

4.13 PUBLIC SERVICES, UTILITIES, AND SERVICE SYSTEMS

The following section provides an analysis of public services, utilities, and service systems for the proposed project. Existing condition information presented in this section is based on coordination with potentially affected utility and public service agencies. Specific references are identified within the subsection for each respective issue. This section addresses the following utility and public service systems (the service provider is noted in parenthesis):

- Fire Protection (City of Newport Beach Fire Department)
- Law Enforcement (City of Newport Beach Police Department)
- Public Schools (Newport Mesa Unified School District)
- Public Libraries (Newport Beach Public Library System)
- Solid Waste (Orange County Waste and Recycling)
- Public Transportation (Orange County Transportation Authority)
- Water (City of Newport Beach)
- Electricity (Southern California Edison)
- Natural Gas (Southern California Gas Company)

Scoping Process

During the scoping process, it was determined that the proposed project could have potential impacts related to all of the thresholds for public services, utilities, and service systems that the State CEQA Guidelines include as criteria for determining significance. Refer to Appendix A, Initial Study/Notice of Preparation (IS/NOP), for additional discussion.

Three comment letters associated with public services, utilities, and service systems were received in response to the IS/NOP circulated for the proposed project. The Southern California Gas Company (The Gas Company) stated that gas service can be provided from an existing gas main located in various locations surrounding the project site, based on availability. The Metropolitan Water District of Southern California (Metropolitan) stated that it does not own or operate any facilities, nor does it own real estate entitlements on the proposed project site and that the proposed project is not regionally significant to Metropolitan. Metropolitan encouraged the City of Newport Beach (City) to use water conservation measures. The Orange County Transportation Authority (OCTA) submitted a letter stating that a new bus stop at Avocado Avenue and Farallon Drive is being considered and asking that the Environmental Impact Report (EIR) address potential impacts related to bike safety. The recommendations and concerns raised during the scoping process related to public services, utilities, and service systems are addressed in this EIR section.

4.13.1 Methodology

Public service and utility providers were sent a questionnaire that requested current levels of service provided to the project area and information on possible constraints or impacts to their services at project build out. The impact analyses are based on responses to the questionnaires, meetings with

service provider representatives, and/or information obtained through subsequent phone conversations with service provider representatives. Correspondence from the public services providers is included in Appendix L.

4.13.2 Existing Environmental Setting

Fire Protection. The Newport Beach Fire Department (NBFD) is responsible for reducing loss of life and property from fire, medical, and environmental emergencies. In addition to fire suppression, NBFD also provides fire prevention and hazard reduction services. The Fire Prevention Division works in conjunction with the City's Planning, Public Works, and Building Departments to ensure that all new construction and remodels are built in compliance with local and State building and fire codes, including the provision of adequate emergency access and on-site fire protection measures.

There are eight fire stations strategically located throughout the City to provide prompt assistance to area residents. The NBFD currently employs 146 full-time and 170 seasonal employees to provide 24-hour protection and response to the City's residents and visitors. NBFD is divided into four divisions: operations, fire prevention, training, and administrative. The NBFD divides its fire suppression staff into three shifts per month, with 39 personnel working each shift. Of the NBFD employees located at the eight NBFD stations, seven paramedics serve per shift. Two are always on duty at Stations 2, 3, and 5 with paramedic ambulances. In addition, Station 8 is a Paramedic Assessment Unit (PAU) with one paramedic crew member.

The NBFD also handles incidents associated with hazardous materials. The NBFD's goal is to protect the public health and the environment throughout the City from accidental releases and improper handling, storage, transportation, and disposal of hazardous materials through coordinated efforts of regulation, management, emergency response, enforcement, and site mitigation oversight. In case of a hazardous materials emergency, a mutual aid hazardous materials response team is requested from one of the County's four hazardous materials response provider agencies.

Station No. 2 serves and would continue to serve the existing City Hall project site. This station is located at 475 32nd Street and serves the Lido area of the City. This station is staffed by two captains, two engineers, three firefighters, and two firefighter paramedics for each shift. Equipment at this station includes one fire engine, one ladder truck, and one paramedic van. The average response time for Station No. 2 is just over 4 minutes (Newport Beach General Plan Update EIR 2006).

Station No. 3 would serve the proposed project site. This station is located at 868 Santa Barbara Drive and serves the Newport Center area of the City. This station is staffed by one battalion chief, two captains, two engineers, three firefighters, and two firefighter paramedics. Equipment at this station includes one fire engine, one ladder truck, one paramedic van, and one battalion chief. The average response time for Station No. 3 is approximately 4.5 minutes (Newport Beach General Plan Update EIR 2006).

The response objective of the NBFD, which includes dispatch time, time to dress in protective gear and travel time, is 7 minutes and 20 seconds, 90 percent of the time. The travel component of that aggregation remains 5 minutes, 90 percent of the time, and 10 minutes for the remaining 10 percent of the time.

Law Enforcement. The Newport Beach Police Department (NBPD) provides police service to the proposed project site. The police department is located at 870 Santa Barbara Drive and provides services in crime prevention and investigation, community awareness programs, and other services such as traffic control. The NBPD employs a total of 285 personnel, including 1 chief, 3 captains, 8 lieutenants, 22 sergeants, 115 sworn officers, 92 civilian personnel, and 44 seasonal and part-time personnel. The NBPD is divided into three divisions, including support services, patrol/traffic, and detectives.

NBPD currently has authorization for 149 sworn officers. With a population of approximately 87,400 residents, the ratio of officers is currently 1.7 officers per 1,000 residents. On average, 3,300 emergency calls are received per month, with an average response time of 4 minutes, 41 seconds in 2008. An average of 74,000 police responses per year are dispatched. In 2008, the average police response time for nonemergency calls was 16 minutes, 21 seconds. It is noted that the response time for nonemergency calls includes a variety of nonemergency calls, including parking violations and animal control calls. There are no current plans to increase staffing levels or to expand the NBPD.

In the existing condition, the average response time to the existing City Hall is approximately 8 minutes, and the average response time to the proposed City Hall site is approximately 3 minutes.

Public Schools. The Newport-Mesa Unified School District (NMUSD), with a service area of 58.83 square miles, provides educational services to the City of Newport Beach, City of Costa Mesa, and other unincorporated areas of Orange County. The Airport Area is served by the Santa Ana Unified School District (SAUSD). A small portion of the City located in the eastern part of the City is served by the Laguna Beach Unified School District (LBUSD). NMUSD serves the majority of the City and has 32 public schools including 22 elementary schools, 2 junior high schools, 5 high schools, 2 alternative education centers, and 1 adult school. Of these, 2 high schools, 1 middle school, and 8 elementary schools are located within City limits. According to the NMUSD website, Lincoln Elementary School is the closest school to the proposed project site, and Newport Elementary School is the closest school to the existing City Hall site. In 2007–2008, Lincoln Elementary has 607 students enrolled. Newport Elementary had 412 students enrolled in that same reporting period.

Public Libraries. The Newport Beach Public Library (NBPL) system consists of a Central Library and three branch library facilities located throughout the City. The Central Library, which occupies 4 acres on the proposed project site, is a 54,362-square-foot (sf) building. The NBPL system is currently staffed by approximately 90 employees with approximately 65–70 working at the Central Library. Staffing levels fluctuate throughout the day as workload demands and based on workday shifts (e.g., 8:00 a.m.–3:00 p.m., 3:00 p.m.–9:00 p.m.). The four libraries serve 71,784 active borrowers, and the system circulates over 1,701,400 items annually.

Typically, libraries assess their needs on a ratio of volumes per measure of population. The NBPL, however, assesses library needs based on indicators that demonstrate actual use of the library rather than a ratio of volumes or square feet per measure of population. These indicators account for customer activity within the library and include statistics derived from door counts, activities in the building (such as program attendance, customer training, or use of the facility by outside groups),

computer use within the library, overall circulation of library materials, and reference questions. The NBPL reports these indicators within the following categories: circulation statistics; statistics documenting reference transactions; statistics that measure customers served in the library; and program attendance. The library uses these statistical categories as a basis for assessing the library's ability to adequately serve its customers.

Library statistics documenting customer activity within the libraries parallel the population statistics for the City and indicate that the number of customers served by the NBPL system continues to grow. Statistics for fiscal year 2007–2008 show that the number of customers served within the libraries annually has increased by over 33 percent since fiscal year 1999–2000. Program attendance, which includes programming devoted to juvenile customers, is also growing, and the number of customers attending library programs, training, and events in fiscal year 2007–2008 has increased 45 percent from fiscal year 1999–2000. Similarly, circulation statistics show an increase of 27 percent since fiscal year 1999–2000.

The NBPL has indicated that within the next 20 years, the changing role of libraries in the City will need to be addressed with remodeling, expansion of existing buildings, and the possible construction of a new library branch. NBPL has also indicated a need to expand the Children's Room at the Central Library.

The number of children in the City nearly doubled from 1990–2007. This figure includes the population of Newport Coast, which was annexed by the City in 2002. At the same time, the percentage of children's materials checked out by Library patrons rose. In 2008, children's materials accounted for 33 percent of all checkouts in the NBPL system and 30 percent of all checkouts at the Central Library. Due to high demand for children's materials and the high numbers of patrons, the existing Children's Room at the Central Library does not adequately serve the community.

The Children's Room contains the collection, computers, staff, seating, a story time room, and an outdoor children's garden. The Children's Room is too small for the number of parents and children using the library today. There are only five chairs for adults plus one two-person couch. Additional space is needed to allow for seating where adults and children can interact, look at books, and read. There are tables and chairs sized for children but too few of them to accommodate a class visit from a school.

