5.12 UTILITIES AND SERVICE SYSTEMS

This section of the Draft Supplemental Environmental Impact Report (SEIR) evaluates potential impacts to utilities and services systems in areas proposed for land use changes under the Newport Beach General Plan LUE Amendment. Utilities and services systems include water supply and distribution systems; wastewater (sewage) conveyance and treatment; storm drainage systems; solid waste collection and disposal; and other public utilities. Impacts to hydrology (e.g., flooding) and water quality can be found in Section 5.7, *Hydrology and Water Quality*.

5.12.1 Wastewater Treatment and Collection

5.12.1.1 ENVIRONMENTAL SETTING

Regulatory Background

Federal

Clean Water Act

The Clean Water Act (CWA) establishes regulations to control the discharge of pollutants into the waters of the United States and regulates water quality standards for surface waters. Under the CWA, the U.S. Environment Protection Agency (EPA) is authorized to set wastewater standards and runs the National Pollutant Discharge Elimination System (NPDES) permit program. Under the NPDES program, permits are required for all new developments that generate discharges that go directly into Waters of the United States. The federal Clean Water Act, United States Code, Title 33, Sections 1251 et seq. requires wastewater treatment of all effluent before it is discharged into surface waters.

Local

City of Newport Beach Sewer System Management Plan

The Sewer System Management Plan (SSMP, July 2009) provides a plan and schedule to properly manage, operate, and maintain all parts of the City's sanitary sewer system. By planning ahead and ensuring all parts are maintained, the City is able to minimize risk of sanitary sewer overflows (SSOs) and mitigate any SSOs that may occur. The plan also outlines the SSMP emergency response program, operation and maintenance, overflow emergency response plan, and design and performance provisions.

City of Newport Beach Sewer Master Plan 2010

The 2010 Sewer Master Plan updated the 1996 sewer master plan. It evaluates the City's existing sewer collection system and provides a framework for undertaking the construction of new and replacement facilities in order to maintain proper level of service for the City's needs. It also ensures that the City meets requirements of the statewide General Waste Discharge Requirements issued by the California Regional Water Quality Control Board, effective May 2, 2006. The master plan includes inflow and infiltration studies to analyze flow monitoring and water use data, a capacity assurance plan to analyze the existing system with

existing land use and unit flow factors, a condition assessment and sewer system rehabilitation plan, and a financial plan with recommended capital improvements and financial models.

City of Newport Beach Urban Water Management Plan 2010

The City's Urban Water Management Plan (UWMP) is required under Water Code Section 10610 through 10656 of the Urban Water Management Planning Act, effective January 1, 1984. The act requires all urban water suppliers to prepare, adopt, and file a UWMP with the California Department of Water Resources every five years. The plan outlines current water demands, sources, and supply reliability to the City by forecasting water use based on climate, demographics, and land use changes within the City. The plan also provides demand management measures to increase water use efficiency for various land use types and details a water supplies contingency plan in case of shortage emergencies.

City of Newport Beach Municipal Code

The City of Newport Beach Municipal Code identifies land use categories, development standards, and other general provisions that ensure consistency between the City's General Plan and proposed development projects. The following provisions from the City's municipal code focus on wastewater services impacts:

- **Chapter 14.24 (Sewer Connection, Permits):** Requires dwelling units and business structures to connect to the City's public sewer network through an Application for Sewer Connection (Section 14.24.030). The sewer connection fee (Section 14.24.050) is $250.00 per connection to the public sewer and must be paid prior to issuance of building permits. Section 14.24.065 (Sewer Use Charge) details the monthly basic and/or supplemental sewer use charge for each dwelling unit or business structure connected to the public sewer system.

- **Section 14.28.020 (Prohibited Use of Sewers):** Prohibits certain solids, liquids, or substances from being deposited or placed in any public sewer, manhole, or pipe line which discharges into a public sewer.

