

4.13 UTILITIES AND SERVICE SYSTEMS

This section evaluates the effects of the proposed project on utilities and service systems by identifying the anticipated demand for utilities, as well as existing and planned utility availability. For purposes of this EIR, utilities include domestic water supply, wastewater conveyance and treatment, and solid waste collection and disposal. In addition, although not identified in the Initial Study/Notice of Preparation (IS/NOP) prepared for the project, this section also analyzes electricity and natural gas utilities. Stormwater drainage facilities are discussed in Section 4.7 (Hydrology and Water Quality) of this report.

Data used to prepare this section were taken from contacts with utility providers and City staff (Appendix 11). Full bibliographic entries for all reference materials are provided in Section 4.13.14 (References) at the end of this section.

All comments received in response to the IS/NOP circulated for the proposed project were taken into consideration during preparation of this EIR, and, if relevant, have been addressed in this section or others within this document.

Water Supply

4.13.1 Environmental Setting

■ Potable Water

The Utilities Division of the City of Huntington Beach's Department of Public Works provides potable water to the City, and would serve the proposed project site.

■ Water Sources

The City's drinking water is a blend of surface water imported by the Metropolitan Water District of Southern California (MWDSC) via its member agency Metropolitan Water District of Orange County (MWDOC), and groundwater pumped from the Santa Ana River basin. MWDSC's imported water sources are the Colorado River and the State Water Project, which draws water from the San Francisco-San Joaquin Bay Delta. Groundwater comes from a natural underground reservoir managed by the Orange County Water District (OCWD) that stretches from the Prado Dam and fans across the northwestern portion of Orange County, excluding the communities of Brea and La Habra, and stretching as far south as the El Toro "Y."⁹⁰

Existing sources of water supply consist of ten groundwater wells that pump directly into the system, three imported water connections, and three emergency connections with neighboring cities. Groundwater production from the ten wells varies from approximately 350 gallons per minute (gpm) to approximately 3,400 gpm, with normal supply at approximately 21,400 gpm (30.8 million gallons per day [mgd]) total production capacity rated at approximately 25,050 gpm (36.1 mgd).

⁹⁰ Huntington Beach, City of. 2006. Public Works Utilities Division. 2006 Consumer Confidence Report.

The three imported connections are with Metropolitan Water District of Southern California (MWD). One connection (OC 9) enters Huntington Beach at Newland Street and Edinger Avenue, and has the capacity to deliver 6,750 gpm into the water system. The second connection (OC 35) is located at Springdale Street and Glenwood Drive with a capacity of 11,250 gpm. The third connection (OC 44) enters Huntington Beach at the Santa Ana River and Adams Avenue with a capacity of 7,000 gpm.

The City of Huntington Beach has four reservoirs with a total combined capacity of 50 million gallons (Figure 4.13-1 [Service Area and Water Supply Facilities]). Overmyer I and Overmyer II, and have a combined capacity of 24 million gallons. Peck Reservoir has a capacity of 17 million gallons. Edwards Hill Reservoir is the newest facility and has a capacity of 9 million gallons. In addition, the City is currently in the process of constructing Springdale Reservoir.

The pumping capacity into the system from all reservoirs is 44,365 gallons per minute. Total capacity from all wells, reservoirs, and MWD connections is presently 87,980 gallons per minute (126.69 mgd). The water system has 537 miles of pipeline ranging in size from 2 inches to 42 inches. The City of Huntington Beach maintains emergency water connections with the cities of Fountain Valley, Seal Beach and Westminster.⁹¹

■ Water Supply

The Utilities Division supplies customers throughout the City of Huntington Beach and the Sunset Beach area of unincorporated Orange County. Figure 4.13-1 (Service Area and Water Supply Facilities) shows the City limits and service areas, as well as the location of key water supply facilities.

Water at the proposed project site would be served by the City and derived from a combination of local groundwater and imported water. Historically, the City has utilized groundwater more than imported water to satisfy water system demands. Currently, the City receives approximately 75 percent of its water supply from groundwater wells accessing the Santa Ana River groundwater basin and approximately 25 percent of its supply from imported water from MWDOC. To ensure a lasting supply for the region, the basin is managed by the OCWD, and the City pays a replenishment assessment to the district for each acre-foot of water taken from the groundwater basin. Actual percentages of groundwater and imported water vary somewhat on an annual basis depending on the extent to which these programs are implemented.⁹²

Current and projected water supplies from imported water and groundwater are shown in Table 4.13-1 (Orange County Groundwater Basin Groundwater Spreading Systems).

⁹¹ Huntington Beach, City of. 2007. Department of Public Works website. http://www.ci.huntington-beach.ca.us/CityDepartments/public_works/Wateroperations/Supply/. Accessed April 24, 2007.

⁹² Ibid.

**Table 4.13-1 Orange County Groundwater Basin
Groundwater Spreading Systems**

<i>System</i>	<i>Area (acres)</i>	<i>Storage Capacity (AF)</i>	<i>Percolation Rate (cfs)</i>
Main River System	245	480	87-115
Off-River System	126	394	15-40
Deep Basin System	280	8,484	89-300
Burris Pit/Santiago System	373	17,500	106-210

SOURCE: City of Huntington Beach 2005 Urban Water Management Plan

■ Water Demand

Similar to other water supply agencies, the City estimates a range of different future water demands, including average-day and maximum-day, in order to adequately plan for anticipated growth. Average-day demands account for variations in water use over a period of time due to a variety of potential factors such as weather patterns and conservation measures, whereas maximum-day demands project the greatest anticipated amount of water that would be used per day.

As discussed in the 2005 Water Master Plan Update, the City has reached near full development, and water usage for the City's service area has been relatively stable over the past five years. Although water production has been fairly consistent in the past, the City's future water average demands are projected to increase approximately 10 percent by 2025 as a result of planned development and re-development and the projected increase in population density. The average daily water consumption in the City is 32 mgd, with a minimum of 11 mgd and a maximum of 43.0 mgd of water used in 1995. The average daily consumption is approximately 150 gallons per day (gpd) per person.⁹³ Average daily water demand for the City is projected to be approximately 24,760 gpm (35.65 mgd) in the year 2025,⁹⁴ an increase approximately 3.65 mgd over existing conditions.

Table 4.13-2 (City of Huntington Beach—Projected Water Supply and Demand Normal Water Year) compares current and projected water supplies and demands in a normal year scenario. The results displayed in this table indicates that MWDOC can meet all of the City's demands in an average, single dry, and multiple dry years through 2030.⁹⁵

⁹³ Huntington Beach, City of. 2007. Department of Public Works website. http://www.ci.huntington-beach.ca.us/CityDepartments/public_works/Wateroperations/Supply/. Accessed April 24, 2007.

⁹⁴ Huntington Beach, City of. 2005. Water Master Plan Update.

⁹⁵ Huntington Beach, City of. 2005. Urban Water Management Plan.

**Table 4.13-2 City of Huntington Beach—Projected Water Supply and Demand
Normal Water Year
(AFY—All projections rounded to nearest ten AF)**

Water Sources	Normal Water Years				
	2010	2015	2020	2025	2030
Supply					
Projected Supply During an Average Year as a % of Demand During an Average Year ^a	130.8	126.6	133.4	125.5	118.0
Imported ^b	13,620	13,320	14,170	13,470	12,780
Local (Groundwater) ^c	24,300	24,540	24,790	25,040	25,260
Total Supply	37,920	37,860	38,960	38,510	38,040
% of Normal Year^d	100.0	100.0	100.0	100.0	100.0
Demand					
Imported ^b	10,410	10,500	10,620	10,730	10,830
Local (Groundwater) ^c	24,300	24,540	24,790	25,040	25,260
Total Demand^e	34,710	35,060	35,410	35,770	36,090
% of Year 2005 Demand (33,941 AF)	102.3	103.3	104.3	105.4	106.3
Supply/Demand Difference	3,210	2,800	3,550	2,740	1,950
Difference as % of Supply	8.5	7.4	9.1	7.1	5.1
Difference as % of Demand	9.2	8.0	10.0	7.7	5.4

SOURCE: City of Huntington Beach 2005 Urban Water Management Plan

^a From Table 4.2-1, Row I

^b Imported water supply = (imported water demand) x (MWDOC Projected Supply Available During an Average Year as a % of Demand During an Average year (from 4.2-1, Row I); Imported demand = 30% of total demand based on a BPP of 70%.

^c Groundwater demand is estimated to comprise 70% of the total demand based on a BPP of 70%; groundwater supply is estimated to equal demand

^d Normal Year supply is assumed to reflect the total supply available in the row labeled "Total Supply."