The story time room comfortably accommodates up to 25 adults and children while the programs often attract 40 or more people. There were 26 story times held in this room during the month of May 2009. A new story time room would provide a larger venue for programs and events. Currently, special events for children are held in the Friends Meeting Room on the west side of the Library, not in the children's area.

Public Transportation. The proposed project is within the OCTA bus service area. OCTA currently maintains six bus routes that service the OCTA Newport Transportation Center located immediately north of the proposed project site. The bus routes servicing the project area are:

- Route 1 makes 50 daily trips

- Route 55 makes 53 daily trips
- Route 57 makes 54 daily trips
- Route 75 makes 14 daily trips
- Route 76 makes 22 daily trips
- Route 79 makes 27 daily trips

Route 1 services Avocado Avenue south of San Miguel. Each of the above-mentioned bus routes is currently operating within capacity. Expansion of services is due to several factors, mainly customer demand and available budget. Other key factors that may warrant expanding service include above-standard load capacities, which includes customers being passed by at bus stops, additional trips required along bus routes to meet customer demand, and service areas showing a lack of service. Route performance is measured using a boarding per revenue-vehicle-hour ratio. An optimal route performance ratio is 20 boardings per revenue-vehicle-hour. As soon as the ratio approaches this criterion, plans for service expansion are considered. At this time, bus routes serving the project site are considered adequate.

Solid Waste. The majority of solid waste generated in the City is collected by the City's Refuse Division, and the remaining solid waste is collected by waste haulers and transported to a City-owned transfer station. Refuse from both sources is then consolidated and transported to a materials recovery facility where recyclable materials are sorted from refuse by machines and other methods. The remaining solid waste is then taken to one of three landfills in the County of Orange (County).

Both the existing and proposed project sites are located within OC Waste & Recycling (OCWR) Department's service area. OCWR administers the countywide Integrated Waste Management Plan. OCWR owns and operates 3 active landfills and 4 household hazardous waste collection centers and monitors 12 closed landfills. All three landfills are permitted as Class III landfills. Class III landfills accept all types of nonhazardous municipal solid waste for disposal; however, no hazardous or liquid waste can be accepted.

The Frank R. Bowerman Landfill is the closest OCWR landfill to the proposed project site (approximately 15 miles) and would be expected to provide waste disposal for the proposed project once operational. The Frank R. Bowerman Landfill, which is permitted to receive a daily maximum of no more than 8,500 tons of solid waste per day, is approximately 725 acres in size, 341 acres of which are permitted for refuse disposal. The landfill opened in 1990 and is scheduled to close in approximately 2022, but was recently expanded to have enough capacity to last until 2053. As of June 30, 2008, the landfill has a remaining air space¹ capacity estimated at approximately 64.38 million cubic yards (cy).

OCWR prepared an EIR for the expansion of the Frank R. Bowerman Landfill that will add capacity and extend the site's life until approximately 2053. The County Board of Supervisors approved the

¹ Landfill airspace is defined as the volume of space on a landfill site that is permitted for the disposal of municipal solid waste (MSW). In the provision of solid waste disposal services, landfill airspace is depleted by being filled up with waste.

project and certified the Final EIR on August 14, 2006. OCWR is fully permitted for the landfill expansion.

Although the Frank R. Bowerman Landfill accepts waste from the existing City Hall site and would accept waste from the proposed project once it is operational, it is anticipated that the 320,000 cy of dirt removed from the proposed project site would be disposed of at the Prima Deshecha Landfill in the City of San Juan Capistrano (approximately 30 miles from the proposed project site).¹ Prima Deshecha Landfill is permitted to accept up to 4,000 tons per day (tpd) of waste. Prima Deshecha Landfill totals approximately 1,530 acres, with 699 acres permitted for refuse disposal. The landfill was opened in 1976 and is scheduled to close in approximately 2067. As of June 30, 2008, the landfill has a remaining air space capacity estimated at approximately 135.09 million cy.

Both landfills are subject to regular inspections from the California Integrated Waste Management Board (CIWMB) and the Board's Local Enforcement Agency (LEA), the California Regional Water Quality Control Board (RWQCB), and the South Coast Air Quality Management District (SCAQMD) to ensure compliance with applicable regulations.

In 1989, the California Integrated Waste Management Act (Assembly Bill [AB] 939) was passed, which mandated a 25 percent reduction of waste being disposed of in the landfill system by 1995 and a 50 percent reduction by 2000. In response to AB 939, the CIWMB was established to monitor compliance with waste reduction requirements. According to the CIWMB, all counties within the State are required to have an approved Countywide Integrated Waste Management Plan (CIWMP), which outlines methods for waste diversion and demonstrating sufficient solid waste disposal capacity for a minimum of 15 years. In compliance with AB 939, the County prepared a CIWMP, which is kept current, demonstrating the required 15-year disposal capacity and allowing disposal of a maximum daily imported waste stream of 1,000 tpd. Imported tonnage varies depending on demand. It is limited by the solid waste facility permit for each site. For the 2006 reporting year (the last reporting year available), data showed that the City was at a 60 percent diversion rate.²

Table 4.13.A shows the estimated solid waste generated by the existing City Hall and Library on the existing and proposed project sites.

¹ It is possible that excavated material from the proposed project site could be reused off site, but in order to evaluate a reasonable worst-case scenario for the proposed project, disposal is assumed in this EIR.

² California Integrated Waste Management Board (CIWMB). Website, accessed July 19, 2009.

Table 4.13.A: Existing Solid Waste Generation

Land Use	Area	Generation Factor	Listed Waste Generation Source Category	Estimated Solid Waste Generation (tons per year)
Existing City Hall (minus Fire Department)	47,809 sf/257 employees	0.59 tons/employee/year	Government	151.63
Newport Beach Central Library	54,362 sf	0.0013 tons/sf/year	Education/Schools	70.67
Total				222.3

Source: California Integrated Waste Management Board, Estimated Solid Waste Generation Rates for Institutions: <http://www.ciwmb.ca.gov/wastechar/WasteGenRates/Institution.htm> (accessed April 24, 2009).
sf = square feet

Water. Water service within the Planning Area is provided by the City, Irvine Ranch Water District (IRWD), and Mesa Consolidated Water District (Mesa). The existing and proposed project sites are located within the service territory of the City.

The City provides water service to nearly 75,600 people and various land uses. The City water supplies are imported water purchased from the Municipal Water District of Orange County (MWDOC), groundwater pumped from the Orange County Groundwater Basin, and reclaimed water. Through the existing infrastructure totaling over 210 miles within the City’s service area, water is delivered via transmission mains and distribution lines. Existing water lines range from 1 to 36 inches, with the majority of the pipelines ranging from 8 to 12 inches in diameter. Transmission mains convey water to various sections of the distribution system and the distribution lines deliver water to local areas. In addition, the City’s water infrastructure includes five domestic and two reclaimed pump stations and 43 pressure-reducing stations. The water distribution system is divided into five major pressure zones that serve elevations from sea level to 725 ft above sea level.

Within the region, there are four main groundwater basins: the La Habra Basin, the San Juan Basin, the Laguna Canyon Basin, and the Lower Santa Ana Basin. These basins supply several cities and agencies and are administered by Basin Pumping percentages, as allocated by the Orange County Water District (OCWD). The City receives its groundwater from the Lower Santa Ana Basin (Basin), which is also called the Coastal Plain of Orange County Groundwater Basin. Since 1997, the City has operated four groundwater wells in Fountain Valley at the Dolphin Avenue and Tamura School sites. Each site contains one shallow well and one deep well. Upon extraction, the water travels over 6 miles in 30-inch transmission mains through the Cities of Fountain Valley, Huntington Beach, Costa Mesa, and eventually into the City. From the wells, the groundwater is conveyed to the 16th Street Reservoir at the City’s utilities yard, and then to different areas within the City’s service boundaries.

Water Storage. The City uses three water system storage reservoirs: Big Canyon Reservoir, Zone 4 Reservoir, and 16th Street Reservoir. The Big Canyon Reservoir, which is located in Corona del Mar, is a distribution and storage concrete earthen dam reservoir that has a capacity of

approximately 196 million gallons (MG) and a maximum water surface elevation of 302 ft. However, the City maintains this reservoir at an average level of approximately 286 ft, providing approximately 300 acre-feet (af) (98 MG) of storage. A cover was installed on the reservoir in 2004. The Zone 4 Reservoir is a circular 1.5 MG belowgrade concrete tank that has a maximum elevation of 663 ft, located on Muir Beach Circle. The 16th Street Reservoir is a buried cast-in-place concrete tank that has a capacity of 3 MG, located at 951 West 16th Street. As discussed above, this reservoir serves as a holding tank for well water.

Fire Flows. As discussed above, the NBFDD is responsible for fire suppression within the City. The NBFDD relies on the area’s infrastructure, including the adequacy of nearby water supplies to suppress fire. Thus, the City has adopted the section of the 2001 California Fire Code that lists the minimum required fire flow and flow duration for buildings of different floor areas and construction types (Appendix III-A of the Fire Code.) Fire flow is the flow rate of water supply (measured in gallons per minute, or gpm) available for firefighting measured at 20 pounds per square inch (psi) pressure. Available fire flow is the total water flow available at the fire hydrants, also measured in gpm. Consistent with the California Fire Code, Section 9.04.450 of the City’s Municipal Code indicates that, in buildings fitted with approved internal automatic sprinkler systems, the minimum required fire flow for that structure may be reduced by up to 50 percent, as approved by the Fire Chief, but the resulting fire flow cannot be less than 1,500 gpm.

