D. Anderson, future growth anticipated in this General Plan would result in a substantial increase in vehicle trips, and cause several local intersections and roadways to operate at a Level of Service (LOS) below standards established by the City of Coalinga. Street segments most heavily affected include Van Ness Street, and State Route 33 east of Hayes Street.

The Study identifies specific roadway improvement needs at General Plan buildout including development of Access Management Plans, lane widening (two -lane to four-lane), construction of passing lanes and incorporation of signalization. The actual development of these improvements would be dependent on several factors including the timing specific development proposals, development intensity, and Caltrans funding and coordination.

Future Regional Traffic Operations

The Traffic Study identified that there would be a substantial increase in the number of daily automobile trips with buildout of the General Plan, and that much of this traffic will be external to Coalinga. This suggests that the increase in commercial development and employment centers will attract drivers from out of the city limits, impacting the regional road system. The report notes that ultimately "four-lane roadways will be needed to link Coalinga with the balance of Fresno County." Because these impacts would occur in areas that do not fall under the City's jurisdiction, it would be necessary to coordinate any necessary improvements with other agencies, including the County of Fresno, the Fresno Council of Governments and Caltrans.

ALTERNATIVE TRANSPORTATION

Providing an adequate means of alternative transportation can greatly reduce peak hour traffic congestion and support regional air quality mandates. Alternative transportation measures include the use of public transit, as well as bicycling, walking, and equestrian trails.

PUBLIC TRANSIT

Coalinga Transit provides demand responsive weekday service in the City of Coalinga. Scheduled round-trip intercity service to the Fresno-Clovis Metropolitan Area is available Monday through Saturday.

Fresno County Rural Transit Agency (FCRTA) provides transit service in and between the rural incorporated and unincorporated communities of Fresno County, including Coalinga. Passenger fares are subsidized in order to encourage frequent trips. Dial-a-ride is available within the city for the fare of $1.00 each way. Intercity service fares range from $2.00 to $11.00 per one-way trip. Services within a rural city are offered on a demand responsive and/or scheduled fixed route basis. Service between rural cities and the Fresno-Clovis Metropolitan area are provided on a scheduled fixed route basis. Each of Fresno County Rural Transit Agency's intercity buses are equipped with parcel and bicycle racks and are alternatively fueled by propane, compressed natural gas, or electric batteries for cleaner air.

BICYCLING, WALKING AND EQUESTRIAN TRAILS

Bikeways are classified by one of three categories:

- *Class I Bikeways* (bike path) provide for bicycle travel on a right-of-way completely separated from any street or highway.
- *Class II Bikeways* (bike lane) provide a restricted right-of-way for the exclusive use of bicycles with vehicle parking and cross flow by pedestrians and motorists permitted. Bike lanes are normally striped within paved areas of highways.
- *Class III Bikeways* (bike route by sign) provide for shared use with pedestrian and auto-traffic.

The rural setting of Coalinga provides a variety of formal and informal trails for walking, bicycling, and equestrian use. Both Warthan and Los Gatos Creeks provide trails through the City and to outlying areas. Equestrian users utilize Warthan and Los Gatos Creek trails. The gravel road along the west side and paved road along the east side of Warthan Creek are used extensively by bicyclists, as is Los Gatos Creek. These creekways have been designated as local bikeway routes.

The U.S. Army Corps of Engineers has proposed the Los Gatos Creek Recreation Corridor Trail on the top of the levee at Warthan Creek Bridge north and west to Los Gatos Creek Bridge. This trail will be constructed in conjunction with a flood control project in Coalinga.

Other local bikeway routes include Highway 33 from Highway 198 east to Warthan Creek and Van Ness Avenue west of Highway 198.

Regional bikeways serving areas beyond the City of Coalinga have also been designated by the Fresno County Rural Bikeways Plan. These regional bikeway routes include Highway 33/198 north of the City; the Southern Pacific right-of-way along Phelps Avenue east to Huron; and Jayne Avenue east of the City. The railroad right-of-way could provide bikeway linkage between Coalinga, Huron, Lemoore, Hanford and Visalia prior to bikeway implementation.

Circulation Goals, Policies and Implementation Measures

The following Circulation goals, policies and implementation measures have been established to guide short and long-range decision making by the community.

Goal C1
A balanced, safe and efficient circulation system that includes cars, public transportation, bicycles and pedestrians while accommodating future growth, maintaining acceptable Levels of Service.

Policy C1-1
The City shall require that new development provide the necessary infrastructure to serve itself consistent with the city-wide circulation system, as shown in **Figure 4-2**, presented earlier.

Implementation Measure C1-1.1
Prepare a five-year capital improvement plan prioritizing new circulation facilities.

Implementation Measure C1-1.2
Establish a funding mechanism to provide on-going funding for the five-year capital improvement program. Applicable implementation studies will need to be conducted in order to confirm the feasibility and cost of improvements to determine eligibility for funding.

Implementation Measure C1-1.3
Establish development standards that require traffic studies for developments.

Policy C1-2
New development projects shall be required to mitigate their impacts and to pay their fair share of countywide traffic improvements they contribute to the need for.

Implementation Measure C1-2.1
Consider a countywide traffic impact fee to address cumulative (i.e. not project-specific) impacts associated with new development. Fees shall be used to pay for the cost of network improvements as well as other transportation improvements such as transit within the Coalinga AOI.

Implementation Measure C1-2.2
Establish development standards that require payment of traffic impact fees for all new development and periodically update.

Implementation Measure C1-2.3
The traffic impact fee program fee should be updated as required to include the cost of regionally beneficial street improvements that are installed as development proceeds and should include the cost of future traffic signals as outlined in the General Plan EIR, which cost may also have Caltrans participation.

Policy C1-3
The City recognizes that Level of Service D may not always be achieved on some roadway segments, and may also not be achieved at some intersections. Roadways on which LOS D is projected to be exceeded are shown in the General Plan or the General Plan EIR, based on the study conducted by KD Anderson (August, 2008). On these roadways, the City shall ensure that improvements to construct the ultimate roadway system as shown in this Circulation Element are completed, with the recognition that maintenance of the desired level of service may not be achievable.

Implementation Measure C1-3.1
Develop criteria to determine which roadway segments and intersections will not achieve the desired level of service standard.

Implementation Measure C1-3.2
Pursue all feasible circulation system alternatives that reduce the potential for street segments in the Downtown commercial core to operate below LOS D as a result of competing commercial developments in other areas of the City.

Implementation Measure C1-3.3
Develop an additional east-west collector road, or restrict the intensity of commercial and industrial uses north of State Route 33 (Polk Street/Jayne Avenue) from Merced Avenue to Juniper Ridge Boulevard, to ensure that cumulative development in that area does not result in the need to widen State Route 33 to six lanes or lower LOS below D on that section.

Policy C1-4
Maintain and improve existing circulation and transportation facilities.

Implementation Measure C1-4.1
Coordinate with Coalinga Transit and Fresno County Rural Transit Agency to provide safe and efficient transit system for local and regional travel, particularly for youth, elderly, low-income or disabled persons.

Implementation Measure C1-4.2
Establish and implement a street and sidewalk repair program.

Implementation Measure C1-4.3
Realign offset intersections where they create traffic problems.

Implementation Measure C1-4.4
Establish a funding mechanism to ensure construction of the proposed circulation system consistent with the findings of the 2025 General Plan Update.

Implementation Measure C1-4.5
Establish a funding mechanism to ensure construction of the proposed circulation system consistent with the findings of the 2025 General Plan Update.

Implementation Measure C1-4.6
The City shall require new development proposals, including Public Works projects, to include an evaluation of whether or not roundabouts could be used as an alternative to stop sign or traffic signal controlled intersections.

Policy C1-5
The City shall identify necessary improvements for all roads and streets in its planning area and implement measures and development plans to implement those improvements.

Implementation Measure C1-5.1
Prepare a Feasibility Study and develop a bridge impact fee to fund a bridge and roadway improvements for a north/south connector from Phelps Avenue to Jayne Avenue.

Implementation Measure C1-5.2
Develop and implement with Caltrans a SR 33 Access Management Plan which would identify the location of future access.

Implementation Measure C1-5.3
Update the traffic mitigation fee to include the cost of constructing SR 33 improvement in those locations where fronting development is unlikely and roadway widening will likely be necessary at the General Plan built out.

Implementation Measure C1-5.4
The City and Caltrans should complete a plan line study for SR 33 from Cambridge Avenue to Fifth Street to identify the configuration and limits of ultimate improvements to SR 33 through the developed areas of Coalinga.

Implementation Measure C1-5.5
Conduct a plan line study for the area to define the limits of future construction. The study should confirm a strategy that would close off the westbound Van Ness street approach and reconstruct First Street to extend easterly from SR 33 to the Coalinga School farms project area. Signalizing the SR 33/Van Ness Street/ First Street intersection should be included.

Implementation Measure C1-5.6
Contribute to the cost of Project Study Reports for the Interstate 5 interchanges with SR's 33, 145, 198, and Jayne Avenue which would confirm ultimate improvement needs and fair share responsibility within the monies collected by the countywide traffic impact fee.

Policy C1-6
Shall encourage the use of transportation alternatives that reduce the use of personal vehicles.

Implementation Measure C1-6.1
Funding for development, operations, and maintenance of facilities for mass transit, bicycle, and pedestrian modes of transportation shall be considered in the City's budgeting process.

Implementation Measure C1-6.2
Implement policies and implementation measures in the Air Quality Element which seek to encourage non-vehicle transportation alternatives in Coalinga.

Implementation Measure C1-6.3
Support positive incentives such as carpool and vanpool parking, bus turnouts, and pedestrian-friendly project designs to promote the use of transportation alternatives.

Policy C1-7
Shall require that transit service is provided in all areas of Coalinga, so that transit dependent residents of those areas are not cut off from community services, events, and activities.

Implementation Measure C1-7.1
Shall require that any local or regional transit agency serving Coalinga serve all areas of the city.

Goal C2
A network of multi-use recreational trails along Los Gatos and Warthan Creeks with inner City and regional connections for use by local residents and visitors.

Policy C2-1
Promote non-motorized bike and pedestrian circulation facilities to serve all areas of the City and link regional systems, with priority coordination with school, park, transit and major facilities.

Implementation Measure C2-1.1
Develop a Multi-Use Off-Street Trails Master Plan.

Implementation Measure C2-1.2
Establish development standards requiring new development provide the necessary funding, easements, dedications and improvements needed to establish a network of recreational trails.

Implementation Measure C2-1.3
Pursue grant opportunities and other financing programs to fund the construction and maintenance of recreational trails including taxes, fees, bonds, assessments, and/or donations.

Goal C3
Create a system of pedestrian and bicycle routes and transit related facilities that provide an efficient alternative to automobile transportation.

Policy C3-1
Promote installation of additional, distinctive transit stops at key activity areas and encourage covered shelters at new stops that are linked to safe pedestrian and bicycle routes.

Implementation Measure C3-1.1
Require new development to dedicate land and/or construct/install bicycle facilities and indented curbs for bus pullouts, bus shelters, and other transit-related public improvements where appropriate.

Implementation Measure C3-1.2
Install dedicated sidewalks along major arterials, and plant and maintain trees to reinforce a pedestrian-friendly atmosphere.

Implementation Measure C3-1.3
Consider bicycle operating characteristics and safety needs in the design of roadways, intersections, and traffic control systems.

Implementation Measure C3-1.4
Promote and facilitate the use of bicycles with other transportation modes.

Implementation Measure C3-1.5
Maintain and update, when required, a Pedestrian and Bicycle Master Plan (PBMP) for Coalinga. Regional Bikeways Plan routes shall be shown as Class II facilities in the PBMP unless otherwise designated.

Implementation Measure C3-1.6
Seek Caltrans certification for the PBMP to facilitate its use for grants and other funding.

CHAPTER

5

SAFETY, AIR QUALITY AND NOISE ELEMENT

INTRODUCTION

The Public Safety Element helps guide land use decisions by identifying potential safety hazards and establishing appropriate policies to protect life and property in the Coalinga area. The most common hazards known to occur in Coalinga are associated with fire, geology and seismicity, flooding and hazardous materials. The Public Safety Element stresses preventive action, but for unpredictable circumstances such as an earthquake or hazardous materials spill, an organized and timely emergency response will also be guided by the Element.

Emergency preparedness is necessary to avoid or minimize loss of life and property due to natural and technological disasters; to reduce social, cultural, environmental and economic costs of disasters; and to assist and encourage the rapid recovery from catastrophic events. An important part of preparedness is careful assessment of risks before an emergency occurs. Response activities focus on saving lives, preventing injury and reducing property damage. Critical facilities, which provide emergency assistance after a major disaster, include police and fire stations, schools, hospitals and roadways designated as evacuation routes. A discussion of fire flow and water storage capacity is included in the Public Facilities and Services Element.

ORGANIZATION OF THE ELEMENT

This Element is organized into three main sections described below:

- **Introduction.** This section includes an overview of the contents of the Safety, Air Quality and Noise Element and a discussion of state law requirements.

- **Safety Background and Setting.** This section provides a description of the current setting including a discussion of natural and man-made hazards in the area.
- **Air Quality Background and Setting.** This section provides a description of the current setting and air quality standards including a discussion of climate change and greenhouse gas (GHG) emissions.
- **Noise Background and Setting.** This section provides a description of the current setting and noise standards.
- **Goals, Policies and Implementation Programs.** This section outlines Coalinga's overall safety, air quality and noise goals, and the policies and implementation programs designed to attain these goals.

REQUIREMENTS OF THE SAFETY, AIR QUALITY AND NOISE ELEMENT

Safety Element

The Safety Element covers issues mandated by State Government Code §65302(g) specifically:

> "*...the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, tsunami, seiches, and dam failure; slope instability leading to mudslides and landslides; subsidence, liquefaction and other seismic hazards identified pursuant to Chapter 7.8 (commencing with § 2690) of the Public Resources Code, and other geologic hazards knows to the legislative body; flooding; and wildland and urban fires. The safety element shall include mapping of known seismic and other geologic hazards. It shall also address evacuation routes, peakload water supply requirements, and minimum road widths and clearances around structures, as those items relate to identified geologic and fire hazards....* "

This Element has been prepared in conformance with all mandatory requirements of State law. Specific topics addressed include:

- Seismic hazards, including surface faulting, seismic shaking, ground failure, and liquefaction
- Flooding and flood hazards
- Wildland and urban fire hazards
- Manmade hazards
- Disaster Planning

The Safety Element is expected to affect land use policies and hence is coordinated with the Land Use Element. Considerations included in this Element may also be applicable to Open Space and Conservation, Public Facilities and Services, Housing and Circulation Elements in that it discusses hazards that may affect decision-making in these issue areas.

Air Quality Element

The State of California does not require an Air Quality Element as part of a General Plan. However, due to the continuing air pollution problem in the San Joaquin Valley Air Basin (Basin), the State Legislature added Section 65302.1 to the California Government Code in 2003. This section requires cities and counties in the San Joaquin Valley to amend appropriate elements of general plans to include data, analysis, comprehensive goals, policies and feasible implementation strategies to improve air quality no later than one year after the first revision of their housing elements that occurs after January 1, 2004. Cities and counties are required to submit these air quality amendments to the San Joaquin Valley Unified Air Pollution Control District (SJVAPCD) at least 45 days prior to the adoption of those amendments, and the District then has 30 days to return comments and advice. Additionally, recent legislation has prompted the California Attorney General to direct agencies to address the issue of climate change in their General Plans. Climate change is presently thought to be both naturally occurring and induced by increases in the amounts of carbon dioxide (CO2) and other greenhouse gases (GHGs) in the earth's atmosphere attributable to the burning of fossil fuels. Greenhouse gases are not currently (200) regulated as pollutants, although the State of California has adopted legislation seeking to roll back emissions to 1990 levels for some major contributors (such as industry). The Air Quality Element is intended to help the City, as well as the Basin, improve its air quality to meet State and Federal air quality requirements and growing climate change concerns.

Noise Element

The Noise Element provides a policy framework for addressing potential noise impacts in the planning process. Its purpose is to minimize future noise conflicts. The Noise Element is related to the Land Use, Housing, Circulation and Open Space Elements. Recognition of the interrelationship between noise and these four mandated elements is necessary to prepare an internally consistent General Plan and to initiate changes that will reduce noise exposure to acceptable levels.

Safety - Background and Setting

Safety concerns for the City of Coalinga fall into two main categories: natural hazards, which includes seismic, flooding and wildfires; and manmade hazardous materials and urban fire.

Natural Hazards

The City of Coalinga is located within Pleasant Valley, a northwest to southeast trending alluvial basin. Pleasant Valley is bounded on the west by the central Coast Ranges (Diablo Range) and on the east by a series of hills associated with anticlinal folding. An anticline is an arch of stratified rock in which the layers bend downward in opposite directions from the crest, with the oldest strata at the center producing mountain peaks. These hills (Anticline Ridge, Guijarrel Hills,

Kettleman Hills, and Lost Hills) separate Pleasant Valley from the San Joaquin Valley to the east. These anticlinal structures act as traps for petroleum.

The western and southern margins of the San Joaquin Basin consist of folded and faulted Mesozoic basement rocks and upper Jurassic through Quaternary sedimentary rocks. Structural geology of the Coalinga area is dominated by a large synclinal structure (folded rock structure in which the sides dip or incline down toward a common line or plane) and several large anticlines that trend in a northwest to southeast direction. The alluvial basin known as Pleasant Valley is formed within this synclinal structure.

Sediments exposed in the Coalinga area include Holocene alluvial deposits, comprised of layers of sand, clay and silt. Sedimentary rocks exposed in the hills on the west and east sides of Pleasant Valley consist of the Pleistocene (two million to 11,000 years old) Tulare Formation; and Pliocene (two to 13 million years old) Etchegion and San Joaquin Formations; and Miocene (13 to 25 million years old) Temblor, Monterey, Big Blue, Santa Margarita and Reef Ridge Formations.

Seismic Hazards

The planning area is located within a seismically active region of California. Numerous mapped faults including the San Andreas, Pond-Poso Creek, and White Wolf faults, located west and south of the City, could produce significant ground shaking. Active faults surrounding the San Andreas Fault have produced large earthquakes in the last century and are expected to produce similar large earthquakes in the future. The hills near Coalinga contain evidence of deep faulting in the Anticline Ridge area. Regional faults are depicted on **Figure 5-1**.

The 1983 Coalinga earthquake, centered eight miles northeast of the City, measured 6.7 on the Richter scale and caused widespread damage to structures. The earthquake is thought to be associated with a geologic feature often referred to as the "Coast Ranges-Sierran block boundary zone." This feature generally consists of a family of faults that appear to border the east side of the Coast Ranges. Many of these faults are likely to be active "blind-thrust" faults similar to the structure that produced the 1983 earthquake. Two similar type earthquakes are thought to have occurred in 1892 near the Winters-Vacaville area adjacent to the Sacramento Valley. In addition, the 1985 Avenal earthquake indicates similar-type faulting in the Kettleman Hills region just southeast of Coalinga. A review of historic earthquake activity from 1850 to 1995 indicates that seven earthquakes of magnitude 6.0 or greater have occurred within a 70-mile radius of the City of Coalinga. There have also been 15 earthquakes with magnitudes between 5.5 and 6.0 within the 70-mile radius.

The two principal seismic hazards to property in the Coalinga area are damage to structures and foundations due to strong ground shaking, and surface rupture of earth materials along fault traces. To protect structures from the hazards of surface ground rupture, the California Geological Survey under the State-mandated Alquist-Priolo Earthquake Fault Zoning Act of 1994 (formerly the Alquist-Priolo Special Studies Zone Act of 1972), has delineated "Earthquake Fault Zones" along the surface traces of active faults.

