

## **4.12 PUBLIC SERVICES AND UTILITIES**



This section of the DEIR describes the existing public facilities and services in the City of Madera and the greater General Plan Planning Area and evaluates the effects associated with General Plan Update. This analysis addresses citywide and regional impacts to these facilities and services and identifies mitigation measures to lessen those impacts. Please note that the following discussion has been broken into subsections associated with the public service/utility services provided by the City of Madera and other agencies:

- Fire protection
- Law enforcement
- Water supply
- Sewer
- Solid waste disposal
- Public schools
- Electricity, natural gas, and other services
- Parks and recreation

### 4.12.1 FIRE PROTECTION AND EMERGENCY MEDICAL SERVICES

#### 4.12.1.1 EXISTING SETTING

##### FIRE PROTECTION

Fire protection and emergency medical services are provided by the Madera City Fire Department, which is administered by the California Department of Forestry and Fire Protection (CalFire) through a cooperative fire protection agreement. Policy direction remains with the Madera City Council and all permanent Fire Department staff are CalFire employees. The department provides a multitude of emergency and nonemergency services to the community. Services include fire prevention and suppression, emergency medical assistance (though not ambulance service), rescue, public assistance, fire menace standby, safety inspections, and review of building plans for compliance with applicable codes and ordinances.

The two City fire stations, located at 317 North Lake and 200 South Schnoor, are staffed 24 hours a day. The Fire Department staffs two fire engines and one mini-pumper. One of the engines features a 50-foot tele-squirt aerial ladder. The City is currently in the initial stages of planning for the addition of a Fire Station in the northern portion of the City (Madera City Fire Department, 2008).

Pursuant to a Memorandum of Understanding between the City and the County of Madera, the City enjoys automatic aid responses from County Fire Station #1 and #3. Station #1 is located near the intersection of Road 28 and Avenue 14, and Station #3 is located near the intersection of Road 26 and Avenue 18½. Both of these County stations are staffed with one full-time firefighter augmented by paid call, or volunteer, firefighters.

The ISO Public Protection Classification Program, created by the Insurance Services Office, Inc., grades a community's fire protection on a scale of 1 to 10, based on ISO's Fire Suppression Rating Schedule with 1 being the highest rating possible. According to Stan Craig of the Madera City Fire Department, the City's current ISO rating is 4.

The Fire Department is currently in the process of studying fire protection service delivery for the city. A goal of that project is to establish standards for City Council adoption. The Fire Department is currently using National Fire Protection Association (NFPA) 1710 standards of response for urban areas with populations exceeding 1,000 per square mile as a planning guide.

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These guidelines call for a first response to the emergency scene within 7 minutes of the receipt of the call for service. The Madera City Fire Department's average time, from receipt of alarm to arrival of the first unit, is 6.56 minutes (Madera City Fire Department, 2008).

Ninety-eight percent of the Fire Department's funding comes from the City General Fund. The remaining 2 percent comes from funding from the Public Works Department in exchange for routine fire hydrant maintenance work performed by the Fire Department. Because the department is primarily funded by the General Fund, the City Council sets the annual funding levels based on discretionary dollars available.

### **Emergency Medical Services**

Ambulance services in the Madera area are provided by Pistoiresi Paramedics located at 113 North R Street in Madera. This company provides three ambulatory units 24 hours a day as well as one additional on-call unit.

Two hospitals are located in or near Madera:

- Madera Community Hospital, a 100-bed health care institution featuring a 16-bed emergency room and comprehensive medical care, is located on East Almond Avenue in Madera along State Route 99. Additional special care facilities, including convalescence facilities, are also available.
- The Children's Hospital Central California is a 338-bed hospital on a 50-acre campus near Madera (southeast of the Planning Area) with a medical staff of more than 450 physicians.

### **4.12.1.2 REGULATORY FRAMEWORK**

STATE

#### **California Occupational Safety and Health Administration**

In accordance with California Code of Regulations Title 8 Sections 1270 "Fire Prevention" and 6773 "Fire Protection and Fire Equipment," the California Occupational Safety and Health Administration (CAL-OSHA) has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance and use of all firefighting and emergency medical equipment.

#### **Emergency Response/Evacuation Plans**

State law authorizes the Office of Emergency Services (OES) to prepare a Standard Emergency Management System (SEMS) program, which sets forth measures by which a jurisdiction should handle emergency disasters. Noncompliance with SEMS could result in the State withholding disaster relief from the noncomplying jurisdiction in the event of an emergency disaster. The preservation of life, property, and the environment is an inherent responsibility of local, state, and federal government. OES coordinates the responses of other agencies including the California Highway Patrol (CHP) and the City of Madera Police and Fire departments.

### **Fire Hazard Severity**

California has enacted statewide laws aimed at reducing wildfire hazards in wildland-urban interface areas. These regulations cover topics such as fire prevention, vegetation management, notification and penalties, fire hazard severity zones, defensible space, setbacks, and exemptions. For the complete text of the Fire Hazard Zoning Field Guide, the reader is referred to the Office of the State Fire Marshal's fire safety planning website (<http://osfm.fire.ca.gov/zoning.html>).

### **California Public Resources Code**

The Public Resources Code includes the following laws related to fire safety.

### **Vegetation Management Program**

CalFire has a fuel reduction program called the Vegetation Management Program. Limited funding is available to conduct fuel management activities primarily by burning on parcels or aggregates of parcels of 100 acres or more. The objective of the Vegetation Management Program is to prevent high-intensity wildfire through fuel modification. If brush can be kept at the medium fuel load level, then the intensity of fire can be reduced substantially.

### **California Fire Plan**

The California Board of Forestry and CalFire have developed the California Fire Plan in an effort to reduce the overall costs and losses from wildfire in California. According to the California Fire Plan, the primary purpose of wildland fire protection in California is to protect human health and safety together with the wide range of assets found on California wildlands. These assets include timber, range, recreation, water and watersheds, plants, air quality, cultural and historic resources, unique scenic areas, buildings, and wildlife, plants, and ecosystem health.

The California Fire Plan defines a standard for measuring the level of fire protection service provided in an area, considers assets at risk, incorporates the cooperative interdependent relationships of wildland fire protection providers, provides for public stakeholder involvement, and creates a fiscal framework for policy analysis. A key product of the California Fire Plan is the development of wildfire safety zones to reduce the risks to residents and firefighters from future large wildfires. The California Fire Plan defines an assessment process for measuring the level of service provided by the fire protection system for wildland fire. This measure can be used to assess the department's ability to provide an equal level of protection to sites with similar land types, as required by Public Resources Code Section 4130. This measure is the percentage of fires that are successfully controlled before unacceptable costs are incurred. Knowledge of level of service will help define the risk to wildfire damage faced by public and private assets in wildlands.

LOCAL

### **City of Madera Fire Code**

The City regulates development and building design through Section 9-1.06 of its Municipal Code.

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### 4.12.1.3 IMPACTS AND MITIGATION MEASURES

#### STANDARDS OF SIGNIFICANCE

The following standards are based on State CEQA Guidelines Appendix G. A significant impact to fire protection and emergency services would occur if implementation of the proposed project:

- 1) Would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services.

#### METHODOLOGY

Evaluation of potential fire service impacts was based on consultation with staff from the Madera City Fire Department, as well as review of the Fire Department's website and other relevant literature.

#### IMPACTS AND MITIGATION MEASURES

##### Fire Protection and Emergency Medical Services

**Impact 4.12.1.1** Implementation of the proposed General Plan Update would increase the demand for fire protection and emergency medical service. With the implementation of General Plan Update policy provisions, this is considered a **less than significant** impact.

Implementation of the proposed General Plan would include approximately 24,788 residential units and approximately 804 acres being developed for commercial, office, and industrial land uses by the year 2030 in the Planning Area. As population and other development in the Planning Area increases, demands for fire protection and emergency medical services will also increase.

According to the Fire Department, a need currently exists for an additional fire station in the northern portion of the city. When the city boundaries extend beyond the current Sphere of Influence, additional facilities will be necessary. If significant buildout occurs prior to the addition of the necessary facilities, the potential exists for simultaneous multiple calls for service, which could result in a need to prioritize calls, resulting in delays and increased response times.

#### Proposed General Plan Policies, Objectives, and Actions that Provide Mitigation

The proposed General Plan Update contains several goals, policies, and action items that would address potential impacts associated with fire protection and emergency medical services. The following list contains those policies and action items that include specific, enforceable requirements and corresponding performance standards that address this impact.

*Policy CI-44: Public facilities should be phased in a logical manner which avoids "leapfrog" development and encourages the orderly development of roadways, water and sewer, and other public facilities. The City shall*

not provide public financing or assistance for projects that do not comply with City master plans.

- Policy CI-47: All major development projects shall identify the size and cost of all infrastructure and public facilities and identify how the installation and long-term maintenance of infrastructure will be financed consistent with the policies in this General Plan.
- Policy CI-49: Except when prohibited by state law, the City shall require that sufficient capacity in all public services and facilities will be available on time to maintain desired service levels and avoid capacity shortages, traffic congestion, or other negative effects on safety and quality of life.
- Policy CI-50: All new residential development shall be required to annex into City of Madera Community Facilities District 2005-01, or any subsequent CFD created in its place. The purpose of the CFD is to collect special assessments from new residential development to offset the cost of providing eligible municipal services to that development.
- Policy HS-33: The City shall ensure the safety and protection of Madera and its community members by providing adequate first response capabilities to emergencies and by maintaining sufficient resources to expand protection as the community grows.
- Policy LU-13: The City shall support the annexation of property to its boundaries for the purpose of new development only when it determines that the following conditions exist:
- 1) Sufficient public infrastructure, facilities, and services are available or will be provided in conjunction with new development; and
  - 2) Demands on public infrastructure, facilities and services created by the new development will not result in reductions in capacity that is necessary to serve the existing city limits (including demand created by infill development), reductions in existing service levels within the city limits, or the creation of detrimental fiscal impacts on the City.
- Policy LU-14: All proposals to annex property into the City limits for the purpose of new development shall prepare a Public Facilities Financing Plan (PFFP) that articulates infrastructure and public facilities requirements, their costs, financing mechanisms, and the feasibility of the financial burden. The PFFP shall analyze backbone infrastructure and public service needs and funding capacity at the Village level, as defined in Figure LU-3 of the Land Use Element of this General Plan. (The Planning Process required for Village Reserve Areas in Policy LU-34 shall be sufficient to meet this requirement.) The cost of preparing the PFFP shall be shared proportionately among property owners in each Village, with the shares of any non-participating owner collected at the time of development and reimbursed to owner(s) who prepared the PFFP through a reimbursement agreement.

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*Policy LU-15: The City shall deny projects and oppose the annexation of properties which are demonstrated to be out of compliance with Policies LU-13 and LU-14 above.*

*Policy LU-16: Funding mechanisms for major capital facilities which must be "oversized" to support future development shall be established to account for the full cost of the facility(ies) and provide for ultimate financing by the future development that will share in the benefit. A typical way of accomplishing this is for the initial project proponent to complete the required improvements and enter into a reimbursement agreement to be reimbursed for that portion beyond his fair share. Alternatively, a phased Community Facility District (CFD) or similar mechanism which can include all oversized facilities required for the Village can be established to finance these facilities over time.*

Continued implementation of City Fire Code provisions and implementation of the General Plan policies would ensure that adequate fire protection and emergency medical services are provided. Policies CI-47 and CI-49 specifically require that public facilities be identified and financed and that public services and facilities be available on time to maintain desired service levels. Policy HS-33 requires that adequate first response capabilities be maintained as the city develops. The environmental effects of the development of additional fire protection facilities in the Planning Area have been programmatically considered in this Draft EIR as part of overall development identified in the General Plan Update Land Use Map (see Sections 4.1 through 4.13). As such, this impact is considered **less than significant**.

