

3.3 Public Utilities and Services

This section presents the environmental setting and impact analysis for public utilities and services including schools, water supply, wastewater treatment, solid waste systems, and public services (police and fire protection).

ENVIRONMENTAL SETTING

SCHOOLS

Existing School Facilities

Within the Planning Area, elementary and middle school education is provided by the Lemoore Union Elementary School District. There are currently four elementary schools (from grades K-6), one middle school, and one charter elementary/middle school (K-8) in Lemoore. High school education is provided by the Lemoore Union High School District. The Lemoore Union High School District has a larger coverage area that includes the unincorporated community of Stratford and currently comprises the main campus of Lemoore High School, an adjoining campus of the Gertrude F. Gundacker Alternative Education Facilities, and Lemoore Middle College High School which is located at the West Hills College Campus. The locations of school facilities are illustrated in Figure 3.3-1.

In addition to public schools, there are two private schools in Lemoore. Mary Immaculate Queen School provides K-8 education, while Kings Christian School provides K-12 education.

Enrollment and Capacity

According to the California Department of Education, Lemoore school districts provided education to approximately 5,600 elementary, middle and high school students in 2006. Almost all of the elementary schools reported enrollment figures that are close to maximum capacity. The middle schools are running at an average of 14 percent under capacity. Student capacity at Lemoore's three high schools varies between 24 percent under capacity to 20 percent over capacity.

Table 3.3-1 summarizes recent enrollment and capacity counts for these schools.

West Hills College

Located west of SR-41, West Hills Community College provides college level education to students living in Lemoore and around the region. Recently relocated to its present site from the northeast corner of Cinnamon Drive and 19th Avenue, the new campus opened its doors to Lemoore students in January 2002. West Hills College features 18 classrooms, a state-of-the-art science wing called a Collaboratory, the largest and most technologically advanced library in Kings County, a multipurpose center, a full-service student services and administration building, as well as an outdoor amphitheater for students and community members. Currently, the western wing is still under construction. The college presently accommodates 3,770 students onsite and online. By full completion it is expected to accommodate approximately 11,000 part time

students or 6,000 full time equivalents. The college is committed to educational excellence and works closely with the Lemoore community to provide outreach and appropriate support services to high school graduates, re-entry students, the military community, developmental, underserved, and special needs populations.

Table 3.3-1 Existing Public Schools in Lemoore 2006–2007

<i>School</i>	<i>Location</i>	<i>Enrollment</i>	<i>Total Capacity</i>	<i>Percent Capacity</i>
Elementary Schools (K-6)				
Cinnamon Elementary	500 E. Cinnamon Drive	620	630	98
Lemoore Elementary	573 Bush Street	674	700	96
Meadow Lane Elementary	Quandt & Meadow	587	650	90
P.W. Engvall Elementary	19th & Cedar Lane	697	700	100
<i>Total Elementary Schools</i>		2,578	2,680	96
Middle Schools (7-8)				
Liberty Middle	1000 Liberty Way	602	700	86
Lemoore University Charter (K-8)	West Hills College	191	240	80
<i>Total Middle Schools</i>		793	940	84
High Schools (9-12)				
Donald C. Jamison High (Continuation)	351 E. Bush Street	76	100	76
Lemoore Union High	101 E. Bush Street	2,104	1,755	120
Lemoore Middle College High	555 College Avenue	54	60	90
<i>Total High Schools</i>		2,234	1,915	117
Total		5,605	5,535	101

Source: California Department of Education, 2006-2007.

Figure 3.3-1 Existing and Proposed Parks and Schools (Front)

Figure 3.3-1 Existing and Proposed Parks and Schools (Back).

WATER SUPPLY

The City’s municipal water system obtains water from underground aquifers by pumping from six (6) active ground wells located within the Planning Area and four (4) in an 80-acre well field five miles north of the City. Currently, these wells have a capacity of approximately 19.2 million gallons per day (mgd) to a firm capacity of 15.9 mgd¹. Water is conveyed from the wells to consumers via a network of 6” to 16” pipelines. Within the distribution system, the City maintains four ground-level storage tanks with a total capacity of 4.4 million gallons. The City’s main water distribution plant is located along G Street west of Lemoore Avenue. In addition to the main domestic water supply system, the City operates a separate system to supply industrial water to the SK Foods tomato processing plant. The two water systems can be connected in case of an emergency such as a major fire or natural disaster.

Lemoore is located in the Tulare Lake Hydrologic Region and extracts ground water from the Tulare Lake Subbasin to meet all of the City’s water supply. As shown in Table 3.3-2, the City produced approximately 1,917 million gallons or 5,885 acre-feet of water in 2002. Four years later, water production had increased to 2,301 million gallons or 7,064 acre-feet. The 2005 Urban Water Management Plan estimates that water from the subbasin is sufficient to meet City needs through 2025. The Tulare Lake Subbasin is interconnected with multiple subbasins including Kings, Kern, Kaweah, Tule, Westside, and Pleasant Valley Subbasins. The subbasin is not adjudicated, and no restriction is placed on the amount of water the City may draw.

Table 3.3-2 Water Production, 1996 - 2006

Year	Water Pumped (million gallons)	Acre feet	Annual Percent Increase
1996	1,528	4,690.90	n/a
1997	1,535	4,712.40	0.5
1998	1,389	4,264.20	-10.5
1999	1,571	4,822.90	11.6
2000	1,612	4,948.80	2.5
2001	1,668	5,120.70	3.4
2002	1,917	5,885.10	13.0
2003	2,294	7,042.50	16.4
2004	2,185	6,707.90	-5.0
2005	2,249	6,904.40	2.8
2006	2,301	7,064.00	2.3

1 million gallons is equivalent to 3.07 acre feet

Source: City of Lemoore Public Works Department, 2007.

¹ Firm Capacity is defined as the total capacity less one of the largest wells out of service.

Water Quality

The EPA and the State Department of Health Services have recently tightened the requirement for arsenic content in drinking water from 50 micrograms per liter ($\mu\text{g}/\text{L}$) to 10 $\mu\text{g}/\text{L}$. The City is given until February, 2009 to meet the new limit.

The City is modifying its water supply and distribution system to meet the new limit. Water drawn from north wellfield wells has historically exceeded this lower limit. The City is limited by a stipulated agreement with an irrigation district to keep the total production from the north wellfield to an average of 3,380 acre feet per year.

As the City grew it became necessary to supplement water supply from the north wellfield with water drawn from wells within the City. Water from City wells has an arsenic content less than 10 $\mu\text{g}/\text{L}$ but is of somewhat lower quality in color and taste.