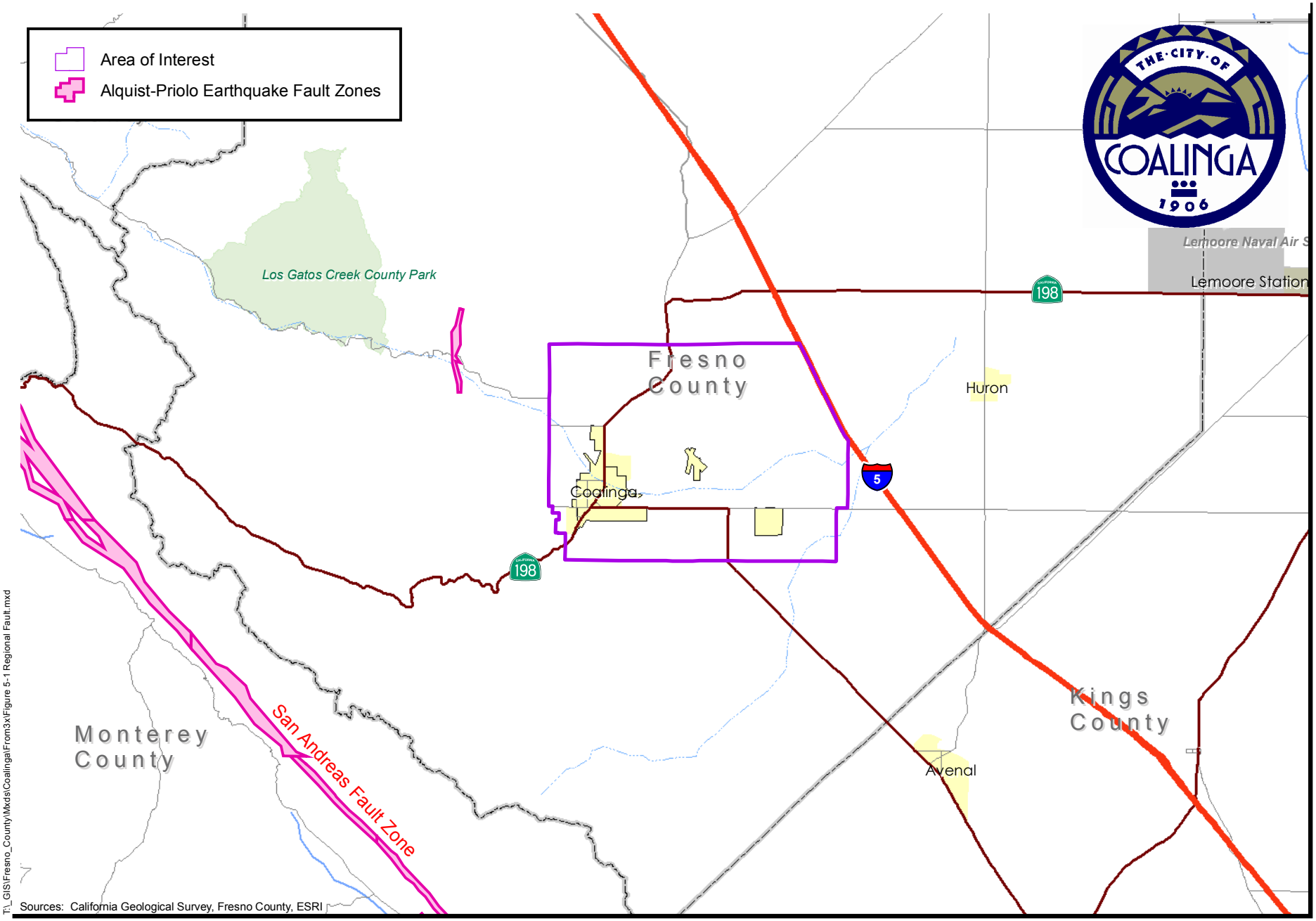


FIGURE 5-1
REGIONAL FAULTS

The zones vary in width, but average about one-quarter mile wide. An active fault, as defined by State law, is a fault that has been proven by direct geologic evidence to indicate movement within the last 11,000 years. A fault that has been proven by direct geologic methods to have not moved in the last 11,000 years is not active. The potentially active designation includes those faults that were active within the last two million years (Quaternary Period), but have not been studied in sufficient detail to be classified as either active or inactive.

Portions of Fresno County near the Coalinga area have been zoned for special studies as outlined in the Alquist-Priolo Earthquake Fault Zoning Act. These areas are located along the Nunez Fault, located approximately six miles northwest of Coalinga. Several secondary phenomena are associated generally with strong seismic shaking, especially in areas characterized by a relatively shallow ground water table, and underlain by loose, cohesionless soil deposits. These secondary seismic hazards include liquefaction, seismically induced settlement and ground lurching.

- **Ground shaking -** The intensity of ground shaking at a given location depends primarily on the earthquake magnitude, the distance from the epicenter to the site, and the response characteristics of the soils or bedrock units underlying the site. The San Andreas Fault is potentially capable of producing the most intense ground accelerations at the site. A maximum credible earthquake of Richter magnitude 7.8 on the San Andreas Fault would produce seismic shaking capable of significantly damaging structures and infrastructure in the area.
- **Liquefaction -** Liquefaction is the sudden loss of strength that occurs when loose, cohesionless, water saturated soils are subjected to strong seismic ground motion. Structures built on these soils tilt or sink when the soils liquefy. Liquefaction occurs in an earthquake-prone area underlain by alluvium and where the ground water table is less than 50 feet below the surface. Given the depth of the ground water table in the Coalinga area (300 to 400 feet) the potential for liquefaction is considered very low.
- **Seismically Induced Settlement -** Strong ground shaking can cause settlement by allowing sediment particles to become more tightly packed, thereby reducing pore space. Unconsolidated, poorly packed alluvial deposits are especially susceptible to this phenomenon. Inadequately compacted artificial fills may also experience seismically-induced settlement. Following the 1983 Coalinga earthquake, several damage assessment studies were initiated. Based on the settlement values reported after the 1983 event, the potential for seismic settlement and/or differential compaction within the planning area is considered minimal.[1]

[1] State of California Department of Corrections, *California State Prison - Fresno County at Coalinga Draft Environmental Impact Report*, March 1990, Michael Brandman Associates.

Flooding

The City of Coalinga is located within Pleasant Valley, a northwest to southeast trending alluvial basin. Drainage in the Pleasant Valley is characterized by ephemeral lakes and streambed basins that are generally dry in the summer and fall.

Los Gatos and Warthan Creeks flow easterly out of the southern hills of the Diablo Range and converge at the eastern edge of the Coalinga City limits. In the upper reaches of the watershed the stream channels are typically wide, shallow, and meandering. Near the City, both Warthan and Los Gatos Creeks have been altered to increase capacity and reduce the risk of flooding. East of the City, the Los Gatos Creek channel has been scraped and shaped. Warthan Creek is channelized within the Sphere of Influence (SOI) and bordered on both sides by levees. Farmers completed most of the channelization and levee work in the early 1900s. After the 1983 earthquake, tons of concrete rubble and debris were dumped along both banks of Warthan Creek for bank stabilization.

Jacalitos Creek converges with Los Gatos Creek approximately five miles east of the City limits. In the far southeast corner of the proposed Area of Interest (AOI), Zapato Chino Creek flows through the Palvarado Gap into the San Joaquin Valley. These creeks all flow northeast within the Arroyo Pasajero watershed. The Arroyo Pasajero watershed has a long history of flooding including major events in 1958, 1969 and 1995. Intense and infrequent winter storms have resulted in significant amounts of surface water runoff. Flood-producing rainfall typically occurs when preceding rains have saturated the Pleasant Valley, resulting in surging flood flows lasting for several days.

Portions of the City of Coalinga, the proposed SOI, and the proposed AOI are within the Federal Emergency Management Agency (FEMA) designated 100-year floodplain. The 100-year floodplain is indicated in the Flood Hazard Overlay, identified on **Figure 5-2**, and subject to the provisions of the Flood Hazard Overlay as described in the Land Use Element and the Floodplain Management Ordinance. Any structures constructed within the designated flood zone would be subject to the potential risk of flood damage, including inundation or foundation damage during severe storms.

Storm Drainage

The storm drain system in Coalinga consists of several independent networks of storm drain inlets and pipes that either discharge into four permanent storm drain basins or the Warthan or Los Gatos Creeks. Storm drainage in Coalinga is a gravity flow system, where flows through the pipes do not require the use of pump stations or lift stations. The existing storm drain system consists of pipes up to 48-inches in diameter and twelve drainage zones. Several portions of the storm drain system are severely undersized and the system relies on aboveground surface flow through street curbs and gutters as a means of stormwater conveyance.

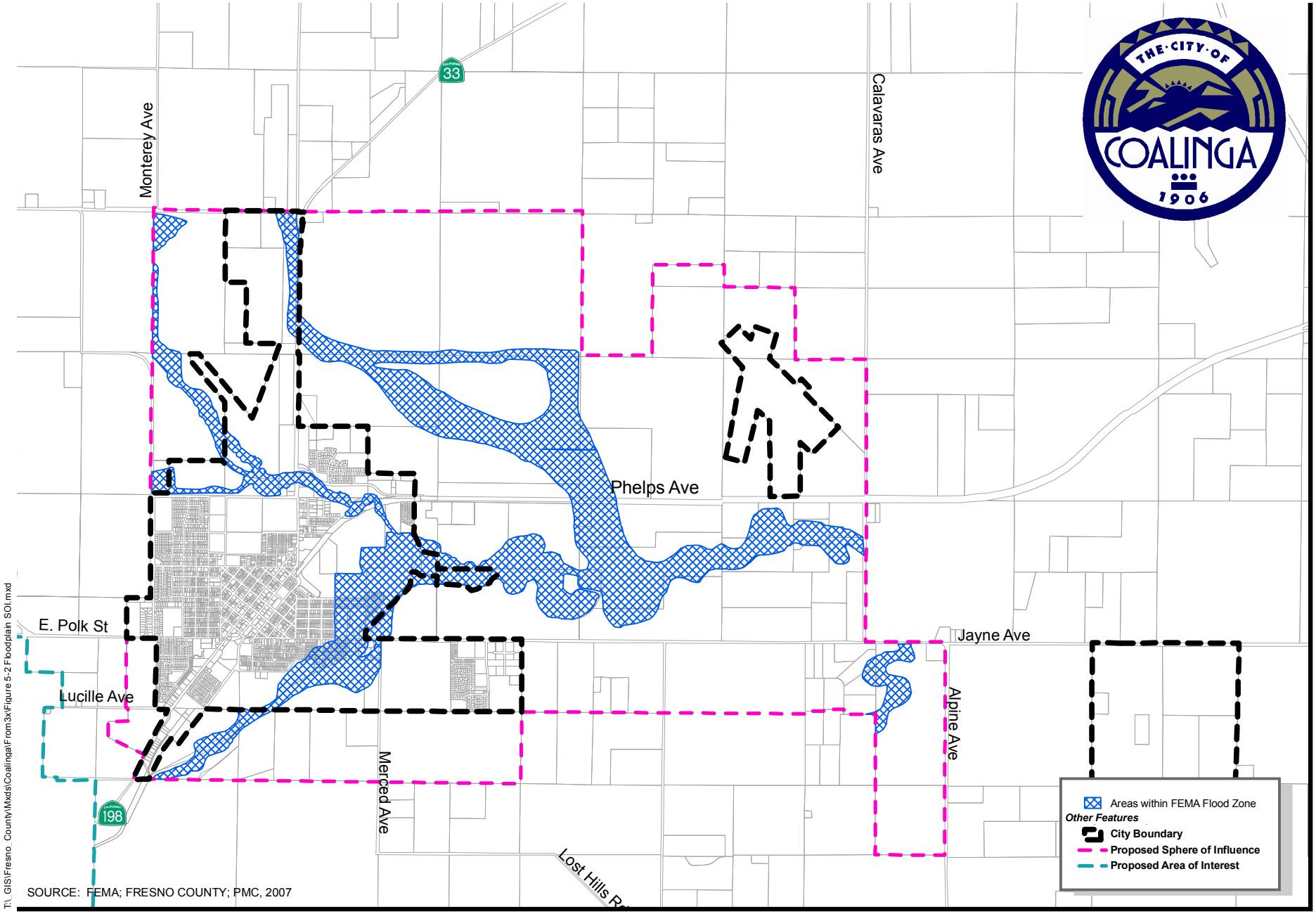


FIGURE 5-2
100- YEAR FLOODPLAIN WITHIN THE PROPOSED SPHERE OF INFLUENCE

At the West Hills College school farm located in the northeast portion of the City, open drainage swales have been created as a means to convey stormwater from the City to a pond adjacent to Warthan Creek. The pipe networks in the downtown area discharge at these drainage swales and the runoff is directed out to the pond. The runoff from the older residential development east of downtown and south of the West Hills College school farm also discharges into the open drainage swales via street overflow through gutters and some pipes.

Storm Drain System Master Plan

In 2002, the City authorized Boyle Engineering to prepare a Storm Drainage Master Plan to identify existing storm drain system deficiencies and recommend necessary improvements. Proposed improvements to the existing storm drain system include the construction of new facilities that parallel existing facilities or new facilities in those areas that currently do not have any storm drain service. In general, the proposed improvements aim towards providing storm drainage in those portions of the City currently without any storm drain facilities. The proposed improvements will be designed to convey stormwater to the east towards the existing West Hills Basin, which will ultimately provide storage capacity for the majority of Coalinga. The storm drain pipes will be designed to have capacity for the 10-year storm event. To be consistent with the Fresno Metropolitan Flood Control District (FMFCD) basin design criteria, which is commonly used in Fresno County, the basins will be sized for a 100-year, 10-day storm event.

Because the City is located near the downstream portion of the general watershed, Coalinga must also manage the off-site watershed that passes through the City. The surrounding mountains to the north and west slope towards the City, therefore, the City currently experiences tremendous amounts of flow from the west. However, the magnitude of the off-site flows does not reasonably permit the use of standard storm drain pipes. The magnitude of the off-site runoff entering the City is in the hundreds of cubic feet per second during a 100-year storm event, and such large flows compounded with the runoff generated from within the City will require unreasonable pipe sizes. According to the Storm Drainage Master Plan, the most practical method to manage the off-site runoff is to prevent it from entering the storm drain system within the City. The off-site runoff from the mountains to the west will be intercepted by means of an open-channel and berm to be located west of Monterey Avenue. The channel is intended to interrupt the existing flow pattern by redirecting the flow that currently passes through the City to the south, into Warthan Creek.

Wildfire

Wildland fires also pose potential hazards in the hilly areas where chaparral and other vegetation are present. Wildland fires can destroy large tracts of land as well as structures. The Irish Hills, located adjacent to the planning area, are considered a "Wildland Area that May Contain Substantial Forest Fire Risks and Hazards" by the California Department of Forestry and Fire Protection. The Coalinga Fire Department has adopted a weed abatement program to reduce property damage from wildland fires. The wildland fire map is presented as **Figure 5-3**.

MANMADE HAZARDS

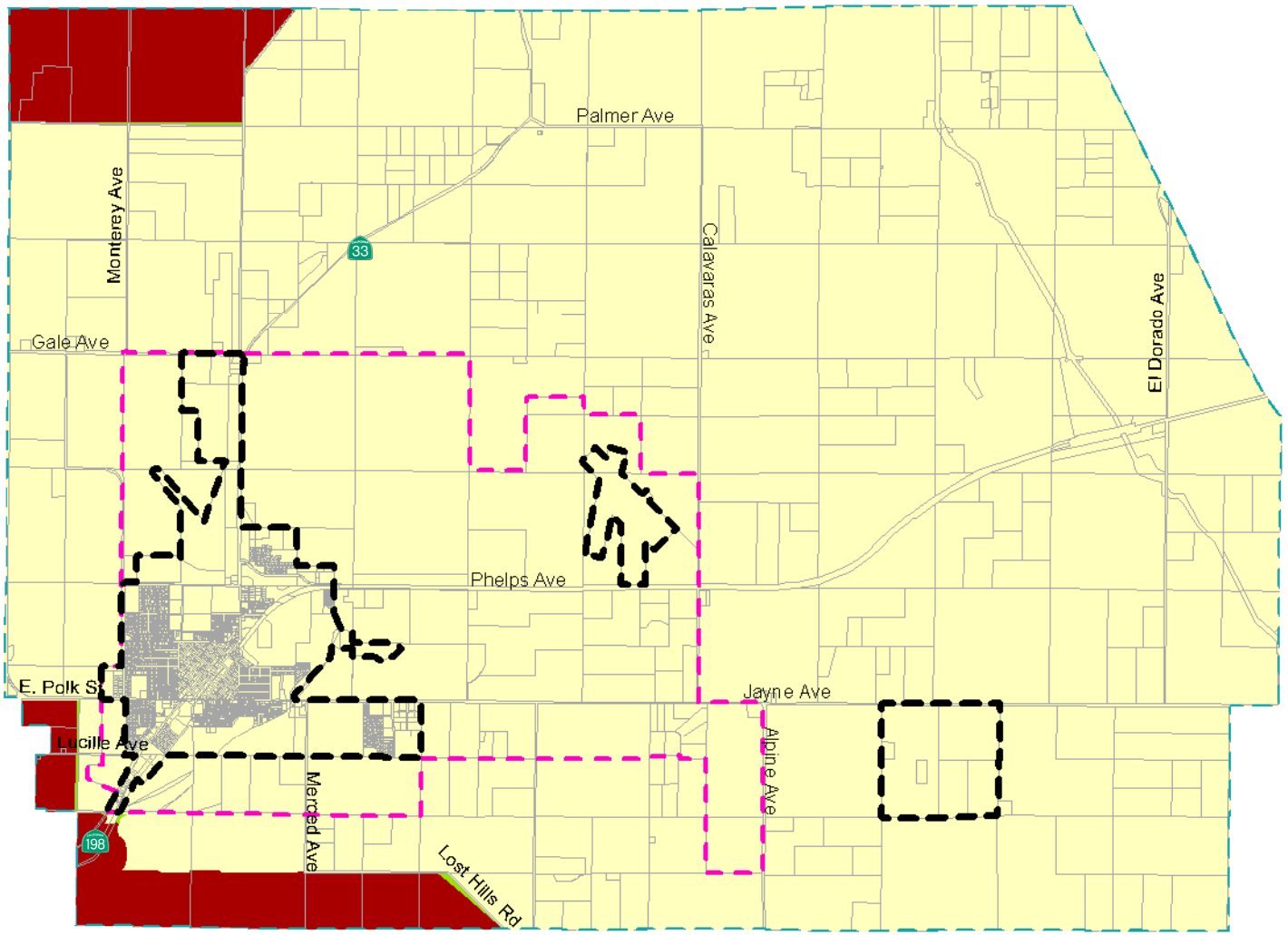
Hazardous Materials

Hazardous materials are present throughout the City, but are widely varied in terms of quantity and type. Businesses using hazardous materials may include dry cleaners or automotive service shops that routinely utilize solvents and other potentially hazardous substances. Households also utilize and store materials that could be considered hazardous, although usually not of the same type and quantity as commercial and agricultural uses. There is no major manufacturing or other heavy industrial uses within the City Limits. The absence of a heavy industrial base significantly reduces the amount of hazardous materials present within the City, thereby reducing the risk of exposure in the event of upset conditions. Oil production activities and operations in the outlying areas may transport hazardous materials through the City.

