

## 14.0 PUBLIC SERVICES AND UTILITIES

This section of the Draft Environmental Impact Report (“Draft EIR”; “DEIR”) describes the public services and utilities that would be required to serve the proposed Project. Public services include fire protection and emergency medical services, law enforcement, schools, electrical, natural gas, telephone service, cable television service, parks and recreation, water, wastewater, and other associated services. This section of the Draft EIR identifies thresholds of significance for identified public services and provides an evaluation of potential impacts to public services that could result from the implementation of the proposed Project. See Section 15.0, Hazardous Materials and Hazards, of this document for a detailed discussion of wildland fire hazards and Section 13.0, Hydrology and Water Quality, for a detailed discussion of water and stormwater drainage.

### 14.1 FIRE PROTECTION AND EMERGENCY MEDICAL SERVICES

#### 14.1.1 Existing Setting

The proposed Project site is located within the Granite Bay Community Plan Planning Area and is covered by the fire district services provided to this area.

##### 14.1.1.1 South Placer Fire District

Fire protection in the Granite Bay Community Plan area is provided by the South Placer Fire District (SPFD). SPFD is a tax-supported governmental agency that provides service under local agreements and the California State Mutual Aid Plan. SPFD also supports the statewide mutual aid system by staffing a State of California Office of Emergency Services Engine. There are 70 approved positions in SPFD, of which 51 are full-time employees and the remaining are apprentice and volunteer employees. The SPFD provides “all risk” emergency services, which include but are not limited to fires, medical aids, hazmat incidents, and rescues.

SPFD operates out of five fire stations, including four in Granite Bay. The closest station to the Project site is Station 16, located at 5300 Olive Ranch Road, approximately 3.5 miles from the site, which includes a three-person advanced life support engine company and one paramedic. Station 15, at 4650 East Roseville Parkway, has two engines in its company. Station 17, at 6900 Eureka Road, has a three-person truck company and an advanced life support ambulance staffed with two including a paramedic. Station 19, at 7070 Auburn Folsom Road, has a three-person engine company. Station 20, at 3505 Auburn Folsom, has a two-person advanced life support ambulance. All five stations “cross staff” on multiple pieces of emergency equipment, depending on the nature of the call.

SPFD’s apparatus includes seven type one engines, three type three wildland engines, two brush units, one light rescue unit, one quintuple combination pumper (quint) ladder truck, one water tender, one mobile air unit, three transporting ambulances, two utility trucks, and six staff vehicles including three command units.

Funding sources for SPFD include general and unsecured property taxes, the SPFD Special Tax, ambulance service fees, cellular tower lease, and cost recovery.

## **Service Standards**

An Insurance Services Office (ISO) rating is a collection of information on a community's public fire protection, which is determined by using a Fire Suppression Rating Schedule (FSRS). The FSRS is the manual that the ISO uses in reviewing the firefighting capabilities of individual communities. The schedule measures the major elements of a community's fire suppression system and develops a numerical grading called a Public Protection Classification (PPC). The FSRS determines a PPC from 1 to 10. Class 1 represents the best public protection, and Class 10 indicates less than the minimum recognized protection. By classifying a community's ability to suppress fires, ISO helps communities evaluate their public fire protection services. Placer County has a General Plan policy stating that the following minimum fire protection standards are encouraged: 4 in urban areas, 6 in suburban areas, and 8 in rural areas. The SPFD's current ISO rating is 4 (Richardson, 2009). SPFD responded to approximately 1,800 calls for service during 2010 (Richardson, 2011).

SPFD's service standards consist of the following:

**Structure Fire:** response force of 14 responders. First unit arrival within 7 minutes total reflex time, 80 percent of the time. Second unit arrival within 10 minutes total reflex time 80 percent of the time. The remaining units, including the Incident Commander, shall arrive within 12 minutes total reflex time (response time measured from call receipt at police 911 to fire unit arrival on scene), 80 percent of the time.

**Medical Emergencies:** response force of four responders and one ambulance (ALS capable). First unit arrival within 7 minutes total reflex time, 80 percent of the time. Second unit including advanced life support arrival within 10 minutes total reflex time, 80 percent of the time.

## **Automatic Aid Agreements**

SPFD entered into an automatic aid agreement with the Rocklin, Roseville, Penryn, Loomis, and Folsom fire departments. The agreement calls for reciprocal aid for major structures within each district's jurisdiction. A recognized automatic aid response is provided to a portion of the graded areas of the Project site by these departments.

### **14.1.1.2 Fire Hazard**

The Project site is located at the top of Sierra College Boulevard, which is considered upslope of undeveloped property with unmanaged vegetation. This area is considered by SPFD to be a Moderate Fire Severity Zone. See Section 15.0, Hazardous Materials and Hazards, of this document for a detailed discussion of wildland fire hazards.

### **14.1.1.3 Emergency Medical Services**

Granite Bay is served by two comprehensive area hospitals located in Roseville: Kaiser Permanente and Sutter Roseville Medical Center, which include Trauma Center and certified Stroke and Heart Attack Centers.

## **14.1.2 Regulatory Framework**

### **14.1.2.1 Federal**

There are no federal standards and regulations applicable to the Project site.

**14.2.1.2 State**

There are no state regulations and standards that are applicable to the Project site.

**14.1.2.3 Local**

***Placer County Code***

Article 9.32 of the Placer County Code sets various requirements for fire prevention. Specifically, it sets standards for the storage of explosives and hydrocarbon liquid, as well as fire hazards and hazardous vegetation abatement on unimproved parcels. The proposed Project would have to comply with these standards as enforced by Placer County.

***Placer County General Plan***

The Placer County General Plan Public Facilities and Services and Fire Protection elements address fire protection for the county. **Table 14.1-1** analyzes the Project’s consistency with the Placer County General Plan policies pertaining to fire services. While this Draft EIR analyzes the Project’s consistency with the Placer County General Plan pursuant to State CEQA Guidelines Section 15125(d), the determination of the Project’s consistency with this General Plan rests with the Placer County Board of Supervisors. Environmental impacts associated with any inconsistency with General Plan policies are addressed under the impact discussions of this EIR.

**TABLE 14.1-1  
GENERAL PLAN CONSISTENCY ANALYSIS – FIRE PROTECTION AND  
EMERGENCY MEDICAL SERVICES**

| General Plan Policies  | Consistency Determination        | Analysis   |
|--|----------------------------------|--|
| <p><b>Public Facilities and Services Policy 4.B.3:</b> The County shall require, to the extent legally possible, that new development pay the cost of providing public services that are needed to serve the new development; exceptions may be made when new development generates significant public benefits (e.g., low income housing, needed health facilities) and when alternative sources of funding can be identified to offset foregone revenues. This includes working with the cities to require new development within city limits to mitigate impacts on Countywide facilities and services.</p> | <p align="center">Consistent</p> | <p>The Project applicant will pay all fees required by the County to pay for the Project’s fair share of fire services.</p>  |
| <p><b>Fire Protection Policy 4.I.1.</b> The County shall encourage local fire protection agencies in Placer County to maintain the following minimum fire protection standards (expressed as Insurance Service Organization (ISO) ratings):</p> <ul style="list-style-type: none"> <li>a. ISO 4 in urban areas</li> <li>b. ISO 6 in suburban areas</li> <li>c. ISO 8 in rural areas</li> </ul>   | <p align="center">Consistent</p> | <p>Implementation of the proposed Project will not cause ISO ratings to increase to levels beyond those encouraged in the General Plan.</p>  |
| <p><b>Fire Protection Policy 4.I.1.</b> The County shall encourage local fire protection agencies in the County to maintain the following standards (expressed as average response times to emergency calls):</p>  | <p align="center">Consistent</p> | <p>The proposed Project site is adequately served by an internal roadway network connecting the Project site to Sierra College Boulevard and Nightwatch Drive. The internal roadway network would allow for easy fire access to the Project site. The Project applicant will</p> |

| General Plan Policies  | Consistency Determination | Analysis  |
|--|---------------------------|---|
| a. 4 minutes in urban areas<br>b. 6 minutes in suburban areas<br>c. 10 minutes in rural areas  |                           | work with SPFD to ensure adequate response times to the Project site, as well as adequate circulation throughout the parking lot and two points of entry and egress.                                    |
| <b>Fire Protection Policy 4.I.3.</b> The County shall require new development to develop or fund fire protection facilities, personnel, and operations and maintenance that, at a minimum, maintains the above service level standards.                | Consistent                | The Project applicant will pay any fees required by the County to help maintain the required service level standards.   |
| <b>Fire Protection Policy 4.I.9.</b> The County shall ensure that all proposed developments are reviewed for compliance with fire safety standards by responsible local fire agencies per the Uniform Fire Code and other County and local ordinances. | Consistent                | The proposed Project is consistent with all applicable local policies and regulations regarding the implementation of built-in fire safety standards, including Article 9.32 of the Placer County Code. |

## **Granite Bay Community Plan**

**Table 14.1-2** analyzes the Project’s consistency with the Granite Bay Community Plan policies pertaining to fire services. While this Draft EIR analyzes the Project’s consistency with the Granite Bay Community Plan pursuant to State CEQA Guidelines Section 15125(d), the determination of the Project’s consistency with this plan rests with the Placer County Board of Supervisors. Environmental impacts associated with inconsistency with Community Plan policies are addressed under the impact discussions of this EIR.

**TABLE 14.1-2  
COMMUNITY PLAN ANALYSIS – FIRE PROTECTION AND EMERGENCY MEDICAL SERVICES**

| Community Plan Policies   | Consistency Determination | Analysis   |
|---|---------------------------|--|
| <b>Land Use Policy 19:</b> Allow the increase of commercial and residential development only when all public services can be provided in an adequate and timely manner. | Consistent                | Adequate fire services will be in place prior to construction of the proposed Project per Article 16.08 of the Placer County Code, and as enforced by the Placer County Planning Department. |

## **14.1.3 Impacts**

### **14.1.3.1 Standards of Significance**

Project impacts are considered significant if the project results in the following (based on State CEQA Guidelines Appendix G):

- 1) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for 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.

### 14.1.3.2 Methodology

The analysis of fire protection impacts is based upon review of objectives, goals, and policies identified in the Placer County General Plan and Granite Bay Community Plan, consultations with County staff and SPFD staff, and review of other relevant documents.

### 14.1.3.3 Project-Level Impacts and Mitigation Measures

#### IMPACT 14.1.1: Fire Protection and Emergency Medical Services

The proposed Project would not result in the need for additional or expanded fire protection facilities and would not result in decreased fire protection service levels.

The proposed Project would result in the construction and use of a house of worship facility, which would include event space, offices, classrooms, a chapel, storage space, a kitchen, and parking facilities. The Project site is currently within the service area of the SPFD and would construct buildings for which fire services would be required. Additional firefighters and staff should not be necessary to service the Project site (Richardson, 2009). SPFD's existing facilities and equipment in the county currently serve the existing Project area. Implementation of the proposed Project would not require the construction of a new fire station to serve the Project area, nor would it require the physical expansion of an existing fire station.

All development and structures associated with the Project must comply with Uniform Fire Code (UFC) requirements, per Article 15.04 of the Placer County Code, which would decrease the likeliness of structure related fires. Implementation and enforcement of the UFC would ensure adequate fire flows and water supply to serve the proposed Project and mandate the installation of on-site fire suppression systems for all new development. This impact is considered **less than significant** and no further mitigation is required.

## 14.2 LAW ENFORCEMENT

### 14.2.1 Existing Setting

The Project site is located within the Granite Bay Community Plan Planning Area and is within the service area for the Placer County Sheriff's Department.

#### 14.2.1.1 Placer County Sheriff's Department

The Placer County Sheriff's Department (PCSD) provides all law enforcement services to Granite Bay. The PCSD provides all aspects of law enforcement, including patrol, investigations, 24-hour emergency communication services (911 dispatches), traffic enforcement, and traffic collision investigations. PCSD operates the South Placer Substation at 6140 Horseshoe Bar Road in Loomis, approximately 5.5 miles from the Project site. The next closest sheriff's station is at the Auburn Justice Center located at 2929 Richardson Drive, approximately 18.8 miles from the Project site.

Within the PCSD, Patrol Division personnel are the first to respond to emergencies within the county. Patrol deputies handle the enforcement of criminal and vehicle code regulations, and investigate misdemeanors and felony crimes. Patrol deputies are also responsible for the enforcement of some of the County Code ordinances, including parking and snow removal violations.

The Patrol Division is staffed by approximately 120 uniformed officers and supervisors who provide 24-hour coverage through a three-shift system. Officers also work special assignments including motorcycle patrol, bicycle patrol, snowmobile patrol, helicopter patrol, marine patrol, canine, explosives ordinance disposal (E.O.D.), special enforcement team (SWAT), and Drug Abuse Resistance Education (D.A.R.E.) Patrol resources are directed to those areas of the county where specific crime trends are occurring. Twelve canine officers and their dogs are used for the search of suspects, missing persons, and the location of evidence. Three of these canines specialize in narcotics detection.

The Placer County Sheriff's Department also has a very active citizen volunteer program. Approximately 100 volunteers in Auburn, Granite Bay, Foresthill, Kings Beach, and West Roseville provide hundreds of hours of support by taking counter reports, filing, and performing other office tasks that free up department personnel.

Response times vary greatly in the PCSD's service area based on call priority type, beat deputy location, availability of additional personnel, distance, time of day, weather, and traffic conditions. Priority 1 calls are life threatening and Priority 2 are crimes in progress; all others are considered non-emergency and not given priority. The Placer County General Plan includes a goal that PCSD strive to achieve a response time for emergency calls of 6 minutes in urban areas, 8 minutes in suburban areas, 15 minutes in rural areas, and 20 minutes in remote rural areas. The Project site is located in area that is considered suburban.

PCSD is funded through various sources, including the County General Fund, which provides PCSD with the majority of its revenues. Limited services are contracted and paid for by government and non-government entities.

### 14.2.2 Regulatory Framework

#### 14.2.2.1 Federal

There are no federal standards and regulations applicable to the proposed Project.

#### 14.2.2.2 State

There are no state regulations and standards that are applicable to the proposed Project.

#### 14.2.2.3 Local

##### ***Placer County General Plan***

The Placer County Public Facilities and Services and Law Enforcement elements address law enforcement for the county. **Table 14.2-1** analyzes the Project's consistency with the Placer County General Plan policies pertaining to law enforcement services. While this Draft EIR analyzes the Project's consistency with the Placer County General Plan pursuant to State CEQA Guidelines Section 15125(d), the determination of the Project's consistency with this General Plan rests with the Placer County Board of Supervisors. Environmental impacts associated with inconsistency with General Plan policies are addressed under the impact discussions of this EIR.

**TABLE 14.2-1  
GENERAL PLAN CONSISTENCY ANALYSIS – LAW ENFORCEMENT**

| General Plan Policies  | Consistency Determination | Analysis   |
|--|---------------------------|--|
| <p><b>Public Facilities and Services Policy 4.B.3:</b> The County shall require, to the extent legally possible, that new development pay the cost of providing public services that are needed to serve the new development; exceptions may be made when new development generates significant public benefits (e.g., low income housing, needed health facilities) and when alternative sources of funding can be identified to offset foregone revenues. This includes working with the cities to require new development within city limits to mitigate impacts on Countywide facilities and services.</p> | <p>Consistent</p>         | <p>The Project applicant will pay all fees required by the County to pay for the Project’s fair share of law enforcement services.</p>   |
| <p><b>Law Enforcement Policy 4.H.1.</b> Within the County’s overall budgetary constraints, the County shall strive to maintain the following staffing ratios (expressed as the ratio of officers to population):</p> <ul style="list-style-type: none"> <li>a. 1:1,000 for unincorporated areas</li> <li>b. 1:7 for jail population</li> <li>c. 1:16,000 total County population for court and civil officers</li> </ul>   | <p>Consistent</p>         | <p>The proposed Project will not result in an impact that would significantly affect police staffing ratios and response times resulting in the need to maintain additional staffing above the current level.</p>  |
| <p><b>Law Enforcement Policy 4.H.2.</b> The County Sheriff shall strive to maintain the following average response times for emergency calls for service:</p> <ul style="list-style-type: none"> <li>a. 6 minutes in urban areas</li> <li>b. 8 minutes in suburban areas</li> <li>c. 15 minutes in rural areas</li> <li>d. 20 minutes in remote rural areas</li> </ul>   | <p>Consistent</p>         | <p>The proposed Project site is adequately served by an internal roadway network connecting the Project site to Sierra College Boulevard and Nightwatch Drive. The internal roadway network would allow for easy police access to the Project site. The Project applicant will work with PCSD to ensure adequate response times to the Project site.</p> |
| <p><b>Law Enforcement Policy 4.H.4.</b> The County shall require new development to develop or fund sheriff facilities that, at a minimum, maintain the above standards.</p>   | <p>Consistent</p>         | <p>The Project applicant will pay any fees required by the County to help maintain the required service level standards.</p>   |
| <p><b>Law Enforcement Policy 4.H.5.</b> The County shall consider public safety issues in all aspects of commercial and residential project design, including crime prevention through environmental design.</p>   | <p>Consistent</p>         | <p>The Placer County Sheriff’s Department will review the Amazing Facts Project application to ensure compliance with this policy.</p>   |

**Granite Bay Community Plan**

**Table 14.2-2** analyzes the Project’s consistency with the Granite Bay Community Plan policies pertaining to law enforcement services. While this Draft EIR analyzes the Project’s consistency with the Granite Bay Community Plan pursuant to State CEQA Guidelines Section 15125(d), the determination of the Project’s consistency with this Plan rests with the Placer County Board of Supervisors. Environmental impacts associated with inconsistency with Community Plan policies are addressed under the impact discussions of this EIR.