To accommodate continued growth while meeting arsenic standards, the City has undertaken several steps after determining that treatment of the north wellfield supply was not economically feasible:

- Drilled a “substitute” well in the north wellfield designed to draw from lower-arsenic strata, albeit with lower production capacity.
- Planned for modification of an existing north wellfield well to reduce arsenic concentrations in its produced water.
- Planned for the construction of additional deep wells in the southwest area of the City, an area in which low-arsenic water production has resulted in new wells.
- Authorized funding and design for a cross-town transmission main to enable the entire community to be served by southwest area wells.

Implementation of the above mentioned steps will assure the long-term supply of groundwater meet EPA and State water quality standards. In this regard, it is worth noting that the City is continuing its efforts to consider surface water as an alternative to supplement ground water in cooperation with other local water agencies and the Naval Air Station Lemoore, however, this has yet to produce feasible results for detailed analysis.

Water Demand

Projected water demand, shown in Table 3.3-3, is expected to increase from 6.3 mgd in 2006 to 10.5 mgd in 2030.

Table 3.3-3 Current and Projected Water Demand

	2006	2015	2030 ¹
Population ¹	23,390	30,050	48,250
Average Day Demand (mgd) ²	6.3	7.3	10.5
Maximum Day Demand (mgd) ³	12.8	15.5	23.5

mgd = million gallons per day

¹ Population at year 2030 is based on full buildout of the General Plan.

² Using per capita consumption of 175 gallons per day, the Average Day Demand also assumes an addition of 2,033,000 gallons per day for SK Foods and Leprino Foods.

³ Using per capita consumption of 440 gallons per day Maximum Day Demand with an additional 2,278,000 gallons per day for SK Foods and Leprino Foods.

Source: *City of Lemoore Urban Water Management Plan, 2005. City of Lemoore, 2007.*

The key to meaningful estimates of projected water demand is the relationship of the currently-estimated 175 gallons per day usage per capita, to community population projections. The separation of that figure into commercial, institutional, multiple-residential and single-family residential components, although possible from current billing records and incorporated in the City’s Urban Water Management Plan, is of little value. On the other hand, water usage by new industry, whether from dedicated wells (such as the two City wells currently supplying SK Foods), from the City water system (such as the two Leprino plants), or from industry-owned wells is a key, and to a large extent, unpredictable component of community water system demand.

To satisfy projected community water demands, the City must assure that new well development provides sufficient volumes of water for both growth-related average day usage and peak day usage with one or more wells out of service, for arsenic-level mitigation, and for anticipated non-food processing industrial development.

Water Recycling and Reuse

The overall health of the local groundwater subbasin from which the City pumps its water has shown some consistent trends since the late 1950’s. Data from the City wells at the wellfield used to evaluate any effect of the City’s wells on the basin show that there has been a consistent decline of 0.5 feet per year in groundwater levels in the semi-confined aquifer (below the “A” Clay) and no decline in levels in the confined aquifer below the (“E” Clay). The City removes approximately 0.14 percent of estimated aquifer storage from the groundwater basin, and this percentage is anticipated to increase to 0.19 percent by the year 2010 if current trends continue. There was no change in the historic trends of the local subbasin after the construction of the City’s wells; the City’s continued use of their wells will not lead to a decline of the portion of the groundwater basin below the “E” Clay.

Groundwater recharge of the deep, confined, aquifers tapped by City wells is primarily from up-Basin stream recharge, from deep percolation of up-gradient applied irrigation waters and from up-Basin snow runoff and rainfall.

The Lemoore Canal and Irrigation Company owns, maintains and operates surface water transport facilities adjacent to and within the City of Lemoore.

The Kings County Water District (KCWD) manages surface water supply in the area east of the City. The water utilized by the KCWD comes from a variety of sources. A major portion is obtained from the Kings River through ownership of shares of stock in the Peoples Ditch Company and the Last Chance Water Ditch Company. Water is also obtained from the Kaweah River through shares of Lakeside Ditch Company Stock.

Effluent from combined domestic and SK Foods waste discharges to the City's wastewater plant is conveyed via a 6-mile pipeline to the Westlake Canal. The recycled water is then used to supplement irrigation of about 50,000 acres of animal feed grains and cotton on Westlake Farms. Discharge to Westlake Canal in 2004 was approximately 25 percent of the water utilized by Lemoore's domestic consumers and by SK Foods.

SK Foods, a tomato products processing facility, discharges approximately 75 percent of its total annual water usage directly to agricultural land previously supplied by groundwater and surface water entitlements, for crop irrigation. The balance of the industry's effluent is discharged to the City's wastewater treatment and recycling facility. Thus, essentially 100 percent of the industry's water usage is recycled.

Leprino treats its process wastes before discharging them to the downstream end of the City's wastewater treatment facilities. That treated waste, approximately 2 million gallons per day, is transported through the City's 30-inch outfall line to the Westlake Farms' irrigated agriculture. In excess of 50 percent of the industry's water usage is recycled, the balance being evaporated in the cheese production process.

It is anticipated that the effluent recycled by SK Foods and Leprino Foods will remain constant during the planning horizon. The City's recycled domestic effluent will increase proportionate to anticipated population growth, essentially doubling during the planning period (through 2025).

The effectiveness of the existing and projected agricultural irrigation recycling program precludes the necessity of evaluating other recycling programs such as dual distribution systems. The two major industries, as cost-saving measures, fully recycle water within their plants for multiple uses prior to discharge.

WASTEWATER COLLECTION, TREATMENT, AND DISPOSAL

Collection

Wastewater is collected from all developed properties within the City Limits utilizing a sanitary sewer system principally composed of PVC pipe and 17 pump stations. The City's relatively recent growth history minimizes the difficulties inherent in sewer systems in older communities;

the flat topography necessitates relatively frequent usage of pump stations as does the bisecting of the community with the SR-198 and SR-41. The design of the City’s sewer system – its trunk sewer and pump station locations – is largely compatible with the proposed locations of growth in this updated General Plan, although increases in several pump stations’ capacity will be required.

Treatment

The City’s, and Leprino’s wastewater treatment facilities are located in the southwest quadrant of the community, between Vine Street and 19th Avenue, south of Iona Avenue, in an area largely devoted to industrial and service commercial development. The City’s treatment facilities include a headworks, aerated lagoons, and effluent chlorination. Located on the same site are secondary treatment-level reactors and effluent ponding facilities for Leprino’s industrial wastes; effluent from these facilities is routed through a City lagoon and chlorinated by the City prior to co-disposal through the City’s effluent outfall. SK Foods, disposes of approximately 75 percent of its industrial waste through a leased, city-owned, pipeline directly to agricultural fields, and sends 25 percent of its waste to the City for treatment. A smaller tomato-paste processing facility (“Agusa”) sends all of its waste to the City facilities.

City/SK Foods/Agusa waste flows to the City’s facilities are nearly 2,000,000 gallons per day; Leprino flows are 2,000,000 gallons per day. The City’s “advance primary” treatment facilities produce effluent complying with the Regional Water Quality Control Board’s biochemical oxygen demand (B.O.D.) waste discharge permit requirements.

