# Chapter 26 Public Services and Utilities

## 26.1 Introduction

This chapter describes the environmental setting, methods of analysis, and impact analysis for public services and utilities for Project construction and operation.

The study area for this analysis consists of Glenn, Yolo, and Colusa Counties, which include the areas in the Sacramento Valley where Project construction and operation could have an impact on public services or utilities.

For public services, Tehama County and Yolo County are not analyzed because there would be no impacts from the Project on public services in these counties. Project construction and operation in Tehama County would be contained within the existing RBPP facility and construction would be limited in duration; it would require limited personnel and there would be no increase in demand for public services. Electricity needed to power the additional pumps at the RBPP is addressed in Chapter 17, *Energy*. Construction and operation in Yolo County would not increase the demand for public services because the associated activities would be in agricultural lands, construction activities would be limited in duration, and the activities would require limited personnel. Furthermore, construction workers commuting to Tehama and Yolo Counties would already be using public services either in those two counties or the public services in the jurisdictions they are commuting from, and thus would not represent a change from existing conditions. Impacts associated with public park facilities are discussed in Chapter 16, *Recreation Resources*.

For public utilities, Tehama County is not analyzed because construction and operation activities in Tehama County would not require substantial utilities in comparison to existing demands. There would be no impacts from the Project on utilities in Tehama County because construction and operation would entail the installation of two additional pumps and would occur within an existing facility under an established operations and maintenance plan.

Chapter 5, *Surface Water Resources*, discusses water supply and filling Sites Reservoir. Further information regarding emergency plans and evacuation plans is provided in Chapter 27, *Public Health and Environmental Hazards*. Discussion of emergency access and travel to schools in the Maxwell Unified School District is in Chapter 18, *Navigation, Transportation, and Traffic*. Tables 26-1a and 26-1b summarize the CEQA determinations and NEPA conclusions for construction and operation impacts, respectively, for the alternatives described in the impact analysis.

**Table 26-1a. Summary of Construction Impacts and Mitigation Measures for Public Service and Utilities Resources**

| Alternative | Level of Significance Before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| Impact UTIL-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 for fire protection, police protection, schools, or other public facilities | | | |
| No Project | NI/NE | - | NI/NE |
| Alternative 1 | LTS/NE | - | LTS/NE |
| Alternative 2 | LTS/NE | - | LTS/NE |
| Alternative 3 | LTS/NE | - | LTS/NE |
| Impact UTIL-2: Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects | | | |
| No Project | NI/NE | - | NI/NE |
| Alternative 1 | LTS/NE | - | LTS/NE |
| Alternative 2 | LTS/NE | - | LTS/NE |
| Alternative 3 | LTS/NE | - | LTS/NE |
| Impact UTIL-3: Have insufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years | | | |
| No Project | NI/NE | - | NI/NE |
| Alternative 1 | LTS/NE | - | LTS/NE |
| Alternative 2 | LTS/NE | - | LTS/NE |
| Alternative 3 | LTS/NE | - | LTS/NE |
| Impact UTIL-4: Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments | | | |
| No Project | NI/NE | - | NI/NE |
| Alternative 1 | LTS/NE | - | LTS/NE |
| Alternative 2 | LTS/NE | - | LTS/NE |
| Alternative 3 | LTS/NE | - | LTS/NE |
| Impact UTIL-5: Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals | | | |
| No Project | NI/NE | - | NI/NE |
| Alternative 1 | LTS/NE | - | LTS/NE |
| Alternative 2 | LTS/NE | - | LTS/NE |
| Alternative 3 | LTS/NE | - | LTS/NE |

Notes:
NI = CEQA no impact
LTS = CEQA less-than-significant impact
NE = NEPA no effect or no adverse effect

**Table 26-1b. Summary of Operations Impacts and Mitigation Measures for Public Service and Utilities Resources**

| Alternative | Level of Significance Before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| Impact UTIL-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 for fire protection, police protection, schools, or other public facilities | | | |
| No Project | NI/NE | - | NI/NE |
| Alternative 1 | LTS/NE | - | LTS/NE |
| Alternative 2 | LTS/NE | - | LTS/NE |
| Alternative 3 | LTS/NE | - | LTS/NE |
| Impact UTIL-2: Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects | | | |
| No Project | NI/NE | - | NI/NE |
| Alternative 1 | LTS/NE | - | LTS/NE |
| Alternative 2 | LTS/NE | - | LTS/NE |
| Alternative 3 | LTS/NE | - | LTS/NE |
| Impact UTIL-3: Have insufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years | | | |
| No Project | NI/NE | - | NI/NE |
| Alternative 1 | LTS/NE | - | LTS/NE |
| Alternative 2 | LTS/NE | - | LTS/NE |
| Alternative 3 | LTS/NE | - | LTS/NE |
| Impact UTIL-4: Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments | | | |
| No Project | NI/NE | - | NI/NE |
| Alternative 1 | LTS/NE | - | LTS/NE |
| Alternative 2 | LTS/NE | - | LTS/NE |
| Alternative 3 | LTS/NE | | LTS/NE |
| Impact UTIL-5: Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals | | | |
| No Project | NI/NE | - | NI/NE |
| Alternative 1 | LTS/NE | - | LTS/NE |
| Alternative 2 | LTS/NE | - | LTS/NE |
| Alternative 3 | LTS/NE | - | LTS/NE |

Notes:
NI = CEQA no impact
LTS = CEQA less-than-significant impact
NE = NEPA no effect or no adverse effect

# 26.2 Environmental Setting

This section discusses existing public services and utilities in Glenn and Colusa Counties as relevant to the Project. The 2020 populations of Glenn and Colusa Counties are 29,400 and 21,902, respectively. By 2030, the population of Glenn County is anticipated to increase to 30,476 and that of Colusa County is expected to be 23,671 (see Chapter 25, *Population and Housing*). The discussion below is based on a review of planning documents (e.g., general plans, zoning codes); public services and utilities information from federal, state, and local government entities; information from private sector utility providers; and communications with personnel at police, fire, and solid waste facilities.

## 26.2.1. Public Services

### *26.2.1.1. Police Protection*

Glenn and Colusa Counties are each served by a County Sheriff's department that is responsible for law enforcement services in the unincorporated county areas. The County Sheriff departments typically administer the County jails, function as the County Coroner/Crime Lab, and act as the Office of Emergency Services (USACOPS 2020). Law enforcement services are also provided by city police departments and the California Highway Patrol (CHP). The CHP is the primary law enforcement agency for state highways and roads, and provides traffic control, accident investigation, and the management of hazardous materials spill incidents.

**Glenn County**

The Glenn County Sheriff's Department is in Willows, California. The department provides law enforcement services in the unincorporated areas of the county in addition to providing backup and dispatch services for the Willows and Orland police departments. The Glenn County Sheriff's Department also shares law enforcement responsibilities for the Mendocino National Forest with the U.S. Forest Service (USFS). The Glenn County Sheriff oversees the County jail and dispatch, functions as the County Coroner, patrols county waterways, and acts as the Director of Emergency Services (County of Glenn 2020). Law enforcement emergency services are also provided by the Orland Police Department, Willows Police Department (USACOPS 2020), and CHP.

**Colusa County**

The main office of the Colusa County Sheriff's Department is in Colusa, California, and there is a substation in Maxwell that serves the communities of Maxwell and Sites. The Colusa County Sheriff's Department is responsible for law enforcement in the unincorporated areas of Colusa County (i.e., the entire county except for the cities of Williams and Colusa). The Colusa County Boating Safety Unit, which is a division of the county sheriff's department, is responsible for promoting safe boating on the county's waterways. The Colusa County Sheriff's Department and the police departments of the Cities of Williams and Colusa participate jointly in search and rescue efforts in Colusa County.

#### *26.2.1.2. Fire Protection*

There are multiple fire protection service providers in Glenn and Colusa Counties. These providers are staffed by paid and volunteer firefighters, including emergency medical technicians (EMTs) and first responders. The fire protection services in the study area and their local area response times are discussed below. The National Fire Protection Association 1710 Standard for the Organization and Deployment of Fire Suppression Operations is used as the best practice for determining appropriate initial response of fire suppression resources (Appendix 4A, *Regulatory Requirements*). This standard requires the initial response (4 firefighters) within 5 minutes, 90% of the time, and a full effective fire force (15 firefighters) within 9 minutes, 90% of the time.

**Glenn County**

There are 12 fire departments in 13 fire protection districts in Glenn County (FireDepartment.net 2020a). These departments operate independently from the California Department of Forestry and Fire Protection (CAL FIRE). CAL FIRE provides services from west of the electrical transmission lines located west of Interstate 5 (I-5) to the Mendocino National Forest (Sites Project Authority and Bureau of Reclamation 2017:29-8). Of these emergency service providers, the Willows City/Rural Fire Department has a service area that overlaps with the study area. The Willows City/Rural Fire Department staffs volunteers and paid firefighters; out of 35 firefighters on staff, four are paid, 20 are EMTs, and 15 are first responders. The Willows City/Rural Fire Department is a year-round, 24/7, all-risk agency that covers 96 square miles from the Glenn County line to County Road 45, west to County Road FF, and east to County Road V. Local area response times are around 6 minutes in town and 10–15 minutes outside of town (Peabody pers. comm.).

**Colusa County**

Fire protection services in Colusa County are provided by rural districts, city fire departments, CAL FIRE, and USFS. The Colusa Rural Fire District consolidated with Grand Island Fire District to form the Sacramento River Fire District, which provides fire protection services to the rural portions of Colusa County. There are 10 fire departments and fire stations within Colusa County in Arbuckle, Colusa, Grimes, Maxwell, Princeton, Stonyford, and Williams (FireDepartment.net 2020b). Fire protection services for the west side of Colusa County are provided by the Maxwell Fire Protection District (MFPD), Bear Valley/Indian Valley Fire Protection District, and Williams Fire Protection Authority.

The MFPD provides service in an area that covers 208 square miles from the Glenn-Colusa county line to Lurline Road and as far west as Rail Canyon Road and to the 2047 Canal to the east. The MFPD currently receives approximately 250 calls per year (Warner Herson pers. comm.). These calls include East Park Reservoir in Colusa County, and calls from the reservoir frequently occur in the evening hours (Warner Herson pers. comm.). The MFPD presently has three full-time personnel and 34 volunteers and is the only fire department in Colusa County that has an ambulance for patient transport to the hospital. Local area response times are under 5 minutes (in town) and 8 minutes (out of town) (Cohen pers. comm.). Part of the MFPD is within the state response area for wildfires, and MFPD is the first to respond to all fires in the state response area until CAL FIRE arrives to assume command of the incident. MFPD is responsible for all non-fire emergency calls within the district.

The Bear Valley/Indian Valley Fire Protection District is a year-round district that offers fire and medical dispatch and is staffed by 21 volunteer firefighters, 2 EMTs, and 3 reserve members as needed. The Bear Valley/Indian Valley Fire Protection District's service area spans 133 square miles between Elk Creek and State Route (SR) 20 in Bear Valley. Response times to the local area (i.e., Stonyford and Lodoga) average between 10–15 minutes, the nighttime response time is between 15–20 minutes, and the daytime response time is between 5–10 minutes. (Corbin pers. comm.).

The Williams Fire Protection Authority retains nine paid staff, two of whom are available 24/7 to respond to emergencies. Additionally, the staff is supplemented by 32 volunteers, of which some are firefighters and some are EMTs. The Williams Fire Protection Authority does not offer transport to hospitals and only offers first responder emergency medical services. Response times to the local area are within 4 minutes. (Gilbert pers. comm.).

#### *26.2.1.3. Schools*

There are nine school districts with 28 public schools in Glenn County, including elementary/primary schools, junior high/middle schools, high schools, and other types of schools such as continuation, community day, and special education (Ed-Data 2022). Additional educational opportunities are provided through the Butte-Glenn Community College District. There are five school districts and 19 schools in Colusa County including elementary schools, middle schools/junior highs, high schools, and other types such as alternative, county community, continuation, and special education (Ed-Data 2022).

Maxwell Unified School District serves an area of 387 square miles (Maxwell Unified School District 2019), providing public education to children located throughout Maxwell and its surrounding communities, including Sites, Lodoga, Leesville, Stonyford, and other communities around the Project site. The district consists of three schools and serves approximately 340 students. There is a school bus route between Lodoga and Maxwell along Sites Lodoga Road and Maxwell Sites Road.

