15.
Utilities

15 Utilities

This chapter describes existing utilities that serve the Project Area and, as appropriate, the City of Los Angeles and the surrounding region. The utilities addressed in most detail are water supply and wastewater management, including recycled water, stormwater management, and solid waste management. Electrical supply, natural gas supply, and information technology/communications (IT/COMM) are also addressed.

15.1 Existing Conditions

15.1.1 Water Supply

Water is supplied to the Project Area and the City of Los Angeles by the Los Angeles Department of Water and Power (LADWP). The LADWP, the largest municipal utility in the nation, was established more than 100 years ago to deliver reliable, safe water and electricity supplies to 640,000 water customers and 1.4 million electric customers in the Los Angeles area. Water is delivered via 7,229 miles of pipe, and supplies 59,346 fire hydrants.

As a revenue-producing proprietary department, LADWP transfers about 7 percent of its annual estimated electric revenues and 5 percent of its water revenues to the City of Los Angeles general fund. LADWP's operations are financed solely by the sale of water and electric services. Capital funds are raised through the sale of bonds. No tax support is received. A five-member Board of Water and Power Commissioners establishes policy for LADWP. The Board members are appointed by the Mayor and confirmed by the City Council for five-year terms (LADWP, 2008).

15.1.1.1 Water Supply Sources

LADWP water supply sources (average year) include: the Los Angeles Aqueduct (35 percent), the Metropolitan Water District of Southern California (MWD) (53 percent), groundwater (11 percent), and recycled water (1 percent). The MWD has its headquarters in Los Angeles and is the largest supplier of treated water in the U.S. It is a cooperative of 14 cities and 12 municipal water districts that provides 1.7 billion gallons of water to 19 million people in its 5,200-square-mile (13,000 square-kilometers) service area. Its main water sources are the Colorado River and the Sacramento-San Joaquin Delta in Northern California. It was created by an act of the California Legislature in 1928, primarily to build and operate the Colorado River Aqueduct. MWD became the first (and largest) contractor to the State Water Project in 1960 (MWD, 2009).

15.1.1.2 Water Treatment Facilities

LADWP maintains over 100 tanks and reservoirs, fitted with filtration and chlorinization systems to provide safe water throughout the City, including to the Project Area. The MWD operates five water treatment plants that supply potable water to its service area including to LADWP.

Wastewater generated in the Project Area is collected in the City of Los Angeles sanitary system. The primary responsibility of the Bureau of Sanitation (BOS) of the Department of Public Works of the City of Los Angeles is to collect, clean, and recycle solid and liquid waste generated by residential, commercial, and industrial users in the City of Los Angeles and surrounding communities. The BOS carries out its responsibilities by the management and administration of three primary programs:

- Wastewater collection, conveyance, treatment, and disposal
- Solid resources collection, recycling, and disposal
- Watershed protection

BOS currently collects and treats an average of 550 million gallons per day (mgd) of wastewater for residents and businesses in the City of Los Angeles and 29 nearby contracting communities. The sewers and wastewater treatment systems are continually upgraded to ensure that the health of the public and the environment are protected. To that end, a significant portion of the treated wastewater is used as recycled water and biosolids are reused as fertilizers and soil amendments (City of Los Angeles Department of Public Works, 2009).

15.1.1.3 Recycled Water

The Project Area does not have any existing recycled water service but any future recycled water service will be provided by BOS.

The recycled water that BOS provides is approved for non-potable purposes only, such as irrigation, landscaping and industrial uses, but it is not treated to drinking water standards and is not to be used for potable purpose or meeting fire demand requirement.

15.1.2 Stormwater Management

The Water Quality Compliance Master Plan for Urban Runoff (WQCMPUR) is a 20 year strategy for clean stormwater and urban runoff to protect the City's rivers, lakes, and beaches from pollution. The WQCMPUR was developed in response to City Council Motion CF 07-0663, dated March 2 2007, and completed in May 2009. It describes the existing status of urban runoff management in Los Angeles and;

- builds ongoing watershed management efforts by the City, and other agencies and organizations;
- identifies key issues for the future of urban runoff management;
- provides strategic guidelines for improving the water quality of the City's rivers, lakes, and beaches.
- identifies opportunities for collaboration among City departments and with environmental organizations;
- describes how rainwater could be put to beneficial use to augment water supply;
- helps with climate change and sustainability of the City of Los Angeles.

The storm drainage pattern in the Project Area is controlled generally by the topography, the existing infrastructure, and the surface drainage features. A major challenge for stormwater management in Los Angeles is that the City is largely developed and most of the surface area is impervious. The City is responsible for the operation and maintenance of the storm drainage collection system within the City limits and the City's system is solely conveyed through gravity-flow.