Agricultural operations in the area surrounding the City regularly store and use a variety of pesticides and herbicides. Historical pest control data for cotton and hardy row crops, as well as data provided by the Fresno County Agricultural Commissioner's office, indicate a variety of pesticides have been used on surrounding cropland. In general, the pesticides used were defoliants and insecticides. None of the pesticides reportedly used are persistent in soil, and if they were applied according to manufacturer's directions, should be at residual levels below that which is harmful to human dermal contact. It should be noted that pesticide mixing or storage areas can have much higher residual concentrations and, although undocumented, such areas may exist.

Urban Fire

The City of Coalinga is susceptible to both urban and wildland fire hazards. Fires occurring in the urban area have the potential to destroy property and structures, and cause injury or loss of life. Urban land uses with inappropriate or outdated building materials and the native landscape are potential fire hazards. Housing units constructed with wood shake roofs or wood siding present potential fire hazards. Many of the City's older buildings have been rebuilt to newer fire codes, thus improving the City's fire safety.



City Boundary
Proposed Sphere of Influence
Proposed Area of Interest
Fire Hazard Severity Zones
Very High Threat
Outside State Resposibility Area
No Data

SOURCE: CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION, 2005; FRESNO COUNTY; PMC, 2007

0 4000 8000
SCALE IN FEET

N

FIGURE 5-3
FIRE HAZARDS

T:\GIS\Fresno_County\Mxds\Coalinga\From3x\Figure 5-3 Fire Hazards.mxd

AIR QUALITY - BACKGROUND AND SETTING

Air pollution in the Basin results from human activities that cause emissions, coupled with natural phenomenon that stimulates the formation of unhealthy air. Mountains on the east, west and south surround the San Joaquin Valley. In addition, the San Joaquin Valley experiences long, sunny summers and relatively short, foggy winters. These features contribute to local climate episodes such as frequent temperature inversions (i.e., temperature increases associated with higher altitudes).

The primary human causes of air pollution in the San Joaquin Valley are mobile sources (cars and trucks), oil production and agricultural activities. Rapid population growth and the associated increases in traffic, urbanization and industrial activity is the most significant factor in declining air quality in the Basin. Overall, oil production has been declining since 1985, resulting in decreased emissions associated with the oil industry.

GEOGRAPHY AND TOPOGRAPHY

The California Air Resources Board (ARB) has divided the state into regional air basins according to topographic air drainage features. The San Joaquin Valley Air Basin (herein referred to as Basin) is the second largest air basin in the state. The Basin is defined by the Sierra Nevada Range to the east (8,000 to 14,000 feet in elevation) and the Coastal Ranges to the west (4,500 feet in elevation). The San Joaquin Valley could be considered a "bowl" open only to the north.

Although marine air generally flows into the basin from the San Joaquin River Delta, the region's topographic features restrict air movement through and out of the Basin. The Coastal Ranges hinder wind access into the San Joaquin Valley from the west, the Tehachapi's prevent southerly passage of airflow, and the high Sierra Nevada range is a significant barrier to the east. Most of the surrounding mountains are above the normal height of summer inversion layers (1,500 to 3,000 feet). These topographic features result in weak airflow, which becomes blocked vertically by high barometric pressure over the San Joaquin Valley. For this reason, the Basin is highly susceptible to air pollution accumulation.

CLIMATE

Local climate conditions can exacerbate the air quality problem. Wind speed and direction play an important role in dispersion and transport of air pollutants. Wind can help create or break up air pollution. For example, ozone is classified as a "regional" pollutant in part due to the time required for ozone formation. Ozone precursors can be transported well away from the source area before ozone concentrations peak. Other primary pollutants (e.g. carbon monoxide) may form high concentrations when wind speed is low.

During the summer, wind usually originates at the northern end of the San Joaquin Valley and flows in a south-southeasterly direction through the valley, through Tehachapi pass, and into the

Southeast Desert Air Basin portion of Kern County. During the winter, wind occasionally originates from the southern end of the San Joaquin Valley and flows in a north-northwesterly direction. During the winter the valley also experiences light, variable winds of less than 10 miles per hour. Low wind speeds, combined with low inversion layers in winter, create a climate conducive to high carbon monoxide (CO) concentrations.

Wind speed and direction change throughout the day. During the day, north-northwesterly winds prevail. However, in the late evening through early morning, wind flow is affected by cooler drainage winds from the surrounding mountains and the wind flow reverses direction. This interruption of northwesterly wind, including the evening and morning transition between the two wind flow patterns, is known as an eddy. This phenomenon adds to the complexity of regional wind flow and pollutant transport within the Basin.

The Basin has an "inland Mediterranean" climate averaging over 260 sunny days per year. The valley floor is characterized by warm, dry summers and cooler winters. The average mean temperature over a 30-year period is 65 degrees. High daily temperatures in summer average 95 degrees in the valley. The winter average daily low temperature is 45 degrees. Since 1960, the San Joaquin Valley has averaged 106 days a year of 90 degrees or hotter, and 40 days a year of 100 degrees or hotter. The daily summer temperature variation can be as high as 30 degrees. Temperature and solar radiation are important in the chemistry of ozone formation (a major component of smog). Ozone is formed in a photochemical reaction requiring sunlight. Generally, the higher the temperature, the more ozone formed. However, extremely hot temperatures can "lift" or "break" the inversion layer, dispersing the ozone.

Inversion Layers and Air Pollution

Inversion layers are formed in the atmosphere when temperature increases with elevation, or when a mass of warm dry air settles over a mass of cooler air near the ground. Inversion layers are significant in determining both ozone formation and CO concentrations. Ozone and its precursors will mix and react to produce higher concentrations under an inversion, and inversions trap and hold directly emitted pollutants such as CO. In short, inversions and air pollution literally do not mix.

Meteorological data are used to assess the potential for air pollution accumulation. For example, weather factors that may restrict horizontal and vertical air movement are important. Vertical movement lifts the pollutants through a thicker layer of air, while horizontal movement spreads the pollutants over a wider geographic area. Temperature inversions, which occur in a stable atmosphere of warm air over cooler air, hinder the upward dispersion of pollutants. The Basin experiences two common types of inversions: radiation inversion and subsidence inversion.

Radiation inversions are caused by nighttime cooling of an air layer near the valley surface. It extends upward several hundred feet and occurs during the nighttime and early morning. During a radiation inversion, little vertical mixing occurs. The inversion is destroyed when the sun heats the ground, which in turn heats the lower layers of air. The ground-level air then floats up

through the inversion layer. The inversions are more persistent during the winter, when they occur nearer to the valley floor.

Subsidence inversions are caused by downward vertical motion. As air descends, it warms and as a result, becomes warmer than the air beneath it. This limits vertical mixing, which can only occur when the air below is warmer than the air above.

AIR QUALITY STANDARDS

Federal Standards

The Federal Clean Air Act (FCAA, 1970, amended 1977 and 1990) required the Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for several air pollutants, based on human heath and welfare criteria. Two types of standards have been established: primary standards, which protect public heath, and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction. Primary standards have been established for the following "criteria" air pollutants, so called because they were established on the basis of health criteria:

- Carbon Monoxide (CO)
- Ozone (O3)
- Respirable particulate matter (less than 10 microns in diameter) (PM10)
- Fine particulate matter (PM2.5)
- Nitrogen dioxide (NO2)
- Sulfur dioxide (SO2)
- Lead (Pb)

The primary standards are intended to protect, with an adequate margin of safety, those persons most susceptible to respiratory distress, such as people suffering from asthma or other illness, the elderly, very young children, or people engaged in strenuous work or exercise. All of the above standards, except carbon monoxide, also have some form of secondary standard. Generally, the secondary standard is the same as the primary standard. Air pollutants negatively affect human health, plants, animals, and building materials. Some of these effects are temporary, and others are permanent.

Table 5-1, presented on the following page, summarizes air pollution effects.

TABLE 5-1
AIR POLLUTION EFFECTS

Pollutant	Description	Effects	Sources
Carbon Monoxide (CO)	Colorless, odorless, toxic gas produced by incomplete combustion of carbon-containing substances.	Passes through lungs into bloodstream. Deprives sensitive tissue of oxygen. Not known to have adverse effects on vegetation, visibility, or material objects.	Gasoline-powered motor vehicles.
Oxides of Nitrogen (NOx)	Two types, Nitric Oxide (NO), and Nitrogen Dioxide (NO2). NO is a colorless, odorless gas formed when combustion takes place under high pressure and/or temperature. NO2 forms by combustion to NO and oxygen. Participants in photochemical smog reactions.	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown.	Motor vehicles primary source. Other sources: petroleum refining operations, industrial sources, ships, railroads, and aircraft.
Sulfur Oxides (SOx)	Colorless, pungent gas formed by combustion of sulfur-containing fossil fuels.	Irritates upper respiratory tract; injurious to lung tissue. Can yellow the leaves of plants, destructive to marble, iron and steel. Limits visibility and reduces sunlight.	Fuel combustion primary source. Other sources: chemical plants, sulfur recovery plants, and metal processing.
Photo-chemical Oxidant	Consists primarily of ozone. Created in atmosphere, not emitted directly, during photochemical process. Ozone is a pungent, colorless toxic gas.	Common effects are damage to vegetation and cracking of untreated rubber. High concentrations can directly affect lungs, causing irritation.	Motor vehicles major source of emission of oxidants or nitrogen and reactive hydrocarbons, which are ozone precursors.
Particulates	Made up of finely divided solids or liquids such as soot, dust, aerosols, fumes and mists.	May irritate eyes and respiratory tract. Absorbs sunlight, reducing amount of solar energy reaching the earth. Produces haze and limits visibility. Can damage materials.	Agricultural operations and dust- and fume-producing industrial and, construction, combustion products including exhaust, atmospheric photochemical reactions. Natural activities such as wind-raised dust and ocean spray.
Hydrocarbons and Other Organic Gases	Includes the many compounds consisting of hydrogen and carbon, found especially in fossil fuels. Some highly photochemically reactive.	Not known to cause adverse effects in humans. May damage plants.	Motor vehicles major source. Other sources: petroleum refining, petroleum marketing operations, and evaporation of organic solvents.

Source: South Coast Air Quality Management District, "Air Quality Handbook for Preparing Environmental Impact Reports," April 1987.

State Standards

The FCAA requires areas with air quality violating the NAAQS to prepare an air quality control plan referred to as the State Implementation Plan (SIP). The SIP contains the strategies and control measures that states will use to attain the NAAQS. The FCAA amendments of 1990 require states containing areas that violate the NAAQS (such as the San Joaquin Valley Air Basin) to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, planning documents, rules, and regulations of Air Basins as reported by the agencies with jurisdiction over them. The EPA reviews SIPs to determine if they conform to the mandates of the FCAA amendments and will achieve air quality goals when implemented. If the EPA determines a SIP to be inadequate, it may prepare a Federal Implementation Plan (FIP) for the nonattainment area and impose additional control measures.

States are required to develop and implement air pollution control plans designed to achieve and maintain the standards established by EPA. States may also develop their own standards, provided the state standards are at least as stringent as the EPA standards. California has established its own standards known as the California Ambient Air Quality Standards (CAAQS). The California standards are more stringent than the Federal standards, especially for PM^{10} and sulfur dioxide. California has also set individual standards for visibility, sulfates, hydrogen sulfide, and vinyl chloride.

Table 5-2, presented below, lists California and Federal ambient air quality standards. Note that California has more standards and also stricter standards for some air pollutants.

TABLE 5-2
CALIFORNIA AND FEDERAL AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards [a, d]	National Standards [b, c]	
			Primary [d]	Secondary [e]
Ozone (O_3)	1-hour	0.09 ppm (180 µg/m³)	--	Same as Primary
	8-hour	0.070 ppm (137 µg/m³)	0.08 ppm (157 µg/m³)	
Particulate Matter (PM_{10})	AAM	20 µg/m³ *	50 µg/m³ [f]	
	24-hour	50 µg/m³	150 µg/m³	
Fine Particulate Matter ($PM_{2.5}$)	AAM	12 µg/m³*	15 µg/m³	
	24-hour	No Standard	65 µg/m³	
Carbon Monoxide (CO)	1-hour	20 ppm (23 mg/m³)	35 ppm (40 mg/m³)	None
	8-hour	9 ppm (10 mg/m³)	9 ppm (10 mg/m³)	
	8-hour (Lake Tahoe)	6 ppm (7 mg/m³)	–	

Pollutant	Averaging Time	California Standards [a, d]	National Standards [b, c]	
			Primary [d]	Secondary [e]
Nitrogen Dioxide (NO_2) [f]	AAM	–	0.053 ppm (100 µg/m^3)	Same as Primary
	1-hour	0.25 ppm (470 µg/m^3)	–	
Sulfur Dioxide (SO_2)	AAM	–	0.03 ppm (80 µg/m^3)	–
	24-hour	0.04 ppm (105 µg/m^3)	0.14 ppm (365 µg/m^3)	–
	3-hour	–	–	0.5 ppm (1,300 µg/m^3)
	1-hour	0.25 ppm (655 µg/m^3)	–	–
Lead [g]	30-day Average	1.5 µg/m^3	–	–
	Calendar Quarter	–	1.5 µg/m^3	Same as Primary
Sulfates	24-hour	25 µg/m^3	No Federal Standards	
Hydrogen Sulfide	1-hour	0.03 ppm (42 µg/m^3)		
Vinyl Chloride[g]	24-hour	0.01 ppm (26 µg/m^3)		
Visibility-Reducing Particle Matter	8-hour	Extinction coefficient of 0.23 per kilometer —visibility of 10 miles or more (0.07—30 miles or more for Lake Tahoe) due to particles when the relative humidity is less than 70%.		

a *California standards for O_3, CO (except Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, PM (PM_{10} and $PM_{2.5}$), and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded.*

b *National standards (other than O_3, PM, and those based on annual averages or annual arithmetic means) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of daily concentrations, average over three years, are equal to or less than the standard.*

c *Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25EC and a reference pressure of 760 torr.*

d *The levels of air quality necessary to protect the public health.*

e *The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.*

f *On February 22, 2007 the ARB approved a new hourly CAAQS for NOx of 0.18 ppm and a new annual CAAQS of 0.30 ppm, not to be exceeded. These newly approved standards are due to become effective in late 2007, pending approval by the California Office of Administrative Law.*

AAM = Annual Arithmetic Mean;
Source: ARB 2007

Climate Change

Below is a description of recent (as of 2007) state regulations that specifically address greenhouse gas emissions and global climate change. At the time this General Plan Update, there are no regulations setting ambient air quality emissions standards for greenhouse gases.

- **ASSEMBLY BILL 1493** – In 2002, then-Governor Gray Davis signed Assembly Bill (AB) 1493. AB 1493 requires that the California Air Resources Board (ARB) develop and adopt, by January 1, 2005, regulations that achieve "the maximum feasible reduction of greenhouse gases emitted by passenger vehicles and light-duty truck and other vehicles determined by the ARB to be vehicles whose primary use is noncommercial personal transportation in the state."

- **EXECUTIVE ORDER S-3-05** – Executive Order S-3-05, which was signed by Governor Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra's snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established total greenhouse gas emission targets. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80% below the 1990 level by 2050. The Executive Order directed the Secretary of the California Environmental Protection Agency (CalEPA) to coordinate a multi-agency effort to reduce greenhouse gas emissions to the target levels. The Secretary will also submit biannual reports to the governor and state legislature describing: (1) progress made toward reaching the emission targets; (2) impacts of global warming on California's resources; and (3) mitigation and adaptation plans to combat these impacts. To comply with the Executive Order, the Secretary of the CalEPA created a Climate Action Team (CAT) made up of members from various state agencies and commission. CAT released its first report in March 2006. The report proposed to achieve the targets by building on voluntary actions of California businesses, local government and community actions, as well as through state incentive and regulatory programs.

- **ASSEMBLY BILL 32, THE CALIFORNIA GLOBAL WARMING SOLUTIONS ACT OF 2006** – In September 2006, Governor Arnold Schwarzenegger signed AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by the year 2020. This reduction will be accomplished through an enforceable statewide cap on GHG emissions that will be phased in starting in 2012. To effectively implement the cap, AB 32 directs ARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then ARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 requires that ARB adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrives at the cap; institute a schedule to meet the emissions cap; and develop tracking, reporting, and enforcement mechanisms to ensure that the state achieves reductions in GHG emissions necessary to meet the cap. AB 32 also includes guidance to institute emissions reductions in an economically efficient manner and conditions to ensure that businesses and consumers are not unfairly affected by the reductions.

- **SENATE BILL 1368** – SB 1368 is the companion bill of AB 32 and was signed by Governor Schwarzenegger in September 2006. SB 1368 requires the California Public Utilities Commission (PUC) to establish a greenhouse gas emission performance standard for baseload generation from investor owned utilities by February 1, 2007. The California Energy Commission (CEC) must establish a similar standard for local publicly owned utilities by June 30, 2007. These standards cannot exceed the greenhouse gas emission rate from a baseload combined-cycle natural gas fired plant. The legislation further requires that all electricity provided to California, including imported electricity, must be generated from plants that meet the standards set by the PUC and CEC.

Regional – San Joaquin Valley Unified Air Pollution Control District (SJVAPCD) Standards

Each Air Pollution Control District in California is designated by the California Air Resources Board (ARB) as "attainment", "nonattainment," or "unclassified" for each of the ten pollutants for which CAAQS have been established: PM_{10}, $PM_{2.5}$, ozone, nitrogen dioxide, sulfur dioxide, CO, sulfates, lead, hydrogen sulfide, vinyl chloride, and visibility reducing particles. Attainment of the State standard is determined by a district's highest air monitor reading.

- **Nonattainment Designation** – Nonattainment Designation means the pollutant concentration in the district exceeded the State standard established for that pollutant at least once in the last three years. A district with a nonattainment status is required to develop plans for attaining and maintaining the standards for each nonattainment pollutant or its precursor. These plans are discussed in the next section, "Air Quality Plans."
- **Attainment Designation** – Attainment Designation means that the State standard for that pollutant has not been violated in the designated district. However, this does not mean that the district is exempt from air quality programs. To maintain the State standards, the district must adopt all rules and regulations necessary to protect ambient air quality.
- **Unclassified Designation** – Unclassified Designation means not enough data exists on which to base a decision on attainment or nonattainment. An unclassified status signals the need for additional data collection and analysis.

State and Federal attainment status designations for the SJVAPCD are summarized in **Table 5-3,** presented on the following page.

TABLE 5-3
SJVAPCD ATTAINMENT STATUS DESIGNATIONS

Pollutant	State Designation	Federal Designation
Ozone, 1-hour	Nonattainment/Severe	No Federal Standard
Ozone, 8-hour	No State Standard	Nonattainment/Serious
PM^{10}	Nonattainment	Nonattainment/Serious
$PM^{2.5}$	No State Standard	Nonattainment
CO (Fresno County)	Attainment	Unclassified/Attainment
Nitrogen dioxide	Attainment	Unclassified/Attainment
Sulfur dioxide	Attainment	Unclassified
Lead (particulate)	Attainment	No designation
Hydrogen sulfide	Unclassified	No Federal Standard
Sulfates	Attainment	No Federal Standard
Visibility-reducing particulates	Unclassified	No Federal Standard

Source: SJVAPCD, 2006
Note: Federal 1-hour ozone standard was revoked on June 15, 2005

The following pollutants either were in attainment or are currently unclassified: carbon monoxide, nitrogen dioxide, sulfur dioxide, lead, hydrogen sulfide, sulfates and visibility reducing particles**.** **Tables 5-4,** below and **5-5**, presented on the following page, show the number of exceedances of air quality standards for ozone and PM_{10} in the Basin for the years 2001 through 2005 (the most recent data available).