### 26.2.2. Utilities

#### *26.2.2.1. Water*

California depends on surface water and groundwater sources. Groundwater is the primary source of domestic water supply in Glenn and Colusa Counties and is extracted from both private and municipal wells. The Sacramento River is the main source of surface water in Glenn and Colusa Counties. Municipal water supplied from the Sacramento River and groundwater wells is conveyed through pipelines to water treatment systems operated by various water districts (special service districts or municipalities). The treated water is then distributed through a grid system that serves the incorporated areas and some of the rural neighborhoods adjoining the incorporated areas. In more rural areas, private groundwater wells serve as the primary domestic water source. Both counties predominantly consist of agricultural land uses and, therefore have a limited amount of formal infrastructure to support large domestic water use. Irrigation water is conveyed to agricultural lands for application through canals operated by irrigation districts or water districts.

### Glenn County

The eastern portion of Glenn County overlies the Sacramento Valley Groundwater Basin, which contains abundant supplies of good quality groundwater to depths of 800 feet. Groundwater is the primary source of domestic water supply in the county and is also used for irrigation in areas where surface water is not available (Glenn County 2020). There are 17 municipal wells serving Willows, Hamilton City, and Orland. These wells range in depth from an average of 250 to 500 feet. There are 46 industrial wells in the county, and they have an average depth of 250 feet (Sites Project Authority and Bureau of Reclamation 2017:29-9). Based on well logs submitted to the California Department of Water Resources for wells completed from 1977 to 2010, the number of wells installed in Glenn County during that period was approximately 3,154: 1,784 are domestic wells, 845 irrigation wells, 18 public supply wells, 20 industrial wells, 322 monitoring wells, and 165 wells with unknown or other uses (Glenn County 2020). Glenn County has approximately 34 municipal water supply systems that serve approximately 89% of the county's residents.

The Sacramento River is the primary source of surface irrigation water in Glenn County. Water from the river is diverted into the GCID Main Canal and TC Canal. Most of Glenn County's water supply from the Sacramento River is directed to agricultural uses.

### Colusa County

Municipal and industrial water needs in Colusa County are primarily met by groundwater supply from an estimated 1,936 wells (Sites Project Authority and Bureau of Reclamation 2017:29-10). Supply is supplemented with approximately 27% surface water. Domestic water systems in Colusa County are supplied with groundwater from wells generally 100 to 500 feet deep. Colusa County has approximately 30 municipal water supply systems (U.S. Environmental Protection Agency 2020).

Colusa County's surface water use is almost entirely agricultural. Similar to Glenn County, the Sacramento River is the primary source of surface irrigation water in Colusa County. Water from the river is diverted into TC Canal, into GCID Main Canal, and from the CBD.

### Yolo County

Yolo County overlies the Sacramento Valley groundwater basin, which provides most of the domestic water supply for the county. Individual users and private and public systems draw domestic water supplies from the basin. Most wells draw from the basin's shallow aquifer, although many areas are developing deeper wells to avoid subsidence and contamination issues associated with the shallower aquifers (Yolo County 2009b). Surface water is most commonly used for agricultural irrigation, while groundwater is used as the domestic water supply in unincorporated Yolo County. The major watersheds and surface water features in Yolo County include Cache Creek, Putah Creek, Sacramento River, and Yolo Bypass (Yolo County 2009b). In addition to these natural sources, the county also includes major slough and canal facilities such as the TC Canal and CBD (Yolo County 2009b).

#### *26.2.2.2. Stormwater and Wastewater*

Most of the study area is rural and has no formal stormwater management system. Stormwater is primarily collected in existing receiving waters (e.g., Funks Creek, Stone Corral Creek, and CBD) and carried to the Sacramento River. More urbanized areas in the counties (e.g., Maxwell, Dunnigan) have storm drains and collection basins that collect and may retain stormwater before releasing it into receiving waters.

Domestic wastewater in the study area is treated and returned to the environment using both onsite disposal (typically septic systems comprised of a septic tank and leach fields) and centralized treatment and disposal. The areas served by onsite systems are generally rural or agricultural. More populous areas have a wastewater treatment facility (centralized disposal) in which a series of underground pipelines convey wastewater from residences and businesses to a wastewater treatment plant for treatment before release to local waterways.

**Glenn County**

In Glenn County, wastewater is treated and returned to the environment typically through onsite disposal in rural and agricultural areas and centralized disposal in the more populated areas. The communities of Orland, Willows, Hamilton City, Northeast Willows, and Parkway Estates are served by community systems for wastewater disposal and treatment (Glenn County 2020). All other wastewater disposal occurs in individual septic systems, with the exception of the California Department of Transportation rest area on I-5, Glenn Milk Producers, and Holly Sugar, which use industrial wastewater treatment ponds. Table 26-2 summarizes the existing Glenn County wastewater treatment facilities, their capacity, and current treatment rates.

**Table 26-2. Summary of Glenn County Wastewater Treatment[1]**

| Name | General Description | Capacity | Current Treatment Rate |
|---|---|---|---|
| Hamilton City CSD | Facility includes seven stabilization ponds. | Maximum dry weather influent flow of 0.5 MGD | Current dry weather influent rate of 0.222 to 0.230 MGD |
| Northeast Willows CSD | Agreement with City of Willows to treat or dispose CSD wastewater at City of Willows Wastewater Treatment Plant for district and its inhabitants. | Agreement allows treatment of up to 96,000 gallons per day | Currently 48,000 gallons per day |
| City of Orland | Domestic wastewater treatment facility with four unlined evaporation ponds and a 44-acre irrigation field; can support a population of approximately 12,000 | Average flow of 2.13 MGD and a peak flow of 6.08 MGD. | Currently averages 0.72 MGD, with a peak flow of 1.24 MGD |
| City of Willows Wastewater Treatment Plant | Wastewater Treatment Plant with secondary treatment; upgrading to tertiary treatment | Rated capacity of 1.2 MGD | Daily dry weather average flow of 0.650 MGD |

Notes:
[1] Glenn County 2020
CSD = Community Services District
MGD = million gallons per day

## Colusa County

In Colusa County, wastewater is treated and returned to the environment using primarily onsite disposal and centralized disposal. The areas served by onsite systems are generally rural or agricultural. Most of these systems serve an individual residence or commercial establishment, but several serve groups of homes or businesses (Colusa County 1989).

Five communities are served by centralized wastewater disposal systems: Arbuckle, Colusa, Maxwell, Princeton, and Williams. Community systems consist of a network of collection lines, a treatment facility, and a disposal component (typically evaporation ponds that are discharged to a stream or drainage channel). Table 26-3 summarizes the existing Colusa County wastewater treatment facilities, their capacities, and current treatment rates.

**Table 26-3. Summary of Colusa County Wastewater Treatment**

| Name | General Description | Capacity | Current Treatment Rate |
|---|---|---|---|
| Arbuckle PUD | Arbuckle PUD WWTP operates a clarifier, digester, and seven evaporation/percolation ponds. Existing capacity far exceeds potential residential growth identified in the Colusa County General Plan | 0.5 MGD capacity | Currently treats an average of 0.27 MGD |
| City of Colusa WWTP | The City of Colusa WWTP includes an influent pump station, plant headworks, a nitrifying activated sludge system, tertiary filtration systems, UV light disinfection, and an effluent re-aeration basin and pump station | NPDES Permit allows 0.7 MGD, the design capacity is 0.9 MGD | Current average dry weather flow of 0.58 MGD. The WWTP has the capacity to accommodate 1,229 additional residential units, of which 508 could be developed in its Sphere of Influence |
| Maxwell Public Utility District WWTP | Maxwell WWTP operates; headworks with a communicator, one aeration lagoon, and three oxidation lagoons. | Rated capacity of 0.2 MGD | Current average flow of 0.14 MGD. The WWTP has the permitted capacity to service approximately 1,000 new connections, which is more than adequate to meet the residential growth identified in the Colusa County General Plan. |
| Princeton WWD | Princeton WWD wastewater treatment system operates an influent pump station, a concrete | Design/permitted to not exceed a monthly average | Currently averages 0.034 MGD. The Princeton WWD wastewater treatment |

| Name | General Description | Capacity | Current Treatment Rate |
|---|---|---|---|
| | lined aeration ditch, and two evaporation/percolation ponds. | flow of 0.040 MGD | system is nearly at its capacity. |
| City of Williams WWTP | The City of Williams WWTP is part of a municipal wastewater collection, treatment, and disposal system; it includes 0.6 miles of force mains, 4 lift stations, 23 miles of gravity sewers, 15 miles of laterals, and receives tertiary level treatment. | Peak flow rate of 4.5 MGD | Average daily max month flow rate 1.08 MGD, peak flow rate of 2.32 MGD |

Sources: Central Valley Regional Water Quality Control Board 2018; Colusa County 2010; Colusa LAFCO 2013a, 2013b, 2016, 2017.
Notes:
MGD = million gallons per day
NPDES = National Pollutant Discharge Elimination System
PUD = Public Utility District
WWD = Waterworks District
WWTP = Wastewater Treatment Plant

**Yolo County**

Multiple municipal wastewater systems serve the cities and towns of Yolo County. Absent municipal wastewater systems, private onsite septic systems are the most common method of wastewater treatment in the unincorporated county. Septage pumped from Yolo County tanks is transported to Hayward, Vallejo, and Lincoln for disposal. Knights Landing has a community wastewater system managed by a Community Service District and is currently operating at capacity. Nine more acres of treatment and disposal ponds are planned in Knights Landing but have not yet been constructed (Yolo County 2009a).

Most of Yolo County's population lives in the four incorporated cities of Davis, West Sacramento, Woodland, and Winters. Stormwater management in the county is focused on the urbanized areas, which have storm drains and collection basins that collect and/or retain stormwater before releasing it into receiving waters. The portion of the study area in Yolo County is rural and has no formal stormwater management system; stormwater is primarily collected in existing receiving waters (e.g., Cache and Putah Creeks) and carried to the Sacramento River.

### *26.2.2.3. Solid Waste*

The transport and disposal of solid waste in the study area is performed by individual public works departments and contracted private waste handling companies in the counties. Solid waste in these areas is transported to commercial Class I, II, and III landfills. Class I sites typically accept hazardous and nonhazardous wastes; Class II sites typically accept "designated"[1] and nonhazardous wastes; and Class III sites accept nonhazardous wastes.

[1] Hazardous waste that has been granted a variance from hazardous waste management requirements or nonhazardous waste that consists of or contains pollutants that could be released in concentrations exceeding applicable water quality objectives.

**Glenn County**

Glenn County had one landfill near Artois that ceased operation in October 2019. No new solid waste disposal facilities are planned in the county, and it is anticipated that additional land would be purchased near the existing site for expansion purposes. The Glenn County Transfer Station was established at the west end of County Road 33 near Artois for waste disposal (Glenn County 2020). The 356-acre transfer station accepts tires and mixed municipal, industrial, construction, demolition, and agricultural wastes. The transfer station has a maximum permitted throughput of 250 tons per day (California Department of Resources Recycling and Recovery 2020).

Other active waste handling facilities in Glenn County include:

- Valley Gold Compost: composting operation for manure and green materials with a maximum capacity of 4,000 cubic yards per year (California Department of Resources Recycling and Recovery 2020).
- Compost Solutions: 28-acre composting facility that has a maximum capacity of 50,000 tons per year for agricultural materials, green materials, biosolids, and manure (California Department of Resources Recycling and Recovery 2020).
- K&S Spreading: 12-acre composting operation that has a maximum capacity of 200,000 cubic yards per year for manure, green materials and agricultural materials (California Department of Resources Recycling and Recovery 2020).
- California Olive Ranch Composting Trial: 30-acre facility with a maximum capacity of 198,000 cubic yards for wood waste, manure, green materials, food wastes, and agricultural materials (California Department of Resources Recycling and Recovery 2020).

**Colusa County**

The County of Colusa owns and operates the Stonyford Disposal Site on Lodoga-Stonyford Road in Stonyford. The landfill is a 47-acre, Class III facility that is permitted for up to 10 tons per day of nonhazardous waste. The facility accepts only “in-County” loads of tires and agricultural, mixed municipal, and construction/demolition wastes. The landfill’s design capacity is 149,219 cubic yards, and the total estimated remaining capacity was 55,683 cubic yards as of April 30, 2001 (California Department of Resources Recycling and Recovery 2020). As of 2001, the landfill’s life expectancy was 63 years (closure date January 1, 2064). The County of Colusa County is contracted with Recology, a waste collection and disposal company that transports waste from various locations, including from Colusa County to the Ostrom Road Landfill in Wheatland in Yuba County (Wright pers. comm.). The Ostrom Road Landfill had approximately 39,223,000 cubic yards of capacity remaining as of June 1, 2007, and has an expected closure date of December 31, 2066; it has a maximum permitted throughput of 3,000 tons per day (California Department of Resources Recycling and Recovery 2020).

Other operating waste handling facilities in Colusa County include the 3.7-acre Maxwell Transfer Station that has a maximum permitted throughput of 180 tons per day (transfer/processing of agricultural, construction/demolition, mixed municipal, and tire waste)

and transfers waste to the Ostrom Road Landfill (California Department of Resources Recycling and Recovery 2020).