### Mitigation Measures

None required.

#### **4.12.1.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES**

##### CUMULATIVE SETTING

The cumulative setting for fire protection and emergency medical services includes the current service area boundaries of the Madera City Fire Department, as well as the full buildout of the Planning Area, which is expected to occur after 2030. The reader is referred to Section 4.0 regarding the cumulative setting and buildout under the proposed General Plan Update.

##### CUMULATIVE IMPACTS AND MITIGATION MEASURES

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

**Impact 4.12.1.2** Implementation of the proposed General Plan Update and associated buildout would contribute to the cumulative demand for fire protection and emergency medical services. This is considered a **less than cumulatively considerable** impact.

Implementation of the proposed City of Madera General Plan would require additional fire-related services and equipment to adequately serve the anticipated population of 263,278 residents and associated nonresidential development in the Planning Area at buildout (anticipated beyond 2030).

### Proposed General Plan Policies, Objectives, and Actions that Provide Mitigation

The proposed General Plan Update contains several goals and policies that would assist in addressing fire protection and emergency service impacts. Those policies and action items that contain specific, enforceable requirements and/or restrictions and corresponding performance standards that address this impact are listed under Impact 4.12.1.1.

As described under Impact 4.12.1.1, continued implementation of City Fire Code provisions and implementation of General Plan policies would ensure that adequate fire protection and emergency medical services are provided. Policies CI-47 and CI-49 specifically require that public facilities be identified and financed and that public services and facilities be available on time to maintain desired service levels. Policy HS-33 requires that adequate first response capabilities be maintained as the city develops. Policy LU-13 requires that sufficient public services be available, including fire service, in conjunction with new development. Policies LU-14, LU-15, and LU-16 require that financing plans be in place to ensure public services, including fire, will be available in conjunction with new development and annexation. The environmental effects of the development of additional fire protection facilities in the Planning Area have been programmatically considered in this Draft EIR as part of overall development identified in the General Plan Update Land Use Map (see Sections 4.1 through 4.13). Therefore, the proposed General Plan Update would not contribute to cumulative fire protection and emergency service impacts, and this impact is considered **less than cumulatively considerable**.

#### Mitigation Measures

None required.

### **4.12.2 LAW ENFORCEMENT**

#### **4.12.2.1 EXISTING SETTING**

The Madera City Police Department provides law enforcement services to the City of Madera. The department has one police station located at 330 South C Street. As of April 2009, the department had a total of 59 sworn officers, 15 patrol vehicles, and 4 patrol motorcycles.

The average response time for all calls is 15.9 minutes, while the average response time for high priority emergency calls is approximately 4 minutes. These response times can vary based on the time of day.

#### STAFFING

The police department is divided into two divisions: Administrative Services and Operations. Fifty-eight officers and 21 civilians are employed full time. Civilian volunteers and police reserves supplement the department effort.

#### **Police Administrative Services Division**

The Administrative Services Division is responsible for managing the budget, the facilities, license and regulatory compliance, records, communications, property and evidence, investigations, the gang task force, crime prevention, the volunteer program, and personnel and training. The division operates the 24-hour dispatch center where both emergency 911 and nonemergency

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calls for service are received. The department historically receives some 40,000 calls for service each year.

### **Police Operations Division**

The Operations Division is responsible for the department's initial response to calls for service. The division has three work units: patrol, traffic, and police reserves. About 33 police officers are assigned to the patrol unit. Included in the patrol unit are three police canine officers, each of whom is assigned a police dog. These officers have take-home vehicles in order to facilitate their response to call-outs.

The Operations Division has four police motorcycle officers who are dedicated to traffic enforcement and collision investigation. The division has two school liaison officers who are assigned to the high school and one at the Thomas Jefferson and Martin Luther King middle schools on a full-time basis. They are responsible for law enforcement activities at their respective schools. One officer is assigned to the City of Madera Housing Authority on a full-time basis.

Finally, the division is assisted by a contingent of reserve police officers. These officers volunteer their time to bolster the efforts of the patrol unit. The department provides all uniforms and equipment for the reserve officers.

According to Commander Randy Williams with the Madera City Police Department, the allocated positions within the department provide a staffing ratio of 1.0 officers per 1,000 residents.

### **4.12.2.2 REGULATORY FRAMEWORK**

STATE

#### **Emergency Response/Evacuation Plans**

The State of California passed legislation authorizing the Office of Emergency Services to prepare a Standard Emergency Management System program, which sets forth measures by which a jurisdiction should handle emergency disasters. Noncompliance with SEMS could result in the State withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster.

### **4.12.2.3 IMPACTS AND MITIGATION MEASURES**

STANDARDS OF SIGNIFICANCE

The following standards are based on State CEQA Guidelines Appendix G. A significant impact to police protection would occur if implementation of the proposed project:

- 1) Would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services.

METHODOLOGY

Evaluation of potential law enforcement impacts was based on consultation with staff from the Madera City Police Department, as well as review of the Police Department's website and other relevant literature.

IMPACTS AND MITIGATION MEASURES

**Law Enforcement Service and Standards**

**Impact 4.12.2.1** Implementation of the proposed General Plan Update would increase the demand for law enforcement services. With the implementation of General Plan Update policy provisions, this is considered a **less than significant** impact.

Implementation of the proposed General Plan would include approximately 24,788 residential units and approximately 804 acres being developed for commercial, office, and industrial land uses by the year 2030 in the Planning Area. As population and other development in the Planning Area increases, demands for law enforcement services will also increase.

Based on the current staffing ratio goal of 1.0 officers per every 1,000 persons, development proposed under the General Plan Update would result in the need for approximately 170 total officers in the Planning Area by 2030. It should be noted, however, that the City has not defined a fixed staffing ratio for its Police Department, and service levels may be established based on various performance criteria. In any case, the addition of law enforcement personnel, together with additional facilities and equipment to accommodate the additional staff, will be necessary by 2030.

Proposed General Plan Policies, Objectives, and Actions that Provide Mitigation

The proposed General Plan Update contains several goals, policies, and action items that would address potential impacts associated with public services and law enforcement. The following list contains those policies and action items that include specific, enforceable requirements and corresponding performance standards that address this impact.

*Policy CI-44: Public facilities should be phased in a logical manner which avoids "leapfrog" development and encourages the orderly development of roadways, water and sewer, and other public facilities. The City shall not provide public financing or assistance for projects that do not comply with City master plans.*

*Policy CI-47: All major development projects shall identify the size and cost of all infrastructure and public facilities and identify how the installation and long-term maintenance of infrastructure will be financed consistent with the policies in this General Plan.*

*Policy CI-49: Except when prohibited by state law, the City shall require that sufficient capacity in all public services and facilities will be available on time to maintain desired service levels and avoid capacity shortages, traffic congestion, or other negative effects on safety and quality of life.*

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*Policy CI-50: All new residential development shall be required to annex into City of Madera Community Facilities District 2005-01, or any subsequent CFD created in its place. The purpose of the CFD is to collect special assessments from new residential development to offset the cost of providing eligible municipal services to that development.*

*Policy HS-35: The City shall ensure the safety and protection of Madera and its community members by providing appropriate first response to emergencies and ensure that sufficient resources are available to expand protection as the community grows.*

*Action Item HS-35.1: Collaborate with existing agencies to review existing interoperable communication and prepare a communications plan as needed.*

*Policy HS-36: The City will maintain and enhance community safety through coordinated regional emergency, law-enforcement and protective services systems.*

*Policy HS-39: The City encourages the use of Crime Prevention Through Environmental Design (CPTED) principles in the design of private development projects and public facilities. These basic principles include:*

### *Natural Surveillance*

*A design concept directed primarily at keeping intruders easily observable. Promoted by features that maximize visibility of people, parking areas and building entrances: doors and windows that look out on to streets and parking areas; pedestrian-friendly sidewalks and streets; front porches; adequate nighttime lighting.*

### *Territorial Reinforcement*

*Physical design can create or extend a sphere of influence. Users then develop a sense of territorial control while potential offenders, perceiving this control, are discouraged. This experience is promoted by features that define property lines and distinguish private spaces from public spaces by using landscape plantings, pavement designs, gateway treatments, and "CPTED" fences.*

### *Natural Access Control*

*A design concept directed primarily at decreasing crime opportunity by denying access to crime targets and creating in offenders a perception of risk. This is gained by designing streets, sidewalks, building entrances and neighborhood gateways to clearly indicate public routes and discouraging general access to private areas through structural and design elements.*

*Target Hardening*

*Accomplished by features that prohibit entry or access: window locks, dead bolts for doors, interior door hinges*

Implementation of Policies CI-47 and CI-49 specifically requires that public facilities be identified and financed and that public services and facilities be available on time to maintain desired service levels. Policy HS-35 requires that adequate first response capabilities be maintained as the city develops. The environmental effects of the development of additional law enforcement facilities in the Planning Area have been programmatically considered in this Draft EIR as part of overall development identified in the General Plan Update Land Use Map (see Sections 4.1 through 4.13). As such, this impact is considered **less than significant**.

Mitigation Measures

None required.

**4.12.2.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES**

CUMULATIVE SETTING

The cumulative setting for law enforcement services includes the full buildout of the Planning Area, which is expected to occur after 2030. The reader is referred to Section 4.0 regarding the cumulative setting and buildout under the proposed General Plan Update.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

**Cumulative Law Enforcement Services**

**Impact 4.12.2.2** Implementation of the proposed General Plan Update and associated buildout would contribute to the cumulative demand for law enforcement services. This is considered a **less than cumulatively considerable** impact.

Implementation of the proposed City of Madera General Plan would require additional law enforcement services and equipment to adequately serve the anticipated population of 263,278 residents and associated nonresidential development in the Planning Area at buildout (anticipated beyond 2030).

Proposed General Plan Policies, Objectives, and Actions that Provide Mitigation

The proposed General Plan Update contains several goals and policies that would assist in addressing law enforcement service impacts. Those policies and action items that contain specific, enforceable requirements and/or restrictions and corresponding performance standards that address this impact are listed under Impact 4.12.2.1.

As described under Impact 4.12.2.1, implementation of Policies CI-47 and CI-49 specifically requires that public facilities be identified and financed and that public services and facilities be available on time to maintain desired service levels. Policy HS-35 requires that adequate first response capabilities be maintained as the city develops. The environmental effects of the development of additional law enforcement facilities in the Planning Area have been programmatically considered in this Draft EIR as part of overall development identified in the General Plan Update Land Use Map (see Sections 4.1 through 4.13). Therefore, the proposed

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General Plan Update would not contribute to cumulative law enforcement service impacts, and this impact is considered **less than cumulatively considerable**.

### Mitigation Measures

None required.

### 4.12.3 WATER SUPPLY

This section addresses environmental effects of the proposed project on water supply infrastructure and treatment capacity. For discussion of water quality and the adequacy of water supplies available to serve the proposed project, see Section 4.9, Hydrology and Water Quality.

