3.15 UTILITIES AND SERVICE SYSTEMS

This EIR section analyzes the potential for adverse impacts on utilities and service systems resulting from implementation of the proposed project. The Initial Study (Appendix A) identified the potential for impacts associated with water supply, sewer/wastewater service, and solid waste. Data used to prepare this section were taken from the City's General Plan Utilities Element, the Water Supply Assessment (Appendix D), Domestic Water System and Sanitary Sewer System CEQA Support Information report, and information from the service providers regarding available service levels and current or anticipated constraints. Full bibliographic entries for all reference materials are provided in Chapter 7 (References) of this document. It should be noted that telephone and cable television services are "on demand" services and are, therefore, not considered in this analysis; electrical and natural gas services are specifically addressed in Section 3.5 (Energy and Mineral Resources); and storm drainage facilities are specifically addressed in Section 3.8 (Hydrology and Water Quality).

3.15.1 Existing Conditions

Water Supply

The City of Huntington Beach provides potable water to the project site. Currently, the City's domestic water system that serves the project site includes 12- to 20-inch pipelines located in the streets that border the project site and an 18-inch pipeline running through the site. Specifically, the off-site domestic water system that serves the project site includes the following:

- Water availability from the north through a 20-inch pipeline in Lake Street, with a connection to serve the project site through an existing 18-inch pipeline on the project site. The 18-inch water main is part of the water supply for the Hilton Hotel and the Waterfront development, east of the proposed project.
- Additional supply from the north through a 12-inch pipeline in Atlanta Avenue
- Water supply from the west via a 12-inch pipeline continued in First Street to Pacific Coast Highway (PCH)
- Water supply from the south and east through a 12-inch water main in PCH

The City of Huntington Beach is currently constructing an extension of the existing on-site 18-inch pipeline to connect to a new 12-inch main in Beach Boulevard. The existing project area water system has sufficient capacity for existing development and the commercial expansion projects east of the project site.

The City has a secure and reliable, drought resistant water supply, with water available to the City through two water supply sources: groundwater and imported surface water. The primary water source for the City of Huntington Beach's municipal water supply is groundwater produced from the City's wells in the Santa Ana Groundwater Basin. The City produces groundwater via seven existing domestic water wells that meet or exceed all water quality standards. The remaining water supply is purchased from the Municipal Water District of Orange County, a member agency of the Metropolitan Water District of Southern California. This imported water is supplied to the City via three service connections. In addition, the City has emergency mutual-aid water connections with the Cities of Fountain Valley, Seal Beach, and Westminster.

Water supply is provided to the City and managed pursuant to a system of institutional arrangements, agreements, permits, licenses, judgments, and statutes. The quality of the water available to the City is regulated by the California Regional Water Quality Control Board, Santa Ana Region, and is managed, in part, by the Orange County Water District (OCWD).

The quantity and sources of the native surface supply to the Santa Ana River, which naturally replenishes the Orange County Groundwater Basin, is governed by the terms of judgments entered pursuant to settlement agreements among upper and lower Santa Ana River Basin water users. These and other contractual arrangements have been refined since the formation of the Orange County Water District in 1933, the formation of the Metropolitan Water District of Southern California in 1928, and the organization of the Municipal Water District of Orange County in 1951. As stated in the Water Supply Assessment (WSA) dated June 6, 2003, prepared for the proposed project and supported in the City's 2000 Urban Water Management Plan, the combined ability of these water importers and regional suppliers can meet the needs of their member agencies, including the City of Huntington Beach. The WSA concludes that the total water supply available to the City during normal, single dry and multiple dry years within a 20-year projection will meet the projected water demand of the proposed project, as well as the demand of existing and other planned future uses, including agricultural uses.

Projected water supply and demand for the City of Huntington Beach is provided in Table 3.15-1. The Urban Water Management Plan projects City water demands in five-year increments up to the year 2020. The Plan is based upon the ultimate land use areas from the City's General Plan. Available water supply for the City of Huntington Beach is projected to exceed the water demand of the City, including the proposed project and other planned future developments, over the next 20 years.

In addition to the 2000 Urban Water Management Plan, the City of Huntington Beach also adopted a Water Master Plan in December 2000 to evaluate and plan for adequate water supply at build-out of the General Plan, as amended, and adopted specific plans, including the Downtown Specific Plan, as amended. This Plan

confirms the Urban Water Management Plan's conclusion that water can be provided at full system build-out by Year 2020. Furthermore, according to the City (Rulla 2002), a February 11, 2002 report by the Metropolitan Water District concluded that if all imported water supply programs and local projects proceed as planned, with no change in demand projections, reliability could be assured beyond 20 years.

Table 3.15-1 City of Huntington Beach Water Supply and Demand (in acre-feet)

Year	2000	2005	2010	2015	2020	2022
Supply	37,460	38,200	40,075	40,100	40,100	40,100
Demand	34,600	35,526	37,270	37,330	37,330	37,330
Difference	2,860	2,674	2,805	2,770	2,770	2,770

SOURCE: City of Huntington Beach, 2000 Urban Water Management Plan (December 2000), as cited in the Water Supply Assessment for Pacific City Development (Appendix D)

Wastewater Service

The Orange County Sanitation District (OCSD) provides regional wastewater collection, treatment, and disposal services for the City of Huntington Beach. OCSD operates two wastewater treatment plants, Plant 1 and Plant 2, and both perform primary and secondary treatment procedures. Plant 1 is located in Fountain Valley, and Plant 2 is located in Huntington Beach. The two plants receive a total of 234 million gallons per day (mgd), with Plant 1 receiving approximately 83 mgd and Plant 2 receiving the remaining 151 mgd (OCSD 2002). Plant 2 treats most of the City's sewage. No existing capacity issues have been identified, and OCSD has developed engineering plans for plant improvements anticipated to meet area demands to the year 2050.

