

3.12 Utilities and Service Systems

This section discusses existing utilities and service systems in the vicinity of the proposed project, presents the associated regulatory framework, and provides an analysis of potential impacts to utilities and service systems that would result from the proposed project. Public utilities in the project area include: water, wastewater, storm water, solid waste, electrical, telecommunications, and natural gas conveyance facilities.

3.12.1 Setting

The following discussion describes existing utilities and service systems in the project area.

Water Agencies

The following water districts supply water to the project area: LACWWD40, PWD, QHWD, RCSD, and AVEK. Each agency is described below.

LACWWD40 is a water retailer that provides treated potable water to the City of Lancaster, the western portion of the City of Palmdale, and the unincorporated communities of Pearblossom, Littlerock, Sun Village, Rock Creek, Lake LA, Desert View Highlands and Northeast Los Angeles County. LACWWD40's water sources include imported SWP water through AVEK and groundwater from its own production wells.

PWD is both a water wholesaler and retailer serving the eastern portion of the City of Palmdale. PWD provides their customers with a combination of groundwater and surface water. Groundwater comes from PWD's operation of groundwater wells and surface water is supplied from the California Aqueduct and Littlerock Reservoir. Both sources of surface water are transferred to Palmdale Lake for local storage. Approximately 60 percent of PWD's water is provided by surface water, while approximately 40 percent comes from groundwater wells.

QHWD is a water retailer that provides treated potable water to the community of Quartz Hill, located in the southwest corner of the Antelope Valley in unincorporated Los Angeles County. QHWD's water sources include imported SWP water through AVEK and local groundwater.

RCSD is a water retailer that provides treated potable water to the Town of Rosamond in unincorporated Kern County. RCSD's water sources include imported SWP water through AVEK and local groundwater. After 2009, RCSD is planning to eliminate imports of treated water from AVEK and instead import and recharge untreated SWP water to augment groundwater supplies

As a water wholesaler, AVEK is a SWP contractor who obtains all its water from the California Aqueduct to supply the Antelope Valley with potable water and untreated agricultural water. The raw water imported from the SWP is treated at one of four water treatment plants in the Antelope Valley: Quartz Hill Water Treatment Plant (WTP), Eastside WTP, Rosamond WTP and Acton WTP. AVEK supplies treated water to LACWWD40, RCSD, and QHWD.

Wastewater

County Sanitation Districts Nos. 14 and 20 of Los Angeles County provide wastewater management services for the Antelope Valley. LACSD No. 14 includes portions of the cities of Lancaster and Palmdale and adjacent unincorporated Los Angeles County areas. LACSD No. 14 owns and operates the LWRP and the adjoining network of trunk sewers. LACSD No. 20 serves an area that includes the majority of the City of Palmdale and portions of unincorporated County areas. LACSD No. 20 owns and operates the PWRP and a network of approximately 40 miles of trunk sewers. RCSD owns and operates the RWWTP, which currently provides secondary treatment to all incoming wastewater effluent.

Storm Water

The City of Lancaster and the City of Palmdale maintain storm water drainage infrastructure in their respective city limits. The Los Angeles County Flood Control District manages the storm drain system in the unincorporated areas of the Antelope Valley. The Kern County Engineering and Survey Services Department manages storm drain systems in Kern County. The Kern County Planning Department in conjunction with RCSD is in the process of developing and implementing an area storm control plan for the Rosamond area. The final storm control plan will be included in the revised Rosamond Specific Plan.

Solid Waste Management

Waste Management of Antelope Valley is the local division of Waste Management, Inc. that provides collection, disposal, recycling, and environmental services to the Antelope Valley. It operates two landfills, the Antelope Valley Recycling and Disposal Facility in Palmdale and the Lancaster Recycling and Disposal Facility in Lancaster. The Lancaster Recycling and Disposal Facility receives up to 1,700 tons of refuse per day. As a solid waste facility, the Antelope Valley Recycling and Disposal Facility can receive up to 1,800 tons of refuse per day.

The County of Kern Waste Management Department owns and operates the Mojave-Rosamond Sanitary Landfill. This facility receives up to 42 tons of refuse per day and has an estimated closure date of December 31, 2014.

The City of Palmdale's Public Works Division also manages the city's solid waste and recycling services. The City of Lancaster's Public Works Division manages the city's recycling programs, and Waste Management Inc. is the City's franchise residential solid waste hauler.

Other Utilities

Electricity is provided to the Antelope Valley by Southern California Edison (SCE) and natural gas services are provided by the Southern California Gas Company (SCGC). Cable service to the City of Palmdale is provided by Time Warner Cable and telephone services are provided by Verizon Communications and AT&T.

