

D.11 Public Services and Utilities

Section D.11.1 provides a summary of the existing utility and service providers in the vicinity of the proposed Sacramento Natural Gas Storage (SNGS) project. Applicable regulations, plans, and standards are listed in Section D.11.2. Potential impacts and mitigation measures for the Proposed Project are presented in Section D.11.3, and project alternatives are described in Section D.11.4. The mitigation monitoring, compliance, and reporting program is discussed in Section D.11.5 and references cited in this section are listed in Section D.11.6.

D.11.1 Environmental Setting for the Proposed Project

This section presents the utility and service providers in the project area and provides an overview of the type and general locations of utilities and services in relation to the Proposed Project. Government agencies have recently categorized data pertaining to utility systems (including their location, capacity, and type) as sensitive, critical infrastructure information, so public access to much of this type of data has become restricted for security reasons. As such, only information that continues to be made public and is readily available is presented in this section. While specific data would provide a better picture of the existing utilities within the project study area, in large part, this level of detail is unnecessary for the analysis needed to determine the impacts generated by the Proposed Project.

D.11.1.1 Existing Utilities

The Proposed Project area is served by the public service and utility providers within the City of Sacramento and the County of Sacramento. Publicly and privately owned local purveyors in this area provide and maintain utilities associated with electricity, water, stormwater and wastewater, solid waste, and natural gas. Municipally operated lines provide sewer services in each of the jurisdictions within the project study area. Similarly, stormwater conveyance systems are regulated and maintained by each respective jurisdiction. Table D.11-1 summarizes the public service and utility providers serving the study area and lists information for major utility types that would likely share utility corridor space with the Proposed Project.

**Table D.11-1
Utility and Service Providers by Jurisdiction**

Jurisdiction	Utility or Service System Provider
City of Sacramento	<ul style="list-style-type: none"> • Natural Gas and Electricity—<u>Sacramento Municipal Utility District</u>, Pacific Gas & Electric Company • Water—<u>City of Sacramento Department of Utilities</u>Sacramento County Water Agency—Zone 44 • Wastewater—City of Sacramento Department of Utilities • Fire Protection—Sacramento Fire Department • Police Protection—City of Sacramento Police Department

Table D.11-1 (Continued)

Jurisdiction	Utility or Service System Provider
	<ul style="list-style-type: none"> • Telephone—Pacific Bell • Cable Television—Comcast • Hospitals—Mercy General, Shriners Hospital for Children, UC Davis Health Center, and Sutter General • Solid Waste—City of Sacramento/private franchised haulers • Landfills Used—Sacramento County Keifer, L and D, Florin Perkins, and private transfer stations • School District—Sacramento City Unified School District
County of Sacramento	<ul style="list-style-type: none"> • Natural Gas and Electricity—Pacific Gas & Electric Company • Water—Florin County, Cal American Water Co, Sacramento County Water Agency—Zone 41 • Wastewater—Private systems • Fire Protection—Sacramento Metropolitan Fire District • Police Protection—County of Sacramento Sheriff's Department • Telephone—Pacific Bell • Cable Television—Comcast • Hospitals—See City of Sacramento above • Solid Waste—See City of Sacramento above • Landfills Used—See City of Sacramento above • School District—See City of Sacramento above

Note: Not all information is publicly available.

Source: See Section D.11.6 for a list of references used to compile Table D.11-1.

D.11.1.2 Public Services

Fire

City of Sacramento

The Sacramento Fire Department (SFD) provides fire protection services to the entire City of Sacramento and to some small areas just outside the city's boundaries within County of Sacramento limits. Contracted areas within SFD's jurisdiction include the Fruitridge, Natomas, and Pacific Fire Protection Districts. Station 10, located at 5642 66th Street, is approximately 1 mile to the northwest of Depot Park. This station maintains 1 fire engine, 1 truck, and a medic. In the event of an emergency, SFD has automatic aid agreements with all local fire districts and the Governor's Office of Emergency Services (Sacramento, City of 2008).

The SFD comprises three divisions: the Office of the Chief, providing fiscal management, special projects, and public information; the Office of Operations, providing emergency services and operations, including hazardous materials response, domestic preparedness, urban search and rescue, swift water rescue, specialized/technical rescue services, and shift operations; and the Office of Administrative Services, providing support to operations staff, including fire prevention, training, technical services, human resources, and emergency planning. In 2007, the

SFD employed 635 personnel (535 fire suppression personnel and 100 fire prevention personnel and support staff). SFD operates 23 engine companies, 8 truck companies, 1 heavy rescue company, 12 ambulance units, and 2 public safety boats (Sacramento, City of 2008).

Water required for fire suppression is supplied by fire hydrants connected to local water mains throughout the area. Additional water is carried by fire equipment responding to a fire. In addition to fire protection services, the SFD also provides emergency medical treatment.