#### 4.12.3.1 EXISTING SETTING

##### WATER SERVICE PROVIDERS IN THE PLANNING AREA

There are five water purveyors within the Planning Area (see **Figure 4.9-1**):

- City of Madera
- Madera Irrigation District (MID)
- Madera Valley Water Company (MVWC)
- Madera County Maintenance District 19-Parkwood (CMD-19)
- County Service Area 3-Parkdale (CSA-3)

See Section 4.9, Hydrology and Water Quality, of this EIR for a detailed discussion of water supply for these water purveyors. The following descriptions of each water purveyor were obtained from the County's Integrated Regional Water Management Plan (2008).

##### City of Madera

The City of Madera provides water service to its population of almost 57,000 (as of 2007) and relies solely on groundwater. The City's existing water system facilities include 16 groundwater wells, 150 miles of water distribution system pipelines, and a one million gallon elevated water storage tank. The wells are scattered throughout the city and have depths ranging from approximately 300 to 700 feet. The total pumping capacity of the current water system is about 27,000 gallons per minute (gpm). Specific capacities for the wells range from 17 gpm/ft to about 100 gpm/ft. As discussed in Section 4.9, Hydrology and Water Quality, the City of Madera 2005 Urban Water Management Plan estimated that water use in the City of Madera was 13,350 acre-feet per year (AFY) in 2005, and usage was projected to be 15,935 AFY in 2010 (City of Madera, 2005). According to the City's Water System Master Plan prepared in 1997, the typical per capita water consumption rate in Madera is 280 gallons per capita per day (gpcd). This per capita demand fluctuates depending on climate but is based on multiple-year data (City of Madera, 1997a).

Because the City relies solely on groundwater for its water supply, the planned water supply projects and programs are related to the expansion of its system of wells and distribution system throughout the city to serve continued growth in addition to routine maintenance projects. The City's Water System Master Plan (WSMP) projected the need for four new wells between 2005 and 2010, another four wells between 2010 and 2015, and five new wells between 2015 and 2020. These future wells are expected to be sited in areas of anticipated growth. The Master Plan

also projects the need for new distribution mains to serve these new developments. Outside of these distribution mains, improvements proposed under the WSMP include specific pipeline reinforcements, water distribution connections, and pipeline looping.

#### Madera Irrigation District

The Madera Irrigation District (MID) is the largest irrigation district in Madera County covering approximately 128,300 acres including the portions of the Planning Area outside of the existing city limits (see **Figure 4.9-1**). MID delivers water to its customers through approximately 115 miles of pipelines, 225 miles of lined canals, 90 miles of unlined canals, and 102 miles of natural streambeds. The pipelines range from 12 inches to 84 inches in diameter with about half of them cast in place. The flows are delivered by gravity in the majority of the water distribution system, with only a few small pump stations (Madera County, 2008).

#### Madera Valley Water Company

The Madera Valley Water Company (MVWC) is a mutually owned water company providing water to approximately 1,890 residential and 40 commercial customers in the northern portion of the Planning Area.

#### County Special Districts

Madera County has 34 County Service Areas and Maintenance Districts that together operate 30 small water systems, two of which are located within the Planning Area:

- Madera County Maintenance District 19-Parkwood (CMD-19) which serves about 635 units with a system capacity of 1,840 gallons per minute
- County Service Area 3-Parksdale (CSA-3), which serves about 507 units with a system capacity of 1,900 gpm

### **4.12.3.2 REGULATORY FRAMEWORK**

The reader is referred to the “Regulatory Framework” discussion in Section 4.9, Hydrology and Water Quality, regarding applicable water supply regulations and policies.

### **4.12.3.3 IMPACTS AND MITIGATION MEASURES**

#### STANDARDS OF SIGNIFICANCE

The following significance thresholds are based on Appendix G from the State CEQA Guidelines and apply to the proposed project’s water supply system. A project is considered to have a significant water supply impact on the environment when it would:

- 1) Result in the need for new water supplies or entitlements, or result in the need for new or expanded local or regional water treatment or distribution facilities that would result in a physical impact to the environment.

See Section 4.9, Hydrology and Water Quality, for a discussion of the proposed project’s impacts on water supplies and groundwater levels as well as the environmental effects of obtaining additional water supplies.

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### METHODOLOGY

This section is based on review of applicable proposed General Plan Update policies and the review of previously prepared environmental documents for other projects in the area, including, but not limited to, the City of Madera Urban Water Management Plan and the Madera County Integrated Regional Water Management Plan.

### IMPACTS AND MITIGATION MEASURES

#### Water Supply Infrastructure

**Impact 4.12.3.1** Implementation of the General Plan would require additional treatment capacity, storage capacity, and other conveyance facilities to meet the projected water supply demands. However, implementation of proposed General Plan Update policies would require that water supply infrastructure be provided at the same time as development. This is considered a **less than significant** impact.

The City's Water System Master Plan projected the need for four new wells between 2005 and 2010, another four wells between 2010 and 2015, and five new wells between 2015 and 2020. These future wells are expected to be sited in areas of anticipated growth. The Master Plan also projects the need for new distribution mains to serve these new developments. Outside of these distribution mains, improvements proposed under the WSMP include specific pipeline reinforcements, water distribution connections, and pipeline looping. The City of Madera's WSMP projects the need for new wells, distribution mains, and various pipeline reinforcements and water distribution connections to meet water service demands for their 2020 growth projections. (2020 is the horizon year for the City's existing WSMP, and the WSMP does not estimate projections for 2030.)

Additional water supply production and distribution infrastructure improvements to serve development in the Planning Area would include similar groundwater facilities, such as raw water pipelines, water storage tanks, pump facilities, and treatment and distribution facilities. In 2006, the City's water demand was 13,165 AFY. The proposed General Plan Update is anticipated to result in a City water demand increase from a projected 15,935 AFY in year 2010 to approximately 47,450 AFY by year 2030.

#### Proposed General Plan Policies, Objectives, and Actions that Provide Mitigation

The proposed General Plan Update contains several goals, policies, and action items that would address potential impacts associated with public services and water supply. The following list contains those policies and action items that include specific, enforceable requirements and corresponding performance standards that address this impact.

*Policy CI-44: Public facilities should be phased in a logical manner which avoids "leapfrog" development and encourages the orderly development of roadways, water and sewer, and other public facilities. The City shall not provide public financing or assistance for projects that do not comply with City master plans.*

*Policy CI-47: All major development projects shall identify the size and cost of all infrastructure and public facilities and identify how the installation and*

long-term maintenance of infrastructure will be financed consistent with the policies in this General Plan.

*Policy CI-49:* Except when prohibited by state law, the City shall require that sufficient capacity in all public services and facilities will be available on time to maintain desired service levels and avoid capacity shortages, traffic congestion, or other negative effects on safety and quality of life.

*Policy CI-51:* Water supply and delivery systems shall be available in time to meet the demand created by new development, or shall be assured through the use of bonds or other sureties to the City's satisfaction.

*Action Item CI-51.1:* The following shall be required for all development projects, excluding subdivisions:

- An assured water supply and delivery system shall be available at the time of project approval. If a choice of alternative methods of supply and/or delivery is selected, each shall be capable individually of providing water to the project.
- All required water infrastructure for the project shall be in place at the time of project approval, or shall be assured through the use of bonds or other sureties to the City's satisfaction. Water infrastructure may be phased to coincide with the phased development of large-scale projects.

*Action Item CI-51.2:* The following shall be required for all subdivisions to the extent permitted by state law:

- Proposed water supply and delivery systems shall be identified at the time of tentative map approval to the satisfaction of the City. Alternative methods of supply and/or delivery may be proposed, provided that each is capable individually of providing water to the project.
- Prior to the approval of a final map by the City, sufficient capacity shall be available to accommodate the subdivision plus existing development, and other approved projects in the same service area, and other projects which have received commitments for water service.
- Offsite and onsite water infrastructure sufficient to provide adequate water to the subdivision shall be in place prior to the approval of a final map or their financing shall be assured to the satisfaction of the City, consistent with the requirements of the Subdivision Map Act.
- Offsite and onsite water distribution systems required to serve the subdivision shall be in place and contain water at sufficient quantity and pressure prior to the issuance of any building permits.

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*Model homes may be exempted from this policy as determined appropriate by the City, and subject to approval by the City.*

*Policy CI-54: The City shall require that water flow and pressure be provided at sufficient levels to meet domestic, commercial, industrial, and firefighting needs.*

Implementation of Policies CI-47 and CI-49 specifically requires that public facilities be identified and financed and that public services and facilities be available on time to maintain desired service levels, while Policy CI-51 and Action Items CI-51.1 and CI-51.2 would require that water supply and infrastructure be available at the same time as development occurs. The environmental effects of the development of new water supply distribution infrastructure in the Planning Area have been programmatically considered in this Draft EIR as part of overall development identified in the General Plan Update Land Use Map (see Sections 4.1 through 4.13). The reader is referred to Section 4.9, Hydrology and Water Quality, regarding the anticipated environmental effects of major supply water and associated infrastructure projects. As such, this impact is considered **less than significant**.

### Mitigation Measures

None required.

### 4.12.3.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

#### CUMULATIVE SETTING

The cumulative setting for water supply services includes the full buildout of the Planning Area, which is expected to occur after 2030. The reader is referred to Section 4.0 regarding the cumulative setting and buildout under the proposed General Plan Update as well as Section 4.9, Hydrology and Water Quality, regarding cumulative water supply conditions associated with groundwater usage.

#### CUMULATIVE IMPACTS AND MITIGATION MEASURES

#### Cumulative Water Supply Infrastructure

**Impact 4.12.3.2** Implementation of the proposed General Plan Update and associated buildout would contribute to the cumulative demand for water supply infrastructure. However, implementation of proposed General Plan Update policies would require that water supply infrastructure be provided at the same time as development. This is considered a **less than cumulatively considerable** impact.

As identified under Impact 4.12.3.1, additional water supply production and distribution infrastructure improvements to serve development in the Planning Area would likely involve groundwater facilities, such as raw water pipelines, water storage tanks, pump facilities, and treatment and distribution facilities. Implementation of the proposed City of Madera General Plan would further increase the need for upgraded and expanded water supply infrastructure to adequately serve the anticipated population of 263,278 residents and associated nonresidential development in the Planning Area at buildout (anticipated beyond 2030).

Proposed General Plan Policies, Objectives, and Actions that Provide Mitigation

The proposed General Plan Update contains several goals and policies that would assist in addressing water supply infrastructure needs. Those policies and action items that contain specific, enforceable requirements and/or restrictions and corresponding performance standards that address this impact are listed under Impact 4.12.3.1.

As described under Impact 4.12.3.1, implementation of Policies CI-47 and CI-49 specifically requires that public facilities be identified and financed and that public services and facilities be available on time to maintain desired service levels, while Policy CI-51 and Action Items CI-51.1 and CI-51.2 would require that water supply and infrastructure be available at the same time as development occurs. The environmental effects of the development of new water supply distribution infrastructure in the Planning Area have been programmatically considered in this Draft EIR as part of overall development identified in the General Plan Update Land Use Map (see Sections 4.1 through 4.13). The reader is referred to Section 4.9, Hydrology and Water Quality, regarding anticipated environmental effects of major supply water and associated infrastructure projects. Therefore, the proposed General Plan Update would not contribute to cumulative water supply infrastructure impacts, and this impact is considered **less than cumulatively considerable**.

Mitigation Measures

None required.