**Yolo County**

In Yolo County there are several active solid waste facilities, including the Yolo County Central Landfill, Esparto Convenience Center landfill, Northern Recycling Compost–Zamora facility, and the Recology Davis Green Material TransferOp. The Yolo County Central Landfill's design capacity is 208,000 cubic yards and is situated on 38 acres (California Department of Resources Recycling and Recovery 2020). The Yolo County Central Landfill accepts green materials and food wastes. The Esparto Convenience Center landfill, a transfer station in Esparto, is situated on 11 acres and designed to have a maximum capacity of 250 cubic yards. This landfill accepts mixed municipal, industrial, ash, construction, and demolition waste (California Department of Resources Recycling and Recovery 2020). The Northern Recycling Compost–Zamora facility has a design capacity of 100,000 cubic yards and accepts up to 300 tons per day of green materials. The Recology Davis Green Material TransferOp is a 15-acre composting facility with a maximum throughput of 150 tons per day and a maximum design capacity of 12,000 tons (California Department of Resources Recycling and Recovery 2020).

#### *26.2.2.4. Natural Gas*

Natural gas is supplied through a system of underground pipelines of varying diameters to residences and businesses throughout the study area by Pacific Gas and Electric Company (PG&E), and several smaller natural gas utilities (California Public Utilities Commission 2020).

**Glenn County**

Natural gas is provided by PG&E in the more populous areas of Glenn County, and several propane companies serve the outlying areas of the county (Glenn County 2020). Cities and towns with natural gas service provided by PG&E include Artois, Butte City, Elk Creek, Glenn, Hamilton City, Orland, Princeton, and Willows (Pacific Gas and Electric Company 2014a). Infrastructure to deliver natural gas is currently in place, and on request, PG&E can provide services to newer development.

**Colusa County**

Similar to Glenn County, the more populous areas of Colusa County receive natural gas from PG&E, and more rural areas are served by propane companies (Inmyarea.com 2020). There is gas service to Maxwell, but none to the unincorporated community of Sites or the Sites Reservoir area. To the east of Funks Reservoir, PG&E operates two high-pressure arterial gas transmission pipelines running north and south. The smaller pipeline has a diameter of 36 inches and the larger pipeline has a diameter of 42 inches. Both pipelines originate in Canada, serve most of northern and central California, and have a 100-feet-wide right-of-way (Sites Project Authority and Bureau of Reclamation 2017:29-14).

**Yolo County**

PG&E supplies most of Yolo County with electricity and natural gas. Propane is used in the county as an energy source in areas without access to natural gas distribution lines. The propane

suppliers for Yolo County include Viking Propane, Suburban Propane, Amerigas, Sheldon Gas, Allied Propane, and Capitol City Propane (Yolo County 2009b).

### *26.2.2.5. Electricity*

Electricity is provided to the residences and businesses throughout the study area by a combination of overhead and underground transmission and distribution lines. High-voltage (230-kilovolt-ampere [kVA]) electricity is generated and transmitted throughout California (and also generated in other states, with some electricity being imported to California) and is stepped down in voltage for residential, commercial, and industrial land uses. Electricity providers include PG&E, Western Area Power Administration (WAPA), and other municipal utilities. Electricity generation in California and electricity consumption in the study area are shown in Chapter 17, *Energy*, Table 17-2 and Table 17-5.

#### Glenn County

Electricity is provided to commercial and residential customers in Glenn County by PG&E and WAPA (Pacific Gas and Electric Company 2014b; Western Area Power Administration 2020). Areas with electrical service provided by PG&E include the cities and towns of Artois, Butte City, Elk Creek, Glenn, Hamilton City, Orland, Princeton, and Willows. Existing infrastructure to deliver electricity is currently in place to deliver services to Antelope Valley. PG&E generally can provide services to newer development on request. WAPA provides services to GCID and Provident/Princeton Irrigation District in Willows.

#### Colusa County

Both PG&E and WAPA provide electricity to Colusa County. Electrical service to commercial and residential customers in Maxwell and Sites is provided by PG&E. A PG&E generating station is in the northern part of the county about 5 miles northwest of Maxwell. PG&E operates four 230-kV transmission lines in rights-of-way in the study area near Funks Reservoir. The transmission lines serve the community of Sites and the nearby areas. The lines along the Maxwell Sites Road run south in the general direction of Leesville via Huffmaster Road. WAPA operates two 230-kV transmission lines that are aligned north/south and pass just east of Funks Reservoir (Sites Project Authority and Bureau of Reclamation 2017:29-14).

#### Yolo County

PG&E operates power lines, powerhouses, and substations in Yolo County and provides electricity to most of the county. Private companies provide service for some of the unincorporated areas of Yolo County that are not covered by PG&E (Yolo County 2009b).

### *26.2.2.6. Telephone, Cable, and Internet*

Cable service (overhead and underground lines), telephone (land lines and cellular service), and internet services are available in the study area from a variety of providers including AT&T, Comcast, Wave Broadband, Vonage, Spectrum, T-Mobile, Frontier, Dish, and Direct TV.

#### Glenn County

Cable and internet services in Glenn County are provided both individually and in tandem with telephone service by Comcast Cable and AT&T (Phone Providers 2020a). Other services are

Earthlink, Dish, Xfinity, Frontier, and Direct TV. Cable and internet services are available in most urban and urban-rural areas (Wirefly 2020a).

**Colusa County**

In Colusa County, telephone service is provided by AT&T, Wave Broadband, and Comcast with the option of tandem cable services (Phone Providers 2020b). Additional providers in Sites and nearby communities include Dish, Direct TV, Wave Broadband, Frontier (Wirefly 2020b). Service is provided via both underground and overhead lines along Maxwell Sites Road from Maxwell west to Sites. There is a combination of underground and overhead cables serving residences in the community of Sites. Near Lodoga and along Huffmaster Road, underground lines provide service to several residences (Sites Project Authority and Bureau of Reclamation 2017). Cable taps serve local ranches and a radio antenna site on PG&E poles.

**Yolo County**

In Yolo County, the telephone, cable and internet services are provided individually or in tandem by AT&T, Comcast Xfinity, and Direct TV (Wirefly 2022). Additional providers in the county include Dish, Wave Broadband, Consolidated Communications, and DSL Extreme (Phone Providers 2022).

## 26.3 Methods of Analysis

This section describes the qualitative and quantitative methods used to evaluate construction and operation impacts of the Project on public services and utilities in the study area. For public services, the evaluation assesses whether the Project would necessitate the construction of new or modified facilities, such as fire stations, police stations, or schools, in order to maintain applicable service or performance standards for those facilities. For utilities, the evaluation assesses whether the Project utility needs would be adequately met by existing utility services, supplies, facilities, or infrastructure as applicable, or whether the Project would require new utility infrastructure or exceed applicable standards, supplies, or capacity limits. Environmental impacts from construction and operation of transmission lines and potentially required drainage facilities are discussed in Chapters 5 through 30 of this Final EIR/EIS and would be located within the footprint of the facilities to be constructed and operated.

### 26.3.1. Construction

A qualitative evaluation of impacts of construction and construction workers on public services was performed. Appendix 2D, *Best Management Practices, Management Plans, and Technical Studies,* contains various BMPs regarding the use of safety equipment, fire safety and suppression, and health and safety materials which are incorporated into the analysis. These include:

- BMP-19, Development and Implementation of Worker Occupational Health and Safety Plans, requires an onsite project-dedicated ambulance, onsite medical technician/first-aid trailer office, and fire suppression equipment on construction vehicles.

- BMP-18, Development and Implementation of Fire Safety Plans for Prevention and Suppression/Control During Construction and Maintenance, requires fire suppression equipment and measures to reduce fire risk.
- BMP-16, Development and Implementation of a Construction Equipment, Truck, and Traffic Management Plan (TMP), implements standard requirements of the TMP during construction, including provisions requiring compliance with construction notification procedures for the Counties of Glenn and Colusa, County Sheriff's departments, public works, fire departments, and other public service providers and maintain emergency responder accessibility of roads.
- BMP-31, Implementation of Onsite Security Measures and/or Personnel at Construction Sites, requires 24-hour onsite security at construction sites, staging areas, and equipment storage areas.
- BMP-14, Obtainment of Permit Coverage and Compliance with Requirements of Central Valley Regional Water Quality Control Board Order R5-2022-0006 (National Pollutant Discharge Elimination System No. CAG995002 for Limited Threat Discharges to Surface Water) and State Water Resource Control Board Order 2003-0003-003-DWQ (Statewide General Waste Discharge Requirements For Discharges To Land With A Low Threat To Water Quality), requires coverage under and compliance with waste discharge requirements for protect land and surface water quality from discharges of pollutants.
- BMP-12, Development and Implementation of Stormwater Pollution Prevention Plan(s) (SWPPP) and Obtainment of Coverage under Stormwater Construction General Permit (Stormwater and Non-stormwater) (Water Quality Order No. 2022-0057-DWQ/NPDES No. CAS000002 and any amendments thereto), requires a suite of measures to control soil erosion and sediment, stormwater and non-stormwater runoff, and "housekeeping" considerations (e.g., construction materials stockpiles, waste management).
- BMP-38, Notification of the Federal Aviation Administration (FAA) of Construction or Alterations, requires the FAA to be notified of construction and alterations that exceed 200 feet above ground level so that the FAA can ensure that Project features and construction equipment have appropriate safety markings and lighting, update air navigation charts, and notify the aviation community, including emergency aircraft.

The expected volumes and sources of water that would be required during construction are described to evaluate potential impacts of the Project on water supply availability. Ground water would be provided through existing wells or potentially new groundwater wells. These wells would be located in the Project area. Refer to Chapter 8, *Groundwater Resources*, for pumping expectations and potential effects on groundwater resources. Appendix 2C, *Construction Means, Methods, and Assumptions*, Section 2.2, *Construction Utilities*, provides further information on construction water use.

Impacts on electricity consumption for Project construction are discussed quantitatively, and the analysis uses information from Chapter 17, *Energy*, related to the energy demands during construction, including amount, type, and frequency of electricity consumption needed for

construction equipment and temporary construction buildings (e.g., trailers for construction contractors). Modeled electricity demand (kWh per construction year) for Project construction is included in Chapter 17, Table 17-8. Prior to construction, system impact study would be conducted by either PG&E/California Independent System Operator (CalISO) or WAPA, depending upon which electricity service provider is selected for the Project, which is incorporated into the analysis. In the system impact study, WAPA or PG&E/CalISO would evaluate the proposed generation needs and the capacity of existing transmission facilities and equipment to accept the proposed new generation.

Wastewater generated during construction (primarily from dewatering activities) would generally be treated and reused on site or discharged based on waste discharge requirements established for Project compliance with Central Valley Regional Water Quality Control Board (RWQCB) Order R5-2022-0006 and State Water Resources Control Board Order 2003-0003-003. The amount of wastewater generated during construction that would require occasional offsite transportation and treatment was evaluated to identify potential impacts on wastewater treatment providers' ability to serve the Project's projected demand in addition to the providers' existing commitments.

Potential construction impacts on stormwater infrastructure and utilities is evaluated qualitatively based on construction means and methods and the current level of detail provided in Chapter 2, *Project Description and Alternatives*. The evaluation incorporates the following BMPs for construction impacts. It is assumed that potential new drainage facilities and relocation of utilities that could occur during construction in Glenn, Yolo, and Colusa Counties would occur within the disturbance areas that have been evaluated in other resource chapters of this Final EIR/EIS:

- BMP-15, Performance of Site-Specific Drainage Evaluations, Design, and Implementation, requires evaluation of local drainage features during final Project design and incorporation of necessary design features (e.g., low impact development practices, bioswales, infiltration basins) to result in equivalent functioning of existing drainage systems.
- BMP-10, Salvage, Stockpiling, and Replacement of Topsoil and Preparation of a Topsoil Storage and Handling Plan, requires evaluation of topsoil for salvaging suitability and preparation of storage and handling plans.
- BMP-4, Verification and/or Relocation of Utilities and Infrastructure, requires identification of all utilities/infrastructure prior to start of construction activities associated with any and all facilities and inclusion of size, color, and location of existing utilities on all construction drawings and/or in health and safety officer materials so utilities can be avoided; if relocation is necessary coordinate with all appropriate utility providers and local agencies to determine which utility lines will be relocated and monitor daily.
- BMP-26, Preparation and Implementation of an Electrical Power Guidelines and EMF Field Management Plan, requires that the design and construction of power facilities be in accordance with electric and magnetic field (EMF) guidance.