There are four drainage areas in the City of Los Angeles: Los Angeles River, Ballona Creek, Dominguez Channel, and Santa Monica Bay. The Project Area is located in the Los Angeles River basin which prior to channelization, experienced significant flooding in the past. As shown on Figure 15-1, a major flood occurred along the Arroyo Seco in Highland Park, north of the Project Area, in 1938.

Figure 15-1: 1938 Floor along the Arroyo Seco

Source: www.lastormwater.org

As introduced in Chapter 7, the Los Angeles River watershed covers 834 square miles, including the Santa Monica Mountains to the north and west, the San Gabriel Mountains to the north and east, and the Los Angeles coastal plain to the south. Below the Elysian Valley is the confluence of the Arroyo Seco and the Los Angeles River. The Arroyo Seco drains the southwestern section of the San Gabriel Mountains, and enters the Los Angeles River, within the northern limits of the Project Area (City of Los Angeles Department of Public Works, 2009).

In addition to flooding, stormwater carries contamination such as trash, metals, coliform bacteria, oil and grease, nutrients, and toxic organic compounds, such as pesticides and herbicides. The WQCMPUR presents a plan for reducing these pollutant loads from stormwater to levels that will be acceptable under federal and State regulations. Water Quality Management Plans will be developed for each of the City's four watersheds and specific Implementation Plans will be developed to address total maximum daily loads of pollutants (TMDLs). Using the guidelines of the WQCMPUR, these Water Quality Management Plans and TMDL Implementation Plans will:

- "Identify best management practices (BMPs) for implementation that will result in compliance with water quality regulations by using design storm and BMP performance criteria;
- Select and prioritize the BMPs for implementation in the watersheds, focusing on the BMPs outlined in the Citywide Collaboration and the Outreach Initiatives;
- Coordinate with ongoing watershed management activities where common goals exist;
- Support the urban runoff management goals of the LADWP Integrated Resource Plan (IRP);
- Establish a quantitative nexus between the BMPs selected for implementation and water quality standards attainment;
- Establish metrics to measure success. (City of Los Angeles Department of Public Works, 2009)

Chapter 7 also describes other plans and programs related to stormwater management that apply to the Project Area.

15.1.3 Solid Waste Management

Solid waste, recycling, and greenwaste collection services for residences in the Project Area are currently provided by BOS. The BOS collects over one million tons of refuse annually from 750,000 customers including single and small multiple family residences. The BOS also provides specialized services such as collection of white goods (e.g., refrigerators, stoves, washing machines, etc.), on call bulky items (e.g., furniture), seasonal bulky brush (e.g., Christmas trees), and other specialized collection services. Refuse collection for businesses and multi-family residences (over 4 units) is handled by private contractors.

The BOS has recently acquired and begun operating the City-owned Central Los Angeles Refuse Transfer Station (CLARTS) to reduce contractual costs to manage and transport materials to recycling and disposal facilities (City of Los Angeles Bureau of Sanitation, 2009). BOS operates the Sunshine Canyon Disposal Site, which receives up to 860,000 tons/year of refuse. The BOS also manages five closed landfills: Bishops Canyon, Branford, Sheldon-Arleta, Toyon Canyon, and Lopez Canyon.

The BOS is currently developing a Solid Waste Integrated Resources Plan (SWIRP). The SWIRP goals are to eliminate use of urban landfills, develop alternative technologies for long term waste disposal, increase recycling and resource recovery, and to convert the entire sanitation fleet to clean fuel Liquid Natural Gas vehicles. These goals will lead Los Angeles towards being a “zero waste” city (City of Los Angeles Bureau of Sanitation, 2009).

15.1.3.1 Residential and Commercial Solid Waste Recycling

The City of Los Angeles and other California communities are required by state law to achieve at least a 50 percent recycling rate each year starting in the year 2000. This means that 50 percent of all solid waste generated annually in the community by residences and businesses, including construction and demolition waste, must be diverted from the landfill by recycling programs. Residential, commercial, industrial, and office recycling services, including greenwaste commonly referred to as yard waste, are available through the BOS.

The City of Los Angeles is also served by the Household Hazardous Waste Collection Facility that is operated by BOS, and which annually recycles about 2.6 million pounds of household hazardous waste. Programs such as these have led to an increase in the amount of the City’s solid waste that is diverted from landfills.

15.1.3.2 Construction and Demolition Waste Recycling

The Integrated Waste Management Act, Assembly Bill (AB) 939, was passed in 1989 because of the increase in waste stream and the decrease in landfill capacities in California. The California Integrated Waste Management Board (CIWMB) was established, and requires a disposal reporting system. AB 939 mandates a reduction of waste being disposed. As previously introduced jurisdictions are required to meet a diversion goal of 50 percent by the year 2000.

On July 3, 2002, the Los Angeles City Council adopted an ordinance (No. 174706) requiring that all private waste haulers collecting solid waste within the City obtain a waste hauling permit, pay an AB 939 compliance fee of ten percent of gross receipts, and submit an annual report (City of Los Angeles Bureau of Sanitation, July 14, 2009). The purpose of the fee is to establish recycling programs for multi-family residences, commercial businesses, and other private sector activities. Material that is source separated is not subject to the fee.