Water Supply and Demand. Domestic water for the Planning Area is supplied by both groundwater and imported surface water sources, as previously discussed. Currently, 75 percent of the water supplied by the City’s service area is supplied by groundwater from the Orange County Groundwater Basin, and the remaining 25 percent of water supply is provided by MWDOC, which delivers water imported from the Colorado River and State Water Project. The groundwater supply for the City’s water system is extracted from two well sites, as discussed above, established in Fountain Valley. Table 4.13.B shows the projected water supply and demand for the City through 2030.

Table 4.13.B: Projected Water Demand (acre-feet per year)

Source	2010	2015	2020	2025	2030
MWDOC	5,758	6,157	6,362	6,226	6,256
OCWD (Lower Santa Ana Basin)	13,590	14,921	14,778	14,990	14,960
Recycled Water (projected use)	444	478	500	500	500
Total Water Supply Sources	19,792	21,556	21,640	21,716	21,716
Projected Demand	19,792	21,556	21,640	21,716	21,716

Source: City of Newport Beach, 2005 Urban Water Management Plan.
MWDOC = Municipal Water District of Orange County
OCWD = Orange County Water District

The future supply projection assumes that the City will continue to produce groundwater and purchase local water. Currently, the City purchases imported water from the Metropolitan Water District of Southern California (Metropolitan) through MWDOC.

During short-term periods of water supply reductions, the City would implement its water shortage contingency plan. Since the City’s entire potable water demand is met with imported and local water supplies, the City is highly dependent on OCWD and Metropolitan to meet its needs during dry years. According to the City’s 2005 Urban Water Management Plan (UWMP), even during multiple dry years, the City would have sufficient water to meet its customers’ needs.

According to the City of Newport Beach’s UWMP, water supplies can continue to meet the City’s imported water needs until 2030. Beyond that date, improvements associated with the State Water Project supply, additional local projects, conservation, and additional water transfers would be needed to adequately serve the City. It is noted that at the time the UWMP was approved, a passive park was proposed on the project site; the Civic Center uses were not included in the City’s projected water demand in the UWMP.

The Groundwater Replenishment System (GRS), a joint venture by OCWD and the OCSD that was not included in the UWMP water supply analysis, will help to reduce the County’s and City’s reliance on imported surface water by taking treated wastewater and injecting it into the groundwater basin. The GRS went online in 2008 and produces approximately 70,000 afy of water. OCWD, which provides the groundwater supply to the City, projects that there is sufficient groundwater supplies to meet any future demand requirements in the City. As such, the City’s future water supply projections are based on implementation of City conservation programs, additional recycled water, additional production of groundwater, and MWDOC efforts to reduce the City’s dependence on imported water supplies.

Existing Water Demand. The City maintains water facilities in the vicinity of the proposed project site. As shown in Table 4.13.C, baseline or existing uses on site are estimated to consume approximately 3,971 gpd of potable water, which is 4.45 afy.

Table 4.13.C: Existing Water Demand

Land Use	Area	Demand Factor	Estimated Water Demand (gallons/day)
Existing City Hall (minus Fire Department)	47,809 sf/257 employees	13 gal/employee/day	3,341
Newport Beach Central Library	54,362 sf/70 employees	9 gal/employee/day	630
Total			3,971

Source: Kathyne Ceballos, Junior Civil Engineer. City of Newport Beach Utilities Department. August 2009.
sf = square feet

Wastewater. Wastewater service within the Planning Area is provided by the City, IRWD, and the Costa Mesa Sanitary District (CMSD). Similar to the boundaries of the City’s potable water system, the City provides sewer service to most of the City and has a total service area of approximately 13.5 square miles. The existing and proposed project sites are located within the service territory of the City.

The existing collection system for the City consists of over 200 miles of gravity and force flow sewer mains, varying in size from 2 to 15 inches in diameter. Residential and commercial wastewater collected by the City's wastewater collection system is transported using a system of 21 pump stations for treatment by the OCSD. In addition, OCSD trunk sewers and force mains also receive sewage flows from City sewers at many locations throughout the City. The OCSD trunk sewers, which vary in size from 18 to 42 inches in diameter, substantially reduce the size and number of sewers needed to be built and operated by the City. The OCSD also operates seven pump stations in the City as follows:

- Bitter Point Pump Station (Service Area D0)
- Lido Pump Station (Service Area F0)
- 14th Street Pump Station (Service Area F0)
- A Street Pump Station (Service Area F0)
- Rocky Point Pump Station (Service Area G0)
- Bay Bridge Pump Station (Service Area L0)
- MacArthur Pump Station (Service Area M0)

The OCSD is responsible for safely collecting, treating, and disposing the wastewater generated by 2.3 million people living in a 470-square-mile area of central and northwest Orange County. The two sewage water treatment plants operated by OCSD include Treatment Plant No. 2 in Huntington Beach and Reclamation Plant No. 1 in Fountain Valley.

A majority of the City's sewage flow is pumped to OCSD Plant No. 2, while flows from the portion of the City north of the Corona del Mar (73) Freeway are pumped to Plant No. 1. OCSD Reclamation Plant No. 1 currently maintains a design capacity of 174 million gallons per day (mgd) and treats an average of 92 mgd. Treatment Plant No. 2 maintains a design capacity of 276 mgd and currently treats, on average, a flow of 129 mgd.¹ Currently Plants Nos. 1 and 2 are operating at 53 percent and 47 percent of design capacity, respectively. The OCSD wastewater treatment plants are divided into several operating systems that work together. The major processes are preliminary treatment, primary treatment, anaerobic digestion, secondary treatment, and solids handling.

Wastewater treated by the OCSD is discharged into the ocean through a 120-inch-diameter ocean outfall pipe that extends 5 miles offshore to a discharge point 180 feet below the ocean surface. The treatment levels meet all current State and federal requirements. OCSD also reclaims up to 10 million gallons of treated wastewater every day, which is sent for further processing and then used for landscape irrigation and for injection into the groundwater seawater intrusion barrier.

As shown in Table 4.13.D, baseline or existing uses on site would be estimated to produce approximately 2,546 gpd of wastewater.

¹ Orange County Sanitation District Facts and Key Statistics. January 2009.

Table 4.13.D: Existing Wastewater Generation

Land Use	Area	Demand Factor	Estimated Wastewater production (gallons per day)
Existing City Hall (minus Fire Department)	47,809 sf/257 employees	8 gal/employee/day	2,056
Newport Beach Central Library	54,362 sf/70 employees	7 gal/employee/day	490
Total			2,546

Source: Kathyne Ceballos, Junior Civil Engineer. City of Newport Beach Utilities Department. August 2009.
sf = square feet

Energy. The State CEQA Guidelines, Appendix F, Energy Conservation, state that EIRs are required to include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. The discussion below provides information pertaining to existing energy supplies and energy use patterns in the region and locality.

Electricity. The existing and proposed project sites are within the service territory of Southern California Edison Company (SCE). SCE, an independently owned utility, provides electrical service throughout the City. SCE distributes electricity purchased through the California Power Exchange, which is the electricity marketplace for approximately 80 percent of California’s electricity customers. According to the California Energy Commission (CEC), the SCE service area experienced a peak demand of 19,465 megawatts (MW) in 2000.¹ The CEC estimates that peak demand and net energy load within SCE’s service territory will continue to grow annually by 2.4 percent and 2.0 percent, respectively. In 2006, the CEC projected a peak demand in SCE’s service territory of 24,960 MW in 2012 and a net energy load of 125.2 million megawatt hours (MWh). In 2008, the CEC projected a peak energy demand of 25,258 MW in 2013 and a peak energy demand of 26,382 MW in 2016.

Using established consumption factors provided by the SCAQMD, the annual electrical demand associated with existing conditions on site was calculated. As shown in Table 4.13.E, baseline or existing uses would be estimated to consume approximately 1.2 million kilowatt-hours per year (kWh/yr).

¹ California Energy Commission. California Energy Demand 2008–2018 Staff Revised Forecast. November 2007.

Table 4.13.E: Estimated Existing Electricity Usage

Land Use	Area	Demand Factor	Estimated Water Demand (kWh/yr)
Existing City Hall (minus Fire Department)	47,809 sf/257 employees	12.95 kWh/sf/year	619,127
Newport Beach Central Library	54,362 sf/70 employees	11.55 kWh/sf/year	627,881
Total			1,247,008

Source: SCAQMD Electricity Usage Rates, Table A9-11-A. CEQA Air Quality Handbook. 1993.

kWh/sf/year = kilowatt hours per square foot per year.

kWh/yr = kilowatt hours per year

sf = square feet

Natural Gas. Natural gas resources are drawn upon at naturally occurring reservoirs primarily located outside of the State and delivered via a high-pressure transmission line. California has three primary regional access points where interstate pipelines deliver natural gas into the State. Gas destined for Southern California is accessed at a series of market hubs, with interconnections to Pacific Gas and Electric (PG&E) and The Gas Company. As the gas is transported to its destination, the pressure is maintained with the assistance of compressors. The gas is then received at a storage field (i.e., underground storage tanks) and redistributed through another series of transmission lines.

The Gas Company, the service provider for the existing City Hall site and the proposed project site, service approximately 19 million people in its 23,000-square-mile service territory. The Gas Company system can accept up to 3,875 million cubic feet per day (MMcfd) of interstate and local California supplies. The Gas Company has four storage fields, Aliso Canyon, Honor Rancho, La Goleta, and Playa del Rey, and has a storage capacity of 131.1 billion cubic feet (Bcf) and a daily withdrawal capacity of 3,195 MMcfd.¹ There are also several new supply and storage projects under consideration at the State level. If approved, these projects could add as much as 1,700 MMcfd of natural gas to the statewide system.² According to a CEC staff report, “As existing producing regions mature and new resources are developed, it is only natural that new pipelines will be built and supply shares will shift.”³

Using established consumption factors provided by the SCAQMD, the annual natural gas demand associated with existing conditions on site was calculated. As shown in Table 4.13.F, baseline or existing uses on site would be estimated to consume approximately 204,342 cubic feet (cf) of natural gas per month. This represents approximately 0.006 percent of the available withdrawal capacity of The Gas Company.