The OCSD discharges treated wastewater offshore approximately 5 miles from the coast, at a depth of 200 feet underwater, just north of the Santa Ana River in Huntington Beach. The OCSD is permitted to discharge this treated wastewater through a permit jointly issued by the Environmental Protection Agency (EPA) and the Regional Water Quality Control Board (RWQCB). OCSD treats wastewater through preliminary, advanced primary, and secondary treatment in order to ensure that discharged treated wastewater does not include harmful concentrations of contaminants. The OCSD tracks and evaluates water quality, sediment quality, and sea life from Seal Beach to Corona del Mar to ensure that applicable beach and water quality standards are being met. During February 2002, routine ocean monitoring detected bacteria often associated with wastewater at shallower depths than previously seen. The amount of bacteria detected did not exceed any applicable water quality standards. However, in order to eliminate the possibility that treated wastewater is adversely affecting the surf zone or recreational water quality standards, OCSD board of directors directed that all wastewater be disinfected prior to discharge. The short-term disinfection

method, which began in August 2002, is a chlorination-dechlorination process. While this method is currently being employed, the OCSD is researching a long-term disinfection method.

Currently, there is no sewer infrastructure operating on the project site, as the site is vacant. Existing sewer lines are located in the surrounding streets bordering the project site, including First Street, Atlanta Avenue, Huntington Street, and PCH. An existing 54-inch OCSD trunk sewer is located to the west of the project site along Walnut Avenue.

Solid Waste

Rainbow Disposal is the exclusive hauler of all solid waste for the City of Huntington Beach. They operate 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. One MRF primarily processes residential solid waste, and the other MRF processes residential and quasi-industrial solid waste, including construction and demolition 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. Additionally, Rainbow Disposal maintains a 63 percent diversion rate from the Orange County landfills, which exceeds the AB939 requirement of 50 percent diversion of solid waste by the Year 2000.

Orange County presently owns and operates three active landfills, which have a combined design capacity of 20,000 tons per day. It is anticipated that the Orange County landfill system will have adequate capacity to operate until 2035. The Frank R. Bowerman Landfill is the closest facility to the site and would likely be the facility that accepts solid waste from the site. The City is under contract to the County's Integrated Waste Management Division to dispose of all waste to the County landfill system (not a particular facility) until the Year 2007. Rainbow Disposal's Transfer Station has a design capacity of 2,800 tons per day, and is currently only at approximately 57 percent utilization. In addition, Rainbow Disposal has indicated that landfill capacity would not be an issue for the City of Huntington Beach for at least 40 years (Jerry Moffat, May 2002).

The California Integrated Waste Management Board 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. In addition, Orange County landfill system has a study group and 40-year plan for expansion considering future expansive options for the three county-operated landfills.

3.15.2 Regulatory Framework

There are no federal regulations related to utilities that apply to the proposed project.

State

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

The Urban Water Management Planning Act was developed due to concerns for potential water supply shortages throughout the State of 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 to describe their efforts to promote efficient use and management of water resources.

Water Conservation Projects Act

The State of 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 January 2002, SB 221 and SB 610 serve to ensure that certain land developments in the State 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 20-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 the California Environmental Quality Act.

AB 939—California Integrated Waste Management Act

In 1989, the Legislature adopted the California Integrated Waste Management Act of 1989. The Act requires that each county prepare a new Integrated Waste Management Plan. The Plan was required to include a Source Reduction and Recycling Element prepared by each city within the State by July 1, 1991. Each source reduction element included a schedule providing for source reduction, recycling, or composting of 25 percent of solid waste in the jurisdiction by January 1, 1995, and 50 percent by January 1, 2000. SB 2202 (Senate Environmental Quality Committee 2000) made a number of changes to the municipal solid waste diversion requirements under the Integrated Waste Management Act. These changes included a revision to the statutory requirement for 50 percent diversion of solid waste to clarify that local governments shall continue to divert 50 percent of all solid waste on and after January 1, 2000.

Local

Southern California Association of Governments

SCAG's Regional Comprehensive Plan and Guide (RCPG) and RHNA are tools for coordinating regional planning and development strategies in southern California. Policies contained in the RCPG identified by SCAG as relevant to the proposed project are identified in Table 3.15-2, and this table also includes an assessment of the proposed project's consistency with these policies.

Table 3.15-2 SCAG Regional Comprehensive Plan and Guide—Policies Applicable to Utilities and Service Systems

Policy	*Project Consistency*
Policy 7. Encourage water reclamation throughout the region where it is cost-effective, feasible, and appropriate to reduce reliance on imported water and wastewater discharges. Current administrative impediments to increased use of wastewater should be addressed.	Reclaimed water is not currently being used by the City. If reclaimed water became available in the City, then the project could use this source of water where appropriate.
Policy 3.27. The timing, financing, and location of public facilities, utility systems, and transportation systems shall be used by SCAG to implement the region's growth policies.	As described below in Section 3.15.3 (Impacts), water and wastewater providers and systems serving the project site have adequate capacity to provide an acceptable level of service to the proposed development. Additionally, with implementation of MM U-1 and MM U-2, which would require the Applicant to provide adequate access for waste haulers and to develop a solid waste management plan to reduce solid waste generation, the proposed project would result in less-than-significant impacts to solid waste hauling services and the County landfill system. Further, as described in Section 3.9 (Land Use), the proposed project would be consistent with the development intensities specified in the City General Plan and in the Downtown Specific Plan and would, therefore, be implemented consistently with the growth envisioned in the City and in the region.