**TABLE 14.2-2  
COMMUNITY PLAN CONSISTENCY ANALYSIS – LAW ENFORCEMENT**

| Community Plan Policies   | Consistency Determination | Analysis  |
|---|---------------------------|---|
| <b>Land Use Policy 19:</b> Allow the increase of commercial and residential development only when all public services can be provided in an adequate and timely manner. | Consistent                | Adequate emergency, fire, and sheriff services will be available. |

**14.2.3 Impacts**

**14.2.3.1 Standards of Significance**

Law enforcement impacts are considered significant if implementation of the Project results in the following (based on State CEQA Guidelines Appendix G):

- 1) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for 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.

**14.2.3.2 Methodology**

The analysis of law enforcement impacts is based upon review of objectives, goals, and policies identified in the Placer County General Plan and Granite Bay Community Plan, consultations with County staff and PCSD staff, and review of other relevant documents.

**14.2.3.3 Project-Level Impacts and Mitigation Measures**

**IMPACT 14.2.1:** Law Enforcement Services

The proposed Project would not result in the need for additional or expanded law enforcement facilities and would not result in decreased law enforcement service levels.

The addition of the proposed Project would create a new urban use for which law enforcement services would be required. PCSD has a staffing ratio of 1 officer per 1,000 residents for unincorporated areas. This Project would not directly add additional residents to Placer County and would not have an effect on PCSD staffing ratios. Additional police officers and staff should not be necessary to service the Project site. PCSD’s existing facilities and equipment in the county currently serve the existing Project area. Implementation of the proposed Project would not require the construction of a new police station to serve the Project area, nor would it require the physical expansion of an existing police station. Since PCSD’s funding is provided by the County, any necessary increase in additional personnel will be paid for through the County budget (Rogers, 2009).

Implementation of the proposed Project would not result in the need to construct new or expanded police facilities. Therefore, this Project would result in a **less than significant** impact and no further mitigation is required.



## 14.3 PUBLIC SCHOOLS

### 14.3.1 Existing Setting

The Project site is located within the Granite Bay Community Plan area, which is served by several three school districts: the Roseville Joint Union High School District (RJUHSD), the Loomis Union School District (LUSD), and the Eureka Union School District (EUSD).

#### 14.3.1.1 Roseville Joint Union High School District, Loomis Union School District, and Eureka Union School District

Seven public schools in these school districts generally serve the Granite Bay Community Plan area. These schools include Granite Bay High School in the RJUHSD, Franklin Elementary School and Loomis Basin Charter School in the LUSD, and Cavitt Junior High School, Eureka Elementary School, Greenhills Elementary School, Oakhills Elementary School, and Ridgeview Elementary School in the EUSD.

During the 2009–2010 school year, the RJUHSD had 9,868 students and 420.4 full-time equivalent teachers; the LUSD had 2,505 students and 113.8 full-time equivalent teachers; and the EUSD had 3,517 students and 168.4 full-time equivalent teachers (Ed-Data, 2011).

#### ***Funding and Financing Mechanisms***

##### *Developer Fees*

State law authorizes school districts to impose school facility fees (developer fees) as a condition of the issuance of building permits to finance certain school facility costs. In order to establish developer fees, the districts are required to develop justification reports which demonstrate the nexus between the fee that is imposed and the need for public facilities created by the new development. However, pursuant to California Government Code Section 65995(d), school districts may not levy developer fees on any facility used exclusively for religious purposes such as the proposed Project.

### 14.3.2 Regulatory Framework

#### 14.3.2.1 Federal

There are no federal standards and regulations applicable to the Project site.

#### 14.3.2.2 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 (SB) No. 50 (Stats. 1998, Ch.407), governs a school district's authority to levy school impact fees. This comprehensive legislation, coupled 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.

Prior to the Leroy F. Greene School Facilities Act (Government Code Sections 65995–65998), case law allowed counties or cities to consider and impose conditions to mitigate impacts of new

development on school facilities. The 1998 School Facilities Act suspended this authority, commonly referred to as *Mira* authority.

Government Code Section 65995, as amended by SB 50, establishes the dollar amount school districts may impose on new development. The statute provides that, with limited exceptions, the amount of any fees, charges, dedications, or other requirements may not exceed the following:

- 1) In the case of residential construction, \$1.93 per square foot of assessable space; or
- 2) In the case of any commercial or industrial construction, \$0.31 per square foot of chargeable covered and enclosed space (Gov. Code Section 65995, subd. (b)). These fees are to be adjusted for inflation as set forth in the statewide cost index class B construction.

Under specified circumstances, school districts may impose alternative fees pursuant to Government Code Sections 65995.5 and 65995.7 (Level 2 and/or Level 3 fees, respectively). If state funding expires at any time, school districts may impose up to 100 percent of the state average cost of school facilities on new development (alternative Level 3 fees). However, if a state bond measure fails, *Mira* authority is partially restored to the extent that a city could deny an application but could not condition the project to pay fees above the fee set by the state.

Government Code Section 65995(e) states that a county or city does not have the ability to condition any land use approval, whether legislative or adjudicative, on the need for school facilities. In addition, Government Code Section 65995(f) prohibits a county or city from imposing a requirement to participate in a Community Facilities District (CFD, also known as Mello-Roos district). Government Code Section 65995(g)(1) further states that a developer's refusal to participate in a CFD cannot be a factor in considering a "legislative or adjudicative" act. However, Government Code Section 65995(g)(2) further states that a person can voluntarily elect to pay a fee through a CFD.

New construction funds are allocated on a priority point basis. As a result, only schools with high priority points will be funded while districts without a high number of priority funds will not be funded. The State maintains a list of projects that have received an approval by the State Allocation Board (SAB) but are designated as unfunded approvals since no funding has been made available. Essentially, this is a list waiting for potential future funding and does not represent total unfunded need for projects on file. The list is updated monthly following the State Allocation Board Meeting. It is also important to note that an unfunded project approval does not guarantee a future apportionment by the SAB (CSAB, 2006).

Pursuant to California Government Code Section 65995(d), school districts may not levy developer fees on any facility used exclusively for religious purposes such as the proposed Project.

### ***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 \$13,050,000,000 (thirteen billion fifty million dollars) to fund necessary education facilities to relieve overcrowding and to repair older schools. Funds will be targeted to 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 to provide adequate higher education facilities to accommodate growing student enrollment (CDGS, 2006).

### 14.3.2.3 Local

The Placer County General Plan Public Facilities and Services and Schools elements address school services for the county. In addition, the Granite Bay Community Plan Land Use Element addresses school services within the community. However, these policies addressing school services would not be applicable to the proposed Project as there will be no new students generated as a result of the Project.

### 14.3.3 Impacts

#### 14.3.3.1 Standards of Significance

School facilities impacts are considered significant if implementation of the project results in the following (based on State CEQA Guidelines Appendix G):

- 1) Result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities, need for new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service and performance objectives.

#### 14.3.3.2 Methodology

The analysis of public school impacts is based upon consultation with school district and County staff and review of relevant planning documents and policies.

#### 14.3.3.3 Project-Level Impacts and Mitigation Measures

##### **IMPACT 14.3.1:** Impacts on Schools and Related Facilities

Implementation of the proposed Project would not significantly increase student enrollment at RJUSD, LUSD, EUSD, or any other schools and would not require new or expanded school facilities or related services.

The increase in employment opportunities caused by the proposed Project could indirectly result in minimal new student enrollments in the applicable school districts; however, the Project does not have a residential component and would not directly generate any new school enrollments. When new public school facilities are needed, they must undergo rigorous site-specific CEQA and California Board of Education evaluation prior to construction to identify and lessen environmental impacts. Typical environmental effects associated with the construction and operation of new school facilities include air emissions (during construction and operation), increased noise levels (during construction and operation), disturbance to biological and cultural resources (depending on location), increased demand for public services (electric, water, and wastewater), and increased traffic (during construction and operation). The RJUSD, LUSD, and EUSD would be required to perform independent environmental review of any new school facilities or the expansion of existing facilities to comply with CEQA.

The proposed Project, as a house of worship, would be exempt from school facility fees per California Government Code Section 65995(d). However, the RJUSD, LUSD, and EUSD also receive funding from the State of California through bonds to pay for the construction of new facilities and improvements to existing facilities, equipment, and personnel as described in the Regulatory Framework subsection above.

Because minimal new student enrollments would be generated as a result of the proposed Project and the funding mechanisms available to the RJUSD, LUSD, and EUSD would continue to provide adequate funding to expand existing and construct new public schools as needed, there would be **no impact** and no mitigation is required.

## 14.4 ELECTRICAL, NATURAL GAS, AND TELECOMMUNICATION SERVICES

### 14.4.1 Existing Setting

The Project site is located within the service areas of Pacific Gas and Electric Company for electrical and natural gas services, and AT&T, Surewest Telephone, and Wave Broadband for telecommunication and cable services

#### 14.4.1.1 Electricity Services

##### *Pacific Gas and Electric Company*

Electric services for the Project would be provided by the Pacific Gas and Electric Company (PG&E). The Pacific Gas and Electric Company filed a Plan of Reorganization in 2001. The company's reorganization established the reorganized Pacific Gas and Electric as an independent, investor-owned company focused on retail electricity and natural gas distribution to its customers in Northern and Central California. The reorganized Pacific Gas and Electric Company will continue to be regulated by the California Public Utilities Commission; however, this entity will no longer be affiliated with the PG&E Corporation. Retail customers of Pacific Gas and Electric Company will continue to receive all of the same electric and natural gas services they currently receive.

PG&E provides natural gas and electric service to approximately 15 million people throughout a 70,000-square-mile service area in Northern and Central California (PG&E, 2008).

##### *Electricity Consumption*

PG&E supplies approximately 81,923 million kilowatt-hours (kWh) of electricity to 13 million customers throughout its service area (PG&E, 2008). **Table 14.4-1** below shows natural gas consumption by land use for PG&E's service area from 1996 to 2006 expressed in millions of kWh. PG&E currently maintains underground natural gas lines that run parallel to Sierra College Boulevard.

**TABLE 14.4-1  
ELECTRICITY CONSUMPTION FOR PG&E'S SERVICE AREA  
(IN MILLIONS OF KWH)  
1996–2006**

| Year | Ag & Water Pump | Commercial Building | Commercial Other | Industry | Mining & Construction | Residential | Streetlight | Total Usage    |
|------|-----------------|---------------------|------------------|----------|-----------------------|-------------|-------------|----------------|
| 1996 | 5,723           | 29,466              | 5,104            | 20,486   | 2,629                 | 28,120      | 542         | <b>92,069</b>  |
| 1997 | 5,975           | 31,203              | 4,897            | 21,750   | 2,716                 | 28,599      | 559         | <b>95,699</b>  |
| 1998 | 5,000           | 31,156              | 4,841            | 21,117   | 2,563                 | 29,596      | 572         | <b>94,845</b>  |
| 1999 | 6,005           | 33,176              | 5,165            | 20,572   | 2,585                 | 30,521      | 509         | <b>98,534</b>  |
| 2000 | 6,004           | 34,503              | 5,279            | 20,748   | 2,599                 | 31,646      | 552         | <b>101,331</b> |

## 14.0 Public Services and Utilities

| Year | Ag & Water Pump | Commercial Building | Commercial Other | Industry | Mining & Construction | Residential | Streetlight | Total Usage    |
|------|-----------------|---------------------|------------------|----------|-----------------------|-------------|-------------|----------------|
| 2001 | 6,350           | 33,329              | 4,857            | 18,893   | 2,397                 | 29,657      | 509         | <b>95,993</b>  |
| 2002 | 6,439           | 34,220              | 4,944            | 18,143   | 2,283                 | 30,537      | 503         | <b>97,070</b>  |
| 2003 | 6,324           | 35,243              | 4,682            | 17,954   | 2,477                 | 31,976      | 516         | <b>99,171</b>  |
| 2004 | 6,778           | 35,741              | 4,987            | 18,352   | 2,642                 | 32,708      | 532         | <b>101,740</b> |
| 2005 | 5,402           | 35,819              | 5,113            | 18,619   | 2,863                 | 33,106      | 537         | <b>101,460</b> |
| 2006 | 6,010           | 36,943              | 5,407            | 18,561   | 2,912                 | 34,345      | 542         | <b>104,719</b> |

Source: CEC, 2008b

### 14.4.1.2 Natural Gas Services

#### *Natural Gas Consumption*

Table 14.4-2 below shows natural consumption by land use for PG&E's service area from 1996 to 2006 expressed in millions of therms.

**TABLE 14.4-2  
NATURAL GAS CONSUMPTION FOR PG&E'S SERVICE AREA  
(IN MILLIONS OF THERMS)  
1996–2006**

| Year | Ag & Water Pump | Commercial Building | Commercial Other | Industry | Mining & Construction | Residential | Total Usage  |
|------|-----------------|---------------------|------------------|----------|-----------------------|-------------|--------------|
| 1996 | 55              | 706                 | 81               | 2,081    | 44                    | 1,982       | <b>4,950</b> |
| 1997 | 64              | 723                 | 67               | 2,014    | 163                   | 1,978       | <b>5,010</b> |
| 1998 | 70              | 789                 | 67               | 1,914    | 319                   | 2,283       | <b>5,442</b> |
| 1999 | 71              | 831                 | 64               | 1,837    | 236                   | 2,422       | <b>5,461</b> |
| 2000 | 79              | 797                 | 55               | 1,909    | 288                   | 2,164       | <b>5,291</b> |
| 2001 | 50              | 642                 | 67               | 1,770    | 296                   | 2,029       | <b>4,853</b> |
| 2002 | 59              | 819                 | 35               | 1,547    | 272                   | 2,086       | <b>4,818</b> |
| 2003 | 85              | 887                 | 49               | 1,471    | 268                   | 2,051       | <b>4,810</b> |
| 2004 | 65              | 812                 | 68               | 1,538    | 304                   | 2,024       | <b>4,811</b> |
| 2005 | 41              | 779                 | 79               | 1,560    | 329                   | 1,935       | <b>4,724</b> |
| 2006 | 48              | 923                 | 104              | 1,517    | 286                   | 2,021       | <b>4,899</b> |

Source: CEC, 2008b

#### ***Electric and Natural Gas Infrastructure Funding***

Funding for the installation of natural gas and electric facilities are via charges to ratepayers in accordance with the Electric & Gas Tariff currently on file with the California Public Utilities Commission (CPUC). New development is required to ensure a clear and acceptable route is provided to PG&E for the installation of these facilities (i.e., rights-of-way, adequate tree clearances, clear of any environmental issues).

### **14.4.1.3 Telecommunication Services**

#### ***Telephone and Internet Services***

##### *AT&T*

AT&T is one of two providers of telephone service within Granite Bay. AT&T serves customers nationwide with a range of wireless voice and data services (AT&T, 2008).

##### *SureWest Telephone*

SureWest provides digital cable TV, fiber optics, DSL, high-speed Internet access, data transport, and local and long distance telephone service. SureWest Telephone serves 110,000 access lines to homes and businesses, offering communications products and services within an 83-square-mile service territory that includes Granite Bay. In addition, SureWest Telephone is capable of providing DSL service to 100 percent of its service area (SureWest, 2008).