¹ Southern California Gas Company and San Diego Gas and Electric. Gas System Expansion Study: Receipt Point and Storage Expansion. December 2008.

² W. William Wood Jr. Natural Gas Infrastructure. May 2009.

³ Ibid.

Table 4.13.F: Estimated Existing Natural Gas Consumption

Land Use	Area (sf)	Consumption Factor (cf/sf/mo)	Natural Gas Consumption (cf/mo)
Existing City Hall (minus Fire Department)	47,809 sf/257 employees	2.0	95,618
Newport Beach Central Library	54,362 sf/70 employees	2.0	108,724
Total			204,342

Source: SCAQMD *CEQA Handbook*, Natural Gas Usage Rate (G), Table A9-12-A.

cf/sf/mo = cubic feet per square foot per month

cf/mo = cubic feet per month

sf = square feet

4.13.3 Regulatory Setting

Federal Policies and Regulations. There are no federal policies or regulations applicable to public services, utilities, and service systems for the proposed project.

State Policies and Regulations.

California Integrated Water Management Act of 1989. The California Integrated Waste Management Act of 1989 (Public Resource Code [PRC] Division 30), enacted through AB 939 and modified by subsequent legislation, required all California cities and counties to implement programs to reduce, recycle, and compost at least 50 percent of wastes by 2000 (PRC Section 41780). The State determines compliance with this mandate to “divert” 50 percent of generated waste (which includes both disposed and diverted waste) through a complex formula. This formula requires cities and counties to conduct empirical studies to establish a “base year” waste generation rate against which future diversion is measured. The actual determination of the diversion rate in subsequent years is arrived at through deduction, not direction measurement: instead of counting the amount of material recycled and composted, the city or county tracks the amount of material disposed at landfills, then subtracts the disposed amount from the base year amount. The difference is assumed to be diverted (PRC 41780.2).

Senate Bill 1374. Senate Bill (SB) 1374 requires that the annual report submitted to the CIWMB include a summary of the progress made in diversion of construction and demolition waste materials. In addition, SB 1374 requires that the CIWMB adopt a model ordinance suitable for adoption by any local agency to require 50 to 75 percent diversion of construction and demolition waste materials from landfills by March 1, 2004. Local jurisdictions are not required to adopt their own construction and demolition ordinances, nor are they required to adopt CIWMB’s model by default. However, adoption of such an ordinance may be considered by CIWMB when determining whether to impose a fine on a jurisdiction that has failed to implement its Source Reduction and Recycling Element (SRRE).

Assembly Bill 75. AB 75, passed in 1999, took effect on January 1, 2000. This bill added new provisions to the PRC, mandating that State agencies develop and implement an IWMP; it also mandated that community service districts providing solid waste services report disposal and diversion information to the city, county, or regional agency in which the community service district is located.

Appendix F of the State CEQA Guidelines. Appendix F, Energy Conservation, states that EIRs are required to include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. In addition, Appendix F seeks inclusion of information in the EIR addressing the following:

- Measures to reduce wasteful, inefficient and unnecessary consumption of energy during construction, operation, and maintenance of the project;
- The siting and orientation of buildings and structures to minimize energy consumption, including transportation energy;
- Measures for reducing peak energy demand;
- Incorporation of alternative fuels (particularly renewable ones) or energy systems; and
- Incorporation of recycling of nonrenewable resources.

Public Schools. California Code of Regulations (CCR) Section 17620 authorizes school districts to levy a fee, charge, dedication, or other requirements against any construction of new residential, commercial, and industrial uses in their boundaries for the purpose of funding the construction of new schools or school facilities. The maximum fee amount that school districts can assess is limited by statutes provided in CCR Section 65995. Level 1 fee maximums are \$2.14/sf for residential development and \$0.34/sf for commercial and industrial development. The California Department of Education (DOE) permits local school districts to increase these fees, subject to DOE review, and with approval of a nexus study from the school district that demonstrates that costs incurred by the school district for the provision of school facilities and services are higher than Level 1 funding provides. In such an instance, a nexus must be demonstrated in the study between the increase proposed by the local school district and the actual cost of provision of school facilities and service. It should be noted that the City is exempt from payment of school facility fees.

Local Policies and Regulations.

City of Newport Beach Municipal Code.

- Title 9, Fire Code, of the City's Municipal Code, contains provisions that deal with a range of issues, including articulating fire flow requirements, the provision of automatic

sprinkler systems in public buildings, requiring an accurate occupant count in public places, and the provision of emergency power in public assembly places.

- Title 9 also requires that plans indicate that all buildings shall have fire sprinklers installed by the property owner/developer in accordance with the Newport Beach Municipal Code. Said sprinklers shall be installed prior to each final Building and Zone inspection.
- Title 14 of the City's Municipal Code provides a mechanism for quickly imposing mandatory water conservation measures ranging from voluntary consumption reductions to measures that restrict water usage to the minimum necessary for basic human health and sanitation. The mandatory restrictions on water use and the prohibitions of activities that waste water as well as the penalties and surcharges provided by this chapter are the minimum controls necessary to ensure that adequate supplies of water are available now and in the future.
- Title 14 also establishes reasonable procedures and standards for the design, installation, and maintenance of water-efficient landscapes in conjunction with new construction projects within the City to promote the conservation and efficient use of water within the City and prevent the waste of available water resources.
- Title 20 of the City Municipal Code contains an ordinance on recyclable materials. This section establishes a comprehensive set of regulations and guidelines regarding the requirement for specific areas for collecting and loading recyclable materials in certain developments in the City.

City of Newport Beach General Plan. Conservation goals and policies are included in the Natural Resources Element of the City General Plan (2006). The following goals and policies are applicable to the proposed project.

NR 1. Minimized water consumption through conservation methods and other techniques.
Policies

NR 1.1 Water Conservation in New Development. Enforce water conservation measures that limit water usage, prohibit activities that waste water or cause runoff, and require the use of water-efficient landscaping and irrigation in conjunction with new construction projects. (*Imp 2.1, 7.1, 17.1*)

NR 1.2 Use of Water Conserving Devices. Establish and actively promote use of water conserving devices and practices in both new construction and major alterations and additions to existing buildings. This can include the use of rainwater capture, storage, and reuse facilities. (*Imp 6.1, 7.1, 17.1*)

NR 1.4 Alternative Conservation Measures. Explore implementation of alternative conservation measures and technology as they become available. (*Imp 7.1, 17.1, 18.1*)

NR 24. Increased energy efficiency in City facilities and operations and in private developments.

NR 24.1 Incentives for Energy Conservation. Develop incentives that encourage the use of energy conservation strategies by private and public developments. (*Imp 7.1*)

NR 24.2 Energy-Efficient Design Features. Promote energy-efficient design features. (*Imp 7.1*)

NR 24.3 Incentives for Green Building Program Implementation. Promote or provide incentives for “Green Building” programs that go beyond the requirements of Title 24 of the California Administrative Code and encourage energy efficient design elements as appropriate to achieve “green building” status. (*Imp 7.1*)

NR 24.4 Incentives for Provision of LEED Certified Buildings. Provide incentives for implementing Leadership in Environmental and Energy Design (LEED) certified building such as fee waivers, bonus densities, and/or awards recognition programs. (*Imp 2.1, 7.1*)

4.13.4 Impact Significance Criteria

The following criteria are based on the City’s Initial Study, the Initial Study Checklist, and Appendix G of the State CEQA Guidelines. The effects of the proposed project on public services, utilities, and service systems are considered to be significant if the proposed project would:

Threshold 4.13.1: Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for *fire protection*

Threshold 4.13.2: Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for *police protection*

Threshold 4.13.3: Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for *public schools*

Threshold 4.13.4: Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could

cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for *library services*

- Threshold 4.13.5:** Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for *public transportation*
- Threshold 4.13.6:** Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board
- Threshold 4.13.7:** Require or result in the construction of new water or wastewater treatment or collection facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- Threshold 4.13.8:** 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
- Threshold 4.13.9:** Have insufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed
- Threshold 4.13.10:** Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments
- Threshold 4.13.11** Result in substantial adverse physical impacts associated with the provision of new or physically altered energy transmission facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable levels of service
- Threshold 4.13.12:** Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs
- Threshold 4.13.13:** Fail to comply with federal, State, and local statutes and regulations related to solid waste
- Threshold 4.13.14:** Include a new or retrofitted storm water treatment control Best Management Practice (BMP), (e.g., water quality treatment basin, constructed treatment wetland), the operation of which could result in significant environmental effects (e.g., increased vectors and odors)?

4.13.5 Project Impacts

Threshold 4.13.1: **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for *fire protection*?**

Less than Significant. As discussed in greater detail in Section 4.9, the proposed project has the potential to increase employment in the City by 295 employees and to result in a proportional increase in population (39 people, assuming the same ratio of employees who live in the City, 13 percent). This potential increase in employees and population could result in an increase in calls for emergency fire and medical services. The project is anticipated to create the typical range of service calls for office and government office developments, including emergency medical and rescue service. In a letter dated May 22, 2009 (Appendix L), the Nbfd indicated that the proposed project would not substantially increase response times or create a substantial increase in demand for staff, equipment, or other emergency activities. The letter also stated that the proposed project would be serviceable within the Nbfd's current staffing and resources, and the proposed project would not increase response times for fire and emergency vehicles to the existing City Hall site or the proposed project site. Because the same number of employees is expected to remain at the existing City Hall site (257), demand for services and the resulting response time would not change at the existing site. With an additional 295 employees at the proposed project site and the close proximity of Fire Station No. 3 to the site (the average response time for Station No. 3 is approximately 4.5 minutes), the response time goal of 7 minutes, 20 seconds, 90 percent of the time, can be met by fire and emergency services.