- BMP-1, Conformance with Applicable Design Standards and Building Codes, includes a broad range of civil engineering and design measures for facilities including electrical supply (i.e., transmission lines and substations).
- BMP-11, Management of Dredged Material, requires chemical characterization of Funks Reservoir sediment prior to dredging, and design and operation of settling/dewatering basins and dredged material storage areas to avoid adverse effects on surface water and groundwater quality from pollutants potentially contained in Funks Reservoir sediment, and runoff and subsequent sedimentation and turbidity.
- BMP-7, Removal and/or Reuse of Materials from Abandoned Roads, requires removal of asphalt within inundation area and reuse as appropriate.

The estimated amount of solid waste generated during construction (primarily from demolition activities) was evaluated and compared to local landfill capacity to identify potential impacts of the Project on local solid waste infrastructure and the attainment of solid waste reduction goals. Using the Federal Emergency Management Agency's *Debris Estimating Field Guide* (Federal Emergency Management Agency 2010), and U.S. Environmental Protection Agency's *Estimating 2003 Building-Related Construction and Demolition Materials Amounts* (U.S. Environmental Protection Agency 2009), a conservative assumption was made for tonnage of debris generated as a result of demolition of the structures. It is assumed that demolition of a single-family residence (average area of 1,600 square feet) would generate an average of 40 to 160 tons (20 to 890 cubic yards) of debris; demolition of barns (average area of 10,000 square feet) would generate approximately 1,000 tons (500 cubic yards) per structure of debris; and the demolition of other types of structures (average area of 500 square feet) would generate roughly 50 tons (25 cubic yards) per structure of debris. These values were applied to the number of structures anticipated to be subject to demolition to determine estimated tonnage and volume of demolition debris for Alternatives 1, 2, and 3.

### 26.3.2. Operation

The impacts of operations on public services are evaluated qualitatively by discussing the need for new or expanded governmental facilities, as staffing and ratios alone do not represent a physical change to the environment. As identified in Appendix 2D, *Best Management Practices, Management Plans, and Technical Studies*, Section 2D.8, *Recreation Management Plan*, the Authority will work to support existing emergency services and personnel, including first responders, during operations. The Recreation Management Plan (as identified in Appendix 2D) would ensure the Authority safely manages recreational facilities in coordination with Glenn and Colusa Counties. The Plan will describe the coordination with Glenn and Colusa Counties to support emergency services at the recreational facilities and will describe requirements for fire suppression in the recreation areas. Specific measures include:

- Developing different measures, including but not limited to assessing the need for and considering funding for emergency response staff and purchasing equipment based on the specific characteristics of the recreation areas and facilities and in consideration of other potential funding sources that may be secured over time.

- Placing a helipad within either the Peninsula Hills Recreation Area or the day-use boat ramp area for emergency access and placing a helipad near both Golden Gate Dam and Sites Dam.
- Incorporation of prefabricated structures for storing equipment and materials to assist emergency services personnel within the footprint of the recreation areas for police and fire emergency response.
- Describing procedures and policies for reporting any fires that are at the recreation areas, triggers for evacuating recreation areas due to fires, and fire evacuation routes.
- Maintaining fire-suppression equipment (e.g., fire extinguishers, fire blankets) at recreational facilities, as well as in the administrative buildings, and all Authority vehicles.
- Training Authority employees in fire suppression techniques and use of all fire suppression equipment at least once a year and documenting the training.

Impacts on available water supply are evaluated by describing the volume of water supply needed for the administration and operations building, maintenance and storage building, and the recreation areas compared to existing supply and sources. For the purposes of the analysis, it is assumed that the water supply for the administration and operations building and maintenance and storage building would come from groundwater well(s) and the recreation areas would be supplied with water from Sites Reservoir. Water use at the administration and operations building and the maintenance and storage building was approximated using the baseline conditions in the Green Building Initiative's Water Consumption Calculator (Green Building Initiative 2020). Alternative 1 or 3 would require an estimated 30 permanent employees to conduct visual inspections and perform various maintenance activities on different facilities during the operation of Sites Reservoir. Based the square footage of each building, it was estimated that there would be the equivalent of approximately 12 employees at the administration and operations building at one time and approximately 5 employees at one time at the maintenance and storage building; it is anticipated that these employees would work approximately 260 days per year. Water use at the recreation areas was estimated from *Water Use in Forest Service Recreation Areas: Guidelines for Water System Designers* (U.S. Forest Service 2007). The day-use visitors in the recreation areas are estimated to use approximately 1 gallon per day (gallon/day) per user while the campgrounds are estimated to use approximately 5 gallons/day per person at each campsite. To provide an estimate of water use, the analysis assumes that an average of 25% of the 250 available campsites are occupied throughout the year with an average of 3 people per campsite, for a total of 68,500 campground users per year. Day use would make up the remaining 118,500 visitors for a total of 187,000 recreational visitors per year.

Impacts on wastewater treatment providers and solid waste disposal facilities are evaluated by describing the estimated volume of wastewater and solid waste generated by operation of Project facilities in need of treatment or disposal compared to existing capacities. Based on estimates of typical wastewater flow rates from recreational facilities (U.S. Environmental Protection Agency 2002:Table 3-6), campgrounds are anticipated to generate approximately 30 gallons/day per camper and day use is anticipated to generate approximately 3 gallons/day per visitor. Similar to water use described above, the analysis assumes that an average of 25% of the 250 available

campsites are occupied throughout the year with an average of 3 people per campsite, for a total of 68,500 campground users per year. These values were applied to the recreation areas to estimate the amount of wastewater that would be generated at these facilities each year for Alternatives 1, 2, and 3.

The administration and operations building and maintenance and storage building are anticipated to generate approximately 15 gallons/day per employee (U.S. Environmental Protection Agency 2002). Similar to water use described above, the analysis assumes that there would be 12 employees at the administration and operation building at one time and 5 employees at the maintenance and storage building at one time. These values were applied to the administration and operations building and maintenance and storage building to estimate the amount of wastewater that would be generated at these facilities each year for Alternatives 1, 2, and 3.

Impacts on electricity generation and consumption from Project operations are discussed quantitatively, and the analysis uses information from Chapter 17, *Energy*, related to the Project's operational energy generation and energy demands. Electricity generation and consumption for Project, CVP, and SWP operation are modeled in Appendix 17A, *CVP/SWP Power Modeling*, and reported in Chapter 17. The energy needed under operations for the pumps and supply of electricity from the Project hydroelectric generators would require new transmission lines to connect to the grid. The system impact study would be conducted by either PG&E/CalISO or WAPA, depending upon which electricity service provider is selected for the Project, which is incorporated into the analysis.

Using the California Department of Resources Recycling and Recovery's (2020) estimated solid waste generation rates, a conservative assumption was made for tonnage of solid waste generated as a result of operations at the administration and operations building and the maintenance building. It is assumed that operations at the administration and operations building (3,400 square feet) would generate an average of 0.006 pounds per square feet per day (pounds/square feet/day) and the maintenance and storage building (2,700 square feet) would generate an average of 0.014 pounds/square feet/day of solid waste. Based on estimates of solid waste management in recreational forest areas (U.S. Environmental Protection Agency 1971), the recreation areas would likely generate 1.25 pounds per visitor per day of solid waste. These values were applied to the administration and operations building, maintenance and storage building, and recreation areas to estimate the solid waste that would be generated at these facilities each year for Alternatives 1, 2, and 3.

### 26.3.3. Thresholds of Significance

An impact on public services and utilities would be considered significant if the Project would:

- 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 for fire protection, police, protection, schools, or other public facilities.

- Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.
- Have insufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years.
- Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments.
- Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; not comply with federal, state and local management and reduction statues and regulations related to solid waste.

## 26.4 Impact Analysis and Mitigation Measures

**Impact UTIL-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 for fire protection, police protection, schools, or other public facilities**

***No Project***

Under the No Project Alternative, the operations of the existing TC Canal, RBPP, and GCID Main Canal would continue and there would be no effect on public services and utilities. Existing conditions and conditions under the No Project Alternative would be similar for public services and utilities because the Counties and municipalities in the study area have planned for development in their respective spheres of influence through the planning period of their general plans. The Counties and municipalities include language in their general plans that they meet federal regulations for fire protection response timing.

*Significance Determination*

The No Project Alternative would not result in substantial adverse physical impacts associated with the provisioning of, or need for, new or physically altered governmental facilities in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection, police protection, or other public facilities. There would be no impact/no effect.

***Alternatives 1 and 3***

*Construction*

It is anticipated the increase of construction workers would not result in the construction of new or altered government facilities related to public services because the workers would not

permanently relocate to the study area and increase the demand for public services on a long-term basis. As described in Chapter 25, *Population and Housing*, and Appendix 2C, it is anticipated the construction labor force would come from the surrounding areas and would primarily commute to the work sites (AECOM and Engineering Solutions 2021). Construction activities may require specialized skills not readily available in the local labor force; therefore, it is expected that construction personnel may include non-local workers from the greater Northern California region. It is also anticipated that these non-local workers would not permanently move to the Project region. As discussed in Chapter 25, they could use hotels/motels for overnight lodging or commute daily from surrounding areas (e.g., Sacramento). Given that the construction period is relatively short, it is unlikely that investments would be made in new housing to accommodate construction workers, especially when considering the probable place of origin of workers. It is not anticipated that construction personnel would increase the population of the area and thus would not regularly or permanently utilize public services such as police, fire, or schools, given the temporary nature of construction and the likelihood of construction workers to commute.

It is not anticipated that construction would result in the construction of new or altered government facilities related to public services because facilities would be provided on site during construction for construction worker health and safety. Per implementation of BMP-19, construction personnel would have access to an onsite project-dedicated ambulance and medical technician/first-aid trailer office and appropriate communication equipment to communicate onsite or offsite if needed in case of an emergency. In addition, designated areas would be identified within the construction area for helicopter landing in case of an emergency.

With the exception of the Maxwell Unified School District, none of the school districts in Glenn or Colusa Counties are in proximity (i.e., within 5 miles) to any Project facilities or would use any of the roads affected by the Project as school bus routes. Project implementation would not directly affect school structures or operations outside of the Maxwell Unified School District and would not result in substantial unplanned population growth that would require a change in the number of schools or related resources (see Chapter 25).

Emergency access would be maintained and provided throughout construction. Implementing BMP-38 will ensure that Project features and construction equipment have appropriate safety markings and lighting, that air navigation charts are updated, and the aviation community notified of construction activities, maintaining safe air space for all aircraft, including police, fire, and emergency responders. Roadway operations would remain acceptable during construction regardless of the increase in construction traffic (Chapter 18). Therefore, access for emergency service providers would be maintained during construction of Alternatives 1 and 3. Furthermore, as a result of implementing the TMP as required by BMP-16, construction traffic levels would not disrupt emergency service or access to a level that would require the construction or expansion of governmental facilities. If construction traffic is concentrated in one roadway segment over a short period, emergency vehicles and first responders have the right-of-way and would bypass any potential construction congestion, as lanes would remain open per the TMP. The TMP will detail requirements for signage, emergency services notifications, and traffic controls and will have provisions that require compliance with construction notification procedures for counties, sheriff's departments, public works, and fire and police departments.

Implementation of the TMP would ensure continued emergency access during construction. Construction of Alternative 1 or 3 would not result in the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities.

*Operation*

Under Alternative 1 or 3, it is anticipated that operation and maintenance would not result in the construction of new or altered government facilities related to public services. Operation and maintenance activities under Alternative 1 or 3 are estimated to require a limited number (30) of permanent employees to conduct visual inspections and various maintenance activities on different facilities in accordance with the design structures after construction. It is anticipated that these permanent employees would come from existing local communities, such as Willows or Williams, in Glenn or Colusa Counties, which are in proximity to the reservoir, and would not require relocation to the community of Maxwell, where housing options are limited (see Chapter 25). Permanent employees coming from existing communities are currently using existing fire protection, police protection services, and schools in those areas. These employees would not create a substantial increase in demand for these services beyond what is already being provided. Traffic levels associated with maintenance employees would not disrupt fire response or police response because existing roads are currently under-utilized and many of them would be upgraded as part of Alternative 1 or 3 during construction to meet current standards (e.g., Road 68 and additional shoulders). Operation of Alternative 1 or 3 would not result in the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities.