##### *Cable TV – Wave Broadband*

Cable TV services in Granite Bay are provided by Wave Broadband. Wave Division Holdings, LLC is a cable, Internet, and phone services company currently serving over 275,000 customers in Washington, Oregon, and California. Wave Broadband, a retail division of Wave Division Holdings, serves communities surrounding Sacramento, including Rocklin, Auburn, Lincoln, Loomis, and West Sacramento (Wave Broadband, 2008).

### **14.4.2 Regulatory Framework**

#### **14.4.2.1 Federal**

There are no federal standards and regulations applicable to the Project site.

#### **14.4.2.2 State**

##### ***California Public Utilities Commission***

The California Public Utilities Commission (CPUC) is the state agency that regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies, in addition to authorizing video franchises. The CPUC grants operating authority, regulates service standards, sets rates, and monitors utility operations for safety, environmental stewardship, and public interest.

Traditionally, general rate cases have been the major form of regulatory proceeding for the CPUC. General rate case applications may be filed every three years, and take about a year to complete. The utility bases its revenue request on its estimated operating costs and revenue needs for a particular future year. Customer rates will be based on the CPUC's determination of how much revenue the utility reasonably requires to operate.

##### ***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. The Energy Commission

adopted the 2008 Standards on April 23, 2008, and the Building Standards Commission approved them for publication on September 11, 2008. The new standards were written to go into effect on July 1, 2009 (CEC, 2008a).

**California Green Building Standards**

Title 24, Part 11 of the California Code of Regulations, known as the Green Buildings Standards or the CALGreen Code, is a code with mandatory requirements for new residential and nonresidential buildings (including buildings for retail, office, public schools, and hospitals) throughout California beginning on January 1, 2011. In short, the code is established to reduce construction waste, make buildings more efficient in the use of materials and energy, and reduce environmental impact during and after construction (CBSC, 2010).

**14.4.2.3 Local**

**Placer County General Plan**

The Placer County Housing and Public Facilities and Services elements address electrical and natural gas services for the county. **Table 14.4-3** analyzes the Project’s consistency with the Placer County General Plan policies pertaining to electrical, natural gas, and telecommunication services. While this Draft EIR analyzes the Project’s consistency with the Placer County General Plan pursuant to State CEQA Guidelines Section 15125(d), the determination of the Project’s consistency with this General Plan rests with the Placer County Board of Supervisors. Environmental impacts associated with inconsistency with General Plan policies are addressed under the impact discussions of this EIR.

**TABLE 14.4-3  
GENERAL PLAN CONSISTENCY ANALYSIS – ELECTRICAL, NATURAL GAS, AND  
TELECOMMUNICATION SERVICES**

| General Plan Policies  | Consistency Determination | Analysis   |
|--|---------------------------|--|
| <p><b>Public Facilities and Services Policy 4.A.4:</b> The County shall require proposed new development in identified underground conversion districts and along scenic corridors to underground utility lines on and adjacent to the site of proposed development or, when this is infeasible, to contribute funding for future undergrounding.</p>  | <p>Consistent</p>         | <p>There are no officially designated scenic vistas or corridors in the Project area. Furthermore, the Project site is not located within an identified underground conversion district.</p> |
| <p><b>Public Facilities and Services Policy 4.B.3:</b> The County shall require, to the extent legally possible, that new development pay the cost of providing public services that are needed to serve the new development; exceptions may be made when new development generates significant public benefits (e.g., low income housing, needed health facilities) and when alternative sources of funding can be identified to offset foregone revenues. This includes working with the cities to require new development within city limits to mitigate impacts on Countywide facilities and services.</p> | <p>Consistent</p>         | <p>The Project applicant will pay all fees required to pay for the Project’s need for electrical, natural gas, and telecommunication infrastructure.</p>                                     |

**Granite Bay Community Plan**

**Table 14.4-4** analyzes the Project’s consistency with the Granite Bay Community Plan policies pertaining to electrical, natural gas, and telecommunication services. While this Draft EIR analyzes the Project’s consistency with the Granite Bay Community Plan pursuant to State CEQA Guidelines Section 15125(d), the determination of the Project’s consistency with this plan rests with the Placer County Board of Supervisors. Environmental impacts associated with inconsistency with Community Plan policies are addressed under the impact discussions of this EIR.

**TABLE 14.4-4  
COMMUNITY PLAN CONSISTENCY ANALYSIS – ELECTRICAL, NATURAL GAS,  
AND TELECOMMUNICATION SERVICES**

| Community Plan Policies   | Consistency Determination | Analysis  |
|---|---------------------------|---|
| <b>Land Use Policy 19:</b> Allow the increase of commercial and residential development only when all public services can be provided in an adequate and timely manner. | Consistent                | Adequate electric, natural gas, and telecommunication infrastructure will be available to the Project site. |

**14.4.3 Impacts**

**14.4.3.1 Standards of Significance**

Electrical, natural gas, and telecommunication facilities impacts are considered significant if implementation of the project results in the following (based on State CEQA Guidelines Appendix G):

- 1) Result in substantial adverse physical impacts associated with the provision of new or physically altered electricity, natural gas, or telephone facilities, need for new or physically altered electricity, natural gas, or telephone facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service and performance objectives.

**14.4.3.2 Methodology**

Evaluation of potential impacts on electrical, natural gas, and telecommunication services resulting from the proposed Project was based on consultation with the service providers and County staff, review of California Energy Commission policies, state standards, and review of objectives, goals, and policies identified in the Placer County General Plan and Granite Bay Community Plan. The analysis focuses on the environmental effects associated with the provision of these services to the Project site.

**14.4.3.2 Project-Level Impacts and Mitigation Measures**

**IMPACT 14.4.1:** Electrical, Natural Gas, and Telecommunication Services

Buildout of the proposed Project would require additional electric, natural gas, and telecommunication supplies. The actual placement of underground utility lines and their alignment has yet to be determined; however, the Project would most likely tie into the existing power supply line in the electrical service right-of-way near the Project site entrance on Sierra



College Boulevard, rather than have new sets of electrical lines and cables run to the Project site in order to power the facility. All electric line extensions would be made in accordance with the appropriate tariffs on file with and approved by the California Public Utilities Commission: Electric Rule 15 and 16. Therefore, the extension of infrastructure and construction-related activities are not expected to result in any adverse impacts.

In addition, the Project would be required to comply with changes to Title 24 of the California Code of Regulations regarding energy efficiency, which became effective in September 2005, and green building, which became effective January 1, 2011. The energy efficiency standards were developed in response to the state's energy crisis as well as Assembly Bill (AB) 970 and Senate Bill (SB) 5X in regard to improving residential and nonresidential building energy efficiency, minimizing impacts to peak energy usage periods, and to reduce impacts on overall state energy needs. The green building standards were developed to reduce construction waste, make buildings more efficient in the use of materials and energy, and reduce environmental impact during and after construction. See Section 16.0, Greenhouse Gas and Climate Change, for a discussion of compliance with these standards.

AT&T and SureWest provide telephone service to the Granite Bay area. Considering that these companies already provide telephone service to surrounding properties, they will likely be able to serve the proposed Project without impacting existing services in the area or requiring significant new infrastructure.

Wave Broadband would be able to serve the proposed Project site by tying the existing transmission line(s) on Sierra College Boulevard into the Project site. Based on the size of the development, serving the proposed Project will create a minimal impact to existing services and customers. Also, the environmental effects of extending utility infrastructure within roadway rights-of-way would be limited to minor and temporary construction effects associated with air quality, noise, and water quality as discussed in those chapters of this DEIR. Therefore, this impact is considered **less than significant** and no further mitigation is required.

### 14.5 PARKS AND RECREATION

#### 14.5.1 Existing Setting

The Project site is located within the Granite Bay Community Plan area, which is served by five parks and one natural reserve area.

##### 14.5.1.1 Placer County Parks and Grounds Division

The Placer County Parks and Grounds Division oversees and manages park and recreation resources within the Granite Bay community. Parks in Granite Bay consist of Ronald L. Feist Park (5 miles north of the Project site), Douglas Ranch Park, Granite Bay Community Park, Treelake Park, and Treelake Terrace Park. These parks, all within 6 miles of the Project site, provide sports fields and facilities, picnic areas, and bicycle and pedestrian trails to Granite Bay residents. The Miners Ravine Natural Reserve, located 7 miles northwest of the Project site, also provides a passive park and interpretive nature trail (Fisher, 2009).

##### *Trails*

In addition to providing a trail connection to the existing trail along Sierra College Boulevard to the west, the Granite Bay Community Plan identifies a trail route that includes a small portion of trail at the southeast corner of the Amazing Facts property. That trail segment contains wetlands,

vernal pools, and buffer zones which must be avoided (see Section 6.0, Biological Resources). The Project proponent has granted the request to provide a 25-foot easement along the southern portion of the Project site with an expanded 40-foot by 40-foot easement area in the southeastern portion of the property (see **Figure 3-3**). The expanded easement area was requested to provide adequate room for an existing fire hydrant as well as the trail. The purpose of such easement is for a public multi-use trail not larger than 12 feet wide. Through connection of this trail easement to other trails in the Community Plan network depends on the future acquisition of additional trail easements. Therefore, construction of the trail within the easement is not anticipated as a part of this Project. The County or other proponent would be responsible for environmental review and permitting of construction activities associated with the trail at the time of construction.

### **14.5.2 Regulatory Framework**

#### **14.5.2.1 Federal**

There are no federal standards and regulations applicable to the Project site.

#### **14.5.2.2 State**

There are no state standards and regulations applicable to the Project site.

#### **14.5.2.3 Local**

The Placer County General Plan Public Facilities and Services and Public Recreation and Parks Elements address parks and recreation services for the county. The Granite Bay Community Plan Land Use Element addresses parks and recreation services within the community. However, these policies addressing park and recreation services would not be applicable to the proposed Project as the Project does not include any residential units and therefore would not necessitate new or expanded parks facilities.

### **14.5.3 Impacts**

#### **14.5.3.1 Standards of Significance**

A recreation impact is considered significant if implementation of the Project would result in the following (based on State CEQA Guidelines Appendix G):

- 1) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- 2) Inclusion of recreational facilities, or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

#### **14.5.3.2 Methodology**

The Project was evaluated for its impacts on parks and recreational services based on a review of the Placer County General Plan, Granite Bay Community Plan, and consultations with relevant County staff.

### 14.5.3.3 Project-Level Impacts and Mitigation Measures

#### IMPACT 14.5.1: Park and Recreation Facilities

Buildout of the proposed Project would not require the construction or expansion of additional park and recreational facilities, as the proposed Project does not contain a residential component. Therefore, there would **no impact** and no mitigation is required.

## 14.6 SOLID WASTE SERVICE

### 14.6.1 Existing Setting

The Project site is located within the Granite Bay Community Plan area, which is served by one residential and commercial garbage service and one residential and commercial recycling service.

#### 14.6.1.1 Auburn Placer Disposal Service

Auburn Placer Disposal Service (APDS) provides residential and commercial garbage service, debris box service, and recycling to residents and businesses in the cities of Rocklin and Auburn, the Town of Loomis, and in unincorporated Placer County. The company processes more than 100,000 tons of garbage and recyclable material annually. Auburn Placer Disposal Service also offers spring cleanup day for residents and provides commercial cardboard recycling and newspaper drop-off.

Auburn Placer Disposal Service's office, maintenance shop, transfer station, and recycling buyback center are located in Auburn. The company also operates two other transfer stations in Placer County and is responsible for the post-closure of the closed Auburn landfill.

Auburn Placer Disposal Service offers a wide variety of recycling opportunities at the Auburn Transfer Station including newspapers, cardboard, white paper, motor oil, batteries, aluminum, glass, and plastic. Latex paint, appliances, tires, scrap metal, wood, and green waste are accepted with a processing fee. Ninety-gallon trash cans (toters) are typically provided by Auburn Placer Disposal Service. Curbside recycling is provided to residents of Auburn, Loomis, and unincorporated Placer County.

#### 14.6.1.2 Materials Recovery Facility

The Western Placer Waste Management Authority (WPWMA) is a regional agency that provides recycling and refuse disposal services to the commercial and residential sectors of Auburn, Lincoln, Loomis, Rocklin, Roseville, and unincorporated Placer County. The WPWMA's Western Regional Sanitary Landfill is located near State Route 65 between Roseville and Lincoln. Permitted capacity for the 281-acre landfill is 36,350,000 cubic yards, and the estimated closure date is 2036. Approximately 80 percent of the landfill's capacity remains (CIWMB, 2009).

In January of 1990, AB 939 was passed which requires that jurisdictions divert 25 percent of solid waste from landfills by 1995 and 50 percent by 2000. The WPWMA owns and operates a materials recovery facility (MRF) which is designed to recover recyclable materials (including newspaper, cardboard, metals, glass, plastics, green waste, and wood waste) from the trash to reduce the amount of material going to the landfill. The MRF is a key element in the jurisdiction's efforts to comply with the state law to divert 50 percent of its waste from landfills. Based on California Department of Resources Recycling and Recovery (CalRecycle, 2011)

(formerly California Integrated Waste Management Board) reports, the 2006 diversion rate in unincorporated Placer County was 68 percent.

## 14.6.2 Regulatory Framework

### 14.6.2.1 Federal

There are no federal standards and regulations applicable to the Project site.

### 14.6.2.2 State

#### *State of California*

To minimize the amount of solid waste that must be disposed of by transformation and land disposal, the State Legislature passed the California Integrated Waste Management Act of 1989 (AB 939), effective January 1990. According to AB 939, all cities and counties are required to divert 50 percent of all solid waste from landfill facilities by January 1, 2000. Solid waste plans are required to explain how each city's AB 939 plan will be integrated with each city's plan. They must promote (in order of priority) source reduction, recycling and composting, and environmentally safe transformation and land disposal.

### 14.6.2.3 Local

#### *Placer County General Plan*

**Table 14.6-1** summarizes the Project's consistency with the applicable Placer County General Plan objectives and policies related to solid waste services. While this EIR analyzes the Project's consistency with the General Plan pursuant to CEQA Section 15125(d), the Placer County Board of Supervisors will ultimately make the determination of the Project's consistency. Environmental impacts associated with inconsistency with General Plan policies are addressed in the appropriate impact discussions of this EIR.

**TABLE 14.6-1  
GENERAL PLAN CONSISTENCY – SOLID WASTE**

| General Plan Policies  | Consistency Determination | Analysis   |
|--|---------------------------|--|
| <b>Policy IV G 1:</b> The County shall require waste collection in all new urban and suburban development.   | Consistent                | Waste collection services will be contracted for by the Project.   |
| <b>Policy IV G 7:</b> The County shall require that all new development complies with applicable provisions of the Placer County Integrated Waste Management Plan. | Consistent                | The proposed Project will comply with all rules and regulations set forth in the Placer County Integrated Waste Management Plan. |
| <b>Policy IV G 9:</b> The County shall encourage businesses to use recycled products in their manufacturing processes and consumers to buy recycled products.      | Consistent                | The proposed Project will comply with all County regulations regarding the use of recycled products.                             |

**Granite Bay Community Plan**

**Table 14.6-2** analyzes the Project’s consistency with the Granite Bay Community Plan policies pertaining to solid waste services. While this Draft EIR analyzes the Project’s consistency with the Granite Bay Community Plan pursuant to State CEQA Guidelines Section 15125(d), the determination of the Project’s consistency with this plan rests with the Placer County Board of Supervisors. Environmental impacts associated with inconsistency with Community Plan policies are addressed under the impact discussions of this EIR.

**TABLE 14.5-2  
COMMUNITY PLAN CONSISTENCY ANALYSIS – SOLID WASTE**

| Community Plan Policies   | Consistency Determination | Analysis   |
|---|---------------------------|--|
| <b>Land Use Policy 19:</b> Allow the increase of commercial and residential development only when all public services can be provided in an adequate and timely manner. | Consistent                | Adequate solid waste services will be available before construction of the proposed Project commences. |

**14.6.3 Impacts**

**14.6.3.1 Standards of Significance**

A solid waste impact is considered significant if implementation of the project would result in any of the following:

- 1) Be served by a landfill without sufficient permitted capacity to accommodate the project’s solid waste disposal needs.
- 2) Noncompliance with federal, state, and local statutes and regulations related to solid waste.