^e Total water demand figures are based on the City's projections provided to MWDOC and included in MWDOC's July 2005 draft supply/demand projections

In viewing its entire service area, MWDOC projects single dry year demands that are 105.5 percent of normal and three multiple dry years demands that are 106.7, 103.7 and 105.5 percent of normal. These same factors are representative of all of Orange County and will be applied to project the City's demands in single and multiple dry years. Comparisons of current and projected water supplies and demands in single dry and multiple dry years also indicated that MWDSC can meet all of the City's demands through 2030.⁹⁶

The percentage of groundwater that the City is allowed to pump from the Orange County Groundwater Basin each year is called the Basin Production Percentage (BPP). While the BPP has been as high as 75 percent in recent years, the BPP was set at 66 percent for 2004-2005. The BPP has been set at 64 percent for the water year 2005-2006 and is anticipated to increase to 70 percent over the next five years. Producers may pump above the BPP to 100 percent of their needs by paying the Basin Equity Assessment (BEA). The BEA is the additional fee paid on any water pumped above the BPP, making the

⁹⁶ Huntington Beach, City of. 2005. Urban Water Management Plan.

cost of that water equal or greater to the cost of imported water. Such flexibility in producing over the BPP guarantees the City and other water utilities in Orange County the ability to provide water to their customers during periods of varying water availability.⁹⁷

■ Infrastructure

As discussed above, the City's water distribution system is connected to MWDSC transmission mains at OC-9, OC-35 and OC-44 located respectively along the northeast, northwest, and southeast sides of the City. In addition, there are approximately 51,700 water distribution structures maintained by the City's Department of Public Works. They range in size from ¾ inch to 10 inches in diameter. The area of the City is approximately 28 square miles. The City also provides water to the Sunset Beach area in the County of Orange.⁹⁸

Existing infrastructure surrounding the project site includes a 12-inch water main along Goldenwest Street. Implementation of the proposed development would include on-site water distribution pipes, which would connect to the existing 12-inch line along Goldenwest Street.⁹⁹

Recycled Water

The Green Acres Project (GAP) was intended to supply recycled water to various municipal users in Orange County, including Huntington Beach; however, the project is currently on hold. Until such time that the GAP is operational, recycled water would not be available to serve the project site. However, a pipe is located in Goldenwest Street for future use when recycled water does become available.

■ Water Treatment Facilities

As previously stated, approximately 25 percent of the City's potable water supply is imported water purchased from the MWD. The City receives treated imported water from the MWD Robert B. Diemer Filtration Plant in northern Orange County, and the Joseph Jensen Filtration Plant in Granada Hills. The Diemer Filtration Plant receives a blend of Colorado River water from Lake Mathews and the State Water Project (SWP) water through the Yorba Linda Feeder. Currently, the Diemer Filtration Plant has an operating capacity of 455 mgd and current flows are approximately 213 mgd. The Jensen Filtration Plant receives only SWP water with no water received from the Colorado River, and currently has an operating capacity of 750 mgd and current flows are approximately 420 mgd.¹⁰⁰

⁹⁷ Huntington Beach, City of. 2005. Urban Water Management Plan.

⁹⁸ Huntington Beach, City of. 2002. Department of Public Works website. http://www.surfcity-hb.org/CityDepartments/public_works/Wateroperations/Distribution/. Accessed April 24, 2007.

⁹⁹ Huntington Beach, City of. 2007. Written correspondence with City Department of Public Works, May 10.

¹⁰⁰ Metropolitan Water District of Southern California. 2007. Personal correspondence with MWD employee, April 27.

4.13.2 Regulatory Framework

■ Federal

Federal Safe Drinking Water Act

Enacted in 1974 and implemented by the EPA, the federal *Safe Drinking Water Act* imposes water quality and infrastructure standards for potable water delivery systems nation-wide. The primary standards are health-based thresholds established for numerous toxic substances. Secondary standards are recommended thresholds for taste and mineral content.

U.S. Environmental Protection Agency

The EPA established primary drinking water standards in the *Clean Water Act* Section 304. States are required to ensure that potable water retailed to the public meets these standards. Standards for a total of eighty-one individual constituents have been established under the *Safe Drinking Water Act* as amended in 1986. The U.S. EPA may add additional constituents in the future. State primary and secondary drinking water standards are promulgated in CCR Title 22 Sections 64431–64501. Secondary drinking water standards incorporate non-health risk factors including taste, odor, and appearance.

■ State

Urban Water Management Planning Act (California Water Code, Division 6, Part 2.6, Section 10610 et seq.)

The *Urban Water Management Planning Act* (Act) was developed due to concerns over potential water supply shortages throughout California. It requires information on water supply reliability and water use efficiency measures. Urban water suppliers are required, as part of the Act, to develop and implement Urban Water Management Plans (UWMP) to describe their efforts to promote efficient use and management of water resources. The City's 2005 UWMP is intended to serve as a general, flexible, and open-ended document that periodically can be updated to reflect changes in the Orange County water supply trends, and conservation and water use efficiency policies. The UWMP, along with the City's Water Master Plan and other City planning documents, is used by City staff to guide the City's water use and management efforts through the year 2010, when the UWMP is required to be updated.

Water Conservation Projects Act

California's requirements for water conservation are codified in the *Water Conservation Projects Act of 1985* (Water Code Sections 11950–11954), as reflected below:

11952 (a). It is the intent of the Legislature in enacting this chapter to encourage local agencies and private enterprise to implement potential water conservation and reclamation projects....

SB 221 (Kuehl Bill) and SB 610 (Costa Bill)

Signed into law on October 2001 and effective beginning in January 2002, SB 221 and SB 610 serve to ensure that certain land developments in California must be accompanied by an available and adequate

supply of water to serve those developments. Serving as companion measures, SB 610 and SB 221 seek to promote more collaborative planning between local water suppliers and cities and counties.

SB 221 requires the legislative body of a city, county, or local agency to include, as a condition in any tentative map that includes a subdivision, a requirement that a sufficient water supply shall be available to serve the subdivision. A “subdivision” is defined as a proposed residential development of more than 500 dwelling units or one that would increase, by at least ten percent, the number of service connections of a public water system having less than 5,000 connections. "Sufficient water supply" is defined as the total water supplies available during normal, single-dry, and multiple-dry years within a twenty-year projection that will meet the projected demand of a proposed subdivision. SB 221 ensures that collaboration on finding the needed water supplies to serve a new large subdivision occurs before construction begins.

SB 610 requires additional factors to be considered in the preparation of urban water management plans and water supply assessments. SB 610 requires all urban water suppliers to prepare, adopt, and update an urban water management plan that, essentially, forecasts water demands and supplies within a certain service territory. In addition, water assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in Water Code 10912(a)) subject to CEQA.

■ Local

General Plan Utilities Element

The City’s General Plan Utilities Element (1996) focuses on the City’s water supply, sanitation treatment, storm drainage, solid waste disposal, natural gas, electricity, and telecommunications systems. Applicable goals and policies of this element related to water supply and treatment systems and facilities include the following:

- Goal U1** Provide a water supply system that is able to meet the projected water demands; upgrade deficient systems and expand water treatment, supply, and distribution facilities; and pursue funding sources to reduce the cost of water provision in the City.
- Objective U.1.1** Maintain a system of water supply distribution facilities capable of meeting existing and future daily and peak demands, including fire flow requirements, in a timely and cost-efficient manner.
 - Policy U.1.1.1** Monitor the demands on the water system, manage the development to mitigate impacts and/or facilitate improvements to the water supply and distribution system, and maintain and expand water supply and distribution facilities.
- Objective U.1.2** Ensure that existing and new development does not degrade the City’s surface waters and groundwater basins.

- Policy U.1.2.1** Require that existing and new development contain safeguards and mitigation measures preventing degradation.
- Policy U.1.2.2** Require new developments to connect to the sewer system.
- Objective U.1.3** Minimize water consumption rates through site design, use of efficient systems, and other techniques.
 - Policy U.1.3.2** Continue to require the incorporation of water conservation features in the design of all new construction and site development.
- Objective U.1.4** Ensure the costs of improvements to the water supply, transmission, distribution, storage and treatment systems are borne by those who benefit.
 - Policy U.1.4.1** Require the cost of improvements to the existing water supply and distribution facilities necessitated by new development be borne by the new development benefiting from the improvements, either through the payment of fees, or the actual construction of the improvements in accordance with State Nexus Legislation.