According to Project Design Feature (PDF) PSU-1, the City would also comply with Title 9 of the Municipal Code (Fire Code), which requires installation of fire sprinklers and articulates fire flow requirements, access requirements, placement of hydrants, and other fire protection requirements. Compliance with Title 9 would further reduce potential impacts related to fire protection services within the City. Therefore, project impacts related to fire protection would be less than significant, and no mitigation is required.

Threshold 4.13.2: **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for *police protection*?**

Less than Significant. As discussed in greater detail in Section 4.9, the proposed project has the potential to increase employment in the City by 295 employees and to result in a proportional increase in population. This potential increase in employees and population could result in an increase in calls for police services. The NBPD goal would be to maintain existing response times and staffing levels. Even if all 295 employees were new residents to the City, this would be less than 1 percent

growth over the population projection for 2012, and the addition of 295 persons would not change the existing ratio of officer to residents (i.e., 1.7 officer per 1,000 residents).

In a letter dated May 21, 2009 (Appendix L), the NBPB indicated that the proposed project would not substantially increase response times or create a substantial increase in demand for staff, facilities, equipment, or police services. The letter also stated that the NBPB will be able to adequately service the proposed project. Therefore, potential impacts related to police services are less than significant. No significant impacts to police services would result from project implementation, and no mitigation is required.

Threshold 4.13.3: **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for *public schools*?**

Less than Significant. As discussed in greater detail in Section 4.9, the proposed project has the potential to increase employment in the City by 295 employees and to result in a proportional increase in population. According to the NMUSD, the proposed project would not result in a significant increase in students, and any increase generated by the proposed project could be accommodated by existing school facilities. NMUSD does not have student generation rates for government office uses; however, assuming that all 295 people became residents of the City within the NMUSD and 20 percent of the potential increase in employee/residents also has children attending grades K–12, implementation of the proposed project would result in an enrollment increase of approximately 59 new students. The increase in enrollment would be spread out between all 32 public schools in the school district, resulting in a less than significant increase in student enrollment. It should also be noted that 59 additional students would be less than one percent growth over the overall student enrollment projected in the City's General Plan and one percent growth over the projected increase in enrollment for NMUSD. As stated above in the regulatory setting in this section, State law stipulates that each school district can collect fees for new development. Because the City is a government entity, it is exempt from this fee, but any new residential development constructed in the City to accommodate future growth would not be exempt. Therefore, potential impacts related to public schools are less than significant. No significant impacts to public schools would result from project implementation, and no mitigation is required.

Threshold 4.13.4: **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for *library services*?**

Less than Significant. The proposed project includes an approximate 17,000 sf expansion of the existing Newport Beach Central Library. The expansion area would provide a reading room, tenant

space, media room, and other ancillary uses. According to the NBPL, this expansion would be based on a flexible plan that could be adjusted to accommodate a potential rapid change in demographics. The Central Library, with the 17,000 sf expansion, would be able to better meet demand for children's materials, space, and activities. In addition, the expanded library would have a great physical presence in the City with its integration into the proposed Civic Center. Residents who visit City Hall would find it convenient to visit the Library. Therefore, an increase in the number of first-time visitors is expected. The Central Library also provides informational services and delivery of materials to City employees; use of this service is expected to increase with closer proximity between the Library and City Hall administration building. Generation of additional demand for library services resulting from a population increase generated by the proposed project would be offset through the expansion of the Library and library services, including the City Hall delivery program. Project impacts related to library services would be less than significant, and no mitigation is required.

Threshold 4.13.5: **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for public transportation?**

Less than Significant. OCTA currently operates six bus routes that service the proposed project area via the Newport Transportation Center located immediately north of the proposed project site. OCTA Route 1 operates on Avocado Avenue south of San Miguel. In a letter dated April 22, 2009, OCTA indicated that it considered that installation of a new bus stop at Avocado Avenue and Farallon Drive. In another letter dated May 29, 2009, OCTA stated that the new bus stop, if approved, would likely open concurrently with the proposed City Hall. Through existing programs, the City encourages the use of alternative transportation, including public transportation and use of bicycles. OCTA indicated that while more riders would be expected as a result of the proposed project, no adverse impacts to existing services are anticipated.

Because existing routes in the vicinity of the proposed project are operating within capacity and additional ridership resulting from the proposed project could be accommodated, no significant impacts to public transportation services are anticipated, and no mitigation is required.

There are existing bicycle facilities (e.g., lanes and paths) in the vicinity of the proposed project, including a Class I Off-Road Paved Bikeway on MacArthur Boulevard and Class II On-Road Paved Striped Bikeways on San Miguel and Avocado Avenue south of San Miguel. Existing bikeways would be maintained as part of the proposed project. For additional information regarding potential impacts to bikeways, refer to Section 4.2, Traffic.

In addition to maintaining current bike lanes, the City would continue to seek new opportunities to promote commuter carpooling and transit use, as well as alternative transportation for City employees and visitors to the Civic Center (PDF GHG-2).

Threshold 4.13.6: Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Less than Significant. As previously stated, OCSD would provide treatment of wastewater for the proposed project. The City maintains sanitary sewers in Avocado Avenue to which the proposed project would connect. The total estimated wastewater generation for the proposed project would be 1.5 MG per year.¹ Anticipated wastewater treatment demand for the proposed City Hall and Park would be in addition to existing wastewater treatment demand for the existing City Hall (assuming reuse) and the existing Library.

It is anticipated that wastewater from the proposed project site would be treated at Reclamation Plant No. 2, located in Huntington Beach. Reclamation Plant No. 2 maintains a design capacity of 276 mgd and currently treats an average flow of 129 mgd.² Currently, Plant No. 1 and Plant No. 2 are operating at 53 percent and 47 percent of design capacity, respectively. Increased wastewater flows from the proposed project can be accommodated within the existing design capacity of the plant. Because the Reclamation Plant has adequate capacity, the proposed project would not exceed the wastewater treatment requirements of the Santa Ana RWQCB. Project impacts related to wastewater treatment requirements are less than significant, and no mitigation is required.

Threshold 4.13.7: Would the project require or result in the construction of new water or wastewater treatment or collection facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

OR

Threshold 4.13.9: Would the project have insufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Note: This section discusses the potential project impacts related to water supplies and facilities. Wastewater generation facilities are discussed under the following threshold.

Less than Significant. The proposed project is an urban infill project in an area presently served by all utilities. As previously stated, the City maintains a water main in Avocado Avenue. The proposed project would include a looped on-site water system with a 4-inch pipe on the central parcel that would supply both domestic and fire flow water. There are two points of connection to the water main for the central parcel and one point of connection serving the northern parcel.

Project development will result in both short-term and long-term increases in water demand. Short-term demand for water may occur during demolition, excavation, grading, and construction activities on site. Water demand for soil watering (fugitive dust control), cleanup, masonry, painting,

¹ ARUP North America Ltd. Newport Beach City Hall and Park Development Plan Drainage Report and Utility Demand Estimation. July 2009.

² Orange County Sanitation District Facts and Key Statistics. January 2009.

and other activities would be temporary and would cease at project build out. Overall, demolition and construction activities require minimal water and are not expected to have any adverse impacts on the existing water system or available water supplies. Therefore, impacts associated with short-term construction activities are considered less than significant, and no mitigation is required.

New development on site will result in an increase in long-term water demand. All new development is required to comply with State law regarding water conservation measures, including pertinent provisions of Title 20 and Title 24 of the California Government Code regarding the use of water-efficient appliances. As stated in PDF PSU-4, the proposed project would also utilize additional water conservation measures in the proposed City Hall and Park, including, but not limited to:

- Low-flow faucets
- Dual flush water closets and pint (1/8 gallon per flush) urinals
- Drip irrigation wherever practical
- A high percentage of drought-tolerant, native species for landscaping
- Cooling tower water use reduction via nonchemical water treatment
- Use of nonpotable water to supply some or all irrigation and toilet flushing through the use of gray water, on-site reuse of rainwater, and/or capture of dry flows as they exit the site¹

Table 4.13.G, shows the difference between conventional construction and what is being proposed by the project in terms of water conservation.

Table 4.13.G: Basis of Water Reduction Calculations for the Proposed Project

		Conventional Construction	Proposed Project
Flow Fixtures	Lavatory faucets Kitchenette faucets Water closets Urinals	2.5 gpm 2.5 gpm 1.6 gpf 1 gpf	0.5 gpm 2 gpm Dual flush – average 1.28 gpf 0.125 gpf
Irrigation	Irrigation Average Plant Factor ¹	100% spray 0.6	50 % drip, 50 % spray 0.3 (50% less water)
Mechanical	Cooling Tower	3 cycles of concentration	8 cycles of concentration

Source: ARUP North America Ltd. Newport Beach City Hall and Park Development Plan Drainage Report and Utility Demand Estimation. July 2009.

¹ In proportion with water demand: 0.1–0.3 = low water, 0.4–0.6 = moderate water, 0.7–0.9=high water

gpf = gallons per flush

gpm = gallons per minute

Based on the water conservation techniques listed above, the total annual water use for the proposed project would be 8.4 MG, which is 45 percent below the water demand of a similar project using conventional construction (15.3 MG annually). Even after reducing the irrigation demand by

¹ The City may choose to connect the project site to the municipal reclaimed water supply in the future, but such a connection is not included as part of the proposed project analyzed in this EIR.