**14.6.3.2 Methodology**

Evaluation of potential solid waste impacts was based on consultation with Placer County staff, review of the Placer County General Plan and Granite Bay Community Plan, review of the programs and policies of APDS, and information provided by the California Integrated Waste Management Board (CIWMB) website.

**14.6.3.2 Project-Level Impacts and Mitigation Measures**

**IMPACT 14.6.1 Solid Waste Disposal**

Implementation of the Project would cause a minimal increase in demand for solid waste collection and disposal services beyond the current service level. Based on the solid waste generation rates, the capacity of existing landfills, and the waste diversion rate of Placer County, it is concluded that the proposed Project would be served under the existing capacity of APDS and Placer County to service residential, commercial, and industrial customers (Rowe, 2009).

In order to calculate solid waste generation rates for the Project, the conservative professional office rate of 0.084 pounds per 100 square feet per day from CalRecycle was used (CalRecycle, 2009). Based on this rate, the Project could produce up to 174.74 pounds of solid waste per day (208,020 sf x 0.084 lb/100 sf/day), or 32 tons per year. Also, based on the 68 percent diversion rate for Placer County, approximately 21.76 tons (32 x 0.68 = 21.76) of solid waste should be

diverted from the Western Regional Sanitary Landfill each year. Thus, an estimated 10.24 tons of solid waste should be deposited in the Western Regional Sanitary Landfill per year. Given that the landfill has 29 million cubic yards of capacity remaining, an additional 10.24 tons of waste per year would not be significant to the landfill.

The County's compliance with AB 939, by means of the WPWMA, reduces potential impacts on the capacity of the landfill. As stated above, WPWMA operates the MRF within Placer County. All solid waste collected in the area is transported to the MRF where recyclable materials are sorted from the waste stream. AB 939 requires all cities and counties to divert 50 percent of all solid waste to landfills.

It is concluded that the proposed Project would be served by a landfill with adequate capacity and would not reduce the County's ability to comply with state-mandated solid waste diversion requirements. Therefore, the Project will result in a **less than significant** impact. No further mitigation is required.

### **14.7 WATER SERVICES**

The proposed Project is located within the service area for the Placer County Water Agency.

#### **14.7.1 Existing Setting**

##### **14.7.1.1 Placer County Water Agency**

The Placer County Water Agency (PCWA) provides water service to the Project area and would serve the Project site. PCWA's service area encompasses the entire boundary of Placer County, ranging from the rim of the Sacramento Valley on the west to the Sierra Nevada and Lake Tahoe on the east. PCWA provides water resource planning and management, retail and wholesale supply of irrigation water and drinking water, and production of hydroelectric energy within its service area (PCWA, 2009).

PCWA serves over 36,000 water accounts providing annual deliveries to 220,000 residents, businesses, industrial customers, and agriculture. A significant amount of raw water irrigates pastures, orchards, rice fields, farms, ranches, golf courses, and other uses. PCWA-treated water is sold directly to customers in Auburn, Colfax, Loomis, Rocklin, and portions of Roseville and the surrounding unincorporated areas of Placer County. PCWA-treated water is also sold wholesale to the City of Lincoln and several smaller special districts which treat the water and retail it directly to their customers. PCWA raw water is also sold to the City of Roseville, San Juan Water District (Granite Bay), and several special districts that treat the water and retail it to their customers (Brown & Caldwell, 2005).

The PCWA service area is currently divided into five zones. The proposed Project site is located in Zone 1, which is the largest of the five zones and extends north from the northern boundary of the City of Roseville to the City of Auburn and extends to the northwest to include the City of Lincoln. A small detached portion southwest of the City of Roseville near Baseline Road and Crowder Lane is also included in Zone 1. PCWA provides retail treated water service to most of Zone 1 and also serves wholesale treated water to the City of Lincoln, California American Water Company, and other property owner associations located in Zone 1 (Brown & Caldwell, 2005).

##### ***Surface Water Supply and Water Rights***

PCWA's surface water supply sources consist of water purchased from Pacific Gas & Electric (PG&E) from the Yuba and Bear rivers, Middle Fork Project (MFP) water from the American

River, and Central Valley Project water from the American River (Brown & Caldwell, 2006). **Figure 14.7-1** below shows a schematic of PCWA's water supply system. Water for Zone 1 is supplied from PG&E's Drum-Spaulding system on the Yuba/Bear River System and from the PCWA's MFP from the American River.

### ***Yuba/Bear River System***

The main source of water supply in Zone 1, as well as in the entire PCWA service area, is from the Yuba/Bear River System (Brown & Caldwell, 2006). The Yuba/Bear River System supply originates in Lake Spaulding and is purchased from PG&E. PCWA has two water supply contracts with PG&E that provide options to purchase up to 125,400 acre-feet (af) annually from PG&E's rights to water for consumptive purposes from the Yuba and Bear river systems. These water rights were developed prior to 1914 by PG&E and its predecessors by appropriation, with the places of use for the water being western Placer County and PCWA's Zone 3. PCWA currently takes delivery of up to 105,400 acre-feet per year (af/y) of water annually for delivery to Zones 1 and 5 from the Yuba/Bear River System through PG&E's Bear River Canal and its downstream canal network. The 105,400 af/y is delivered pursuant to the PCWA's existing Zone 1 PG&E water supply contract. The contract for the 105,400 acre-feet annually supplied to Zones 1 and 5 terminates in 2013, at which time the contract will come up for renewal for an adjustment in the price to be paid for the water (Brown & Caldwell, 2006).

### ***Middle Fork American River System***

PCWA also has permits from the California State Water Resources Control Board (SWRCB), and an agreement with the United States Bureau of Reclamation (USBR), to divert up to 120,000 af/y for consumptive use from the American River. The water is available from direct diversions from the north fork of the American River between November and June and from the redirection of releases from the Agency's Middle Fork American River Project in the remainder of the year. Western Placer County and a portion of northeastern Sacramento County are the places of use for this water source (Brown & Caldwell, 2005). Of PCWA's 120,000 permitted af/y from the American River, Zone 1 and Zone 5 receive 35,500 af/y of MFP water via the American River Pump Station, which was completed in 2007 (PCWA, 2008).

### ***Other Surface Water Supplies***

In addition to the above supplies, PCWA is negotiating with USBR for the right to take 35,000 af/y of Central Valley Project (CVP) entitlement from the Sacramento River and/or Feather River for delivery to Zones 1 and 5 (WFA, 2000). If circumstances prevent PCWA from developing the diversion from the Sacramento and/or Feather rivers, one alternative is to increase the American River diversion by 35,000 af/y to 70,500 af/y.

### ***Groundwater Supply***

Although groundwater from the North American Groundwater Subbasin is pumped by several water agencies in western Placer County, PCWA does not use significant amounts of groundwater for its water supply. Currently, Zones 2 and 4 are the only zones that pump groundwater (Brown & Caldwell, 2006). The predominant historical use of groundwater in western Placer County has been for agriculture, and the estimated historical average annual agricultural groundwater demand has been approximately 90,000 af/y (Brown & Caldwell, 2006). Total groundwater use in 2003 for western Placer County was 97,371 af/y (Brown & Caldwell, 2006). Under these pumping conditions, the groundwater levels at the southern end of the western Placer County basin have been stable since about 1982 (following a steady decline of about 1½

feet per year from 1950 to 1982), and at the northern end of the basin the levels have risen slightly since completion of Camp Far West Reservoir in 1974. These stable groundwater levels indicate that groundwater pumping is currently in balance with the natural groundwater recharge rate (Brown & Caldwell, 2006). The most recent evaluation of the western Placer County groundwater basin lists the estimated sustainable safe yield as 95,000 af/y for the western Placer County portion of the North American Groundwater Subbasin (Brown & Caldwell, 2006).

PCWA anticipates that under drought conditions it would need to rely on groundwater in conjunction with demand reductions in order to meet demands when surface water supply is reduced. It is anticipated that groundwater pumping exceeding the safe yield during dry periods is feasible as long as the long-term (multiple year) average does not exceed the safe yield of 95,000 af/y (Brown & Caldwell, 2006)

### **Water Supply Reliability**

Water quality, legal issues, and environmental concerns are not anticipated to have a significant impact on PCWA surface water supply reliability. However, during single and multiple dry years, PCWA's surface water supply could become unreliable. For planning purposes, PCWA assumes California's 1977 drought, which was the worst on record, is the single dry year event. During that drought, PCWA relied exclusively on the PG&E supply, which was reduced to approximately 50,000 acre-feet. Therefore, PCWA assumes a similar supply reduction from 105,400 to 50,000 acre-feet during a single dry year.

The drought from the late 1980s to early 1990s is the benchmark for a multi-year drought for most watersheds in the state. During that time, the PG&E supply was not cut back for PCWA, as ample supply was available. However, for a conservative estimate, the PG&E contract is assumed to be reduced 25 percent for each year of the multiple dry year condition.

In addition, PCWA has completed computer modeling of the Middle Fork Project to determine the reliability of its water supply under the 70 years of available hydrologic record. That report concluded the Middle Fork Project could have supplied the full 120,000 acre-feet in all the years of record and could provide full deliveries even in an assumed worst-case three-year consecutive event, which is a repeat of 1976, 1977, and with a third year a repeat of 1977. Therefore, there is no assumed supply reduction of the Middle Fork Project American River supply during the dry year planning event.

PCWA's total dry year supplies are summarized in **Table 14.7-1**. Alternatives for replacing inconsistent sources include transfers and increased use of recycled water and groundwater.

**TABLE 14.7-1  
PCWA'S ASSUMED DRY YEAR SURFACE WATER SUPPLIES**

| <b>Water Supply</b>    | <b>Normal Year Supply<br/>(af/y)</b> | <b>Single Dry Year Supply<br/>(af/y)</b> | <b>Multiple Dry Year Supply<br/>(af/y)</b> |
|------------------------|--------------------------------------|--|--|
| PG&E                   | 100,400                              | 50,000                                   | 75,300                                     |
| Middle Fork Project    | 120,000                              | 120,000                                  | 120,000                                    |
| Central Valley Project | 35,000                               | 26,250                                   | 26,250                                     |
| <b>Total</b>           | <b>255,400</b>                       | <b>196,250</b>                           | <b>221,550</b>                             |

*Source: Brown & Caldwell, 2006, pg. 6-7*



**PCWA Projected Water Supply Demand**

**Table 14.7-2** shows the 2004 treated water demand in Zone 1 by customer category, along with the number of connections.

**TABLE 14.7-2  
2004 TREATED WATER DEMAND AND NUMBER OF CONNECTIONS BY  
CUSTOMER CATEGORY IN AF/Y**

| <b>Customer Type</b> | <b>Number of Connections<br/>in Zone 1</b> | <b>Water Demand in Zone 1<br/>(af/y)</b> |
|----------------------|--|--|
| Residential          | 25,647                                     | 16,063.07                                |
| Multi Units (7,324)  | 664  | 1,982.61                                 |
| Commercial           | 1,433                                      | 2,945.75                                 |
| Industrial           | 2  | 1,078.26                                 |
| Municipal            | 132  | 971.22                                   |
| Landscape-Greenbelt  | 335  | 1,323.99                                 |
| Irrigation/Ag        | 81   | 411.00                                   |
| Construction         | –  | 210.01                                   |
| Fire Protection      | –  | 8.83                                     |
| Resale               | 8  | 7,978.85                                 |
| No Demand            | –  | 139.29                                   |
| Interties            | –  | 16.18                                    |
| Misc. Connections    | 1,550                                      | –  |
| <b>Total</b>         | <b>29,852 Connections</b>                  | <b>33,129.06 af/y</b>                    |

*Source: Brown & Caldwell, 2005, pg. 3-3; Brown & Caldwell, 2006, p. 3-9*

PCWA's 2006 Integrated Water Resources Plan (IWRP) presents an integrated water supply strategy for normal, single dry, and multiple dry years for western Placer County and identifies several different growth scenarios in order to project future water demand. The water supply to demand comparison for PCWA is based on Scenario 2b, which is assumed by the IWRP to be the most likely representation of the buildout of western Placer County, based on the currently approved general plans within the PCWA's service area, as well as proposed projects that were in the approval process during the IWRP planning period. **Table 14.7-3** below shows the projected demand at buildout of Scenario 2b, compared to PCWA supplies.

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**FIGURE 14.7-1      PCWA WATER SUPPLY SYSTEM**



**TABLE 14.7-3  
WEST PLACER COUNTY SUPPLY TO DEMAND COMPARISON BUILDOUT OF  
SCENARIO 2B**

|                         | <b>Normal Year<br/>(af/y )</b> | <b>Multi-Dry Years<br/>(af/y )</b> | <b>Single Driest Year<br/>(af/y )</b> |
|-------------------------|--------------------------------|------------------------------------|---------------------------------------|
| <b>Water Demand</b>     |                                |                                    |                                       |
| PCWA                    |                                |                                    |                                       |
| Auburn                  | 12,188                         | 12,188                             | 11,822                                |
| Lincoln                 | 44,243                         | 44,243                             | 42,916                                |
| Rocklin                 | 27,841                         | 27,841                             | 27,006                                |
| Loomis/Granite Bay      | 16,284                         | 16,284                             | 15,795                                |
| West Placer             | 52,125                         | 51,125                             | 50,561                                |
| Roseville               | 65,970                         | 65,970                             | 65,970                                |
| San Juan Water District | 16,415                         | 16,415                             | 16,415                                |
| Raw Water               | 75,000                         | 55,000                             | 34,000                                |
| <b>Total Demands</b>    | <b>310,066</b>                 | <b>290,066</b>                     | <b>264,485</b>                        |
| <b>Water Supplies</b>   |                                |                                    |                                       |
| PCWA                    |                                |                                    |                                       |
| MFP                     | 120,000                        | 120,000                            | 120,000                               |
| CVP                     | 35,000                         | 26,250                             | 26,250                                |
| PG&E                    | 100,400                        | 75,000                             | 50,000                                |
| South Sutter WD         | 5,000                          | 0                                  | 0                                     |
| Lincoln (NID)           | 3,300                          | 2,475                              | 1,650                                 |
| Roseville (CVP)         | 32,000                         | 24,000                             | 24,000                                |
| Total Recycled Water    | 21,261                         | 21,261                             | 21,261                                |
| Private Groundwater     | 5,273                          | 5,273                              | 5,273                                 |
| Groundwater             |                                |                                    |                                       |
| Roseville               | 0                              | 6,790                              | 6,790                                 |
| Lincoln/PCWA            | 0                              | 10,000                             | 10,000                                |
| <b>Total Supplies</b>   | <b>322,234</b>                 | <b>291,049</b>                     | <b>265,224</b>                        |

Source: Brown & Caldwell, 2006, p. 9-9

As shown, there is adequate water supply to reliably meet all of the projected PCWA western Placer County service area demands, including Zone 1, under normal climate, multiple year, and single year drought conditions. However, under drought conditions, PCWA, Roseville, and Lincoln will all need to rely on groundwater to improve the reliability of their system (Brown & Caldwell, 2006).

Under current pumping conditions, the groundwater levels at the southern end of the western Placer County basin have been stable since about 1982, and at the northern end of the basin the

levels have risen slightly since completion of Camp Far West Reservoir in 1974. These stable groundwater levels indicate that groundwater pumping is currently in balance with the natural groundwater recharge rate (Brown & Caldwell, 2006). The most recent evaluation of the western Placer County groundwater basin lists the estimated sustainable safe yield as 95,000 af/y for the western Placer County portion of the North American Groundwater Subbasin. It is anticipated that groundwater pumping exceeding the safe yield during dry periods is feasible as long as the long-term (multiple year) average does not exceed the safe yield of 95,000 af/y (Brown & Caldwell, 2006).

### ***Water Infrastructure***

Zone 1 includes four water treatment facilities, 14 storage tanks, and approximately 370 miles of treated water piping (Brown & Caldwell, 2006).

In addition, PCWA plans to construct a new water treatment plant (WTP) that will be located on Ophir Road in the Newcastle/Ophir area adjacent to the American River Pump Station. The new WTP will have an initial capacity of 30 million gallons per day (mgd) with an ultimate design capacity of 120 mgd. The Ophir WTP is planned for operation in 2011 (PCWA, 2007).

### ***Water Treatment***

There are four water treatment plants in PCWA's Zone I. A portion of Granite Bay, along with Rocklin, Penryn, Loomis, and Lincoln, are served by the Foothill and Sunset WTPs that are located in the southern part of Zone 1 (lower Zone 1).