Consistency Analysis

Implementation of the proposed project would include the construction of necessary utilities on site, which consist of water conveyance pipelines. The water lines associated with the proposed project are required to be sized appropriately for the anticipated demand of 11,425 gpd, and required peaking and fire flow demands.¹⁰¹ In addition, it is anticipated that the increased demand would not result in necessary upgrades to the water treatment plants. In accordance with CEQA, the project is required to mitigate and reduce any and all impacts to both water supply and facilities. The project would be consistent with the goals, objectives, and policies contained in the General Plan.

4.13.3 Project Impacts and Mitigation

■ Analytic Method

To determine impacts on water supply resulting from implementation of the proposed project, this section includes an evaluation of whether the projected increase in water use at the project site falls within the City’s projected water demands. It also includes an analysis of whether there will be an adequate and reliable source of water for the proposed project and whether any infrastructure improvements would be necessary.

¹⁰¹ Anticipated demand in gallons per acre per day (5.0 acres x 2,285 gpad unit water use factor for OS-P) according to the City of Huntington Beach Water Master Plan Update (2005).

■ Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2007 CEQA Guidelines. For the purposes of this EIR, implementation of the proposed project may result in a potentially significant impact if the proposed project would cause either of the following results:

- Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- Require new or expanded water entitlements and resources, if there are not sufficient water supplies available to serve the project from existing entitlements and resources¹⁰²

■ Impacts and Mitigation Measures

Threshold	Would the project require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
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Impact 4.13-1 Implementation of the proposed project would not require or result in the construction of new or expanded water treatment facilities, the construction of which could cause significant environmental effects.

According to the City’s 2005 Water Master Plan Update, the open space (park) water demand for 2024/25 is approximately 2,285 gallons per acre per day. With approximately 5 acres associated with the development of the proposed senior center and associated outdoor areas, the estimated water demand for the proposed project would be approximately 11,425 gpd (0.011 mgd).

Water Conveyance Infrastructure

Specific to the project area, existing infrastructure surrounding the project site includes a 12-inch water main line along Goldenwest Street. Implementation of the proposed development would require the construction of an on-site public water system that would provide service to the senior center facility, with water conveyance pipes throughout the project site that would connect to this 12-inch main. A separate hydraulic analysis will dictate future fire flow requirements and associated water demand.

Construction of the on-site water system would not require any demolition of surface structures since the site is currently undeveloped—only excavation activities typically done during the construction of any development. Development of this infrastructure would adhere to existing laws and regulations, and the water conveyance infrastructure would be appropriately sized for the development of the project, which includes potable water, domestic irrigation, and fire flow demands. In addition, separate irrigation water service would be constructed as part of the development of the proposed project, in order to provide irrigation for the public landscaped areas and common open-space areas.

The City of Huntington Beach Fire Department (HBFD) requires specific fire-flow rates at each project site and specifies the residual pressure necessary at on-site fire hydrants. Due to the possibility of a fire

¹⁰² This standard has been slightly modified from the text found in CEQA Guidelines, Appendix G, for ease of comprehension.

occurring on any given day, the City’s existing water system satisfies maximum-day demands occurring elsewhere throughout the water system and would also satisfy the required flow at the project site. Expansions to the water system would provide the necessary pressure requirements to meet the average-day demand, peak-hour demand, plus fire flow during maximum day demand of the proposed project. Thus, upon completion of the proposed on-site water system infrastructure, which is required to adhere to the City’s Utilities Division Standards and requirements, the City’s domestic water system would provide adequate water supply and fire flows for the proposed project. The impacts related to water conveyance infrastructure would be *less than significant*.

Water Treatment Facilities

The proposed project site would be served with local groundwater and imported water supply purchased from MWD. The demand for groundwater generated by the proposed project would not require additional treatment facilities as this water is treated at the well from which it originates. As previously mentioned, the City received approximately 75 percent of its water supply from groundwater wells and 25 percent from the MWD. Thus, for the purposes of this analysis, it is anticipated that the additional demand placed on either the Diemer Filtration Plant or the Jensen Filtration Plant would be approximately 25 percent of the total increase in water demand of 11,425 gpd (0.011 mgd), or 2,856 gpd (0.003 mgd).

As stated previously, the Diemer Filtration Plant has an operating capacity of 455 mgd and current flows are approximately 213 mgd, while the Jensen Filtration Plant currently has an operating capacity of 750 mgd and current flows of approximately 420 mgd. If the project’s imported water demand were treated solely at either Filtration Plant, this increase would represent far less than one percent (.001 percent at Diemer and .0009 percent at Jensen) of the remaining capacities of both facilities.

Because the proposed project would represent such a small amount of the remaining operating capacity at both Diemer Filtration Plant and Jensen Filtration Plant, it is anticipated that the existing plants could adequately serve the additional demand generated by the proposed project without requiring expansions to these facilities. This impact is considered *less than significant* and no mitigation is required.

Threshold	Would the project require new or expanded water entitlements and resources, if there are not sufficient water supplies available to serve the project from existing entitlements and resources?
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Impact 4.13-2 Implementation of the proposed project would generate an additional demand for water, but would not require water supplies in excess of existing entitlements and resources, or result in the need for new or expanded entitlements.

As discussed previously, new development on the project site would increase demands for municipal water services by approximately 11,425 gpd (0.011 mgd). The estimated 0.011 mgd water demand that would result from implementation of the proposed development would represent approximately 0.003 percent of the City’s total water demand in 2025. In addition, as the City’s water demand is anticipated to increase by approximately 3.65 mgd by 2025 over existing conditions, the estimated project demand of 0.011 mgd would represent approximately 0.3 percent of this anticipated increase.

Therefore, the City's existing system could supply adequate water to the proposed development. Additionally, as discussed previously, the City's existing system would also be sufficient to provide adequate fire flows to the proposed development. Because the City would have a sufficient supply of water available to serve the proposed development through 2025, including municipal, irrigation, and fire flows, this impact is *less than significant*.

The following mitigation measure related to impacts associated with water supply availability was initially identified in the Central Park Master Plan EIR. The language in this measure has been modified for this project to reflect project-specific components of the proposed senior center where necessary, although their intent remains the same. The original measures from the Central Park Master Plan EIR appear in Table 4-1 of this EIR.

For the purposes of this document, the City shall implement mitigation measure MM 4.13-2, which would ensure that measures set forth in the Central Park Master Plan EIR are carried over:

MM 4.13-2 (This MM is Measure Utilities-7 from the Central Park Master Plan EIR)

If the Green Acres Project is not yet operational and able to supply water to the program level elements of the Master Plan prior to the development of final plans and specifications, additional studies will be undertaken to determine the extent to which one or a combination of the following measures will be necessary to reduce impacts to water supply systems for program level elements during the interim until water from the Green Acres Project is available.

- *Reduce the required irrigable areas by 10 percent;*
- *Enhance the utilization of existing groundwater systems (i.e., subpotable wells); or*
- *Supplement the irrigation supply with water from the domestic water system.*

Implementation of mitigation measure MM 4.13-2 would further ensure availability of water supplies to accommodate the proposed project. Impacts would remain *less than significant*.

Wastewater

4.13.4 Environmental Setting

The City owns, operates, and maintains a wastewater collection system that includes gravity pipelines, manholes, lift stations and force mains. This system serves over 95 percent of the areas within the City, and several small areas within the Cities of Westminster, Seal Beach, Newport Beach, and Fountain Valley. The City's wastewater system would provide service to the proposed project.¹⁰³

■ Infrastructure

The City's wastewater collection system is comprised of approximately 350 miles of wastewater pipelines ranging in size from 6 to 30 inches in diameter. Approximately 85 percent of the City's wastewater pipelines are 8 inches in diameter. Due to the City's generally flat topography, the City also operates and

¹⁰³ Huntington Beach, City of. 2002. Department of Public Works website. http://www.surfcity-hb.org/CityDepartments/public_works/Wateroperations/wastewater/. Accessed April 24, 2007.

maintains twenty-seven lift stations, varying in capacity from approximately 80 gpm to 1,350 gpm.¹⁰⁴ These facilities lift sewage from low points in the collection system to manholes at higher locations. Combined transport of the City's wastewater collection system is an estimated 24.3 gpd.¹⁰⁵ An existing 15-inch sewer line operated by the City runs in an east-west direction south of the project site (off site), and then continues in a north-south direction parallel to Goldenwest Street across the eastern portion of the project site. This 15-inch sewer line connects to another 18-inch City-owned sewer line along Goldenwest Street.¹⁰⁶