General Plan Utilities Element

The General Plan Utilities Element focuses upon plans and policies applicable to the City's water supply, sanitation treatment (wastewater), storm drainage, solid waste disposal, natural gas, electricity, and telecommunications systems. Table 3.15-3 identifies goals and objectives presented in the Utilities Element of the General Plan related to utilities that are potentially relevant to the proposed project. This table also includes an assessment of the proposed project's consistency with the policies adopted in support of these goals and objectives.

Table 3.15-3 General Plan Utilities Element—Policies Applicable to Utilities and Service Systems

Goal, Objective, or Policy	*Project Consistency*
Goal U 1. Provide a water supply system which 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 costs of water provision to the City.	Conformance with implementing policies, as discussed below, results in conformance with this goal.
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.	Conformance with implementing policies, as discussed below, results in conformance with this objective.

Table 3.15-3 General Plan Utilities Element—Policies Applicable to Utilities and Service Systems

Goal, Objective, or Policy	*Project Consistency*
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.	As described below in Section 3.15.3 (Impacts), a water supply assessment (WSA) was completed for the proposed project, in accordance with State law, to evaluate whether, under the City's current Urban Water Management Plan, sufficient water supplies exist in or are planned for the City to serve the proposed project. As described in Section 3.9 (Land Use), the proposed project would be consistent with development projections in the City's General Plan and in the Downtown Specific Plan, upon which water demand projections in the Urban Water Management Plan were calculated. In addition, the WSA concluded that the City possesses sufficient water supplies to serve the proposed project without compromising service to other existing or planned developments within the City. Further, the proposed project includes infrastructure improvements to facilitate delivery of adequate water supplies to the project. The proposed project would, therefore, be implemented in a manner that is consistent with this policy.
Policy U 1.1.2. Approve and implement development in accordance with the standards identified in the Growth Management Element.	As described above, the proposed project would be consistent with General Plan and Downtown Specific Plan growth projections for the project site and, with implementation of MM U-1 and MM U-2, would not compromise the ability of utilities providers to maintain adequate service across their respective systems.
Objective U 1.2. Ensure that existing and new development does not degrade the City's surface waters and groundwater basins.	Conformance with implementing policies, as discussed below, results in conformance with this objective.
Policy U 1.2.1. Require that new and existing development contain safeguards and mitigation measures preventing degradation.	As described in Section 3.15.3 (Impacts), the proposed project would be consistent with General Plan and Downtown Specific Plan growth projections for the project site and not result in the degradation of water or wastewater service. Although the proposed project could result in a potentially significant impact with respect to solid waste transportation and disposal, implementation of MM U-1 and MM U-2, would ensure the provision of adequate access for waste haulers and would reduce the quantity of solid waste entering the disposal stream, thus preventing degradation of the solid waste disposal system.
Policy U 1.2.2. Require new developments to connect to the sewer system.	As described in Chapter 3 (Project Description) and in Section 3.15.3 (Impacts), the proposed project includes connections to the sewer system. The proposed project would, therefore, be consistent with this policy.
Objective U 1.3. Minimize water consumption rates through site design, use of efficient systems, and other techniques.	Conformance with implementing policies, as discussed below, results in conformance with this objective.
Policy U 1.3.2. Continue to require the incorporation of water conservation features in the design of all new construction and site development.	As a condition of approval for the proposed project, the project must include appropriate water conservation features. The proposed project would, therefore, be consistent with this policy.
Policy U 1.3.4. Require the use of reclaimed water for landscaped irrigation, grading, and other noncontact uses in the new developments, where available or expected to be available.	Reclaimed water is not currently used by the City. If reclaimed water became available in the City, then the project could use this source of water where appropriate.
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.	Conformance with implementing policies, as discussed below, results in conformance with this objective.

Table 3.15-3 General Plan Utilities Element—Policies Applicable to Utilities and Service Systems

Goal, Objective, or Policy	*Project Consistency*
Policy U 1.4.1. Require the costs 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 by the actual construction of the improvements in accordance with the State Nexus Legislation.	As described in Section 3.15.3 (Impacts), the WSA prepared for the proposed project determined that the City has adequate water supplies to serve the project without compromising service to existing or planned development. and would not require the construction of additional water supply systems. Additionally, the proposed project includes improvements to existing water infrastructure (the extension of connections) to allow delivery of adequate waster supply to the project site.
Goal U 2. 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 to the City.	Conformance with implementing policies, as discussed below, results in conformance with this goal.
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 a maximized cost efficiency.	Conformance with implementing policies, as discussed below, results in conformance with this objective.
Policy U 2.1.1. Approve and implement development in accordance with the standards identified in the Growth Management Element.	As described above, the proposed project would be consistent with General Plan and Downtown Specific Plan growth projections for the project site and, with implementation of MM U-1 and MM U-2, would not compromise the ability of utilities providers to maintain adequate service across their respective systems.
Policy U 2.1.6. Require that sewer capacity is available before building permits are issued for new development.	As described in Section 3.15.3 (Impacts), existing sewer system capacity is adequate to serve the proposed project.
Policy U 2.1.7. Design and route wastewater treatment collection facilities to eliminate the need for pump stations where possible.	As described in Section 3.15.3 (Impacts), existing sewer system capacity is adequate to serve the proposed project, and the proposed project would not require construction of additional wastewater conveyance or treatment facilities, including pump stations.
Objective U 2.2. Ensure the costs of wastewater infrastructure improvements are borne by those who benefit.	Conformance with implementing policies, as discussed below, results in conformance with this objective.
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 the State Nexus Legislation.	As described in Section 3.15.3 (Impacts), existing sewer system capacity is adequate to serve the proposed project, and the proposed project would not require construction of additional wastewater conveyance or treatment facilities..
Goal U 4. Maintain solid waste collection and disposal services in accordance with the California Integrated Waste Management Act of 1989, and pursue funding sources to reduce the cost of the collection and disposal services in the City.	Conformance with implementing policies, as discussed below, results in conformance with this goal.