The Foothill WTP consists of two parallel treatment trains which are treated as separate plants (Foothill 1 and 2) (Starr Consulting, 2008, p. 2-2). Foothill 1 WTP has a design flow of 40 mgd, an average winter flow of 10 mgd, and an average summer flow of 30 mgd (Starr Consulting, 2008, p. 2-3). The Foothill 2 WTP has a design flow of 15.0 mgd, an average winter flow of 7 mgd, and an average summer flow of 15 mgd (Starr Consulting, 2008).

The Sunset WTP has a design flow of 8 mgd, with average flows of 5 mgd (Starr Consulting, 2007, p. 2-8). The Sunset WTP is typically operated during the peak summer months and during outages in the PG&E supply to the Foothill WTP (Brown & Caldwell, 2006).

### ***Water Distribution Infrastructure***

The PCWA Zone 1 water system service area begins at an elevation of approximately 1,800 feet and ends at an elevation of 100 feet. For the most part, gravity moves raw water through a series of water canals to the WTPs and then to the water distribution system without additional pumping (PCWA, 2003, p. 5-8). The proposed Project would connect to an existing 20-inch water line east of the intersection of Sierra College Boulevard and Nightwatch Drive and west of the entry driveway to the Project site via three separate water lines (a 4-inch, 8-inch, and 12-inch line). On-site water lines would range from 4 to 12 inches in diameter and would provide both potable water and water for fire suppression.

### 14.7.2 Regulatory Framework

#### 14.7.2.1 Federal

##### ***Safe Drinking Water Act***

The Safe Drinking Water Act (SDWA) was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996 and requires many actions to protect drinking water and its sources: rivers, lakes, reservoirs, springs, and groundwater wells. The SDWA applies to every public water system in the United States but does not regulate private wells that serve fewer than 25 individuals.

The SDWA authorizes the United States Environmental Protection Agency (USEPA) to set national health-based standards for drinking water to protect against both naturally occurring and man-made contaminants that may be found in drinking water. Originally, the SDWA focused primarily on treatment as the means of providing safe drinking water at the tap. The 1996 amendments changed the existing law by recognizing source water protection, operator training, funding for water system improvements, and public information as important components of safe drinking water. This approach is intended to ensure the quality of drinking water by protecting it from source to tap (USEPA, 2009).

#### 14.7.2.2 State

##### ***Urban Water Management Planning Act***

In 1983, the California Legislature enacted the Urban Water Management Planning Act (Water Code Sections 10610–10656). The act states that every urban water supplier that provides water to 3,000 or more customers, or that provides over 3,000 acre-feet of water annually, should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years. The act describes the contents of the Urban Water Management Plans (UWMP) as well as how urban water suppliers should adopt and implement the plans. It is the intention of the act to permit levels of water management planning commensurate with the numbers of customers served and the volume of water supplied (DWR, 2009b). As discussed under Regional Regulatory Framework below, the Placer County Water Agency adopted its most recent UWMP in 2005.

##### ***Senate Bill (SB) 610***

SB 610 makes changes to the Urban Water Management Planning Act to require additional information in Urban Water Management Plans if groundwater is identified as a source available to the supplier. Required information includes a copy of any groundwater management plan adopted by the supplier, a copy of the adjudication order or decree for adjudicated basins, and if non-adjudicated, whether the basin has been identified as being overdrafted or projected to be overdrafted in the most current California Department of Water Resources (DWR) publication on that basin. If the basin is in overdraft, that plan must include current efforts to eliminate any long-term overdraft. A key provision in SB 610 requires that any project subject to the California Environmental Quality Act (CEQA) supplied with water from a public water system be provided a specified water supply assessment, except as specified in the law (DWR, 2009a).

## **Assembly Bill (AB) 901**

AB 901 requires Urban Water Management Plans to include information relating to the quality of existing sources of water available to an urban water supplier over given time periods and the manner in which water quality affects water management strategies and supply (DWR, 2009a).

## **Senate Bill (SB) 221**

SB 221 prohibits approval of subdivisions consisting of more than 500 dwelling units unless there is verification of sufficient water supplies for the project from the applicable water supplier(s). This requirement also applies to increases of 10 percent or more of service connections for public water systems with less than 500 service connections. The law defines criteria for determining “sufficient water supply” such as using normal, single dry, and multiple dry year hydrology and identifying the amount of water that the supplier can reasonably rely on to meet existing and future planned uses. Rights to extract additional groundwater, if groundwater is to be used for the project, must be substantiated (DWR, 2009a).

## **California Urban Water Conservation Council**

The California Urban Water Conservation Council (CUWCC) was created in 1991 by numerous urban water agencies, public interest organizations, and private entities throughout California to assist in increasing water conservation in the state. The goal of the CUWCC is to integrate best management practices (BMPs) into the planning and management of California’s water resources. A Memorandum of Understanding [MOU] Regarding Urban Water Conservation in California was signed by these agencies in 2007 and formalizes an agreement to implement the BMPs and makes a cooperative effort to reduce the consumption of California’s water resources (CUWCC, 2008). PCWA is a signatory of the memorandum. By signing the Council’s MOU, members agree to implement 14 BMPs to conserve water in urban areas. The Council’s BMPs were updated in 2008 to include current technology and to credit agencies for innovative water conservation programs. The 14 BMPs are now organized into five categories. Two categories, Utility Operations and Education, are Foundational BMPs, because they are considered to be essential water conservation activities by any utility and are adopted for implementation by all signatories to the MOU as ongoing practices with no time limits. The remaining BMPs are Programmatic BMPs and are organized into Residential, Commercial, Industrial, and Institutional (CII), and Landscape categories (CUWCC, 2009). The BMPs are shown in **Table 14.7-4** below.

**TABLE 14.7-4  
CUWCC REVISED BMPS**

| Old BMP Number & Name   | New BMP Category                                      |
|---|---|
| 1. Water Survey Programs for Single-Family Residential and Multi-Family Residential Customers | Programmatic: Residential                             |
| 2. Residential Plumbing Retrofit  | Programmatic: Residential                             |
| 3. System Water Audits, Leak Detection and Repair   | Foundational: Utility Operations – Water Loss Control |
| 4. Metering with Commodity Rates for All New Connections and Retrofit of Existing Connections | Foundational: Utility Operations – Metering           |
| 5. Large Landscape Conservation Programs and Incentives                                       | Programmatic: Landscape                               |



| Old BMP Number & Name   | New BMP Category  |
|---|---|
| 6. High-Efficiency Clothes Washing Machine Financial Incentive Programs               | Programmatic: Residential                               |
| 7. Public Information Programs  | Foundational: Education – Public Information Programs   |
| 8. School Education Programs  | Foundational: Education – School Education Programs     |
| 9. Conservation Programs for Commercial, Industrial, and Institutional (CII) Accounts | Programmatic: Commercial, Industrial, and Institutional |
| 10. Wholesale Agency Assistance Programs  | Foundational: Utility Operations – Operations           |
| 11. Retail Conservation Pricing   | Foundational: Utility Operations – Pricing              |
| 12. Conservation Coordinator  | Foundational: Utility Operations – Operations           |
| 13. Water Waste Prohibition   | Foundational: Utility Operations – Operations           |
| 14. Residential ULFT Replacement Programs   | Programmatic: Residential                               |

Source: CUWCC, 2009

### 14.7.3 Regional

#### Water Forum Agreement

Initiated in 1995, the Water Forum process brought together a diverse group of stakeholders that included business and agricultural leaders, citizens’ groups, environmentalists, water managers, and local governments to evaluate available water resources and future water needs of the Sacramento metropolitan area. These stakeholders identified the following coequal objectives to guide the development of the Water Forum Agreement (WFA):

- Provide a reliable and safe water supply for the region’s economic health and planned development through the year 2030; and
- Preserve the fishery, wildlife, recreational, and aesthetic values of the lower American River.

After a six-year consensus-based stakeholder process, the WFA, along with an environmental impact report for the WFA, was completed. The comprehensive WFA, which includes a Memorandum of Understanding signed by each of the stakeholder organizations, allows the region to meet its needs in a balanced way through implementation of seven elements. These elements include detailed understandings among stakeholder organizations on how this region will deal with key issues such as groundwater management, water diversions, dry year water supplies, water conservation, and protection of the Lower American River (WFA, 2000, p. 1). The WFA establishes a regional conjunctive-use water program for the lower American River and the connected groundwater basin, including purveyor-specific agreements (PSAs) that define the benefits each water purveyor will receive as a stakeholder and the actions each must take to receive these benefits. The key water supply provisions in the PSA for PCWA are as follows (Brown & Caldwell, 2006, p. 6-5):

- In most years, when the projected March through November unimpaired inflow to Folsom Reservoir is greater than 950,000 af/y, PCWA will divert and use up to 35,500 af/y from the American River and 35,000 af/y from the Sacramento and/or Feather rivers with certain conditions. The 35,000 af/y limitation does not apply to PCWA’s Middle Fork water supply.

- In the drier years and driest years, when the Folsom Reservoir inflow is less than 950,000 af/y, PCWA would divert 35,500 af/y plus replace up to 27,000 af/y of water in the American River from reoperation of the Middle Fork Project reservoirs.

Within the WFA, there are also water conservation plans identified for individual water purveyors. The BMPs from the water supply provisions listed above are found in these individual conservation plans, and were derived from the original MOU developed by CUWCC. The BMPs were then customized for each water purveyor so are a bit different than those identified in CUWCC's Memorandum of Understanding. The BMPs listed in the conservation plan for PCWA in the Water Forum Agreement are listed in **Table 14.7-5**.

**TABLE 14.7-5  
WATER FORUM BEST MANAGEMENT PRACTICES FOR PCWA**

| BMP Number | BMP Name   |
|------------|--|
| 1          | Interior and exterior water audits and incentive programs for single-family residential, multi-family residential and institutional customers. |
| 2          | Plumbing retrofit of existing residential accounts.  |
| 3          | Distribution system water audits, leak detection and repair.   |
| 4          | Non-residential and residential meter retrofit.  |
| 5          | Large landscape water audits and incentives for commercial, industrial, institutional, and irrigation accounts.                                |
| 6          | Landscape water conservation requirements for new and existing commercial, industrial, institutional and multi-family developments.            |
| 7          | Public information.  |
| 8          | School education.  |
| 9          | Commercial and industrial water conservation.  |
| 11         | Conservation pricing for metered accounts.   |
| 12         | Landscape water conservation for new/existing single family homes.   |
| 13         | Water waste prohibition.   |
| 14         | Water conservation coordinator.  |
| 16         | Ultra-low flush toilet replacement program for non-residential and residential customers.  |

*Source: WFA, 2000*

The WFA is a long-term water supply plan that addresses water supplies and demands to 2030 for existing (as of January 2000) purveyors and agencies. The WFA did not address water supplies beyond 2030 and did not account for new incorporations for the cities of Elk Grove (2000) and Rancho Cordova (2003) or updates to general plans. Rather, the WFA analysis was based on existing land use plans that were available at the time it was prepared.

### **PCWA 2005 Urban Water Management Plan**

PCWA prepared urban water management plans in 1985, 1992, 1997, 2000, and most recently in 2005. The 2005 Urban Water Management Plan (UWMP) provides a description of the existing water system, historical and projected water use, water supply sources, water conservation best management practices, recycled water, and a comparison of water supply versus demand.

**PCWA 2006 Integrated Water Resources Plan**

In 2004, PCWA initiated the preparation of an Integrated Water Resources Plan (IWRP) to assess the buildout water demands in western Placer County. Completed in 2006, the IWRP includes the projected service demands of several new development projects proposed to be included in future general plan updates and presents an update of unit water use analysis using 2004 water use information. The IWRP plans for the integration of a variety of water supply sources, including groundwater, reclaimed water, and additional water conservation measures.

**14.7.4 Local**

**Placer County General Plan**

The Placer County General Plan addresses water service for the county. **Table 14.7-6** analyzes the proposed Project’s consistency with the Placer County General Plan policies pertaining to water services. While this Draft EIR analyzes the Project’s consistency with the Placer County General Plan pursuant to State CEQA Guidelines Section 15125(d), the determination of the Project’s consistency with this General Plan rests with the Placer County Board of Supervisors. Environmental impacts associated with inconsistency with General Plan policies are addressed under the impact discussions of this EIR.

**TABLE 14.7-6  
GENERAL PLAN CONSISTENCY ANALYSIS – WATER SERVICES**

| General Plan Policies  | Consistency Determination          | Analysis   |
|--|------------------------------------|--|
| <p><b>Policy 4.C.1.</b> The County shall require proponents of new development to demonstrate the availability of a long-term, reliable water supply. The County shall require written certification from the service provider that either existing services are available or needed improvements will be made prior to occupancy. Where the County will approve groundwater as the domestic water source, test wells, appropriate testing, and/or report(s) from qualified professionals will be required substantiating the long-term availability of suitable groundwater.</p>  | <p>Consistent, with Mitigation</p> | <p>As discussed under Impact 14.7.1 below, the PCWA has adequate water supplies from existing supplies to serve the proposed Project in both normal and drought years. In addition, mitigation measure <b>14.7-2</b> under Impact 14.7.2 would ensure that the Project applicant would enter into a facilities agreement with the PCWA to provide any on- or off-site pipelines or other facilities needed to supply water for domestic or fire protection services consistent with this policy.</p> |
| <p><b>Policy 4.C.2.</b> The County shall approve new development based on the following guidelines for water supply:</p> <ul style="list-style-type: none"> <li>a. Urban and suburban development should rely on public water systems using surface supply.</li> <li>b. Rural communities should rely on public water systems. In cases where parcels are larger than those defined as suburban and no public water system exists or can be extended to the property, individual wells may be permitted.</li> <li>c. Agricultural areas should rely on public water systems where available, otherwise individual water wells are acceptable.</li> </ul> | <p>Consistent</p>                  | <p>The proposed Project is considered urban development and would be served by the PCWA, which relies solely on surface water during normal years.</p>   |
| <p><b>Policy 4.C.6.</b> The County shall promote efficient water use and reduced water demand by:</p> <ul style="list-style-type: none"> <li>a. Requiring water-conserving design and equipment in new construction;</li> <li>b. Encouraging water-conserving landscaping and</li> </ul>   | <p>Consistent, with Mitigation</p> | <p>Mitigation measure <b>14.7-1</b> as identified below would ensure that the Project would include water-efficient landscaping consistent with this policy.</p>   |

## Amazing Facts Ministry EIR

| General Plan Policies  | Consistency Determination | Analysis  |
|--|---------------------------|---|
| <p>other conservation measures;</p> <p>c. Encouraging retrofitting existing development with water-conserving devices; and</p> <p>d. Encouraging water-conserving agricultural irrigation practices.</p>   |                           |   |
| <p><b>Policy 4.C.12.</b> The County shall limit the annual rate of growth to 3 percent in areas where domestic water is supplied by individual or community wells. Where surface water supplies provide domestic water, the amount of growth shall be limited to what can be served by available surface water supplies assuming a 4-year drought period and usage of one acre-foot of water per year per household.</p> | Consistent                | As discussed under Impact 14.7.1 below, the PCWA has adequate water supplies from existing supplies to serve the proposed Project in both normal and drought years. |

### Granite Bay Community Plan

**Table 14.7-7** analyzes the Project's consistency with the Granite Bay Community Plan policies pertaining to water services. While this Draft EIR analyzes the Project's consistency with the Granite Bay Community Plan pursuant to State CEQA Guidelines Section 15125(d), the determination of the Project's consistency with this plan rests with the Placer County Board of Supervisors. Environmental impacts associated with inconsistency with Community Plan policies are addressed under the impact discussions of this EIR.