County of Sacramento

The limits of the Florin Gas Field are located within the jurisdiction of the Sacramento Metropolitan Fire District (SMFD), SFD, and the Cosumnes Community Services District (CSD) Fire Department (Sacramento, City of 2008).

The SMFD provides service, through 42 stations and 750 uniformed and support personnel, to nearly 600,000 people in a 417-square-mile area. SMFD represents 16 predecessor fire agencies (SMFD 2008).

Station 50, located at 8880 Gerber Road, services the community of Florin and is located in nearest proximity to the southern limits of the Florin Gas Field. The station includes Engine 50, Medic 50, Battalion 9, and Truck 50. A total of 2,140 calls for Engine 50, 2758 calls for Medic 50, 901 calls for Battalion 9, and 751 calls for Truck 50 were received during 2004 (SMFD 2008).

Police

City of Sacramento

The project components located within the City of Sacramento would be served by the Sacramento Police Department (SPD). The SPD maintains three stations: 300 Richards Boulevard (the Central Station), 5303 Franklin Boulevard (the Joseph E. Rooney Police Facility), and 3550 Marysville Boulevard (the William J. Kinney Police Facility) (SPD 2008).

The SPD maintains numerous resource service centers throughout the City of Sacramento. The Patrol Division is staffed by neighborhood patrol officers, problem-oriented police officers, community service officers, and support staff. Patrol officers provide 24-hour service to the Sacramento community.

The City of Sacramento is divided into six geographical patrol sectors: northwest, northeast, central, south, southwest, and east. The SPD currently maintains headquarters at the Public Safety Center, located at 5770 Freeport Boulevard, approximately 8 miles from the Army Depot.

The substation that would be located within closest proximity to the Proposed Project is the Joseph E. Rooney Police Facility, located approximately 4.5 miles from the project area.

The SPD is staffed by 790 sworn police officers, 382 civilian staff, and 26 part-time non-career employees. The SPD received 946,301 calls for service in 2005 (SNGS, LLC 2007), resulting in 327,716 calls dispatched.

The SPD maintains mutual aid agreements as part of a statewide emergency response system. Locally, the SPD maintains memorandums of understanding and contracts to provide services with regional transit and school districts within the City of Sacramento, with the exception of Grant Joint Unified School District, which employs its own police force. The SPD has specialized staff to work with regional transit and in City of Sacramento high schools (SPD 2008).

County of Sacramento

The County of Sacramento Sheriff's Department provides specialized law enforcement services to Sacramento County and local police protection to the unincorporated area (Sacramento, City of 2005a). Specialized law enforcement includes providing court security services, operating a system of jails for pre-trial and sentenced inmates, and operating a training complex. Local police protection includes response to calls and trouble spots, investigations, surveillance, and routine patrolling.

The substation that is in closest proximity to project components is the North Central Division, located at 2500 Marconi Avenue, approximately 8 miles from the project area. The Marconi Station, North Central Division, houses the patrol deputies, problem-oriented police officers, detectives, crime analysts, crime prevention specialists, and the community service center for the Arden-Arcade area of Sacramento (Sacramento County Sheriff 2008). The Marconi Station has a staff of 68 sworn officers (Sacramento, City of 2005a)

Hospitals

There are numerous private hospitals, medical centers, health service facilities, and physicians' offices in the Sacramento region. Hospitals and other medical facilities for each jurisdiction in the study area are listed above in Table D.11-1.

Schools

Sacramento City Unified School District (SCUSD) serves the City of Sacramento. The SCUSD currently operates 54 elementary schools (kindergarten through 6th grade), an additional 6 elementary schools (kindergarten through 8th grade), 8 middle schools (7th through 8th grade, with 2 schools that have 6th through 8th grade), 6 high schools (9th through 12th grade), 6

charter schools, 5 adult education centers, 1 continuation school, 1 independent study school (kindergarten through 12th grade), and 1 alternative school (SCUSD 2008).

The following schools are located within 1 mile of project components: Carmellia Elementary School, located at 6600 Cougar Drive; Elder Creek Elementary, located at 7934 Lemon Hill Avenue; Earl Warren Elementary, located at 5420 Lowell Street; Will C. Wood Middle School, located at 6201 Lemon Hill Avenue; Joseph Bonheim Elementary, located at 7300 Marin Avenue; Florin Elementary, located at 7300 Kara Drive; Samuel Kennedy Elementary School, located at 7037 Briggs Drive; and David Reese Elementary, located at 7600 Lindale Drive.

Solid Waste

The City of Sacramento collects all residential solid waste and about one-third of the commercial solid waste for customers within the City of Sacramento. Solid waste is transported to the Sacramento Recycling and Transfer Station on Fruitridge Road and then to the Lockwood Landfill in Sparks, Nevada. This landfill has enough capacity to remain open until the year 2025 (Sacramento, City of 2000b). The remainder of the commercial solid waste is collected by private franchised haulers and disposed of at various facilities, including the Sacramento County Keifer Landfill, L and D Landfill, Florin Perkins Landfill, and private transfer stations.