45 percent, irrigation would remain the largest expected water use for the proposed project. The expected water use for building fixtures would be 2.1 MG, which equates to 15 gpd per occupant. Anticipated water demand for the proposed project would be in addition to existing water demand for the existing City Hall (assuming reuse) and the existing Library.

Based on data shown in Table 4.13.B, the City's total expected water demand at project build out in 2012 is expected to be 20,498 afy (approximately 6,679 MG). Because the UWMP assumed use of the entire proposed project site as a passive park that would demand more water use than the proposed Civic Center uses, project water demand would not exceed the City's expected water demand at project build out. The proposed project would represent a very small (0.000000131 percent) portion of the City's total projected water demand in 2012. The change in land uses (i.e., park to Civic Center) would not materially affect the full build-out water demand projections utilized in the UWMP dated December 2005, nor would the proposed project change the UWMP conclusions with respect to projected water supply reliability. The project would not necessitate new or expanded water entitlements, and the City would be able to accommodate the increased demand for potable water through existing water acquisition programs and pumping from existing wells (see existing setting, above). The only new water infrastructure that would be required for project build out would occur on site as part of proposed project construction (i.e., installation of new water pipes and meters on site). The existing City Hall site would be converted to other public facilities uses. The site and site occupancy would continue to be served by the existing water infrastructure. Therefore, sufficient water supplies are available to serve the project, project impacts associated with water demand are less than significant, and no mitigation is required.

Threshold 4.13.7: **Would the project require or result in the construction of new water or wastewater treatment or collection facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

OR

Threshold 4.13.10: **Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

Note: This section discusses wastewater generation and facilities. Water supplies and facilities are discussed under the previous threshold.

Less than Significant. The proposed project is an urban in-fill project in an area presently served by all utilities. As previously stated, wastewater (sewer) collection for the proposed project site would be provided by the City, and OCSD would provide treatment of wastewater. The City maintains sanitary sewers in Avocado Avenue to which the proposed project would connect. The total estimated wastewater generation for the proposed project would be 1.5 MG per year.¹ Anticipated wastewater

¹ ARUP North America Ltd. Newport Beach City Hall and Park Development Plan Drainage Report and Utility Demand Estimation. July 2009.

treatment demand for the proposed project would be in addition to existing wastewater treatment demand for the existing City Hall (assuming reuse) and the existing Library.

It is anticipated that wastewater from the proposed project site would be treated at Reclamation Plant No. 2, located in Huntington Beach. Treatment Plant No. 2 maintains a design capacity of 276 mgd and currently treats on average a flow of 129 mgd.¹ Currently Plant No. 1 and Plant No. 2 are operating at 53 percent and 47 percent of design capacity, respectively. Increased wastewater flows from the proposed project can be accommodated within the existing design capacity of the plant. Therefore, the proposed project would not require, nor would it result in, the construction of new wastewater treatment or collection facilities or the expansion of existing facilities other than those facilities to be constructed on site that could cause significant environmental effects. Project impacts related to the construction of wastewater treatment or collection facilities and the capacity of the wastewater treatment provider are less than significant, and no mitigation is required.

Threshold 4.13.8: Would the project 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?

Less than Significant. Runoff from the project site enters the City storm drain system at six different locations (discharge points) along the southwestern portion of the site. The capacity of the downstream storm drain network is dependent on peak discharge rates entering the system. Under the proposed conditions, there would be a net decrease in peak discharge at four of the discharge points. At the remaining two discharge points, the increase in peak discharge would be no more than 1 percent or 1-CFS, or both.² Total storm volumes would increase at some discharge points; however, the increase is not anticipated to impact capacity of the downstream storm drain system. The stormdrains have sufficient capacity to absorb the predicted increase and still operate within the standards of the Orange County Hydrology Manual. Because the decrease and/or negligible increase in peak discharge would not adversely affect the capacity of downstream networks, construction or expansion of storm water drainage facilities would not be required. Therefore, impacts to storm water drainage facilities are less than significant, and no mitigation is required.

Threshold 4.13.11 Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered energy transmission facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable levels of service?

Electricity. For the purposes of electricity demand analysis, the discussion below addresses the CEQA threshold as included in Appendix G of the CEQA Guidelines and stated above, as well as the issues identified in Appendix F of the State CEQA Guidelines, Energy Conservation.

Less than Significant. The proposed project is an urban in-fill project in an area presently served by all utilities. New development on site will result in an increase in long-term demand for electricity.

¹ Orange County Sanitation District Facts and Key Statistics. January 2009.

² ARUP North America Ltd. Newport Beach City Hall and Park Development Plan Drainage Report and Utility Demand Estimation. July 2009.

All new development is required to comply with State law regarding energy conservation measures, including pertinent provisions of Title 24 of the California Government Code. Title 24 covers the use of energy-efficient building standards, including ventilation, insulation, construction, and the use of energy-saving appliances, conditioning systems, water heating, and lighting. As stated in PDF PSU-5, in addition to the requirements of Title 24, the proposed project would also utilize additional energy conservation measures including, but not limited to:

- A high-performance facade
- Mixed mode active and natural ventilation
- Under-floor air distribution
- Daylight dimming controls
- Low-wattage light fixtures
- Exterior shading devices
- Proper building orientation

If the proposed project were constructed using conventional construction methods, but meeting Title 24 standards, they would be anticipated to generate an annual electricity demand of 1,327,000 kWh/yr and a peak demand of 1,200 kilo Volt-Ampere (kVA). Based on the inclusion of the energy conservation measures listed above, a reduction in energy consumption of 20 percent below Title 24 levels is anticipated with a 10 percent reduction in peak demand. The proposed project, by including the energy conservation measures listed above, would be expected to generate an electricity demand of 1,061,000 kWh/yr and a peak demand of 960 kVA. Anticipated energy demand for the proposed project would be in addition to existing electricity demand for the existing City Hall (assuming reuse) and the existing Library.

In 2006 the CEC projected a peak demand in SCE's service territory of 24,960 MW in 2012 and a net energy load of 125.2 million MWh. In 2008, the CEC projected a peak energy demand of 25,258 MW in 2013 and a peak energy demand of 26,382 MW in 2016. Based on CEC projections for SCE's service area in 2012,¹ the maximum project-related annual consumption will represent less than 0.008 percent of the forecast net energy load. Based on these estimates, sufficient transmission and distribution capacity exists, off-site improvements will not be necessary, and on-site improvements will occur in a logical, efficient manner utilizing the most up-to-date design, construction, and operational methods available. In addition, implementation of PDFs GHG-1, GHG-2, PSU-2, and PSU-5 would ensure that energy conservation efforts are incorporated into the project with the intention of reducing overall demand. Impacts associated with the provision of electricity would be less than significant. The supply and distribution of electricity to the proposed project would not disrupt power to the surrounding area or adversely affect service levels. Therefore, impacts associated with the proposed project's electricity demand would be less than significant, and no mitigation is necessary.

The proposed project incorporates design components, PDFs, and mitigation measures that reduce overall energy consumption, including electricity usage, consistent with the objectives stated in

¹ California Energy Commission, 2002–2012 Electricity Outlook Report: energy.ca.gov/electricity_outlook/index.html, accessed August 13, 2006.

Appendix F of the State CEQA Guidelines. For example, the City Hall administration building is sited to minimize the summer heating effects of the sun and maximize the moderating effects of coastal breezes, reducing the energy that will be required to cool the structure. Specifically, by orienting the long ends of the building east and west, the expanse of the southern face (the one that receives the most heat gain in the north hemisphere) is reduced. The deep overhangs help to modulate the light and heat gain on the east and west faces of the structure. By facing the roof 'wave' forms to the north, the slope of the roof is at an angle that maximizes the efficiency of photovoltaic (PV) panels, should they be installed on those roof forms. Also, the north-facing clerestory windows allows for even (not direct) light throughout the day. The indirect natural lighting allows the artificial lighting on the second floor to be dimmed or off most of the day, reducing the amount of artificial lighting needed. The reduced requirement for artificial lighting conserves energy needed to power the lights and the mechanical systems energy needed to remove the heat that those lights would generate.

In addition, PDF GHG-1 specifies that the City shall register the new City Hall administration building, Community Room, and Council Chambers in the LEED-NC Silver program and seek LEED-NC Silver certification after construction. LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality. One of the benefits of LEED design is the opportunity to reduce energy needs through environmentally friendly site and building design. PDF GHG-2 identifies eight specific actions that the City will take to reduce waste and energy consumption and to increase the efficiency of its operations in order to minimize impacts to the environment and enhance the sustainability of its operations. PDF PSU-5, Energy Conservation (see Section 4.13.8) specifies that the proposed project would utilize energy conservation measures in the proposed Civic Center including, but not limited to, high -performance facade, mixed- mode active and natural ventilation, under -floor air distribution, daylight dimming controls, low-wattage light fixtures, exterior shading devices, and proper building orientation. Also, PDF PSU-4 specifies project commitments to water conservation. The collection, treatment, and delivery of water in California requires approximately 19 percent of the State's overall electricity use; therefore, reductions in water use will also result in reductions in electrical energy use.

Section 4.8 of this EIR, Global Climate Change and Greenhouse Gas Emissions, includes an analysis of the project emissions associated with energy consumption and notes that in addition to the PDFs described above, the project will implement mitigation measures to further reduce greenhouse gas emissions through the conservation of electricity, among other means. Therefore, the project incorporates aggressive commitments to reduce and minimize electricity consumption and avoid wasteful or inefficient consumption of energy. By minimizing electricity consumption, the project minimizes effects to the provision of electrical power and the potential for associated physical impacts.