15.1.4 Electrical Supply

Electrical power is supplied to the Project Area by LADWP, which supplies more than 22 million megawatt (MW) hours of electricity a year for the City's 1.4 million customers. Business and industry consume about 70 percent of the electricity in Los Angeles, but residences constitute the largest number of customers. In addition the LADWP lights public streets and highways, powers the city's water system, and sells electricity to other utilities.

The City's first power plant, located at Division Creek, was built in 1905 to supply hydroelectric power for the construction of the Los Angeles Aqueduct. LADWP has continued to provide additional electric generation facilities since then to meet the increasing demand for power in Los Angeles.

The Los Angeles City Council approved LADWP's ten-year IRP on August 15, 2000. The IRP is designed to improve reliability while keeping rates stable and preserving the environment. The IRP calls for a $1.7 billion investment to finance 2,400 megawatts (MW) of in-basin power generation including new combustion turbines, development of new renewable energy resources, and energy efficiency programs (LADWP, July 14, 2009).

According to the City of Los Angeles General Plan (General Plan) Framework Element, "LADWP obtains 17 percent of the required power are met by municipally-owned power plants within the Los Angeles Basin. The remaining LADWP requirements are met by sources outside of the Los Angeles Basin. The current emphasis on purchasing power from non-LADWP power systems is to improve fuel diversity, take advantage of low-priced surplus electricity, and to minimize the air emissions in the South Coast Air Basin." (City of Los Angeles, July 14, 2009)

15.1.5 Natural Gas Supply

Southern California Gas Company (SCGC) is the primary provider of natural gas to the southern portion of California, including the City of Los Angeles. It is the nation's largest natural gas distribution utility, providing energy to 20.3 million consumers through 5.7 million gas meters in more than 500 communities. The SCGC service territory spans approximately 20,000 square miles, from Visalia to the Mexican border (Southern California Gas Company, 2010).

15.1.6 Information Technology/Communications

There are numerous telecommunication providers in the City. AT&T, Verizon, Qwest, Comcast, and others that provide telecommunication as well as cable television services in the City. Underground conduits and overhead cables are present in the Project Area. Cable Operators serving the County of Los Angeles include: Time Warner Cable, Charter Communications, Cox Communications, and Capp's TV. The Project Area is within the franchise agreement area between Time Warner Cable and the City.

15.2 Standards of Significance

Criteria for determining the significance of impacts to utilities have been developed based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines and relevant agency thresholds. The City of Los Angeles CEQA Thresholds Guide was also consulted in setting standards of significance. For the purposes of this Draft Environmental Impact Report (EIR), an alternative may have a significant impact on utilities if it would:

- Exceed wastewater treatment capabilities of the LADWP.
- Cause a measurable increase in wastewater flows at a point where, and a time when, a sewer's capacity is already constrained or that it would cause a sewer's capacity to become constrained.
- Substantially or incrementally exceed the future scheduled capacity of any one treatment plant by generating flows greater than those anticipated in the Wastewater Facilities Plan or General Plan and its elements.
- 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 stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Result in insufficient water supplies available to serve the Project Area from existing entitlements and resources, or require new or expanded entitlements.
- Result in insufficient capacity in the water infrastructure that would serve the project, taking into account the anticipated conditions at project buildout;
- Result in projected growth in population, housing, or employment for the Community Plan area to be exceeded in the year of the project completion.
- Result in a determination by the wastewater treatment provider that serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- Result in insufficient permitted capacity to accommodate the project's solid waste disposal needs.
- Create a need for an additional solid waste collection route, or recycling or disposal facility to adequately handle project-generated waste.
- Conflict with solid waste policies and objectives in the various planning documents addressing solid waste management, residential and commercial solid waste recycling, and construction and demolition waste recycling in the City.
- Violate federal, State, and local statutes and regulations related to solid waste.
- Require major new (off-site) energy supply facilities and distribution infrastructure, or capacity enhancing alterations to existing facilities.
- Require energy supply infrastructure that was not anticipated by adopted plans.
- Fail to incorporate energy conservation measures in the project design and/or operations.

15.3 Potential Utilities Impacts

This section begins with a description of assumptions that have been incorporated in the analysis of potential impacts to utilities. Then potentially significant impacts of implementing the Cornfield Arroyo Seco Specific Plan and Redevelopment Plan (Proposed Alternative) when compared with the existing conditions in the Project Area are presented, followed by impacts of the Proposed Alternative that are considered to be less than significant. Impacts that are considered to be significant are accompanied by an explanation of why the application of a standard resulted in a determination that the impact would be significant. When a significant impact has been set forth, mitigation measures to address that potential impact are also presented, along with a determination of whether the impact will continue to be significant after implementation of the mitigation measure. The section concludes with a description of the potential impacts of the No Project Alternative.