Disposal

The City’s (and Leprino’s) combined effluent is transported through a six-mile outfall to a discharge point in an irrigation canal, Westlake Canal, which transports water from the Kings River to Westlake Farms for row crop irrigation. It is not always possible, particularly when Kings River water is not being diverted, to maintain State Board-designated dissolved oxygen levels in Westlake Canal below the point of City/Leprino discharge. Similarly, Basin Plan-required limitations on effluent salinity are of continuing concern largely because of the discharges from Leprino and other industrial facilities. Nevertheless, demonstrable adverse effects of the discharge have been limited and the agricultural irrigation reuse of the effluent is beneficial.

Planned Improvements

Future wastewater flows related to General Plan-projected growth are:

Table 3.3-4 Current and Projected Wastewater Treatment Needs

	2006	2015	2030
Population ¹	23,390	30,050	48,250
Average Influent (mgd) ²	4.0	3.1	6.3

mgd = million gallons per day

¹ Population at year 2030 is based on full buildout of the General Plan.

² Assuming per capita use remains constant as 2006 rate and taking into account the reduction of influent flow by 2.0mgd when Leprino Foods begin to fully treat their own sewerage.

Source: City of Lemoore Sanitary Sewer Collection System Master Plan, 2001; Dyett & Bhatia, 2007.

With respect to these treatment and disposal needs and facilities:

- Leprino Foods is currently constructing additional treatment facilities on the present site. When completed, probably in 2008, Leprino effluent will be separately chlorinated and then discharged, at a rate of approximately 2.25 million gallons per day, directly to the City's effluent outfall.
- SK Foods is being encouraged to remove all of its industrial waste discharge from the City's treatment facility, transporting it directly to agricultural irrigation.
- At some point prior to 2030 the effluent outfall must be pressurized to accommodate increased flows.
- The City is evaluating the feasibility of purchase of several sections of land from Westlands Water District, west of the current point of canal discharge, to accommodate land disposal of the City's and Leprino's effluent. It may be necessary, at the time of such modified disposal, to significantly upgrade or replace the existing City treatment facilities to meet Regional Water Quality Control Board discharge requirements. The City is currently considering modifications in its impact fees and wastewater rates to fund these changes.

SOLID WASTE

Solid waste disposal for Lemoore is managed by Kings Waste and Recycling Authority (KWRA). The City's Public Works Department (PWD) Refuse Division is responsible for collection services. The majority of the City's solid waste is taken to Kettleman Hills Landfill Facility. The facility is managed by Chemical Waste Management (CWMI) and is located at Kettleman City. Its service area includes Fowler, Lodi, Orange Cove, Lemoore, unincorporated areas in Kings County, and many more communities.

Created in 1998, the Kettleman Hills Landfill is a Class II/III facility. The facility accepts municipal solid waste, industrial waste, construction waste, tires, and sludge. The landfill has a capacity of 4.2 million cubic yards and was 55 percent full as of June 2005. In 2005, jurisdictions under KWRA disposed of approximately 110,100 tons of wastes at this site. The KWRA is currently studying the future needs for solid waste disposal services, including the option to build a new landfill near the existing site. The Authority has a 25-year contract with CWMI to handle its solid waste until 2023.

Figure 3.3-2 Water and Wastewater Facilities (Front)

Figure 3.3-2 Water and Wastewater Facilities (Back)

Reuse and Recycling

To reduce waste disposal and promote recycling, the California Integrated Waste Management Act of 1989 (AB 939) promotes an integrated approach to managing waste. The California Public Resources Code Section 41780 (A)(2) requires that cities and counties divert 50 percent of all solid waste produced within their jurisdiction through source reduction, recycling, and composting. For Kings County, 1998 was established as the base year for the calculation of diversion rates. According to California Integrated Waste Management Board (CIWMB) reports, Kings County’s diversion rate has been fluctuating between 45 to 50 percent in the last few years (see Table 3.3-5). The preliminary diversion rate for 2005 (still under CIWMB review) is 44 percent.

A variety of reuse and recycling programs exist in Lemoore. The City has implemented a ‘green’ waste service for grass clippings, weeds, leaves, wood (without nails, glue, or paint), plant material and saw dust; and a ‘blue’ waste service for recyclables such as empty plastic containers, glass, aluminum, newspaper, and cardboard. Meanwhile, ‘e-waste’ and used-oil are collected at the City Corporation Yard.

Table 3.3-5 Kings County Solid Waste Diversion Rates (1998 - 2005)

<i>Year</i>	<i>Recycling or Waste Reuse Rate (Percent of total waste)</i>
1998	37
1999	45
2000	49
2001	48
2002	47
2003	46
2004	50
2005 ¹	44

¹ Preliminary data is subject to change.

Source: Consolidated Waste Management Authority, Waste Stream Information Profiles.

POLICE, FIRE, AND EMERGENCY PREPAREDNESS

The City of Lemoore Police and Fire Departments provide police and fire fighting services within the City. The Police and Fire Departments also coordinate with other public agencies on emergency preparedness. Additional police and fire protection services within unincorporated areas are provided by the County of Kings Sheriff’s and Fire departments.

Fire Protection

The Lemoore Volunteer Fire Department (LVFD) provides fire protection and suppression services for the City. The Department operates as an all volunteer department that includes one Chief, two Assistant Chiefs, four Crew Captains, seven Engineers, eleven Emergency Medical Technicians, one paid part-time Secretary, and one paid full-time maintenance worker. The Department’s service area covers approximately nine square miles, and maintains Mutual Aid Agreements with Kings County, Hanford City Fire and Naval Air Station Lemoore. The LVFD responds to structural and wildland fires and emergency medical service. It also provides other

services including fire inspections, tours and demonstrations, permitting of certain hazardous materials, and investigation of hazardous materials incidents. Additionally, the Department regulates explosive and hazardous materials under the Uniform Fire Code, and permits the handling, storage and use of any explosive or other hazardous material.

Currently, the Department operates primarily out of one fire station at 210 Fox Street. The station has 35 volunteer fire fighters, representing a citywide ratio of 1.5 firefighters per thousand residents. A second station recently came online at 41 Cinnamon Drive in case there is a problem crossing the railroad tracks. The locations of both existing and proposed City and County fire stations are illustrated in **Figure 3.3-2**.

Fire Response Standard

In 1997, the City earned its Insurance Service Office (ISO) rating of 3, on a scale of 1 to 10 with 1 being the highest. Existing fire response times average between 4 and 6 minutes.² As the City develops outside the current City Limits, the Fire Department estimates that an additional station, equipment, and personnel will need to be added to the west side of SR-41 in order to maintain the current ISO rating and response times. If fire response service improvements do not keep pace with growth, response time will increase, fire losses will increase, insurance rates will increase, and citizens' safety will be in jeopardy.