Table 3.15-3 General Plan Utilities Element—Policies Applicable to Utilities and Service Systems

Goal, Objective, or Policy	*Project Consistency*
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.	Conformance with implementing policies, as discussed below, results in conformance with this objective.
Policy U 4.1.2. Investigate the feasibility of providing trash and recycling receptacles along City streets in pedestrian oriented commercial areas (i.e., Downtown, Peter's Landing, Beach Boulevard nodes, etc); design receptacles to be aesthetically compatible with the district in which they are located.	As required by MM U-2, the proposed project would be required to prepare and implement a Solid Waste Management Plan to reduce solid waste entering the disposal stream from the project site. The plan would also include the provision of disposal and recycling bins for construction workers and for visitors. Additionally, the residential component of the proposed project would be required to comply with all applicable City requirements regarding solid waste disposal and collection.
Goal U 5. Maintain and expand service provisions to City of Huntington Beach residences and businesses.	Conformance with implementing policies, as discussed below, results in conformance with this goal.
Objective U 5.1. Ensure that adequate natural gas, telecommunication and electrical systems are provided.	Conformance with implementing policies, as discussed below, results in conformance with this objective.
Policy U 5.1.4. Require the review of new and or expansions of existing industrial and utility facilities to ensure that such facilities will not visually impair the City's coastal corridors and entry nodes.	As described in Section 3.15.3 (Impacts), the proposed project would not require the construction of utility facilities that would visually impair the City's coastal corridors or entry nodes.

General Plan Coastal Element

The policies listed within the Coastal Element are consistent with the Utilities Element in its objective to ensure adequate infrastructure for existing and planned land uses within the Coastal Zone. Table 3.15-4 identifies goals and objectives presented in the Coastal Element of the General Plan related to utilities that are potentially relevant to the proposed project. This table also includes an assessment of the proposed project's consistency with the policies adopted in support of these goals and objectives.

Table 3.15-4 General Plan Coastal Element—Policies Applicable to Utilities and Service Systems

Goal, Objective, or Policy	*Project Consistency*
Goal C 9. Provide water, sewer, and drainage systems that are able to support permitted land uses; upgrade existing deficient systems; and pursue funding sources to reduce costs of wastewater service provision in the City.	Conformance with implementing policies, as discussed below, results in conformance with this goal.
Objective C 9.1. Provide and maintain water, sewer and drainage systems that adequately serve planned land uses at a maximized cost efficiency.	As described in Section 3.15.3 (Impacts), existing water and sewer system capacity is adequate to serve the proposed project.

General Plan Growth Management Element

The policies listed within the Growth Management Element and applicable to utilities are consistent with the Utilities Element in its objective to ensure adequate infrastructure for existing and planned land uses while providing for orderly growth in the City. Table 3.15-5 identifies goals and objectives presented in the Growth Management Element of the General Plan related to utilities that are potentially relevant to the proposed project. This table also includes an assessment of the proposed project's consistency with the policies adopted in support of these goals and objectives.

Table 3.15-5 General Plan Growth Management Element—Policies Applicable to Utilities and Service Systems

Goal, Objective, or Policy	*Project Consistency*
Goal GM 5. Provide adequate water service to all areas of the City in a coordinated and cost efficient manner.	Conformance with implementing policies, as discussed below, results in conformance with this goal.
Objective 5.1.. 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.	Conformance with implementing policies, as discussed below, results in conformance with this objective.
Policy GM 5.1.2. Provide water service to all areas in accordance with the following minimum standards: ■ Water pressure shall be provided with the following minimum standards for average and peak hour demand conditions: minimum pressure – 40 psi; maximum pressure – 80 psi; average pressure – 60-65 psi. ■ Provide fire flow capabilities that meet the Fire Department's requirements. ■ Provide emergency water supply for a minimum of one day. ■ Provide the best quality of water available at the most reasonable cost. ■ Meet all requests for service in a timely manner.	As described below in Section 3.15.3 (Impacts), a Water Supply Assessment (WSA) was completed for the proposed project, in accordance with State law, to evaluate whether sufficient water supplies exist in or are planned for the City to serve the proposed project. The WSA concluded that the City possesses sufficient water supplies to serve the proposed project without compromising service to other existing or planned developments within the City. The proposed project includes infrastructure improvements to facilitate delivery of adequate water supplies to the project. The proposed project would, therefore, be implemented in a manner that is consistent with this policy.
Policy GM 5.1.3. Require the use of reclaimed water for landscaped irrigation, grading, and other non-contact uses in new developments, where available or expected to be available.	Reclaimed water is not currently used by the City. If reclaimed water became available in the City, then the project could use this source of water where appropriate.
Goal GM 6. Provide a wastewater collection and treatment system that 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.	Conformance with implementing policies, as discussed below, results in conformance with this goal.
Objective 6.1. Ensure that 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 a maximized cost efficiency.	Conformance with implementing policies, as discussed below, results in conformance with this objective.
Policy GM 6.1.2. Ensure that new development complies with Orange County Sanitation District requirements.	The proposed project would include infrastructure to provide sewer service to the site. The project Applicant would coordinate with OCSD as appropriate and comply with applicable requirements.