Natural Gas.

Less than Significant. The proposed project is an urban in-fill project in an area presently served by all utilities. New development on site would result in an increase in long-term demand for natural gas. Gas lines sufficient to handle existing uses plus the proposed project currently exist in Avocado Avenue. Project design includes accessing and tying into the existing natural gas system. The

proposed project would be anticipated to generate an annual natural gas demand of 17,000 therms¹/yr (1,760 sf/hr). In comparison, if the proposed project were constructed using conventional design techniques, it would be anticipated to generate an annual natural gas demand of 21,200 therms/yr (2,200 sf/hr). This represents a 20 percent reduction (over Title 24 requirements) in natural gas consumption and demand.

According to the CEC, The Gas Company has adequate pipeline and storage capacity to receive supplies through 2012 (project opening year) and has planned pipeline and storage improvements to address future needs. Consequently, the supply and distribution of natural gas within the area surrounding the proposed project would not be reduced or inhibited as a result of the proposed project, and levels of service to off-site users would not be adversely affected. In addition, implementation of PDFs GHG-1, GHG-2, and PSU-2 would ensure that energy conservation efforts are incorporated into the project with the intention of reducing overall demand. Therefore, impacts related to the provision of natural gas services to the proposed project would be less than significant, and the proposed project would not require new or physically altered transmission facilities (other than those facilities needed for on-site distribution and hook-up into the existing system). Similarly, no significant impacts to local or regional supplies of natural gas would occur as a result of the proposed project, and no mitigation is necessary.

Threshold 4.13.12: Would the project be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less than Significant. The proposed project would result in additional solid waste generation during construction and operation. Project construction would result in the removal of approximately 320,000 cy of dirt from the project and demolition debris from the portion of the library that would be removed to allow for expansion (i.e., a section of the north wall). For the purpose of this analysis, it is assumed that dirt and construction debris would be disposed of at the Prima Deshecha Landfill, while operational solid waste would be disposed of at the Frank R. Bowerman Landfill. Solid waste is expected to be generated at the same rate at the existing City Hall site, should the site be reused for government or commercial office.

As shown in Table 4.13.H, implementation of the proposed project would result in an increase of approximately 196 tpy of solid waste. An increase of approximately 1,074 lbs/day of solid waste would be committed to the OCWR's landfills or other waste disposal facilities.

As of June 30, 2008, Prima Deshecha Landfill has a remaining air space capacity estimated at approximately 135.09 million cy and could, therefore, accommodate construction debris from the proposed project site. The Frank R. Bowerman Landfill, which is permitted to receive 8,500 tpd and has an average daily tonnage of approximately 7,000 tons, will be able to adequately meet the project's operational solid waste disposal demand. The proposed project would not result in any significant impacts to solid waste landfill capacity in the County.² Therefore, impacts to solid waste would be less than significant, and no mitigation is necessary.

¹ 1 therm is approximately the energy equivalent of burning 100 cubic feet of natural gas.

² Virginia Roman, Staff Specialist. Orange County Waste and Recycling. Email dated May 11, 2009. (Appendix L).

Table 4.13.H: Estimated Solid Waste Generation

Land Use	Area	Generation Factor	Listed Waste Generation Source Category	Estimated Solid Waste Generation (tons per year)
Proposed Project				
City Hall administration building, Community Room, and Council Chambers	98,000 sf or 295 employees	0.59 tons/employee/year	Government	174
Parking Structure	450 spaces	No generation factor applicable	N/A	N/A
Newport Beach Central Library Expansion	17,135 sf	0.0013 tons/sf/year	Education/Schools	22.28
Existing Structures (existing City Hall and Library)				
Existing City Hall (minus Fire Station No. 2)	47,809 sf/257 employees	0.59 tons/employee/year	Government	151.63
Newport Beach Central Library	54,362 sf/70 employees	0.0013 tons/sf/year	Education/Schools	70.67

Source: California Integrated Waste Management Board, Estimated Solid Waste Generation Rates for Institutions: <http://www.ciwmb.ca.gov/wastechar/WasteGenRates/Institution.htm> (accessed April 24, 2009).

sf = square feet

N/A = not applicable

Threshold 4.13.13: Would the project fail to comply with federal, State, and local statutes and regulations related to solid waste?

Less than Significant. Solid waste practices in California are governed by multiple federal, state, and local agencies that enforce legislation and regulations ensuring that landfill operations minimize impacts to public health and safety and the environment. An important part of OCWR’s mission is to apply sound environmental practices to ensure compliance with these regulations. Additionally, OCWR has an adopted CIWMP that requires countywide facilities to meet the 15-year capacity requirements. OCWR is also obligated to obtain a Solid Waste Facilities Permit, a Storm Water Discharge Permit, and permits to construct and operate gas management systems and meet Waste Discharge Requirements. The LEA, SCAQMD, and RWQCB enforce landfill regulations related to health, air quality, and water quality, respectively. The proposed project would not inhibit OCWR’s compliance with the requirements of each of the governing bodies.

It should also be noted that the City complies with all federal, State, and local statutes and regulations related to solid waste (refer to PDF PSU-3). As described in PDF PSU-3, AB 939 required that after 2000, the City divert at least 50 percent of solid waste from landfills through conservation, recycling, and composting. As described in PDF PSU-3, the City’s contractual agreement with the various waste haulers within the City obligates the City to meet or exceed the diversion requirements set forth in AB 939. For the 2006 reporting year (the last reporting year available), data showed that the City was

at a 60 percent diversion rate.¹ Therefore, the proposed project would comply with federal, State, and local statutes and regulations related to solid waste, and no mitigation is required.

Threshold 4.13.14: **Would the project include a new or retrofitted storm water treatment control Best Management Practice (BMP), (e.g., water quality treatment basin, constructed treatment wetland), the operation of which could result in significant environmental effects (e.g., increased vectors and odors)?**

Less than Significant. Storm water treatment control BMPs proposed as part of the project are discussed in detail in Section 3.5, Project Characteristics, and Section 4.10, Hydrology and Water Quality. Proposed BMPs include underground detention storage tanks, biofiltration strips and swales, dry detention basins or bioretention basins, extended detention basins, and media filters. BMPs would be designed in accordance with the Orange County Drainage Area Management Plan (DAMP) requirements. The proposed biofiltration strips and swales, bioretention, and detention basins would be unlined to allow for infiltration at natural rates. In addition, these BMPs would contain subdrains to allow excess treated water that does not infiltrate to drain off site to minimize excess ponding and vector and odor concerns.

The City would be responsible for all maintenance activities associated with the storm water Treatment Control BMPs. BMPs would be inspected periodically by a designated staff member, such as the facilities manager, to ensure they are functioning properly. Routine and periodic maintenance activities such as debris and sediment removal would be conducted by the City's landscape maintenance crew. Nonroutine maintenance such as major reconstruction or replacement would be handled by contractors with experience in constructing storm water Treatment Control BMPs. Because the BMPs would be designed, inspected, and maintained to prevent ponding, vectors, and odors, impacts related to operation of storm water Treatment Control BMPs are considered less than significant, and no mitigation is required.

4.13.6 Cumulative Impacts

For the analysis of public services and utilities, the study area considered for the cumulative impact of other projects consisted of: (1) the area that could be affected by future proposed project activities, and (2) the areas affected by other projects whose activities could directly or indirectly affect the public services and utilities of the proposed project site within a service area.

Fire Protection. The geographic area for cumulative analysis of fire protection services is defined as the service territory for NBFDF. The City is almost fully built-out, with most new development occurring as in-fill development or redevelopment. The contribution of these projects to area growth is reflected in Orange County Projections-2006 (OCP-2006) estimates and has been taken into account in long-range planning efforts undertaken by agencies such as NBFDF. NBFDF anticipates cumulative demand in order to plan for overall service. The NBFDF is currently meeting its response

¹ California Integrated Waste Management Board (CIWMB). Website accessed July 19, 2009.

time objectives and, in light of past, present, and reasonably foreseeable projects, expects to continue meeting its response time objectives. Therefore, no cumulative impacts are anticipated.

In addition, Nbfd confirmed that the project could be accommodated with adequate fire protection and emergency medical services. The Nbfd's determination that adequate service can be provided includes consideration of area demand in light of cumulative planned or anticipated projects. Therefore, with implementation of project PDFs the project's demand for fire protection services would not result in or contribute to a significant cumulative impact to fire protection services, and no mitigation is required.

Police Protection. The geographic area for cumulative analysis of police protection services is defined as the service territory for the NBPd. The City is almost fully built out, with most new development occurring as in-fill development or redevelopment. The contribution of these projects to area growth is reflected in OCP-2006 estimates and has been taken into account in long-range planning efforts undertaken by agencies such as NBPd. NBPd anticipates cumulative demand in order to plan for overall service. The NBPd is currently meeting its staffing and response time objectives and, in light of past, present, and reasonably foreseeable projects, expects to continue meeting those objectives. In addition, the need for additional police protection services associated with cumulative growth would be addressed through the annual budgeting process, when budget adjustments may be made to meet changes in service demand. Therefore, no cumulative impacts are anticipated as a result of past, present, or reasonably foreseeable projects, and the proposed project's demand for police services would not be cumulatively considerable.

Public Schools. The geographic area for cumulative analysis of school services is defined as the service territory of the NMUSD. According to the City's General Plan EIR, the NMUSD indicated that school capacity in 2006 was adequate to serve current levels of enrollment, but that the capacity of the NMUSD would be potentially exceeded with build out of the General Plan. The City adopted General Plan policies that would facilitate the construction of new schools and found that cumulative impacts associated with the provision of new educational facilities would be considered less than significant.