**4.12.4 WASTEWATER SERVICE**

**4.12.4.1 EXISTING SETTING**

CITY OF MADERA WASTEWATER SYSTEM

**Wastewater Collection System**

Wastewater is collected throughout the City of Madera via a network of sanitary sewer collection pipelines ranging from 8 to 42 inches in diameter. With the aid of five sewer lift stations, the influent is gravity fed to the wastewater treatment plant (WWTP) approximately 7 miles from the western boundary of the city limits. There are approximately 12,000 residential connections, each of which typically has a 4-inch sewer service pipeline connecting to the main pipeline. Commercial and industrial customers number less than 1,000 and are connected with service pipelines appropriate to handle their particular effluent load.

The average daily wastewater volume for 2008 was estimated to be approximately 5.82 million gallons per day (mgd) (City of Madera, 2008). The City of Madera has no facilities for extensive storage of the wastewater before treatment. Because the City of Madera's wastewater treatment plant has been designated as a regional collection point for septic disposal, septic haulers from outside the City service area bring in an additional volume of wastewater. The most recent data show that outside septic waste collection contributes an average of 5,419 gallons (less than 1 percent of total) per day to the treatment totals. The outside septic waste collection volume is assumed to remain constant over time because some of the areas currently served by septic tanks will eventually be served by public sewer systems, offsetting the projected growth in areas served by septic tanks. **Table 4.12.4-1** provides projections for wastewater collected and treated in the service area. The projection in **Table 4.12.4-1** assumes an average annual population growth rate of 3.6 percent.

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**TABLE 4.12.4-1**  
**WASTEWATER COLLECTED AND TREATED (AFY) IN THE CITY OF MADERA SERVICE AREA**

2005	2010	2015	2020	2025
6,400	7,600	9,100	11,000	13,000

*Source: City of Madera, 2008; County of Madera 2008*

### **Wastewater Treatment System**

The Madera WWTP, when constructed in 1972, consisted of influent grinding, grit removal, primary clarification, secondary treatment using trickling filters, and secondary clarifiers. The WWTP also provides anaerobic digestion of biosolids generated in the treatment process.

The City recently expanded the capacity of the WWTP from 7 to 10.1 mgd and upgraded the current treatment process to reduce nitrogen levels in the effluent.

The new treatment process replaced the trickling filters with oxidation ditches, a suspended growth process capable of removing nitrogen. After clarification, the anaerobically digested biosolids are dewatered by a sludge centrifuge. The dewatered cake is then hauled offsite for final disposal.

### **Wastewater Management**

The treated wastewater (effluent) from the City of Madera's WWTP is disposed of by land application rather than discharge to a waterway. The facilities consist of fourteen 20-acre percolation/evaporation ponds and a 40-acre irrigated farming area. The farming area currently uses effluent for irrigation purposes whenever it is being actively farmed.

The WWTP Expansion Predesign Report by Boyle (July 2004) proposed a system of recovery wells that will pump groundwater from under the percolation ponds to an MID canal for agricultural irrigation. This pumping of percolated effluent is intended to reduce mounding under the WWTP and to control elevated concentrations of nitrate or other contaminants in the underlying groundwater. Phase 1 of the recovery well system is currently being designed.

### **COUNTY-OPERATED WASTEWATER SYSTEMS**

Madera County Service Areas and Maintenance Districts operate 16 small sewer systems. Seven of these are located in the Valley Floor subarea and the remaining nine are in the Foothills and Mountains subarea. The following descriptions of the wastewater systems are based on information from the County's website and County staff.

The smaller wastewater systems generally have sanitary sewer systems with asbestos cement, clay, or plastic pipe collection systems; one raw sewage pumping station; an extended aeration treatment process; chlorine disinfection; and treated water pumping. Wastewater is handled by percolation ponds and sprayfields. Many of these wastewater systems are in poor condition and need repair.

The larger, County-operated wastewater systems (with more than 500 connections) are located in the communities of Oakhurst, Bass Lake, and Parksdale. Of these, only Parksdale is located in the Planning Area.

Parksdale's wastewater system consists of a plastic pipe collection system, a raw sewage pumping station, and one metering station. After flowing through the metering station, the wastewater becomes the responsibility of the City of Madera. City fees for sewage disposal are passed on to each resident connected to the sewer system.

### 4.12.4.2 REGULATORY FRAMEWORK

#### FEDERAL

##### **Clean Water Act**

The Clean Water Act (CWA) regulates the water quality of all discharges into waters of the United States including wetlands, perennial and intermittent stream channels. Section 401, Title 33, Section 1341 of the CWA sets forth water quality certification requirements for "any applicant applying for a federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters." Section 404, Title 33, Section 1344 of the CWA in part authorizes the U.S. Army Corps of Engineers to:

- Set requirements and standards pertaining to such discharges: subparagraph (e);
- Issue permits "for the discharge of dredged or fill material into the navigable waters at specified disposal sites": subparagraph (a);
- Specify the disposal sites for such permits: subparagraph (b);
- Deny or restrict the use of specified disposal sites if "the discharge of such materials into such area will have an unacceptable adverse effect on municipal water supplies and fishery areas": subparagraph (c);
- Specify type of and conditions for non-prohibited discharges: subparagraph (f);
- Provide for individual state or interstate compact administration of general permit programs: subparagraphs (g), (h), and (j);
- Withdraw approval of such state or interstate permit programs: subparagraph (i);
- Ensure public availability of permits and permit applications: subparagraph (o);
- Exempt certain federal or state projects from regulation under this Section: subparagraph (r); and
- Determine conditions and penalties for violation of permit conditions or limitations: subparagraph (s).
- Section 401 certification is required prior to final issuance of Section 404 permits from the U.S. Army Corps of Engineers.

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### LOCAL

#### City of Madera Sewer System Master Plan

The City of Madera prepared a Sewer System Master Plan (SSMP) in 1997 to guide the development of wastewater facilities in the city as well as in surrounding lands. This document develops unit flow factors, identifies deficiencies in the existing wastewater system, and identifies improvements to correct these deficiencies and expand the system to provide service to new area of development. The proposed sewer system improvement projects define the recommended SSMP capital improvement program (CIP).

#### 4.12.4.3 IMPACTS AND MITIGATION MEASURES

##### STANDARDS OF SIGNIFICANCE

The following standards are based on State CEQA Guidelines Appendix G. A significant impact to wastewater service would occur if implementation of the proposed project would result in the following:

- 1) Project exceeds wastewater treatment requirement of the applicable Regional Water Quality Control Board;
- 2) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or
- 3) A determination by the wastewater treatment provider, which serves or may serve the project, that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

##### METHODOLOGY

Evaluation of potential impacts on wastewater facilities and services was based on consultation with City of Madera staff and review of the City of Madera Urban Water Management Plan and the Madera County Integrated Regional Water Management Plan. The impact analysis considers 2030 conditions.

##### IMPACTS AND MITIGATION MEASURES

#### Wastewater Conveyance and Treatment

**Impact 4.12.4.1** Implementation of the City of Madera General Plan Update would substantially increase wastewater flows and require additional infrastructure and may require additional treatment capacity to accommodate anticipated demands. However, implementation of proposed General Plan Update policies would require that wastewater conveyance and treatment capacity be provided at the same time as development. This impact is considered **less than significant**.

Wastewater Conveyance

Implementation of the General Plan would allow for increased development which would require improvements and modifications to existing wastewater facilities and require new wastewater conveyance infrastructure including collectors, trunks, and interceptor sewer lines and appurtenances. Wastewater flow estimates are calculated using recommended unit flow factors for master planning from the 1997 Sewer System Master Plan, presented below in **Table 4.12.4-2**.

**TABLE 4.12.4-2  
RECOMMENDED UNIT FLOW FACTORS FOR MASTER PLANNING**

Land Use Category	Unit Flow Factor (gpd/acre)
Very Low Density Residential	400
Low Density Residential	1,300
Medium Density Residential	2,700
High Density Residential	3,500
Commercial/Office/Industrial/Schools	1,000

Source: City of Madera Sewer System Master Plan, 1997b

Based on the factors in **Table 4.12.4-2** and the acreages given in **Table 3.0-1** of this document, wastewater generation rates by year 2030 are estimated to be 21.21 MGD.<sup>1</sup>

The SSMP identifies improvements and modifications needed to ensure sufficient capacity in both conveyance and treatment facilities and includes construction and operation costs associated with the proposed facilities under the existing City of Madera General Plan. The SSMP will need to be updated to address growth under the updated Madera General Plan. The SSMP identifies several future trunk sewer lines proposed in the Planning Area to accommodate the estimated effluent flows including the MSCCC Specific Plan Area, north of Adell Street, and the Avenue 13 interceptor. Recommended capital improvement projects include seven improvements to the existing sewer system to alleviate existing capacity deficiencies and improve system operational reliability and maintenance, and nine expansion projects to supplement the capacity of the existing trunk sewer system and extend the system to areas of future development. The environmental effects of the development of new wastewater conveyance infrastructure in the Planning Area have been programmatically considered in this Draft EIR as part of overall development identified in the General Plan Update Land Use Map (see Sections 4.1 through 4.13).

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<sup>1</sup> Year 2030 wastewater generation rates are calculated as follows: total commercial, industrial, office, and schools square footage in acres (7,206 ac) times 1,000 gpd/ac = 7,206,000 gpd plus VLD Residential (3,806 ac) times 400 gpd/ac = 1,522,400 gpd plus LD Residential (6,750 ac) times 1,300 gpd/ac = 8,775,000 gpd plus MD Residential (9,280 ac) times 2,700 gpd/ac = 25,056,000 gpd plus HD Residential (343 ac) times 3,500 gpd/ac = 1,200,500 gpd = 21,209,500 gpd = 21.21 mgd.

Recommended unit flow factors did not include Village Reserve or Village Mixed Use designations, so they were included as Medium Density Residential in this calculation.

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### Treatment Capacity

The WWTP recently underwent an expansion and has a permitted capacity of 10.1 mgd. Expansion of the Planning Area is planned to be phased to provide for sufficient long-term capacity. Wastewater generation rates by year 2030 are estimated to be 21.21 mgd under the proposed General Plan Update, which would be within the capacity of proposed expansion improvements under the existing Sewer System Master Plan. The City is currently working on updates to its Sewer System Master Plan and will use updated population numbers to accommodate for growth under the updated General Plan.

The City's wastewater facilities are modular and are made to be expanded rather than abandoned (Randall, 2008). The City has adequate land to expand current facilities and has the potential to build a second WWTP (Randall, 2008). It should be noted, however, that unless alternative treatment processes are implemented which provide an alternative to discharging effluent to ponds, the City will need to acquire additional acreage for the purpose of constructing percolation/evaporation ponds. While environmental review for future expansions of the WWTP has not been completed, the following potential environmental effects from further wastewater treatment could occur:

- Potential groundwater quality impacts from expanded land application of wastewater effluent
- Adverse impacts on biological and cultural resources from construction of new facilities
- Adverse noise and air quality impacts during the construction of new facilities

Subsequent WWTP improvement and expansion projects will be subject to their own environmental review.

### Proposed General Plan Policies, Objectives, and Actions that Provide Mitigation

The proposed General Plan Update contains several goals, policies, and action items that would address potential impacts associated with public services and water supply. The following list contains those policies and action items that include specific, enforceable requirements and corresponding performance standards that address this impact.