Municipal Code—Water Management Program and Water Efficient Landscape Requirements

The purpose of Chapter 14.18, Water Management Program of the Huntington Beach Municipal Code is to reduce the quantity of water used, for the purpose of conserving water supplies throughout the City.

The purpose and intent of Chapter 14.52, Water Efficient Landscape Requirements include the following: *(a)* promote the values and benefits of landscapes while recognizing the need to invest water and other resources as efficiently as possible; *(b)* establish a structure of designing, installing, and maintaining water efficient landscapes in new projects; *(c)* establish provisions for water management practices and water waste prevention for established landscapes; *(d)* establish a long range goal of water efficiency through proper planning and design, the use of technologically current equipment with proper installation, continued maintenance and monitoring of water use through the designed systems; *(e)* when used in conjunction with the "Arboricultural Landscape Standards and Specifications" Resolution Number 4545, to give the Landscape Architect and/or owner the tools to provide an individualized landscape improvement to suit the needs of the owner and the requirements of the city; and *(f)* to provide standards for a finished landscape that is physically attractive, conserves water and is easy to maintain.

3.15.3 Thresholds of Significance

In general, impacts upon utilities and service systems would be considered significant if project implementation would exceed the capacity of existing or planned infrastructure serving the community. Project impacts would be considered significant if any of the following would occur:

Water Supply

- Result in insufficient water supplies available to serve the project from existing entitlements and resources

Sewer/Wastewater

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board
- Cause an increase in wastewater treatment that requires or results in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- Result in a determination by the wastewater treatment provider which serves or may serve the project that is has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments

Solid Waste

- Be served by a landfill within insufficient permitted capacity to accommodate the project's solid waste disposal needs
- Conflict with federal, State, and local statutes and regulations related to solid waste

3.15.4 Project Impacts

Impact U-1 Sufficient water supplies would be available from existing entitlements and resources to serve the proposed project.

Generation rates that were used to determine the daily water demand of the proposed project are shown in Table 3.15-6. As shown, project implementation would generate a water demand of 393,915 gallons per day (gpd). According to the City's 2000 Water Master Plan, the water system demand for the City in 2000 was approximately 31 million gallons per day (mgd). As such, the water demand of the proposed project would represent an increase of approximately 1.3 percent of the City's year 2000 water demand.

Table 3.15-6 Projected Water Demands for the Proposed Project

Land Use	*Quantity*	*Demand Factor*	*Estimated Flow*
Condominiums	516 Dwelling Units (DU) [1]	400 gpd/du	206,400 gpd
Hotel	400 Rooms	225 gpd/room	90,000 gpd
Office	60,000 Square Feet	0.3 gpd/Square Feet	18,000 gpd
Restaurant/Clubs	38,900 Square Feet [1]	1.5 gpd/Square Feet	58,350 gpd
Retail	141,100 Square Feet [2]	0.15 gpd/Square Feet	21,165 gpd
Total	***N/A***	***N/A***	***393,915 gpd***

1. The information provided in the WSA (Appendix D) considers a project with 540 dwelling units and 50,000 square feet of restaurant/clubs space for the project, as these intensities was originally contemplated for the proposed project.
2. The information provided in the WSA (Appendix D) considers a project with 130,000 square feet of retail space, as this intensity was originally contemplated for the proposed project. Although this represents a shortfall compared to the proposed project, the additional water flow generated would be negated by the extra water flows calculated for both the condominiums and restaurant/clubs space.

SOURCE: Hunsaker & Associates 2003b

Per Senate Bills 221 and 610, which require a water provider to furnish substantial evidence that adequate water supplies would be available to meet the water demands of new and existing customers, through normal, single dry and multiple dry years for a 20 year period, a Water Supply Assessment was prepared in 2003 for the proposed project. This assessment relied on information taken from the City's own publications and technical and planning publications of numerous State, regional, and local public agencies, each of which plays some coordinating role in maintaining the reliability of the City's water supply. As documented in the Water Supply Assessment, which was prepared by Hunsaker & Associates Irvine, Inc. dated May 30, 2003, and supported by the City's 2000 Urban Water Management Plan and Water Master

Plan, an adequate water supply exists to serve the proposed project. The 2000 Urban Water Management Plan, which projected water demands for the City based on the ultimate land uses allowed under the City's General Plan, concluded that available water supply for the City of Huntington Beach would exceed the water demands of the City, including the proposed project and other planned future developments, over the next 20 years. The plan projected that a water demand of 37,330 acre-feet would occur in the City of Huntington Beach by year 2022, and that a water supply of 40,100 acre-feet would be available to serve that demand.

Provision of this reliable, drought resistant water supply to the City is done through coordination with other local, regional, and state agencies. The two water supply sources available to the City, groundwater from the Santa Ana Groundwater Basin and imported surface water from the Metropolitan Water District of Southern California, are managed pursuant to a system of institutional arrangements, agreements, permits, licenses, judgments, and statues. The water supply provided to the City from water importers and regional suppliers, which are governed by contractual agreements, would provide the City with a secure and reliable water supply over the next 20 years. Therefore, impacts to water supply would be less than significant.