The OCSD is responsible for receiving, treating, and disposing of the wastewater generated in central and northwest Orange County, including the City's wastewater. In this regional management capacity, OCSD owns, operates and maintains the majority of the "backbone" wastewater collection trunk pipelines. OCSD's regional wastewater pipelines generally range in size from 21 to 108 inches in diameter and collect the City's wastewater at multiple connections. In addition to these collection facilities, OCSD has two lift stations and Wastewater Treatment Plant No. 2, which is located within the City and described below. As such, the City's local system generally discharges to larger OCSD facilities to convey wastewater to the local treatment plant. Given the growth within OCSD's service area, OCSD is currently upsizing a number of collection system pipelines to provide additional capacity. One of these key facilities is the 108-inch Bushard Trunk Sewer, which runs through the City to OCSD's Wastewater Treatment Plant No. 2.¹⁰⁷ A 42-inch OCSD sewer line is located north of the project site near the intersection of Goldenwest Street and Slater Avenue. The City-owned 18-inch sewer line along Goldenwest Street connects to this OCSD main line.¹⁰⁸

Utilizing a telemetry system, the staff has constant monitoring capabilities of all sewer lift stations and also has crews perform a site and equipment inspection every other day. City crews are also responsible for the maintenance and repairs necessary to keep the wastewater system operating at peak performance levels.¹⁰⁹

■ Treatment Plants

OCSD manages wastewater collection and treatment for approximately 471 square miles in central and northwest Orange County, which includes 21 cities, 3 special districts, and 2.4 million residents. OCSD utilizes the following two facilities: Reclamation Plant No. 1 in Fountain Valley and Wastewater Treatment Plant No. 2 in Huntington Beach to treat a combined daily average of 264 million gallons of wastewater. Effluent from Reclamation Plant No. 1 is either routed to the ocean disposal system or is sent to the OCWD facility, Green Acres Project, for advanced treatment and recycling.

¹⁰⁴ Huntington Beach, City of. 2003 Citywide Sewer Master Plan.

¹⁰⁵ Huntington Beach, City of. 2002. Department of Public Works website. http://www.surfcity-hb.org/CityDepartments/public_works/Wateroperations/wastewater/. Accessed April 24, 2007.

¹⁰⁶ Gray, Chris. 2007. Personal correspondence with City of Huntington Beach, Public Works, July 10.

¹⁰⁷ Huntington Beach, City of. 2003 Citywide Sewer Master Plan.

¹⁰⁸ Nasara, Adam. 2007. Personal correspondence with Orange County Sanitation District, June 13.

¹⁰⁹ Huntington Beach, City of. 2002. Department of Public Works website. http://www.surfcity-hb.org/CityDepartments/public_works/Wateroperations/wastewater/. Accessed April 24, 2007.

Wastewater flows from the project site would be treated by Wastewater Treatment Plant No. 2, which has a total design capacity of 168 mgd, and an existing average flow of approximately 151 mgd. OCSD has plans to increase Wastewater Treatment Plant No. 2's treatment capacity.¹¹⁰

4.13.5 Regulatory Framework

■ Federal

Federal Water Pollution Control Act (Clean Water Act)

The major piece of federal legislation dealing with wastewater is the federal *Water Pollution Control Act*, which is designed to restore and preserve the integrity of the nation's waters. The federal *Water Pollution Control Act*, popularly known as the *Clean Water Act*, is a comprehensive statute aimed at restoring and maintaining the chemical, physical, and biological integrity of the nation's waters. Enacted originally in 1948, the Act was amended numerous times until it was reorganized and expanded in 1972. It continues to be amended almost every year. In addition to the federal *Water Pollution Control Act*, other federal environmental laws regulate the location, type, planning, and funding of wastewater treatment facilities.

■ State

Operation of Wastewater Treatment Plant No. 2 is subject to regulations set forth by the California Department of Health Services and the California State Water Resources Control Board.

■ Regional

Regional Water Quality Board

Under the Santa Ana Regional Water Quality Control Board (SARWQCB) National Pollutant Discharge Elimination System (NPDES) permit system, all existing and future municipal and industrial discharges to surface waters within the City would be subject to regulations. The Orange County NPDES permit requires that all development within the City is subject to the provisions of the Orange County NPDES Storm Water Permit. The NPDES storm water permit was issued by SARWQCB for municipal storm water and urban runoff discharges within Orange County, and incorporated cities therein.

■ Local

City of Huntington Beach Municipal Code

The *City of Huntington Beach Municipal Code* Chapter 14.25 contains regulations associated with stormwater and urban runoff management. Permits are required for any alterations or connections to the existing sewage system, and for industrial waste dischargers.

¹¹⁰ Nasara, Adam. 2007. Personal correspondence with Orange County Sanitation District, June 13.

General Plan Utilities Element

The City's General Plan Utilities Element (1996) focuses on the City's water supply, sanitation treatment, storm drainage, solid waste disposal, natural gas, electricity, and telecommunications systems. Applicable goals and policies of this element related to wastewater systems and facilities include the following:

Goal U2 Provide a wastewater collection and treatment system which is able to support permitted land uses; upgrade existing deficient systems; and pursue funding sources to reduce costs of wastewater service provision in the City.

Objective U.2.1 Ensure the City provides and maintains a wastewater collection and treatment facilities system which adequately conveys and treats wastewater generated by existing and planned development at maximized cost efficiency.

Policy U.2.1.1 Approve and implement development in accordance with the standards identified in the Growth Management Element.

Policy U.2.1.5 Maintain, upgrade, and expand existing wastewater collection and treatment facilities.

Policy U.2.1.6 Require that sewer capacity is available before building permits are issued for new development.

Objective U.2.2 Ensure the costs of wastewater infrastructure improvements are borne by those who benefit.

Policy U.2.2.1 Require the costs of improvements to the existing wastewater collection facilities, which are necessitated by new development, to be borne by the new development benefiting from the improvements; either through the payment of fees, or by the actual construction of the improvements in accordance with State Nexus Legislation.

Consistency Analysis

Implementation of the proposed project would include the construction of necessary utilities on site, including wastewater conveyance lines. The sewer lines would be sized appropriately for the anticipated flow of approximately 1,000 gpd of wastewater, and in accordance with the requirements of the City's Public Works Department. As discussed in the impact analysis, it is anticipated that the increased flows from the proposed project would not result in required upgrades to the treatment plant. The construction of wastewater conveyance lines in accordance with the projected size and outflow of the project site would not conflict with the applicable goals, objectives and policies of the City's General Plan Utilities Element.

4.13.6 Project Impacts and Mitigation

■ Analytic Method

In general, wastewater generation is approximately 70 to 90 percent of the water demanded, or consumed, the variance being largely attributed to the amount of landscaping on site. In order to provide a conservative analysis, it is assumed that 90 percent of the water demand would become wastewater. Assuming the proposed project would generate a water demand of 11,425 gpd, as discussed above, this would yield an estimated wastewater generation of 10,283 gpd. The new wastewater discharges from the proposed project would place additional demand upon regional treatment facilities.

To determine wastewater impacts associated with implementation of the proposed project, estimated future wastewater flows are compared to the capacity of the wastewater treatment plants to determine whether sufficient capacity exists and/or whether there is the need for additional wastewater treatment systems.

■ Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2007 CEQA Guidelines. For the purposes of this EIR, implementation of the proposed project may result in a potentially significant impact if the proposed project would cause either of the following results:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board
- Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- Include a new or retrofitted storm water treatment control Best Management Practice (BMP), (e.g. water quality treatment basin, constructed treatment wetlands), the operation of which could result in significant environmental effects (e.g. increased vectors and odors)¹¹¹
- 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 commitments¹¹²

¹¹¹ According to the Citywide Urban Runoff Management Plan (2005), the City has included this threshold to the Initial Study Checklist Appendix G of the CEQA Guidelines in its CEQA preparation and review process for proposed projects. The Initial Study prepared for the proposed project did not incorporate this threshold; thus, it has been included in this EIR analysis.

¹¹² This standard has been slightly modified from the text found in CEQA Guidelines, Appendix G, for ease of comprehension.

■ Impacts and Mitigation Measures

Threshold	Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?
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Impact 4.13-3 Implementation of the proposed project would not exceed wastewater treatment requirements of the Santa Ana Regional Water Quality Control Board.

As stated above, the NPDES permit system requires that all existing and future municipal and industrial discharges to surface waters within the City be subject to specific discharge requirements. The proposed project would not result in the discharge of wastewater to any surface water. Instead, operational discharges will be sent to the project's sewer system, which would ultimately be treated at one or more of the OCSD wastewater treatment plants. The OCSD wastewater treatment plants are required to comply with their associated waste discharge requirements (WDRs). WDRs set the levels of pollutants allowable in water discharged from a facility.

Compliance with any applicable WDRs, as monitored and enforced by the OCSD, would ensure that the proposed project would not exceed the applicable wastewater treatment requirements of the SARWQCB with respect to discharges to the sewer system. This would result in a *less-than-significant* impact. No mitigation measures are required.