The proposed project would not generate a substantial increase in population that would generate a substantial number of new students within NMUSD. Any project contribution to growth in student enrollment would be incidental and not cumulatively considerable because the project would not result in a significant population increase within the City. No mitigation is required.

Library Services. The geographic area for cumulative analysis of library services is defined as the service territory of the NBPL. As stated above, the NBPL does not assess needs based on a ratio of volumes or square feet per measure of population. Rather, the NBPL assesses need based on circulation statistics, statistics documenting reference transactions, statistics that measure customers served in the library, and program attendance. The NBPL has indicated that within the next 20 years, the changing role of libraries in the City will need to be addressed with remodeling, expansion of existing buildings, and the possible construction of a new library branch. While the proposed project may generate additional demand for library services due to the proximity of the Central Library to the

proposed City Hall administration building, this increase would be addressed by the proposed expansion of the Central Library and library services (e.g., the City Hall delivery program). Therefore, the proposed project's contribution to demand for library services would not be cumulatively considerable, and no mitigation is required.

Public Transportation. The geographic area for cumulative analysis of transit services is defined as the service territory for OCTA, which encompasses all of Orange County. Transit services in the vicinity of the proposed project site are not operating beyond capacity. Past, present, and reasonably foreseeable projects that would utilize the same transit services as the proposed project (e.g., OCTA Bus Route 1) are not anticipated to cause those services to exceed capacity, and no cumulative impacts are anticipated. The proposed project is not expected to have a significant impact on the provision of transit services in the County or the area surrounding the project site. Any increase that does result from implementation of the proposed project would be incidental and not cumulatively considerable because transit services are not currently impacted and would not be adversely impacted by the proposed project. No mitigation is required.

Water. The geographic area for the cumulative analysis of water infrastructure includes the proposed project site and the service territory of the City. According to the City's UWMP, existing water systems have sufficient capacity to meet the additional maximum day and peak-hour domestic water demand and fire flow demand from the proposed project and other proposed projects within the City's service territory through 2030. Beyond that date, improvements associated with the State Water Project supply, additional local projects, conservation, and additional water transfers would be needed to adequately serve the City. As a result, the City is participating in the GRS, which is intended to help reduce the City's reliance on imported water. OCWD, which provides the groundwater supply to the City, projects that there are sufficient groundwater supplies to meet any future demand requirements in the City. As such, the potential cumulative impacts from past, present, and reasonably foreseeable projects related to water supply within the City would be less than significant.

Based on data shown in Table 4.13.B, the City's total expected water demand at General Plan build out in 2030 is expected to be 21,716 afy (approximately 7,076 MG). Because the UWMP assumed use of the entire proposed project site as a passive park that would demand more water use than the proposed Civic Center uses, project water demand would not exceed the City's expected water demand in 2030. The proposed project would represent a very small (0.0000012 percent) portion of the City's total projected water demand in 2030. The change in land uses (i.e., park to Civic Center) would not materially affect the full build-out water demand projections utilized in the UWMP dated December 2005, nor would the proposed project change the UWMP conclusions with respect to projected water supply reliability. Therefore, the proposed project's contribution to water demand in the City would not be cumulatively considerable, and no mitigation is required.

Wastewater. The geographic area for the cumulative analysis for wastewater treatment is defined as the City and OCSD service territory. Within its service area, OCSD uses United States Census Bureau population information with population projections as well as current land use and build out or zoned land use to project current and future wastewater flows. Because OCSD projects that its existing and planned wastewater treatment capacity would be sufficient to accommodate the growth forecasted by

the U.S. Census within its service area, development that is generally consistent with this forecast can be adequately served by OCSD facilities. In addition, OCSD existing facilities have capacity to accommodate past, present, and reasonably foreseeable projects, including those listed in Table 4.1.C. The proposed project would potentially increase employment in the City and County by 295 employees. The proposed project would not result in substantial employment growth beyond projections and would not induce significant population or housing growth, either directly or indirectly. In addition, the proposed project would not contribute wastewater that would exceed the service capacity of OCSD. Therefore, the proposed project would not significantly contribute to or cause cumulative impact to wastewater services, and no mitigation is required

Electricity. The geographic area for the cumulative analysis of impacts to the provision of electricity is the service territory of SCE. The CEC estimates that peak demand and net energy load within SCE's service territory will continue to grow annually by 2.4 percent and 2.0 percent, respectively.

Although the proposed project has the potential to increase electrical demand in the area, SCE has identified adequate capacity to handle increases in electrical demand, and any increase in electrical demand resulting from the proposed project would be incremental compared to an increase in regional electrical demand. In addition, compliance with Title 24 of the California Administrative Code as required by PDF PSU-2 regulates energy consumption in new construction and regulates building energy consumption for heating, cooling, ventilation, water heating, and lighting for the proposed project and all future projects. The proposed project would also participate in the Leadership in Environmental and Energy Design (LEED) program and obtain LEED-New Construction (NC) Silver status as required by PDF GHG-1. Specific energy reduction measures that would be incorporated into the proposed project are listed in PDF PSU-4. Therefore, in relation to the cumulative study area, the project's incremental contribution to increased demand for electricity would not be cumulatively considerable, and no mitigation is required.

Natural Gas. The geographic area for the cumulative analysis of impacts to the provision of natural gas is the service territory for The Gas Company. There are several new supply and storage projects under consideration at the State level. If approved, these projects could add as much as 1,700 MMcf/d of natural gas to the statewide system, of which The Gas Company is a part.¹ Moreover, in the past few years the State has supported construction of transportation capacity in excess of the quantity of gas it consumes.² Therefore, sufficient gas supplies and infrastructure capacity are available, or have already been planned, to serve past, present, and reasonably foreseeable projects. Further, like the proposed project, all future projects would be subject to Title 24 requirements and would be evaluated on a case-by-case basis to determine the need for specific distribution infrastructure improvements. As the natural gas provider has identified adequate capacity and additional development within The Gas Company's service area would comply with Title 24, the proposed project's contribution to cumulative natural gas impacts would be considered less than significant.

¹ W. William Wood Jr. Natural Gas Infrastructure. May 2009

² Ibid.

Solid Waste. The geographic area for the cumulative analysis of impacts to solid waste disposal capacity is the County of Orange. The proposed project in combination with other past, present, and reasonably foreseeable projects within the County would create an increased demand on landfills and solid waste services for the County. However, as required, OCWR has available disposal capacity for a minimum period of 15 years. Based on their current daily maximum permitted disposal capacities, the Frank R. Bowerman Landfill and Prima Deshecha Landfill are not scheduled to close until 2053 and 2067, respectively. Neither landfill currently exceeds its daily maximum permitted disposal capacity. Therefore, OCWR indicated that the proposed project would not have a significant project-specific or cumulative impact on waste disposal capacity at County landfills.¹ In addition, the City complies with all federal, State, and local statutes and regulations related to solid waste. No mitigation is required.

4.13.7 Level of Significance Prior to Mitigation

There are no potentially significant impacts related to public services, utilities, and service systems.

4.13.8 Project Design Features and Mitigation Measures

The following Project Design Feature (PDF) commitments identified in Chapter 3.0 of this EIR are intended to reduce impacts to the provision of public services and utilities. No potentially significant impacts related to public services, utilities, and service systems have been identified; therefore, no mitigation is required.

PDF PSU-1: **Fire Code.** The City of Newport Beach (City) shall comply with the requirements of Title 9 (Fire Code) of the City's Municipal Code including installation of fire sprinklers in all new buildings. Said sprinklers shall be installed prior to each final building inspection.

PDF PSU-2: **Electricity and Natural Gas.** The proposed project shall meet or exceed all State Energy Insulation Standards and City of Newport Beach codes in effect at the time of application for building permits. (Commonly referred to as Title 24, these standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Title 24 covers the use of energy-efficient building standards, including ventilation, insulation, construction, and the use of energy-saving appliances, conditioning systems, water heating, and lighting.) Plans submitted for building permits shall include written notes or calculations demonstrating compliance with energy standards and shall be reviewed and approved by the Director of the City of Newport Beach Building Department prior to issuance of building permits.

¹ Virginia Roman, Staff Specialist. Orange County Waste and Recycling. Email dated May 11, 2009. (Appendix L).

PDF PSU-3

Solid Waste. In compliance with State legislation (Assembly Bill [AB] 939), the City of Newport Beach implements programs to recycle, reduce refuse at the source, and compost solid waste in order to achieve a 50 percent reduction in solid waste disposed of at landfills. AB 939 also requires that all cities conduct a Solid Waste Generation Study (SWGS) and prepare a Source Reduction Recycling Element (SRRE). In accordance with AB 939, the City of Newport Beach submits an annual report to the California Integrated Waste Management Board (CIWMB) summarizing its progress in diverting solid waste disposal.

PDF PSU-4

Water Conservation. The proposed project would also utilize additional water conservation measures in the proposed Civic Center which may include, but is not limited to:

- Low-flow faucets
- Dual-flush water-closets and pint (1/8 gallon per flush) urinals
- Drip irrigation where practical
- Project landscaping will include drought-tolerant and native species combined with ornamental species and turf
- Cooling tower water use reduction via nonchemical water treatment.

PDF PSU-5

Energy Conservation. The proposed project would also utilize additional energy conservation measures in the proposed Civic Center including, but not limited to:

- High-performance facade
- Mixed-mode active and natural ventilation
- Under-floor air distribution
- Daylight dimming controls
- Low-wattage light fixtures
- Exterior shading devices
- Proper building orientation

4.13.9 Level of Significance after Mitigation

There are no potentially significant impacts related to public services, utilities, and service systems.