TABLE 5-4
SAN JOAQUIN VALLEY AIR BASIN EXCEEDANCES OF OZONE STANDARDS

Year	Exceedance Days			1-Hour Observations	8-Hour Averages
	1-Hour		8-Hour		
	State	Federal	Federal	Maximum	Maximum
2005	83	8	72	0.134	0.113
2004	106	9	109	0.155	0.126
2003	137	37	134	0.156	0.127
2002	127	31	125	0.164	0.132
2001	123	32	109	0.149	0.120

Source: ARB, 2006
Note: Maximum concentration expressed as parts per million

TABLE 5-5
SAN JOAQUIN VALLEY AIR BASIN EXCEEDANCES OF PM^{10} STANDARDS

Year	Estimated Days[1]		Annual Average		3-Year Average		High 24-Hr Average	
	State	Fed	State	Fed	State	Fed	State	Fed
2005	146	0	45	44	52	46	137	131
2004	113	3	44	45	60	51	219	217
2003	167	0	52	52	60	55	150	150
2002	256	8	60	60	60	56	194	189
2001	168	12	52	57	60	56	221	205

Source: ARB, 2006

Note: 1. Estimated # of days in the year that standards would have been exceeded had sampling occurred every day of the year. Sampling typically occurs once every six days. Concentrations expressed in micrograms per cubic meter.

In December 2004, the EPA took final action to designate attainment and nonattainment areas for fine particles, $PM_{2.5}$. On July 6, 2006 the EPA proposed to find the Basin in attainment with Federal PM_{10} standards. The proposed action is based on three years (2003-2005) of clean air monitoring data for this pollutant. The final decision will be made following submission of public comments.

As a severe nonattainment area for ozone, the San Joaquin Valley is subject to the most stringent requirements in the California Clean Air Act (CCAA) and must apply all feasible measures to reduce emissions. The Air Resources Board (ARB) has determined that the San Joaquin Valley is both a receptor and contributor of transported air pollutants. The Basin has been identified by the ARB as a receptor of air pollution from the San Francisco Bay Area and Broader Sacramento air basins, and as a contributor of air pollution to the Broader Sacramento, Southeast Desert, and Great Basin Valley air basins. Since the Basin has been identified as a source of air pollution to other areas, additional mitigation requirements are mandated by the CCAA. The key CCAA requirements for the SJVAPCD include:

- Provide for five percent per year reductions in nonattainment emissions, or include "every feasible measure" in the SJBAPCD Air Quality Management Plan (AQMP);
- Establish a permitting program that achieves no net increase in stationary source emissions;
- Develop a strategy to reduce vehicle trips, use and miles traveled;
- Increase average vehicle ridership to 1.5 persons per vehicle during commute hours by January 1, 1999;
- Reduce population exposure to nonattainment pollutants by 25 percent by December 31, 1994;

- Establish Best Available Retrofit Control Technology (BARCT) requirements for all permitted sources, with BARCT rules adopted for at least 75 percent of the permitted inventory by December 31, 1993; and
- Develop indirect and area source programs.

Air Quality Plans

The SJVAPCD has recently completed the following air quality attainment plans: *Extreme Ozone (1-hour) Attainment Demonstration Plan* (2004) and *PM_{10} Attainment Demonstration Plan* (2006). In coordination with the California Air Resources Board (ARB) and other north/central California air districts, the SJVAPCD has begun development of the *8-hour Ozone Attainment Demonstration Plan*. Submittal of the 8-hour ozone attainment demonstration plan to the EPA is anticipated to occur prior to June 15, 2007. In December 2004, the EPA took final action to designate attainment and nonattainment areas for fine particles, $PM_{2.5}$. The Basin was designated as nonattainment and the SJVAPCD will submit a plan to meet $PM_{2.5}$ standards by April, 2008.

Air districts continuously monitor their progress in implementing attainment plans and must periodically report to the ARB and EPA. The districts also periodically report to the ARB and EPA and revise the attainment plans to reflect new conditions and requirements in accordance with schedules mandated by the CCAA and the FCAA. The goals and policies of the Coalinga Air Quality Element are designed to maintain consistency with potential revisions to State and Federal mandates.

The SJVAPCD implements air quality plans primarily by adopting rules and regulations. The California Health and Safety Code authorize districts to adopt rules and regulations to pursue civil and criminal penalties for violations. The law allows for fines and civil penalties of up to $50,000 per day and imprisonment in the County jail for up to one year. The SJVAPCD has adopted rules on sources ranging from architectural coatings (Rule 4601) to orchard heaters (Rule 4303) to rubber tire manufacturing (Rule 4681). The SJVAPCD rulebook contains more than 130 rules, and more are scheduled for development over the next few years.

The SJVAPCD has adopted several rules applying to sources never before regulated in the San Joaquin Valley. Rule 4901 (Residential Wood Burning Fireplaces and Wood Heaters), calls for voluntary curtailment of wood burning on "No Burn Days" and the prohibition of sale of non-EPA-certified wood heaters within the SJVAPCD jurisdiction. Rule 4902 (Residential Water Heaters), requires new residential water heaters sold in the San Joaquin Valley to meet lower NO_x emission standards.

The SJVAPCD has identified three strategies for reducing emissions generated by indirect sources. These strategies include enhanced SJVAPCD CEQA participation; implementation of a new and modified indirect source review program; and encouragement of all cities and counties in the San Joaquin Valley to adopt an Air Quality Element or air quality policies as part of their General

Plans. The SJVAPCD now actively reviews and comments on CEQA documents prepared by lead agencies and suggests mitigation measures to reduce air quality impacts.

The SJVAPCD has undertaken steps to comply with Assembly Bill (AB) 2061 (Polanco). This bill requires assessment of socioeconomic impacts of certain new and modified rules put forth by the SJVAPCD, plus a good faith effort to minimize adverse effects on industry and the public. Where appropriate, the SJVAPCD now examines its proposed activities for socioeconomic effects.

Legislation such as AB 1807 (Tanner, Air Toxics Act), AB 2588 (Air Toxics "Hot Spots" Information and Assessment Act), AB 3205 (Toxic Emissions Near Schools), SB 1731 ("Hot Spots" Risk Reduction Mandates), and the FCAA Amendments (Title III) mandate the SJVAPCD to implement a comprehensive toxic air emission program. AB 2588 requires the SJVAPCD to develop a uniform approach to catalogue the emissions of 729 toxic substances in the valley.

The SJVAPCD has also adopted a number of voluntary air quality programs. Examples include a Smoking Vehicles Program and the Air Quality Education Program. Although these programs are voluntary, they provide an important link to local government and the public. The Smoking Vehicles Program started as a pilot program in San Joaquin County in 1992 and has been expanded to cover the entire San Joaquin Valley.

City Standards

The SJVAPCD includes eight counties and 59 incorporated cities. Most strategies for reducing air pollution emissions are most effectively implemented through local jurisdictions. For example, local government's responsibility for air quality increased significantly with the passage of the CCAA and the FCAA. Both of these pieces of legislation emphasize the need to reduce motor vehicle trips and vehicle miles traveled at the local level. The City of Coalinga's responsibilities for air quality cover four areas:

- Land use planning;
- Reviewing and mitigating the environmental impacts of development projects;
- Developing and maintaining the transportation infrastructure in the community; and
- Implementing local air quality program such as commute-based trip reduction and coordinated transit routes.

Each of these responsibilities is discussed below:

- **Land Use Planning -** The City of Coalinga has the authority and responsibility to approve or not approve development projects. As part of its duties, the City implements the General Plan. The Air Quality Element is not a mandatory element; however, Section 65302.1 of the State Government Code (adopted in 2003) requires cities and counties in the San Joaquin Valley to amend appropriate elements of general plans to include data, analysis, comprehensive goals, policies, and feasible implementation strategies to improve air

quality. The Coalinga Air Quality Element must be consistent with the other Coalinga General Plan Elements.

- To implement the General Plan, the City adopts standards for all facets of development. Most well-known of these standards is the Zoning Ordinance, which designates the type, location, and mix of uses; and controls features such as building height, setbacks from streets and lot lines, landscaping requirements, parking requirements, and more. The Subdivision Ordinance sets standards for street and lot designs, dedication requirements, and financing of public improvements. The Building Code provides standards for construction, including energy efficiency requirements, structural standards, electrical standards, plumbing standards, and related requirements. These ordinances and standards provide an effective means for implementing design and facility-based air quality control measures.

- **CEQA Review -** The California Environmental Quality Act (CEQA) was enacted by the State legislature in 1970 and has been amended many times. CEQA applies to local government initiated plans, projects and regulations, and to private projects requiring discretionary approval from a State or local agency. For example, for this Coalinga General Plan Update, an Environmental Impact Report (EIR) was prepared. An EIR must inform governmental decision makers and the public about the potential significant environmental effects of proposed activities.

  CEQA allows the City to not approve a project if necessary to avoid one or more significant effects on the environment. This authority compels developers to include measures in their projects to mitigate potentially significant environmental impacts. The City is required to consult with, and request comments from, agencies that exercise authority over resources that may be affected by a project. The SJVAPCD has authority over most air quality issues and has assigned staff to review the air quality impacts of development projects. The SJVAPCD analyzes the project and recommends mitigation measures to reduce air quality impacts. The City may choose to require or not require the measures suggested by the SJVAPCD. However, for EIRs, when the City does not agree with recommendations and objections raised by the SJVAPCD, the City must prepare a written response that provides detailed reasons why specific comments were not accepted.

- **Transportation Infrastructure -** Planning and construction of transportation infrastructure is a highly cooperative effort involving local government, regional transportation planning agencies, the California Department of Transportation (Caltrans), the Federal Department of Transportation, and others. The FCAA requires transportation plans to conform to the air quality goals of the State Implementation Plan (SIP). A SIP consists of the emissions standards for vehicular sources set by the ARB as well as attainment plans adopted by the air district and approved by the ARB. States must assure that transportation programs do not undermine the attainment of air quality standards.

- **Local Air Quality Programs -** The CCAA allows air districts to delegate the implementation of transportation control measures to any local agency as long as the following conditions

are met: (1) the agency must submit an implementation plan to the district for approval; (2) the agency must adopt and implement measures at least as stringent as those in the district's plan; and (3) the district must adopt procedures for reviewing the local agency's performance in implementing the measures.

One area where the City of Coalinga (and all other local governments) has an important role is in low-emission vehicle programs. Programs to convert City vehicle fleets, including buses, to cleaner burning fuels have significant air quality benefits and can provide a model to private industry.

The Air Quality Element goals, policies and implementation measures define how Coalinga will work to reduce air pollution.

Noise - Background and Setting

Noise sources in Coalinga fall into three basic categories: motor vehicle and farm equipment, aircraft, and stationary sources. Motor vehicle and farm equipment noise sources include automobiles, trucks, and motorcycles. Motor vehicle noise is of concern due to the high number of individual events which often create a sustained noise level and proximity to areas sensitive to noise exposure. Historically, due to the relatively small amount of traffic in Coalinga, traffic-related noise has not generally been significant problem. However, the traffic mix includes an unusually high percentage of large trucks on the City's major roadways, including Polk Street east of Elm Avenue, Elm Avenue and Phelps Avenue. It is possible that residences near the right-of-way of these streets may be exposed to excessive noise levels.

A comprehensive assessment of aircraft noise was undertaken as part of planning for the new Coalinga Municipal Airport. The future 60 and 65 Community Noise Equivalent Level (CNEL) contours (a measurement of the cumulative noise exposure in a community) do not extend past the airport boundaries. No significant adverse noise impacts are anticipated from operation of the new airport.

Stationary noise sources are generally larger facilities such as power plants, sewage treatment plants, oil production facilities, agricultural operations and heavy industrial uses. No major heavy industrial uses are located within the City; however, agricultural operations occurring in the area generate noise from tractors, irrigation and crop-dusting. The existing sewage treatment plant is located just east of the City; however, the treatment plant is planned to be relocated further east of the City, near the Pleasant Valley State Prison. According to the Environmental Impact Report (EIR) prepared for the relocation of the plant (City of Coalinga WWTP EIR prepared by Morro Group April 2006), the nearest sensitive noise receptor (residence) is located approximately 2,100 feet from the plant site. Based on comparative noise readings, the new treatment plant is not expected to produce significant noise impacts at the nearest sensitive receptor. Due to the uncertainties of the final treatment plant design, the EIR recommends as mitigation that a qualified acoustical engineer verify that the plant can maintain a maximum noise level of 60 dBA or lower

at the nearest sensitive receptor. Gravel mining operations are to remain more than ½-mile from any current or potential residential development.

The most common noise sensitive land uses include residential uses, schools, hospitals, nursing and personal care facilities, churches, places of public assembly and entertainment, libraries, museums, hotels, motels, bed and breakfast facilities, outdoor sports and recreation facilities and offices. **Table 5-6**, presented below**,** specifies noise levels acceptable within each land use. The Community Noise Equivalent Level (CNEL) and Day-Night Noise Level (Ldn) are measures of the 24-hour noise environment. They represent the constant A-weighted noise level (an approximation of human sensitivity to sound) that would be measured if all the sound energy received over the day were averaged. In order to account for the greater sensitivity of people to noise at night, the CNEL weighting includes a five-decibel penalty on noise generated between 7:00 p.m. and 10:00 p.m. and a 10-decibel penalty between 10:00 p.m. and 7:00 a.m. the following day. The Ldn includes only the 10-decibel weighting for late-night noise events. For practical purposes, the two measures are equivalent for typical urban noise environments.

The most noise sensitive land uses in Coalinga are residential areas. Residential development is considered especially noise sensitive because, 1) considerable time is spent by individuals at home, 2) significant activities occur outdoors, and 3) sleep disturbance is most likely to occur in a residential neighborhood. The Coalinga Regional Medical Center, located in the northeast part of town, is also considered a sensitive receptor.

TABLE 5-6
ACCEPTABLE NOISE LEVELS BY LAND USE

Land Use	Community Noise Equivalent Level (CNEL) or Day-Night Level (Ldn), dB							
	50	55	60	65	70	75	80	85
Residential: Low-Density Single-Family, Duplex, Mobile Homes								
Residential: Multi-Family								
Transient Lodging: Motels, Hotels								
Schools, Libraries, Churches, Hospitals, Nursing Homes								
Auditoriums, Concert Halls, Amphitheaters								
Sports Arenas, Outdoor Spectator Sports								
Playgrounds, Neighborhood Parks								
Golf Courses, Riding Stables, Water Recreation, Cemeteries								
Office Buildings, Business, Commercial and Professional								
Normally Acceptable		Specified land use is satisfactory, based on the assumption that any buildings are of normal conventional construction, without any special noise insulation requirements.						
Conditionally Acceptable		New construction or development should be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features included in design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.						
Normally Acceptable		New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in design.						
Clearly Acceptable		New construction or development should generally not be undertaken.						
Nature of the noise environment where the CNEL or Ldn level is:	Below 55 db: Relatively quiet suburban or urban areas, no arterial streets within one block, no freeways within one-quarter mile.							
	55-65 db: Mostly somewhat noisy urban areas, near but not directly adjacent to high volumes of traffic.							
	65-75 db: Very noisy urban areas near arterials, freeways, or airports.							
	75+ db: Extremely noise urban areas adjacent to freeways or under airport traffic patterns. Hearing damage with constant exposure outdoors.							

Source: Cotton/Beland/Associates, adapted from City of Los Angeles EIR Manual for Private Projects, U.S. Department of Housing and Urban Development and State of California Guidelines and U.S. EPA, Report on Levels of Environmental Noise Requisite to Protect the Public Health and Welfare with an Adequate Margin of Safety, 1974.

SAFETY, AIR QUALITY AND NOISE GOALS, POLICIES AND IMPLEMENTATION MEASURES

The following goals put forward in the *Natural Hazard Mitigation Plan* (2005) define the values and vision for the community and along with the guiding principles in Chapter 1 of this General Plan, provide the foundation for safety, air quality and noise goals, policies and implementation measures

- Protect Life and Property
- Public Awareness
- Partnerships and Implementation
- Emergency Services

The following goals, policies and implementation measures have been established to guide short and long-range decision making by the community.

Goal S1
A safe community that ensures the protection and well-being of its residents.

Policy S1-1
The City shall maintain its emergency preparedness, including evacuation procedures, to address potential manmade and natural disasters in order to guarantee the safety of, and accessibility to, all its residents. Procedures shall be developed in coordination with local, State, and Federal emergency operations and Plans.

Implementation Measure S1-1.1
The City shall update and review, per State and Federal Guidelines, the City's adopted Emergency Preparedness Plan and Network that outlines evacuation measures, identifies emergency public shelters, addresses animals in disaster, and provides information specific to people with disabilities.

Implementation Measure S1-1.2
Following the completion of the Emergency Preparedness Plan and Network, prepare public information notices in English and Spanish to disseminate information to the community, including school children and people with disabilities, to improve awareness of geologic, seismic, and flooding hazards as well as hazardous materials and direct what to do in the event of an emergency.

Implementation Measure S1-1.3
Following the completion of the Emergency Preparedness Plan and Network, schedule and conduct periodic drills to test the effectiveness of the City's emergency response procedures and network.

Implementation Measure S1-1.4
Provide ongoing training to ensure the readiness of emergency response teams and City staff to adequately and safely respond to emergencies.

Implementation Measure S1-1.5
Coordinate with local, State and Federal agencies to share hazard information, establish emergency preparedness plans and reduce the time and effort required to obtain permits for emergency repair work.

Implementation Measure S1-1.6
Maintain and upgrade critical facilities as well as the database of safety related information, including Geographic Information System (GIS) data, and convey that information to the public and decision makers.

Implementation Measure S1-1.7
Coordinate circulation element street designations and road improvement projects with evacuation routes.

Policy S1-2
The City shall facilitate long-term recovery following a disaster.

Implementation Measure S1-2.1
The City should consider mechanisms such as funds redevelopment assistance funds and/or plans to assist with public and private rebuilding efforts, the provision of housing for displaced residents, damage assessment, repair of critical infrastructure and resumption of service, business and government functions.

Implementation Measure S1-2.2
Develop a system for identifying, creating duplicate back-ups and providing safe storage of essential City records. Within one (1) year create duplicate storage of existing critical City records.

Goal S2
Minimize loss of life, structures and environment that may result from natural and man-made hazards.

Policy S2-1
The City shall ensure that developments, structures, and public facilities are sited with consideration to safety.

Implementation Measure S2-1.1
Within one (1) year of adoption of the General Plan, review and amend the Zoning Ordinance to include relevant local, state and federal regulations, including UBC

provisions regarding the placement of structures and development standards to avoid known hazards.

Implementation Measure S2-1.2
Within one (1) year of adoption of the General Plan, review and amend the Zoning Ordinance to provide criteria for site selection to ensure greater safety for critical-use structures (i.e. hospitals, schools, utilities, and fire, police and public assembly facilities).

Implementation Measure S2-1.3
Continuously update a five-year capital improvement plan for public facilities with a prioritized list of proposed capital improvement projects.

Policy S2-2
The City shall ensure that developments, structures, and public facilities adequately address geologic and seismic hazards.

Implementation Measure S2-2.1
Within one (1) year of adoption of the General Plan, work with Federal, State and local agencies including the USGS, California Department of Conservation Division of Mines and Geology and Fresno County to refine and update the City's earthquake maps to accurately identify groundshaking hazards in the Coaling area.

Implementation Measure S2-2.2
Within two (2) years of adoption of the General Plan, incorporate guidelines from the Seismic Hazards Mapping Act into the Zoning Ordinance and other City policy documents, codes and guidelines.

Implementation Measure S2-2.3
The City shall require geotechnical studies for development in areas identified on the City's earthquake maps as having high seismic hazard risks and those sites with moderate to high liquefaction potential, or other soil limitations. These reports should include analysis of seismic ground shaking, subsidence, settlement and fault displacement potential and specify appropriate mitigation.