*Policy CI-44: Public facilities should be phased in a logical manner which avoids "leapfrog" development and encourages the orderly development of roadways, water and sewer, and other public facilities. The City shall not provide public financing or assistance for projects that do not comply with City master plans.*

*Policy CI-47: All major development projects shall identify the size and cost of all infrastructure and public facilities and identify how the installation and long-term maintenance of infrastructure will be financed consistent with the policies in this General Plan.*

*Policy CI-49: Except when prohibited by state law, the City shall require that sufficient capacity in all public services and facilities will be available on time to maintain desired service levels and avoid capacity shortages, traffic congestion, or other negative effects on safety and quality of life.*

*Policy CI-55: Sewage conveyance and treatment capacity shall be available in time to meet the demand created by new development, or shall be assured through the use of bonds or other sureties to the City's satisfaction.*

*Action Item CI-55.1: The following shall be required for all development projects, excluding subdivisions:*

- Sewer/wastewater treatment capacity shall be available at the time of project approval.*
- All required sewer/wastewater infrastructure for the project shall be in place at the time of project approval, or shall be assured through the use of bonds or other sureties to the City's satisfaction.*

*Action Item CI-55.2: Require the following for all subdivisions to the extent permitted by state law:*

- Sewage/wastewater treatment capacity shall be available at the time of tentative map approval.*
- Sewer service to the subdivision shall be demonstrated prior to the approval of the Final Map by the City. Sufficient capacity shall be available to accommodate the subdivision plus existing development, and other approved projects using the same conveyance lines, and projects which have received sewage treatment capacity commitment.*
- Onsite and offsite sewage conveyance systems required to serve the subdivision shall be in place prior to the approval of the Final Map, or their financing shall be assured to the satisfaction of the City, consistent with the requirements of the Subdivision Map Act.*
- Sewage conveyance systems inside the subdivision shall be in place and connected to the sewage disposal system prior to the issuance of any building permits. Model homes may be exempted from this policy as determined appropriate by the City, and subject to approval by the City.*

*Policy CI-56: Development along corridors identified as locations of future sewerage conveyance facilities shall incorporate appropriate easements as a condition of approval.*

Implementation of Policies CI-47 and CI-49 specifically requires that public facilities be identified and financed and that public services and facilities be available on time to maintain desired service levels, while Policy CI-55 and Action Items CI-55.1 and CI-55.2 would require that wastewater treatment and infrastructure capacity be available at the same time as development occurs. As such, this impact is considered **less than significant**.

### Mitigation Measures

None required.

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### 4.12.4.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

#### CUMULATIVE SETTING

The cumulative setting for wastewater services includes the full buildout of the Planning Area, which is expected to occur after 2030. The reader is referred to Section 4.0 regarding the cumulative setting and buildout under the proposed General Plan Update.

#### CUMULATIVE IMPACTS AND MITIGATION MEASURES

##### Cumulative Wastewater Service

**Impact 4.12.4.2** Implementation of the proposed General Plan Update and associated buildout would contribute to the cumulative demand for wastewater service. However, implementation of proposed General Plan Update policies would require that wastewater treatment and infrastructure capacity be provided at the same time as development. This is considered a **less than cumulatively considerable** impact.

As identified under Impact 4.12.4.1, additional wastewater treatment and infrastructure capacity improvements would be needed to serve future development. Buildout of the Planning Area under the proposed General Plan Update would further increase the need for upgraded and expanded wastewater infrastructure to adequately serve the anticipated population of 263,278 residents and associated nonresidential development anticipated beyond 2030.

#### Proposed General Plan Policies, Objectives, and Actions that Provide Mitigation

The proposed General Plan Update contains several goals and policies that would assist in addressing wastewater service needs. Those policies and action items that contain specific, enforceable requirements and/or restrictions and corresponding performance standards that address this impact are listed under Impact 4.12.4.1.

As described under Impact 4.12.4.1, policies CI-47 and CI-49 specifically require that public facilities be identified and financed and that public services and facilities be available on time to maintain desired service levels, while Policy CI-55 and Action Items CI-55.1 and CI-55.2 would require that wastewater treatment and infrastructure capacity be available at the same time as development occurs. Therefore, the proposed General Plan Update would not contribute to cumulative wastewater infrastructure impacts, and this impact is considered **less than cumulatively considerable**.

#### Mitigation Measures

None required.

### 4.12.5 SOLID WASTE

#### 4.12.5.1 EXISTING SETTING

The City of Madera Department of Solid Waste and Recycling (SWR) provides solid waste removal services for the City of Madera. SWR operates a curbside solid waste, a green waste collection program, and a mandatory blue-can recycling program for Madera.

In unincorporated Madera County, residential collection services are provided by two exclusive franchise collectors under agreements with the County. Residential pickup in the county is generally voluntary, with individual property owners arranging service with franchise collectors.

Madera Disposal Inc. provides collection services in the valley portions of the county, while EMADCO Disposal serves the Eastern Madera County area.

### SOLID WASTE COLLECTION AND DISPOSAL

Solid waste disposal for the city is managed by the City of Madera Solid Waste and Recycling Department. The City provides all waste collection and transport services within the city limits processing approximately 37,012 tons in 2000. The City has no recycling facilities. However, there are several recycling companies in Madera that accept beverage containers and other recyclables.

### LANDFILL FACILITIES

There is currently one active, permitted landfill that services the City of Madera. The Fairmead Solid Waste Disposal Site is a Class III landfill located at Avenue 22 and Road 19 in the City of Chowchilla. It is owned by the County of Madera and operated by Madera Disposal Systems, Inc. It is located on 121 acres with a total permitted disposal area of 77 acres surrounded by agricultural, open space, residential, and rural land uses. This landfill accepts agricultural, construction/demolition, green materials, industrial, tires, asbestos, and mixed municipal wastes with a maximum of 1,100 tons accepted per day. The estimated permitted capacity of the landfill is 9.4 million cubic yards of which approximately 5,552,894 cubic yards or 59.1 percent remain. As of 2008, the estimated closure date of the landfill is 2027, which assumes a 2 percent annual growth rate.

### WASTE REDUCTION PROGRAMS

The City of Madera last updated their Source Reduction and Recycling Element (SRRE) in 1997. This element describes the City's efforts to reduce the amount of solid waste entering landfills. This is accomplished through source reduction, recycling, composting, and programs to handle special wastes. The implementation of these programs has resulted in a 50 percent diversion rate as of 2007.

#### 4.12.5.2 REGULATORY FRAMEWORK

##### FEDERAL

##### **Resource Conservation and Recovery Act**

The Resource Conservation and Recovery Act (RCRA) was enacted in 1976 to address the huge volumes of municipal and industrial solid waste generated nationwide. After several amendments, the act as it stands today governs the management of solid and hazardous waste and underground storage tanks (USTs). RCRA, enacted in 1976, is an amendment to the Solid Waste Disposal Act of 1965. RCRA has been amended several times, with the most substantial changes made by the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA is a combination of the first solid waste statutes and all subsequent amendments. RCRA authorizes EPA to regulate waste management activities. RCRA authorizes states to develop and enforce their own waste management programs, in lieu of the federal program, if a state's waste

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management program is substantially equivalent to, consistent with, and no less stringent than the federal program.

STATE

### **California Integrated Waste Management Act**

The California Integrated Waste Management Act of 1989 (AB 939) requires every city and county in the state to prepare a Source Reduction and Recycling Element to its Solid Waste Management Plan that identifies how each jurisdiction will meet the mandatory state waste diversion goals of 25 percent by 1995 and 50 percent by 2000 and beyond. The purpose of AB 939 is to "reduce, recycle, and re-use solid waste generated in the state to the maximum extent feasible." The term "integrated waste management" refers to the use of a variety of waste management practices to safely and effectively handle the municipal solid waste stream with the least adverse impact on human health and the environment. The act has established a waste management hierarchy, as follows: source reduction; recycling; composting; transformation; and disposal.

### **California Integrated Waste Management Board Model Ordinance**

Subsequent to the Integrated Waste Management Act, additional legislation was passed to assist local jurisdictions in accomplishing the goals of AB 939. The California Solid Waste Re-use and Recycling Access Act of 1991 (Sections 42900–42911 of the Public Resources Code) directs the California Integrated Waste Management Board (CIWMB) to draft a "model ordinance" relating to adequate areas for collecting and loading recyclable materials in development projects. Upon speaking with Annette Kwock, Solid Waste/Recycling Coordinator, the City passed a Construction and Demolition Ordinance which came into effect in December, 2008.

### **AB 1327 California Solid Waste Reuse and Recycling Access Act**

The Solid Waste Reuse and Recycling Access Act of 1991 required each jurisdiction to adopt an ordinance by September 1, 1994, requiring each development project to provide an adequate storage area for collection and removal of recyclable materials.

#### **4.12.5.3 IMPACTS AND MITIGATION MEASURES**

##### STANDARDS OF SIGNIFICANCE

The following standards are based on State CEQA Guidelines Appendix G. A significant impact to solid waste service would occur if implementation of the proposed project would result in the following:

- 1) Production of quantities of solid waste that would exceed the capacity of the landfill(s) that will serve the project's solid waste disposal needs.
- 2) Non-compliance with federal, state, and local statutes and regulations related to solid waste.

METHODOLOGY

Evaluation of potential impacts on solid waste facilities and services was based on consultation with staff from the City of Madera Public Works and Planning departments and review of pertinent literature.

PROJECT IMPACTS AND MITIGATION MEASURES

**Impact 4.12.5.1** Implementation of the proposed General Plan Update would increase solid waste generation and the demand for related services. However, this increased generation would not exceed landfill capacity or conflict with solid waste reduction measures. This is considered a **less than significant** impact.

The land uses associated with the proposed City of Madera General Plan Update would include residential, commercial, and industrial designations and would result in increase solid waste generation.

Assuming implementation of mandatory diversion programs, the proposed General Plan Update could generate approximately 239,348 tons of waste annually by year 2030. The Fairmead Landfill is projected to have sufficient disposal capacity to handle the current and estimated waste stream until the year 2027. Upon closure of the Fairmead Landfill, or sooner should the City desire, solid waste would be sent to other available landfills that would be in operation beyond 2027 (e.g., City of Clovis Landfill has permitted capacity through year 2047 and accepts waste from areas outside the City of Clovis). In addition, subsequent development under the proposed General Plan Update would be subject to City source reduction provisions.

Proposed General Plan Policies, Objectives, and Actions that Provide Mitigation

The proposed General Plan Update contains goals, policies, and action items that would address potential impacts associated with public services. The following list contains those policies and action items that include specific, enforceable requirements and corresponding performance standards that would reduce this less than significant impact associated with solid waste service.

*Policy CI-49: Except when prohibited by state law, the City shall require that sufficient capacity in all public services and facilities will be available on time to maintain desired service levels and avoid capacity shortages, traffic congestion, or other negative effects on safety and quality of life.*

*Policy CI-59 The City will promote solid waste source reduction, reuse, recycling, composting and environmentally-safe transformation of waste. The City will seek to comply with the requirements of AB 939 with regard to meeting state-mandated targets for reductions in the amount of solid waste generated in Madera.*

*Action Item CI-59.1: The City shall provide information to businesses and residents on available options to implement waste reduction targets. Other actions may include:*

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- *Actively promoting a comprehensive, consistent, and effective recycled materials procurement effort among other governmental agencies and local businesses.*
- *Encouraging all companies that do business in Madera to recycle and reuse construction scraps, demolition materials, concrete, industrial waste, and green waste.*

As identified above, adequate landfill capacity is available to meet the needs of the City beyond 2030 and subsequent development would be subject to City source reduction programs. Implementation of the above General Plan Update policies and associated action item would further assist in solid waste reduction measures. This impact would be **less than significant**.

### Mitigation Measures

None required.