15.3.1 Assumptions

The following are assumptions that have been applied in the analysis of the potential utility impacts. These assumptions are based on information gathered during the planning process to develop the Proposed Alternative and to avoid or minimize its environmental consequences.

- All future development in the Project Area will need to comply with the goals and policy requirements of the General Plan to ensure adequate public utilities to support future development in the Project Area that would be allowed with the Proposed Alternative.
- Water supply for the Project will be adequate. The Los Angeles Department of Water and Power has developed a detailed Water Supply Assessment (WSA) that concludes that Project's "annual water demand falls within the available and projected water supplies for normal, single-dry, and multiple-dry years through the year 2030 as described in LADWP's year 2005 UWMP. LADWP finds that it will be able to meet the water demand of the developments as described in Cornfield/Arroyo Seco Specific Plan as well as existing and planned future water demands of its service area." (City of Los Angeles Department of Water and Power (LADWP), Water Resources Division, 2010). The impact assessment assumes that the short-term and long-term conservation strategies and mitigation measures discussed in the WSA and in this Chapter will be applied.
- It is unknown how the existing water distribution system in the Project Area will be incorporated (engineered) into the Proposed Alternative. It is likely that an increase in conveyance facilities will be required to serve the development resulting from the Proposed Alternative. These facilities will be subject to the terms of the WSA and the mitigation measures discussed in this Chapter.
- Stormwater from the Project Area would be managed to comply with the City's current National Pollution Discharge Elimination System (NPDES) permit requirements, established by the California Regional Water Quality Control Board, Los Angeles Region (Regional Board). Management of stormwater will incorporate all the requirements identified in Section 15.1.3 of this chapter. Stormwater management measures shall also incorporate BMPs required by the WQCMPUR for all development.

- Solid waste management in the Project Area will comply with State diversion requirements. In addition, it will conform, as appropriate, to the City's SWIRP[1].
- Solid waste from demolition of existing structures will be managed in accordance with the requirements outlined in Section 15.1.4.2 of this chapter. Similarly, solid waste from the Project Area construction will be managed to meet the requirements of Ordinance 174706.
- Future electricity and natural gas needs will be supplied by LADWP. Future IT/COMM needs will be provided by the then-current local franchise holders or other appropriate providers.
- The utilities demand analyses are based on the existing and proposed land uses for the Proposed Alternative and the No Project Alternative, as shown in Table 15.1. For the purposes of utilities demand analysis, impacts were determined based on the maximum potential development level and mitigation measures were identified to mitigate for the maximum potential development level.

Table 15-1: Existing and Proposed Population and Land Uses

Item	Current (2003)	Proposed Alternative (2035)	No Project Alternative (2035)
Population	4,802	31,855	5,512
Residential (square feet)	1,683,787	10,844,830	2,020,544
Retail (square feet)	297,173	508,425	312,961
Commercial/Office (square feet)	170,127	1,702,147	229,193
Light Industrial/Research and Development (square feet)	1,872,275	6,571,654	2,076,341
Institutional Uses (square feet)	123,800	200,000	136,180
Parks/Open Space (acres)	17	69	46

[1] The City has set a goal of achieving 75 percent diversion by 2013, and 90 percent by 2025. The RENEW LA Plan is the blueprint for SWIRP.
http://www.zerowaste.lacity.org/files/monthly_articles/2009Mar20SWIRPnewsletter4.pdf (Accessed 9 July 2009)

- The existing and maximum estimated Project Area utility demand is characterized in Table 15-2. Table 15-3 compares demand on a per capita basis.

Table 15-2: Estimated Existing Maximum Utility Demands

Type of Utilities	Current (2003)	Proposed Alternative (2035)	No Project Alternative (2035)
Potable Water (mgd)	0.96	6.29	1.09
Wastewater (mgd)	0.48	3.19	0.55
Electricity (million-kWh/yr)	33	222	38
Natural Gas (million-therm/yr)	7.7	50.8	8.8
Solid Waste (thousand-ton/yr)	16.02	34.33	18.94

Notes: mgd = million gallons per day, kWh = kilowatt-hours, /yr = per year, therm/yr = therms per year, ton/yr = tons per year.

Source: Arup, 2009.

Table 15-3: Estimated Per Capita Utility Demands

Type of Utilities	Current (2003)	Proposed Alternative (2035)	No Project Alternative (2035)
Potable Water (gallons/day)	200	197	198
Wastewater (gallons/day)	100	100	100
Electricity (kWh/yr)	6,872	6,969	6,894
Natural Gas (Therm/yr)	1,603	1,595	1,597
Solid Waste (Tons/year)	3.34	1.08	3.44

Notes: kWh = kilowatt-hours, /yr = per year.
Source: Arup, 2009.