The City of Sacramento generates approximately 600,000 tons per year of solid waste. The City of Sacramento collects approximately 50% of the solid waste, and the remainder is collected by private companies, including franchised haulers and individual residents (Sacramento, City of 1988).

Table D.11-2 summarizes the estimated permitted capacity and remaining capacity of the landfills anticipated to serve the project site. While many landfills exist within the region, the landfills identified below collect the majority of solid waste within the project area.

Table D.11-2
Landfill Capacity

Landfill	Size	Estimated Permitted Capacity as of 2000 (cubic yards)	Total Estimated Capacity Used (cubic yards)	Estimated Remaining Capacity (%)	Anticipated Closure Date as of 2000
Keifer Landfill	978 square miles	117,400,000	4,500,000	96.2	2064
L and D Landfill	96 square miles	6,031,055	1,931,055	68	2016
Florin Perkins Landfill	10 acre disposal acreage	7,000,000	TBD	TBD	2025

Source: CIWMB 2008.

D.11.2 Applicable Regulations, Plans, and Standards

The following section presents the state, regional, and local utility service system regulations, plans, and standards that are directly applicable to the Proposed Project and its alternatives.

D.11.2.1 State Regulations

The responsibilities of utility operators and other excavators working in the vicinity of utilities are detailed in Section 1, Chapter 3.1 “Protection of Underground Infrastructure,” Article 2 of the California Public Utilities Code. This law requires that an excavator contact a regional notifications center at least 2 days prior to excavation of any subsurface installations. The notifications center for the project area is Underground Service Alert. Any utility provider seeking to begin an excavation project can call Underground Service Alert’s toll-free hotline. Underground Service Alert, in turn, will notify the utilities that may have buried lines within 1,000 feet of the excavation. Representatives of the utilities are required to mark the specific location of their facilities within the work area prior to the start of excavation. The excavator is required to probe and expose the underground facilities by hand prior to using power equipment.

D.11.2.2 Regional and Local Regulations

The municipal plans for the City and County of Sacramento have a variety of goals and policies related to utilities and public service systems and generally describe the municipalities’ provision and management of fire and police protection services, water and wastewater systems, and the visual and safety aspects of the location of utilities.

The locational safety and visual issues associated with the SNGS project are discussed in Sections D.8, Land Use, Agriculture, and Recreational Resources; D.6, Hazardous Materials, Public Health and Safety; and D.13, Visual Resources. While the provision of fire and police protection services is described within the plans for local jurisdictions and general goals and policies are laid out for these services, the plans do not directly address the public service issues specifically associated with the project. However, ~~municipal-city and county~~ codes enacted by each jurisdiction provide a permitting and approval process to govern the installation of underground and overhead utilities within public rights-of-way.

The City of Sacramento Department of Transportation coordinates construction efforts within the City of Sacramento right-of-way. The Street Services division meets weekly to coordinate both private and public utilities, to coordinate planning and construction of underground utilities and street improvements within the City of Sacramento (Sacramento Department of Transportation 2008).

D.11.3 Environmental Impacts and Mitigation Measures for the Proposed Project

D.11.3.1 Definition and Use of Significance Criteria

Based on Appendix G of the CEQA Guidelines, impacts to public services and utilities would be considered significant if any of the following would occur:

- The project would disrupt the existing utility systems or would cause a collocation accident
- The project would preclude emergency access or access to public facilities, or would increase the need for police, fire, or school facilities
- The project would require water or would generate solid waste or wastewater that exceeds the ability of existing facilities to accommodate the new capacities.

D.11.3.2 Applicant Proposed Measures

SNGS, LLC proposes to implement the following applicant proposed measure (APM), presented in Table D.11-3, to reduce public services and utility impacts associated with the Proposed Project.

**Table D.11-3
Applicant Proposed Measures for Public Services and Utilities**

APM No.	Description
9	SNGS, LLC would prepare an Emergency Response Plan for use in response to a pipeline-related emergency (e.g., gas leak, earthquake, accidental release of hazardous materials or waste, fire, and/or pipeline or facility damage). Included in this plan would be measures for fire prevention. The plan would be designed in accordance with state and federal regulations, including 49 CFR 192, Health and Safety Code (Chapter 6.95), and Titles 19, 22, and 27 of the California Code of Regulations.

D.11.3.3 Public Services and Utilities Impact Analysis

Impact U-1: Utility System Disruptions

Utilities such as water, wastewater, and natural gas pipelines, petroleum product pipelines, and electric and phone/fiber-optic cable lines may be buried in the vicinity of the Proposed Project components or beneath roads and sidewalks crossed by the proposed natural gas transmission lines. This section addresses possible disruptions to existing utilities as a result of the Proposed Project components and is organized by location.