Police Services

The City of Lemoore Police Department is charged with the protection of life and property and crime prevention and suppression. The Department investigates traffic accidents, crimes, and violations of City, State and Federal laws.

Housed at 657 Fox Street, the Lemoore Police Department has a staff of 31 sworn peace officers and seven civilian staff members. There are 31 vehicles assigned to the Department. The Department currently operates at a ratio of 1.33 officers per thousand residents, which is lower than the western U.S. average of 1.5 officers per thousand residents reported by the Federal Bureau of Investigation. Average response times in 2006 averaged between 2.1 to 6.1 minutes depending on the priority type. Response times and the ability of the Police Department to provide acceptable levels of service are contingent on increasing staffing levels, sworn and civilian, consistent with resident population increase and the population of visitors, merchants, schools, and shoppers with the Department's service area. In 2006, the Department responded to 30,474 calls for service, an increase of 563 calls over the previous year. There were 854 felony crimes and 1,223 misdemeanor crimes reported in the City.

Police Programs

The Lemoore Citizens' Police Academy started in March 1997 gives members of the community a better understanding of the criminal justice system. The Citizens' Academy has been tailored to the philosophy of community policing embraced by members of the Lemoore Police Department. The Department's goal is to provide 2 sessions of the Citizen's Police Academies a year.

² Service Response from John Gibson, Fire Chief of the Lemoore Volunteer Fire Department, August 2006.

In October 1997, the Department started the Volunteers in Policing Program, where graduates of the Citizens' Academy volunteer hours to make patrol checks, handle clerical work, work radar, finger print and other miscellaneous tasks as required. The Volunteers in Policing donated 5,092 hours of volunteer time during 2006 to their community. This brings the total number of hours donated by members of the Volunteers in Policing to 38,349 hours since the start of the program.

The Kings County Sheriff's Department and California Highway Patrol are responsible for law enforcement in the unincorporated areas surrounding the city and on the highways.

Table 3.3-6 Annual Calls for Police Services

Year	Calls for Service	Percent Increase
2001	24,059	-
2002	25,178	4.7
2003	28,446	13.0
2004	30,046	5.6
2005	29,911	-0.4
2006	30,474	1.9

Source: City of Lemoore Police Department, 2007.

REGULATORY SETTING

The provision of public facilities and services in the Planning Area is the responsibility of several local, regional and State agencies. The regulatory settings of these agencies are described in turn below.

SCHOOLS

The Lemoore Union Elementary School District is the primary provider of K-6 and middle schools in the City. The Lemoore Union High School District is the primary provider of high school education in the City. School facilities are governed by the following documents:

School Facilities Needs Analysis/Fee Justification Study (2006). The School Facilities Needs Analysis and Fee Justification Study discuss facility needs and fee justification for both the Lemoore Union Elementary School and High School Districts. It provides estimates on future student accommodations and school needs, as well as cost of those facilities. The study further discusses methods to finance new and current facilities, specifically with regards to residential development fees as well as optional alternative fees.

Lemoore Union High School District 2005-2015 Master Plan (2005). The School District Master Plan presents historical enrollment and projects future enrollment for the District up to 2015, and through this process identifies issues affecting the future growth of facilities within the District. The Plan lists seven planning objectives and discusses programs to implement these objectives within the time horizon.

WATER AND WASTEWATER

The Lemoore Public Works Department is responsible for water supply and distribution and for wastewater collection, treatment and disposal. Water quality and public health is regulated and managed on the federal, state and local levels by the following regulations and plans:

Clean Water Act. The Clean Water Act is the principal Federal law that addresses water quality. The primary objectives include the regulation of pollutant discharges to surface water, financial assistance for public wastewater treatment systems, technology development, and non-point source pollution prevention programs. The Clean Water Act also requires that states adopt water quality standards to protect public health and welfare and enhance the quality of water.

California Water Code. Division 7 of the California Water Code (Porter-Cologne Act), establishes a program to protect water quality and beneficial uses of state water resources and includes groundwater and surface water. The State Water Resources Control Board and the Regional Water Quality Control Boards (RWQCBs) are the principal state agencies responsible for control of water quality.

Federal Safe Drinking Water Act. The Safe Drinking Water Act (SDWA), administered by the U.S. EPA in coordination with the states, is the main federal law that ensures the quality of drinking water. Under the SDWA, EPA sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards.

City of Lemoore Urban Water Management Plan. Drafted in December 2005, the Urban Water Management Plan is the City's planning document for water supply management. The document describes Lemoore's service area characteristics, projected population, current water facilities, water supply projections, water reliability, groundwater quality concerns and projected supply and demand up to the year 2025. The Plan includes a list of demand management measures being implemented in the City, a water shortage contingency plan, a description of groundwater supply, water quality and reliability, calculations of existing and projected water use up to the year 2025, a description of demand management measures, and planned water supply projects and programs.

In addition to the Lemoore Public Works Department, various regional and private water purveyors or agencies share an interest in Lemoore's water and wastewater needs.

Kings County Water District. The Kings County Water District (KCWD) is a legal entity formed to provide water management in the northeast portion of Kings County. Since 1954, the KCWD has monitored groundwater levels, implemented programs to recharge basins, conserve water, increase water supply, and prevent water waste in the County.

Laguna Irrigation District. The City has an agreement with Laguna Irrigation District (LID) to preserve ground water. Elements of the agreement are:

- An agreement to limit the City's pumping from the well field to an average of 3,380 acre-feet per year (the 1994 base year amount). Pumping may increase in any one year to 3,700 acre-feet,

- Constraints on increasing pipeline capacity between the City and the well field by building a second transmission line,
- A prohibition of additional wells in or near the well field; and
- A jointly-held fund, to be used to purchase recharge water.

The Lemoore Canal Companies. Although not a district or public agency, the Lemoore Canal and Irrigation Company and the John Heinlen Water Company own, maintain, and operate surface water canals near and within the City of Lemoore. The activities of these companies affect groundwater levels and usage in the Lemoore area. The City maintains a minor share of the Lemoore Canal and Irrigation Company which allows it to discharge stormwater into its canals for transport to NRCS wetlands and other agriculture areas. Additionally, this ownership gives the City water rights for irrigation of the municipal golf course.

SOLID WASTE

Solid waste disposal throughout Lemoore is managed by the County's Kings Waste and Recycling Authority (KWRA). The City's Public Works Department has an assisting role in helping the County deal with solid waste collection and recycling. Landfill operations are operated as an enterprise function by Chemical Waste Management Inc. via contract with the KWRA. Solid waste operations are regulated by the following regulations and plans:

Federal Resource Conservation and Recovery Act. The Resource Conservation and Recovery Act regulates potential health and environmental problems associated with solid waste hazards and non-hazardous wastes. It gives the U.S. EPA the authority to control hazardous wastes and provides a general framework for the management of these wastes.