Implementation Measure S2-2.4
The City shall require soils reports for development in areas identified on the City's earthquake maps as having moderate to very high seismic hazards or where soil stability may be an issue.

Implementation Measure S2-2.5
*As a component of the pubic information effort described in **Implementation Measure S1-1.2**, promote public awareness of earthquake hazards and ways to reinforce buildings and prevent damage including bolting homes to their foundations and securing furniture personal belongings within the home.*

Policy S2-3
The City shall ensure that developments, structures, and public facilities adequately address flooding hazards.

Implementation Measure S2-3.1
An engineered floodplain and hydrologic analysis shall be prepared for new development projects within or directly adjacent to known 100-year flood plains.

Implementation Measure S2-3.2
The City shall prohibit development within the FEMA-identified 100-year flood plain unless maps are revised and accepted by FEMA based on changes to flood control improvements; or, base elevations are raised to a level sufficient to protect new development from flooding.

Implementation Measure S2-3.3
Develop and implement a plan to stabilize, protect and repair the streambeds, with emphasis on Warthan and Los Gatos Creeks, and correct storm drainage system deficiencies.

Implementation Measure S2-3.4
Adopt standard erosion control mitigation measures to ensure that impacts are consistently mitigated

Policy S2-4
The City shall seek to reduce the potential for exposure of hazardous substances to humans and the environment.

Implementation Measure S2-4.1
The City shall support, jointly with other Fresno counties and the City of Fresno, the Household Hazardous Waste Disposal Program. The program shall be periodically reviewed to ensure that regular household hazardous waste disposal programs are sponsored to enable residents to bring backyard pesticides, cleaning fluids, paint cans, and other common household toxics to a centralized collection center for proper disposal.

Implementation Measure S2-4.2
Vigorously prosecute unlicensed dumping of toxic or hazardous materials into the ground or the water in Coalinga. Encourage citizens to report illegal dumping when they see it.

Implementation Measure S2-4.3
Support efforts to enforce state "right to know" laws, which outline the public's right to information about local toxics producers. Require monitoring and reporting as a condition of approval, for new businesses that generate hazardous wastes, to ensure compliance with approved disposal procedures.

Implementation Measure S2-4.4
Require new and existing land uses involved in production, storage, transport, handling, and/or disposal of hazardous materials to locate or relocate a safe distance from other land uses that may be adversely affected by these activities.

Implementation Measure S2-4.5
Periodically inspect City emergency shelters to ensure that equipment and supplies are available and operational.

Policy S2-5
The City shall ensure new development in high fire risk areas is carefully sited and configured.

Implementation Measure S2-5.1
New development shall be required to cluster lots and buildings where feasible to reduce the need for multiple response teams during fires.

Implementation Measure S2-5.2
The Fire Department shall be required to review subdivision design to ensure adequate fire flows, access for emergency vehicles, construction standards and vegetation clearance.

Implementation Measure S2-5.3
The use of fire resistant material shall be required in building construction.

Implementation Measure S2-5.4
Within one (1) year the City shall develop regulations to increase the defensible area around homes and include the regulations as requirements in building review and approval.

Implementation Measure S2-5.5
The City shall periodically assess the impact of incremental increases in development and traffic congestion on fire hazards and emergency response time.

Implementation Measure S2-5.6
Within one (1) year the City shall develop an emergency evacuation program for the neighborhoods in the West Hills that are subject to high fire hazards.

Goal S3
Prevention of unnecessary drainage, erosion and sedimentation.

Policy S3-1
Prevent unnecessarily intensive drainage, erosion and sedimentation.

Implementation Measure S3-1.1
Require new development to demonstrate through plans and other supportive documentation that drainage patterns and flow rates will not be significantly modified from pre-disturbance flows.

Implementation Measure S3-1.2
Require new development proposed within a designated flood zone to use site planning techniques to ensure that structures are elevated at least one foot above the 100-year flood zone consistent with **Implementation Measure S2-3.2.**

Implementation Measure S3-1.3
Require the preparation of sedimentation and erosion control plans for new development located on steep slopes, or in or near the floodplain in accordance with Table 5-7 (below).

Implementation Measure S3-1.4
Require new development to avoid building in the 100 year floodplain to the extent feasible, consistent with ***Implementation Measure S2-3.2.***

TABLE 5-7
EROSION AND SEDIMENTATION MITIGATION

Applicability: In the instance that a specific proposed project will result in earth moving activities equaling or exceeding 5,000 cubic yards, is located on slopes greater than 20%, is located within the 100-year floodplain, is located within 500 feet of the 100-year floodplain boundary, or is located within 100 feet of any unnamed drainage or tributary to Warthan Creek, Los Gatos Creek, Jacalitos Creek, Zapato Chino Creek, or the Arroyo Pasajero watershed; the applicant shall prepare a sedimentation and erosion control plan. The plan shall include the following elements:
Slope surface stabilization: Temporary mulching, seeding or other suitable stabilization measures approved by the City Engineer shall be used to protect all exposed erodible areas. Earth interceptors and diversions shall be installed at the top of cut or fill slopes where there is a potential for erosive surface runoff.
Erosion and sedimentation control devices: In order to prevent sedimentation discharges, erosion and sediment control devices shall be installed as necessary for all grading and filling. Control devices and measures may include, but are not limited to, energy absorbing structures or devices to reduce the velocity of runoff water.
Final erosion control measures: During the period from October 15 through April 15, all surfaces disturbed by vegetation removal, grading, or other construction activity are to be revegetated to control erosion.
1.Control of off-site effects: All grading activity shall be conducted to prevent damaging effects of erosion, sediment production and dust on the site and on adjoining properties.

Goal AQ1
Effective communication, cooperation and coordination in developing and operating community and regional air quality programs.

Policy AQ1-1
Air quality impacts associated with new development projects must be considered during the development review process.

Implementation Measure AQ1-1.1
The City shall require an air quality impact analysis using the methods promulgated by the San Joaquin Air Pollution Control District (the District) for all projects that are subject to CEQA review and meet or exceed District emissions thresholds.

Implementation Measure AQ1-1.2
The City shall adopt methods and thresholds for determining which projects will be required to prepare Comprehensive Air Quality Mitigation Plans.

Implementation Measure AQ1-2.3
Within one (1) year the City shall adopt standard air quality mitigation measures to ensure that impacts are consistently mitigated consistent with SJAPCD policy or State law.

Implementation Measure AQ1-1.4
The City shall work with the District to enforce air quality mitigation measures.

Implementation Measure AQ1-1.5
The City shall notify and request comments from neighboring jurisdictions and other affected agencies during review of significant discretionary projects.

Implementation Measure AQ1-1.6
The City shall work closely with the Coalinga-Huron Unified School District to identify future school sites that are compatible with land use, transportation and air quality plans.

Implementation Measure AQ1-1.7
Support and participate in the air quality education programs of the District.

Implementation Measure AQ1-1.8
Continue to replace or convert conventional fuel for City vehicles with clean fuel vehicles as feasible.

Implementation Measure AQ1-1.9
The City shall require new development, entitlement requests, and construction activities to adhere to, and the City implement, the Best Available Control Measures (BACM) and Reasonably Available Control Measures (RACM) adopted by City Council Resolution 2936 and 2892, respectively.

Goal AQ2
Reduction of motor vehicle trips and vehicle miles traveled.

Policy AQ2-1
Encourage and support development projects that propose alternatives to standard vehicle trips.

Implementation Measure AQ2-1.1
Where feasible, projects that should propose pedestrian or transit-oriented designs at suitable locations and encourage higher densities in areas served by a full range of urban services.

Implementation Measure AQ2-1.2
Require larger development projects and Master Plan Growth Areas to consider inclusion of mixed-use components that provide commercial services such as day care centers, offices, restaurants, banks and stores.

Implementation Measure AQ2-1.3
Promote downtown Coalinga as the primary pedestrian-oriented, commercial, and financial center of the City as outlined in the Downtown Mixed Use overlay standards and the Downtown Design Standards.

Implementation Measure AQ2-1.4
Require adequate neighborhood commercial shopping areas to provide services to new residential developments, provided they don't compete directly with the Downtown.

Implementation Measure AQ2-1.5
Within two (2) years of adoption of the General Plan the City shall develop a Safe Routes to School program. This program should be developed in close cooperation with the Coalinga-Huron Unified School District and should help the District choose school sites that allow students to safely walk or bike from their homes.

Implementation Measure AQ2-1.6
Develop park and ride lots and rideshare programs to serve long distance and regional commuters.

Implementation Measure AQ2-1.7
Work with public and private organizations (e.g., the Chamber of Commerce, West Hills College) to attract employers to the community to help improve the jobs/housing balance.

Implementation Measure AQ2-1.8
Require new development to provide pedestrian and bicycle connections to transit facilities, commercial and neighboring uses, and other potential destinations.

Implementation Measure AQ2-1.11
Create car-pooling, telecommuting and mass-transit programs for community members and businesses

Implementation Measure AQ2-1.13
Implement a police on bicycles program as appropriate and feasible.

Policy AQ2-2
Support upgrades and improvements to the transportation system that benefit bicycle, pedestrian, and other non-vehicular forms of circulation. (See also Goal C3 and it's associated policies and implementation measures in the Circulation Element)

Implementation Measure AQ2-2.1
The City shall pursue and use state and federal funds earmarked for bicycle and transit improvements.

Implementation Measure AQ2-2.2
The City shall require new development to dedicate land for bus turnouts and shelters at sites deemed appropriate and necessary by the City and the transit providers.

Implementation Measure AQ2-2.3
Design arterial and collector streets with on-street bike lanes and detached pedestrian walkways.

Implementation Measure AQ2-2.4
Within two (2) years of adoption of the General Plan, prepare a Bicycle and Pedestrian Master Plan to provide a comprehensive system of bikeways and pedestrian paths.

Implementation Measure AQ2-2.5
Require developers to provide regional and commuter bikeways to serve their developments through construction of improvements or payment of an in-lieu fee.

Implementation Measure AQ2-2.6
Develop Zoning Ordinance standards to require developers to provide bicycle racks, or enclosed and locked bicycle storage, at major activity centers, offices, and commercial establishments to serve patrons and employees.

Implementation Measure AQ2-2.7
Develop Zoning Ordinance standards that require larger developments to provide facilities and programs that increase the effectiveness of transportation control measures (e.g., employer based trip reduction programs, transit programs, ride share programs, or parking reductions).

Goal AQ3
Minimize exposure of the public to toxic air pollutant emissions and noxious odors from industrial, manufacturing and processing facilities.

Policy AQ3-1
Mitigate impacts from toxic air pollutant emissions and noxious odors from industrial, manufacturing, and processing facilities.

Implementation Measure AQ3-1.1
Develop Zoning Ordinance standards that require residential development projects and projects categorized as sensitive receptors to provide buffers to separate those uses from major arterials, industrial sites, and hazardous materials locations.

Implementation Measure AQ3-1.2
Require new air pollution point sources such as, but not limited to, industrial, manufacturing, and processing facilities, to be located an adequate distance from residential areas and sensitive receptors.

Implementation Measure AQ3-1.3
Locate air pollution sensitive land uses (e.g., hospitals, convalescent homes, residences, schools) away from existing developed and undeveloped industrial sites in recognition that the potential exists for those sites to contain industrial processes that may emit toxic and hazardous pollutants at some future date.

Goal AQ4
A reduction in particulate, fugitive dust and other emissions.

Policy AQ4-1
Implement measures that effectively reduce particulate, dust and other emissions.

Implementation Measure AQ4-1.1
Require new development to reduce short-term emissions during construction by implementing conditions on major new development projects in accordance with ***Table 5-8****, presented on the following page.*

Implementation Measure AQ4-1.2
Implement post construction mitigation measures to reduce long-term operational emissions in accordance with ***Table 5-9*** *presented below.*

Implementation Measure AQ4-1.3
Prohibit wood burning appliances and fireplaces in new construction and remodels.

TABLE 5-8
SHORT TERM CONSTRUCTION MITIGATION MEASURES

Short Term Construction Mitigation Measures
a. All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.
b. All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.
c. All land clearing, grubbing, scraping, excavation, land leveling, grading, cut & fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
d. With the demolition of buildings up to six stories in height, all exterior surfaces of the building shall be wetted during demolition.
e. When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the tip of the container shall be maintained.
f. All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. *(The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions). (Use of blower devices is expressly forbidden).*
g. Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.
h. Within urban areas, trackout shall be immediately removed when it extends 50 or more feet from the site and at the end of each workday.
i. Any site with 150 or more vehicle trips per day shall prevent carryout and trackout.
j. Limit traffic speeds on unpaved roads to 15 mph
k. Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.
l. Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site.
m. Install wind breaks at windward side(s) of construction areas.
n. Suspend excavation and grading activity when winds exceed 20 mph
o. Limit area subject to excavation, grading, and other construction activity at any one time.
Construction Equipment Mitigation Measures
a. Use of alternative fueled or catalyst equipped diesel construction equipment
b. Minimize idling time (e.g. 10 minute maximum)
c. Limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use.
d. Replace fossil-fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set)
e. Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak-hour of vehicular traffic on adjacent roadways.
f. Implement activity management (e.g. rescheduling activities to reduce short-term impacts)

TABLE 5-9
POST CONSTRUCTION MITIGATION MEASURES

Post Construction Vehicular Emissions
a. Provide transit enhancing infrastructure that includes: transit shelters, benches, etc.; street lighting; route signs and displays; and/or bus turnouts/bulbs
b. Provide park and ride lots and/or satellite telecommuting centers
c. Provide pedestrian enhancing infrastructure that includes: sidewalks and pedestrian paths; direct pedestrian connections; street trees to shade sidewalks; pedestrian safety designs/infrastructure; street furniture and artwork; street lighting; and/or pedestrian signalization and signage
d. Provide bicycle enhancing infrastructure that includes; bikeways/paths connecting to a bikeway system; secure bicycle parking; and/or employee lockers and showers
e. Implement carpool/vanpool program e.g., carpool ride matching for employees, assistance with vanpool formation, provision of vanpool vehicles, etc.
f. Provide on-site shops and services for employees, such as cafeteria, bank/ATM, dry cleaners, convenience market, etc.
g. Provide on-site childcare, or contribute to off-site childcare within walking distance.
h. Establish mid-day shuttle service from worksite to food service establishments/commercial areas
i. Provide shuttle service to transit stations/multimodal centers
j. Provide preferential parking (e.g., near building entrance, sheltered area, etc.) for carpool and vanpool vehicles
k. Implement parking fees for single occupancy vehicle commuters
l. Implement parking cash-out program for employees (i.e.. non-driving employees receive transportation allowance equivalent to value of subsidized parking)
m. Provide transit incentives
n. Implement compressed work week schedule (e.g., 4/40, 9/80)
o. Implement home-based telecommuting program
Source Emission Mitigation Measures
a. Use solar or low-emission water heaters (beyond Rule 4902)
b. Use central water heaters
c. Orient buildings to take advantage of solar heating and natural cooling and use passive solar designs
d. Increase wall and attic insulation beyond Title 24 requirement
e. Use solar or low-emission water heaters
f. Use central water heating systems
g. Provide electric maintenance equipment
h. Eliminate or limit the amount of traditional fireplaces installed (i.e. natural gas fireplaces/inserts or at least EPA certified wood stoves or inserts in stead of open hearth fireplaces)

Goal AQ5
Reduce the amount of greenhouse gases emitted by City operations, as well as the residential, commercial and industrial sectors.

Policy AQ5-1
Actively seek to reduce greenhouse gas (GHG) emissions within the Planning Area.

Implementation Measure AQ5-1.1
The City shall implement regulations issued by the California Air Resources Board to reduce the amount of GHG emissions that could potentially occur as a result of implementation of the proposed General Plan. The City may alter implementation of these regulations as new information becomes available from the State regarding GHG emissions and thresholds to determine the significance of these emissions. This implementation program shall not be construed as to prohibit the City of Coalinga from adopting more stringent regulations to reduce GHG emissions, should the City deem them appropriate.

Implementation Measure AQ5-1.2
The City should support the development and implementation of a Community Greenhouse Gas Reduction Plan). At a minimum, this Plan should incorporate and implement feasible GHG mitigation measures to achieve the following:

(a) Reduce net emissions of GHG emissions from Coalinga

(b) Reduce the net impacts of energy production

(c) Reduce the costs of energy to the City and it's residents reduce the City's vulnerability to changes in energy availability and price

(d) Increase public awareness of energy issues and potential impacts

(e) Monitor the cost and effectiveness of the City's methods to reduce GHG emissions so that the City may learn by and improve on them

(f) Any additional impacts identified as relevant and current by the City of Coalinga.

Implementation Measure AQ5-1.3
The City should join the Cities for Climate Protection Campaign, administered by ICLEI (Local Governments for Sustainability).

Implementation Measure AQ5-1.4
All City-funded projects that involve the disturbance of more than one acre shall use construction equipment that utilizes fuels, such as biodiesel, which reduce GHG emissions by 10% compared to typical fuels.

Implementation Measure AQ5-1.5
The City shall require all projects that involve the disturbance of more than five (5) acres to use construction equipment that utilize fuels, such as biodiesel, which reduce GHG emissions by 10% compared to typical fuels.

Implementation Measure AQ5-1.6
The City shall locate neighborhood commercial uses within ½ mile of residential areas so that they can be more easily reached by bicycle or on foot.

Implementation Measure AQ5-1.7
The City shall coordinate with regional transit providers to locate transit stops within ½ mile of new residential and commercial areas.

Implementation Measure AQ5-1.8
Commercial developments expected to have over 100 employees and not located within 1/4 mile of existing retail services shall set aside portions of the site for retail services that can serve employees and surrounding businesses.

Implementation Measure AQ5-1.9
To reduce heating and cooling requirements of new structures, the city shall require new development to include measures such as parking lots and streets with 50% tree cover within 10 years of construction, paving materials that have as light a color as is feasible, roofing materials that reduce transmission of heat to the building below, separation between the ventilation and thermal conditioning systems.

Implementation Measure AQ5-1.10
The City shall prepare a Community Greenhouse Reduction Plan.

Policy AQ5-2
Identify opportunities for creating energy conservation and efficiency programs for application in all City facilities, schools and local businesses.

Implementation Measure AQ5-2.1
City buildings and facilities will be operated in the most energy-efficient manner without endangering public health and safety and without reducing public safety or service levels.

Implementation Measure AQ5-2.2
The Town will identify energy efficiency improvement measures to the greatest extent possible, undertake all necessary steps to seek funding for their implementation and, upon securing funding, implement the measures in a timely manner.

Implementation Measure AQ5-2.3
The City shall evaluate the feasibility of constructing new City structures to LEED standards, and will give preference in approval, water and sewer service, to housing developments that meet the LEED neighborhood design standards.

Implementation Measure AQ5-2.4
The City shall give preference in approval and water and sewer service, to housing developments that incorporate photovoltaic and or solar water heating systems.

Implementation Measure AQ5-2.5
Solar water heating and/or photovoltaic systems shall be required for all new single-family residences with more than two (2) baths, multi-family residential developments larger than four (4) units and commercial buildings larger than 20,000 square feet.

Policy AQ5-3
The City shall encourage sustainable employee commuting and municipal transportation practices.

Implementation Measure AQ5-3-1
Encourage alternatives to employees commuting as occupants of individual vehicles powered by non-sustainable fuels.

Implementation Measure AQ5-3-2
As feasible, offer free parking for alternative fuel vehicles and fuel-efficient cars.

Implementation Measure AQ5-3-3
Retire old and under-used municipal vehicles, as feasible, and promote replacement purchases of compact and hybrid vehicles.

Implementation Measure AQ5-3.4
Create car-pooling, van-pooling, and transit programs for municipal employees.