An increase in requests (i.e., service calls) for law enforcement and other emergency service providers is anticipated for operation of Alternative 1 or 3 from visitors to the new recreation areas compared to existing conditions. Approximately 187,000 recreational visitors per year would visit the Sites Reservoir and its recreation areas. The number of visitors per day would fluctuate, resulting in varying levels of use during the recreational season; it is anticipated that 70% of recreational use would be during the primary recreation season (i.e., May 1 through September 20), with approximately 98,000 total visitors on weekends and holidays during this period. This estimate is approximately double the existing and projected population of rural Glenn and Colusa Counties (Chapter 25). The emergency services and law enforcement response to Sites Reservoir would be provided by multiple public service providers, including the Glenn and Colusa County Sheriff's Departments, municipal police departments, CHP, CAL FIRE, city fire departments, volunteer fire departments or fire protection districts, or a combination thereof through mutual aid agreements. These service providers currently coordinate to provide emergency response to the study area. The Colusa County Boating Safety Unit would be responsible for patrolling the reservoir. These emergency service providers currently have facilities located throughout the study area, including in Maxwell. As described in Chapter 2 and Appendix 2D, as part of the Recreation Management Plan, helipads would be placed near Golden Gate Dam or Sites Dam and the Peninsula Hills Recreation Area or the day-use boat ramp for emergency responder use during operation. Prefabricated structures for storing emergency equipment and materials would be placed within the footprint of the recreation areas for police and fire emergency response. These facilities would allow existing emergency service providers access to supplies and equipment to support the recreation areas. Under Alternative 1 or 3, it is

anticipated that operation would not result in the construction of new or altered government facilities related to public services.

*CEQA Significance Determination and Mitigation Measures*

During construction of Alternatives 1 and 3, emergency services and response times, as well as school bus routes, would be maintained through the use of existing roads and implementation of BMP-16. Emergency responders would be able to maintain acceptable service ratios and response times, and no new governmental facilities would be required. Therefore, impacts on public services related to fire protection and police protection from construction would be less than significant. Operation of Alternative 1 or 3 would not result in the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities.

Permanent employees would not result in an increased need for new or physically altered governmental facilities for police, fire, or schools, because permanent employees would not be required to relocate and they would likely come from areas surrounding the reservoir, given the lack of housing available in Maxwell. Operation of Alternative 1 or 3 would include helipad(s) and prefabricated equipment sheds for storage of emergency equipment onsite. The emergency services and law enforcement response to Sites Reservoir would be provided by multiple public service providers that currently have facilities. Any increase in the need for emergency response services, given the number of people expected to use the reservoir and recreation areas and the existing rural conditions and relatively low current demand for public services, would be accommodated through existing providers and facilities. No new governmental facilities are expected to be constructed for fire, police, or schools. Operational impacts on public services related to fire protection, police protection, schools, and other public facilities would be less than significant.

*NEPA Conclusion*

Construction and operation effects of Alternatives 1 and 3 would be the same as described above for CEQA. During construction, emergency responders would be able to maintain acceptable service ratios and response times, and no new or altered governmental facilities would be required as compared to the No Project Alternative. During operation, no new governmental or altered facilities are expected to be constructed for fire, police, or schools as compared to the No Project Alternative. Construction and operation of Alternative 1 or 3 would not result in adverse effects on public services related to fire protection, police protection, or other public facilities.

***Alternative 2***

The impacts on public services under Alternative 2 would be very similar to those described for Alternatives 1 and 3 regarding fire protection and police protection. The differences under Alternative 2 are primarily associated with the change in the route to the west side of the Sites Reservoir. Alternative 2 would require the realignment of Sites Lodoga Road, Maxwell Lodoga Road, and Huffmaster Road to provide a road (i.e., South Road) that would extend from Maxwell to the community of Lodoga around the south side of the reservoir. Huffmaster Road would be integrated into Sites Lodoga Road and would be entirely paved. All other permanent access, maintenance, and construction roads would be the same for the reservoir facilities under

Alternatives 1, 2, and 3. Alternatives 1, 2, and 3 would involve the establishment of the same two primary recreation areas and day-use boat ramp.

*Construction*

Access to the west side of the Sites Reservoir, including to Lodoga, from the eastern side and the southern portion of the reservoir during the construction of South Road would be through the existing routes. The realignment of Sites Lodoga Road, Maxwell Lodoga Road, and Huffmaster Road would be completed prior to the demolition and removal of the affected segment of Huffmaster Road to maintain access to residences near the southern portion of the reservoir and the town of Leesville. Maintaining access routes in Antelope Valley would allow emergency service providers to maintain acceptable response times during Alternative 2 construction. Similar to Alternatives 1 and 3, traffic levels on local roads leading to the Alternative 2 facilities would increase during the construction period. Level of service on all roads used for construction would be maintained and roads would be open to emergency vehicles. In addition, implementation of BMP-16 would ensure that construction traffic levels would not disrupt emergency service response times to a level that would require the construction or expansion of governmental facilities.

*Operation*

Operation activities for Alternative 2 facilities and the limited number of permanent employees required (30) would be the same as for Alternatives 1 and 3. Operation of Alternative 2 would result in the same impacts as those described for Alternative 1 or 3 on fire protection or police protection. No new governmental facilities would be required to be constructed as a result of the permanent employees.

Impacts on fire protection and police protection for Alternative 2 as a result of recreationists using Sites Reservoir would be the same as described above for Alternatives 1 and 3 because the same recreation opportunities and areas would be developed under all alternatives. No new or altered governmental facilities would be required as a result of recreational visitors.

*CEQA Significance Determination and Mitigation Measures*

Similar to Alternatives 1 and 3, during construction of Alternative 2, emergency services and response times would be maintained through the use of existing roads and implementation of BMP-16. Therefore, impacts related to fire protection and police protection from construction of Alternative 2 would be less than significant.

Similar to Alternatives 1 and 3, the operation of the recreation areas under Alternative 2 would result in an increase in the need for fire and police services; however, no new facilities are anticipated. Therefore, impacts related to fire protection, police protection, or other public facilities from operation of Alternative 2 would be less than significant.

*NEPA Conclusion*

Construction and operation effects of Alternative 2 would be the same as described above for CEQA. During construction, emergency responders would be able to maintain acceptable service ratios and response times, and no new or altered governmental facilities would be required as

compared to the No Project Alternative. During operation, no new or altered governmental facilities are expected to be constructed for fire, police, or schools as compared to the No Project Alternative. Construction and operation of Alternative 2 would not result in adverse effects on public services related to fire protection, police protection, or other public facilities.

**Impact UTIL-2: Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects**

***No Project***

Under the No Project Alternative, the operations of the existing TC Canal, RBPP, and GCID Main Canal would continue and Sites Reservoir and associated facilities would not be constructed or operated. Continued operations of the existing water supply/conveyance facilities would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities.

*Significance Determination*

The No Project Alternative would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities as compared to the existing conditions baseline. There would be no impact/no effect.

***Alternatives 1 and 3***

*Construction*

**Water**

As discussed further in UTIL-3, new water supply wells may be needed in Antelope Valley and in the vicinity of Funks Reservoir to provide water to be utilized during construction. Impacts associated with the installation and use of these wells for construction water supply are evaluated throughout this Final EIR/EIS because they are included in the footprint of Alternatives 1 and 3 for the inundation area and around Funks Reservoir. For example, Chapter 8, *Groundwater Resources*, evaluates the potential impacts on groundwater supply. Further, because people would be relocated from the community of Sites prior to construction, there would be no disruption of domestic water supply within the reservoir footprint. BMP-4 addresses potential impacts of surface and subsurface utilities from Project construction outside of the reservoir footprint. As discussed in UTIL-3 and Chapter 5, *Surface Water Resources*, construction activities would not require new or modified water rights, water supply, or operating agreements to accommodate the construction water needs and would not affect water supply for other water users.

**Wastewater**

During construction of Alternatives 1 and 3, domestic wastewater management needs would likely be temporarily provided via portable toilets that would be serviced by an appropriate

provider. The provider would be responsible for transporting and disposing of the wastewater. Wastewater generated during construction would not be treated entirely by one wastewater treatment provider in one day. The contractor responsible for servicing the facilities would have a regular maintenance schedule and dispose of the waste at an approved wastewater treatment provider. The temporary use of portable toilets and generation of wastewater during construction would not require new or expanded wastewater treatment facilities.

**Stormwater**

Existing stormwater facilities in the study area are not engineered and primarily include streams, irrigation ditches, and undeveloped channels. BMP-12 would address stormwater management during construction by including erosion and sediment control measures and during-construction and postconstruction runoff management measures. Regulatory requirements for stormwater management and erosion and sedimentation control are included in Appendix 4A. The erosion control measures would protect soils that have been exposed during excavation, filling, and stockpiling operations from eroding at rates greater than preconstruction conditions. The sediment control measures would capture sediment that was generated from exposed soils. The runoff management measures would reduce runoff rates and prevent concentrated runoff from causing scour, such as at culvert outfall points. BMP-15 would be implemented to ensure that post-Project conditions will result in equivalent functioning of the existing drainage system, and implementation would incorporate measures for drainage feature stability (e.g., drainage systems and practices that mimic natural processes to infiltrate and recharge, such as green infrastructure, low impact development practices, bioswales, infiltration basins); incorporate relocation plans (for canals, ditches, wells, and other existing infrastructure); and incorporate other modifications to manage localized runoff amounts and/or patterns as part of Alternative 1 or 3. Drainage features installed as part of implementation of BMP-15 would be located within the disturbance areas that have been evaluated in other resource chapters of this Final EIR/EIS.

**Electric, Natural Gas, Telecommunication Facilities**

Under Alternatives 1 and 3, ground-disturbing activities such as the excavation and trenching that would be associated with installing the pipelines for the regulating reservoirs (TRR East and Funks) and conveyance complex have the potential to temporarily interrupt local electrical, cable, and natural gas utilities. The implementation of BMP-4 for construction related to utilities will address verification and potential relocation of utilities, which would maintain service throughout construction. If utilities would be in need of relocation as a result of Project construction, relocation would occur within proposed disturbance areas in accordance with BMP-4. Furthermore, compliance with electrical power and EMF management guidance would be required as part of BMP-26. Construction activities in the inundation area (including bridge construction) and road relocation alignments are expected to disrupt utilities and eliminate existing access roads in these areas. However, all parcels in the inundation area footprint would be acquired prior to construction activities for Alternatives 1 and 3 and the existing structures in the inundation area would be demolished during site preparation. Therefore, no utility service to the parcels would be needed and no new, expanded, or relocated facilities would be required.

Construction of the Sites Reservoir and Sites Dam would eliminate the existing access to the communication tower array on Logan Ridge, which is southeast of the inundation area. However, an alternate new road (Comm Road South) would be constructed outside of the reservoir

footprint to allow continued maintenance access to the communication tower and would not result in a disruption to this utility that would require new or expanded communication facilities.

Construction of the Dunnigan Pipeline to the CBD would not require partial or complete closures or detours of roads or freeways because it would occur in tunnels under I-5, SR 99, and the railroad or would be in agricultural lands. The tunnels would be constructed at least 45–50 feet below the surface and would avoid any utility infrastructure. Water and soil for construction would be obtained from onsite construction dewatering and trenching, respectively. Electrical service would be required for construction and operation and would be in accordance with BMP-4.

Supplying power to the Funks and TRR East PGPs would require new high-voltage transmission lines and a point of interconnection (POI) to the existing transmission system for Alternatives 1 and 3. New transmission lines would be required to tie the hydropower generation facilities to the existing grid, and it is expected these generation-tie lines would run in parallel with the power supply lines. Transmission lines would also be required to connect the Funks and TRR East substations. There would also be an interconnection between the Funks and TRR East PGPs and it is anticipated that the transmission lines would parallel the pipelines in the same easement. Up to four 230-kV transmission lines would be required: two for the source supply to either the Funks PGP or TRR East PGP, and two between the Funks and TRR East electrical substations. The two looped source circuits would be installed on a set of common double-circuit steel monopole structures and would require separate easements because they would not parallel any of the pipelines (Figure 2-20). The two transmission lines between the Funks and TRR electrical substations would be installed on their own common set of double-circuit steel monopole structures within the pipeline easement (Figure 2-21).

Two of the substations are within the footprint of the Funks and TRR PGPs and the proposed new POI substation will be sited at a location that will be determined after the completion of the system impact study (Chapter 2, *Project Description and Alternatives*). Construction would be coordinated with WAPA, PG&E, and other appropriate entities to avoid potential disruption to either of these utilities. The POI between the electrical substations and existing transmission lines would require a system impact study, which would be conducted by either PG&E/CalISO or WAPA, depending upon which electricity service provider is selected. Until a system impact study conducted either by PG&E in conjunction with CalISO or by WAPA is undertaken, it is not possible to determine whether the Authority would be required to invest in additional electric transmission infrastructure to ensure reliable operation of the existing regional transmission system. Based on current knowledge, construction of Alternatives 1 and 3 would not require substantial additional electric generation capacity. In addition, in accordance with BMP-1, the Authority will ensure conformance with applicable design standards and building codes for equipment, including electrical generation equipment, substations, and transmission lines, buildings.