Impact U-2 The proposed project would be served with adequate water and fire flows.

Based on the design criteria for the City of Huntington Beach and the current proposed development concept, the estimated water demand types for the proposed project are shown in Table 3.15-7.

Table 3.15-7 Estimated Water Demand Types for the Proposed Project

Water Demand	*Million Gallons per Day*	*Gallons per Minute*
Average Day Demand	0.42	292
Maximum Day Demand	0.67	467
Peak Hour	1.05	730
Maximum Fire Flow	5.755	4,000

SOURCE: Hunsaker & Associates 2003b

In addition, the following water pressure requirements have been determined for the proposed project and within the immediate project area:

- **Average-Day Simulations**—Pressures in the immediate area of the proposed project must not drop by more than 2 psi. Pressures in the area including the proposed project must not drop below 50 psi
- **Peak-Hour Simulations**—Pressures in the immediate area of the proposed project must not drop by more than 4 psi. Pressures in the area including the proposed project must not drop below 40 psi

The City of Huntington Beach Fire Department (HBFD) requires a 4,000-gpm fire-flow rate at the project site using three consecutive hydrants while maintaining a minimum residual pressure of 20 psi at each of the three hydrants. Due to the possibility of a fire occurring on any given day, the required fire flow at the project site must operate with maximum-day demands occurring elsewhere throughout the water system.

In order to accommodate the water demands of the proposed project, including required water and fire flow rates, the project Applicant has agreed to fund the construction of new water lines on- and off-site to improve the City's distribution system beyond its present capabilities. Specifically, water pipelines to be constructed as part of the proposed project include

- A new 18-inch water main on Pacific View Avenue between First Street and Huntington Street
- A new 12-inch water main in Huntington Street that would connect to an existing 12-inch water main in Atlanta Avenue, an existing water main in Huntington Street, and a new 18-inch water main in Pacific View Avenue
- A new 12-inch water main in First Street (in the public right-of-way) that would connect to the existing 12-inch water main in Atlanta Avenue and with the new 18-inch water main in Pacific View Avenue
- A new 12-inch water main in First Street that would connect to a new 12-inch water main in PCH and with the new 18-inch water main in Pacific View Avenue

These improvements to the water pipeline system in the project area would provide the necessary pressure requirements to meet the average-day demand, peak-hour demand, and fire flow plus maximum-day demand of the proposed project as determined by the City and HBFD. Thus, upon completion of the proposed pipeline realignments and supplemental inter-ties to the adjacent domestic water system infrastructure, the City's domestic water system would be enhanced beyond its current capabilities to provide adequate water supply and fire flows for the proposed project. Impacts related to water and fire flows for the proposed project would be less than significant.

Impact U-3 The proposed project would be adequately served by the wastewater treatment provider, and would not exceed wastewater treatment requirements or require the expansion or construction of new wastewater treatment facilities.

Regional sewer service to the City of Huntington Beach for the proposed project would be provided through construction of a new sewer connection from the project site to the OCSD's 54-inch diameter Coast Trunk Sewer, which is located at the intersection of Walnut Avenue and First Street. Relocation or modification of the other existing trunk sewers located within the public right-of-way and in the vicinity of

the project site would not be required. The new sewer collection system serving the project site would consist of two components: a new public sewer system and a new private sewer system.

Owned and operated by the City of Huntington Beach, the new public sewer system would provide a new sewer connection from the District's Coast Trunk Sewer to an existing OCSD manhole located near the intersection of Walnut Avenue and First Street. From this manhole, additional sewer connections would be made to the other remaining manholes located along Pacific View Avenue. This system would collect wastewater from the visitor-serving commercial component of the proposed project and approximately 42 residential dwelling units located adjacent to Huntington Street. Grease traps would be required on all sewer laterals serving food preparation and entertainment establishments as required by the Building and Safety Department of the City of Huntington Beach.

The private sewer system would consist of sewer laterals that are constructed along the looped access road of the proposed project's residential component to serve the remaining residential development that is located north of Pacific View Avenue. The private sewer system would utilize 8-inch sewers that would be constructed in the looped access road to serve the multifamily development. These sewer laterals would collect and deliver wastewater from the residential development to the new public sewer located along Pacific View Avenue, which ultimately connects to the District's 54-inch diameter Coast Trunk Sewer. The private sewers would be constructed to public sewer standards using manholes in lieu of cleanouts where access to the sewer manholes is available. Maintenance of the private sewer systems would be provided by the residential Home Owner Association (HOA).

As the project site is currently vacant, development of the proposed project would increase the amount of wastewater transported by the Coast Trunk Sewer and treated by the OCSD. However, according to OCSD, adequate capacity exists in the Coast Trunk Sewer to serve the proposed project. Based on the design criteria for the City of Huntington Beach, the estimated peak sewer flow for the proposed project is 0.446 mgd,[14] while the estimated average sewer flow is 0.222 mgd. The sewer flows for each land use within the proposed project are shown in Table 3.15-8, below.

[14] The estimated peak sewer flow for the proposed project provided in Appendix M considers a project with 540 dwelling units, 50,000 square feet of restaurant/clubs space, and 130,000 square feet of retail space, as these intensities were originally contemplated for the proposed project.