California Integrated Waste Management Act. The California Integrated Waste Management Act requires that all local governments divert at least 50 percent of their solid waste from landfills by 2000 through source reduction, composting, and recycling activities. The Act gives the highest priority to source reduction and defines it as the act of reducing the amount of solid waste generated in the first place. Recycling and composting are given the next highest priority. The Act specifies that all other waste that is not diverted be properly and safely disposed of in a landfill or through incineration. The County relies on a broad mix of waste stream diversion programs to meet this diversion goal.

Kings County Integrated Waste Management Plan. The County's Integrated Waste Management Plan includes sections on source reduction and recycling, household hazardous wastes, non-disposal facilities, and a description of potential disposal sites. Additionally, the Plan specifies goals and implementing actions to reduce and recycle wastes generated within the county.

POLICE AND FIRE SERVICES

The City of Lemoore Police Department provides police and safety services for the City while the City of Lemoore Volunteer Fire Department provides fire services within the City. Both Police and Fire Services are subject to regulations in Titles 5 and 8 of the Lemoore Municipal Code, as well as State and federal legislation relating to public safety and fire-fighting. Fire hazards are

addressed mainly through the application of the State Fire Code and the Uniform Building Code. The Fire Code addresses access, including roads, vegetation removal, and safety issues. The Building Code requires that construction of certain types of development provide fire compartments, fire stops, and adequate fire flows in sprinklers and other systems.

IMPACT ANALYSIS

SIGNIFICANCE CRITERIA

A significant impact would occur with full implementation of the proposed General Plan if the following impacts occur:

- Generation of student levels that exceed available or planned school capacity;
- Water demand exceeds available supply or distribution capacity;
- Wastewater flows that exceed available collection or treatment capacity;
- Solid waste levels exceed available disposal capacity;
- Solid waste levels are in non-compliance with federal, state, or local regulations related to solid waste
- Increased risk of exposure to fire hazards; or Police, fire, or emergency response levels of service drop below General Plan performance standards.

METHODOLOGY AND ASSUMPTIONS

This analysis considered current and proposed General Plan policies and goals, existing and proposed public facilities and services within the City, and applicable regulations and guidelines.

The projected student population was calculated based on the projected number of single family and multi-family housing units with buildout of the proposed General Plan, using the school districts’ records on student generation factors, as well as the average student ratio attending public schools in Kings County (see Table 3.3-7) These calculations also assume an average school size of 750 students (grades K-5), 800 students (grades 6-8), and 1,800 students (grades 9-12). This new student population was compared with existing school capacity to determine the number and type of new facilities needed. School size assumptions are given by the California Department of Education, *Guide to School Site Analysis and Development* (2000).

Table 3.3-7 Student Generation Assumptions

	<i>Student Generation Factors</i>	<i>Percent of Students Attending Public Schools</i>
Single Family Households	0.625	96
Multi-Family Households	0.507	96

Source: Lemoore Union Elementary School District and Lemoore Union High School District, 2006. Dyett & Bhatia, 2007.

The analysis of water and wastewater services and facilities is based on information provided by the Lemoore Public Works Department. Water supply projections for average daily demand in 2030 are based on an assumed per capita consumption rate of 175 gallons per day, with an

addition of 2,033,000 gallons per day for SK Foods and Leprino Foods (2005 levels held constant). Projections for the maximum daily demand are based on a per capita rate of 440 gallons per day on top of 2,278,000 gallons per day for SK Foods and Leprino Foods (2005 levels held constant). Wastewater projections for 2030 assume the per capita treatment levels remain constant at 2006 levels.

The analysis of solid waste demand, services, and facilities is based on information provided by the California Integrated Waste Management Board and Kings Waste and Recycling Authority.

The analysis of public safety services is based on discussions with the Lemoore Police Department and the Lemoore Volunteer Fire Department.

To evaluate potential impacts on fire facilities and services, an analysis was done using 1.5 mile radii around existing fire stations in order to calculate the percentage of land within the City that is located inside and outside of these service areas.

SUMMARY OF IMPACTS

Impacts on public utilities and services are expected to be less than significant after implementation of proposed General Plan policies. The development of additional residential west of SR-41 will result in the greatest impact to wastewater and water carrying infrastructure as new pipes, pump stations and storage must be built in this area. Water supply and wastewater treatment facilities are expected to be adequate for the short term. However, water quality and wastewater disposal challenges should be addressed soon as both are already non-compliant with State regulations. As the City grows, it will need to add manpower and facilities to Police and Fire services to maintain current service standards and response time.

The impact of additional development on schools is another area that warrants attention as current school facilities are already at or near capacity. Plan policies are designed to ensure that any impacts caused by additional development are reduced to a less than significant level. In areas where the City has less direct jurisdiction (schools and solid waste), plan policies promote cooperation with the responsible authority and introduce initiatives to help meet regulatory requirements.

IMPACTS AND MITIGATION MEASURES

Impact

3.3-1 Implementation of the proposed General Plan will increase enrollment, exceed the capacity of existing schools, and require new school facilities. (*Less than Significant*)

Buildout of the proposed General Plan in 2030 is expected to add approximately 8,020 households to the City. Using student generation ratios provided by the Lemoore Union Elementary School and High School Districts, these new households will add approximately 2,680 new elementary school students, 660 new middle school students, and 1,330 new high school students to the school system. The number of new schools needed for these students is shown in Table 3.3-8.

Table 3.3-8 Additional Public School Students Based on Plan Buildout

	<i>Additional Households at Buildout</i>	<i>Student Generation Factors</i>	<i>Ratio of Students Attending Public Schools</i>	<i>Additional Public School Students</i>
Single Family Households	6,710	0.625	0.96	4,026
Multi-Family Households	1,310	0.507	0.96	638
Total	8,020	N/A	N/A	4,660

Source: Lemoore Union Elementary School District and Lemoore Union High School District, 2006; California Department of Education 2006; Dyett & Bhatia, 2007.

As shown in Table 3.3-9, although current school facilities were designed for 5,540 students, nearly 5,600 students were enrolled in 2006. Many elementary schools were at or near capacity, and the Lemoore Union High School was over enrolled by 20 percent in 2006. School district officials recognize the urgent need to expand present facilities or build new schools and have undertaken several initiatives to meet their needs. The Lemoore Elementary School District is planning to build a new school located on the corner of 19th Avenue and Cinnamon Drive within the next five years. Meanwhile, the High School District is also planning to build a new school within ten years and is currently evaluating alternative sites.

Table 3.3-9 Buildout Student Population and School Demand

<i>Type</i>	<i>Additional Students at Buildout¹</i>	<i>Current Students</i>	<i>Current Capacity</i>	<i>Students at Buildout in Excess of Current Capacity</i>	<i>New Schools Needed²</i>	<i>Acres Needed³</i>
Elementary School (K-6)	2,682	2,578	2,680	2,580	4	60
Middle School (7-8)	655	793	940	508	1	20
High School (9-12)	1,326	2,234	1,915	1,645	1	45
Total	4,660	5,610	5,540	4,730	6	125

¹ Assumes 0.354 elementary school, 0.088 middle school, and 0.183 high school students per single family household, and 0.320 elementary school, 0.070 middle school, and 0.117 high school students per multi family household.