- The maximum estimated demand for treated water, wastewater, electricity, natural gas, and solid waste occurs with the Proposed Alternative because that alternative would result in a greater increase in population than the No Project Alternative.

15.3.2 Potential Utilities Impacts of the Proposed Alternative

15.3.2.1 Potentially Significant Utilities Impacts of the Proposed Alternative

Impact Utilities 1: Implementation of the Proposed Alternative would result in a need for potable water that could require the construction of new or expansion of existing facilities to provide treated water. This potential impact is considered to be significant.

The average day demand for potable water for the Proposed Alternative would be about 6.3 million gallons per day (mgd), an increase of about 5.3 mgd from current demand in the Project Area. Even if LADWP has adequate water treatment capacity to meet the needs of the Proposed Alternative, there is inadequate infrastructure in the Project Area to deliver and distribute the water.

Mitigation Measure Utilities 1: The City of Los Angeles shall ensure that all required water distribution systems, water storage tanks, and pump stations in the Project Area to supply the demand for potable water are constructed to meet the requirements that will result from implementation of the Proposed Alternative. This will be accomplished by not approving development in excess of existing system capacities until needed improvements are made.

In addition, during the planning and development of specific projects within the Project Area as a result of the Proposed Alternative the following mitigation measures shall be implemented as applicable:

- **The project shall comply with Ordinance No. 170,978 (Water Management Ordinance), which imposes numerous water conservation measures in landscape, installation, and maintenance (e.g., use drip irrigation and soak hoses in lieu of sprinklers to lower the amount of water lost to evaporation and overspray, set automatic sprinkler systems to irrigate during the early morning or evening hours to minimize water loss due to evaporation, and water less in the cooler months and during the rainy season).**
- **In addition to the requirements of the Landscape Ordinance, the landscape plan shall incorporate the following:**
    - **Weather-based irrigation controller with rain shutoff**
    - **Matched precipitation (flow) rates for sprinkler heads**
    - **Drip/microspray/subsurface irrigation where appropriate**
    - **Minimum irrigation system distribution uniformity of 75 percent**
    - **Proper hydro-zoning, turf minimization and use of native/drought tolerant plan materials**
    - **Use of landscape contouring to minimize precipitation runoff**
- **A separate water meter (or submeter), flow sensor, and master valve shutoff shall be installed for existing and expanded irrigated landscape areas totaling 5,000 sf. and greater.**

- **Install high-efficiency toilets (maximum 1.28 gallons per foot), including dual-flush water closets, and high-efficiency urinals (maximum 0.5 gallons per foot), including no-flush or waterless urinals, in all restrooms as appropriate.**
- **Install restroom faucets with a maximum flow rate of 1.5 gallons per minute.**
- **A separate water meter (or submeter), flow sensor, and master valve shutoff shall be installed for all landscape irrigation uses.**
- **Single-pass cooling equipment shall be strictly prohibited from use. Prohibition of such equipment shall be indicated on the building plans and incorporated into tenant lease agreements. (Single-pass cooling refers to the use of potable water to extract heat from process equipment, e.g. vacuum pump, ice machines, by passing the water through equipment and discharging the heated water to the sanitary wastewater system.)**
- **All restroom faucets shall be of a self-closing design.**
- **Install no more than one showerhead per shower stall, having a flow rate no greater than 2.0 gallons per minute.**
- **Install and utilize only high-efficiency clothes washers (water factor of 6.0 or less) in the project, if proposed to be provided in either individual units and/or in a common laundry room(s). If such appliance is to be furnished by a tenant, this requirement shall be incorporated into the lease agreement, and the applicant shall be responsible for ensuring compliance.**
- **Install and utilize only high-efficiency Energy Star-rated dishwashers in the project, if proposed to be provided. If such appliance is to be furnished by a tenant, this requirement shall be incorporated into the lease agreement, and the applicant shall be responsible for ensuring compliance.**
- **The applicant of a new car wash shall incorporate a water recycling system to the satisfaction of the Department of Building and Safety.**

With the implementation of these mitigation measures, this potentially significant impact will be reduced to a level that is less than significant.

New or enlarged treated water distribution system components, including water storage tanks, pump stations, and other facilities (including treated and untreated water conveyance), will need to be constructed in or adjacent to the Project Area to accommodate the anticipated demand for increased water service. The water storage tanks shall be designed with the operational, emergency, and fire service capacities required by the future development that would occur with the implementation of the Proposed Alternative. Implementation of this mitigation measure will ensure needs of the new development would be reduced to a level that is less than significant.

Impact Utilities 2: Implementation of the Proposed Alternative would result in an increase in wastewater generation that could exceed the capability of the City of Los Angeles to comply with the wastewater discharge requirements of the Regional Board. In addition, implementation of the Proposed Alternative would result in an

increase in wastewater generation that could exceed the capacity of City facilities, resulting in the need to construct additional facilities. This potential impact is considered to be significant.