Implementation Measure AQ5-3.5
Implement telecommuting policy for municipal employees where feasible and appropriate

Goal N1
A community free from the harmful and annoying effects of excessive noise.

Policy N1-1
The City shall ensure noise mitigation measures and techniques are incorporated into site planning, architecture, design and construction projects.

Implementation Measure N1-1.1
Within one (1) year of adoption of the General Plan, the City shall develop and adopt a comprehensive noise ordinance that regulates hours of operation and controls excessive

noise from construction activity, lawn blowers, trimmers, street sweepers, machinery and other disturbances. The City shall restrict construction activities to the hours between 7 am and 9 pm Monday through Friday and 8 am and 5 pm on Saturday and Sunday for all development projects, unless it can be shown that longer construction hours would not increase noise impacts to sensitive receptors.

Implementation Measure N1-1.2
Require development proposals to conform with the policies of the City's Noise Element ensuring compatibility with the existing noise environment.

Implementation Measure N1-1.3
The City shall require an acoustical analysis for new development that may result in noise that exceeds specified levels.

Implementation Measure N1-1.4
Develop procedures that monitor and ensure implementation of noise mitigation measures pursuant to an acoustical analysis.

Implementation Measure N1-1.5
Require the construction of barriers to shield noise-sensitive uses from excessive noise.

Implementation Measure N1-1.6
Reduce noise generated by construction activities by requiring sound attenuation devices on construction vehicles and equipment.

Implementation Measure N1-1.7
Reduce noise generated by building equipment (e.g., HVAC, exhaust fans) by requiring buffering techniques including sound attenuation walls and berms.

Policy N1-2
The City shall ensure acceptable noise levels near sensitive noise receptors including schools, hospitals, convalescent homes and other noise-sensitive areas.

Implementation Measure N1-2.1
Periodically review and update the Noise Element to ensure policies are consistent with changing conditions in the City's noise environment. Current standards are what the City will use.

Implementation Measure N1-2.2
Enforce City, State and Federal traffic noise standards.

Implementation Measure N1-2.3
Require a landscaped buffer between commercial, industrial or mixed uses and any adjoining noise sensitive receptor.

Implementation Measure N1-2.4
Require automobile and truck access to commercial properties be the maximum practical distance from any adjoining noise sensitive receptor.

Implementation Measure N1-2.5
The City shall prohibit truck deliveries to commercial and industrial properties abutting residential uses before 7 a.m. and after 9 p.m. unless there is no feasible alternative.

Policy N1-3
The City shall discourage the use of soundwalls to be used as noise buffering.

Implementation Measure N1-3.1
*Consistent with **Implementation Measure LU2.2-2**, the use of soundwalls is discouraged, and should only be used if other techniques such as landscaping, setbacks and screening are proved infeasible or inadequate.*

CHAPTER

6

PUBLIC FACILITIES AND SERVICES ELEMENT

INTRODUCTION

The Public Facilities and Services Element describes public facilities and utility services provided by the City and public agencies within the City and surrounding area. Public services generally include fire and police protection, public schools, hospitals, libraries, park and recreation services, as well as social and cultural services. The utilities described in this section include major infrastructure systems such as the water supply and distribution network, the sewage collection and treatment system, and the natural gas network. Drainage facilities are discussed in the Safety, Air Quality and Noise Element.

ORGANIZATION OF THE ELEMENT

This Element is organized into three main sections described below:

- **Introduction**. This section includes an overview of the contents of the Public Facilities and Services Element and a discussion of state law requirements.
- **Background and Setting.** This section provides a profile of the existing conditions and provides an assessment of what measures will be required to accommodate the level of development anticipated with the Land Use Diagram.
- **Public Facilities and Services Goals, Policies and Implementation Programs.** This section outlines Coalinga's overall Public Facilities and Services goals, and the policies and implementation programs designed to attain these goals.

REQUIREMENTS OF THE PUBLIC FACILITIES AND SERVICES ELEMENT

California Government Code Section 65302 does not require a Public Services and Facilities Element to be included in a General Plan. However, Section 65303 states: "The general plan

may include any other elements or address any other subjects which, in the judgment of the legislative body, relate to the physical development of the City."

The Public Services and Facilities Element is closely related to the Land Use and Circulation Elements. The Element is also related to the Safety, Air Quality, and Noise Element and the Open Space and Conservation Element.

Consistency with the Safety, Air Quality and Noise Element is achieved through goals and polices which afford protection related to police and fire service, threats from flooding, avoidance of health hazards associated with inadequate provisions of potable water and sanitary sewer facilities, and the management of hazardous materials.

Background and Setting

Fire

Fire protection is available from the City of Coalinga Fire Department located at 300 West Elm Avenue. The Fire Department provides fire and life safety services to the residents and businesses of the City of Coalinga. The department responds to fire, vehicle accidents, hazardous materials releases, medical emergencies and other incidents requiring immediate action to reduce loss of life and property.

The department consists of twelve full-time personnel and is supplemented by a paid-call (volunteer) force of approximately eleven. The Fire Department currently has three engines and an 80-foot ladder truck. The department also operates and maintains three ambulances, which have a service area of over 1,000 square miles. The primary ambulance is staffed full time by an Advanced Life Support (ALS) crew and the second ambulance can be staffed at either an ALS or Basic Life Support (BLS) level. The City's general fund supports all services of the department. The City receives monthly revenue for the ambulance service from the Fresno County Health Department and the Coalinga Hospital District.

All portions of the City are within three miles of the fire station; however, due to the expansion of the City, response times of over five minutes are not uncommon. The City has "mutual aid" and "instant aid" agreements with the Fresno County Fire Protection District (FCFPD). Under the instant aid agreement, FCFPD automatically responds to critical facility fires in Coalinga. Critical facilities (i.e., those facilities which are occupied) in the City include schools, convalescent homes, prisons and the hospital. In return, the Coalinga Fire Department responds to any fire within one-half mile of the City's incorporated boundary. Under the mutual aid agreement, FCFPD and Pleasant Valley State Prison (PVSP) Fire Department will respond (when available) when requested. The City will also provide an engine crew to assist the Office of Emergency Services (OES) when requested.

The Insurance Services Office (ISO) Commercial Risk Services, Inc. provides fire insurance ratings for communities according to the adequacy of their fire protection services and according to the presence of particular fire hazards. The rating system is based on the level of service provided to a community. The City of Coalinga has received (1993) an ISO protection classification rating of 3 on a scale of 1 (optimal) and 10 (unprotected).

A basic fire flow of 2,500 gallons per minute (gpm) can be maintained for two hours at any time during a period of three days with consumption at the maximum rate. In a single-family residential area, a fire flow of 1,500 gpm at a 20-pound per square inch (psi) residual pressure is commonly applied. Fire flow requirements in nonresidential areas vary at each location according to construction material, square footage, number of stories and building usage. The "basic fire flow," as defined by ISO for Coalinga, is 1,500 gpm with duration of two hours (300,000 gallons).

Emergency water storage is an important consideration for the provision of fire protection services. Emergency water storage is the water volume recommended to meet demand during emergency situations. In Coalinga, the most probable cause of a total loss of supply would be a major earthquake. In the event this should occur, the only water available would be stored in two steel or concrete tanks located at Palmer Avenue and Derrick Avenue and at Calaveras Avenue south of Palmer Avenue. Together these tanks have a capacity of more than five million gallons. Further discussion of the City's water storage capacity is provided in the water system section below.

The General plan recommends that the City develop a Fire Measures Department Master Plan that addresses and provides for future facility, equipment, communication system, and personnel requirements to accommodate planned growth pursuant the Land Use Diagram.

POLICE

The Coalinga Police Department has the responsibility of preserving the peace, responding to law enforcement service requests, and protecting life and property within the City Limits. Personnel are available 24 hours a day, seven days a week to prevent and investigate criminal activity, apprehend suspects and violators, investigate traffic accidents and provide animal control services. The department is staffed with eighteen sworn officers. In addition, there are six non-sworn positions and two reserve officers. Officers conduct special investigations, crime analysis, training as well as records and evidence management and storage. The Police Department also provides dispatch services to its officers as well as the Coalinga Fire Department. Personnel operate the Dispatch Center in the Police Department around the clock seven days a week. The Department station is located in the City Center at 270 N. Sixth Street. The state-of-the-art station was completed and operational in late 1994.

The City's Police Department maintains a number of mutual aid/operational agreements, which include partnerships with the Fresno County Sheriff's Department and California Highway Patrol for service in the immediate unincorporated areas. Similar agreements exist with the recently annexed Pleasant Valley State Prison. The Coalinga Police Department also enjoys numerous

community partnerships with schools, businesses, allied agencies, and citizen organizations including Senior Citizens on Patrol (SCOP), Neighborhood Watch, Drug Abuse Resistance Education (DARE), Multi-Agency Gang Enforcement Consortium (MAGEC), and Fresno County Narcotics Enforcement Team (NET). The department places a high level of importance on traffic safety with aggressive efforts towards education, DUI enforcement, accident prevention and investigation and recommendations on traffic control devices and vehicle abatement.

This General Plan update recommends that the City develop a Capital Improvement Plan addresses that provides for future police facilities, equipment and personnel requirements to accommodate planned growth pursuant the Land Use Diagram.

SCHOOLS

The City is within the Coalinga-Huron Unified School District (CHUSD); the school district is also responsible for schools within the City of Huron Sphere of Influence and Fresno County rural areas. The CHUSD includes five elementary schools, two middle schools, two continuation high schools, a community day school and one senior high school. All of the CHUSD facilities are located in Coalinga except for one elementary school, a middle school and a continuation high school, which are located in Huron. Enrollment levels for school facilities within Coalinga are shown below in **Table 6-1**.

TABLE 6-1
COALINGA-HURON UNIFIED SCHOOL DISTRICT, 2005-2006 ENROLLMENT (COALINGA SCHOOLS ONLY)

School	Enrollment
Annie E. Cheney Kindergarten	161
Henry F. Bishop Elementary	273
Nell Dawson Elementary	461
Sunset Elementary	413
Coalinga Middle School	663
Cambridge Continuation High School	31
Community Day	14
Coalinga High School	1,210
Coalinga Total	**3,226**
District Total	**4,413**

Source: California Department of Education (2006)

The CHUSD has experienced steady growth in enrollments over the past several years. This growth is expected to increase to a growth rate of approximately 4+ percent per year. The growth is projected to result from:

- Pending and planned residential developments in the cities of Coalinga and Huron and in the unincorporated areas.
- Proposed annexations to the City of Coalinga.
- Construction of the Coalinga State Hospital in the Pleasant Valley area.

With the addition of fifteen portables, on several campuses, all of the schools are presently operating within their available capacity (October, 2002).[2] According to the CHUSD, continued residential growth in the Coalinga area would result in student overcrowding and in the need to construct new school facilities. Implementation of the General Plan will encourage development and growth in both the residential and non-residential sectors. Residential development will increase the permanent population of the City while non-residential development will increase the employment base within the CHUSD boundaries. As set forth in the CHUSD Five-Year Facilities Plan, to provide school facilities to house projected student enrollments, the CHUSD needs to:

- Construct at least one new elementary facility.
- Consider the expansion of the High School at the existing facilities on Baker Street or consider other alternative sites for the construction of new facilities.
- Refurbish existing facilities. Modernization projects planned for the High School and Sunset Elementary school sites will provide additional teaching stations.

The City recognizes the pressures on the school district given a burgeoning school population; the lack of State responsibility to fund schools properly; and the lack of adequate enabling legislation, which defines the role of local government to meet school funding needs. In an effort to plan for and address these issues, specific goals, policies and implementation measures relating to the City's schools have been included in this General Plan.

Parks and Recreational Facilities

The two developed parks in the City are Keck Park and Olsen Park. Keck Park is a 15-acre community park that includes the Coalinga Community Center. This park is located on Jayne Avenue on the western edge of the City. Olsen Park is a 10-acre park located on Jayne Avenue east of the commercial core area. School district facilities also are available.

The Coalinga-Huron Recreation and Park District provides recreational facilities to the cities of Coalinga and Huron and the rural areas including the fitness center and senior center. The District currently provides recreation services and sports for preschoolers through senior citizens. Sports and athletic programs are offered at the elementary, high school and community college also.

A Youth Sports Complex is proposed on Cambridge Avenue across from the Bishop and Coalinga Middle School campuses. The proposed sports complex includes both organized and open use recreation opportunities. Organized recreation includes sports activities such as baseball, softball, soccer and Bicycle Moto-cross*(X)* (BMX), intended to be utilized primarily by the various sports

leagues. Open use recreation includes jogging paths, multi-purpose courts, Skateboard Park, tot-lot and amphitheater.

This General Plan Update outlines measures to ensure that ample parks and recreational facilities to serve the special needs population, residents and visitors.

AIRPORT

In 1996, the City relocated and constructed the Coalinga Municipal Airport at the corner of Phelps and Calaveras Avenues approximately four miles east-northeast of the City in the southwest portion of Fresno County. The airport is located on approximately 1,012 acres of land at an elevation of 622 feet above mean sea level. The airport is classified as a General Aviation Airport in the National Plan of Integrated Airport Systems and as a General Aviation Community Airport in the California Aviation System Plan. The facility has 5,000 feet of lighted runway. Aircraft operations include air taxis carrying passengers and cargo, general aviation and military operations. The ultimate buildout for the new airport includes extending the runway to 7,500 feet and upgrading the instrument approach to a full Instrument Landing System.

The airport is located within the Airport Master Plan Area as described in the Land Use Element of this General Plan. New development within the area is required to be master planned through the provisions outlined in the 2005 Airport Master Plan (Aries Consulting).

WATER

Water Quality

Coalinga's groundwater is of poor quality due to high concentrations of sodium, sulfates and total dissolved solids (TDS). This condition occurs at depths between 500 and 1,500 feet; therefore, groundwater is not considered a viable source of potable water for the Coalinga planning area. Even for crop irrigation, groundwater is considered only of "marginal acceptability."

Due to the poor groundwater quality, potable water utilized by the City consists of imported water. To obtain domestic water, the City entered into contract with the U.S. Department of the Interior, Bureau of Reclamation for water service. The current contract obligates the Bureau of Reclamation to furnish Coalinga up to 10,000 acre-feet (AF) of water per year. The contract also establishes that the minimum quantity of water that the City is obligated to accept and pay for throughout the life of the contract shall not be less than the average annual use for the previous five years. Overall water consumption has averaged 5,000 acre-feet per year (AFY).

Water Facilities

Water Treatment Plant

Coalinga's surface water treatment plant originally came on line in April 1972 with a nominal capacity of eight million gallons per day (MGD) average daily flow and a hydraulic (maximum

flow) capacity of 12 MGD. In 1992, primarily in anticipation of the increased demands resulting from construction of the Pleasant Valley State Prison, the treatment plant was expanded to a nominal treatment capacity of 12 MGD and a hydraulic capacity of 16 MGD. The treatment plant takes water from the California Aqueduct via the Coalinga Canal.

Filtered Water Pump Station

The filtered water pump station includes two 450 horsepower (HP), 2,300 gallons per minute (gpm) and 2,400 gpm and three 700 HP, 3,600 gpm vertical turbine pumps. When in good repair, the pump station has the operational ability to pump the treatment plant capacity of 16.4 MGD (11,400 gpm) with one of the 450 HP pumps out of service. The booster pump station lifts treated water in a series of 24-, 27- and 30-inch transmission mains leading to Coalinga.

Storage Reservoirs

Coalinga's existing water system includes the five storage reservoirs listed below. All of the reservoirs consist of steel tanks resting on reinforced concrete ring wall foundations, none of the tanks are bolted to the ring wall foundations. The Oil King and Northwest reservoirs' sole function is to provide water to oil companies. As such, they are excluded from the evaluation of the City's available storage. The existing combined storage capacity of the Palmer, Derrick and Calaveras reservoirs is 15.4 million gallons (MG).

- Palmer Avenue Reservoir - Located on the south side of Palmer Avenue, the Palmer Reservoir has a capacity of 2.8 MG. This reservoir receives the pumped filtered water from the water treatment plant.
- Calaveras Avenue Reservoir - Located on the east side of Calaveras Avenue, the Calaveras Reservoir has a capacity of 5.0 MG. Water flows from the filtration plant to the Calaveras Reservoir and then to the Pleasant Valley State Prison.
- Derrick Avenue Reservoir - The Derrick Reservoir is located west of the City, on the east side of Derrick Avenue. This reservoir has a capacity of 7.6 MG. Water from the Palmer Reservoir flows to the Derrick Reservoir and then into the City.
- Oil King Reservoir - Located west of Highway 33/198, approximately three miles north of Palmer Avenue. The reservoir has a capacity of 0.5 MG. This reservoir serves oil company customers exclusively.
- Northwest Reservoir - Located east of Derrick Avenue, approximately three miles north of Gale Avenue, the Northwest Reservoir has a capacity of 0.2 MG. Like the Oil King Reservoir, this reservoir is for the exclusive use of oil company customers.

Booster Pumping Stations

Coalinga's water system includes two booster pumping stations, but neither functions as a part of the City's main service area. Both booster pumping stations serve oil company customers

exclusively. The Oil King booster pumping station consists of two 200-HP, 1,440 gpm booster pumps that elevates the Palmer Avenue Reservoir water to the Oil King Reservoir. The Derrick Avenue booster station consists of two 75-HP, 556 gpm booster pumps to elevate water to the Northwest Reservoir.

Distribution System

Water destined for Coalinga flows southerly in the Central Valley Project's California Aqueduct and then into the Coalinga Canal, approximately fifteen miles northeast of the City. A raw water pump station lifts the Coalinga Canal water to the City's surface water treatment plant. After the water flows through the City's conventional filtration treatment plant, the treated water is pumped by a filtered-water pump station into a 27-inch diameter pipeline in Palmer Avenue. Approximately two miles west of the water treatment plant, the flow tees at Calaveras Avenue.

Water flowing west continues for another mile and a half to the Palmer Avenue Reservoir. Water going to the Pleasant Valley State Prison travels south in the 12-inch Calaveras Avenue pipeline to the Calaveras Avenue Reservoir. After flowing through the Calaveras Reservoir, it continues south in Calaveras Avenue another 3.5 miles to Jayne Avenue and then east to the prison. Water can potentially travel from the Calaveras Reservoir westerly into the City, but the hydraulic conditions are such that this seldom occurs.

The water leaving the Palmer Reservoir flows through approximately eight miles of 27-inch and 24-inch transmission mains to the Derrick Avenue Reservoir. Water travels primarily from the Derrick Avenue Reservoir through 30-, 24- and 18-inch transmission mains into the City's water distribution system. The distribution system consists of a network of water mains ranging in size from 4 to 14 inches in diameter. The system is capable of supplying peak hour needs without excessive losses and can deliver fire flows to main lines.

System Demand

There were approximately 2,965 service connections inside the City serving the 2002 population of 12,379. The City also serves about 4,700 persons at the Pleasant Valley State Prison, which was annexed by the City in 2000, and has approximately sixty connections in rural areas and miscellaneous small business connections located outside the City. Treated water is also provided to two oil companies, a co-generation facility and the Coalinga State Hospital, which opened in late 2005.

In 2000, Coalinga treated and furnished approximately 4,856 AF of potable water to its customers. Around 235 AF of untreated water was also sold to the Harris Ranch feedlot and the Polvadero Golf Course. In addition, Coalinga transferred 3,000 AF of excess water in 2000 to another Reclamation user, bringing Coalinga's total water provided by Reclamation in the year 2000 to 8,091 AF.

Water System Master Plan

In 2001, the City embarked upon a water main Capital Improvement Program (CIP) for replacements and upgrades of deteriorating and undersized water and sewer mains in selected areas throughout the City. The project was anticipated to take approximately three years to complete. Some of the improvements correspond to the CIP in the City's 1991 *Water System Master Plan*. Other improvements are to remedy known maintenance problems. Although it is anticipated that the replacements and upgrades will improve system performance, the degree to which the performance of the water distribution system will be enhanced is not yet known.