² Assumes average school size of 750 students (grades K-6), 800 students (grades 7-8), and 1,800 students (grades 9-12).

³ Assumes average school sizes of 15 acres (grades K-6), 20 acres (grades 7-8), and 45 acres (grades 9-12). Estimated enrollment and site acreage needs based on California Department of Education, Guide to School Site Analysis and Development: 2000 Edition.

Source: Lemoore Union Elementary School District and Lemoore Union High School District, 2006; Dyett & Bhatia, 2007.

At full buildout of the General Plan in 2030, Lemoore will require a total of four elementary schools, one middle school, and one high school to accommodate expected student population growth. However, the Lemoore Elementary School District would like to switch to a “K-8” system, thus slightly larger K-8 sites are delineated on the land use diagram and school location maps. The proposed General Plan reserves adequate land for school sites and requires the City to work with the school districts on school planning. The impacts from development after the implementation of these policies are expected to be less than significant. No additional mitigation is warranted because SB 50, specifically California Government Code section 65995(e) is the exclusive method for financing school facilities and preempts all measures, both financial and non-financial, to mitigate the impacts of land use approvals on school facilities. As a consequence,

the City and other local responsible agencies are preempted by this State law from imposing any other mitigation requiring new school facilities.

Proposed General Plan Policies that Reduce the Impact

LU-I-7 Require new development to pay its fair share of the costs of public infrastructure, services and transportation facilities, in accordance with State law.

These may include parks, fire and police stations, schools, utilities, roads or other needed infrastructure.

LU-I-8 Allow development only when adequate public facilities and infrastructure are available or planned in conjunction with the use, consistent with the traffic level of service (LOS) standards and standards for public facilities and services established in this Plan.

LU-I-42 Ensure adequate elementary and high school sites are reserved in new subdivisions, consistent with the Land Use Diagram and State law.

PSCF-I-14 Develop partnerships with the Lemoore Union Elementary School District, Lemoore Union High School District, private schools, community organizations, and West Hills College to facilitate planning for new school sites and facilities and infrastructure improvements that are compatible with City plans.

PSCF-I-15 Develop partnerships with Lemoore Union Elementary School District and Lemoore Union High School District to optimize the joint use of school facilities for community benefit.

School playgrounds and grass fields offer excellent opportunities for use by the City during off-school hours to accommodate City-sponsored athletic clubs and the needs of after-school programs. Other school facilities that could be used by the City include auditoriums or cafeterias to host community meetings. Currently, both the elementary and high school districts have joint-use agreements with the City.

Implementation of the proposed policies listed above will reduce Impact 3.3-1 to a level that is less than significant. No additional mitigation is needed.

Impact

3.3-2 Implementation of the proposed General Plan will increase demand for public water which may exceed supply. (*Less than Significant*)

As the City expands to include more jobs and new residents, its demand for fresh water will likewise increase. Under the proposed General Plan buildout, Lemoore is expected to add 8,020

households and 16,520 jobs, which represents a doubling of the existing population and a tripling of jobs.

The Lemoore Public Works Department obtains all its water from wells, six of which are located within the Planning Area. All wells draw water from the Tulare Lake Subbasin, which is interconnected with Kern, Kings, Westside, and other subbasins and forms part of the Tulare Lake Hydrologic Region. According to the California Department of Water Resources, the total storage capacity of the Tulare Lake Subbasin in 1995 was estimated at 17,100,000 acre feet to a depth of 300 feet and 82,500,000 acre feet to the base of fresh groundwater. Water levels in the unconfined Tulare Lakes subbasin show a history of sharp fluctuations. From the period of 1970 to 1978, water levels declined almost 12 feet. The ten-year period from 1978 to 1988 saw more fluctuations and a general increase of over 24 feet. Between 1988 and 1993, water levels again dropped, bottoming out in 1993 at 23 feet below the 1970 level. From 1999 to 2000, water levels dropped 7 feet to about 17 feet below the 1970 level.³

Studies conducted by Provost & Pritchard, as well as by Geometric Consultants on local groundwater levels found that groundwater elevations are affected by the region's weather conditions.⁴ Years of continuing drought can cause a steep decline due to a lack of recharge, while up-Basin rainfall can help groundwater levels recover quickly. Data from the City since the 1950's showed that while City well-water levels showed a decline in groundwater levels, the drop was minimal over the years. The studies concluded that City activities are not expected to endanger the health of the groundwater system.

The Tulare Lake Subbasin is a non-adjudicated basin and there is no restriction on the number of wells that may be drilled within the City. Nonetheless, an agreement between the City and Laguna Irrigation District in 1995 limits the construction of additional wells in the north well field. As such, any wells the City may construct in the future must be located within the Planning Area.

While water quantity is not foreseen as a future concern, the City faces a potential problem with water quality. Several of the City wells have arsenic concentrations exceeding 10 milligrams per liter. The steps described herein (new wells, well modification, and a cross-town transmission line) will resolve this problem.

The proposed General Plan policies ensure that new development pays a fair portion for the cost of upgrading water infrastructure. These policies require that such infrastructure be in place prior to development. Payment of fees will be required in accordance with the State Mitigation Fee Act, the Subdivision Map Act, and other applicable State laws.

Proposed General Plan Policies that Reduce the Impact

LU-I-6 Create, maintain, or upgrade Lemoore's public and private infrastructure to support future land use and planned development under the General Plan.

³ California Department of Water Resources. Groundwater Bulletin 118, January 2006 edition.

⁴ Studies by Provost & Pritchard and Geometric Consultants Inc were conducted for the City and Laguna Irrigation District respectively, in 1992. These reports can be obtained from the City and the Laguna Irrigation District.

Infrastructure needs include fiber optic and/or wireless communication systems, along with streets, water, sewer, electricity, natural gas, telephone, and cable.