### 4.12.5.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

#### CUMULATIVE SETTING

The cumulative setting for solid waste includes Madera County and the surrounding region (see Section 4.0). The development associated with the proposed General Plan Update would result in a population increase and contribute to a cumulative impact on solid waste and related facilities. Potential development in the Planning Area would result in an incremental cumulative demand for solid waste collection and disposal.

#### CUMULATIVE IMPACTS AND MITIGATION MEASURES

##### **Cumulative Solid Waste Impacts**

**Impact 4.12.5.2** Implementation of the proposed General Plan, along with potential development of the Planning Area, would result in cumulative increases in solid waste services. This is considered a **less than cumulatively considerable** impact.

As identified under Impact 4.12.5.1, subsequent development under the proposed General Plan Update would increase solid waste service demands. At full buildout of the Planning Area (beyond year 2030), the proposed General Plan Update could generate solid waste of up to 387,019 tons per year associated with the population increase, which would place further demands on disposal needs. While the Fairmead Landfill is anticipated to be closed after the year 2027, other landfills would be available to accept City solid waste, such as the City of Clovis Landfill in Clovis, California (permitted capacity through year 2047). Subsequent development would also be subject to City source reduction programs.

### Proposed General Plan Policies, Objectives, and Actions that Provide Mitigation

The proposed General Plan Update contains goals, policies, and action items that would address potential impacts associated with public services. Those policies and action items that contain specific, enforceable requirements and/or restrictions and corresponding performance standards that address this impact are listed under Impact 4.12.5.1.

As described under Impact 4.12.5.1, adequate landfill capacity is available to be available under cumulative conditions to meet the needs of the City beyond 2030 and subsequent development would be subject to City source reduction programs. Implementation of the above General Plan Update policies and associated action item would further assist in solid waste reduction measures. Therefore, the proposed General Plan Update would not contribute to cumulative solid waste impacts, and this impact is considered **less than cumulatively considerable**.

Mitigation Measures

None required.

**4.12.6 PUBLIC SCHOOLS**

**4.12.6.1 EXISTING SETTING**

Public schools in the Planning Area are administered by the Madera Unified School District (MUSD).

MUSD consists of 17 elementary schools, 3 middle schools, 2 high schools, 1 alternative school, and 2 continuation schools. The district has a total of 25 schools with a combined enrollment of 18,643 students and 881.5 full-time equivalent teachers, resulting in a pupil-to-teacher ratio of 21:1. The district has 2,093 classes with an average class size of 24.0 students. This is slightly less than the county average class size of 24.1 and also less than the state average class size of 25.2.

MUSD contains two charter schools with a total enrollment of 487 students and 23.5 full-time equivalent teachers, resulting in a pupil-to-teacher ratio of 20:7 for the charter schools.

The most current (2008) student generation factors used by MUSD are presented in **Table 4.12.6-1** below.

**TABLE 4.12.6-1  
MADERA UNIFIED SCHOOL DISTRICT STUDENT GENERATION FACTORS**

<b>Grade</b>	<b>Single-Family</b>	<b>Multifamily</b>
K-6	0.431	0.325
7-8	0.1012	0.081
9-12	0.198	0.145
<b>Total</b>	<b>0.751</b>	<b>0.551</b>

*Source: Madera Unified School District, 2008*

In 2008, MUSD collected the following development impact fees:

- \$5.65 per square foot of residential development
- \$0.47 per square foot of commercial/industrial development

There are two-year colleges and four-year universities in the vicinity of the Planning Area. Nearby two-year colleges include Fresno City College, the Madera extension of Kings River College, and the Madera Center of the State Center Community College District. Nearby four-

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year universities include California State University at Fresno, University of California at Merced, and Fresno Pacific University.

### 4.12.6.2 REGULATORY FRAMEWORK

STATE

#### **Leroy F. Greene School Facilities Act of 1998 (SB 50)**

The Leroy F. Greene School Facilities Act of 1998, also known as Senate Bill No. 50 or SB 50 (Stats. 1998, Ch. 407), governs a school district's authority to levy school impact fees. This comprehensive legislation, together with the \$9.2 billion education bond act approved by the voters in November 1998 as Proposition 1A, reforms methods of school construction financing in California. SB 50 instituted a new school facility program by which school districts can apply for state construction and modernization funds. It imposed limitations on the power of cities and counties to require mitigation of school facilities impacts as a condition of approving new development and provided the authority for school districts to levy fees at three different levels.

Level I fees are the current statutory fees allowed under Education Code 17620. This code section provides the basic authority for school districts to levy a fee against residential and commercial construction for the purpose of funding school construction or reconstruction of facilities. These fees vary by district for residential construction and commercial construction and are increased biannually.

Level II developer fees are outlined in Government Code Section 65995.5, allowing school districts to impose a higher fee on residential construction if certain conditions are met. These conditions include having a substantial percentage of students on multi-track year-round scheduling, having an assumed debt equal to 15–30 percent of the district's bonding capacity (percentage is based on revenue sources for repayment), having at least 20 percent of the district's teaching stations housed in relocatable classrooms, and having placed a local bond on the ballot in the past four years which received at least 50 percent plus one of the votes cast. A Facility Needs Assessment must demonstrate the need for new school facilities for unhoused pupils is attributable to projected enrollment growth from the construction of new residential units over the next five years.

Level III developer fees are outlined in Government Code Section 655995.7. If state funding becomes unavailable, this code section authorizes a school district that has been approved to collect Level II fees to collect a higher fee on residential construction. This fee is equal to twice the amount of Level II fees. However, if a district eventually receives state funding, this excess fee may be reimbursed to the developers or subtracted from the amount of state funding.

#### **The Kindergarten-University Public Education Facilities Bond Act of 2002 (Prop. 47)**

This act was approved by voters in November 2002 and provides for a bond issue of \$13.05 billion to fund necessary education facilities to relieve overcrowding and to repair older schools. Funds will be targeted at areas of greatest need and must be spent according to strict accountability measures. Funds will also be used to upgrade and build new classrooms in the California Community Colleges, the California State University, and the University of California in order to provide adequate higher education facilities to accommodate growing student enrollment.

**California Department of Education**

The California Department of Education (CDE) School Facilities Planning Division (SFPD) has prepared a School Site Selection and Approval Guide that provides criteria for locating appropriate school sites in the State of California. School site and size recommendations were changed by CDE in 2000 to reflect various changes in educational conditions, such as decrease in class sizes and use of advanced technology. The expanded use of school buildings and grounds for community and agency joint use and concern for the safety of the students and staff members also influenced the modification of the CDE recommendations.

Specific recommendations for school size are provided in the publication, School Site Analysis and Development. This document suggests a ratio of 1:2 between buildings and land. CDE is aware that in a number of cases, primarily in urban settings, smaller sites cannot accommodate this ratio. In such cases, the SFPD may approve an amount of acreage less than the recommended gross site size and building-to-ground ratio.

Certain health and safety requirements for school site selection are governed by state regulations and the policies of the SFPD relating to:

- Proximity to airports, high-voltage power transmission lines, railroads, and major roadways;
- Presence of toxic and hazardous substances;
- Hazardous facilities and hazardous air emissions within one-quarter mile;
- Proximity to high-pressure natural gas lines, propane storage facilities, gasoline lines, pressurized sewer lines, or high-pressure water pipelines;
- Noise;
- Results of geological studies or soil analyses; and
- Traffic and school bus safety issues.

**4.12.6.3 IMPACTS AND MITIGATION MEASURES**

STANDARDS OF SIGNIFICANCE

The following standards are based on State CEQA Guidelines Appendix G. A significant impact to public schools would occur if implementation of the proposed project:

- 1) Would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services.

METHODOLOGY

Evaluation of potential public school impacts associated with the implementation of the proposed Madera County General Plan Update was based on consultation with school district staff and review of appropriate documents.

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### IMPACTS AND MITIGATION MEASURES

#### Public School Facilities

**Impact 4.12.6.1** Implementation of the proposed General Plan Update would increase demand for public school facilities and services. However, existing fee programs would mitigate new growth demands for public school services. This is considered a **less than significant** impact.

The MUSD Facilities Planning and Construction Management Department's Ten-Year Facilities Plan Budget and Expenditure Report, completed in May 2007, identified a list of needs to meet the growth within the district through 2017. The amendment indicated that the district would need to add two new elementary schools, one new middle school, and one new high school, and improve, modernize, and renovate some existing schools and support facilities to accommodate the estimated 22,777 students the district projected they would have by 2016. Subsequent development proposed under the General Plan Update would result in a projected population of 170,431 residents and approximately 47,739 dwelling units by the year 2030 in the Planning Area. Using the MUSD student generation rates presented in **Table 4.12.6-1**, the proposed General Plan Update would result in approximately 19,048 elementary students, 4,519 middle school students, and 8,659 high school students, for a total of approximately 32,226 students. Several funding sources will be used by MUSD to facilitate the construction and maintenance of the additional facilities needed to serve the projected growth. Sources include, but are not limited to, increased developer impact fees, Fund 35 Savings, and local general obligation bond funds. In addition, California Government Code Sections 65995(h) and 65996(b) specifically set forth that payment of fees provide full and complete school facilities mitigation.

The environmental effects of the development of new public school facilities in the Planning Area have been programmatically considered in this Draft EIR as part of overall development identified in the General Plan Update Land Use Map (see Sections 4.1 through 4.13).

#### Proposed General Plan Policies, Objectives, and Actions that Provide Mitigation

The proposed General Plan Update contains goals, policies, and action items that would address potential impacts associated with public services. The following list contains those policies and action items that include specific, enforceable requirements and corresponding performance standards that would reduce this less than significant impact associated with public schools.

*Policy SUS-1: The City shall assist the Madera Unified School District in obtaining mitigation for the impacts of new development on school facilities.*

*Policy SUS-2: The City shall work with the Madera Unified School District to coordinate the planning of future land use and school facilities and will encourage the District to identify school site locations and routes that are safe for children to walk or bike to school (also known as "Safe Routes to School").*

*Action Item SUS-2.1: Work with the Madera Unified School District to help the District identify and plan for the construction of all road, sidewalk, and other infrastructure improvements needed for new schools, and that these improvements are in place at the time the school opens.*

As identified above, California Government Code Sections 65995(h) and 65996(b) specifically set forth that payment of developer impact fees provide full and complete school facilities mitigation. Implementation of the above General Plan Update policies and associated action item would further assist in the provision of adequate public school facilities. This impact would be **less than significant**.

Mitigation Measures

None required.

**4.12.6.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES**

CUMULATIVE SETTING

The development associated with the proposed General Plan Update would result in population increases contributing to a cumulative impact on schools and related facilities within MUSD. Buildout of the Planning Area (beyond year 2030) would result in an incremental cumulative demand for schools and result in additional environmental impacts associated with the development of new sites. The construction of new schools and related facilities would provide additional capacity to accommodate current and future enrollment. However, providing new school sites could result in cumulative environmental impacts on traffic congestion, noise, potential loss of habitat, water, solid waste, etc. The environmental impacts associated with the development of future school sites would be evaluated individually by MUSD for immediate and cumulative impacts as required by the State Board of Education and CEQA.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

**Cumulative Public School Impacts**

**Impact 4.12.6.2** Implementation of the proposed General Plan, as well as potential development of the Planning Area, would result in cumulative public school impacts. These cumulative public school impacts are considered **less than cumulatively considerable**.

MUSD would need to add new elementary, middle, high, and alternative schools to provide sufficient capacity to accommodate buildout associated with the proposed General Plan Update beyond the year 2030. Based on current MUSD generation rates, the district is expected to accommodate approximately 49,109 students under the proposed General Plan Update at buildout.