The BOS Hyperion Treatment Plant will treat a majority of the waste generated by the implementation of the Proposed Alternative. With the BOS Hyperion Treatment Plant currently operating 130 mgd below capacity (Impact Sciences, Inc., 2008), adequate capacity exists to treat the additional 2.7 mgd of sewage that could be generated as a result of the Proposed Alternative by 2035. However this additional wastewater in combination with the wastewater from other future development in the City of Los Angeles could cause the BOS Hyperion Treatment Plant to reach its effluent discharge limit sooner than 2035. Since sewer connections are issued on a first-come, first-served basis and whatever flow comes to the Hyperion Treatment Plant must be accommodated, there may be room within the discharge limit at the time of development of the wastewater utility service to support the development that would result from implementation of the Proposed Alternative. If all other wastewater flow projections used in the most recent discharge limit increase are realized, however, the discharge limit could be reached sooner than 2035. If that happens, some future development projects could cause an additional discharge limit increase to be needed. Such an increase would require a discretionary approval by the Regional Board and expansion of the wastewater treatment capacity at the BOS Hyperion Treatment Plant. Conversely, there may still be sufficient wastewater treatment capacity with the development in the Project Area if other growth does not build out as densely as planned.

If the BOS Hyperion Treatment Plant reaches its effluent discharge limit and is unable to obtain a needed increase, a sewer connection moratorium could be triggered. A sewer connection moratorium would pose a barrier to growth. It is possible that developers would seek alternative wastewater services (on-site package treatment plants, community septic systems, and similar options) to meet the needs of their projects. This potential impact is considered to be significant.

Mitigation Measure Utilities 2: During the planning and development of specific projects within the Project Area as a result of the Proposed Alternative the following mitigation measures shall be implemented as applicable:

- **The project shall include a holding tank large enough to hold three times the project daily wastewater flow so that the tank would hold all project wastewater during peak wastewater flow periods for discharge into the wastewater collection system during off-peak hours.**
- **A grey water system to reuse wastewater from the project.**
- **Offset excess wastewater generation by restricting the wastewater generation of other land uses within the same service area (e.g., by dedicating open space); and**
- **New wastewater treatment or conveyance infrastructure, or capacity enhancing alterations to existing systems.**

Improvements could be needed to sewer facilities, conveyance pipelines, and the Hyperion Treatment Plant. Impacts from construction of the new facilities could include disturbances related to noise, air quality (dust) and traffic; however, these construction-related impacts would be temporary. These secondary impacts would be considered less-than-significant given impacts-minimizing construction specifications that the City would impose.

The demand for wastewater treatment required to support implementation of the Proposed Alternative is not addressed specifically in the General Plan. However, the plan considers the potential overall increased demand for wastewater conveyance and treatment that could result from the implementation of the Proposed Alternative and other development projects. Also, the City of Los Angeles will ensure that measures to reduce the demand for wastewater treatment are incorporated in the projects that will result from the Proposed Alternative to reduce the need for treatment. Implementation of these mitigation measures is sufficient to reduce this potentially significant impact so it is less than significant.

Impact Utilities 3: Implementation of the Proposed Alternative would result in an increase in demand for electricity that could require or result in the construction of new electricity facilities, transformers, distribution systems, substations, or expansion of existing electricity facilities. This potential impact is considered to be significant.

LADWP will be the electricity provider for households, businesses, and community facilities in the Project Area. The projected increase in electricity demand as a result of the development that would be allowed with implementation of the Proposed Alternative is 189 million kilowatt-hours (kWh) by 2035. LADWP has a policy (described in Section 15.1.5 of this Chapter) of purchasing additional needed electricity from outside the Los Angeles Basin for environmental reasons. The additional electricity required is readily available from the nationwide grids and would not result in the need to construct new facilities other than possible local distribution improvements to satisfy specific industry requirements in the Project Area.

> **Mitigation Measure Utilities 3a: Prior to approving development in the Project Area beyond the existing LADWP electrical system capacity, the City of Los Angeles shall coordinate with LADWP regarding the planned development and provide data for LADWP to assess the future electricity demand.During the planning and development of specific projects within the Project Area as a result of the Proposed Alternative, If conditions dictate, the Department of Water and Power (LADWP) may postpone new power connections for this project until power supply is adequate.**
>
> **Mitigation Measure Utilities 3b: Prior to approving development in the Project Area beyond the existing LADWP electrical system capacity , the City of Los Angeles shall require that LADWP demonstrate that it can upgrade its existing electrical supply infrastructure and construct new electrical substations either on or off-site to meet potential energy demand for the development.**
>
> **With the implementation of these mitigation measures, this potentially significant impact will be reduced to a level that is less than significant.**

The LADWP can use the information provided by the City about future development in the Project Area that would result from the Proposed Alternative to update its planning processes and program facilities to accommodate the planned development. The City shall withhold development approvals for project beyond the existing LADWP capacities until LADWP has demonstrated that it can supply the required electrical service to support development of any projects resulting from the implementation of the Proposed Alternative. Implementing these mitigation measures will be sufficient to reduce this potentially significant impact to a level that is less than significant.