**TABLE 14.7-7  
COMMUNITY PLAN CONSISTENCY ANALYSIS – WATER SERVICES**

| Community Plan Policies   | Consistency Determination   | Analysis  |
|---|-----------------------------|---|
| <p><b>Land Use Policy 18:</b> The rate of development and location of projects shall not exceed the capacity of the community, special districts and utility companies to provide all needed services and facilities in an orderly and economic manner.</p> | Consistent                  | As discussed under Impact 14.7.1 below, the PCWA has adequate water supplies from existing supplies to serve the proposed Project in both normal and drought years  |
| <p><b>Land Use Policy 19:</b> Allow the increase of commercial and residential development only when all public services can be provided in an adequate and timely manner.</p>  | Consistent                  | See response under Land Use Policy 18 above.  |
| <p><b>Policy 2.</b> To allow development requiring treated water only where an adequate distribution system is in place to serve such development.</p>  | Consistent, with Mitigation | Mitigation measure 14.7-2 under Impact 14.7.2 would ensure that the Project applicant would enter into a facilities agreement with the PCWA to provide any on- or off-site pipelines or other facilities needed to supply water for domestic or fire protection services consistent with this policy. |

### 14.7.3 Impacts

#### 14.7.3.1 Standards of Significance

The impact analysis provided below is based on the following State CEQA Guidelines Appendix G thresholds of significance. A water service impact is considered significant if implementation of the project would:

- 1) Result in the need for new entitlements or a substantial expansion or alteration to local or regional water supplies that would result in a physical impact to the environment.
- 2) Result in the need for new systems or a substantial expansion or alteration to the local or regional water treatment or distribution facilities that would result in a physical impact to the environment.

**14.7.3.2 Methodology**

Evaluation of potential water service impacts of the proposed Project was based on consultations with the Placer County Water Agency (PCWA), as well as review of the Placer County General Plan, the Granite Bay Community Plan, and PCWA’s Urban Water Management Plan and Integrated Water Resources Plan. In addition, the Water Forum Agreement was reviewed. A detailed list of resources used to complete this evaluation can be found in Section 20.0, References. The impact evaluation considered existing water service conditions and whether or not the proposed Project would have physical environmental impacts to those conditions.

**14.7.3.3 Project-Level Impacts and Mitigation Measures**

**IMPACT 14.7.1: Project Water Demand**

The proposed Project would result in annual treated water demand of 64.34 af/y and would result in increased demand for water supply from the Placer County Water Agency (PCWA). According to the PCWA’s 2006 Integrated Water Resources Plan, public land uses in lower Zone 1, which include institutional uses such as the proposed Project, have treated water demands of approximately 3,379 gallons per day (gpd) per acre. Therefore, the proposed Project would require approximately 57,443 gpd (3,379 gpd per acre x 17 acres), or 64.34 acre-feet per year (af/y).

As noted in **Table 14.7-3** in the Existing Setting subsection, PCWA currently has adequate water supply to reliably meet all of the projected PCWA western Placer County demands. Specifically, in a normal year the PCWA has total water supplies of 322,234 af/y and total water demands of 310,066 af/y, for a normal year surplus of 12,168 af/y. The proposed Project would require approximately 64.34 af/y of PCWA supplies, leaving 12,103.66 af/y in surplus (see **Table 14.7-8**). In addition, PCWA has adequate and reliable water supplies during multiple dry years and the single driest year to meet demand projected in association with the proposed Project, as shown in **Table 14.7-8** below.

**TABLE 14.7-8  
PCWA AND PROJECT WATER DEMAND VS. SUPPLY**

|   | <b>Normal Year</b> | <b>Multi-Dry Years</b> | <b>Single Driest Year</b> |
|---|--------------------|------------------------|---------------------------|
| PCWA Supplies<br>(in af/y)                              | 322,234            | 291,049                | 265,224                   |
| PCWA Demand<br>(in af/y)                                | 310,066            | 290,066                | 264,485                   |
| Water Supply Surplus<br>(in af/y)                       | 12,168             | 983                    | 739                       |
| Water Supply Demand of<br>Proposed Project<br>(in af/y) | 64.34              | 64.34                  | 64.34                     |
| <b>Remaining PCWA<br/>Surplus</b>                       | <b>12,103.66</b>   | <b>918.66</b>          | <b>674.66</b>             |

During drought years, PCWA would be required to pump additional groundwater to reliably meet demand. In both multiple dry years and the single driest year, PCWA anticipated that 10,000 af/y of groundwater would need to be pumped. The proposed Project could contribute to the need for additional groundwater pumping during drought years. PCWA anticipates that groundwater pumping exceeding the safe yield during dry periods is feasible as long as the long-term (multiple years) average does not exceed the safe yield of 95,000 af/y.

In addition, implementation of the following mitigation measure would ensure that the Project would include water-efficient landscaping.

### **Mitigation Measure 14.7-1 Water-Efficient Landscaping**

All landscaping shall consist primarily of native-appearing drought-tolerant plant species with a water-conserving drip irrigation system to be installed by the developer prior to acceptance of the Project's improvements.

### ***SIGNIFICANCE AFTER MITIGATION***

As the PCWA has adequate water supplies from existing supplies to serve the proposed Project in both normal and drought years, and the Project would be required to install water-efficient landscaping, water supply impacts would be **less than significant**.

### **IMPACT 14.7.2: Water System Facilities**

Implementation of the Project would require extension of the PCWA water distribution system to serve the Project site. In addition, implementation of the proposed Project would increase demand for water treatment and storage within the PCWA system. These impacts are considered **potentially significant**.

As discussed under Impact 14.7.1 above, the Project would result in increased demand for water supply from the PCWA. This increase in demand for water supply would also place additional demands on PCWA water system facilities, including water treatment, conveyance, and storage facilities within the PCWA system. Future infrastructure needs for the PCWA water system are currently included in PCWA's Capital Improvement Program, and fees paid by new development go toward funding water infrastructure improvements. The PCWA has indicated that the proposed Project could connect to an existing 20-inch water line east of the intersection of Sierra College Boulevard and Nightwatch Drive and west of the entry driveway to the Project site via three separate water lines (a 4-inch, 8-inch, and 12-inch line). On-site water lines would range from 4 to 12 inches in diameter and would provide both potable water and water for fire suppression.

However, PCWA also indicated that the proposed Project site and surrounding area can be subject to low water system pressures due to its relatively high elevation coupled with area demands. Therefore, implementation of the proposed Project could result in inadequate water system pressure.

### **Mitigation Measure 14.7-2 Enter Into a Facilities Agreement**

Prior to issuance of building permits for the Project, the Project applicant shall enter into a facilities agreement with the PCWA to provide any on- or off-site pipelines or other facilities needed to supply water for domestic or fire protection services.

**SIGNIFICANCE AFTER MITIGATION**

Implementation of mitigation measure **14.7-2** would ensure that the Project applicant would enter into a facilities agreement with the PCWA to provide any on- or off-site pipelines or other facilities needed to supply water for domestic or fire protection services. This would include any facilities necessary to ensure adequate water system pressures. In addition, the Project applicant would be required to pay all applicable fees and charges required by the PCWA. Therefore, the Project’s impacts to water system facilities would be reduced to a **less than significant** impact.

**14.8 WASTEWATER SERVICE**

**14.8.1 Existing Setting**

**14.8.1.1 Wastewater Service Providers**

***South Placer Municipal Utility District***

South Placer Municipal Utility District (SPMUD) provides sewer collection and maintenance service to an approximately 26-square-mile service area that consists of the entire City of Rocklin, a major portion of the Town of Loomis, and certain unincorporated areas in southern Placer County that include the communities of Penryn and Rodgersdale. Currently, the SPMUD has 18,636 sewer connections, representing 27,666 Equivalent Dwelling Units<sup>1</sup> (EDUs) (SPMUD, 2008). The proposed Project would be required to annex to the Placer County Sewer Maintenance District No. 2 (discussed below) and connect to the SPMUD public sewer collection system (King Engineering, 2011).

The SPMUD owns, operates, and maintains a sewage collection system that includes over 237 miles of pipe with over 5,000 manholes and 9 pump stations. The sewage is transported via two major pipelines to one of the City of Roseville’s two regional wastewater treatment plants — Pleasant Grove Wastewater Treatment Plant (WWTP) and Dry Creek WWTP — for treatment and disposal. Capacity in these regional facilities is available to SPMUD on a first come, first served basis. In addition to sewer main lines, SPMUD owns and maintains the service sewer which is the pipe from the SPMUD’s main line to individual properties or property line cleanouts (SPMUD, 2008). SPMUD updated its Master Plan in 1986 to identify the main infrastructure needs to serve the areas in the SPMUD as they developed.

In 2007, the average dry weather flow from the entire SPMUD service area was 4.9 million gallons per day (mgd).

***South Placer Wastewater Authority***

Initially, the SPMUD provided sewage treatment in several sewer treatment lagoon systems at various sites within the service area. These lagoons were decommissioned in 1974, when the Roseville Trunk Sewer was built to convey the sewage to Roseville’s Dry Creek Wastewater Treatment Plant (WWTP). At that time, the SPMUD entered into a service agreement with the City of Roseville for the treatment of the SPMUD sewage, while continuing to provide for the administration, financing, engineering and construction functions, and the operation and maintenance of the sewer collection system. In October 2000, the South Placer Wastewater Authority (SPWA) was created by the City of Roseville, Placer County, and SPMUD. These

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<sup>1</sup> Equivalent Dwelling Unit (EDU) is a measure where one unit is equivalent to the wastewater effluent from one home.

partner agencies entered into a series of Funding and Operations Agreements to finance regional wastewater and recycled water facilities in southwestern Placer County. Currently, the regional facilities funded by the SPWA include recycled water facilities, trunk sewer lines, the Roseville Dry Creek WWTP, and an additional WWTP – the Pleasant Grove WWTP located in the northwestern portion of Roseville on West Park Drive. In the event the regional facilities near capacity, the agreements contain mechanisms, terms, and conditions that provide for the expansion of the facilities to serve the needs of the parties. It should be noted that capacity and usage in the Dry Creek Interceptor pipeline that serves the “south” part of the SPMUD service area is provided for under a separate, non-regional agreement between SPMUD and the City of Roseville. Under this agreement, Roseville is preserving and saving 24.6 mgd peak daily flow capacity for the benefit of the SPMUD (Stein, 2008). Sewer Maintenance District No. 2 also has a treatment contract with the City of Roseville (King Engineering, 2011).

### ***Placer County Sewer Maintenance District #2***

The Placer County Department of Facility Services operates and maintains ten separate sanitary sewer systems within the county. They are either Sewer Maintenance Districts or County Service Areas which derive their operating revenue from sewer user fees within each district. Funds do not co-mingle between districts and County general funds are not allowed to be used. The Placer County Board of Supervisors is the governing board of each district or service area.

In 1959, the Placer County Board of Supervisors formed Placer County Sewer Assessment District No. 2, which sold bonds to pay for design and construction of a Granite Bay sewer system and a wastewater treatment plant located off Barton Road. By 1961, both the sewer system and treatment plant (located on Seven Cedars Road) were complete and Placer County Sewer Maintenance District No. 2 (SMD #2) was formed to provide maintenance and operation of the collection system and treatment plant. In the early 1980s, studies on the wastewater treatment plant determined that it was more economical to abandon the plant and connect to the City of Roseville Regional Treatment Plant in order to meet new discharge requirements. By 1986, 17 miles of trunk sewer was constructed through the City of Roseville and SMD #2 was connected to the regional treatment plant. As of July 2008, SMD #2 had 118 miles of sewer pipe in the ground, 7,016 EDU connections, and maintained 57 septic tank effluent pump (STEP) units (Placer County, 2008). The boundaries of SMD #2 are approximately Folsom Lake on the east, the Sacramento County line on the south, the City of Roseville on the west and on the north, and Miners Ravine up to and including the Los Lagos Subdivision (Placer County, 1989).

## **14.8.2 Regulatory Framework**

### **14.8.2.1 Federal**

#### ***Clean Water Act (CWA)***

The Clean Water Act (CWA) is the primary federal legislation governing surface water quality protection. The statute employs a variety of regulatory and nonregulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. These tools are employed to achieve the broader goal of restoring and maintaining the chemical, physical, and biological integrity of the nation’s waters so that they can support the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water. Pollutants regulated under the CWA include “priority” pollutants, including various toxic pollutants; “conventional” pollutants, such as biochemical oxygen demand (BOD), total suspended solids (TSS), fecal coliform, oil and grease, and pH; and “non-conventional”



pollutants, including any pollutant not identified as either conventional or priority. The CWA regulates both direct and indirect discharges (USEPA, 2009).

### ***National Pollutant Discharge Elimination System (NPDES)***

The National Pollutant Discharge Elimination System (NPDES) program, Section 402 of the CWA, controls direct discharges into navigable waters. Direct discharges or “point source” discharges are from sources such as pipes and sewers. NPDES permits, issued by either USEPA or an authorized state/tribe, contain industry-specific, technology-based and/or water-quality-based limits, and establish pollutant monitoring and reporting requirements. (USEPA has authorized 40 states to administer the NPDES program.) A facility that intends to discharge into the nation's waters must obtain a permit before initiating a discharge. A permit applicant must provide quantitative analytical data identifying the types of pollutants present in the facility's effluent and the permit will then set forth the conditions and effluent limitations under which a facility may make a discharge (USEPA, 2009).

### ***General Pretreatment Regulations***

Another type of discharge that is regulated by the CWA is discharge that goes to a publicly owned treatment works (POTW). POTWs collect wastewater from homes, commercial buildings, and industrial facilities and transport it via a collection system to the treatment plant. Here, the POTW removes harmful organisms and other contaminants from the sewage so it can be discharged safely into the receiving stream. Generally, POTWs are designed to treat domestic sewage only. However, POTWs also receive wastewater from industrial (non-domestic) users. The General Pretreatment Regulations establish responsibilities of federal, state, and local government, industry and the public to implement Pretreatment Standards to protect municipal wastewater treatment plants from damage that may occur when hazardous, toxic, or other wastes are discharged into a sewer system and to protect the quality of sludge generated by these plants. Discharges to a POTW are regulated primarily by the POTW itself, rather than the state/tribe or USEPA (USEPA, 2009).

### **14.8.2.2 State**

#### ***Porter-Cologne Water Quality Act***

In 1969, the California Legislature enacted the Porter-Cologne Water Quality Control Act to preserve, enhance, and restore the quality of the state's water resources. The act established the State Water Resources Control Board and nine Regional Water Quality Control Boards as the principal state agencies with the responsibility for controlling water quality in California. Under the act, water quality policy is established, water quality standards are enforced for both surface water and groundwater, and the discharges of pollutants from point and nonpoint sources are regulated. The act authorizes the State Control Board to establish water quality principles and guidelines for long-range resource planning including groundwater and surface water management programs and control and use of recycled water.

#### ***State Water Resources Control Board***

Created by the State Legislature in 1967, the five-member State Water Resources Control Board (SWRCB) allocates water rights, adjudicates water right disputes, develops statewide water protection plans, establishes water quality standards, and guides the nine regional water quality control boards located in the major watersheds of the state. The joint authority of water allocation

and water quality protection enables the State Water Board to provide comprehensive protection for California's waters (SWRCB, 2009).

The SWRCB is responsible for implementing the CWA and issues NPDES permits to cities and counties through Regional Water Quality Control Boards (RWQCBs). The Project site is located in a portion of the state that is regulated by the RWQCB's Central Valley Region.

### ***Waste Discharge Requirements Program***

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27. Several SWRCB programs are administered under the WDRs Program, including the Sanitary Sewer Order and recycled water programs (SWRCB, 2009).

### ***Sanitary Sewer Overflow Program***

A sanitary sewer overflow (SSO) is any overflow, spill, release, discharge, or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs often contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oil, and grease and can pollute surface and ground waters, threaten public health, adversely affect aquatic life, and impair the recreational use and aesthetic enjoyment of surface waters. To provide a consistent, statewide regulatory approach to address SSOs, the SWRCB adopted Statewide General Waste Discharge Requirements (WDRs) for Sanitary Sewer Systems, Water Quality Order No. 2006-0003 (Sanitary Sewer Order) on May 2, 2006. The Sanitary Sewer Order requires public agencies that own or operate sanitary sewer systems to develop and implement sewer system management plans and report all SSOs to the State Water Board's online SSO database. All public agencies that own or operate a sanitary sewer system that is comprised of more than one mile of pipes or sewer lines which conveys wastewater to a publicly owned treatment facility must apply for coverage under the Sanitary Sewer Order (SWRCB, 2009).

### ***Recycled Water Policy***

To establish uniform requirements for the use of recycled water, the SWRCB adopted a statewide Recycled Water Policy on February 3, 2009. The regulatory provisions of the policy will go into effect only after approval by the Office of Administrative Law. The purpose of the policy is to increase the use of recycled water from municipal wastewater sources that meets the definition in Water Code Section 13050(n), in a manner that implements state and federal water quality laws. The policy describes permitting criteria that are intended to streamline the permitting of the vast majority of recycled water projects. The intent of this streamlined permit process is to expedite the implementation of recycled water projects in a manner that implements state and federal water quality laws while allowing the Regional Water Boards to focus on projects that require substantial regulatory review due to unique site-specific conditions (SWRCB, 2009).