The adoption of all or some combination of Mello-Roos taxes and state funding would mitigate potential cumulative impacts on schools. However, California Government Code Sections 65995(h) and 65996(b) provide that the payment of school impact fees is considered to provide full and complete school facilities mitigation. The environmental effects of the development of new public school facilities in the Planning Area have been programmatically considered in this Draft EIR as part of overall development identified in the General Plan Update Land Use Map (see Sections 4.1 through 4.13).

Proposed General Plan Policies, Objectives, and Actions that Provide Mitigation

The proposed General Plan Update contains goals, policies, and action items that would address potential impacts associated with public services. Those policies and action items that

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contain specific, enforceable requirements and/or restrictions and corresponding performance standards that address this impact are listed under Impact 4.12.6.1.

As described under Impact 4.12.6.1, California Government Code Sections 65995(h) and 65996(b) specifically set forth that payment of fees provide full and complete school facilities mitigation. Implementation of the above General Plan Update policies and associated action item would further assist in the provision of adequate public school facilities. Therefore, the proposed General Plan Update would not contribute to cumulative public school impacts, and this impact is considered **less than cumulatively considerable**.

### Mitigation Measures

None required.

## 4.12.7 ELECTRICITY, NATURAL GAS, AND OTHER INFRASTRUCTURE

### 4.12.7.1 EXISTING SETTING

Natural gas and electrical power in the Planning Area are supplied by Pacific Gas and Electric Company (PG&E). As of 2008, PG&E is proposing to construct a new transmission line south of Madera's current city limits to provide additional service capacity. Two alignments are being studied—one parallel to Road 11½ and another parallel to Road 12½. The City has indicated a preference for the Road 11½ alignment, since the other route would take the transmission line through lands planned for urban uses.

PG&E has numerous electric overhead and underground facilities in the Planning Area. In addition, PG&E has three substations and two 230kV and three 70kV transmission lines in the Planning Area. PG&E also has five other substations that serve the Planning Area.

Some homes in the Planning Area rely on propane delivered by truck to individual tanks. Although still a small part of the energy supply, solar power is gaining acceptance as a source of power in the Madera area. One group exploring this alternative energy source is farmers, who use solar electricity for water pumps and other uses.

Natural gas, telephone, cable, and broadband infrastructure is provided in the City's roadway right-of-way (typically collocated with other utilities in trenches) as well as in overhead lines.

### 4.12.7.2 REGULATORY FRAMEWORK

STATE

#### **California Building Energy Efficiency Standards**

Title 24, Part 6 of the California Code of Regulations, known as the Building Energy Efficiency Standards, was established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. After adoption of the California Energy Security and Reliability Act of 2000 (AB 970), the California Energy Commission produced changes to the Building Energy Efficiency Standards. In November 2003 the California Energy Commission adopted these updated standards. The California Building Standards Commission adopted the 2005 changes in July 2003 and the updated standards took effect on October 1, 2005. Included in the update were requirements identified under Senate

Bill 5X, part of which requires the California Energy Commission to adopt energy efficiency standards for outdoor lighting.

### California Public Utilities Commission

The California Public Utilities Commission (CPUC) regulates privately owned telecommunication, electric, natural gas, water, railroad, rail transit, and passenger transportation companies. It is the responsibility of the CPUC to assure California utility customers receive safe, reliable utility service at reasonable rates; protect utility customers from fraud; and promote a healthy California economy. The Public Utilities Code, adopted by the legislature, defines the jurisdiction of the CPUC.

#### 4.12.7.3 IMPACTS AND MITIGATION MEASURES

##### STANDARDS OF SIGNIFICANCE

The following standards are based on State CEQA Guidelines Appendix G. A significant impact to utilities would occur if implementation of the proposed project:

- 1) Would result in substantial adverse physical impacts associated with the provision of new or physically altered facilities, the construction of which could cause significant environmental impacts for any public electrical or natural gas service providers or would result in inefficient, wasteful and unnecessary consumption of energy (based on State CEQA Guidelines Appendix F).

##### METHODOLOGY

Evaluation of potential impacts on electrical, natural gas, and telephone services resulting from the proposed project is based on consultation with the service providers, review of California Energy Commission policies, and state standards.

##### IMPACTS AND MITIGATION MEASURES

#### Electrical, Natural Gas, and Other Infrastructure

**Impact 4.12.7.1** Implementation of the General Plan would increase demand for electrical, natural gas, telephone, and related infrastructure. This is considered a **less than significant** impact.

PG&E does not foresee any capacity shortages or problems in meeting the buildout demands associated with the proposed General Plan Update (Smith, 2008).

According to PG&E, as growth occurs in areas that currently have little to no electric facilities, PG&E will either need to upgrade existing lines or build new overhead or underground primary facilities as well as install service transformers and services. Adding capacity to existing substations will also be required in the form of new transformer banks or replacement of the existing banks with larger units. While PG&E does not have plans at the present time to build new transmission lines, it is likely that the increase in load would necessitate upgrading the existing lines in the surrounding vicinity and will not be limited to facilities in the Planning Area. All electrical distribution lines, substations, transmission lines, delivery facilities, and easements required to serve the Planning Area are subject to CEQA review.

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Potential environmental effects of obtaining more power through the development of power plants include, but are not limited to, air quality, biological resources, cultural resources (depending on location), hazardous materials, land use, noise and vibration, traffic, visual resources, waste management, water and soil resources, and health hazards. Potential environmental effects for the construction of transmission lines include, but are not limited to, air quality (during construction), biological resources (depending on location), cultural resources (depending on location), hazardous materials, land use, noise and vibration (during construction), traffic, visual resources, and health hazards. The majority of the infrastructure for these services would be collocated and constructed concurrently with other utilities where feasible and be located within roadway and other public rights-of-way to lessen or eliminate potential environmental impacts.

Development under the proposed General Plan Update would be required to comply with recently adopted changes to Title 24 of the California Code of Regulations regarding energy efficiency that became effective in September 2005. These new energy efficiency standards were developed in response to the state's energy crisis as well as AB 970 and SB 5X in regard to improving residential and nonresidential building energy efficiency, minimizing impacts to peak energy usage periods, and reducing impacts on overall state energy needs.

There are several purveyors providing telephone service as well as cable television and other cable-related services to the Planning Area. Implementation of the General Plan would result in growth in the Planning Area and require the expansion of these services. Most of the underground and aerial telephone transmission lines are generally collocated with other utilities on poles or in underground trenches and are constructed in public and roadway rights-of-way to reduce visual and aesthetic impacts and potential safety hazards. The environmental review of providing telephone and cable services is typically handled on a case-by-case basis in conjunction with individual development projects.

The environmental effects of the development of new utility infrastructure in the Planning Area have been programmatically considered in this Draft EIR as part of overall development identified in the General Plan Update Land Use Map (see Sections 4.1 through 4.13).

### Proposed General Plan Policies, Objectives, and Actions that Provide Mitigation

The proposed General Plan Update contains several goals, policies, and action items that would address potential impacts associated with public services and energy use. The following list contains those policies and action items that include specific, enforceable requirements and corresponding performance standards that address this impact.

*Policy CI-49: Except when prohibited by state law, the City shall require that sufficient capacity in all public services and facilities will be available on time to maintain desired service levels and avoid capacity shortages, traffic congestion, or other negative effects on safety and quality of life.*

*Action Item CON-37.3: 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 of Policy CI-49 would ensure that adequate public utility services are timed with development, while Action Item CON-37.3 would ensure that City energy use is efficient. The majority of this infrastructure would be collocated and constructed concurrently with other

utilities within roadway rights-of-way to lessen or eliminate potential environmental effects. Coordination between service providers and subsequent developers would preclude conflicts between utility providers. Therefore, this impact is considered **less than significant**.

Mitigation Measures

None required.

**4.12.7.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES**

CUMULATIVE SETTING

The cumulative setting for electrical and natural gas services encompasses the service areas of each particular service provider. This includes full buildout of the Planning Area under the proposed General Plan Update that would occur sometime after 2030 as well as regional development identified in Section 4.0. The reader is referred to Section 4.6, Air Quality, regarding energy use and climate change.

CUMULATIVE IMPACTS

**Cumulative Electrical, Natural Gas, and Other Infrastructure**

**Impact 4.12.7.2** Implementation of the proposed General Plan Update, as well as potential development in the region, would result in cumulative utility service impacts. The project's contribution would be **less than cumulatively considerable**.

As identified under Impact 4.12.7.1, PG&E does not foresee any capacity shortages or problems in meeting the buildout demands associated with the proposed General Plan Update (Smith, 2008). While PG&E does not have plans at the present time to build new transmission lines, it is likely that the increase in load would necessitate upgrading the existing lines in the surrounding vicinity and will not be limited to facilities in the Planning Area. All electrical distribution lines, substations, transmission, delivery facilities, and easements required to serve the Planning Area are subject to CEQA review.

Potential environmental effects of obtaining more power through the development of power plants include, but are not limited to, air quality, biological resources, cultural resources (depending on location), hazardous materials, land use, noise and vibration, traffic, visual resources, waste management, water and soil resources, and health hazards. Potential environmental effects for the construction of transmission lines include, but are not limited to, air quality (during construction), biological resources (depending on location), cultural resources (depending on location), hazardous materials, land use, noise and vibration (during construction), traffic, visual resources, and health hazards. The majority of the infrastructure for these services would be collocated and constructed concurrently with other utilities where feasible and be located within roadway and other public rights-of-way to lessen or eliminate potential environmental impacts.

Development under the proposed General Plan Update would be required to comply with recently adopted changes to Title 24 of the California Code of Regulations regarding energy efficiency. These new energy efficiency standards were developed in response to the state's energy crisis as well as AB 970 and SB 5X in regard to improving residential and nonresidential building energy efficiency, minimizing impacts to peak energy usage periods, and reducing impacts on overall state energy needs.

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While implementation of the proposed General Plan Update would result in growth in the Planning Area and require the expansion of these services, most of the underground and aerial telephone transmission lines are generally collocated with other utilities on poles or in underground trenches and are constructed in public and roadway rights-of-way to reduce visual and aesthetic impacts and potential safety hazards.

The environmental effects of the development of new utility infrastructure in the Planning Area have been programmatically considered in this Draft EIR as part of overall development identified in the General Plan Update Land Use Map (see Sections 4.1 through 4.13).

### Proposed General Plan Policies, Objectives, and Actions that Provide Mitigation

The proposed General Plan Update contains several goals, policies, and action items that would address potential impacts associated with public services and energy use. Impact 4.12.7.1 list contains those policies and action items that include specific, enforceable requirements and corresponding performance standards that address this impact.

Implementation of Policy CI-49 would ensure that adequate public utility services are timed with development, while Action Item CON-37.3 would ensure that City energy use is efficient. The majority of this infrastructure would be collocated and constructed concurrently with other utilities within roadway rights-of-way to lessen or eliminate potential environmental effects. Coordination between service providers and subsequent developers would preclude conflicts between utility providers. Therefore, this impact is considered **less than cumulatively considerable**.

### Mitigation Measures

None required.

## 4.12.8 PARKS AND RECREATION

### 4.12.8.1 EXISTING SETTING

The City of Madera owns and maintains 14 parkland facilities, totaling 320 acres, not including building grounds, landscape buffer areas, median islands, and park strips. Excluding the municipal golf course, there are 140 acres of City parklands. These 14 city parks include pocket, neighborhood, and community parks, trails, linear parks, and special use facilities. **Table 4.12.8-1** below lists the parks within the city.