Impact Utilities 4: Implementation of the Proposed Alternative would result in an increase in demand for natural gas that could require or result in the construction of new natural gas facilities, distribution systems, or expansion of existing natural gas facilities. This potential impact is considered to be significant.

SCGC is the natural gas provider for the Project Area. The projected increase of natural gas demand for the implementation of the Proposed Alternative would be approximately 43.1 Mega-Therm per year. SCGC has not already included the increase in natural gas demand from development in the Project Area in its projections for natural gas demand and supply, because the potential development is not specifically included in the General Plan Framework. The existing natural gas distribution system present in the Project Area may need to be improved to accommodate the potential development that would result from implementing the Proposed Alternative.

> **Mitigation Measure Utilities 4a: Prior to approving development in the Project Area beyond the existing SCGC system capacity, the City of Los Angeles shall coordinate with SCGC regarding the planned development and provide data for SCGC to assess the future natural gas demand.**
>
> **Mitigation Measure Utilities 4b: Prior to approving development in the Project Area beyond the existing SCGC system capacity, the City of Los Angeles shall require that SCGC demonstrate that it can upgrade its existing gas supply infrastructure or construct new gas supply infrastructure to meet potential natural gas demand for the development.**
>
> **With the implementation of these mitigation measures, this potentially significant impact will be reduced to a level that is less than significant.**

SCGC can use the information provided by the City about future development in the Project Area that would result from the Proposed Alternative to update its planning processes and program facilities improvements to accommodate for the planned development. The City shall withhold development approvals for projects beyond the existing SCGC system capacities until SCGC has demonstrated that it can supply the required natural gas service to support development of the Proposed Alternative. Implementing these mitigation measures will reduce this potentially significant impact to a level that is less than significant.

Impact Utilities 5: Implementation of the Proposed Alternative would result in an increase in demand for IT/COMM services in the Project Area that would require additional levels of service or construction of additional IT/COMM facilities. This potential impact is considered to be significant.

Existing or other private IT/COMM providers could provide service in the Project Area in the future. However, the extent of the potential development with implementation of the Proposed Alternative would require the provision of additional services and the development of new facilities. Provision of these additional services and facilities is considered to be a potentially significant impact.

> **Mitigation Measure Utilities 5: Prior to approving development in the Project Area that is beyond existing IT/COMM systems capacities, the City of Los Angeles shall require that the IT/COMM providers demonstrate that they can provide the needed services and facilities. With the implementation of this mitigation measure, this potentially significant impact will be reduced to a level that is less than significant.**

The City shall withhold development approvals for projects that are beyond the capacities if the existing IT/COMM systems until the IT/COMM providers demonstrate that they can supply the required services and facilities to support the development. Implementing this mitigation measure will be sufficient to reduce this potentially significant impact to a level that is less than significant.

15.3.2.2 Potential Utilities Impacts of the Proposed Alternative That Are Less Than Significant

Impact Utilities 6: Implementation of the Proposed Alternative would result in an increase in demand for water that could exceed supply limits. This potential impact is considered to be less than significant.

The projected population growth in the Project Area from 2003 to 2035 that could occur as a result of the Proposed Alternative is about 27,000. LADWP has developed a water supply assessment (WSA) for the Project Area that indicates how it intends to offer customers high quality, reliable supply for the next 25 years. The WSA (included as Appendix 7B) examines water demand, conservation, and existing and potential supplies for a range of service area alternatives. The demand projections and supply alternatives developed for this Draft EIR were based on approved General Plans for the communities served by LADWP. The WSA concludes that Project's annual water demand will be met.

Mitigation Measure Utilities 6: None required.

Impact Utilities 7: Implementation of the Proposed Alternative could result in an increase in demand for recycled water for irrigation or other non-potable uses. However, providing recycled water to the Project Area would require a new distribution system, possibly including pump stations and storage tanks. This potential impact is considered to be less than significant.

The increase in parks and recreational facilities that would result from implementation of the Proposed Alternative, depending on how they are designed, could result in areas that have the potential to be irrigated with recycled water. There is also the potential that recycled water could be used to supply residential, commercial, and community facilities in the Project Area, if those potential uses comply with applicable regulations.

The City and LADWP will work together to identify the potential level of use of recycled water in the Project Site. LADWP can use the information to update its plan and to identify ways to obtain the additional water and to program facilities improvements to accommodate for the level of use of recycled water as part of the WSA that was prepared in accordance with Water Code Section 10910 et. seq.