The City authorized Boyle Engineering to prepare a *Water System Master Plan* in 2002 to identify existing water system deficiencies and recommend necessary system improvements to meet existing and future water requirements. The recommended projects are based on hydraulic analyses and incorporate staged expansion improvements for the years 2005, 2010, 2015 and 2020. Most of the expansion improvements are based on a grid expansion of the water distribution system. To account for anticipated growth within the City limits, a grid of 12-inch pipelines was added to the system to represent the required pipelines based on staged growth. The rationale for constructing these grid mains is to provide water service and fire protection to approximately ¼-mile square areas, with smaller distribution mains as development occurs. Looping of grid mains and distribution mains is important to increase fire flow capacity and to prevent water stagnation.

Other improvements include upgrades to the water treatment plant and storage reservoirs. In addition, the *Water System Master Plan* recognized that the current 10,000 AF annual water supply contracted to the City would be insufficient for future growth and the existing water treatment plant would not have the necessary treatment and pumping capacity. The study noted that this issue would require further study beyond the scope of the report. Although it may be possible, depending on groundwater quality, to install new wells near the Derrick or Calaveras Reservoirs and blend the pumped groundwater with treated surface water, the study included a 4-MGD reverse osmosis treatment plant in the CIP for 2020.

This General Plan update recommends that the City develop a Capital Improvement Plan that provides for water facilities to accommodate planned growth pursuant the Land Use Diagram.

WASTEWATER

The City of Coalinga controls and administers the wastewater system for both domestic and industrial sewerage. The oldest portions of the City's wastewater collection system were constructed in the first half of the 20th century to serve what is now the central portion of the City. As the City has grown, the collection system has been extended to serve new development. The collection system currently serves all developed areas within the City Limits. Pleasant Valley State Prison treats and disposes of its wastewater on-site and does not contribute sewer flow to the City's collection system or the wastewater treatment plant. Maintenance of the City sewer system

is financed by sewer charges. Extension of sewer mains to new development is paid for by the developer.

Wastewater Facilities

Collection System

The City's existing sewer collection system is comprised of a network of over 42 miles of sewer pipelines with sizes ranging from six to 24 inches in diameter. The system also includes three sewage pumping stations as well as associated force mains. The backbone of the system consists of trunk and interceptor sewers. In general, interceptor sewers are considered to be the larger pipelines, approximately 21 inches and larger, while trunk sewers typically range from 12 to 18 inches. The trunk and interceptor sewers function to convey wastewater collected in the sewer system to the City's wastewater treatment plant (WWTP) which is currently located east of the City near the confluence of Warthan Creek and Los Gatos Creek.

Pumping (Lift) Stations

Pumping stations (also known as lift stations) raise wastewater flows to a higher elevation in order to continue gravity flow at reasonable slopes and depths. Pump capacities should be sufficient to provide for the pumping of the peak flow rates experienced in the sewer system. Pumping stations with capacities less than anticipated peak flow rates are considered deficient. The City currently operates and maintains three pumping stations at Posa Chanet, Creekside Estates and the Industrial Park.

Wastewater Treatment Plant

The City of Coalinga owns and operates a WWTP under California Regional Water Quality Control Board (RWQCB) Waste Discharge Requirements Order No. 94-184. There are no significant industrial users currently discharging into the WWTP. The WWTP is located at the confluence of Los Gatos Creek and Warthan Creek approximately one mile east of the City. Wastewater disposal at the WWTP occurs via an aerated facultative lagoon process followed by stabilization ponds and final disposal on adjacent land for percolation and irrigation of non-food crops. The quality of the effluent according to 40 Code of Federal Regulations (CFR) Title 22 is undisinfected secondary.

The WWTP has undergone two major improvements in the last twenty years. In 1982, the primary clarifier and anaerobic digester were abandoned in favor of additional aerated lagoons, increasing the permitted treatment capacity to 0.93 MGD. In 1991, modifications to the plant included rehabilitation of the previously abandoned primary clarifier and conversion of the previously decommissioned anaerobic digester to an aerobic digester, increasing the plant capacity to 1.34 MGD. The current (2002) average daily flow is 0.93 MGD, which represents approximately 70 percent of the current average daily permitted flow. However, biochemical oxygen demand (BOD) of the wastewater flowing into the plant is greater than assumed for the

design of the treatment facilities and the plant is operating at approximately 90 percent of the plant's BOD reduction capability. State law requires the City to begin planning for the next plant expansion once the treatment plant reaches 80 percent of its design capacity. The Sewer System Master Plan prepared for the City by Boyle Engineering in 2005 evaluated alternatives for the expansion of wastewater treatment and disposal facilities. The chosen alternative, construction of an entirely new plant at a different location, is described below.

Sewer System Master Plan

The City of Coalinga recognized the importance of planning, developing and financing future sewer system facilities to provide reliable service for existing customers and for anticipated future development. In 2002, the City authorized Boyle Engineering to prepare a *Sewer System Master Plan* to identify existing collection system and treatment deficiencies and recommend necessary improvements to meet future sewage requirements.

As part of the *Sewer System Master Plan*, a *Wastewater Treatment Plant Expansion/Relocation Feasibility Study* was prepared by Boyle Engineering and approved by the City. The existing WWTP is situated east of the City, outside the City limits. However, urban development occurring east of the City was recognized as problematic due to the expansion of residential areas in proximity to the plant. Therefore, the City authorized a consideration of its possible relocation.

After review of the various alternatives, the City directed Boyle to finalize the *Sewer System Master Plan* under the assumption that a new facility would be constructed at a new location to accommodate current and projected flows. The proposed new WWTP location lies south of Jane Avenue, east of Jacalitos Creek and west of Alpine Avenue. A new sewer line from the existing WWTP would need to be constructed to convey the sewer flow to the new location. Assuming a daily consumption of 90 gallons per capita per day (GPCD), the average daily design flow assumed for the proposed expansion will be 2.36 MGD with a peak factor of 1.75 MGD for maximum hourly flow.

The City's sewer system is currently undergoing two million dollars in improvements to be done in four phases that will correspond to the water distribution system improvements. Improvements under consideration include a new screening device, improved scum handling facilities and a trickling filter process to replace the existing aerated lagoons. The trickling filter will expand the plant's treatment capacity from 1.34 mgd to 2.0 mgd. The existing collection system, treatment plant deficiencies and system improvements needed to meet sewerage requirements through the year 2020 are described in the City's Sewer System Master Plan.

The capacity of the new wastewater facility and current improvements to the sewer system improvements will likely not accommodate full buildout of the General Plan. The design of the new plant has not been finalized, so there may be opportunity to increase design capacity. Regardless, this General Plan Update recognizes the potential deficiency in wastewater infrastructure and has incorporated Policies and Implementation measures to address such a potential shortfall including development of a Capital Improvement Plan (CIP) that addresses that

wastewater facilities and infrastructure to accommodate planned growth pursuant the Land Use Diagram.

Natural Gas

The City of Coalinga is one of only three local jurisdictions in California that owns and operates a natural gas distribution system. The City has over 35 miles of gas lines, which were upgraded substantially after the 1983 earthquake. Between 200 and 210 million cubic feet of gas per year is distributed to 3,100 customers.

Beyond the City limits, Pacific Gas and Electric (PG&E) provides natural gas. Two gas mains are located within the vicinity of Coalinga. One line runs parallel along the west side of Interstate 5. The other gas main is located approximately three miles to the north of Jayne Avenue and terminates at the intersection of Calaveras Avenue and Tornado Avenue.

Solid Waste Disposal

At the current time, the City of Coalinga subcontracts out its solid waste collection and disposal services within the City limits. Rural residents outside the City limits in the SOI and AOI are responsible for their own solid waste services. Currently, the City generates approximately 20 tons per day, excluding solid waste generated by the Pleasant Valley State Prison. The prison averages five tons per day.

The Coalinga Disposal Site, operated by the County of Fresno, is located one mile south of the City of Coalinga adjacent to Highway 118. This landfill serves the cities of Coalinga and Huron as well as the rural areas of southwestern Fresno County. Currently, the Coalinga Disposal Site averages 50 tons per day with a maximum daily permitted capacity of 100 tons per day (*New Mental Health Treatment Facility DEIR*). The landfill is expected to serve the Coalinga region for the next 35 to 40 years. Once the landfill has reached capacity, local solid waste will be taken to the regional County landfill on American Avenue, approximately 45 miles east of the City. This landfill is presently expanding to 440 acres in order to accommodate regional growth.

Public Facilities and Services Element Goals, Policies and Implementation Measures

The following Community Vision Statements define the values and vision for the community and along with the guiding principles in Chapter 1 of this General Plan, provide the foundation for public facilities and services goals, policies and implementation measures.

- Provides creative, orderly, and efficient community facilities and municipal services that meet the needs of residents and visitors. Community facilities are sensitively and successfully integrated into the natural environment with necessary municipal and public utility services including police, fire, emergency medical, water, wastewater, storm water, electrical power, natural gas, cable television, communications, library, cemetery, building, community development, solid waste and public education services implemented at the lowest possible cost.
- Develops a convenient and comprehensive system of neighborhood parks, community parks, athletic parks, primitive natural areas, green belts, open space, bike paths, trails, scenic vistas and other recreational opportunities that meets the needs of the citizens and enriches the lives of residents and visitors. Indoor and outdoor parks and recreation facilities that will be adaptable to changes in the population, and provide beauty and functional efficiency to complement the City's natural environment and the needs of its citizens.

The following goals, policies and implementation measures have been established to guide short and long-range decision making by the community.

Goal PFS1
Adequate facilities and services to reduce level of threat to life, structures and the environment caused by fire.

Policy PFS1-1
The City shall plan for adequate facilities, equipment and personnel to meet fire-fighting demands.

Implementation Measure PFS1-1.1
Create, periodically evaluate, and implement a Fire Department Master Plan that addresses and provides for future facility, equipment, communication system, and personnel requirements to accommodate planned growth pursuant to this General Plan.

Implementation Measure PFS1-1.2
Establish an ordinance requiring new development to pay for the increased fire protection necessitated by that particular development.

Implementation Measure PFS1-1.3
Maintain mutual and instant aid agreements with other fire and emergency service agencies in rural areas of the community.

Implementation Measure PFS1-1.4
Prepare, adopt and maintain standards of coverage for the Fire Department specific to the geography of Coalinga.

Implementation Measure PFS1-1.5
Establish and implement development standards that mandate adequate access to structures for fire fighting equipment and appropriate buffer areas for the protection of property from wildland fires.

Implementation Measure PFS1-1.6
Train fire department personnel in wildfire risk assessment and inform homeowners of fire dangers, appropriate responses to fire, and ways to prevent loss.

Implementation Measure PFS1-1.7
Maintain an ongoing fire inspection program to reduce fire hazards associated with older buildings, critical facilities, public assembly facilities, and commercial and industrial buildings.

Goal PFS2
A safe community.

Policy PFS2-1
The City shall ensure Coalinga continues to receive adequate police protection.

Implementation Measure PFS2-1.1
Investigate and, if legal and feasible, establish and implement regulations requiring new development to pay for the increased police protection necessitated by that particular development.

Implementation Measure PFS2-1.2
Continue to cooperate with the Fresno County Sheriff's Department to provide back-up police assistance in emergency situations.

Implementation Measure PFS2-1.3
Require Police Department review of subdivision design for all new projects.

Implementation Measure PFS2-1.4
*Consistent with **Implementation Measure PFS8-1.3**, the City periodically review and update as needed, its adopted Capital Improvement Plan that addresses and provides for*

future police facilities, equipment and personnel requirements to accommodate planned growth pursuant the Land Use Diagram.

Policy PFS2-2
The City shall enhance public awareness and participation in crime prevention.

Implementation Measure PFS2-2.1
Develop new and expand existing educational programs, in both Spanish and English, dealing with personal safety including neighborhood watch and commercial association watch/protection programs.

Implementation Measure PFS2-2.2
Promote the use of defensible space concepts (i.e. site and building lighting, public observation of open spaces, secured areas) in project design.

Goal PFS3
High quality educational opportunities for the residents of Coalinga.

Policy PFS3-1
The City shall provide high quality educational facilities and services that are physically and functionally integrated with their surrounding neighborhoods and the community at large.

Implementation Measure PFS3-1.1
Develop procedures to incorporate school site location and acquisition as part of the Specific Planning process.

Implementation Measure PFS3-1.2
Coordinate operation and maintenance of joint use facilities by agreements between the affected parties.

Implementation Measure PFS3-1.3
Investigate and, if legal and feasible, implement funding methods to supplement current Coalinga-Huron Unified School District funds.

Implementation Measure PFS3-1.4
Coordinate with the Coalinga-Huron Unified School District to update the School Master Plan.

Implementation Measure PFS3-1.5
Coordinate City and School District development monitoring efforts to ensure that the District has early knowledge of all proposed residential projects, the ability to project combined effects of projects on school attendance, utilize consistent analytical approaches, and effectively convey information regarding the ability to accommodate new students to the City Planning Departments.

Goal PFS4

Provide public schools that are physically and functionally integrated with their surrounding neighborhoods and community at large.

Policy PFS4-1

Plan and provide for schools that are integrated into the community.

Implementation Measure PFS4-1.1

Designate sites for new schools so the schools will be planned as a focal point of a neighborhood interrelated with neighborhood retail uses, parks, greenways and off-street paths.

Implementation Measure PFS4-1.2

Designate sites for schools and develop park development standards so that junior high and high schools will be planned adjacent to neighborhood and community parks to promote joint use of appropriate facilities.

Implementation Measure PFS4-1.3

Designate sites for elementary schools that are located adjacent to collectors but away from major thoroughfares.

Implementation Measure PFS4-1.4

Develop bikeway and trail standards that link school facilities to planned bikeways and pedestrian paths.

Implementation Measure PFS4-1.5

Require development plans to show the location of planned schools and to reflect General Plan policies regarding school and neighborhood design.

Implementation Measure PFS4-1.6

Coordinate with public school facility planners during the development of Master Plan Growth Areas or creation or update of Specific Plans.

Implementation Measure PFS4-1.7

Coordinate operation and maintenance of joint use facilities by agreements between the affected parties. (e.g. Department of Parks and Recreation, Coalinga-Huron Recreation and Park District, and School District).

Goal PFS5
Provide school facilities equal to state standards for school enrollment and school site size for all of Coalinga's schools.

Policy PFS5-1
Provide adequate land for school sites and school facilities to meet the changing needs of the population.

Implementation Measure PFS5-1.1
Develop ordinances and standards that require land dedications or reservations for school sites to meet state guidelines for school parcel size.

Implementation Measure PFS5-1.2
Require Master Plan Growth Areas and Specific Plans to consider the potential location of future school sites based upon adopted school district facilities plans and criteria.

Implementation Measure PFS5-1.3
Develop standards and procedures that address the need for reservation of school sites in residential subdivisions.

Implementation Measure PFS5-1.4
Support state legislative efforts to secure additional state funding for school construction and support maintenance of District priorities for funds in the state school bond program.

Implementation Measure PFS5-1.5
To the extent feasible and legal, condition residential projects to phase development with school facility development that is tied to school capacity, provided that the school District proceeds in good faith to complete the timely construction of needed facilities.

Implementation Measure PFS5-1.7
Support the use of Development Agreements to tie residential development to the provision of school facilities and school capacity.

Implementation Measure PFS5-1.8
Develop standard findings for General Plan Amendments and rezones that require consideration of school facility needs to accommodate projected students consistent with service level standards.

Goal PFS6
Ample parks and recreational facilities to serve the special needs population, residents and visitors.

Policy PFS6-1
Provide and maintain neighborhood and community park facilities, including the sports complex, at a ratio of 2.5 acres to 1,000 residents.

Implementation Measure PFS6-1.1
Coordinate with the Coalinga-Huron Recreation and Park District to update the 1975 Coalinga-Huron Master Plan of Parks document.

Policy PFS6-2
Develop new neighborhood and community parks in new residential neighborhoods as growth occurs.

Implementation Measure PFS6-2.1
Establish development conditions requiring new development to provide adequate parks and recreational facilities to serve the special needs population, residents and visitors, either through the dedication of land or payment of in-lieu fees.

Policy PFS6-3
Provide sufficient playfields to accommodate practice and competitive demands for both organized and informal activity.

Implementation Measure PFS6-3.1
Establish Zoning Ordinance development standards that require neighborhood and community parks to include playfields for activities such as baseball, softball, soccer and football as well as picnic areas.

Implementation Measure PFS6-3.2
Establish adequate maintenance programs to maintain and enhance neighborhood and community park facilities.

Policy PFS6-4
Promote recreation programs and facilities that meet the special needs of children, the elderly, and the disabled population.

Implementation Measure PFS6-4.1
Initiate programs and construction of facilities within public parks that generate more outdoor and indoor activities for senior citizens.

Implementation Measure PFS6-4.2
Require barrier free access in all new park developments.

Implementation Measure PFS6-4.3
Coordinate planning of park facilities and operation of joint use facilities, where feasible, with the School District and other community organizations.

Goal PFS7
Adequate and efficient airport services.

Policy PFS7-1
The City shall encourage, support and expand high quality airport facilities needed to meet the needs of the City's expanding resident and tourist population.

Implementation Measure PFS7-1.1
Update the Airport Master Plan to promote orderly development in and around the Airport while protecting public health and safety.

Implementation Measure PFS7-1.2
Establish appropriate revenue generating land uses and services in and around the Airport.

Goal PFS8
Adequate and efficient utility service.

Policy PFS8-1
The City shall provide adequate and efficient utility service to the residents of Coalinga.

Implementation Measure PFS8-1.1
Coordinate with other utility providers to avoid duplication of utility services.

Implementation Measure PFS8-1.2
Utilize reclaimed wastewater for irrigating public and private lands wherever possible and where not precluded by public health concerns and laws. Utilize reclaimed wastewater for irrigating public and private lands wherever possible and where not precluded by public health concerns and laws. The water quality requirements of the City's industrial customers shall be evaluated, and the feasibility of using reclaimed wastewater or groundwater shall be considered.

Implementation Measure PFS8-1.3
In accordance with State law, the City's adopted five-year Capital Improvement Plan (CIP) shall provide for utilities including water, wastewater, drainage, fire, police and other facilities to meet needs of new development proposed under the General Plan Update 2025. Such CIP shall indicate capital projects, estimated costs, time frames, responsible agencies or departments and possible funding sources.

Implementation Measure PFS8-1.4
Obtain funding, prepare a study, and relocate the existing Waste Water Treatment Plant.

Implementation Measure PFS8-1.5
Develop and adopt a program designed to anticipate potential annual growth and project water supply demand in order to control growth and ensure adequate long-term water supply.

Implementation Measure PFS8-1.6
Develop and adopt a program designed to assess the capacity of the existing wastewater treatment facility to ensure adequate wastewater services will be available to accommodate additional growth.

Implementation Measure PFS8-1.7
Increase the capacity of the existing wastewater treatment facility, either by expansion or relocation, to serve additional growth proposed by the General Plan Update 2025.

Implementation Measure PFS8-1.8
Monitor natural gas usage in the City to ensure that adequate natural gas supplies are available in quantities sufficient to serve the community and develop supplies and facilities to meet future needs.

Policy PFS8-2
The City shall permit new development only when accompanied by adequate and efficient utility infrastructure and services and only when the effectiveness of existing infrastructure and services is not reduced.

Implementation Measure PFS8-2.1
The City shall coordinate new development with water availability in order to maintain an adequate supply of potable water for all Coalinga residents.