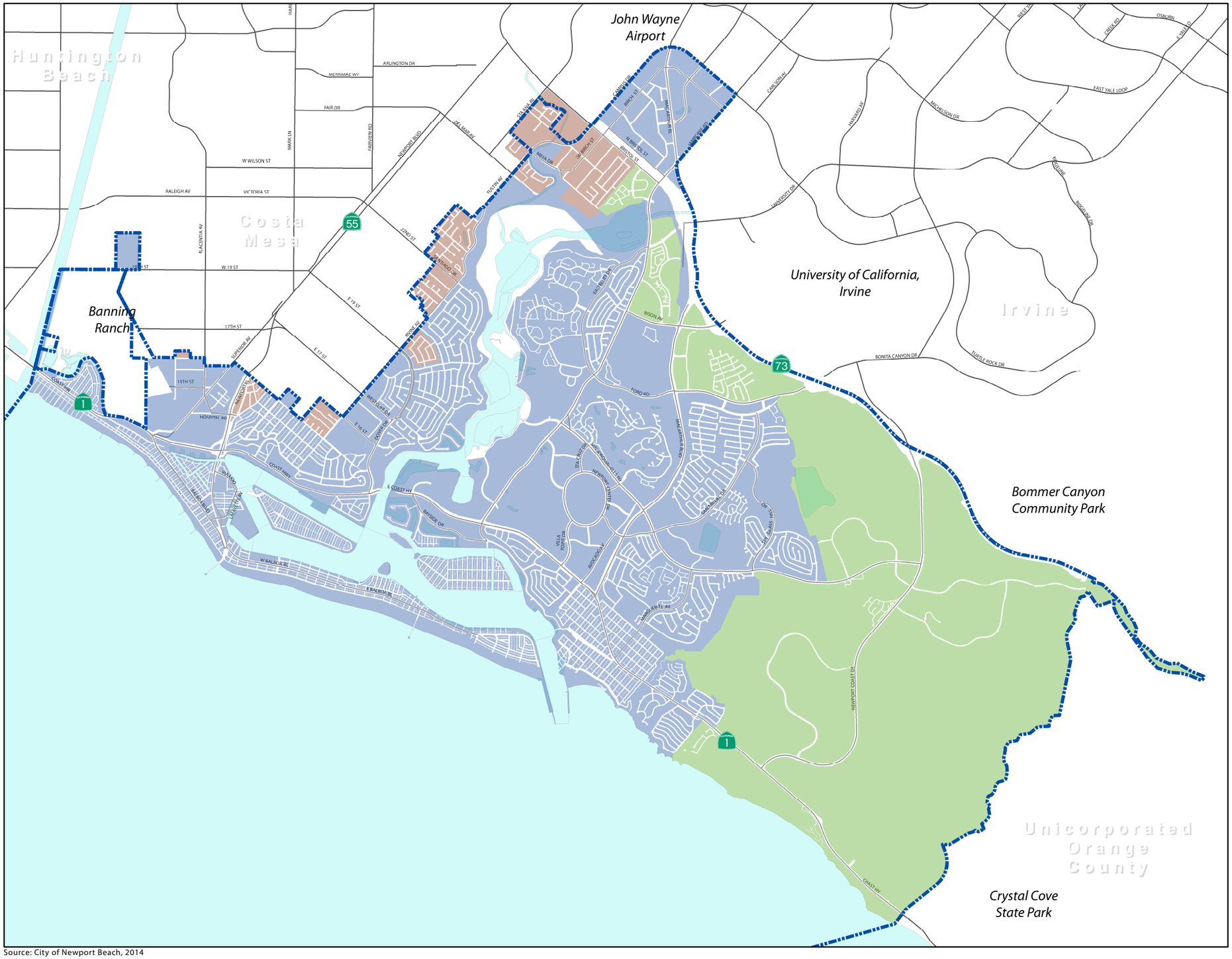
Existing Conditions

Wastewater services in the City of Newport Beach are provided by the City, Irvine Ranch Water District (IRWD), and Costa Mesa Sanitary District (CMSD). Figure 5.12-1, *City of Newport Beach Sewer Service Areas,* shows that the City and IRWD serve the majority of Newport Beach's sewer needs, and CMSD provides services to only a few parcels along the western and northern end of the City.