Table 3.15-8 Projected Sewer Flows

Land Use	Quantity	Duty Factor	Estimated Flow
Condominiums	516 Dwelling Units (DU) [1]	187.0 gpd/DU	96,492 gpd
Hotel	400 Rooms	150.0 gpd/Room	60,000 gpd
Office	60,000 Square Feet	0.2 gpd/Square Feet	12,000 gpd
Restaurant/Clubs	38,900 Square Feet [1]	1.0 gpd/Square Feet	38,900 gpd
Retail	141,100 Square Feet [2]	0.1 gpd/Square Feet	14,110 gpd
Total	***N/A***	***N/A***	***221,502 gpd***

1. The information provided in Appendix M considers a project with 540 dwelling units and 50,000 square feet of restaurant/clubs space for the project, as these intensities was originally contemplated for the proposed project.
2. The information provided in Appendix M considers a project with 130,000 square feet of retail space, as this intensity was originally contemplated for the proposed project. Although this represents a shortfall of 1,100 square feet as opposed to the actual project, the additional water flow generated would be negated by the extra water flows calculated for both the condominiums and restaurant/clubs space.

SOURCE: Hunsaker & Associates 2002

The OCSD estimates the current flow in the Coast Trunk Sewer to be approximately 6.6 million gallons per day (mgd) and the sewer capacity to be approximately 44 mgd. The proposed project would add an estimated 0.446 mgd of additional wastewater to the Coast Trunk Sewer. As the OCSD estimates that there would be more than 30 mgd of unused peak flow capacity through the year 2020, this excess capacity is more than sufficient to handle the proposed project that is projected to generate peak sewage flows of less than 1 mgd. Therefore, the addition of wastewater from the proposed project would not exceed the capacity of the Coast Trunk Sewer. In addition, all discharges to the sewer from the project site would be required to meet OCSD's Wastewater Discharge Regulations issued by the Santa Ana Regional Water Quality Control Board. Furthermore, as discussed above in Section 3.15.1 (Existing Conditions), the OCSD has developed engineering plans for plant improvements that are anticipated to meet area demands to the year 2050. Therefore, impacts to sewer/wastewater are anticipated to be less than significant.

Impact U-4 Implementation of the proposed project would substantially increase solid waste generation in the area.

The project would generate solid waste during construction and operation. Since the site is currently vacant, no structural demolition would occur, generating substantial sources of refuse. Waste materials would be generating substantial sources of refuse. Waste materials would be generated during construction from construction debris, scrap metals, and shipping materials. A portion of this refuse could be recycled, which would reduce the waste stream to landfills.

For project operations, generation rates were employed to calculate the proposed project's solid waste production per year as shown in Table 3.15-9.

Table 3.15-9 Proposed Solid Waste Demand

Type of Use	*Generation Rate*	*Quantity*	*Tons Generated per Year*
Hotel	2.5 pounds/room/day	400 rooms	182.5
Retail	2.5 pounds/day/100 square feet	240,000 square feet [1]	1,095.0
Condominiums	6.41 pounds/unit/day [2]	516 units	603.6
Total	***N/A***	***N/A***	***1,881.0***
Existing Landfill Capacity	N/A	N/A	7,300,000.00 tons permitted/year

1. Values represent the maximum amount of square footage that could be used for the type of land use
2. In the absence of standard industry generation rates for solid waste, this value represents a conservative generation rate based on a range of rates presented by the California Integrated Waste Management Board

SOURCE: G & G Engineering, Inc. January 2002; California Integrated Waste Management Board 2003

Total solid waste produced by the proposed project would be approximately 1,881 tons per year, which equates to approximately 5.2 tons of solid waste per day. As discussed in Section 3.15.1 (Existing Conditions), Rainbow Disposal has indicated that its Transfer Station has a design capacity of 2,800 tons per day, and that its current transfer/recycling capacity is only at approximately 57 percent utilization. As such, the approximate 5.2 tons of solid waste generated by the proposed project per day would only represent 0.19 percent of the Transfer Station's design capacity, and thus could be accommodated by Rainbow Disposal's existing hauling activities and MRF facilities. Therefore, implementation of the proposed project would have a less-than-significant impact upon solid waste haulers serving the City of Huntington Beach.

The existing permitted capacities for the landfills serving Orange County total 20,000 tons per day. Thus, the approximate 5.2 tons per day generated by the proposed project would represent 0.03 percent of the daily tonnage at these landfills. As discussed in Section 3.15.1 (Existing Conditions), Rainbow Disposal has indicated that the landfill capacity for the City of Huntington Beach would be adequate for at least 40 years. In addition, even though Orange County is looking at future expansive options for the three county-operated landfills, the Orange County Landfill System is planned to operate until 2035 and thus adequate capacity is currently provided by the existing landfills within the County. Furthermore, the City is responsible for meeting the requirements of AB939, which include a 50 percent disposal reduction by the start of 2000 and preparation of a solid waste reduction plan to help reduce the amount of solid waste disposed at the landfills. Presently, 63 percent of the solid waste generated by the City of Huntington Beach is diverted by Rainbow Disposal to recycling facilities, which already exceeds the AB939 requirement.

In order to ensure continued City compliance with the requirements of AB939, the additional solid waste generated during construction and operation of the proposed project would need to include provisions for recycling. Without recycling of some construction materials and refuse generated during operations, the project may compromise the City's efforts in reducing the amount of waste transported to the landfills. In

the absence of a recycling plan, the generation of solid waste by the proposed project would conflict with the State statute. Impacts associated with solid waste generation would be potentially significant.

3.15.5 Cumulative Impacts

This cumulative impact analysis considers development of the proposed project, in conjunction with other development within the vicinity of the project in the City of Huntington Beach. Infrastructure capacity for utility services is a regional problem due to recent and projected population increases in the Southern California area. This population increase creates additional demand for utility services, which may already be at or near capacity.