3.12.2 Regulatory Framework

State

Protection of Underground Infrastructure

The California Government Code Section 4216-4216.9 “Protection of Underground Infrastructure” requires an excavator to contact a regional notification center (e.g., Underground Services Alert or Dig Alert) at least two days prior to excavation of any subsurface installations. Any utility provider seeking to begin a project that could damage underground infrastructure can call Underground Service Alert, the regional notification center for southern California. Underground Service Alert will notify the utilities that may have buried lines within 1,000 feet of the project. Representatives of the utilities are then notified and are required to mark the specific location of their facilities within the work area prior to the start of project activities in the area.

California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (Public Resources Code [PRC] Division 30) enacted through AB 939 emphasized conservation of natural resources through reduction, recycling, and reuse of solid waste. AB 939 requires that all cities and counties divert 25 percent of solid waste streams from landfills by 1995 and 50 percent by 2000. In accordance with AB 939, each local agency must submit an annual report to the California Integrated Waste Management Board (CIWMB) summarizing its progress in diverting solid waste disposal.

2005 California Energy Action Plan II

The California Energy Action Plan II is the state’s principal energy planning and policy document (California Energy Commission, 2005). The plan identifies state-wide energy goals, describes a coordinated implementation plan for state energy policies, and identifies specific action areas to ensure that California’s energy is adequate, affordable, technologically advanced, and environmentally sound. In accordance with this plan, the first priority actions to address California’s increasing energy demands are energy efficiency and demand response (i.e., reduction of customer energy usage during peak periods in order to address system reliability and support the best use of energy infrastructure). Additional priorities include the use of renewable sources of power and distributed generation (i.e., the use of relatively small power plants near or at centers of high demand). To the extent that these actions are unable to satisfy the increasing energy and capacity needs, clean and efficient fossil-fired generation is supported.

The Energy Action Plan II includes the following energy efficiency action specific to water supply systems:

- Identify opportunities and support programs to reduce electricity demand related to the water supply system during peak hours and opportunities to reduce the energy needed to operate water conveyance and treatment systems.

3.12.3 Impacts and Mitigation Measures

Significance Criteria

For the purposes of this EIR and consistency with Appendix G of the *CEQA Guidelines*, applicable local plans, and agency and professional standards, the proposed project would have a significant effect on utilities and service systems if it would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Require new or expanded water supply resources or entitlements;
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the projects projected demand in addition to the provider's existing commitments;
- Be served by a landfill with insufficient permitted capacity to accommodate the project solid waste disposal needs;
- Not comply with federal, state, and local statutes and regulations related to solid waste; or
- Effect local and regional energy supplies such that additional electrical capacity is required.

Impacts Discussion

The proposed project would convey and store recycled water produced at existing water treatment plants. It does not require the construction of new treatment facilities. Effluent conveyed in the system would comply with WRRs issued by the RWQCB for the designated end uses.

The proposed project would convey and store disinfected tertiary-treated recycled water produced at the LWRP, PWRP and RWWTP. No new water resources or entitlements are required by the proposed project.

The proposed project would benefit LACSD Nos. 14 and 20 and RCSD by providing beneficial uses for the effluent produced at their treatment plants. The proposed project is being designed with adequate capacity to handle the volume of effluent to be produced at the LWRP, PWRP, and RWTTP after the planned upgrades are completed.

Project-level Impacts

Impact 3.12-1: Construction of the proposed pipeline could result in temporarily, planned or accidental disruption to utility services. Less than Significant with Mitigation.

Numerous utility lines (electricity, gas, telephone, and sewer) of varying sizes are located within the project area. Utility disruption could potentially occur at areas where project components crossed under or over, or be situated adjacent to these utilities.

Utility lines and cables that would be disrupted during construction would be identified during preliminary design. As a condition of approval for either a utility excavation permit or an encroachment permit, a detailed engineering and construction plan, which thoroughly describes construction techniques and protective measures for minimizing impacts to utilities, would be prepared. This plan would be reviewed by utility service providers in the project area.

Underground Services Alert, the regional notification center for southern California, will be contacted at least two days prior to excavation of any subsurface installation per the California Government Code Section 4216-4216.9. Underground Service Alert will notify the utilities that may have buried lines within 1,000 feet of the project. Representatives of the utilities are then notified and are required to mark the specific location of their facilities within the work area prior to the start of project activities in the area.

Due to potential conflicts with utility lines, the proposed project may require that existing utilities be permanently relocated. Thus, the proposed project could result in the temporary disruption of electricity, gas, telephone, and sewer services. In most cases, service disruptions would be temporary and would not exceed one day. With implementation of the mitigation measures, impacts would be considered less than significant.