- LU-I-43 Designate land for public uses to be maintained through capital projects, for parks and open spaces, police and fire services, water and sanitary facilities, infrastructure and other City services.
- CD-I-59 Require new development to reduce storm water run-off, control water pollution, and promote water recharge through sustainable hydrological design. Measures should include, but are not limited to, the following:
- Reducing imperviousness by limiting building footprint and using permeable paving or landscaping to break up expanses of impervious surfaces;
 - Using canopy trees or shrubs to absorb rainwater and slow water flow;
 - Incorporating drainage design into the infrastructure, such as roof downspouts, retention cells, or infiltration trenches, to filter and direct storm water into vegetated areas or water collection devices; and
 - Promoting the installation of sub-surface water retention facilities (for large development) to capture rainwater for use in landscape irrigation and non-potable uses.
- PU-I-1 Update the City's Urban Water Management Plan every five years and ensure its contents are consistent with the California Water Code and General Plan policies, including prioritization and identification of funding sources.
- PU-I-2 Provide and maintain a system of water supply distribution facilities capable of meeting existing and future daily and peak demands, including fire flow requirements, in a timely and cost effective manner.
- PU-I-3 Monitor the demands on the water system and, as necessary, manage development to mitigate impacts and/or facilitate improvements to the water supply and distribution systems.
- PU-I-4 Continue to support the Laguna Water District's groundwater recharging (water banking) efforts, in consultation with the State Department of Water Resources and County water management authorities.

Water banking is a technique where water that is not immediately needed is stored – typically in underground aquifers – for future use. The Laguna Water District currently stores excess water from the Kings River.

PU-I-5 Require that necessary water supply infrastructure and storage facilities are in place concurrently with new development, and approve development plans only when a dependable and adequate water supply for the development is assured.

PU-I-9 Promote the use of evapotranspiration (ET) water systems in irrigating large parks and large landscaped areas.

ET water systems are “smart water systems” that can be programmed with data such as the type of soil, slope of landscape, type of vegetation, daily weather conditions so that they can automatically adjust irrigation schedules based on those conditions. The result is lower water bills and a healthier environment.

PU-I-10 Require that developers of agricultural land to be annexed to the City offer the water rights associated with this land to the City.

PU-I-11 Revise regulations to allow the safe use of reclaimed water (“gray water”) by homes and businesses where feasible. Examples of areas where “gray water” might be safely used include:

- Irrigation of parks and residential yards, and irrigation for farming;
- Cooling towers and HVAC systems in commercial or industrial buildings; and
- Water cisterns in flush toilets.

Generally, a gray water system consists of an underground surge tank, with a filtration system, a pump and associated pipework. The type of gray water system appropriate for individual sites will be determined on the basis of location, soil type, ground water level, and building use. Title 24, part 5 of the California Administration Code has established standards, specifications, and procedure for estimating discharge to and from different gray water systems.

PU-I-12 Establish and implement a program of cooperative surface water use with local water purveyors and irrigation districts to retain surface water rights and supply following annexation and urban development so as to protect against aquifer overdrafts and water quality degradation.

PU-I-14 Drill additional wells within the City when other water supply alternatives are not feasible, and demand warrants their development.

This policy is consistent with the 2005 Urban Water Management Plan.

COS-I-26 Establish water conservation guidelines and standards for new development and for municipal buildings and facilities.

The City also will develop and maintain a list of water conservation technologies, methods, and practices.

- COS-I-27 Become a signatory to the California Urban Water Conservation Council and implement all Demand Management Measures as soon as they become feasible.

The California Urban Water Conservation Council is a non-profit organization whose goal is to integrate urban water conservation Best Management Practices (BMPs) into the planning and management of California's water resources. Since its inception in 1991, 384 urban water agencies and environmental groups have pledged to develop and implement fourteen comprehensive conservation BMPs.

- COS-I-28 Develop a schedule for the retrofitting of existing public buildings with water conservation features, and budget accordingly.

- COS-I-29 Annually check for leaks throughout the City's main water supply and distribution system, and initiate repairs when necessary to reduce water waste.

- COS-I-30 Consider establishing rebate and/or incentive programs for the replacement of leaking, aging and/or inefficient plumbing with more efficient, water saving plumbing and for the use of water efficient landscaping.

- COS-I-31 Educate the general public about the importance of water conservation, water recycling and groundwater recharge through the following means:

- Making water production and treatment facilities available for tours by schools or organized groups;
- Encouraging educators to include water conservation in their curriculums;
- Providing tips to business groups on water conservation and recycling.

The City may solicit assistance from environmental groups, the Lemoore Elementary and High School Districts, and/or concerned citizens to provide education materials or staff time for these public outreach programs.

Implementation of the proposed policies listed above, as well as policy LU-I-7 under Impact 3.3-1, will reduce Impact 3.3-2 to a level that is less than significant. No additional mitigation is needed.

Impact

3.3-3 Implementation of the proposed General Plan will generate wastewater flows that exceed the treatment and disposal capacity of the existing wastewater treatment plant. (*Less than Significant*)

The Lemoore wastewater treatment plant (WWTP) treated approximately 1,500 million gallons of influent in 2006, at an average daily flow of 4.0 mgd. Of this 4.0 mgd, approximately 2.0 mgd came from Leprino Foods. Leprino has a treatment facility but does not disinfect its discharge. According to the Public Works Department, Leprino Foods is in the process of upgrading their facility adjacent to the City WWTP. The upgrading work is scheduled to be completed in 2008. Subsequent to that, Leprino Foods' effluent will be routed to join with Lemoore's in the City's 30-inch outfall line.

The expected removal of Leprino Foods' flow from Lemoore's WWTP will free up capacity to handle the City's current needs. The existing WWTP has a capacity of 4.5 mgd and a head work that could be expanded to handle 9.6 mgd. At full buildout in 2030, influent flow is estimated to be 6.3 mgd, based on a population of 48,250.

The proposed General Plan policies ensure that Lemoore's wastewater collection, treatment and disposal facilities will expand in a timely manner to meet growth demands. As such, no further mitigation is required. Implementation of proposed General Plan policies would ensure that the impact from growth is less than significant.

Proposed General Plan Policies that Reduce the Impact

- PU-I-15 Maintain existing levels of wastewater service by expanding treatment plant and disposal facilities as required by growth and by the Regional Water Quality Control Board.
- PU-I-16 Update the Wastewater Master Plan by 2010 to serve development under this General Plan.
- PU-I-17 Establish impact fees and sewer rates adequate to finance required wastewater treatment and disposal facilities upgrades or replacements.

Implementation of the proposed policies listed above will reduce Impact 3.3-3 to a level that is less than significant. No additional mitigation is needed.

Impact

3.3-4 Implementation of the proposed General Plan will generate additional amounts of solid waste that exceed available disposal capacity. (*Less than Significant*)

According to data from the Integrated Waste Management Board, the County’s solid waste authority, Kings Waste and Recycling Authority (KWRA), disposed about 110,078 tons of waste in 2005. As shown in Table 3.3-10, assuming KWRA achieves a 50 percent diversion rate in 2030, it will need to dispose of no more than 268,200 tons of waste that year. Currently, the City’s solid waste is taken to KWRA’s separating facility where recyclables are separated and sold and the remaining solid waste is transported to the Kettleman Hills Landfill Facility. The landfill has a capacity of 4.2 million cubic yards. The KWRA has a contract with Chemical Waste Management (CWMI) through 2023 and is in the process of creating a new landfill site adjacent to the current landfill facility. The proposed General Plan requires the City to work with the County’s solid waste authority to ensure adequate landfill space is available to meet future demands and aims to reduce city-generated waste through waste reduction, reuse, recycling, and public education. Existing landfill capacity, facility plans underway, and proposed General Plan policies together reduce this impact to a level that is less than significant.