Water Supply

A Water Supply Assessment prepared in May 30, 2003 by Hunsaker & Associates Irvine, Inc. demonstrated that an adequate supply of water in the City would be available to serve the proposed project. The 2003 Water Supply Assessment factored in the water demands of the proposed project, based on the proposed land uses, and the water demands from existing and other planned future developments in the City. This assessment, supported by the City's Urban Water Management Plan and Water Master Plan, concluded that the total water supply available to the City during normal, single dry and multiple years within a 20-year projection would meet the projected water demand of the proposed project, as well as the demand of existing and other planned future uses, including agricultural uses. Therefore, the Water Supply Assessment addresses cumulative water demands and concludes that an adequate water supply would be available to meet those demands.

The existing project area water distribution system has sufficient capacity to meet the demands of the existing development and the commercial expansion projects east of the proposed project. Implementation of the proposed construction of five new water mains in the project area would need to be implemented in order to accommodate the water demands of the proposed development. Analysis of water demand using the City's H2Onet hydraulic model of the water distribution system revealed that pressure requirements for average-day demand, peak-hour demand, and fire flow plus maximum-day demand for the proposed project would be met with these piping improvements without affecting the provision of maximum-day demands elsewhere throughout the water system. Therefore, increased water supply demand by the City in the future would not result in water supply or water pressure deficiencies and impacts on water would not be cumulatively considerable.

Wastewater

The proposed new public and private sewer system serving the proposed project would add an estimated 0.472 mgd of additional wastewater to OCSD's 54-inch Coast Trunk Sewer, which is estimated to have more than 30 mgd of unused peak flow capacity through the year 2020. As such, this excess capacity is more than sufficient to handle the peak sewage flows of the proposed project. In addition, all discharges to the sewer from the proposed project would be required to meet OCSD's Wastewater Discharge Regulations. Cumulative projects within the vicinity of the proposed project, whose project status ranges from proposed to complete, include eight commercial projects (including hotels), five residential projects, and one desalination facility. All of these cumulative commercial and residential projects are of either similar or smaller magnitude than the proposed project. Overall, in addition to several other uses, the cumulative projects include a total of 1,023 residential units, 830,000 square feet of commercial uses, and 637 hotel rooms. The OCSD estimates more than 30 mgd of unused peak flow capacity would be available in the Coast Trunk Sewer through the year 2020. As such, the increase in wastewater generation from the identified cumulative projects and the proposed project, when taken together, would not exceed the capacity of the 54-inch Coast Trunk Sewer. In addition, project-specific review would ensure that all discharges to the sewer from the cumulative projects would meet OCSD's Wastewater Discharge Regulations issued by the Santa Ana Regional Water Quality Control Board. Furthermore, as upgrades occur in association with proposed projects, overall City sewer capacity could increase. As such, impacts on wastewater would not be cumulatively considerable. The project would have a less-than-significant contribution to this effect.

Solid Waste

Rainbow Disposal, the exclusive hauler of all solid waste for the City of Huntington Beach, has indicated that current landfill capacity is adequate to accommodate the proposed project's solid waste disposal needs. The projected 5.2 tons of solid waste generated per day by the proposed project would represent 0.19 percent of the design capacity of Rainbow Disposal's Transfer Station, which is currently at about 57 percent utilization. Additionally, Rainbow Disposal has indicated that the landfill capacity for the City of Huntington Beach would be adequate for at least 40 years. Thus, solid waste generation from the proposed project and cumulative projects in the City of Huntington Beach would not exacerbate regional landfill capacity issues. Furthermore, the implementation of source reduction measures, such as a recycling plan, that would be implemented on a project-specific basis would partially address landfill capacity issues by diverting additional solid waste at the source of generation. Therefore, development associated with cumulative projects within the City would not be cumulatively considerable. The project would have a less-than-significant contribution to this effect.

3.15.6 Mitigation Measures and Residual Impacts

The following standard City requirements (CR) would apply to the project.

CR U-A *Prior to occupancy, all building spoils, such as unusable lumber, wire, pipe, and other surplus or unusable material, shall be disposed of at an off-site facility equipped to handle them.*

CR U-B *The Water Ordinance #14.52, the "Water Efficient Landscape Requirements" apply for projects with 2,500 square feet of landscaping and larger.*

Impacts to utilities as described above under Impacts U-1 through U-3 would be less than significant. In addition to the standard City requirements listed above, implementation of the following mitigation measures (MM) would be required to address impacts from the additional solid waste generated during construction and operation of the proposed project, as described above under Impact U-4.

MM U-1 *Prior to issuance of building permits for the first project component, the Applicant shall submit a Solid Waste Management Plan to the City's Recycling Coordinator. This plan shall discuss how the project will implement source reduction and recycling methods in compliance with existing City programs. Additionally, this plan shall include how the project will address the construction and demolition-generated waste from the site. These methods shall include, but shall not be limited to, the following:*

- *Provision of recycling bins for glass, aluminum, and plastic for visitors and employees of the proposed project*
- *Provision of recycling bins for glass, aluminum, plastic, wood, steel, and concrete for construction workers during construction phases*
- *Bins for cardboard recycling during construction*
- *Scrap wood recycling during construction*
- *Green waste recycling of landscape materials*

MM U-1 would ensure implementation of waste minimization programs, and would ensure that the generation of additional solid waste during construction and operation of the proposed project would not bring the City of Huntington Beach out of compliance with AB939. Impacts associated with solid waste, as discussed under Impact U-4, would be reduced to a less-than-significant level.