Wellhead, Compressor Station, Pipeline Segments 1 and 2

The wellhead site, compressor station, and pipeline segments one and two, which would connect from the wellhead site to the compressor station (segment one) and from the compressor station to Sacramento Municipal Utilities District (SMUD) Line 700 in Fruitridge Road (segment two), are located in the City of Sacramento. Construction of the wellhead site would primarily occur within the fenced 4-acre project site, and construction of the compressor station site would be confined to the 5-acre project site within Army Depot. However, construction of pipeline segments one and two, as described in Section B.2.2, would require construction in an existing utility easement and under the railroad right-of-way, respectively. Overhead electrical lines run along the west side of the wellhead site within the easement and partially along the railroad right-of-way. Short-term electrical service interruptions during construction could occur. SNGS, LLC would coordinate closely with the City of Sacramento Department of Utilities during final project design, and affected service providers would be contacted so that any potential utility conflicts could be identified and relocation efforts could be initiated. While service disruptions would be temporary in nature, these disruptions could impact nearby businesses and hinder activities in the surrounding area. These impacts are considered potentially significant. Implementation of Mitigation Measures U-1a through U-1d would mitigate impacts associated with utility disruption (Impact U-1) to less-than-significant levels (Class II). Refer to Section D.1 for classification of impact significance.

Utilities such as underground water and sewer lines are generally found within roadways. Road work would not be necessary within the City or County of Sacramento except along Fruitridge Road, where the proposed pipelines would connect to existing SMUD pipeline. Therefore, there would be potential for service interruptions of these utilities during construction of the Proposed Project. Though temporary in nature, the potential for disruptions to existing utilities within Fruitridge Road is considered a significant impact. Mitigation Measures U-1a through U-1d would mitigate impacts associated with utility disruptions in Fruitridge Road to less-than-significant levels (Class II).

As described above, installation of underground pipeline segments one and two involves construction activities in close proximity to existing utilities. Consequently, there is potential for the proposed pipeline segments to increase cathodic-induced corrosion of steel pipelines, which could lead to long-term accidental system disruption of such pipelines. This potential maintenance problem with existing and future utilities is considered a significant impact (Class II). Mitigation Measure U-1e provides mitigation in order to reduce indirect impacts from accelerated corrosion to a less-than-significant level.

Natural Gas Storage Reservoir

The underground natural gas storage reservoir spans portions of the City and County of Sacramento and is centered approximately 2 blocks south of Danny Nunn Park at the southwest corner of Power Inn Road and Wagon Trail Way. Injection of gas within the natural gas storage reservoir would not result in impacts to existing utilities as no construction activities are required. The natural gas storage reservoir is an existing facility. Therefore, there would be no impacts associated with utility disruptions.

Mitigation Measures for Impact U-1: Utility System Disruption

U-1a Notice of Service Disruption. Prior to construction during which a utility service interruption is known to be unavoidable, SNGS, LLC shall notify members of the public affected by the planned outage of the impending interruption. Copies of the notices and dates shall be provided to the California Public Utilities Commission (CPUC) at the time the notices are distributed to the public and to the City of Sacramento Fire Department.

U-1b Notification to Underground Service Alert. Underground Service Alert shall be notified a minimum of 48 hours in advance of earth-disturbing activities in order to identify buried utilities. After probing the corridor for existing utilities, exact placement of the connecting pipeline(s) shall be determined so that placement of new structures will not conflict with other co-located utilities.

U-1c Coordination with Affected Jurisdictions. During project design, SNGS, LLC shall coordinate with each jurisdiction affected by the underground pipeline segments to determine the exact location for placement of the pipelines to avoid conflicts with planned and proposed utility projects and any relocation of existing utilities occurring within the direct vicinity of the project.

Coordination with the following jurisdictional departments shall occur in conjunction with final design of the underground natural gas pipelines:

- City of Sacramento Development Services
- City of Sacramento Department of Utilities
- Applicable phone, cable, and fiber-optic companies
- Applicable natural gas and energy companies
- Sacramento County Water Agency.

Documentation of coordinating efforts and local jurisdiction approval of final design plans for the underground pipelines shall be provided to the CPUC prior to the start of construction activities.

U-1d Protection of Underground Utilities. Prior to construction of the underground pipelines, SNGS, LLC shall submit to the CPUC written documentation demonstrating coordination with the appropriate jurisdictions, including the following:

- (1) Construction plans designed to protect existing utilities and showing the dimensions and location of the finalized alignment
- (2) Records that the applicant provided the plans to affected jurisdiction for review, revision, and final approval
- (3) Evidence that the project meets all necessary local requirements
- (4) Evidence of compliance with design standards
- (5) Copies of any necessary permits, agreements, or condition of approval
- (6) Records of any discretionary decisions made by the appropriate agencies.

U-1e Utilities Protection Against Corrosion. SNGS, LLC shall evaluate the potential for the underground pipelines to increase corrosion on existing pipelines. If this potential is determined to exist, SNGS, LLC shall be responsible for installation of the required cathodic protection systems that would reduce corrosion potential. A letter documenting these consultations and their results, including concurrence by the affected jurisdiction(s) and other companies, shall be provided to the CPUC prior to the start of construction.