### ***Statewide General Permit for Landscape Irrigation Uses of Recycled Water***

The SWRCB adopted a statewide general permit for landscape irrigation uses of recycled water (General Permit) in July 2009 (Water Quality Order No. 2009-0006-DWQ). The permit program provides a uniform interpretation of state standards to ensure the safe, reliable use of recycled

water for landscape irrigation uses, consistent with state and federal water quality law, and for which the California Department of Public Health has established uniform statewide standards. The program is intended to reduce costs to producers and users of recycled water by streamlining the permitting process for using recycled water for landscape irrigation.

### ***Department of Public Health***

The California Department of Public Health (formerly Department of Health Services) is responsible for establishing criteria to protect public health in association with recycled water use. The criteria issued by DHS are found in the California Code of Regulations, Title 22, Division 4, Chapter 3, entitled *Water Recycling Criteria*. Commonly referred to as Title 22 Criteria, the criteria contain treatment and effluent quality requirements that vary based on the proposed type of water reuse. Title 22 sets bacteriological water quality standards on the basis of the expected degree of public contact with recycled water. For water reuse applications with a high potential for the public to come into contact with the reclaimed water, Title 22 requires disinfected tertiary treatment. For applications with a lower potential for public contact, Title 22 requires three levels of secondary treatment, basically differing by the amount of disinfectant required (City of San Jose, 2009).

Title 22 also specifies the reliability and redundancy for each recycled water treatment and use operation. Treatment plant design must allow for efficiency and convenience in operation and maintenance and provide the highest possible degree of treatment under varying circumstances. For recycled water piping, DHS has requirements for preventing backflow of recycled water into the public water system and for avoiding cross-connection between the recycled and potable water systems (City of San Jose, 2009).

DHS does not have enforcement authority for the Title 22 criteria; instead the RWQCBs have the authority to enforce their permits containing the applicable criteria (CRWTF, 2003, p. 17).

### **14.8.2.3 Regional**

#### ***Regional Water Quality Control Board, Central Valley Region***

The Central Valley RWQCB provides planning, monitoring, and enforcement techniques for surface and groundwater quality in the Central Valley region, including Placer County. The primary duty of the Regional Board is to protect the quality of the waters in the region for all beneficial uses. This duty is implemented by formulating and adopting water quality plans for specific groundwater or surface water basins and by prescribing and enforcing requirements on all agricultural, domestic, and industrial waste discharges (SWRCB, 2009).

#### ***Water Reuse Requirements (Permits)***

The Central Valley RWQCB issues water reuse requirements (permits) for projects that reuse treated wastewater. These permits include water quality protections as well as public health protections by incorporating criteria established by DHS in Title 22. The Central Valley RWQCB may also incorporate requirements into the permit in addition to those specified in Title 22. These typically include periodic inspection of recycled water systems, periodic cross-connection testing, periodic training of personnel that operate recycled water systems, maintaining a database and/or permitting individual use sites, periodic monitoring of recycled water and groundwater quality, and periodic reporting.

**Waste Discharge Requirements**

The Central Valley RWQCB typically requires a Waste Discharge Requirement (WDR) permit for any facility or person discharging or proposing to discharge waste that could affect the quality of the waters of the State, other than into a community sewer system. Those discharging pollutants (or proposing to discharge pollutants) into surface waters, must obtain an NPDES permit from the Central Valley RWQCB. The NPDES permit serves as the WDR permit. For other types of discharges, such as those affecting groundwater or in a diffused manner (e.g., erosion from soil disturbance or waste discharges to land) a Report of Waste Discharge must be filed with the Central Valley RWQCB in order to obtain a WDR permit. For specific situations, the Central Valley RWQCB may waive the requirement to obtain a WDR permit for discharges to land or may determine that a proposed discharge can be permitted more effectively through enrollment in a general NPDES permit or general WDR permit (SWRCB, 2009).

**14.8.2.4 Local**

**Placer County General Plan**

The Placer County General Plan Public Facilities and Services Element addresses wastewater services for the county. **Table 14.8-1** analyzes the Project’s consistency with the Placer County General Plan policies pertaining to wastewater service. While this Draft EIR analyzes the Project’s consistency with the Placer County General Plan pursuant to State CEQA Guidelines Section 15125(d), the determination of the Project’s consistency with this General Plan rests with the Placer County Board of Supervisors. Environmental impacts associated with inconsistency with General Plan policies are addressed under the impact discussions of this EIR.

**TABLE 14.8-1  
GENERAL PLAN CONSISTENCY ANALYSIS – WASTEWATER SERVICE**

| General Plan Policies  | Consistency Determination          | Analysis  |
|--|------------------------------------|---|
| <p><b>4.D.2.</b> The County shall require proponents of new development within a sewer service area to provide written certification from the service provider that either existing services are available or needed improvements will be made prior to occupancy.</p>   | <p>Consistent</p>                  | <p>SPMUD has stated in a letter, dated July 7, 2009, that there is adequate sewer collection capacity for this Project.</p>   |
| <p><b>4.D.4.</b> The County shall promote efficient water use and reduced wastewater system demand by:</p> <ul style="list-style-type: none"> <li>a. Requiring water-conserving design and equipment in new construction;</li> <li>b. Encouraging retrofitting with water-conserving devices; and</li> <li>c. Designing wastewater systems to minimize inflow and infiltration to the extent economically feasible.</li> </ul> | <p>Consistent, with Mitigation</p> | <p>Mitigation measure 14.8-2a requires the proposed Project to conform to all design criteria and mitigation included in the Project’s sewer study. The sewer study includes measures to ensure that the low-pressure (STEP) sewer system would be efficient consistent with this policy.</p> |
| <p><b>4.D.6.</b> The County shall promote functional consolidation of wastewater facilities.</p>   | <p>Consistent</p>                  | <p>The Project proposes to connect to the existing STEP (septic tank effluent pumped) pressure sewer system in the Cavitt Ranch Subdivision approximately 1,000 feet to the west of the Project site.</p>   |

**Granite Bay Community Plan**

**Table 14.8-2** analyzes the Project’s consistency with the Granite Bay Community Plan policies pertaining to wastewater service. While this Draft EIR analyzes the Project’s consistency with the Granite Bay Community Plan pursuant to State CEQA Guidelines Section 15125(d), the determination of the Project’s consistency with this Plan rests with the Placer County Board of Supervisors. Environmental impacts associated with inconsistency with Community Plan policies are addressed under the impact discussions of this EIR.

**TABLE 14.8-2  
COMMUNITY PLAN CONSISTENCY ANALYSIS – WASTEWATER SERVICE**

| Community Plan Policies  | Consistency Determination   | Analysis   |
|--|-----------------------------|--|
| <b>Land Use Policy 18:</b> The rate of development and location of projects shall not exceed the capacity of the community, special districts and utility companies to provide all needed services and facilities in an orderly and economic manner.           | Consistent                  | As discussed in Impacts 14.8.1 and 14.8.2 below, both the SPMUD and the SPWA have adequate capacity to serve the proposed Project.   |
| <b>Land Use Policy 19:</b> Allow the increase of commercial and residential development only when all public services can be provided in an adequate and timely manner.  | Consistent                  | See response under Land Use Policy 18 above.   |
| 1. Through Placer County Sewer Maintenance District #2 (SMD #2), provide public sewer service to all residential, commercial and public projects within the district based on the permitted densities of the 1989 Granite Bay Community Plan/Land Use Element. | Consistent, with Mitigation | The Project site is designated by the Granite Bay Community Plan as Rural Estate (RE) with 4.6- to 20-acre minimum parcel size. According to the permitted zoning districts for this land use designation, houses of worship are considered accessory uses requiring a minor use permit (MUP). The proposed Project includes an application for a MUP. Should the Project be approved by the County, the MUP would be issued and the Project would be consistent with the Granite Bay Community Plan. In addition, mitigation measure <b>14.8-1a</b> requires the proposed Project to annex into SMD #2. |

**14.8.3 Impacts**

**14.8.3.1 Standards of Significance**

The impact analysis provided below is based on State CEQA Guidelines Appendix G thresholds of significance. A wastewater service impact is considered significant if implementation of the project would:

- 1) Exceed wastewater treatment requirements 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.

- 3) Result in a determination by the wastewater treatment provider that 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.

**14.8.3.2 Methodology**

Evaluation of potential wastewater service impacts was based on information from the sewer study prepared for the proposed Project by King Engineering (2009, updated 2011) (**Appendix 14.0-1**). A detailed list of resources used to complete this evaluation can be found in Section 20.0, References. The impact evaluation considered existing wastewater service conditions and whether or not the proposed Project exceeds RWQCB treatment requirements, can be served by the SPWA, and whether new facilities are needed, the construction of which could cause significant environmental effects.

**14.8.3.3 Project-Level Impacts and Mitigation Measures**

**IMPACT 14.8.1: Wastewater Treatment Impacts**

The proposed Project would generate an average dry weather flow (ADWF) between 3,040 and 6,978 gpd that would require treatment at the City of Roseville Dry Creek Wastewater treatment Plant.

The sewer study prepared for the proposed Project by King Engineering used two methods for projecting the proposed Project’s ADWF. One methodology calculated the flows based on the SPWA’s *South Placer Regional Wastewater and Recycled Water Systems Evaluation* (2007) (Systems Evaluation), which used the size of the Project based on acres and type of land use. The Systems Evaluation used this method to allocate flows from the Placer Urban Growth Area (UGA) in which the proposed Project is located. The Systems Evaluation allocated 10,000 gpd ADWF to the Placer UGA. The King Engineering sewer study used this method to be consistent with the Systems Evaluation for the area and to show that the Project is within the Systems Evaluation allocation. The second methodology is based on King Engineering’s estimation of what the proposed Project will generate based on type of use. King Engineering maintains that the Systems Evaluation method is an over-estimate for the proposed Project, as the main use of the Project will be on Saturday and not continuously during the week. Therefore, the second methodology was based on estimation of the proposed use at the site and estimated EDUs that the Project would generate. EDUs were converted to average dry weather flow based on the Systems Evaluation guidelines.

**Table 14.8-3** below shows the projection using the first methodology, which uses prorated land use based on building sizes multiplied by frequency of use per week and flow factors to derive an ADWF.

**TABLE 14.8-3  
ADWF PROJECTIONS BASED ON LAND USE**

| Land Use                       | Percentage of Project Size | Frequency of Use  | Flow Factor  | Projected ADWF |
|--------------------------------|----------------------------|-------------------|--------------|----------------|
| Publishing Uses<br>(96,000 sf) | 11.1%                      | 4/7 days per week | 850 gpd/acre | 4,043 gpd      |
| Warehouse Uses<br>(11,220 sf)  | 1.3%                       | 4/7 days per week | 850 gpd/acre | 474 gpd        |

| Land Use                       | Percentage of Project Size | Frequency of Use  | Flow Factor  | Projected ADFW |
|--------------------------------|----------------------------|-------------------|--------------|----------------|
| Church Uses<br>(89,810 sf)     | 11.6%                      | 3/7 days per week | 660 gpd/acre | 2,461 gpd      |
| Undeveloped Area<br>(56 acres) | 76%                        |                   | 0 gpd/acre   |                |
| Totals                         | 100%                       |                   |              | 6,978 gpd      |

Source: King Engineering, 2011, p. 5.

**Table 14.8-4** below shows the second projection, which uses EDUs equal to SPWA dwelling units and Placer County’s EDUs to show average dry weather flow by phase for the Project.

**TABLE 14.8-4  
ADWF PROJECTIONS BASED ON LAND USE**

| Project Phase       | Average DUs | Unit ADFW per DU | Projected ADFW |
|---------------------|-------------|------------------|----------------|
| Phase I             | 14          | 190 gpd/DU       | 2,660 gpd      |
| Phase II            | 2           | 190 gpd/DU       | 380 gpd        |
| Phases I & II Total | 16          | 190 gpd/DU       | 3,040 gpd      |

Source: King Engineering, 2009, p. 7.

As shown in **Tables 14.8-3** and **14.8-4** above, the proposed Project would generate an ADFW between 3,040 and 6,978 gpd. Wastewater treatment would be provided by the City of Roseville pursuant to the SPWA Operations Agreement for properties within the SPWA service area boundary. The Project site is not within the SPWA service area boundary, but is within the Placer Urban Growth Area adjacent to the service area boundary. The SPWA’s 2007 *South Placer Regional Wastewater and Recycled Water Systems Evaluation* (Systems Evaluation) identifies treatment system expansions, improvements, and upgrades necessary to meet anticipated wastewater treatment requirements at buildout of the service area boundary. For the Placer UGA, the Systems Evaluation assumed an average dry weather flow (ADWF) of 10,000 gallons per day (gpd). This Project (both phases) will produce between 3,040 and 6,978 gallons per day ADFW and is therefore consistent with and does not exceed the assumed flows for the Project site contained in the Systems Evaluation model. Therefore, the SPWA would have adequate wastewater treatment capacity to serve the proposed Project. However, the Project will be required to obtain Placer County Board of Supervisors approval for annexation into Sewer Maintenance District No. 2 (SMD #2).

In addition, the Project proposes to connect to the existing STEP (septic tank effluent pump) pressure sewer system in the Cavitt Ranch Subdivision approximately 1,000 feet to the west of the Project site. The STEP system consists of a septic tank and pump station to serve the Project. Using a STEP system, effluent from the Project is discharged to the septic tank where solids settle out. The liquid effluent is then pumped from the pump tank using triplex, high head submersible pumps and discharged into the low-pressure sewer line. Solids are routinely removed from the septic tank and transported to a treatment facility. Maintenance, monitoring, and solids removal services will be provided by the Placer County Sewer Maintenance District No. 2 (SMD #2). In addition, odors are emitted from gases as the effluent is discharged from the pressurized line into the gravity sewer line. Chemicals are injected into the lines to reduce odor. There is an existing chemical building at King Ranch Place that is able to mitigate odors from the STEP sewer lines, if needed. As the Project is required to upsize the existing 3-inch low-pressure pump to a 4-inch low-pressure pipe, the meter that controls chemical injection needs to be upsized along with the

pipe size. The existing chemical injection pump is located at the intersection of King Ranch Place and Sierra College Boulevard, and Placer County would require the 3-inch meter that controls chemical injection to be upsized to a 4-inch meter (King Engineering, 2011, p. 16). The applicant will also review the existing chemical dosing capacity to determine if it is sufficient to contain a three-month supply at buildout for each Project phase's proposed increased flows and the sewer shed service area. This would be a **potentially significant** impact.

### **Mitigation Measure 14.8-1a Obtain Approval from Placer County**

Prior to Improvement Plan approval for Phase I, the Project applicant shall obtain Placer County Board of Supervisors approval for annexation into SMD #2. In addition, modification of the agreement between SPMUD and Placer County is required.

### **Mitigation Measure 14.8-1b Review Existing Chemical Building Dosing Capacity**

Prior to Improvement Plan approval for each Project phase, the existing chemical injection system dosing capacity shall be reviewed by the applicant to determine if it is sufficient to contain a three-month supply at buildout for each Project phase's proposed increased flows and the sewer shed service area. Based on the review and approval by the Facility Services Department, Environmental Engineering Division, the applicant may be required to upsize the pumps and tanks.

### **Mitigation Measure 14.8-1c Maintain Proposed Septic and Grease Interceptor Tanks**

The Project's proposed septic tank shall be maintained to minimize pump screen plugging and to minimize solids from being pumped into the STEP system. These tanks' bottom solids levels and top scum thicknesses shall be periodically checked and the contents pumped in accordance with the requirements of the Placer County Facility Services Department, Environmental Engineering Division. In addition, an external oil/grease interceptor tank, appropriately sized per the 2007 California Plumbing Code, shall be installed. The grease interceptor tank contents will be routinely pumped and sent to a licensed grease rendering facility.

## **SIGNIFICANCE AFTER MITIGATION**

Implementation of mitigation measures **14.8-1a** through **14.8-1c** would ensure that adequate wastewater treatment is provided to the Project. Impacts would be reduced to a **less than significant** level.

### **IMPACT 14.8.2: Wastewater Collection and Conveyance Impacts**

Implementation of the proposed Project would require construction of wastewater collection and conveyance infrastructure on- and off-site, and use of flow capacity within SPMUD's infrastructure.