*Operation*

**Water**

During operation of Alternative 1 or 3, no new groundwater wells would be needed. Potable water for the administration and maintenance buildings would be provided from the same wells installed during construction. The two recreation areas that would provide potable water would use water from the new Sites Reservoir. Operation would not result in the relocation or construction of new or expanded water facilities.

**Wastewater**

During operation activities of Alternative 1 or 3, an estimated 66,300 gallons of wastewater would be generated annually at the administration and operations building and the maintenance building (Section 26.3.2, *Operation*). Under Alternative 1 or 3, an onsite septic tank would serve these buildings. This onsite septic tank would preclude the need to expand existing local or regional wastewater treatment facilities. Therefore, operation of the administration and operations building and maintenance building would not result in the relocation or construction of new or expanded wastewater facilities.

The recreation areas would be served by vault toilets, which by design do not require leach fields. The vaults would have to be pumped periodically and the wastewater transported to an appropriate treatment facility that could be in Glenn or Colusa County. An annual estimate of 2.4 million gallons of wastewater, or an average of approximately 6,600 gallons per day, could be generated by use of the recreation areas. This potential volume of wastewater would not be treated entirely by one wastewater treatment provider in one day. The contractor responsible for servicing the vaulted toilets would have a regular schedule and dispose of the waste on a single day based on that schedule at the approved wastewater treatment provider. Therefore, the volume disposed of each time would be less than the total estimated annual volume. The regional wastewater treatment facilities collectively have adequate capacity to process this additional wastewater if the wastewater is disposed of at the various locations in the counties described in Section 26.2.2, *Utilities.* The wastewater treatment providers in Glenn County have an excess capacity of around 2 million gallons per day, and those in Colusa County have an excess capacity of about 2.5 million gallons per day. Operation of the recreation areas would not necessitate the expansion of existing local or regional wastewater treatment facilities.

**Stormwater**

Areas where there may be impervious surfaces, including the administration and operations building and maintenance building, Funks and TRR East PGPs, TC Canal intake, and CBD outlet would generate stormwater runoff. These impervious surfaces would encompass a relatively small acreage compared to the entire Project site (Chapter 5 and Chapter 7, *Fluvial Geomorphology*) and thus would not be expected to exceed existing stormwater management system capacities. Implementation of BMP-15 for operation of Alternative 1 or 3 would ensure that the collection of stormwater would be similar to that under existing conditions and that it would be routed to existing receiving waters (e.g., Funks Creek, Bird Creek, and CBD) and Sites Reservoir per appropriate design and discharge requirements (Central Valley RWQCB and State Water Resources Control Board Orders).

**Electric, Natural Gas, and Telecommunication Facilities**

As described in Chapter 17, *Energy*, based on current knowledge, operation of Alternatives 1 and 3 would not require substantial additional electric generation capacity and a system impact study would be conducted as described above under construction to ensure reliable operation of the existing regional transmission system. Campground electricity demand during operation would be nominal given they are campgrounds with little to no electrical hookups. Utilities that may be relocated during construction, as described above, would provide service after relocation.

Therefore, it is anticipated no new or expanded electrical, natural gas, or telecommunications facilities would be required during operation of Alternative 1 or 3.

*CEQA Significance Determination and Mitigation Measures*

Alternatives 1 and 3 include features such as Comm Road South that would allow for the continued access to existing utilities during construction. Expansion of existing wastewater treatment capacity would not be required during construction or operation of Alternatives 1 and 3. During construction, existing stormwater management systems may result in the construction of new or expanded stormwater drainage systems as part of implementation of BMP-15. During construction, new groundwater wells may be required in Antelope Valley or around Funks Reservoir at the site of the administration and operations building. During construction, utilities may need to be relocated in accordance with BMP-4, and new transmission line and substations would be constructed. Until the system impact analysis has been conducted by either PG&E/CalISO or WAPA, based on current knowledge, operation of Alternative 1 and 3 would not require substantial electric generation capacity. Any new or expanded stormwater drainage, groundwater wells, or relocation of utilities, as well as the transmission lines and substation, would be constructed within proposed disturbance areas and as such have been evaluated throughout this Final EIR/EIS. Construction impacts would be less than significant.

During operations, wells that may have been constructed for construction would be used for the administration and operations building. During operation and maintenance activities under Alternative 1 or 3, the collection of stormwater would be similar to that under existing conditions with implementation of BMP-15. A minimal amount of wastewater would be generated at the administration and operations building and the maintenance building that would be collected in onsite septic tanks and transferred offsite for treatment and disposal. The recreation areas would generate wastewater, which would be transported to offsite regional treatment facilities, which collectively have adequate capacity to process this additional wastewater. If utilities were required to be relocated, they would continue to provide service once relocated under operating conditions of Alternative 1 or 3. The transmission line and substations would operate according to the requirements identified by the system impact study. Therefore, operation of Alternative 1 or 3 would not necessitate new utilities or the expansion of existing utilities, and operational impacts would be less than significant under Alternative 1 or 3.

*NEPA Conclusion*

Construction and operation effects on water supply, wastewater treatment and stormwater drainage, electric power, natural gas, or telecommunications facilities of Alternative 1 or 3 would be the same as described above for CEQA. During construction, utilities may need to be

relocated or expanded, as compared to the No Project Alternative. Any new or expanded utilities would be constructed within proposed disturbance areas and as such have been evaluated throughout this Final EIR/EIS. Operation of Alternative 1 or 3 would not necessitate new utilities or the expansion of existing utilities as compared to the No Project Alternative. Construction and operation would have no adverse effect.

***Alternative 2***

*Construction and Operation*

**Water and Wastewater**

Alternative 2 would require the same water supply and generate the same wastewater volumes during construction and operation as Alternative 1 or 3 because the number of construction workers are not expected to be appreciably different and the number of operation employees and recreation areas would be the same under Alternatives 1, 2, and 3. Therefore, the water and wastewater effects would be the same for Alternative 2 as for Alternatives 1 or 3.

**Stormwater**

Stormwater would be generated under construction and operation of Alternative 2. Stormwater runoff would occur at all areas where there would be impervious surfaces, including the administration and operations building, Funks and TRR West PGPs, TC Canal intake, South Road, CBD outlet, and the Sacramento River discharge. The extent of these impervious surfaces would be slightly greater in area than described above for Alternatives 1 and 3, primarily because of construction of the South Road and the Sacramento River discharge. These impervious surfaces would encompass a relatively small acreage compared to the entire site (Chapter 5 and Chapter 7). Furthermore, with implementation of BMP-15 for operation of Alternative 2, the collection of stormwater would be similar to that under existing conditions, and it would be routed to existing receiving waters (e.g., Funks Creek, Bird Creek, and CBD) and Sites Reservoir per appropriate design and discharge requirements.

**Electric, Natural Gas, Telecommunication Facilities**

Alternative 2 would involve the same type of ground-disturbing activities as described above for Alternatives 1 and 3 around the regulating reservoir and conveyance complex and in the inundation area. As with Alternatives 1 and 3, BMP-4 would be implemented to maintain utility service throughout construction of Alternative 2. If utilities would need relocation as a result of Project construction, relocation would occur within the proposed disturbance areas in accordance with BMP-4. Construction of Alternative 2 in the inundation area would have the same impacts as identified for Alternatives 1 and 3, and utilities would be removed after relocation of residents. The alternate new road (Comm Road South) is proposed under Alternative 2 as described above for Alternatives 1 and 3 and impacts would be the same. Construction of the Dunnigan Pipeline to the CBD under Alternative 2 would be the same as described above for Alternatives 1 and 3 and the impacts the tunnels under I-5 would avoid utility infrastructure. However, Alternative 2 would extend from the CBD to the Sacramento River. Similar to the discussion to the CBD, this alignment would involve implementation of BMP-4.

The requirements of a system impact analysis would generally be similar under Alternative 2 and Alternatives 1 and 3. Alternative 2 would require new transmission lines and substations to be

connected to the grid, which would be subject to the system impact analysis, as discussed in Chapter 17. Until a system impact study conducted either by PG&E in conjunction with CalISO or by WAPA is undertaken, it is not possible to determine whether Project proponents would be required to invest in additional electric transmission infrastructure to ensure reliable operation of the existing regional transmission system. Based on current knowledge, operation of Alternative 2 would not require substantial additional electric generation capacity. As such, the electricity effects for Alternative 2 would be similar to those for Alternative 1 or 3.

*CEQA Significance Determination and Mitigation Measures*

Alternative 2 construction and operation impacts associated with water and wastewater infrastructure would be the same as described above for Alternatives 1 and 3; impacts would be less than significant.

Alternative 2 construction and operation impacts associated with stormwater infrastructure would be similar to those for Alternatives 1 and 3, although it is anticipated that more stormwater would be generated as a result of more impervious surfaces under Alternative 2 as compared to Alternatives 1 and 3. With the implementation of BMP-15, the collection of stormwater would maintain equivalent functioning of existing drainage systems, and stormwater drainage would be constructed within proposed disturbance areas that have been evaluated throughout this Final EIR/EIS. Impacts would be less than significant.

Alternative 2 construction and operation impacts associated with utilities and energy would be similar as describe above for Alternatives 1 and 3. During construction utilities may need to be relocated (BMP-4) and new transmission lines and substations would be constructed. Once constructed or relocated, utility service would continue. Until a system impact analysis is conducted, it is not possible to determine whether the Authority would be required to invest in additional electric transmission infrastructure to ensure reliable operation of the existing regional transmission system. Based on current knowledge, operation or construction of Alternative 2 would not require substantial additional electric generation capacity.

*NEPA Conclusion*

Construction and operation effects on water, wastewater treatment and stormwater drainage, electric power, natural gas, or telecommunications facilities of Alternative 2 would be the same as described above for CEQA. During construction, utilities may need to be relocated or expanded, as compared to the No Project Alternative. Any new or expanded utilities would be constructed within proposed disturbance areas and as such have been evaluated throughout this Final EIR/EIS. Operation of Alternative 2 would not necessitate new utilities or the expansion of existing utilities as compared to the No Project Alternative. Construction and operation would have no adverse effects.

**Impact UTIL-3: Have insufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years**

***No Project***

Under the No Project Alternative, the operations of the existing TC Canal, RBPP, and GCID Main Canal would continue and Sites Reservoir and associated facilities would not be constructed or operated. Water supplies under the future No Project Alternative would be similar to those under existing conditions and continued operations of the existing water supply/conveyance facilities would not change water supplies.

*Significance Determination*

Under the No Project Alternative, Sites Reservoir would not be constructed and operated. There would be no impact/no effect.

***Alternatives 1 and 3***

*Construction*

Impacts related to water supply would be related to construction of Project facilities in Antelope Valley, and other areas of Glenn and Colusa Counties where minor construction would occur that would require water during construction. In addition, construction water would be required for constructing the Dunnigan Pipeline. The anticipated construction water use for Alternatives 1, 2, and 3 is summarized in Table 5-33 and includes both groundwater and surface water supplies.

In the reservoir footprint, water would be obtained from existing private wells that would be acquired along with property by the Authority. The Authority would seek to acquire water from nearby local water purveyors (ditches, canals, and wells) and possibly local landowners (wells) for use in the construction of roads. Excavation dewatering operations would provide a source of construction water for Sites Reservoir and related Project facilities. Water used for construction purposes would also be transferred to the facility footprints from the GCID Main Canal by trucks and/or temporary pipelines. It is assumed that more water may be used from existing or new groundwater wells than surface water for construction of the reservoir facilities located in Antelope Valley.

Water for the construction of the GCID system upgrades and regulating reservoirs and conveyance complex would be transferred to the facility footprints from the TC Canal or GCID Main Canal by trucks and/or pipes. Water required for construction of the Dunnigan Pipeline would be obtained from wells or from dewatering efforts required during pipeline construction, or from the TC Canal.

Existing surface and groundwater supplies would be adequate to meet the construction water needs. No new or expanded water supply entitlements or resources to provide the volume needed would be necessary for construction of Alternatives 1 and 3. Construction activities would not require new or modified water rights, water supply, or operating agreements to accommodate the construction water needs identified above and would not affect water supply for other water users (Chapter 5). New groundwater wells would likely be required to meet the water supply

needs of Project construction. Based on current groundwater storage, groundwater use in the vicinity, and groundwater recharge, adequate groundwater would be available (Chapter 8).

*Operation*

The administration and operations building is estimated to use approximately 61,000 gallons of water per year; the maintenance and storage building is estimated to use approximately 25,000 gallons of water per year. The recreation areas are estimated to use approximately 460,000 gallons of water per year. The water supply for the administration and operations building and the maintenance and storage building would be obtained from groundwater wells that are expected to be installed during construction. The water supply for the recreation areas would be obtained from the Sites Reservoir. As mentioned for construction and identified in Chapter 8, based on current groundwater storage, groundwater use in the vicinity, and groundwater recharge, there is sufficient groundwater to support the nominal amount of water needed for the operation of the buildings, and the Sites Reservoir would provide sufficient water to meet the recreation area needs.