Impact U-2: Public Service System Disruption

The following discussion addresses the impacts of the Proposed Project on fire services, police services, and school facilities.

Fire Facilities

Construction activities associated with the installation of pipeline segments one and two could require lane closures and could impact traffic from the presence of construction vehicles and equipment. These impacts could occur along Power Inn Road during installation of pipeline segment one, and along Fruitridge Road, where pipeline segment two terminates at the SMUD interconnect and valve. Consequently, the possibility exists for interference with emergency service providers (i.e., ambulance, fire, paramedic, and police vehicles). This is considered a significant impact and would be mitigated to a level that is less than significant (Class II) with implementation of Mitigation Measure T-6 (see Section D.12.5, Transportation and Traffic).

Mitigation Measure T-6 includes requirements for the applicant to coordinate in advance of construction with emergency service providers and to have provisions ready at all times to accommodate emergency services, such as providing short detours when necessary.

During construction of the Proposed Project, fire protection services are not anticipated but could unexpectedly be required at the project site. Fire protection and other emergency service providers could need access to the project construction site in the event of a construction-related accident. Construction of the Proposed Project would include the development of egress and ingress points to allow access for large vehicles and equipment. Access to the compressor station, wellhead site, and other project areas would be readily available to emergency and law enforcement agencies.

Operation of the Proposed Project would result in the storage of natural gas under ground along with wellhead, compressor station, and required connecting pipelines. Consequently, as further discussed in Section D.6, Hazardous Materials, Public Health and Safety, of this Environmental Impact Report (EIR), operation of the project would result in increased risk of fire and/or explosion, resulting in an increased demand for local emergency services, including fire protection. Gas well firefighting strategies and tactics require infrastructure, equipment, and training that the SFD does not currently provide. In addition, SFD does not have adequate training for the types of emergencies that could occur at the facility, nor do they have a way to maintain any such training within the department at this time. This could require additional services and personnel from the SFD in terms of inspection of facilities during construction and operation. This impact is considered significant and would be mitigated to less than significant (Class II) with implementation of Mitigation Measure U-2.

Police Facilities

Security features are incorporated into the design of the wellhead site and compressor station site facilities. A 10-foot-tall masonry wall would be constructed around the wellhead site property, and all equipment associated with the wellhead site would be located within the fenced and walled limits of the site. The compressors would be housed in a building approximately 50 feet by 110 feet, and a 6-foot-high chain-link security fence would surround the compressor station. The compressor station would be staffed 24 hours a day, 7 days a week. There may be significant impacts to the SPD and West Sacramento Police Department (WSPD) both during the construction phase and during any potential emergency event dealing with pipeline incidents or with any gas leak. This is considered a significant impact but would be mitigated to less than significant (Class II with implementation of Mitigation Measure U-2).

Schools

As stated above, neither construction nor operation of the Proposed Project is expected to result in an increase in the local population. Approximately 30% of workers would be hired from outside the area for specialized construction techniques, such as well drilling and horizontal directional drills (HDDs). Workers from outside the area would be expected to find temporary housing in the greater Sacramento area during the construction period. Given the brief construction period, family members are not anticipated to accompany non-local workers. Operation of the Proposed Project would not generate a population in the area beyond that anticipated in local and regional plans. Therefore, the Proposed Project would not generate a need for school facilities and there would be no impact.

Mitigation Measure for Impact U-2: Public Service System Disruption

U-2 SNGS, LLC shall coordinate with the City of Sacramento and reimburse the city for their fair share of additional equipment and personnel as determined by the city's needs study. The department is contracting with technical experts to evaluate the capabilities of the department and surrounding public and private infrastructure for the purpose of identifying areas requiring mitigation. Once identified, mitigating action costs, both one-time and recurring, are to be borne by SNGS, LLC. Additionally, SNGS, LLC's Emergency Response Plan shall have provisions to reimburse the City of Sacramento for any costs of responding to an emergency, as well as damage caused by a project-related incident. The Emergency Response Plan shall be submitted to the SFD for review and approval prior to construction.

Impact U-3: Project-Required Utility and Public Service Demands

The following is a discussion of the impact that would result from utility and public service demands of the Proposed Project.

Water

Construction of the Proposed Project would require approximately 44,000 gallons of water for use during the hydrostatic testing of the pipeline. Additional water may be required on site during construction activities for dust suppression, soil compaction, and drilling of fluids. Water would come from City of Sacramento water entitlements. The anticipated water demands during construction activities would be both minimal and temporary. Therefore, impacts would be less than significant (Class III).