Threshold	Would the project require or result in the construction of new or expanded wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
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Impact 4.13-4 Implementation of the proposed project would require new sewer connections, but would not require or result in the construction of new or expanded wastewater conveyance systems.

The project site would include the development of a senior center building and associated open space areas. The City of Huntington Beach Public Works Department and OCSD maintain the sanitary sewer system into which the proposed project would discharge. Development of the proposed project would increase the amount of wastewater transported by the City's sewer system by approximately 10,283 gpd (0.01 mgd).

As discussed in the Environmental Setting, the project site would connect to the City sewer system on a 15-inch line that runs across the eastern portion of the project site, parallel to Goldenwest Street. According to the City's Public Works Department, this line has adequate capacity to serve the proposed project.¹¹³ The 15-inch sewer line would then connect to the City's 18-inch sewer line along Goldenwest Street, and eventually connect to OCSD's 42-inch main on Slater Street. OCSD has determined that its existing infrastructure can adequately support the proposed project.¹¹⁴

¹¹³ Gray, Chris. 2007. Personal correspondence with City of Huntington Beach, Public Works, July 10.

¹¹⁴ Nasara, Adam. 2007. Personal correspondence with Orange County Sanitation District, June 13.

Similar to water distribution systems, the proposed project would require the construction of new wastewater collection systems within the project site and are considered part of overall project construction. Individual water and wastewater connections would occur during their construction. Construction of the wastewater collection systems would adhere to existing laws and regulations, and the infrastructure would be sized appropriately for the future development.

As required by OCSD, any person connecting to the OCSD sewer system is required to pay a connection fee in accordance with the OCSD Connection Fee Master Ordinance. With respect to discharges that constitute an increase in the existing strength and/or quantity of wastewater attributable to a particular parcel or operation already connected, the connection fee shall be based on the increase in anticipated use of the sewage system.¹¹⁵ The Connection Fee Program ensures that all users pay their fair share of any necessary expansion of the system, including expansion to wastewater treatment facilities. These fees are considered full mitigation under CEQA for potential impacts resulting from project development. Therefore, this impact is considered *less than significant*.

Threshold	Would the project include a new or retrofitted stormwater treatment control Best Management Practice (BMP), (e.g. water quality treatment basin, constructed treatment wetlands), the operation of which could result in significant environmental effects (e.g. increased vectors and odors)?
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Impact 4.13-5 Implementation of the proposed project would include new stormwater treatment control BMPs, the operation of which would not result in significant environmental effects.

Refer to Section 4.7 (Hydrology and Water Quality) for a detailed discussion of stormwater treatment.

The proposed project would involve the construction and operation of stormwater treatment control Best Management Practices (BMPs) that would be identified in a Stormwater Pollution Prevention Plan (SWPPP), which would be a part of the project's Water Quality Management Plan (WQMP). As discussed in the Citywide Urban Runoff Management Plan, the City has general/standard conditions of approval to protect receiving water quality from short- and long-term impacts of new development and significant redevelopment, which include the following City requirements (CR).¹¹⁶

CR 4.13-5(a) Prior to grading activities, the Developer shall demonstrate, by providing a copy of the Notice of Intent submitted to the State Water Resources Control Board (SWRCB) and a copy of the subsequent issuance of a Waste Discharge Identification number, that coverage has been obtained under the General Permit. Projects subject to this requirement shall also prepare, submit and implement a Stormwater Pollution Prevention Plan.

CR 4.13-5(b) Prior to issuance of certificate of use or occupancy, the developer shall demonstrate that all structural and non structural BMPs described in the WQMP have been installed and implemented in conformance with approved plans and specifications, and that all storm drain structures are clean and properly constructed.

¹¹⁵ Nasara, Adam. 2007. Personal correspondence with Orange County Sanitation District, June 13.

¹¹⁶ Huntington Beach, City of. 2005. Citywide Urban Runoff Management Plan, January.

Since stormwater treatment control BMPs must be in conformance with approved plans and specifications of appropriate agencies, operations would not be anticipated to result in significant environmental effects including, but not limited to, vectors or odors. Therefore, the project's impacts on environmental effects as a result of stormwater treatment control operations would be *less than significant*. No mitigation is required.

Threshold	Would the project result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
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Impact 4.13-6 Implementation of the proposed project would not increase wastewater generation such that treatment facilities would be inadequate to serve the project's projected demand in addition to the provider's existing commitments.

Wastewater Treatment Plant No. 2 has a capacity of approximately 168 mgd of wastewater, with a current flow of approximately 151 mgd. The proposed project's wastewater generation would be estimated at approximately 10,283 gpd (0.01 mgd), which would minimally increase the demand upon regional treatment facilities. The remaining capacity at Wastewater Treatment Plant No. 2 is approximately 17 mgd. As such, the treatment plant would have more than adequate capacity to treat the additional 0.01 mgd of wastewater that would be generated from the proposed development. The proposed project would represent far less than one percent of the remaining capacity. However, it is likely that the impact on the wastewater treatment plant would be less, given the fact that wastewater treatment planning occurs on a large-scale basis in response to known and/or anticipated regional growth trends, rather than in response to any single project. In addition, OCSD has determined that they have plans to upgrade the facility to expand treatment capacity.

Consequently, construction or expansion of wastewater treatment facilities is not anticipated to be necessary to serve the project's needs. The developer would obtain a "will serve" letter from OCSD in order to construct the project, meaning that the OCSD would confirm that adequate treatment capacity is available over the long term to serve the project and commit to provide treatment service. In addition, the proposed project would be required to adhere to existing laws and regulations associated with wastewater discharge and treatment requirements. Therefore, the project's impacts on wastewater treatment facilities are also considered *less than significant*. However, the following mitigation measure was recommended by the OCSD to help reduce wastewater flows from the proposed project.¹¹⁷

MM 4.13-6 The developer shall install low-flow water devices and waterless urinals as part of the project.

Implementation of mitigation measure MM 4.13-6 would further ensure adequate capacity of wastewater facilities to accommodate the proposed project. Impacts would remain *less than significant*.

¹¹⁷ Nasara, Adam. 2007. Personal correspondence with Orange County Sanitation District, June 13.

Solid Waste

4.13.7 Environmental Setting

Currently, Rainbow Disposal is the exclusive hauler of all solid waste for the City of Huntington Beach. Rainbow Disposal has an agreement with the City to haul commercial waste but will not take liquids or hazardous materials, such as paint, oil, solvents, chemicals or tires per state law. In addition, they do not accept sod, manure, lumber, concrete, or construction debris. However, the County of Orange provides free household hazardous waste collection centers, one of which is located at the Rainbow Disposal Transfer Station in Huntington Beach, which is further discussed below.

Rainbow Disposal operates a Transfer Station, located at 17121 Nichols Street within the City of Huntington Beach, and two Materials Recovery Facilities (MRFs) through which all solid waste is processed. A transfer station is a solid waste facility where smaller refuse-collection vehicles dump their loads of waste onto a tipping floor. This waste is then placed into larger transfer vehicles for transport to the point of ultimate disposal. Use of this type of facility reduces hauling costs and also reduces the number of trucks on the highway. Rainbow Disposal's Transfer Station has a design capacity of 2,800 tons per day, and is currently only at approximately 71 percent utilization.¹¹⁸ At the MRFs, trash is mechanically and manually sorted in order to ensure that the maximum amount goes towards recycling and the minimum amount is separated for landfill disposal.

One MRF primarily processes residential solid waste, and the other MRF processes residential and quasi-industrial solid waste, including construction waste. Construction-related waste is processed at various steps including sorting at the site followed by sorting at the tipping deck at the MRF. Thus, construction-related solid waste is processed via a primary and secondary sort, while the majority of solid waste is processed solely through a secondary (or dirty) sort.

As of 2004, which represents the most recent data available, the City of Huntington Beach maintained a 65 percent diversion rate from the Orange County landfills, which exceeds the AB939 requirement of 50 percent diversion of solid waste by the Year 2000.¹¹⁹

The Orange County Integrated Waste Management Department (IWMD) presently owns and operates three active landfills, including: Frank R. Bowerman Landfill in Irvine; Olinda Alpha Landfill in Brea; and Prima Deshecha Landfill in San Juan Capistrano. All three landfills are permitted as Class III landfills and have a combined design capacity of over 20,000 tons per day. Class III landfills accept only non-hazardous municipal solid waste for disposal; no hazardous or liquid waste can be accepted. Table 4.13-3 (Landfill Capacity) shows the existing capacities of each of these landfills, as well as their anticipated closure dates and annual usage.