5. Environmental Analysis

Figure 5.12-1

City of Newport Beach Sewer Service Areas



Source: City of Newport Beach, 2014

SEWER SERVICE AREAS

- City Boundary
- Costa Mesa Sanitation District (CMSD)
- City of Newport Beach (CNB)
- Irvine Ranch Water District (IRWD)

Note:
The City of Newport Beach Planning Area is surrounded by other developed areas of the cities of Huntington Beach, Costa Mesa, Irvine, and unincorporated areas of Orange County. Directly adjacent to the City's boundaries include Banning Ranch to the northeast, the John Wayne Airport and residential homes to the north, University of California, Irvine along the northeast, Bommer Canyon Community Park to the east, and Crystal Cove State Park to the south.

Land Use Element Update

Supplemental EIR

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5. Environmental Analysis
UTILITIES AND SERVICE SYSTEMS

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Wastewater Collection

City of Newport Beach Services

The City's Municipal Operations Department Wastewater Division is responsible for the majority of the City's residential and commercial wastewater collection services, covering approximately 13.5 square miles (Newport Beach 1996). The system consists of 197 miles of mainline gravity pipes, 4,922 manholes and cleanouts, 25,525 sewer laterals, 21 pump stations, and 4.8 miles of force mains (Newport Beach 2010).

Twenty-one pump stations in the City pump wastewater from lower areas and several island communities to the local and regional gravity systems for treatment at facilities operated by the Orange County Sanitation District (OCSD). The following pump stations are operated by OCSD and located in the City:

- Bitter Point Pump Station
- Lido Pump Station
- 14th Street Pump Station
- A Street Pump Station
- Rocky Point Pump Station
- Bay Bridge Pump Station
- MacArthur Pump Station

OCSD also has trunk sewers and force mains that directly receive sewage flow from Newport Beach sewers. The OCSD trunk sewers in the City are Back Bay Trunk, Bayside Drive Trunk, Balboa Trunk, Big Canyon Trunk, District 6 Trunk, Dover Drive Trunk, East Coast Highway Trunk, Jamboree Trunk, West Coast Highway Trunk, and Von Karman Trunk. The average wastewater flows for various land uses are provided in Table 5.12-1.

Table 5.12-1 City of Newport Beach Wastewater Flow Factors

Land Use	Flow Factor (gallons per day/dwelling unit/acre)
Residential – Single and Multifamily	110-240 gpd/du
Commercial	2,500 gpd/ac
Industrial	2,500 gpd/ac
Public Facilities	2,500 gpd/ac
Private Institution	2,500 gpd/ac
Parks and Recreation	200 gpd/ac

Source: Newport Beach 2010.

The City's service area lies within OCSD's Districts 5, 6, and 7. District 5 and 6 flows are pumped to OCSD's Plant No. 2 in Huntington Beach, and flows from District 7 are transferred to Reclamation Plant No. 1 in Fountain Valley.

Irvine Ranch Water District Services

IRWD operates and maintains a sewer system that spans 84,000 acres in Orange County, with approximately 963 miles of sanitary sewer mains, 12 miles of force mains, and 20,200 sewer connections through the cities of Irvine, Lake Forest, parts of Tustin, Newport Beach, Foothill Ranch, Costa Mesa, and unincorporated Orange County (IRWD 2013). IRWD is responsible for providing wastewater services to the south and southeast portion of the City, which includes Newport Coast and Newport Ridge areas, as well as the northern portion of the City that includes The Bluffs area and runs contiguous to State Route 73 (SR-73). IRWD collects wastewater through its force flow and gravity mains. The wastewater is then delivered to the OCSD reclamation plants.

Costa Mesa Sanitary District Services

CMSD maintains 224 miles of gravity sewer mains, 108 miles of private property sewer lateral pipelines, 24,870 service lateral connections and 20 pumping stations (CMSD 2013). The district provides wastewater services to the entire City of Costa Mesa and portions of Newport Beach and unincorporated Orange County. Within Newport Beach, CMSD provides services to small areas along the northwest portion of the City that lie contiguous to the City of Costa Mesa.

Wastewater Treatment

OCSD provides wastewater treatment for the majority of the wastewater generated within Newport Beach, and a small minority goes to IRWD's reclamation plant. OCSD's service area encompasses 479 square miles of central and northwest Orange County and it operates two reclamation plants.