**TABLE 4.12.8-1  
EXISTING CRPD FACILITIES AND SERVICES**

Facility Name	Location	Type	Acreage	Description of Facilities
Centennial Park	4 <sup>th</sup> and Flume	Neighborhood Park	3.53	Swimming pool, kids pool, diving board, open turf, benches, parking
Clinton Park	Along Sycamore and Clinton Streets	Linear Park	2.07	Path, benches, waste receptacles, bird and bat houses
Community Garden	Between 4 <sup>th</sup> and N. Lake Street	Pocket Park	.31	Community garden

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<b>Facility Name</b>	<b>Location</b>	<b>Type</b>	<b>Acreage</b>	<b>Description of Facilities</b>
Knox Park	Knox Street	Neighborhood Park	2	Grassy and shaded areas
Lions Town and Country Park	Howard Road, between Schnoor and Granada	Community Park	50.36	Group and individual picnic sites, outdoor stage, baseball fields, softball fields, volleyball courts, trails, children's play areas, wooded area, restrooms
McNally Park	Corner of Roosevelt and A Street	Neighborhood Park	1.93	Picnic shelter, basketball courts, children's play area, restrooms, open turf area, picnic tables, barbeque pits
Madera Municipal Golf Course	Avenue 17	Special Use Facility	179.95	18-hole golf course, clubhouse, restaurant, pro shop
Madera Sunrise Rotary Sports Complex	Clinton Ave.	Community Park/Sports Complex	48.94	Picnic shelter, youth and adult soccer fields, adult softball fields, play area, grassy areas
Maple Court Park	Maple Street and Maple Court	Pocket Park	.41	Grassy open area
Pan-American Park	Corner of Sherwood Way and N. Lake St	Neighborhood Park	4.66	Children's play area, volleyball court, basketball court, picnic shelter, restrooms
Riverview Park	Along Riverview Drive	Pocket Park	.65	Grassy open area
Riverside Park	Riverside Drive	Linear Park	3.31	Grassy open area
Rotary Park	North Gateway Drive	Neighborhood Park	9.67	Open turf area, skate park, horseshoe tournament arena, children's play area, picnic sites, restrooms, dog park (2009)
Vern McCullough Fresno River Trail	Rotary Park through Riverside Park along Sharon Avenue	Trail	12.45	Trail, picnic tables, waste receptacles

The City also owns and maintains the Frank A. Bergon Senior Center located on D Street, the Pan-American Community Center located on Sherwood Way, the Westside Activity Center located on West Yosemite, and the Rotary Youth Hut located on South Q Street. The City's Youth Center is under construction at Centennial Park. All of these parks and facilities are located within the city and are available for public use. As of 2008, the city's population was approximately 56,710, resulting in a ratio of approximately 5.64 acres of available parkland per 1,000 city residents, including the municipal golf course. Excluding the municipal golf course, the total is 2.5 acres per 1,000 city residents.

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### 4.12.8.2 REGULATORY FRAMEWORK

#### STATE

The Quimby Act (California Government Code Section 66477) states that “the legislative body of a city or county may, by ordinance, require the dedication of land or impose a requirement of the payment of fees in lieu thereof, or a combination of both, for park or recreational purposes as a condition to the approval of a tentative or parcel map.” It should be noted that the Quimby Act only applies to the acquisition of new parkland and does not apply to the physical development of new park facilities or associated operations and maintenance costs. The Quimby Act effectively preserves open space needed to develop parkland and recreational facilities; however, the actual development of parks and other recreational facilities is subject to discretionary approval and is evaluated on a case-by-case basis with new residential development.

### 4.12.8.3 IMPACTS AND MITIGATION MEASURES

#### STANDARDS OF SIGNIFICANCE

The following standards are based on State CEQA Guidelines Appendix G. A significant impact to recreational facilities would occur if implementation of the proposed General Plan would result in the following:

- 1) Increase the demand for recreational opportunities and facilities that result in the need to construct or expand recreational facilities, which might have an adverse physical effect on the environment.

DEIR sections 4.1 through 4.13 programmatically evaluate the environmental effects of the proposed General Plan Update Recreation and Open Space Element policy provisions associated with recreation and trail facilities.

#### METHODOLOGY

This section was prepared and evaluated based on consultation with City of Madera Department of Parks and Community Services staff and review of relevant documents.

#### IMPACTS AND MITIGATION MEASURES

##### Increased Demand for Park and Recreational Facilities

**Impact 4.12.8.1** Implementation of the proposed General Plan Update would increase the demand for existing facilities and require additional parks and recreational facilities to accommodate the anticipated growth associated with the General Plan Update. This would be a **less than significant** impact given that the proposed General Plan Update and the Parks and Recreation Master Plan would provide improvement of park and recreation opportunities.

Potential development proposed in association with the General Plan Update would require additional parkland, facilities, and personnel to accommodate the demand. The staffing and administrative needs for the City's Parks and Community Services Department will increase as a result of the population and additional park and recreational facilities associated with

implementing the City of Madera General Plan. The estimated population in the Planning Area is anticipated to be 170,431 persons under 2030 conditions. Based on the standard of 3.0 acres of parkland per 1,000 population, the City would need to have approximately 191 acres of parkland to meet the anticipated demand, if the municipal golf course is included. If the municipal golf course is excluded, the City would need to have approximately 511 acres of parkland to meet the anticipated demand. (The City currently has 320 acres of parkland including the municipal golf course and 140 acres excluding the municipal gold course.) New parks and facilities would be developed in response to population growth and as funding allows. Park site and facilities may require land use permits in some case, depending on the anticipated uses and character or adjacent developments.

Typical environmental effects regarding the construction and operation of parks and recreational facilities may involve issues with noise (during construction and associated with playfields and playgrounds), air quality (during the construction of the facility), biological resources (depending on location), historic/cultural resources (depending on location), public services and utilities (demand for police and fire protection, electric, water, and wastewater service), and traffic on a local neighborhood level. The environmental effects of construction of such facilities in the Planning Area have been considered in the technical analyses of this Draft EIR as part of overall development of the Planning Area.

There are various funding measures currently in place for land dedications and basic park development for parks proposed in the Planning Area, including development impact fees, user fees, registration fees for recreation programs, and other related fees. In order to meet the projected growth within the service boundaries, the City would continue to use other sources of revenue including but not limited to Mello-Roos Community Facilities Districts (CFD), Redevelopment Agency Funding (for eligible projects), grants, and/or the expanded use of the District-wide Landscaping and Lighting District associated with recreation facilities.

### Proposed General Plan Policies, Objectives, and Actions that Provide Mitigation

The proposed General Plan Update contains several goals, policies, and action items that would address potential impacts associated with public services and recreation facilities. The following list contains those policies and action items that include specific, enforceable requirements and corresponding performance standards that address this impact.

*Policy PR-1: The City shall develop and maintain a complete system of public parks distributed throughout the City that provides opportunities for passive and active recreation at a minimum of 3 (three) acres per 1,000 (one thousand) residents.*

*Policy PR-4: The City shall acquire, develop, and maintain parks and recreation facilities in accordance with the City's Park and Recreation Master Plan, and with the City's Park Classifications and the Park and Recreation Facility Service Level Standards. All lands offered for dedication must be of size, orientation, location, and suitability to provide park and recreation facilities consistent with this General Plan and the Park and Recreation Master Plan.*

*Policy PR-5: Parks and other facilities will be accepted into the City's system at the City's sole discretion. Land which is proposed to be dedicated to the City will not be accepted if it does not meet the requirements of this Element and/or the Park and Recreation Master Plan.*

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- Policy PR-7:* The development of parks in newly developing areas of the City where development triggers the need for a new park(s) shall be phased and/or timed so that the standards of this Element and the Parks and Recreation Master Plan are met or exceeded at all times. In no case shall parks in a new development be phased or timed in such a way that insufficient park or other facilities are provided either permanently or temporarily. The City recognizes that this may require the development of parks or other facilities larger than will be needed at the time in order to ensure that standards will be maintained as future residential development occurs.
- Policy PR-10:* The City shall require new residential development projects, including mixed-use projects with residential components, to dedicate land and/or pay in-lieu fees to contribute to the acquisition and development of parks or recreation facilities. The determination of which method (land dedication and/or payment of in-lieu fees) is appropriate shall be made at the City's sole discretion.
- Action Item PR-10.1:* Evaluate and implement, if adopted, a Park Impact and Parkland Dedication Ordinance consistent with the Quimby Act.
- Policy PR-14:* The City will collaborate with public and private agencies to jointly plan, develop, and manage a regional park in the Planning Area
- Policy PR-15:* The City shall ensure that the design and location of parks and trails reflect that active living and walkability are important to Madera's quality of life.
- Policy PR-16:* The City shall improve access and connectivity to parks through provision of sidewalks, bike paths, bike lanes, and bridges where appropriate.
- Policy PR-18:* The City shall expand its system of multi-use paths and trails available for transportation and recreation uses to achieve a service level of 0.5 linear miles of trails per 1,000 residents.
- Policy PR-20:* The City shall ensure that new parks provide adequate and secure onsite and offsite parking as identified in the Parks and Recreation Master Plan.

Implementation of the above General Plan Update policies and associated action items, and compliance with City development impact fees would reduce park and recreation impacts to **less than significant**. Specifically, Policy PR-1 sets a parkland provision standard that would improve the existing ratio of parkland to residents (3.0 acres per 1,000 residents), while Policies PR-4 and PR-7 provide standards regarding park and recreation facility types and the timing of park facilities.

### Mitigation Measures

None required.

#### 4.12.8.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

##### CUMULATIVE SETTING

The cumulative setting for parks and recreation consists of the City of Madera Parks and Recreation Department service area boundaries and the Planning Area. Full buildout of the Planning Area (beyond year 2030) would further increase the demand for park and recreation facilities in the Planning Area. Development of approved projects within the Planning Area would impact park and recreation facilities in Madera County's jurisdictional area as well.

##### CUMULATIVE IMPACTS AND MITIGATION MEASURES

##### Cumulative Park and Recreation Demands

**Impact 4.12.8.2** Implementation of the proposed General Plan Update, along with potential development in the region, would result in cumulative park and recreation impacts. This impact would be **less than cumulatively considerable** given that the proposed General Plan Update and the Parks and Recreation Master Plan would provide improvement of park and recreation opportunities.

Buildout of the Planning Area under the proposed General Plan Update would contribute to the cumulative demand for regional and local recreational facilities and services. The estimated population in the Planning Area at buildout is anticipated to be 263,278 persons. Based on the standard of 3.0 acres of parkland per 1,000 population, the City would need to have approximately 790 acres of parkland to meet the anticipated demand.

##### Proposed General Plan Policies, Objectives, and Actions that Provide Mitigation

The proposed General Plan Update contains several goals, policies, and action items that would address potential impacts associated with parks and recreation facilities. Impact 4.12.8.1 lists those policies and action items that contain specific, enforceable requirements and corresponding performance standards that address this impact.

Implementation of the above General Plan Update policies and associated action items, and compliance with City development impact fees would reduce park and recreation impacts to **less than cumulatively considerable**. Specifically, Policy PR-1 sets a parkland provision standard that would improve the existing ratio of parkland to residents (3.0 acres per 1,000 residents), while Policies PR-4 and PR-7 provide standards regarding park and recreation facility types and the timing of park facilities.

##### Mitigation Measures

None required.

## 4.12 PUBLIC SERVICES AND UTILITIES

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