Once constructed, water lines for the Proposed Project components in the City of Sacramento would connect to existing water infrastructure in the project area. Water would be required for restroom facilities used by employees at the wellhead and compressor station sites and

landscaping proposed to screen the wellhead site. Landscaping would consist of drought-tolerant plants, which would naturalize after irrigating for two or three growing seasons. The quantity of water used for operation of the Proposed Project is considered to be small and therefore would have a less-than-significant impact to the regional water supply (Class III). It is also assumed that sufficient water service is available to provide the necessary fire flow in the event of a fire or explosion.

Solid Waste

Construction activities associated with the Proposed Project would result in the temporary generation of solid waste. Materials associated with construction activities requiring disposal include such things as asphalt, piping, and rubber. While most soils from excavation and trenching activities are anticipated to be re-used on site, any excess solids would be disposed of at a licensed facility. For project components within the City and County of Sacramento, it is anticipated that solid waste would be disposed of at either the Lockwood Landfill via the Sacramento Recycling and Transfer Station or the Keifer Landfill in Sacramento County. Additional landfills that may serve the Proposed Project include the L and D Landfill and Florin Perkins Landfill in Sacramento County. Though many landfills serve the project area, it is anticipated that the majority of solid waste would be sent to the aforementioned facilities. The estimated remaining capacity and anticipated closure dates of each landfill are listed above in Table D.11-2. Construction waste and solid waste from excavation are expected to be minimal and would not affect the lifetime of landfills in the area. Operational solid waste generation would be minimal from periodic maintenance and employee monitoring. Therefore, impacts would be less than significant (Class III).

Wastewater

The Proposed Project may include dewatering activities in highly urbanized areas requiring discharge into a sanitary sewer system if other dewatering processes do not meet local water quality requirements. Mitigation Measure U-3 would ensure coordination with local sewer system operators and reduce impacts to a less-than-significant level (Class II).

Sewer lines would be required for the operation phase of the wellhead site in order to connect to the Sacramento Regional County Sanitation District's sewer system. The sewer lines would be located along the north edge of the wellhead property and would tie in to the existing lines owned by the City of Sacramento located in Power Inn Road. Three employees would be required to monitor the compressor station and wellhead site 24 hours each day. The wastewater generated from operation of these facilities is anticipated to be minimal. Implementation of the Proposed Project will not result in an increase in demand that could potentially cause a treatment facility to exceed the Central Valley Regional Water Quality Control Board (CVRWQCB)

requirements. Therefore, the project would have a less-than-significant impact on wastewater treatment requirements (Class III).

Mitigation Measure for Impact U-3: Project-Required Utility and Public Service Demands

U-3 Notice and Approval of Water Discharge. Prior to discharging any water into a local wastewater pipeline or facility, SNGS, LLC shall contact the City of Sacramento and Sacramento Regional County Sanitation District for approval. All discharges shall be in accordance with all local, state, and federal regulations pertaining to wastewater disposal.

D.11.4 Project Alternatives

D.11.4.1 Gas Field Alternatives

Freeport Gas Field

Environmental Setting

The Freeport Gas Field alternative site is located in a suburban fringe area and is partially located underneath a wastewater treatment plant. The area is surrounded on the north, west, and south by the City of Elk Grove (population 59,984) (U.S. Census 2000). The actual reservoir area contains few homes and little population. Initial analysis indicates that there are water and wastewater services nearby. Fire and police services would be provided by the City of Elk Grove and/or Sacramento County.

Environmental Impacts and Mitigation Measures

While the majority of required facilities would be located in areas that are not congested with existing utilities, this alternative would require an approximately 5-mile-long natural gas pipeline. Construction of this 5-mile-long pipeline would increase the potential for utility and public service system disruptions (Impacts U-1 and U-2). Mitigation Measures U-1a through U-1e and U-2 would reduce potential conflicts to less-than-significant levels (Class II). In addition, the longer pipeline would increase the amount of water needed to perform hydrostatic testing, and increase solid waste generated during construction. This increase is minimal and temporary. Therefore, impacts would be less than significant (Class III). As with the Proposed Project, solid waste is not anticipated to be generated during construction; however, dewatering activities may require discharging into a sanitary sewer system if other dewatering processes do not meet local water quality requirements. A similar Mitigation Measure as U-3 would reduce potential impact to less than significant levels (Class II).

Given the location near the urban fringe, it is anticipated that this alternative would have similar impacts on demands for public utilities and services (Impact U-3) as those described for the Proposed Project.

Comparison to the Proposed Project

Due to the increased length of pipelines required, this alternative would potentially increase conflicts with existing utilities and could cause public service disruptions.

Snodgrass Slough Gas Field

Environmental Setting

The Snodgrass Slough Gas Field alternative site is a former gas field that is located in a primarily agricultural area. The nearest population center is Walnut Grove, 4 miles to the east, with a population of approximately 669 (U.S. Census 2000). Based on a preliminary analysis, it does not appear that the area is supported by a substantial utility infrastructure. Police and fire service is provided by the County of Sacramento.