¹¹⁸ Shuman, Bruce. 2007. Personal correspondence with Rainbow Disposal, June 13.

¹¹⁹ California Integrated Waste Management Board. 2007. Jurisdiction Profile for Huntington Beach website: <http://www.ciwmb.ca.gov/Profiles/Juris/JurProfile2.asp?RG=C&JURID=205&JUR=Huntington+Beach>. Accessed April 26, 2007.

Table 4.13-3 Landfill Capacity

<i>Landfill</i>	<i>Location</i>	<i>Current Remaining Capacity (Cubic Yards)</i>	<i>Maximum Capacity (Cubic Yards)</i>	<i>Estimated Close Date</i>	<i>Maximum Daily Load (tons)</i>	<i>Annual Usage (tons)</i>
Frank R. Bowerman	11002 Bee Canyon Access Road Irvine, CA 92602	59,411,872	127,000,000	2022	8,500	2,332,576
Olinda Alpha	1942 North Valencia Avenue Brea, CA 92823	38,578,383	74,900,000	2013	8,000	2,069,835
Prima Deshecha	32250 La Pata Avenue San Juan Capistrano, CA 92675	87,384,799	172,900,000	2067	4,000	814,488

SOURCE: CIWMB 2007

The City is under contract to the County's IWMD to dispose of all waste to the County landfill system (not a particular facility) until the Year 2010¹²⁰. Presently, it is anticipated that the Orange County landfill system will have adequate capacity to operate until 2067. The Frank R. Bowerman Landfill is the closest facility to the proposed project site and would likely be the facility that accepts solid waste from the site. Frank R. Bowerman Landfill is permitted to receive a daily maximum of no more than 8,500 tons per day and is scheduled to close in approximately 2022. However, the IWMD is conducting a study that may extend the life and disposal capacity of the landfill. In particular, the Regional Landfill Options for Orange County (RELOOC) Strategic Plan—Frank R. Bowerman Landfill Implementation is currently being developed.¹²¹

The California Integrated Waste Management Board (CIWMB) requires that all counties have an approved Countywide Integrated Waste Management Plan (CIWMP). To be approved, the CIWMP must demonstrate sufficient solid waste disposal capacity for at least 15 years, or identify additional available capacity outside of the County's jurisdiction. To this end, the RELOOC program, a 40-year strategic plan being prepared by the IWMD, was created. RELOOC evaluates options for trash disposal for Orange County citizens and to ensure that waste generated by the County is safely disposed of and that the County's future disposal needs are met.

4.13.8 Regulatory Framework

■ Federal

There are no applicable federal laws, regulations, or policies that pertain to solid waste.

¹²⁰ Jubinsky, Debra. 2007. Personal correspondence with City of Huntington Beach, Public Works, June 18.

¹²¹ RELOOC Team. 2001. Regional Landfill Options for Orange County (RELOOC) Specific Plan, December.

■ State

California Integrated Waste Management Board

At the state level, the management of solid waste is governed by regulations established by the CIWMB, which delegates local permitting, enforcement, and inspection responsibilities to local enforcement agencies. In 1997, some of the regulations adopted by the State Regional Water Quality Control Board pertaining to landfills (Title 23, Chapter 15) were incorporated with CIWMB regulations (Title 14) to form Title 27 of the *California Code of Regulations*.

California Solid Waste Reuse and Recycling Access Act of 1991

The *California Solid Waste Reuse and Recycling Access Act of 1991* requires each jurisdiction to adopt an ordinance by September 1, 1994 requiring each “Development Project” to provide an adequate storage area for collection and removal of recyclable materials.

AB 939—California Integrated Waste Management Act

In 1989, the State Legislature adopted the *Integrated Waste Management Act of 1989* (AB939), which established an integrated waste management hierarchy that consists of the following in order of importance: source reduction, recycling, composting, and land disposal of solid waste. The law also requires that each county prepare a new IWMP. The Act further required each city to prepare a Source Reduction and Recycling Element (SRRE) by July 1, 1991. Each SRRE includes a plan for achieving a solid waste goal of 25 percent by January 1, 1995, and 50 percent by January 1, 2000. Recently, a number of changes to the municipal solid waste diversion requirements under the *Integrated Waste Management Act* were adopted, including a revision to the statutory requirement for 50 percent diversion of solid waste. Under these provisions, local governments shall continue to divert 50 percent of all solid waste on and after January 1, 2000.

■ Local

Countywide Integrated Waste Management Plan

The CIWMP consists of many parts. Each city in the County, and the unincorporated area of the County, have several planning documents that outline their proposals for waste diversion methods. Specifically, the CIWMP is composed of the Siting Element, Summary Plan, Source Reduction and Recycling Element, Nondisposal Facility Elements, and the Household Hazardous Waste Element. All of these planning documents must be kept current and are submitted to the CIWMB for approval and acceptance. The entity assigned with the task of overseeing the submittal of these documents is the County of Orange, Waste Management Commission/Local Task Force.

General Plan Utilities Element

The City’s General Plan Utilities Element (1996) focuses on the City’s water supply, sanitation treatment, storm drainage, solid waste disposal, natural gas, electricity, and telecommunications systems. Applicable goals and policies of this element related to solid waste management include the following:

Goal U 4 Maintain solid waste collection and disposal services in accordance with the California *Integrated Waste Management Act of 1989* (AB939), and pursue funding sources to reduce the cost of the collection and disposal services in the City.

Objective U 4.1 Ensure an adequate and orderly system for the collection services and the disposal of solid waste to meet the demands of new and existing development in the City.

Policy U 4.1.1 Maintain adequate solid waste collection for commercial, industrial, and residential developments in accordance with state law.

Consistency Analysis

The proposed residential uses would be served by Rainbow Disposal, which has been contracted by the City to maintain their solid waste disposal needs in accordance with the above goal, objective and policy. The project site would work with Rainbow Disposal to meet this goal. No actions brought forth by the proposed project would be in conflict with the goals outlined in the Utilities Element of the City’s General Plan.

4.13.9 Project Impacts and Mitigation

■ Analytic Method

To determine the amount of solid waste generated by the proposed project, solid waste generation factors identified by the CIWMB are applied to the square footage of the proposed project, as presented in Table 4.13-4 (Projected Solid Waste Generation). To determine solid waste impacts associated with implementation of the proposed project, estimated future solid waste generation amounts are compared to the total anticipated remaining capacity at landfills that serve the City.

Table 4.13-4 Projected Solid Waste Generation			
Type of use	Generation Factor (pounds [lbs]/day/sf)	Proposed Development (sf)	Solid Waste (lbs per day)
Institutional			
Public/Institutional	0.007	45,000	315

SOURCE: California Integrated Waste Management Board. 2007.

■ Thresholds of Significance

The following thresholds of significance are based on Appendix G to the 2007 CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact if it would do any of the following:

- Comply with federal, State, and local statutes and regulations related to solid waste

- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid disposal needs¹²²

■ Effects Not Found to Be Significant

The following issue areas were determined to result in less-than-significant or no impacts according to the Initial Study prepared for the project.

Threshold	Would the project comply with federal, state, and local statutes and regulations related to solid waste?
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As a condition of approval, the project would be required to comply with all federal, state and local statutes and regulations related to solid waste handling, transport and disposal during construction and long-term operation. No impact would occur, and no further analysis of this issue is required in this EIR.

■ Impacts and Mitigation

Threshold	Would the project be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?
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Impact 4.13-7 Implementation of the proposed project would not generate solid waste that exceeds the permitted capacity of landfills serving the City of Huntington Beach.

As identified under Analytic Method above, the proposed project is estimated to produce approximately 315 lbs per day and approximately 114,975 lbs per year of solid waste for the entire site. This translates to a generation rate of approximately .168 tons of solid waste per day and 57.49 tons of solid waste per year for the entire project.

Rainbow Disposal's Transfer Station has a design capacity of 2,800 tons per day, and current utilization ranges between 53 and 71 percent. For purposes of this analysis, and assuming a worst-case scenario of 71 percent utilization, the daily solid waste contribution to this transfer station would be less than one tenth of a percent at approximately .006 percent of its entire design capacity. Utilization of the transfer station would remain at 71 percent with implementation of the proposed project. Rainbow Disposal is capable and willing to accept all commercial waste in addition to all construction waste generated by the proposed project.¹²³ In addition, the two MRFs sort and separate all waste and recycle all appropriate materials further reducing the waste generation going to the landfills.