*CEQA Significance Determination and Mitigation Measures*

A reliable water supply would be required for both construction and operation of Alternatives 1 and 3. Sufficient water supplies would be available through existing groundwater and surface water sources to support the construction and operation of Alternatives 1 and 3, although new groundwater wells would likely be required to provide water for Project construction. Therefore, impacts on water supply availability under construction and operation of Alternatives 1 and 3 would be less than significant.

*NEPA Conclusion*

Construction and operation effects for Alternatives 1 and 3 would be the same as described above for CEQA. Although new groundwater wells would likely be required, existing groundwater and surface water sources would provide sufficient water supply for construction and operation of Alternative 1 or 3 as compared to the No Project Alternative. No adverse effects on water supply reliability would occur as the result of construction or operation of Alternatives 1 and 3.

***Alternative 2***

*Construction and Operation*

Existing surface and groundwater supplies would be adequate to meet the construction water needs for Alternative 2. No new or expanded water supply entitlements or resources to provide the volume needed would be necessary for Alternative 2 construction (Chapter 5). Some new groundwater wells would likely be required. Based on current groundwater storage, groundwater use in the vicinity, and groundwater recharge, adequate groundwater would be available (Chapter 8). An alternate water supply would be provided to any landowner during the construction dewatering period if an adjacent existing well user experiences temporary, localized impacts on groundwater availability due to construction dewatering activities.

The water use and supply for the operation of Alternative 2 would be the same as described for Alternatives 1 and 3. This is because the administration and operations building and the maintenance and storage building and the recreation areas are the same for Alternatives 1, 2, and 3 and thus would require the same amount of water and obtain it from the same sources.

*CEQA Significance Determination and Mitigation Measures*

A reliable water supply would be required for construction and operation of Alternative 2. Sufficient water supplies would be available through existing groundwater and surface water sources to support the construction and operation of Alternative 2, as described above for Alternatives 1 and 3. Therefore, impacts on water supply availability under construction and operation of Alternative 2 would be less than significant.

*NEPA Conclusion*

Construction and operation effects for Alternative 2 would be the same as described above for CEQA. Although new groundwater wells would likely be required, existing groundwater and surface water sources would provide sufficient water supply for construction and operation of Alternative 2 as compared to the No Project Alternative. No adverse effects on water supply reliability would occur as the result of construction or operation of Alternative 2.

**Impact UTIL-4: Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments**

***No Project***

Under the No Project Alternative, the operations of the existing TC Canal, RBPP, and GCID Main Canal would continue and Sites Reservoir and associated facilities would not be constructed or operated. Continued operations of the existing water supply/conveyance facilities would not change the level of wastewater treatment demand.

*Significance Determination*

The No Project Alternative would not result in a determination by a wastewater treatment provider that it has inadequate capacity because construction and operation of Sites Reservoir would not occur. There would be no need for additional wastewater treatment by existing wastewater treatment providers. There would be no impact/no effect.

***Alternatives 1 and 3***

*Construction and Operation*

Groundwater encountered during construction of Alternatives 1 and 3 would be contained on site in bermed areas adjacent to work sites to avoid impacts on surface waters. This containment is one of the requirements for treatment of groundwater for compliance with Central Valley RWQCB Order R5-2022-0006 and State Water Resources Control Board Order 2003-0003-003. In addition, during pipeline excavation, a dewatering system would be used so that installation of the pipelines could be done in the dry, and water would be used on site. Therefore, there would be no need for water generated from construction activities to be trucked to offsite treatment

plants. During construction of Alternatives 1 and 3, portable toilets would be provided at construction sites and would be serviced by an appropriate provider that would occasionally require the waste to be hauled for treatment offsite. Guidelines for containment of sanitation facilities (e.g., portable toilets) and their cleaning and replacement are included in BMP-12. Therefore, construction of Alternatives 1 and 3 would not affect wastewater treatment providers' abilities to meet wastewater treatment demands and commitments.

During operation activities, wastewater would be generated at the administration and operations building, maintenance building, and the recreation areas as described for Impact UTIL-2. As described above, operation of these facilities would not necessitate the expansion of existing local or regional wastewater treatment facilities. Wastewater treatment agencies would be able to meet wastewater treatment demands and commitments because of adequate capacity in Glenn and Colusa Counties as described under Impact UTIL-2.

*CEQA Significance Determination and Mitigation Measures*

Construction and operation of Alternatives 1 and 3 would require the treatment of wastewater by a wastewater treatment provider but would not necessitate the expansion of existing local or regional wastewater treatment facilities. Therefore, construction and operation of Alternatives 1 and 3 would not result in a determination by a wastewater treatment provider that it has inadequate capacity to serve projected demand in addition to the provider's existing commitments. Impacts related to the adequacy of wastewater treatment would be less than significant.

*NEPA Conclusion*

Construction and operation effects would be the same as described above for CEQA. The existing capacity of local and regional wastewater treatment facilities would be sufficient to serve the projected demand during construction and operation of Alternative 1 or 3 as compared to the No Project Alternative. No adverse effects related to the adequacy of wastewater treatment would occur as the result of construction or operation of Alternatives 1 and 3.

***Alternative 2***

*Construction and Operation*

Construction and operation effects on wastewater treatment providers' existing capacity under Alternative 2 would be the same as described for Alternatives 1 and 3. Other than maintenance of the portable toilets at construction sites, there would be no need for wastewater generated during construction of Alternative 2 to be trucked to offsite treatment plants. Operation of the administration and operations building, maintenance building, and the recreation areas would not necessitate the expansion of existing local or regional wastewater treatment facilities. Wastewater treatment agencies would be able to meet wastewater treatment demands and commitments because of adequate capacity in Glenn and Colusa Counties as described under UTIL-2.

*CEQA Significance Determination and Mitigation Measures*

Construction and operation impacts under Alternative 2 would be the same as those described for Alternatives 1 and 3. Impacts related to the adequacy of wastewater treatment providers' capacity under Alternative 2 would be less than significant.

*NEPA Conclusion*

Construction and operation effects would be the same as described above for CEQA. The existing capacity of local and regional wastewater treatment facilities would be sufficient to serve the projected demand during construction and operation of Alternative 2 as compared to the No Project Alternative. No adverse effects related to the adequacy of wastewater treatment would occur as the result of construction or operation of Alternative 2.

**Impact UTIL-5: Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals and comply with federal, state and local management and reduction statutes and regulations related to solid waste**

***No Project***

Under the No Project Alternative, the operations of the existing TC Canal, RBPP, and GCID Main Canal would continue and Sites Reservoir and associated facilities would not be constructed or operated. Continued operations of the existing water supply/conveyance facilities would not change the level of solid waste generated at these facilities.

*Significance Determination*

The No Project Alternative would not result in solid waste generation in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals because there would be no solid waste generated from the construction and operation of Sites Reservoir. There would be no impact/no effect.

***Alternatives 1 and 3***

*Construction*

Multiple structures would be demolished under Alternatives 1 and 3 within the inundation area. Demolition debris would be transported to and disposed of at approved landfills. Table 26-4 summarizes the estimated tonnage of solid waste estimated to be generated by demolition activities. To the extent possible, and as required by reduction of solid waste requirements, demolition debris would be reused and recycled under Alternatives 1 and 3. No demolition of existing structures would be required for GCID Main Canal diversion and system upgrades. No demolition or relocation would be required for the TC Canal diversion, TRR East-related facilities, Funks Reservoir-related facilities, or facilities associated with conveyance to the Sacramento River (i.e., Dunnigan Pipeline, and CBD outlet).

**Table 26-4. Estimates of Solid Waste as a Result of Demolition**

| Structure | Demolition Factor | Number of Structures | Tonnage of Solid Waste | Cubic Yards of Solid Waste |
|---|---|---|---|---|
| Single-family homes | 160 tons | 20 | 3,200 | 6,400 |
| Barns | 1,000 tons | 25 | 25,000 | 50,000 |
| Other structures (combination of sheds, silos, and pump houses) | 50 tons | 40 | 2,000 | 4,000 |
| **Totals** | **N/A** | **85** | **30,200** | **60,400** |

Notes: 1 ton of construction and demolition debris = 2 cubic yards (Federal Emergency Management Agency 2010).

The Stonyford Disposal Site in Colusa County had a capacity of 55,683 cubic yards as of April 30, 2001, and a daily max of 10 tons per day; the Maxwell Transfer Station has a permitted capacity of 180 tons per day. In addition, the Ostrom Road Landfill has approximately 39,223,000 cubic yards of capacity remaining and can receive up to 3,000 tons per day (California Department of Resources Recycling and Recovery 2020). Therefore, these different solid waste disposal facilities have sufficient capacity to accept the solid waste generated by demolition under Alternatives 1 and 3.

Clearing and grubbing would be required in the inundation area footprint and for most built facilities (i.e., dam facilities and I/O Works, Funks Reservoir-related facilities, TRR East-related facilities, and Dunnigan Pipeline) and would entail removing and disposing of woody vegetation. Grubbing would consist of removing objects (e.g., stumps, taproots, debris, organic material) larger than 2 inches in diameter to a depth of 1 foot below the cleared surface. Cleared vegetation materials would be disposed of at one of the landfill/green waste facilities identified in Section 26.2.2, *Utilities*, that has already gone through environmental review. The composting and green waste facilities in Glenn and Colusa Counties have adequate capacity to handle green waste generated by construction of Alternatives 1 and 3.

Prior to construction of the Dunnigan Pipeline and TRR East, topsoil material would be excavated, stockpiled separately, used for restoration of temporary work areas outside the inundation area, placed around a facility following construction to support native plant growth, or replaced in agricultural areas. BMP-10 would be implemented during construction of Alternatives 1 and 3.

Alternatives 1 and 3 would involve relocating county roads (i.e., Maxwell Sites Road, Sites Lodoga Road, and Huffmaster Road). Other new paved or unpaved roads would also be provided to access Alternative 1 or 3 facilities from existing roads and to improve operation and maintenance access between the main dams and saddle dams. Road construction would entail making road cuts and fills; hauling away excess cut materials; constructing culverts; laying aggregate road base and asphalt; erecting fences, guardrails, and signs; installing roadway striping and reflectors; restoring temporary disturbance areas; and cleaning up the work sites. The existing Sites Lodoga Road roadbed material would be pulverized, excavated, and used as

aggregate base for the realigned Sites Lodoga Road to save on materials costs and need for disposal.

*Operation*

Operation of Alternative 1 or 3 would generate solid waste at the administration and operations building, maintenance building, and recreation areas. Solid waste generated at these facilities would not be substantial and is anticipated to be roughly 7.5 tons per year at the administration and operations building and 7 tons per year at the maintenance building. The recreational areas are anticipated to generate approximately 117.5 tons per year of solid waste. In keeping with state guidelines 50% of this waste would be recycled or otherwise diverted from the landfills; therefore, an estimated 66 tons (264 cubic yards) (Federal Emergency Management Agency 2010) of solid waste generated during operations would be transported to area landfills annually. As described for construction, adequate capacity exists in local landfills and waste would be delivered to the landfills using appropriate transporters. In addition, operation of Alternative 1 or 3 would not restrict the facilities or transporters from complying with federal, state, and local solid waste regulations.

Maintenance activities for the Alternative 1 or 3 facilities would include debris removal, dredging, vegetation maintenance, rodent control, erosion control and prevention, routine inspections (dams, tunnels, pipelines, PGPs, I/O Works, fencing, signs, and gates), painting, cleaning, repairs, and other routine tasks to maintain facilities in accordance with facility design standards after construction and commissioning. Maintenance activities associated with the existing RBPP and new head gate for the GCID Main Canal would likely include cleaning and the removal of sediment, debris, and biofouling materials, similar to that which already occurs at existing facilities. Reservoir management would include periodic sediment management and removal. The Authority will implement BMP-11, which includes information on the frequency and locations of dredging of Funks Reservoir and TRR East should dredging be needed, testing of sediment before disposal, approved disposal locations, and procedures to follow if sediment contaminant levels exceed regulatory standards for constituents of concern (e.g., pesticides).

*CEQA Significance Determination and Mitigation Measures*

Construction contractors would be required to dispose of construction waste in accordance with federal, state, and local regulations as a requirement of construction contract specifications for Alternatives 1 and 3. Construction materials would be reused and recycled to the extent feasible. Existing asphalt would be pulverized and used to build new roads. Nonhazardous materials in and adjacent to the inundation area may be disposed of in the dead pool area for Sites Reservoir. As discussed in Chapter 21, *Greenhouse Gas Emissions*, a Project-specific construction debris recycling and diversion program would be developed to achieve a documented 50% diversion of construction waste. Excess demolition debris would be transported to approved landfills for disposal. Solid waste generated during operation of Alternative 1 or 3 is not anticipated to be substantial. Therefore, construction and operation activities would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Solid waste-related impacts from the construction and operation of Alternatives 1 and 3 would be less than significant.