It is recognized that LADWP can provide recycled water to the Project Area directly during most of the year for irrigation and other purposes if the supply is available. The use of recycled water could reduce the demand for potable water. However, depending on the level of development, a separate system supplied either with treated or recycled water may be required. Cross connecting treated and recycled water is unacceptable. The City will also need to require that future development in the Project Area includes the facilities required to store and distribute the recycled water and that the water is obtained from a location and in a manner that complies with the requirements of LADWP. These management measures are sufficient to protect the environment from any significant impacts that would result from supplying recycled water to the Project Area.

Mitigation Measure Utilities 7: None required.

Impact Utilities 8: Implementation of the Proposed Alternative would result in areas of impervious surface which could increase the rate and amount of surface runoff and create additional runoff. However, the majority of the existing Project Area is currently impervious urban developed area which is not expected to change or to significantly impact total runoff to the surface water features in the Project Area. This potential impact is considered to be less than significant.

The majority of the existing site is currently impervious urban developed area. In addition to complying with the requirements of the General Plan with respect to managing stormwater, BMPs will be required for all projects that would need to comply with NPDES permit requirements. In addition, compliance with the current requirements related to managing stormwater identified in Chapter 7 Hydrology and Water Quality, will further ensure that the NPDES permit requirements are met. However, there may need to be additional capacity provided to effectively convey stormwater from the Project Area. The City of Los Angeles shall withhold approval of development in the Project Area until it can be demonstrated that there is adequate capacity and operational performance standards to manage stormwater that would result from implementation of the Proposed Alternatives. It must be recognized that the new standard for stormwater management are embedded in the Specific Plan component of the Proposed Alternative that will provide more effective water quality management in the Project Area in the future.

Mitigation Measure Utilities 8: None required.

Impact Utilities 9: Implementation of the Proposed Alternative would result in an opportunity to use recycled water in the Project Area. However, additional treatment capacity would be required by the Los Angeles Department of Water and Power to provide the recycled water and new transmission pipelines would be required to the site to convey the treated wastewater. This potential impact is considered to be less than significant.

The development of any of the new residences, businesses, or public facilities permitted by the Proposed Alternative would allow the incorporation of piping systems to be used for the distribution of recycled water in the Project Area. It is understood that any use of recycled water would have to comply with all applicable water quality regulations. If reuse of recycled water is to be provided for in the Project Area a connection will have to be constructed from the existing treatment and distribution facilities to the Project Area. In addition, the capacity of the Hyperion Treatment Plant to produce recycled water would have to be increased. It is anticipated that the potential recycled water use will reduce the Proposed Alternative's potable water demand by approximately 333 acre feet per year (AFY) (LADWP, 2010). It is assumed that the parks, recreational facilities, landscaped areas, and parkways will be irrigated by recycled water. However, treated water could also be used for irrigation at residential and commercial development; this would increase the need for additional treatment and for a larger distribution system. The use of recycled water could also result in a decrease in demand for water from the LADWP system. Therefore, providing recycled water to the site would result in a condition that is considered to be a less than significant impact.

Mitigation Measure Utilities 9: None required.

Impact Utilities 10: Implementation of the Proposed Alternative would increase the potential for development of new residential, commercial, and light industrial land uses in the Project Area, resulting in increased solid waste generation that the landfill in the service area may not have sufficient permitted capacity to accommodate. This potential impact is considered to be less than significant.

As indicated in Section 15.1.3 of this Chapter, the BOS is currently developing a SWIRP, among whose goals are to eliminate use of urban landfills and to develop alternative technologies for long term waste disposal, with the aim to lead Los Angeles towards being a "zero waste" city.

The estimated increase in solid waste disposal required for implementation of the Proposed Alternative would be approximately 18,000 tons per year, or about 49 tons per day. The daily permitted capacity of Sunshine Canyon landfill is 12,100 tons per day ([1] California Integrated Waste Management Board Permit, 2008), and it is currently receiving about 2,350 tons per day. This landfill is expected to have sufficient capacity to accommodate the increased generation of 49 tons per day. This comprises about 0.4 percent of the Sunshine Canyon Landfill's total daily capacity.

The landfill is expected to have sufficient permitted capacity to accommodate the solid waste disposal needs of the Proposed Alternative. According to its permit, the projected closure date for Sunshine Canyon landfill is 2037.

Mitigation Measure Utilities 10: None required.

15.3.3 Potential Utilities Impacts of the No Project Alternative

The analysis of the No Project Alternative provided in this Draft EIR assumes no development would occur in the Project Area other than that currently allowed by the General Plan. Future uses requiring expansion of utility systems would require approval by the City of Los Angeles. As shown in Table 16-4 the potential maximum utility demands that would result from the No Project Alternative are very close to the utility demands currently observed in the Project Area.

15.3.3.1 Potentially Significant Utilities Impacts of the No Project Alternative

None identified.

15.3.3.2 Potential Utilities Impacts of the No Project Alternative That Are Less Than Significant

None identified.

15.4 References

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