As discussed previously, there are three landfills that could serve the project, which have a design capacity of between 4,000 and 8,500 tons per day. Based on landfill capacity, the solid waste contribution of 0.168 ton per day to any of the three landfills from the proposed project is at a maximum of .004 percent of their allowed daily capacity.

¹²² These standards have been slightly modified from the text found in CEQA Guidelines, Appendix G, for ease of comprehension.

¹²³ Shuman, Bruce. 2007. Personal correspondence with Rainbow Disposal, June 13.

With Rainbow Disposal willing to accept all commercial and construction waste from the project site and with sufficient current and future landfill capacity, the solid waste impacts resulting from implementation of the proposed project is considered *less than significant*. No mitigation is required.

Energy

4.13.10 Environmental Setting

For the purposes of this analysis, energy resources consist of electricity and natural gas. Electricity in the proposed project area is provided to the City by Southern California Edison (SCE), while The Gas Company provides natural gas services.

■ Electricity

The 2005 Integrated Energy Policy Report prepared by the California Energy Commission (CEC) summarizes the state of California's electrical and natural gas supplies. Despite improvements in power plant licensing, enormously successful energy efficiency programs and continued technological advances, development of new energy supplies is not keeping pace with the state's increasing demands. A key constraint in energy is the state's electricity transmission system. Under most circumstances, the state's power grid is able to reliably deliver energy to consumers; for the majority of the days during the year adequate energy supplies are reliably provided to consumers. California's electricity demand is driven by short summer peaks, such that reducing peak demand is the essential factor in adequately planning for the State's electrical needs. These peak demands include a few hours to several days each year, such that managing demand, rather than developing supplies at new power plants for this limited time appears the most efficient method to meet State needs on peak days. The CEC has developed an action plan which includes increasing energy capacity in investor-owned utilities, incentives for combined heat and power projects (cogeneration), energy efficiency programs, expansion of renewable energy programs.

SCE does not currently have any facilities or infrastructure on the project site. Off site, however, there is an existing single-phase transformer located on the east side of Goldenwest Street, north of Talbert Avenue. No change to existing SCE infrastructure is proposed. Other major SCE facilities located in the City include a generating station, six substations, and switching yards.

SCE derives its electricity from a variety of sources, as shown in Table 4.13-5 (Southern California Edison Power Content). Nearly half of its electricity comes from natural gas, with renewable resources constituting another nearly 20 percent.

Table 4.13-5 Southern California Edison Power Content

<i>Energy Resources</i>	<i>SCE Power Mix (projected)</i>
Eligible Renewable	19%
Biomass and Waste	2%
Geothermal	11%
Small hydroelectric	1%
Solar	1%
Wind	4%
Coal	11%
Large Hydroelectric	4%
Natural Gas	49%
Nuclear	17%
Other	<1%
<i>Total</i>	<i>100%</i>

SOURCE: Tran 2004

Percentages are estimated annually by the California Energy Commission based on electricity sold to California consumers during the previous year.

■ Natural Gas

California has not experienced a widespread natural gas shortage in many years. Current supplies are adequate to meet demands, although natural gas storage could be expanded to improve reliability. The state imports 87 percent of its statewide natural gas supply.

Natural gas is provided to the region by The Southern California Gas Company (SCGC), which provides service to 19 million people in California. The SCGC receives its supply of natural gas from several sources: Southern California, Northern California, and out-of-state suppliers. All natural gas services are regulated by the California Public Utilities Commission (CPUC). The SCGC currently provides natural gas service to the vicinity of the project site via existing gas mains in various locations within the project area.¹²⁴

4.13.11 Regulatory Framework

■ Federal

No federal policies related to energy would apply to the proposed project.

¹²⁴ Harriel, Michael. 2007. Technical Supervisor, Southern California Gas Company. Written correspondence, May 22.

■ State

California Code of Regulations (CCR) Title 24

New buildings in California are required to conform to energy conservation standards specified in Title 24 of the CCR. The standards establish “energy budgets” for different types of residential and non-residential buildings, which all new buildings must comply with. The energy budget has a space-conditioning component and a water-heating component, both expressed in terms of energy (British thermal units [BTU]) consumed per year. The regulations allow for trade-offs within and between the components to meet the overall budget. Energy consumption of new buildings in California is regulated by the State Building Energy Efficiency Standards, embodied in Title 24 of the CCR. The efficiency standards apply to new construction of both residential and nonresidential buildings, and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. The building efficiency standards are enforced through the local building or individual agency permit and approval processes. The City requires all new buildings to meet Title 24 standards.

■ Local

General Plan Utilities Element

The City’s General Plan Utilities Element (1996) focuses on the City’s water supply, sanitation treatment, storm drainage, solid waste disposal, natural gas, electricity, and telecommunications systems. Applicable goals and policies of this element related to gas and electricity services and facilities include the following:

- Goal U 5** Maintain and expand service provision to City of Huntington Beach residences and businesses.
 - Objective U 5.1** Ensure that adequate natural gas, telecommunication, and electrical systems are provided.
 - Policy U 5.1.1** Continue to work with service providers to maintain current levels of service and facilitate improved levels of services.
 - Policy U 5.1.2** Continue to underground above ground electrical transmission lines.

Consistency Analysis

Implementation of the proposed project would include the construction of necessary energy infrastructure on site. As discussed below, it is anticipated that the increased demand on energy would not require the construction of upgraded and/or expanded utilities that would cause significant environmental impacts. In addition, the developer would ensure that all possible transmission lines would be placed underground during the construction phase with the exception of existing lines related to the site but located outside the project site boundaries. The proposed project would not conflict with the applicable goals, objectives and policies of the City’s General Plan Utilities Element.

4.13.12 Project Impacts and Mitigation

■ Analytic Method

To determine whether or not implementation of the proposed project would result in impacts on electricity and natural gas supplies, the projected increase in energy demand for each utility was analyzed and calculated using a per-square-foot consumption rate. The anticipated electrical demand associated with the proposed project is 900 kilowatt-hour (kwh) per day. This estimated generation is based on the electrical load of an existing community center of similar size and uses as the proposed project, and is used as recommended by the SCE.¹²⁵ Table 4.13-6 (Projected Natural Gas Demand) provides natural gas demand associated with the proposed project.

Table 4.13-6 Projected Natural Gas Demand				
<i>Type of use</i>	<i>Energy Consumption Rates (cf/sf/month)</i>	<i>Proposed Development (square feet)</i>	<i>Natural Gas (cf/mo)</i>	<i>Natural Gas (cf/day)</i>
Residential				
Public/Quasi-Public	2.9	45,000	130,500	4,350

SOURCE: SCAQMD 1993, Natural Gas Consumption Rates.
The energy consumption rates were taken from the SCAQMD *CEQA Air Quality Handbook* (1993).

To determine potential impacts on energy supplies resulting from implementation of the proposed project, the projected increase in electricity demand was presented to the utility providers to evaluate whether or not there would be an adequate and reliable source of electricity and natural gas for the proposed project, and whether or not any infrastructure improvements would be necessary.

■ Thresholds of Significance

The following thresholds of significance are based on Appendix F to the 2007 CEQA Guidelines, which sets forth guidelines with regard to addressing impacts of a proposed project on energy resources. For the purposes of this EIR, implementation of the proposed project may result in a potentially significant impact if the proposed project would cause either of the following results:

- Require or result in the construction of new energy production and/or transmission facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- Encourage the wasteful or inefficient use of energy

■ Effects Not Found to Be Significant

The IS/NOP prepared for the project did not evaluate potential impacts of the proposed project on electricity and natural gas utilities. As such, effects of the proposed project were not determined.

¹²⁵ Arlinda Dimercurio. 2007. Personal correspondence with Southern California Edison Company, July 2.

■ Impacts and Mitigation

Threshold	Would the project require or result in the construction of new energy production and/or transmission facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
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Impact 4.13-8 Implementation of the proposed project could increase the demand for electricity, and could require or result in the construction of new energy production or transmission facilities.

As discussed above, the State is currently experiencing constraints related to energy supply and delivery. These constraints are generally limited to peak demand days during the summer months, such that for the majority of the days during the year adequate energy supplies are reliably provided to consumers. Additional energy demands resulting from the proposed project would be adequately met by current infrastructure during most of the year. On peak days, the incremental demand from the proposed project would contribute to electricity supply and delivery constraints. The proposed project would be constructed in compliance with Title 24 energy efficiency standards. Further, if energy constraints remain, they are a reflection of the broad energy supply issues experienced by California as a whole, and not unique to the demands of the proposed project.