OCSD Reclamation Plant No. 1 in the City of Fountain Valley has a capacity of 204 million gallons per day (mgd) for advanced primary and 182 mgd for secondary treatment; it treats an average of 95 mgd. Approximately 66 mgd of effluent is sent to the Groundwater Replenishment System (GWRS), a cooperative project between the Orange County Water District and OCSD that began operating in 2008 and has a capacity of 70 mgd. Secondary-treated wastewater from OCSD undergoes a three-step treatment process in the GWRS, which consists of microfiltration, reverse osmosis, and advanced oxidation with ultraviolet light and hydrogen peroxide. The treated water is injected into a seawater barrier and pumped to recharge basins where it naturally percolates into the groundwater basin. It is the largest water purification project of its kind and has a capacity of 72,000 acre-fee per year (afy) or 70 mgd. Ultimate capacity for the GWRS is projected at 130 mgd after facilities are completely expanded (GWRS). An additional 3.3 mgd of effluent from Plant No. 1 are sent to the OCWD for tertiary treatment in a separate facility and later delivered to customers for greywater use. The balance of effluent from Plant No. 1, roughly 25.7 mgd, is sent to Reclamation Plant No. 2 in the City of Huntington Beach and is subsequently discharged through the ocean outfall system (Leon 2013).

OCSD Reclamation Plant No. 2 is in Huntington Beach adjacent to the Santa Ana River. The plant provides a mix of advanced primary and secondary treatment; approximately 33 percent of the wastewater receives secondary treatment through an activated sludge system, and all is discharged into the ocean disposal system. Current capacity for Reclamation Plant No. 2 is 168 mgd of primary treated wastewater and 150 mgd of secondary treated wastewater. The current average flow is 112 mgd; thus, remaining capacity at this plant is

approximately 56 mgd (Leon 2013). Expansion plans by OCSD are always ongoing and designed to address the incremental increase in sewage generation as a result of new development.

After treatment, OCSD releases the treated water into the ocean through a 120-inch diameter offshore pipeline that extends five miles from the Huntington Beach shore to a discharge point approximately 200 feet below the ocean surface. The pipeline also contains 503 portholes through which treated wastewater is slowly released.

5.12.1.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

U-1 Would exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

U-2 Would require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

U-5 Would 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.

The Initial Study, included as Appendix A, substantiates that impacts associated with the following thresholds would be less than significant:

- Threshold U-1

This impact will not be addressed in the following analysis.

5.12.1.3 ENVIRONMENTAL IMPACTS

2006 General Plan EIR

The 2006 General Plan EIR concluded that the 2006 General Plan would have no impact on wastewater treatment requirements of the Regional Water Quality Control Board (RWQCB) because the City requires NPDES permits. The permit contains limits on allowable concentrations and mass emissions of pollutants in both point and nonpoint source discharge. Development in accordance with the 2006 General Plan would be required to comply with all provisions of the NPDES program, as enforced by RWQCB. Furthermore, the NPDES Phase I and Phase II requirements regulate discharge from construction sites. Policies in the 2006 General Plan also specify minimal adverse effects to water quality from sanitary sewer outflows (Policies NR 3.5, 3.7, 5.2, and 5.4). In addition, Policy NR 5.1 requires implementation of the Sewer System Management Plan and the Sewer Master Plan. Thus, no impact to the City's wastewater treatment quality would occur.

Using the City's 1996 Master Plan of Sewer's wastewater generation factors, buildout of the 2006 General Plan was estimated to produce an additional 4.12 mgd. The additional 4.12 mgd of wastewater would be distributed between OCSD Reclamation Plants Nos. 1 and 2. Reclamation Plant No. 1 had a capacity of 174 mgd and treated on average a flow of 90 mgd, approximately 52 percent of its design capacity. Reclamation Plant No. 2 had a capacity of 276 mgd and treated on average a flow of 153 mgd, approximately 55 percent of its design capacity. The additional 4.12 mgd from buildout of the 2006 General Plan was nominal compared to the capacities of the two plants. Conservatively, if all 4.12 mgd of wastewater was sent to Reclamation Plant No. 1, its average flow would increase to approximately 94 mgd (an increase of 4.8 percent), making the plant operate at 54 percent of its design capacity. If all 4.12 mgd was sent to Reclamation Plant No. 2, its average flow would increase to approximately 157 mgd (an increase of 2.8 percent), making the plant operate at 57 percent of its design capacity. Given that both reclamation plants would operate well below their overall design capacity even with this conservative approach, buildout of the 2006 General Plan would not adversely affect the City's wastewater treatment facilities. In addition, policies within the 2006 General Plan require adequate wastewater facilities and conveyance systems to be available to the City residents through renovations, installations, and improvements when needed. Thus, impacts were determined less than significant.