Mitigation Measures

Mitigation Measure 3.12-1a: The locations of overhead and underground utility lines, such as natural gas, electricity, sewage, storm drains, telephone, fuel, and water lines, shall be verified by contractors through field surveys and other methods prior to construction. In areas where unanticipated underground utilities are found, plans to minimize service impacts shall be developed and worked out with the affected utilities.

Mitigation Measure 3.12-1b: As necessary, detailed specifications shall be prepared as part of the design and engineering plans to include procedures for the excavation, support, and fill of areas around utility cables and pipes. Affected utility services shall be notified of construction plans and schedule. Arrangements shall be made with these entities regarding protection, relocation, or temporary disconnection of services.

Mitigation Measure 3.12-1c: Residents and businesses in the project area shall be notified of any planned utility service disruption, in conformance with county and state standards.

Significance after Mitigation: Less than Significant.

Impact 3.12-2: Construction activities associated with the proposed pipeline would generate solid waste that would increase the demand for landfill capacity. Less than Significant with Mitigation.

Construction of the project's proposed pipelines would generate solid waste, including excavated soil. Soils removed during construction of the pipelines would be stockpiled and reused onsite to minimize the need for disposal. The project would be subject to the County of Los Angeles' Construction and Demolition Debris Recycling and Reuse Ordinance requiring 50 percent diversion on all construction projects. Non-recyclable construction waste for the project would be exported by a private contractor who would haul the waste to a local landfill for disposal. Mitigation measures are proposed to reduce the amount of solid waste expected to be generated. With implementation of the mitigation measures, the project construction waste generation would be considered less than significant.

Mitigation Measures

Mitigation Measure 3.12-2a: Project facility design and construction methods that produce less waste, or that produce waste that could more readily be recycled or reused shall be encouraged.

Mitigation Measure 3.12-2b: A requirement for the contractor to describe plans for recovering, reusing, and recycling wastes produced through construction, demolition, and excavation activities shall be included in construction specifications.

Significance after Mitigation: Less than significant.

Program-level Impacts

Impact 3.12-3: Implementation of the storage reservoirs and pump stations could result in the need for new storm water drainage facilities or expansion of existing facilities. Less than Significant.

The new pump station and storage reservoir facilities would require on-site drainage features or on-site retention facilities to collect, control and direct storm water runoff to existing local drainages. The construction of these facilities would result in an increase in impervious surface area in the project vicinity, but not sufficiently enough to require new storm water drainage facilities or the expansion of existing ones. (See Chapter 3.7, Hydrology and Water Quality for calculations of estimated runoff from proposed facilities.) The proposed project's impact to storm water drainage facilities is considered less than significant.

Mitigation Measures

None required.

Impact 3.12-4: Operation of the storage reservoirs and pump stations could result in effects to local and regional energy supplies. Less than Significant with Mitigation.

Operation of the proposed pump station facilities would require new connections to the local electrical transmission system. Plans for the pump station facilities have not been finalized, and thus the energy requirements for operation of the proposed pump stations have not been determined. Operation of the pump stations would be intermittent in response to the demands of end users. The pumps would serve to maintain pressure in the recycled water system and to maintain water storage levels in the system reservoirs.

Energy for the pump stations would be provided by SCE. Electricity is generated and made available to southern California from generating facilities and transmission lines located throughout the western United States. SCE would be responsible for delivering the energy needed for the proposed project. SCE owns and operates transmission lines that are constructed based on anticipated demands within regions. It is expected that operation of the proposed project would decrease electricity demand in the region related to the provision of water supply.

The proposed end uses for the recycled water would otherwise be met with imported potable water if the proposed project were not implemented. The imported water would be delivered through the SWP, which consumes a substantial amount of energy to convey water to southern California from the Sacramento-San Joaquin River Delta in northern California. The SWP is the largest single user of electrical power in the state. The electricity required to distribute local recycled water would be substantially less than the electricity required to import the equivalent amount of potable water. Therefore, the proposed project would reduce the overall energy demand associated with water deliveries in the Antelope Valley. This directly supports the goals of the Energy Action Plan II to reduce the energy needed to operate water conveyance systems.

In further response to the Energy Action Plan II, implementation of energy efficient equipment, such as pumps and lighting, would also minimize the energy requirements of the proposed pump stations. Scheduling pumps to operate as much as possible during off-peak energy demand periods would also be consistent with state policies for maximizing off-peak power usage for utilities. Mitigation Measure 3.12-3 would require both energy efficient equipment and off-peak operation of the system. Given the overall reduction in electricity demand resulting from the proposed project, the impact to energy use would be less than significant.

Mitigation Measures

Mitigation Measure 3.12-3: During project design, LACWWD40 and the implementing agencies shall require the use of energy efficient equipment, including pumps and lighting. Project facility design and construction methods that produce less waste, or that produce waste that could more readily be recycled or reused shall be encouraged.

Significance after Mitigation: Less than significant.