This proposed Project would connect to the existing STEP (septic tank effluent pump) pressure sewer system in the Cavitt Ranch Subdivision approximately 1,000 feet to the west of the Project site. The existing STEP system connects to the SPMUD gravity sewer manhole number RKLN 01 at Scarborough Drive. The proposed Project would install an on-site septic tank with pump tank and triplex alternating submersible, screened high head effluent pumps.

The Project's Phases I and II have significantly different sewer flows. Phase I of the Project proposes to install the on-site STEP system with septic tank and pump station sized for the total



Project (Phases I and II) at buildout and proposes to construct two new sewer pipelines placed in the same trench; a 3-inch (for Phase I use) and 4-inch (for Phase II use) low-pressure pipe from the Project to connect to the existing Cavitt Ranch 3-inch low-pressure pipe at Cavitt Ranch Place located approximately 1,000 feet west of the Project site. Phase I of the Project will utilize the 3-inch and Phase II will disconnect the 3-inch and utilize the 4-inch as well as upsize the existing 3-inch low-pressure pipe and appurtenances from Cavitt Ranch Place to King Ranch Place and across Sierra College Boulevard (King Engineering, 2011, pp. 10–12).

According to the sewer study prepared by King Engineering for the proposed Project, peak average flow rate over for the proposed Project after implementation of both phases would be 97 gallons per minute (King Engineering, 2011, p. 9). The gravity sewer collection system is operated and maintained by SPMUD. SPMUD has stated in a letter, dated July 7, 2009, that there is adequate collection sewer capacity for this Project (**Appendix 14.0-2**).

With the proposed Project connecting to the existing STEP sewer system and no pipe upsizing provided, there would be an increase in the design hydraulic grade for the existing STEP system. This could result in adverse effects to the existing pumps unless mitigated. The sewer study prepared for the proposed Project models the STEP sewer hydraulics with peak flows and sets forth design criteria and mitigation to ensure adequate wastewater facilities would be available to serve both phases of the Project. This impact is considered **potentially significant**.

**Mitigation Measure 14.8-2a Implement Mitigation Identified in the Low-Pressure (STEP) Sewer System Design Report for Amazing Facts Church with Annexation to Placer County SMD #2 (King Engineering; June 11, 2009, updated April 4, 2011)**

The Project shall demonstrate conformance with the following design criteria and implementation of mitigation identified in the King Engineering report entitled *Low Pressure (STEP) Sewer System Design Report for Amazing Facts Church with Annexation to Placer County SMD #2* dated June 11, 2009, and updated April 4, 2011. A final Sewer System Design Report shall be submitted prior to Improvement Plan approval for each phase of the Project and is subject to review and approval by the Placer County Engineering and Surveying Department and the Facility Services Department, Environmental Engineering Division:

- 1) The Project applicant is responsible for the cost of materials and installation of the STEP system.
- 2) Paved access shall be provided to each sewer manhole and STEP system equipment. Such access shall have a structural section designed for HS20 loadings with a minimum structural section of 3-inch AC over 8-inch AB unless otherwise approved by Placer County Environmental Engineering Division, minimum width of 12 feet with 1-foot-wide AB shoulders and a minimum centerline radius of 50 feet. Configurations shall provide for access by County sewer maintenance vehicles and shall either be a through connector road or shall have an applicable turnaround. The Project will need to provide easement rights for County personnel's access and hold the County harmless for damages that may occur due to maintenance and vehicle access. On-site STEP service and tank locations and paved access shall be identified on the Project improvement plans.
- 3) With Phase I of the Project, the Project applicant will be responsible for replacing four residential sewer service pumps, at lots 20, 22, 27, and 29, or as otherwise identified in the final sewer system design report submitted for approval prior to Improvement Plan approval

of Cavitt Ranch Subdivision. At these four lots, the proposed Project will be responsible for the cost of the replacement pump, all appurtenant equipment and cost of installation of the replaced pump (Placer County will actually do the work of installing the pumps and appurtenant equipment).

- 4) Unless previously replaced by others, Phase II of the proposed Project will be responsible for replacing about 1,500 feet of existing 3-inch low-pressure pipe with 4-inch low-pressure pipe from Cavitt Ranch Place to Manhole RKLN 01 to offset the proposed increase in flow rate and pressure to the existing STEP system. This mitigation work will include disconnecting from the existing 3-inch low-pressure pipe and connecting to the dry 4-inch low-pressure pipe placed by the Phase I development along Sierra College Boulevard. The disconnected 3-inch low-pressure pipe will be capped and abandoned. The 3-inch low-pressure pipe to be replaced in the King's Ranch Place intersection may necessarily be done at night to reduce impacts to traffic control. This 3-inch low-pressure pipe replacement may be done by a trenchless procedure, if open cut excavation is infeasible due to interference with existing utilities. This mitigation work will also include upsizing an existing 3-inch magnetic flow meter to a 4-inch magnetic flow meter. These pipe replacements will accommodate the proposed higher flow rates and slightly decrease the design pressures in the existing STEP system from those created by the Phase I improvements.
- 5) Placer County shall approve improvement plans separately for each Project phase for the design of the on- and off-site sewer system. The Project applicant shall obtain easement and encroachment permits for off-site low-pressure pipe to be built along and under Sierra College Boulevard. Improvement plans for construction of public sewer are subject to review and approval by the Placer County Facility Services Department, Environmental Engineering Division, Placer County ESD, and SPMUD. Note that a maintenance agreement for the STEP tank will be completed with the Environmental Engineering Division before improvement plans are approved.
- 6) **Table 14.8-5** below shows an inventory of the changes to the Cavitt Ranch STEP system design hydraulic grade elevations proposed by this Project. The table also shows an inventory of nine existing residential sewer pumps and their design heads. The pump at lot 5 was incorrectly sized for the existing design and should be replaced with a P1007 pump by others, since it is not the responsibility of this Project. Using the criteria listed in Section 3 of the King Engineering report, the report calculates that the original design heads for lots 10, 12, and 16 are over 40 feet too high. That means these pumps may be operating off their curves. If these pumps are working satisfactorily, they can remain in place. Otherwise, they should be replaced with model P1005 FC (flow control). The model P1005 FC will be added to the Placer County maintenance inventory, since it is not currently being used.
- 7) It is recommended that the design hydraulic grade elevations shown on the Cavitt Ranch Record Drawings be replaced with those elevations listed in **Table 14.8-5**.
- 8) Prior to Improvement Plan approval, the applicant shall submit an updated available capacity letter from SPMUD to Placer County. SPMUD and SMD #2 shall approve a modification to their Wastewater Services Agreement to account for the proposed Project.

**TABLE 14.8-5  
IMPACTS TO EXISTING STEP SEWER SYSTEM CAUSED BY AMAZING FACTS  
PROJECT INCLUDING HYDRAULIC AND SERVICE PUMP INVENTORY AT CAVITT  
RANCH**

| Cavitt Ranch Lot # | Existing Hydraulic Design Data<br>Prepared by Murray Smith & Associates |  |                                       |                     |                      | Highest Proposed Hydraulic Design Data <sup>5</sup> |   |                       | Remarks <sup>6</sup>  |
|--------------------|---|--|---------------------------------------|---------------------|----------------------|---|---|-----------------------|---|
|                    | Existing Service Elevation ft.  | Existing Design Hydraulic Grade at Service ft. | TDH- Total Design Head at Service ft. | Existing Pump Model | Design Pump Head ft. | Proposed Design Hydraulic Grade at Service ft.      | Proposed TDH - Total Design Head at Service ft. | Difference in TDH ft. |   |
| 1                  | 259.5   | 504.5  | 245                                   |                     |                      | 513   | 253.5   | 8.5                   |   |
| 2                  | 257.5   | 503.5  | 246                                   |                     |                      | 512.5   | 255   | 9                     |   |
| 3                  | 264   | 501  | 237                                   | P1010               | 231                  | 510.6   | 246.6   | 9.6                   | Exist. P1010 pump ok at 241' design head  |
| 4                  | 264.1   | 503.1  | 239                                   |                     |                      | 512.1   | 248   | 9                     |   |
| 5                  | 269.2   | 504.2  | 235                                   | P2010               | none                 | 512.8   | 243.6   | 8.6                   | Pump improperly sized for exist. head. Should be same a lot 3. Change to P1007 <sup>3</sup> |
| 6                  | 405.2   | 503.2  | 98                                    |                     |                      | 98.6  | 93.4  | 4.6                   |   |
| 7                  | 409   | 506  | 97                                    |                     |                      | 499   | 90  | -7                    |   |
| 8                  | 404.2   | 504.2  | 100                                   |                     |                      | 498.8   | 94.6  | -5.4                  |   |
| 9                  | 400   | 503  | 103                                   |                     |                      | 498.5   | 98.5  | -4.5                  |   |
| 10                 | 438.5   | 532.5  | 94                                    | P1005               | 104                  | 491.6   | 53.1  | -40.9                 | Exist. P1005 pump, 63' design head, see note 2  |
| 11                 | 437   | 535  | 98                                    |                     |                      | 492.1   | 55.1  | -42.9                 |   |
| 12                 | 442.1   | 529.1  | 87                                    | P1005               | 93                   | 490.8   | 48.7  | -38.3                 | Exist. P1005 pump, 55' design head, see note 2  |
| 13                 | 448.8   | 496.8  | 48                                    |                     |                      | 491.5   | 42.7  | -5.3                  |   |
| 14                 | 464.1   | 478.1  | 14                                    |                     |                      | 478.3   | 14.2  | 0.2                   |   |
| 15                 | 488.2   | 492.2  | 4                                     |                     |                      | 540.7   | 52.5  | 48.5                  |   |
| 16                 | 439   | 529  | 90                                    | P1005               | 101                  | 490.8   | 51.8  | -38.2                 | Exist. P1005 pump, 63' design head, see   |

# Amazing Facts Ministry EIR

| Cavitt Ranch Lot # | Existing Hydraulic Design Data<br>Prepared by Murray Smith & Associates |  |                                       |                     |                      | Highest Proposed Hydraulic Design Data <sup>5</sup> |   |                       | Remarks <sup>6</sup>                                    |
|--------------------|---|--|---------------------------------------|---------------------|----------------------|---|---|-----------------------|---|
|                    | Existing Service Elevation ft.  | Existing Design Hydraulic Grade at Service ft. | TDH- Total Design Head at Service ft. | Existing Pump Model | Design Pump Head ft. | Proposed Design Hydraulic Grade at Service ft.      | Proposed TDH - Total Design Head at Service ft. | Difference in TDH ft. |   |
|                    |   |  |                                       |                     |                      |   |   |                       | note 2  |
| 17                 | 446.2   | 511.2  | 65                                    |                     |                      | 485.6   | 39.4  | -25.6                 |   |
| 18                 | 430.2   | 488.2  | 58                                    |                     |                      | 479   | 48.8  | -9.2                  |   |
| 19                 | 446.3   | 485.3  | 39                                    |                     |                      | 478.1   | 31.8  | -7.2                  |   |
| 20                 | 480.7   | 509.7  | 29                                    | WEO5H               | 31                   | 549.5   | 68.8  | 39.8                  | Replace pump with PF1005 FC (71' Design Head)           |
| 21                 | 470.5   | 518.5  | 48                                    |                     |                      | 550.8   | 80.3  | 32.3                  |   |
| 22                 | 464.2   | 521.2  | 57                                    | WE15H               | 71                   | 551   | 86.8  | 29.8                  | Replace pump with PF1005 FC (101' Design Head)          |
| 23                 | 464.2   | 521.2  | 57                                    |                     |                      | 551   | 86.8  | 29.8                  |   |
| 24                 | 457.4   | 520.4  | 63                                    |                     |                      | 551   | 93.6  | 30.6                  |   |
| 25                 | 462   | 518  | 56                                    |                     |                      | 550.7   | 88.7  | 32.7                  |   |
| 26                 | 462.7   | 515.7  | 53                                    |                     |                      | 550.3   | 87.6  | 34.6                  |   |
| 27                 | 466.4   | 508.4  | 42                                    | WEO512              | none                 | 549.6   | 83.2  | 41.2                  | Replace pump with PF1005 FC (84' Design Head)           |
| 28                 | 479.5   | 505.5  | 26                                    |                     |                      | 549   | 69.5  | 43.5                  |   |
| 29                 | 495.8   | 499.8  | 4                                     | WEO3L               | 9                    | 548   | 52.2  | 48.2                  | Replace pump with PEF 75 or PF1005 FC (57' Design Head) |
| 30                 | 495.4   | 495.4  | 0                                     |                     |                      | 544.5   | 49.1  | 49.1                  |   |
| 31                 | 492.5   | 492.5  | 0                                     |                     |                      | 540.7   | 48.2  | 48.2                  |   |

Source: King Engineering, 2009

Notes:

- 1 These pump models are from Orenco Systems, Inc. (1-800-348-9843). The WE and WEO series are older low head effluent pump models and the PEF series are equivalent newer models.
- 2 The original design heads for lots 10, 12 and 16 are over 40' too high. The existing pumps may presently be operating off their pump curves. If they are working, then leave in place. Otherwise replace with P1005FC (not in current County inventory). Amazing Facts Project will have negligible effect on these pumps, per mitigation 1.6 on page 14 and calculation on page 18.
- 3 This pump is incorrectly sized for existing head. It should be changed to a P1007 pump. This is not the responsibility of the proposed Project, since there is no new impact if the pump were the correct one.
- 4 The PF series pumps are the newer models that replace the old P series pumps. The PF1005FC are not pump models that Placer County currently uses in their inventory.
- 5 The highest proposed design heads occur with construction of the Existing + Project (Phase I) scenario. The subsequent scenarios will have slightly lower design heads due to upsizing sewer lines described on pages 12-14.
- 6 The proposed pumps to be replaced may change based on the final sewer system design report.

### **Mitigation Measure 14.8-2b Proposed Wastewater STEP Tanks and System to Comply with County Standards**

The applicant is proposing to be served by low-pressure (STEP) sewer system for this Project. For each Project phase, the Project applicant shall prepare and submit plans and a final sewer system design report for a low-pressure (STEP) sewer system for approval by the Facility Services Department, Environmental Engineering Division prior to or concurrent with approval of the Improvement Plans. The applicant shall be responsible for the following:

- a) The Project applicant is responsible for the cost of materials and installation of the STEP system.
- b) Technical information shall be provided by the applicant's engineer to ensure correct pump type, sizing, and maintenance requirements. A maintenance agreement for the STEP tank shall be completed between the applicant and SMD #2.
- c) STEP system locations and paved access shall be identified on the Improvement Plans. In order to service the STEP tank, paved access to accommodate a large septic pumper truck is necessary.
- d) Prior to Improvement Plan approval, the applicant will dedicate an easement to Placer County to provide access to all sewer infrastructure for the purpose of inspection, maintenance, and repair of the County-maintained STEP system and acknowledge the need for access to the property by County personnel, will not inhibit access, and will hold harmless the County for damages that may occur due to truck access.

### **SIGNIFICANCE AFTER MITIGATION**

As shown in mitigation measure **14.8-2a** above, Phase II of the Project will be required to upsize the existing 3-inch low-pressure pipe to a 4-inch low-pressure pipe from Cavitt Ranch Place to King Ranch Place (approximately 1,500 feet) and upsize the existing 3-inch low-pressure pipe to a 4-inch low-pressure pipe under Sierra College Boulevard (approximately 110 feet). The Project will also upsize the existing 3-inch magnetic flow meter with a 4-inch magnetic flow meter. The Project will review the chemical dosing system to determine if the pumps and tanks are sufficient to contain a three-month supply at buildout of each phase of the Project for proposed increased flows. If necessary, the applicant will be required to upsize the pumps and tanks. Furthermore, as shown in mitigation measure **14.8-2a** above, the Project will also be required to upsize the STEP pumps on Lot 20, Lot 22, Lot 27, and Lot 29, or as otherwise identified in the final sewer system design report submitted for approval prior to Improvement Plan approval, of the Cavitt Ranch Subdivision to mitigate for the proposed Project's increase in design pump head for these four lots.

Implementation of mitigation measures **14.8-2a** and **14.8-2b** would ensure that adequate wastewater infrastructure would be available to serve both phases of the Project. In addition, SPMUD has confirmed it has adequate capacity to treat effluent generated by development of the Project. Therefore, impacts would be considered **less than significant**.