Lastly, according to the 2006 General Plan EIR, the City served approximately 1,200 acre-feet per year (afy) of irrigation demand using potable recycled water. Policy NR 2.1 of the 2006 General Plan encourages the use of recycled water in the City by continuing to provide financial incentives, staff assistance, and training opportunities for customers, and expanding recycled water infrastructure and programs, when feasible. Future recycled water infrastructure developments, if necessary, would require further environmental review when project-level details are known. Thus, impacts associated with the construction of new recycled water conveyance systems within the City were considered less than significant.

General Plan LUE Amendment (Proposed Project)

The following impact analysis addresses thresholds of significance for which the Initial Study disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.12-1: Project-generated wastewater would be adequately treated by the wastewater service provider for the project. [Thresholds U-2 (part) and U-5]

Impact Analysis: According to Figure 5.12-1, *City of Newport Beach Sewer Service Areas*, the City of Newport Beach's wastewater services are provided by the City, IRWD, and CMSD. Given that the proposed project would increase overall population of the City, the project would generate additional wastewater that would affect the existing wastewater service systems.

The subareas proposed for change in the General Plan LUE Amendment fall within either the City or IRWD's sewer service boundary area. CMSD provides sewer services to only a few Newport Beach parcels along the western end of the City, adjacent to the City of Costa Mesa. CMSD's sewer system would not be affected by any proposed subarea changes of the project (Hamers 2013). The proposed subareas for change within the IRWD sewer service boundary area include Newport Coast Center, Newport Coast Hotel, The

Bluffs, and Newport Ridge (Map Reference No. 6, 7, 10, and 15, respectively), which are all proposed for reduced development capacity. A reduction in development capacity would result in less wastewater generation than that estimated for in the 2006 Certified EIR. Thus, the proposed project would have a less than significant impact on IRWD's wastewater system.

The remaining subareas that fall within the City's wastewater system, operated and maintained by the Newport Beach Municipal Operations Department, would be affected by the proposed project given that the majority of these subareas are proposed for increased development capacity. These subareas include Newport Center/Fashion Island, 150 Newport Center Drive, 100 Newport Center Drive, Harbor Day School (3443 Pacific View Drive), Saunders Properties, The Hangars, Lyon Communities, and UAP Companies (4699 Jamboree Road and 5190 Campus Drive). Using the City's wastewater generation factors from the 2010 Sewer Master Plan, the proposed project would generate an additional 431,340 gallons per day (gpd). Table 5.12-2 shows the additional projected wastewater generated within the City's wastewater service area upon implementation of the General Plan LUE Amendment.

Table 5.12-2 Estimated Project-Generated Wastewater

Land Use	Project Buildout (Net Increase)	Wastewater Generation Factor (gpd per du/ac/room/student)	Additional Projected Wastewater (gpd)
Residential – Single and Multifamily	1,729 units	240*	414,960
Office	11.3 acres (493,677 SF)	2,500[a]	28,250
Commercial	1.6 acres (71,110 SF)	2,500*	4,000
Visitor Serving (Hotel)	(701) rooms	150[b]	(105,150)
Schools	72 students	10[b]	720
		TOTAL	342,780 gpd

Sources:
* City of Newport Beach Sewer Master Plan, August 2010.
a The 2010 Sewer Master Plan does not have a wastewater generation factor for Office land use; therefore, a conservative generation factor of 2,500 gpd/ac, currently used for Commercial, Industrial, Public Facilities, and Private Institutions, is used for Office.
b The 2010 Sewer Master Plan does not have wastewater generation factors for Visitor Serving (Hotel) or Schools; therefore wastewater generation factors from the City's 1996 Sewer Master Plan are used.