Implementation of the proposed project would increase the use of electricity at the project site for lighting, heating, and air conditioning the senior center building. The daily electricity consumption by the proposed project is estimated to be approximately 900 kWh/day. There is currently no existing infrastructure on the project site to provide electrical services to the proposed project. According to the SCE, the existing transformer located on the east side of Goldenwest Street, north of Talbert Avenue, would not be able to provide the anticipated electrical demand of 900 kWh/day generated by the proposed project.¹²⁶

As such, according to SCE, new electrical facilities would have to be constructed on site. The proposed project would likely require a three-phased 12,208-volt transformer typical of most commercial buildings. In order to accomplish this, construction activities may include trenching and construction of a new conduit, structure pad, and transformer. However, this estimate is based on preliminary information and consultation with the SCE. Once final site plans are prepared for the proposed project, additional consultation with SCE would be required to verify the electrical load of the project and determine the type and location of structures to be constructed. In addition, SCE would need to work with electrical engineers to determine the most practicable location of the facilities.¹²⁷

As a result, the electricity demand generated by the proposed project would require the need for additional construction or expansion of energy facilities beyond that which was previously planned. Therefore, this impact would be potentially significant. The following mitigation measure related to impacts associated with energy usage was initially identified in the Central Park Master Plan EIR. The language in this measure has been modified for this project to reflect project-specific components of the

¹²⁶ Arlinda Dimercurio. 2007. Personal correspondence with Southern California Edison Company, July 2.

¹²⁷ Ibid.

proposed senior center where necessary, although their intent remains the same. The original measures from the Central Park Master Plan EIR appear in Table 4-1 of this EIR.

For the purposes of this document, the City shall implement mitigation measure MM 4.13-8, which would ensure that measures set forth in the Central Park Master Plan EIR are carried over:

MM 4.13-8 (This MM is Measure Utilities-9 from the Central Park Master Plan EIR)

Prior to construction of program level elements, additional electrical load analyses shall be undertaken to determine the need for additional electrical transformers.

Implementation of mitigation measure MM 4.13-8 would reduce potentially significant impacts associated with the anticipated electrical demands of the proposed project to a ***less-than-significant*** level by ensuring availability of electrical facilities.

Impact 4.13-9 Implementation of the proposed project could increase the demand for natural gas, but would not require or result in the construction of new gas production or transmission facilities.

As shown in Table 4.13-6 (Projected Natural Gas Demand), the project-generated demand for natural gas would be approximately 4,350 feet³/day. The proposed project would be served by existing gas lines located in various locations within the vicinity of the project site.¹²⁸

As SCGC declares itself a “reactive” utility that will provide natural gas as customers request its services, SCGC has indicated that an adequate supply of natural gas is currently available to serve the proposed project and that the natural gas level of service provided to the surrounding area would not be impaired by the proposed project. New natural gas lines to serve the project site would be located underground and would be constructed in accordance with SCGC’s policies and extension rules on file with the CPUC at the time contractual agreements are made. Because the natural gas demand projected for the proposed project would not exceed available or planned supply, new infrastructure would not be required to serve the project site. Therefore, this impact would be ***less than significant***, and no mitigation is required.

Threshold	Would the project encourage the wasteful or inefficient use of energy?
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Impact 4.13-10 Implementation of the proposed project would not result in the wasteful or inefficient use of energy by the proposed project.

As discussed in the Regulatory Framework section above, all new buildings are required to conform to the energy conservation standards specified in CCR Title 24. In order to conform to CCR Title 24, efficient energy use would be enforced and would ensure that a ***less-than-significant*** impact remains with respect to the wasteful or unnecessary use of energy. No mitigation is required.

¹²⁸ Harriel, Michael. 2007. Technical Supervisor, Southern California Gas Company. Written correspondence, May 22.

4.13.13 Cumulative Impacts: Water Supply, Solid Waste, Wastewater, Energy

The geographic context for the City's analysis of cumulative water supply impacts is the service area of the Orange County Water District, including all anticipated cumulative growth represented by full implementation of the General Plan, and the specific projects identified by Table 3-4 (List of Related Development Projects) in Chapter 3 (Project Description).

The geographic context for cumulative impacts related to water is the City of Huntington Beach and part of the Orange County Water District which serves the City in order to supplement city wells and share programs.

The geographic context for cumulative impacts for all other utilities are the service areas for each of the utility providers (e.g., OCSD, OCIWMD).

■ Water Supply

Development of cumulative projects within the City of Huntington Beach would demand additional quantities of water, depending on net increases in population, square footage, and intensity of uses. The City estimates that their water supplies will be enough to supply all projected growth through 2025, and with the addition of import connections they would have an excess water supply. The proposed project would require approximately 11,425 gpd, which would represent approximately 0.003 percent of the City's total water demand in 2025. This water supply could be adequately provided by the City through existing entitlements. Therefore, the proposed project would have a *less-than-significant* contribution to cumulative effects.

Development within the City will contribute to the cumulative demand that will result in the need for new or expanded infrastructure facilities. In turn, the City will construct new facilities or expand existing water supply and water treatment facilities, which could result in significant impacts to the environment. Due to the developed nature of the service area, it is expected that such expansion of water conveyance and/or treatment infrastructure would be minimal as existing infrastructure already exists. Because the proposed project would likely not require the expansion of existing infrastructure, only connections to existing conveyance infrastructure, and because there would be adequate capacity in the existing water treatment plant to serve future demand, the contribution of the proposed project would not be cumulatively considerable. Therefore, the project's contribution to cumulative water infrastructure impacts would be *less than significant*.

■ Wastewater

The RWQCB, in connection with the implementation of the NPDES program, has imposed requirements on the treatment of wastewater and its discharge into local water bodies. Wastewater produced by the proposed project would meet these requirements due to treatment capacity available at Wastewater Treatment Plant No. 2 and the implementation of wastewater BMPs. Therefore, cumulative

development would not result in the exceedance of SARWQCB wastewater treatment requirements, and would have a *less-than-significant* cumulative impact.

Cumulative growth in the service area could result in the need for additional conveyance infrastructure, and due to the continually developing nature of the service area, it is expected that such expansion of conveyance infrastructure could result in significant cumulative environmental effects.

Development of cumulative projects within the OCSD service area would generate additional quantities of wastewater, depending on net increases in population, square footage, and intensification of uses. These projects would contribute to the overall regional demand for wastewater treatment service. OCSD Wastewater Treatment Plant No. 2, which would be the primary treatment plant of the area around Huntington Beach, is currently operating at 151 mgd of wastewater. Although the plant is designed to treat approximately 168 mgd of wastewater, and thus is below operating capacity, according to OCSD, plans are currently in place to upgrade the plant's total treatment capacity. The proposed project would generate approximately 0.01 mgd of wastewater, which represents a very small fraction of one percent of the total current capacity of the plant. In addition, the City would continue to implement water conservation measures that would result in a decrease in wastewater generation. Therefore, as the plant retains excess capacity, this is considered to be a *less-than-significant* cumulative impact.

■ Solid Waste

Orange County IWMD has the ability to take up to 20,000 tons of solid waste a day into its three landfills. With the implementation of the AB939 provisions, which mandates the reduction of solid waste disposal in landfills, the amount of solid waste disposed of in landfills by build-out is required to be 50 percent lower than actual waste production. The OC IWMD has stated that it has sufficient landfill capacity to accommodate future disposal needs of the County until 2035 based on its projections, which include expansion within the County. The proposed project's anticipated solid waste generation of 0.168 ton per day represents a maximum of 0.004 percent of the allowed daily capacity of any of the three landfills serving the proposed project. Therefore, the proposed project would not create demands for solid waste services that exceed the capabilities of the County's waste management system. Consequently, cumulative impacts associated with solid waste within the County would be considered *less than significant*.

■ Energy

SCE is a private utility that generates its own electricity and independently supplies the City of Huntington Beach. SCE has stated that there is not existing electrical infrastructure on site to provide services to the proposed project. While there's a sufficient supply of energy that would accommodate the proposed project, SCE would have to construct a new transformer and associated structures to serve the proposed project. However, because SCE is able to meet future projected demands, and an action plan has been identified to address energy issues on a broader scale, cumulative impacts would be less than significant. Project impacts would have a less-than-significant contribution to these impacts. This is considered to be a *less-than-significant* impact.

With regard to natural gas, development in the geographic area surrounding the project site would result in continued use of this resource. The area surrounding the project site is currently served by existing infrastructure that the proposed project would also use. The Gas Company has stated that it can supply natural gas without jeopardizing other service commitments. The cumulative impact related to the supply of natural gas and to the need for additional or expanded facilities is less than significant, and the proposed project's contribution of 350 feet³/day to demand would not be cumulatively considerable. This is considered to be a *less-than-significant* impact.

4.13.14 References

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