Implementation Measure PFS8-2.2
The City shall investigate the feasibility of developing a water bank in order to provide a consistent and dependable water supply during dry years when the City's water allocation is reduced.

Implementation Measure PFS8-2.3
Underground existing utility lines wherever feasible, and require the undergrounding of utility lines in new development.

Implementation Measure PFS8-2.4
Where new development requires the construction of new public facilities, the new development shall pay its fair share of the construction. Where necessary, the City shall require the dedication of land within newly developing areas for public facilities.

Implementation Measure PFS8-2.5
The City shall require that new development pay its fair share of the cost of all existing facilities it uses based on the demand for these facilities attributable to the new development; exceptions may be made when new development provides alternative sources of funding or equipment to offset any shortfall in revenues.

Implementation Measure PFS8-2.6
The City will calculate and adopt development impact fees to generally offset the cost of needed public facilities and services generated by new development and shall update such fees on an annual basis.

Policy PFS8-3
The City shall reduce per capita per day water consumption from 271 gpcd to 200 gcpd by the year 2015.

Implementation Measure PFS8-3.1
Require new developments to consider the feasibility of onsite retention/harvesting of stormwater to be used for irrigation or other non-potable purposes.

Implementation Measure PFS8-3.2
Identify and implement water conservation measures and require all new development to xeriscape to the maximum extent feasible.

Implementation Measure PFS8-3.3
Create and implement a low flow toilet retrofit program for all residences and businesses within one year. The program shall require residential property owners to submit verification that low flow toilets have been installed on their properties within 6 months of applying for water service.

Goal PFS9
Safe, efficient, and cost-effective removal of waste from residences, businesses and industry.

Policy PFS9-1
The City should promote the reduction of the amount of waste through 1) waste reduction 2) recycling; 3) waste to energy and composting; and 4) proper landfill disposal of the remaining solid waste.

Implementation Measure PFS9-1.1
Create school and community programs that promote recycling.

Implementation Measure PFS9-1.2
Prepare a source reduction and recycling element (SRRE) showing how the City intends to meet the goals set forth in the California Integrated Waste Management Act (CIWMA) of 1989 and ensure that solid waste activities in Coalinga are carried out in accordance with

the CIWMA and coordinated with other jurisdictions, as enforced by the Fresno County Community Health Department, Environmental Health Division.

Goal PFS10
High quality civic and community facilities for the residents of Coalinga.

Policy PFS10-1
Support the expansion of the Coalinga Regional Medical Center and the provision of more efficient and cost-effective health care services for the citizens of Coalinga.

Implementation Measure PFS10-10.1
Explore public/private partnerships and agreements with the development community as a method of providing quality, affordable health care facilities and services to all of Coalinga's citizens.

Policy PFS10-2
Support the expansion of senior care facilities in the community.

Implementation Measure PFS10-2.1
Explore public/private options for long-term care including nursing homes and assisted living facilities to serve the community.

Policy PFS10-3
Encourage the development of facilities and services to serve the needs of the youth, senior citizens, and other special needs groups within the community.

Implementation Measure PFS10-3.1
Explore public/private partnerships and agreements with the development community as a method of providing civic and community facilities.

GLOSSARY

Access - A way of approaching or entering a property, including ingress (the right to enter) and egress (the right to leave).

Air Basin - One of 14 self-contained regions minimally influenced by air quality in contiguous regions.

Air Pollutant Emissions - Discharges into the atmosphere, usually specified in terms of weight per unit of time for a given pollutant from a given source.

Air Pollution - The presence of contaminants in the air in concentrations that prevent the normal dispensive ability of the air and that interfere directly or indirectly with man's health, safety or comfort, or with the full use and enjoyment of property.

Air Quality Standards - The prescribed level of pollutants in the outside air that cannot be exceeded legally during a specified time in a specified geographical area.

Ambient Noise Level - The composite of noise from all sources near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

Annexation - The incorporation of a land area into an existing community with a resulting change in the boundaries of that community.

Arterial - A major street carrying the traffic of local and collector streets to and from freeways and other major streets, with controlled intersections and generally providing direct access to nonresidential properties.

A-Weighted Decibel (dBA) - A numerical method of rating human judgment of loudness. The sound pressure level in decibels, as measured on a sound meter, uses an A-weighting filter to de-emphasize the very low and very high frequency components of sound in a manner similar to the response of the human ear.

Buffer - A strip of land designated to protect one type of land use from another with which it is incompatible. Where a commercial district abuts a residential district, for example, additional use, yard, or height restrictions may be imposed to protect residential properties. The term may also be used to describe any zone that separates two unlike zones such as a multi-family housing zone between single-family housing and commercial uses.

Building - Any structure having a roof supported by columns or walls and intended for the shelter, housing or enclosure of any individual, animal, process, equipment, goods or materials of any kind or nature.

Capital Improvement Program - A proposed timetable or schedule of all future capital improvements (government acquisition of real property, major construction project, or acquisition of long lasting, expensive equipment) to be carried out during a specific period and listed in order of priority, together with cost estimates and the anticipated means of financing each project. Capital improvement programs are usually projected five or six years in advance and should be updated annually.

Clean Air Act - Federal legislation establishing national air quality standards.

Collector - A street for traffic moving between arterial and local streets, generally providing direct access to properties.

Community Noise Equivalent Level (CNEL) - The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five decibels to sound levels in the evening from 7 p.m. to 10 p.m. and after addition of 10 decibels to sound levels in the night after 10 p.m. and before 7 a.m.

Compatibility - The characteristics of different uses or activities that permit them to be located near each other in harmony and without conflict. The designation of permitted and conditionally permitted uses in zoning classifications is intended to achieve compatibility within the zoning district. Some elements affecting compatibility include: intensity of occupancy as measured by dwelling units per acre; pedestrian or vehicular traffic generated; volume of goods handled; and such environmental effects as noise, vibration, glare, air pollution, or radiation. On the other hand, many aspects of compatibility are based on personal preference and are much harder to measure quantitatively, at least for regulatory purposes.

Condominium - A building, or group of buildings, in which units are owned individually, and the structure, common areas and facilities are owned by all the owners on a proportional, undivided basis.

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

Council of Governments (COG) - A regional planning and review authority, such as Fresno County Council of Government, whose membership includes representation from all communities in the designated region.

Coverage - The proportion of the area of the footprint of a building to the area of the lot on which its stands.

Day-Night Average Level (Ldn) - The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of 10 decibels to sound levels in the night after 10 p.m. and before 7 a.m.

Decibel (dB) - A unit for describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).

Density - The number of families, individuals, dwelling units or housing structures per unit of land; usually density is expressed "per acre." Thus, the density of a development of 100 units occupying 20 acres is 5.0 units per acre.

Development - The division of a parcel of land into two or more parcels; the construction, reconstruction, conversion, structural alteration, relocation or enlargement of any structure; any mining, excavation, landfill or land disturbance, and any use or extension of the use of land.

Development Impact Fees - A fee or charge imposed on developers to pay for the costs to the community of providing services to a new development.

Development Plan - A plan, to scale, showing uses and structures proposed for a parcel or multiple parcels of land. It includes lot lines, streets, building sites, public open space, buildings, major landscape features and locations of proposed utility services.

Dwelling - A structure or portion of a structure used exclusively for human habitation.

Dwelling, Multifamily - A building containing two or more dwelling units, generally rented individually for the use of individual families maintaining households; an apartment building is an example of this dwelling unit type.

Dwelling, Single Family Attached - A one family dwelling attached to one or more other one family dwellings by a common vertical wall; condominiums and town homes are examples of this dwelling unit type.

Dwelling, Single Family Detached - A dwelling which is designed for and occupied by not more than one family and surrounded by open space or yards and which is not attached to any other dwelling by any means.

Dwelling Unit - One or more rooms, designed, occupied or intended for occupancy as separate living quarters, with cooking, sleeping and sanitary facilities provided within the unit for the exclusive use of a single household.

Easement - A grant of one or more of the property rights by the property owner to and/or for use by the public, a corporation, or another person or entity.

Economic Base - The production, distribution and consumption of goods and services within a planning area.

Element - A division of the General Plan referring to a topic area for which goals, policies, and programs are defined (e.g., land use, housing, circulation).

Eminent Domain - The authority of a government to take, or to authorize the taking of, private property for public use.

Environment - The sum of all external conditions and influences affecting the life, development and, ultimately, the survival of an organism.

Environmental Impact Assessment - An assessment of a proposed project of activity to determine whether it will have significant environmental effects on the natural and man-made environments.

Environmental Impact Report - A report, as prescribed by the California Environmental Quality Act (CEQA), on the effect of a development proposal and other major actions that significantly affect the environment.

Essential Facilities - Those facilities whose continued functioning is necessary to maintain public health and safety following a disaster. These facilities include fire and police stations, communications facilities, emergency operation centers, hospitals, administrative buildings, and schools designated as mass care shelters. Also included are key transportation facilities and utility facilities such as water supply, sewage disposal, gas storage facilities and transmission lines, and electric generation stations and transmission lines.

Fault - A fracture in the earth's crust forming a boundary between rock masses that have shifted.

Fault, Active - A fault that has moved recently and which is likely to move again. For planning purposes, an "active fault" is usually defined as one that shows movement within the last 11,000 years and can be expected to move within the next 100 years.

Fault, Inactive - A fault which shows no evidence of movement in recent geologic time and no potential for movement in the relatively near future.

Fault, Potentially Active - A fault that last moved within the Quaternary Period (the last 2,000,000 to 11,000 years) before the Holocene Epoch (11,000 years to the present); or a fault which,

because it is judged to be capable of ground rupture or shaking, poses an unacceptable risk for a proposed structure.

Fire Flow - A rate of water flow that should be maintained to halt and reverse the spread of a fire.

Flood Plain - A lowland or relatively flat area adjoining inland or coastal waters that is subject to a one percent or greater chance of flooding in any given year (i.e., 100-year flood).

Floodway - The channel of a natural stream or river and portions of the flood plain adjoining the channel, which are reasonably required to carry and discharge the floodwater or flood flow of any natural stream or river.

Floor Area Ratio (FAR) -The gross floor area of all buildings on a lot divided by the lot area; usually expressed as a numerical value (e.g., a building having 5,000 square feet of gross floor area located on a lot of 10,000 square feet in area has a floor area ratio of .5:1).

General Plan - A legal document that takes the form of a map and accompanying text adopted by the local legislative body. The plan is a compendium of policies regarding the long-term development of a jurisdiction. The state requires the preparation of seven elements or divisions as part of the plan: land use, housing, circulation, conservation, open space, noise, and safety. Additional elements pertaining to the unique needs of an agency are permitted.

Goal - The ultimate purpose of an effort stated in a way that is general in nature and immeasurable; a broad statement of intended direction and purpose (e.g., "Provide a balance of land use types within the City").

Grade - The degree of rise or descent of a sloping surface.

Greenbelt - An open area that may be cultivated or maintained in a natural state surrounding development or used as a buffer between land uses or to mark the edge of an urban or developed area.

Ground Failure - Mudslide, landslide, liquefaction or the compaction of soils due to seismic-induced groundshaking.

Groundwater - The supply of fresh water under the ground surface in an aquifer or soil that forms a natural reservoir.

Growth Management - Techniques used by government to control the rate, amount and type of development.

Hazardous Materials - An injurious substance, including pesticides, herbicides, toxic metals and chemicals, liquefied natural gas, explosives, volatile chemicals and nuclear fuels as defined and regulated by federal, state, and/or local law.

Historic Area - A district, zone or site designated by local, state or federal authorities within which buildings, structures and places are of basic and vital importance due to their association with history, or their unique architectural style and scale, or their relationship to a square or park, and therefore should be preserved and/or developed in accord with a fixed plan.

Household - According to the Census, a household is all persons living in a dwelling unit whether or not they are related. Both a single person living in an apartment and a family living in a house are considered households.

Household Income - The total income of all the people living in a household. Households are usually described as very low income, low income, moderate income, and upper income for that household size, based on their position relative to the regional median income.

Housing Affordability - Based on State and Federal standards, housing is affordable when the housing costs are no more than 30 percent of household income.

Housing Unit - A room or group of rooms used by one or more individuals living separately from others in the structure, with direct access to the outside or to a public hall and containing separate toilet and kitchen facilities.

Human Services - The programs which are provided by the local, state, or federal government to meet the health, welfare, recreational, cultural, educational, and other special needs of its residents.

Implementation Measure - An action, procedure, program, or technique that carries out general plan policy.

Income Categories - Categories for classifying households according to income based on the median income for each County; according to federal and state regulations as amended from time to time.

Infrastructure - The physical systems and services which support development and population, such as roadways, railroads, water, sewer, natural gas, electrical generation and transmission, telephone, cable television, storm drainage, and others.

Intensity - A measure of the amount or level of development often expressed as the ratio of building floor area to lot area (floor area ratio) for commercial, business, and industrial development, or units per acre of land for residential development (also called "density").

Issue - A problem, constraint, or opportunity requiring community action.

Intersection - Where two or more roads cross at grade.

Land Use - A description of how land use is occupied or used.

Land Use Plan - A plan showing the existing and proposed location, extent and intensity of development of land to be used in the future for varying types of residential, commercial, industrial, agricultural, recreational and other public and private purposes or combination of purposes.

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

Liquefaction - A process by which water-saturated granular soils transform from a solid to a liquid state due to groundshaking. This phenomenon usually results from shaking from energy waves released in an earthquake.

Local Street - A street providing direct access to properties and designed to discourage through-traffic.

Lot - The basic unit of land development. A designated parcel or area of land established by plat, subdivision, or as otherwise permitted by law, to be used, developed or built upon as a unit.

Median Income - The annual income for each household size, which is defined annually by the Federal Department of Housing and Urban Development. Half of the households in the region have incomes above the median and half are below.

Mobile Home - A structure, transportable in one or more sections, which is at least 8 feet in width and 32 feet in length, which is built on a permanent chassis and designed to be used as a dwelling unit, with or without a permanent foundation when connected to the required utilities.

National Flood Insurance Program - A federal program that authorizes the sale of federally subsidized flood insurance in communities where such flood insurance is not available privately.

Noise - Any audible sound.

Noise Exposure Contours - Lines drawn about a noise source indicating constant energy levels of noise exposure. CNEL and Ldn are the metrics utilized to describe community noise exposure.

Non-Domestic Water - Water consisting of but not limited to, a combination of treated wastewater and intercepted surface stream flow, supplemented by other waters including potable water.

Open Space - Any parcel or area of land or water essentially unimproved and set aside, designated, dedicated or reserved for public or private use or enjoyment.

Overcrowding - As defined by the Census, a household with greater than 1.01 persons per room, excluding bathrooms, kitchens, hallways, and porches.

Parcel - A lot or tract of land.

Policy - Statements guiding action and implying clear commitment found within each element of the general plan (e.g., "Provide incentives to assist in the development of affordable housing").

Program - A coordinated set of specific measures and actions (e.g., zoning, subdivision procedures, and capital expenditures) the local government intends to use in carrying out the policies of the general plan.

Redevelopment - Redevelopment, under the California Community Redevelopment Law, is a process with the authority, scope, and financing mechanisms necessary to provide stimulus to reverse current negative business trends, remedy blight, provide job development incentives, and create a new image for a community. It provides for the planning, development, redesign, clearance, reconstruction, or rehabilitation, or any combination of these, and the provision of public and private improvements as may be appropriate or necessary in the interest of the general welfare. In a more general sense, redevelopment is a process in which existing development and use of land is replaced with newer development and/or use.

Rehabilitation - The upgrading of a building previously in a dilapidated or substandard condition, for human habitation or use.

Right-of-Way - A strip of land acquired by reservation, dedication, prescription or condemnation and intended to be occupied or occupied by a road, crosswalk, railroad, electric transmission lines, oil or gas pipeline, water line, sanitary or storm sewer, or other similar uses.

Sensitive Species - Includes those plant and wildlife species considered threatened or endangered by the U.S. Fish and Wildlife Service and/or the California Department of Fish and Game according to Section 3 of the Federal Endangered Species Act and California Endangered Species Act. Endangered - any species in danger of extinction throughout all, or a significant portion of, its range. Threatened - a species likely to become an endangered species within the foreseeable future throughout all, or a portion of, its range. These species are periodically listed in the Federal Register and are, therefore, referred to as "federally listed" species.

Sewer - Any pipe or conduit used to collect and carry away sewage from the generating source to a treatment plant.

Site Plan - The development plan for one or more lots on which is shown the existing and proposed conditions of the lot including: topography, vegetation, drainage, floodplains, marshes and waterways; open spaces, walkways, means of ingress and egress, utility services, landscaping, structures and signs, lighting, and screening devices; any other information that reasonably may be required in order that an informed decision can be made by the approving authority.

Solar Access - A property owner's right to have the sunlight shine on his/her land.

Solid Waste - Unwanted or discarded material, including garbage with insufficient liquid content to be free flowing, generally disposed of in landfills or incinerated.

Special District - A district created by act, petition or vote of the residents for a specific purpose with the power to levy taxes.

Special Needs Groups - Those segments of the population which have a more difficult time finding decent affordable housing due to special circumstances. Under State planning law, these special needs groups consist of the elderly, handicapped, large families, female-headed households, farm workers and the homeless.

Standard Metropolitan Statistical Area (SMSA) - A county or group of contiguous counties which contains at least one City of 50,000 inhabitants or more, or twin cities of a combined population of at least 50,000.

Stationary Source - A non-mobile emitter of pollution.

Subdivision - The division of a lot, tract, parcel, or other unit of land for the purpose of sale, lease, or financing, immediately or in the future.

Survey - The process of precisely ascertaining the area, dimensions and location of a piece of land.

Transportation Systems Management - Individual actions or comprehensive plans to reduce the number of vehicular trips generated by or attracted to new or existing development. TSM measures attempt to reduce the number of vehicle trips by increasing bicycle or pedestrian trips or by expanding the use of bus, transit, carpool, vanpool, or other high occupancy vehicles.

Water Course - Any natural or artificial stream, river, creek, ditch, channel, canal, conduit, culvert, drain, waterway, gully, ravine or wash in which water flows in a definite channel, bed and banks, and includes any area adjacent thereto subject to inundation by reason of overflow or flood water.

Wetland - An area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

Zoning - A police power measure, enacted primarily by units of local government, in which the community is divided into districts or zones within which permitted, conditionally permitted, and special uses are established as are regulations governing lot size, building bulk, placement, and other development standards. Requirements vary from district to district, but they must be uniform within the same district. The zoning ordinance consists of a map and text.

Zoning Classification - A geographical area of a City zoned with uniform regulations and requirements.

Zoning Map - The officially adopted zoning map of the City specifying the uses permitted within certain geographic areas of the City.

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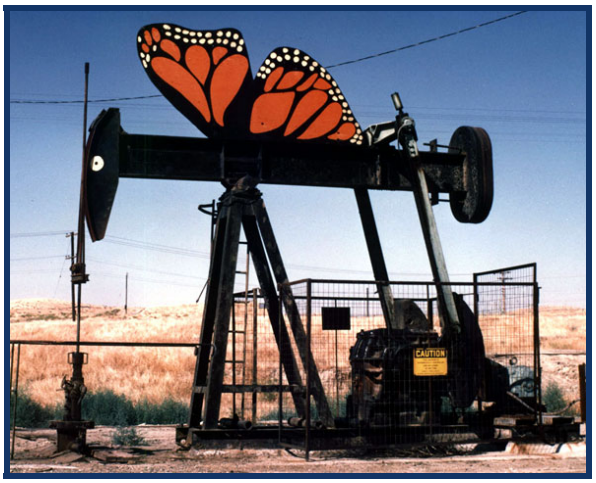

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MAPS

City of Coalinga Land Use Map.

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