Environmental Impacts and Mitigation Measures

While the majority of required facilities would be located in areas that are not congested with existing utilities, this alternative would require an approximately 7-mile-long natural gas pipeline. Construction of this 7-mile-long pipeline would increase the potential for utility disruption and public service system disruption (Impacts U-1 and U-2). Mitigation Measures U-1a through U-1e and U-2 would reduce potential conflicts to less-than-significant levels (Class II). In addition, the longer pipeline would increase the amount of water needed to perform hydrostatic testing, and increase solid waste generated during construction. This increase is minimal and temporary. Therefore, impacts would be less than significant (Class III). As with the Proposed Project, solid waste is not anticipated to be generated during construction; however, dewatering activities may require discharging into a sanitary sewer system if other dewatering processes do not meet local water quality requirements. A similar Mitigation Measure as U-3 would reduce potential impact to less than significant levels (Class II).

Implementation of the alternative may require the extension of water, wastewater, and electrical lines. This is the extent of Impact U-3 associated with this alternative.

Comparison to the Proposed Project

Implementation of this alternative would require the construction of a new public utility infrastructure that is already in place for the Proposed Project. Due to the increased length of pipelines required, this alternative would potentially increase conflicts with existing utilities and could cause public service disruptions.

Thornton Gas Field

Environmental Setting

The Thornton Gas Field alternative site is located in a primarily agricultural area. The nearest population center is Thornton (population 4,650), approximately 1 mile to the north (U.S. Census 2000). The Cosumnes River Preserve is located to the north of the site. The area is located in prime agricultural lands with some of the land under Williamson Contract. The proposed site has little public utility infrastructure. Fire and police service would be provided by Sacramento County.

Environmental Impacts and Mitigation Measures

While the majority of required facilities would be located in areas that are not congested with existing utilities, this alternative would require an approximately 10-mile-long natural gas pipeline. Construction of this 10-mile-long pipeline would increase the potential for utility disruption and public service system disruption (Impacts U-1 and U-2). Mitigation Measures U-1a through U-1e and U-2 would reduce potential conflicts to less-than-significant levels (Class II). In addition, the longer pipeline would increase the amount of water needed to perform hydrostatic testing, and increase solid waste generated during construction. This increase is minimal and temporary. Therefore, impacts would be less than significant (Class III). As with the Proposed Project, solid waste is not anticipated to be generated during construction; however, dewatering activities may require discharging into a sanitary sewer system if other dewatering processes do not meet local water quality requirements. A similar Mitigation Measure as U-3 would reduce potential impact to less than significant levels (Class II).

Implementation of the alternative may require the extension of water, wastewater, and electrical lines. This is the extent of Impact U-3 associated with this alternative.

Comparison to the Proposed Project

Implementation of this alternative would require the construction of a new public utility infrastructure that is already in place for the Proposed Project and, due to the increased length of pipelines required, would potentially increase conflicts with existing utilities and could cause public service disruptions.

D.11.4.2 Project Design Alternatives

Because the project design alternatives would occur within the same vicinity as the Proposed Project, the public services and utilities would be the same for all the gas pipeline route alternatives as described in Section D.8.1.

Alternative Wellhead Site to Compressor Station Pipeline Route 1

Environmental Setting

This alternative would use the same construction locations for the wellhead site, compressor station, and SMUD Line 700 tie-in. Only the pipeline route would differ from the Proposed Project. This route would be approximately 7,800 feet long, approximately 450 feet longer than the Proposed Project.

Environmental Impacts and Mitigation Measures

Disruption to existing utilities and public services would occur in a similar manner as with the Proposed Project (Impacts U-1 and U-2). Increased demand for services would also occur in a similar manner as the Proposed Project (Impact U-3). Similar to the Proposed Project, Mitigation Measures U-1a through U-1e, U-2, and U-3 would be required to reduce potential significant impacts to less-than-significant levels (Class II).

Comparison to the Proposed Project

Due to the increased length of pipeline required, the public services and utility impacts resulting from developing Alternative Wellhead Site to Compressor Station Pipeline Route 1 would be slightly greater than for the Proposed Project.

Alternative Wellhead Site to Compressor Station Pipeline Route 2

Environmental Setting

This alternative would use the same construction locations for the wellhead site, compressor station, and SMUD Line 700 tie-in. Only the pipeline route would differ from the Proposed Project. This alignment would be approximately 7,700 feet long, approximately 350 feet longer than the Proposed Project.

Environmental Impacts and Mitigation Measures

Disruption to existing utilities and public services would occur in a similar manner as with the Proposed Project (Impacts U-1 and U-2). Increased demand for services would also occur in a similar manner as the Proposed Project (Impact U-3). Similar to the Proposed Project, Mitigation Measures U-1a through U-1e, U-2, and U-3 would be required to reduce potential significant impacts to less-than-significant levels (Class II).