*NEPA Conclusion*

Construction and operation effects would be the same as described above for CEQA. The solid waste generated during construction and operation of Alternatives 1 and 3 would not exceed state or local standards, exceed the capacity of local infrastructure, or impair the achievement of solid waste reduction goals as compared to the No Project Alternative. No adverse effects from solid waste generation would occur as a result of construction or operation of Alternatives 1 and 3.

### *Alternative 2*

*Construction and Operation*

Construction and operation of Alternative 2 would be the same as described for Alternatives 1 and 3 with respect to solid waste generation. Alternative 2 would require the same demolition of structures and generate the same demolition debris as Alternatives 1 and 3 (Table 26-4) and would include the same administration and operations building, maintenance building, and recreation areas. Clearing and grubbing of the inundation area may result in slightly less green waste/solid waste under Alternative 2, as compared to Alternatives 1 and 3 given the smaller footprint of the inundation area and fewer saddle dams and because orchards do not have to be removed for TRR West. However, clearing and grubbing of the South Road alignment would be required and would result in more debris, when compared to Alternatives 1 and 3. Road demolition would be the same for Alternatives 1, 2, and 3 because the same roads would need to be demolished. Therefore, Alternative 2 would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

*CEQA Significance Determination and Mitigation Measures*

Construction contractors would be required to dispose of construction waste in accordance with federal, state, and local regulations, as a requirement of the Alternative 2 construction contract specifications. Construction and operation impacts under Alternative 2 would be the same for solid waste as those described for Alternative 1. To reduce GHG emissions, a Project-specific construction debris recycling and diversion program would be developed to achieve a documented 50% diversion of construction waste. Remaining demolition debris would be transported and disposed of at an approved landfill. Therefore, these activities would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals and impacts related to solid waste production would be less than significant as a result of construction or operation of Alternative 2.

*NEPA Conclusion*

Construction and operation effects would be the same as described above for CEQA. The solid waste generated during construction and operation of Alternative 2 would not exceed state or local standards, exceed the capacity of local infrastructure, or impair the achievement of solid waste reduction goals as compared to the No Project Alternative. No adverse effects from solid waste generation or on the attainment of solid waste reduction goals would occur as a result of construction or operation of Alternative 2.

# 26.5 References

## 26.5.1. Printed References

AECOM and Engineering Solutions. 2021. Constructability Analysis for the Conveyance Facilities Task Order No. 2, Task HR53 – Draft [memorandum]. February 22. Prepared by Michael Forrest, P.E., G.E.; Dan Hertel. Prepared for Sites Project Authority.

California Department of Resources Recycling and Recovery. 2020. *SWIS Facility/ Site Search*. Available: https://www2.calrecycle.ca.gov/SolidWaste/Site/Search. Accessed: November 5, 2020.

California Public Utilities Commission. 2020. *Natural Gas and California*. Available: https://www.cpuc.ca.gov/natural_gas/. Accessed: November 4, 2020.

Central Valley Regional Water Quality Control Board. 2018. *Central Valley Water Board Meeting*. Item 25: Uncontested NPDES Permits and Enforcements. April 5/6, 2018 Meeting. Available: https://www.waterboards.ca.gov/centralvalley/board_decisions/tentative_orders/1804/25_uncon_npdes_enf_buff.pdf. Accessed: April 6, 2021.

Colusa County. 1989. *Colusa County General Plan*. Final. Adopted January 13. Available: http://www.countyofcolusageneralplan.org/sites/default/files/backgrounddox/1989%20General%20Plan/7.%20_CommunityServicesElement.pdf. Accessed: November 5, 2020.

Colusa County. 2010. *Colusa County General Plan Update Background Report*. Prepared by De Novo Planning Group. June. Available: http://www.countyofcolusageneralplan.org/sites/default/files/Colusa%20Background%20Report_Complete_no%20figures.pdf. Accessed: November 5, 2020.

Colusa LAFCO. 2013a. *Arbuckle Public Utility District Municipal Service Review*. Resolution 2013-0001. Adopted March 7. Available: https://www.colusalafco.org/uploads/1/1/4/5/11454087/adopted_arbuckle_msr_mar_7_2013.pdf. Accessed: April 6, 2021.

Colusa LAFCO. 2013b. *City of Williams Municipal Service Review*. Resolution 2013-0005. Adopted August 1. Available: https://www.colusalafco.org/uploads/1/1/4/5/11454087/adopted_williams_msr_august_1_2013.pdf. Accessed: April 29, 2021.

Colusa LAFCO. 2016. *Princeton Waterworks District Municipal Service Review (MSR) and Sphere of Influence (SOI)*. Draft. August. Available: https://www.colusalafco.org/uploads/1/1/4/5/11454087/princeton_waterworks_dist._8.2016_msr-soi.pdf. Accessed: April 6, 2021.

Colusa LAFCO. 2017. *Maxwell Public Utility District (MPUD) Municipal Service Review (MSR) Sphere of Influence (SOI)*. Hearing Draft. September. Available:

http://www.colusalafco.org/uploads/1/1/4/5/11454087/hearing_draftmaxwell_pud_msr-soi_9.7.17.pdf. Accessed: April 6, 2021.

County of Glenn. 2020. *Glenn County Sheriff*. Available: https://www.countyofglenn.net/dept/sheriff/welcome. Accessed: November 4, 2020.

Ed-Data. 2022. Education Data Partnership. 2021–2022 Data. Accessed December 14, 2022. http://www.ed-data.org/.

Federal Emergency Management Agency. 2010. *Debris Estimating Field Guide*. Available https://www.fema.gov/media-library-data/1558616150217-8ff03e353e675b00c08a84b5916fa397/fema_329_debris_estimating_field_guide_9-1-2010.pdf. Accessed: December 1, 2020.

FireDepartment.net. 2020a. *Glenn County, CA Fire Departments.* Available: https://www.firedepartment.net/directory/california/glenn-county. Accessed: November 5, 2020.

FireDepartment.net. 2020b. *Colusa County, CA Fire Departments.* Available: https://www.firedepartment.net/directory/california/colusa-county. Accessed: November 5, 2020.

Glenn County. 2020. *Glenn County General Plan Update Existing Conditions Report 2020.* Prepared by De Novo Planning Group. Available: https://static1.squarespace.com/static/5c8a73469b7d1510bee16785/t/5e556b56c253f84cdc287783/1582656403698/GlennCounty-ECR-Final-Feb2020.pdf. Accessed: November 4, 2020.

Green Building Initiative. 2020. *Water Consumption Calculator.* Available: https://app.thegbi.org/education/library/. Accessed: February 21, 2023.

Inmyarea.com. 2020. *Utilities in Williams, CA.* Available: https://www.inmyarea.com/utilities?zipcode=95987. Accessed: November 5, 2020.

Maxwell Unified School District. 2019. *Local Control Accountability Plan and Annual Update Template*. Available: < https://maxwell-ca.schoolloop.com/file/1377668917872/1383373047999/7347607828270725243.pdf> Accessed: December 8, 2020.

Pacific Gas and Electric Company. 2014a. *Gas Service Area Maps*. Available: https://www.pge.com/tariffs/assets/pdf/tariffbook/GAS_MAPS_Service_Area_Map.pdf. Accessed: November 4, 2020.

Pacific Gas and Electric Company. 2014b. *Electrical Service Area Maps*. Available: https://www.pge.com/tariffs/assets/pdf/tariffbook/ELEC_MAPS_Service%20Area%20Map.pdf. Accessed: November 5, 2020.

Phone Providers. 2020a. *Phone Providers by Zip Code*. Available: https://www.phoneprovidersguide.com/95943-zipcode-phone-providers.html. Accessed: November 4, 2020.

Phone Providers. 2020b. *Phone Providers by Zip Code*. Available: https://www.phoneprovidersguide.com/95932-zipcode-phone-providers.html. Accessed: November 4, 2020.

Phone Providers. 2022. *Phone Providers by Zip Code*. Available: https://www.phoneprovidersguide.com/95937-zipcode-phone-providers.html. Accessed: December 28, 2022.

Sites Project Authority and Bureau of Reclamation. 2017. *Draft Environmental Impact Report/ Environmental Impact Statement, Chapter 29 Public Services and Utilities*. Draft. Prepared by Sites Project Authority and the U.S. Department of the Interior, Bureau of Reclamation, Mid-Pacific Region. Volume 1.

U.S. Environmental Protection Agency. 1971. *Solid Waste Management in Recreational Forest Areas.* Report No. SW-16ts. Solid Waste Management Office. Available: https://files.eric.ed.gov/fulltext/ED092348.pdf. Accessed: December 1, 2020.

U.S. Environmental Protection Agency. 2002. *Onsite Wastewater Treatment Systems Manual*. EPA/625/R-00/008. Prepared by U.S. Environmental Protection Agency. February. Available: https://www.epa.gov/sites/production/files/2015-06/documents/2004_07_07_septics_septic_2002_osdm_all.pdf. Accessed: December 1, 2020.

U.S. Environmental Protection Agency. 2009. *Estimating 2003 Building-Related Construction and Demolition Materials Amounts*. Available: https://www.epa.gov/sites/production/files/2017-09/documents/estimating2003buildingrelatedcanddmaterialsamounts.pdf. Accessed: December 1, 2020.

U.S. Environmental Protection Agency. 2020. List of Water Systems in Safe Drinking Water Information System (SDWIS) for Colusa County. Accessed: December 8, 2020. https://www3.epa.gov/enviro/facts/sdwis/search.html.

U.S. Forest Service. 2007. *Water Use in Forest Service Recreation Areas: Guidelines for Water System Designers*. Engineering Tech Tips 0773-2326–MTDC. Available: https://www.fs.fed.us/t-d/pubs/pdfpubs/pdf07732326/pdf07732326dpi72.pdf. Accessed: December 1, 2020.

USACOPS. 2020. *The Nations Law Enforcement Site*. Available: https://www.usacops.com/ca/glenn.html. Accessed: November 3, 2020.

Western Area Power Administration. 2020. *Customer Service Map 2020*. Available: https://www.wapa.gov/regions/SN/PowerMarketing/Documents/CustomerMap2020.pdf. Accessed: November 4, 2020.

Wirefly. 2020a. *Cable TV Providers in Glenn, CA.* Available: https://www.wirefly.com/compare-tv-providers/california/glenn. Accessed: November 4, 2020.

Wirefly. 2020b. *Cable TV Providers in Williams, CA.* Available: https://www.wirefly.com/compare-tv-providers/california/williams. Accessed: November 4, 2020.

Wirefly. 2022. *Cable TV Providers in Dunnigan CA.* Available: https://www.wirefly.com/compare-tv-providers/california/dunnigan. Accessed: December 28, 2022.

Yolo County. 2009a. *County of Yolo 2030 Countywide General Plan, Chapter 5, Public Facilities and Services Element.* Available: https://www.yolocounty.org/home/showpublisheddocument/14466/635289380535200000. Accessed: December 29, 2022.

Yolo County. 2009b. *LSA Associates, Inc. Yolo County 2030 County Wide General Plan EIR Chapter IV. Setting, Impacts And Mitigation Measures Section H . Utilities and Energy.* April 2009. Available: https://www.yolocounty.org/home/showpublisheddocument/9177/635289380535200000 Accessed: December 29, 2022.

### 26.5.2. Personal Communications

Cohen, Kenny. Maxwell Fire Protection District. December 8, 2020—telephone conversation with Yassaman Sarvian, Associate Environmental Planner, Jacobs, Sacramento, CA.

Corbin, Sandy. Fire Chief. Bear Valley/Indian Valley Fire Protection District. December 7, 2020—telephone conversation with Yassaman Sarvian, Associate Environmental Planner, Jacobs, Sacramento, CA.

Gilbert, Jeff. Williams Fire Protection Authority. December 7, 2020—telephone conversation with Yassaman Sarvian, Associate Environmental Planner, Jacobs, Sacramento, CA.

Peabody, Wayne. Willows City/Rural Fire Department. December 8, 2020—telephone conversation with Yassaman Sarvian, Associate Environmental Planner, Jacobs, Sacramento, CA.

Warner Herson, Laurie. Sites Authority Integration CEQA/NEPA Project Manager. April 19, 2021—telephone conversation with Nicole Williams, Senior Environmental Planner, ICF, Sacramento, CA.

Wright, Chesnie. Customer Service Specialist. Recology Butte Colusa Counties Recycling Facility and Office. December 7, 2020—telephone conversation with Morgan Angulo, Environmental Planner, Jacobs, Sacramento, CA.