As stated above, wastewater collected by the City would be treated at OCSD's two reclamation plants, with a small minority of wastewater treated at IRWD's treatment plant. According to OCSD, there are currently no plant treatment deficiencies, and the total added flow generated from the proposed project would not necessitate new or expanded treatment facilities (Leon 2013). Reclamation Plant No. 1 has a capacity of 204 mgd for advanced primary treatment and 182 mgd for secondary treatment, treating an average of 95 mgd. Given that the proposed project would generate 342,780 gpd (0.34 mgd), the wastewater generated is nominal compared to the capacity of both treatment systems at Reclamation Plant No. 1. After treatment, the majority of the effluent would go through additional treatment in OCWD's Groundwater Replenishment System, which has a current capacity of 70 mgd and future expanded capacity of 130 mgd. The remaining effluent would be transferred to Reclamation Plant No. 2, which has a current remaining capacity of approximately 56 mgd. To illustrate the most conservative analysis, if all 0.34 mgd generated from the proposed project were treated at Reclamation Plant No. 1, its average flow would increase to approximately 95.34 mgd (an increase

of 0.4 percent), and the plant would still operate at approximately 47 and 52 percent of its primary and secondary treatment design capacities. If all wastewater generated from the project was treated at Reclamation Plant No. 2, its average flow would increase from 112 mgd to approximately 112.34 mgd (an increase of 0.3 percent), and the plant would still operate at approximately 67 and 75 percent of its primary and secondary treatment design capacities. Thus, existing wastewater treatment facilities are able to accommodate the project-generated wastewater and continue maintaining a substantial amount of remaining capacity for future wastewater treatment.

Furthermore, if development under the General Plan LUE Amendment requires additional sewer flow connections through OCSD sewer lines or pump stations, it is required to comply with current OCSD design guidelines and pay a sewer connection fee of $250.00 per connection to the public sewer prior to issuance of building permits, pursuant to Chapter 14.24 (Sewer Connection, Permits) of the City's Municipal Code (Leon 2013). Developers are also required to pay for infrastructure expansions or improvements, including sewer improvements, if their projects could have a significant adverse impact on existing conditions (Murdoch 2013). Thus, wastewater generated through development in accordance with the proposed project has a less than significant impact on the City and OCSD's overall wastewater collection and treatment facilities and systems.

5.12.1.4 RELEVANT GENERAL PLAN POLICIES

Existing Policies

Harbor and Bay Element (HB)

Goal HB 7: Protection and management of Upper Newport Bay commensurate with the standards applicable to our nation's most valuable natural resources.

- **HB 7.6 - Water Quality Study:-** Retain qualified and objective water quality consultants to thoroughly review all scopes of work for any proposed water quality study: (a) to be conducted, sponsored or considered by the Watershed Management Committee (or any subcommittee or successor entity) in making any decision affecting water quality in Newport Beach; (b) related to water quality in the San Diego Creek and Santa Ana/Delhi Channel watersheds; and (c) that is relevant to any aspect of the establishment or enforcement of any order of the RWQCB including the Total Maximum Daily Loads (TMDL) for Upper Newport Bay. (Policy NR 3.22)

Natural Resources Element (NR)

Goal NR 4: Maintenance of water quality standards through compliance with the total maximum daily loads (TMDLs) standards.

- **NR 4.1 - Total Maximum Daily Loads:** Develop and implement the TMDLs established by the RWQCB, Santa Ana Region and guided by the Newport Bay Watershed Executive Committee (WEC).

Goal NR 5: Sanitary Sewer Outflows—Minimal adverse effects to water quality from sanitary sewer outflows.

- **NR 5.1 - City Sewer Management and Master Plans:** Implement the Sewer System Management Plan and the Sewer Master Plan.

- **NR 5.3 - Sewer Pump Stations:** Renovate all older sewer pump stations and install new plumbing according to most recent standards.

- **NR 5.4 - Waste Discharge Permits:** Comply with the RWQCB's Waste Discharge Requirements (WDRs) associated with the operation and maintenance of the City's sewage collection system.