Comparison to the Proposed Project

Due to the increased length of pipeline required, the public services and utility impacts resulting from developing Alternative Wellhead Site to Compressor Station Pipeline Route 2 would be slightly greater than for the Proposed Project.

Alternative Wellhead Site to Compressor Station Pipeline Route 3

Environmental Setting

This alternative would use the same construction locations for the wellhead site, compressor station, and SMUD Line 700 tie-in. Only the pipeline route would differ from the Proposed Project. This alternative would be approximately 7,100 feet long, approximately 250 feet shorter in length compared to the Proposed Project.

Environmental Impacts and Mitigation Measures

Generally, the public utility and service impacts for this project design alternative would be similar to those discussed for the Proposed Project. Potential disruptions to utilities (Impact U-1), disruption to services (Impact U-2), and utility and public service demands (Impact U-3) would require mitigation similar to that of the Proposed Project (Mitigation Measures U-1a through U-1e, U-2., and U-3) to reduce potential significant impacts to less-than-significant levels (Class II).

Comparison to the Proposed Project

Due to the decreased length of pipeline required, the public services and utility impacts resulting from developing Alternative Wellhead Site to Compressor Station Pipeline Route 3 would be slightly less than for the Proposed Project.

D.11.4.3 Environmental Impacts of the No Project Alternative

Under the No Project Alternative, no adverse public service or utility impacts from construction or operation of the project would occur. Because the Proposed Project is designed to increase natural gas system reliability for the Sacramento area, the No Project Alternative could result in significant impacts to utilities and service systems in the event of disruption of the PG&E natural gas pipelines 400/401. In this event, SMUD may be required to implement cutbacks on non-essential energy use and may run out of natural gas at some locations, thereby potentially resulting in significant impacts to utilities and public service systems in the Sacramento metropolitan area.

D.11.5 Mitigation Monitoring, Compliance, and Reporting

Table G-1 describes the mitigation monitoring, compliance, and reporting program for public services and utilities.

D.11.6 References

49 CFR 192. Title 49: Transportation; Subtitle B: Other Regulations Relating to Transportation; Chapter 1: Pipeline and Hazardous Materials Safety Administration, Department of Transportation. Part 192: Transportation of natural and other gas by pipeline; annual reports; incident reports, and safety-related condition reports.

California Code of Regulations. Title 19: Public Safety.

California Code of Regulations. Title 22: Social Security.

California Code of Regulations. Title 27: Environmental Protection.

California Health and Safety Code. Division 20: Miscellaneous Health and Safety Provisions. Chapter 6.95: Hazardous Materials Release Response Plans and Inventory.

California Public Utilities Code. Section 1; Chapter 3.1: Protection of Underground Infrastructure; Article 2.

CIWMB (California Integrated Waste Management Board). 2008. City of West Sacramento and Yolo County Waste Jurisdiction Profiles. Accessed February 4, 2008, at: <http://www.ciwmb.ca.gov/Profiles/Juris/>

Sacramento, City of. 1988. *City of Sacramento General Plan*. Approved January 1988; revised in 2000 and 2003. 2030 General Plan expected to be adopted early 2009. Sacramento, California.

Sacramento, City of. 2005a. *City of Sacramento General Plan Technical Background Report, Chapter 5 Public Services*. June 2005. Accessed at: <http://www.sacgp.org/documents.html#DraftPlan>

Sacramento, City of. 2005b. *City of Sacramento General Plan Technical Background Report, Chapter 4 Utilities*. June 2005. Accessed at: <http://www.sacgp.org/documents.html#DraftPlan>

Sacramento, City of. 2008. ADEIR SNGS Comment Letter received from King Tunson, Fire Department. Letter dated October 3, 2008.

Sacramento County Sheriff. 2008. Sacramento County Sheriff Home Page: Department and area description. Accessed February 4, 2008, at: www.sacsheriff.com

Sacramento Department of Transportation. 2008. Street Services Construction Coordination. Accessed January 7, 2008, at:
www.cityofsacramento.org/transportation/street/construction.html

SCUSD (Sacramento City Unified School District). 2008. SCUSD Home Page. Description of district and statistics. Sacramento, California. Accessed January 22, 2008, at:
www.scusd.edu

SMFD (Sacramento Metropolitan Fire District). 2008. Department description. Accessed January 17, 2008, at: www.smfd.ca.gov

SNGS, LLC (Sacramento Natural Gas Storage, LLC). 2007. *Proponent's Environmental Assessment (PEA) for the Sacramento Natural Gas Storage Project*. Sacramento, California: Sacramento Natural Gas Storage, LLC and EIP Associates, a division of PBS&J. July 16, 2007.

SPD (Sacramento Police Department). 2008. City of Sacramento Police Department website. Sacramento, California. Accessed January 17, 2008, at:
www.sacpd.org

U.S. Census. 2000. "Data Year 2000." *U.S. Census Bureau American Fact Finder*. Accessed at:
http://factfinder.census.gov/home/saff/main.html?_lang=en