Table 3.3-10 Estimated Solid Waste Generation in 2030

	2005	2030
Diversion Rate (percent)	44	50
Population ¹	22,500	48,250
Total Waste Disposed (tons)	110,100	268,200

The population here is for Lemoore and not all cities serviced by KWRA. Accordingly, the Total Waste Disposed for 2030 assumes the ratio of population between Lemoore and cities served by KWRA remain constant.

Source: Integrated Waste Management Board, Waste Stream Estimation Profile for Kings Waste and Recycling Authority; Dyett & Bhatia, 2007.

Proposed General Plan Policies that Reduce the Impact

- PU-I-19 Continue to require property owners to provide recycling containers in refuse collection areas that are within buildings or screened so as not to be visible from public streets and residential neighborhoods.
- PU-I-20 Reduce waste production by using post-consumer recycled paper and other recycled materials in all City operations.
- PU-I-21 Implement programs to reduce waste at home and in businesses through public education efforts that use many different forms of communication.

Avenues of communication of waste reduction and conservation messages may include advertisements in local newspapers, radio advertisements, large flashy stickers on public refuse bins, articles on the City website or in the City newsletter, or posters in retail establishments that sell recyclable products.

PU-I-22 Amend local ordinances to further support KWRA requirements for proper handling and storage of solid waste and recyclables and diversion of solid waste from landfills.

The Kings Waste Recycling Authority has lead responsibility for this program.

PU-I-23 Explore ways to provide financial incentives for recycling by reducing the cost for recycling and increasing the cost for garbage disposal.

PU-I-24 Actively promote reuse by supporting existing and future swap meets, flea markets and consignment/second-hand shops and providing information on donation pick-up or drop off locations, as well as other waste reduction programs, on the City website.

Although recycling is generally the focus of most local waste management programs, reusing discarded materials is actually the best method of waste reduction because it conserves more of the article's inherent structure and value, as well as the energy that produced it. Examples of reusable goods include furniture, clothing, business supplies and equipment, sinks, lighting fixtures, and building materials. The City already holds a monthly community swap meet in the summertime to encourage these reuse practices.

Implementation of the proposed policies listed above will reduce Impact 3.3-4 to a level that is less than significant. No additional mitigation is needed.

Impact

3.3-5 Implementation of the proposed General Plan will place a higher demand on available police and fire protection services and increase the risk from crime and structural fires. (Less than Significant)

New development under the General Plan will add approximately 24,860 new residents and 16,520 new jobs to the City. This will increase the long-term demand for police assistance and emergency fire response services. To maintain the existing ratio of 1.33 officers per thousand residents, the Lemoore Police Department will need to hire an addition of 33 police officers by 2030 (Table 3.3-11). If the Police Department wanted to meet the western average of 1.5 officers per thousand residents, Lemoore would need to fund a total of 72 officers at buildout, or 41 additional officers. The LVFD will need to add another 37 volunteer firefighters to maintain the current ratio of 1.5 firefighters per thousand residents.

Table 3.3-11 Additional Police and Fire Personnel Needed for General Plan Buildout

Year	Population	Police Officers	Firefighters
2006	23,390	31	35
2030	48,250	64	72
Increase	24,860	33	37

Source: Dyett & Bhatia, 2007.

Besides adding new staff, both the Police and Fire Departments will need additional equipment and facilities. As the City spreads geographically, there will be a need for additional stations or other facilities. Currently, the police response time for priority 1 calls is approximately between 3 to 5 minutes, while the fire response time averages between 4 to 6 minutes.⁵ The need for new facilities is especially important for the Fire Department. Currently, the majority of Lemoore residents are located within 1.5 miles of a fire station. 390 acres of developed land lie outside of the radii of both City and county fire stations. At full buildout, 1,210 acres of developed land would lie outside of this service area, justifying construction of a new fire station to serve development west of SR-41.

To ensure that new development does not adversely affect the City's current police and fire response standards, the proposed General Plan requires new development to contribute its fair share of the cost of the improvement of services. Plan policies ensure that land is reserved for civic and institutional uses (such as Fire and Police Stations) and that the City regularly assesses and meets the manpower and facility needs of both services. Therefore, full implementation of the proposed General Plan policies set out below would result in impacts that are less than significant.

Proposed General Plan Policies that Reduce the Impact

- SN-I-13 Ensure Fire Department personnel are trained in wildfire prevention, response and evacuation procedures.
- SN-I-15 Enforce the Uniform Fire Code the approval of construction plans and final occupancy permits.
- SN-I-22 Assess the manpower, facility, and equipment needs of Police and Fire services at least every three years in order to provide all residents with an optimal level of protection.

To meet existing and future demand, the City will continue to plan for adequate law enforcement and fire-fighting services, and ensure their staffing ratios and response time meet national standards. The requirements for additional Police and Fire Stations shall be considered in Capital Improvement Program budgets and development impact fees.

Law Enforcement

- SN-I-24 Develop an additional police station with improved access to parts of Lemoore west of SR-41 and parts south of SR-198, when necessary to maintain performance and response standards.
- SN-I-25 Maintain mutual aid agreements with Kings County, Naval Air Station Lemoore, neighboring law enforcement agencies and the California Highway Patrol.

⁵ Service Response from Chief Kimberly Morrell, Lemoore Police Department, July 2006.

- SN-I-26 Collaborate, and exchange information with other local, state and federal agencies and with utility service providers in activities related to terrorism prevention and response.

Fire-Fighting

- SN-I-27 Maintain Fire Department performance and response standards at Class 3 ISO rating or better, including building and staffing a new fire station in West Lemoore if necessary.

- SN-I-28 Require adequate access for emergency vehicles in all new development, including adequate widths, turning radii, and vertical clearance on new streets.

The street cross-sections in the General Plan are consistent with this policy.

- SN-I-29 Require sprinklers in buildings exceeding 5,000 square feet and all mixed use development to protect residential uses from non-residential uses, which typically pose a higher fire risk.

Appropriate fire protection measures are necessary in mixed use developments, since residential units are typically in close proximity to higher fire load occupancies, such as retail stores, restaurants, etc.

- SN-I-30 Maintain mutual aid agreements with Kings County, California Department of Forestry, Naval Air Station Lemoore, and nearby cities for fire and disaster services.

Additional policies in the Land Use Element of the General Plan will ensure that new development finances additional public safety facilities as necessary to mitigate its own impacts.

Implementation of the proposed policies listed above, as well as LU-I-7, LU-I-8, and LU-I-43 listed earlier, will reduce Impact 3.3-5 to a level that is less than significant. No additional mitigation is needed.