New and/or Modified Policies

The proposed General Plan LUE Amendment includes the following new and/or amended policies that are relevant to wastewater services. The proposed changes are shown in underlined/~~strikeout~~ text for new text and eliminated text, respectively. The goal for a revised policy is provided, even if the goal itself is unchanged.

Goal LU X: Land use development practices that contribute to a sustained natural environment for use by future generations, economy, and well-being of Newport Beach's residents, while reducing greenhouse gas emissions and impacts on climate change.

- **LU X.X3 - Sustainable Sites and Land Development:** Promote land development practices that reduce energy and water consumption, pollution, greenhouse gas emissions, and waste generation incorporating such techniques as:

    - Concentrating and designing development to promote walking, bicycling, and use of public transit as an alternative to automobile travel;
    - Capturing and re-using stormwater runoff on-site for irrigation and groundwater percolation;
    - Managing wastewater and using recycled water, including encouraging the use of grey water;
    - Orienting buildings to maximize opportunities for solar energy use, daylighting, and ventilation;
    - Using landscapes that conserve water and reduce green waste;
    - Shading of surface parking, walkways, and plazas; and/or
    - Recycling and/or salvaging for reuse of construction and demolition debris.

Goal LU 2: A living, active, and diverse environment that complements all lifestyles and enhances neighborhoods, without compromising the valued resources that make Newport Beach unique. It contains a diversity of uses that support the needs of residents, sustain and enhance the economy, provide job opportunities, serve visitors that enjoy the City's diverse recreational amenities, promote public health, and protect its important environmental setting, resources, and quality of life.

- **LU 2.8 - Adequate Infrastructure:** Accommodate the types, densities, and mix of land uses that can be adequately supported by transportation and utility infrastructure (water, sewer, storm drainage, energy, technology cabling and so on) and public services (schools, parks, libraries, seniors, youth, police, fire, and so on).

5.12.1.5 EXISTING REGULATIONS

- Clean Water Act
- City of Newport Beach Sewer System Management Plan 2009
- City of Newport Beach Sewer Master Plan 2010
- City of Newport Beach Urban Water Management Plan 2010
- City of Newport Beach Municipal Code Chapter 14.24 (Sewer Connection, Permit)
- City of Newport Beach Municipal Code Section 14.28.020 (Prohibited Use of Sewers)

5.12.1.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements, the following impacts would be less than significant: 5.12-1.

5.12.1.7 MITIGATION MEASURES

Impacts are less than significant and mitigation measures are not required.

5.12.1.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

No mitigation measures are required and impacts would remain less than significant.

5.12.2 Water Supply and Distribution Systems

The year 2013 marked the driest year in recorded state history and has led Governor Edmund G. Brown Jr. to proclaim a state of emergency regarding the dry conditions throughout California. This declaration, announced on January 17, 2014, urged Californians to reduce their water use by 20 percent and directed state officials to take all necessary actions to prepare for these drought conditions by assisting farmers and communities that are economically impacted by dry conditions and state agencies to use less water and hire more firefighters. Governor Brown also gave state water officials more flexibility to manage supply throughout California under drought conditions (State of CA 2014).

In particular for local water agencies, the declaration orders that local urban water suppliers and municipalities implement their local water shortage contingency plans immediately in order to avoid or forestall outright restrictions that could become necessary later in the drought. Local water agencies should also update their legally required urban and agricultural water management plans, which help plan for extended drought conditions. The Department of Water Resources will make the status of these updates publicly available (Brown 2014).

5.12.2.1 ENVIRONMENTAL SETTING

Regulatory Background

State

Urban Water Management Planning Act

The Urban Water Management Planning Act of 1983, California Water Code Sections 10610 et seq., requires water suppliers to prepare plans that:

- Plan for water supply and assess reliability of each source of water, over a 20-year period in 5-year increments.
- Identify and quantify adequate water supplies, including recycled water, for existing and future demands, in normal, single-dry, and multiple-dry years.
- Implement conservation and the efficient use of urban water supplies. Significant new requirements for quantified demand reductions have been added by the Water Conservation Act of 2009 (Senate Bill 7 of Special Extended Session 7 [SBX7-7]), which amends the act and adds new water conservation provisions to the Water Code.

Senate Bill 610

Senate Bill 610 (SB 610) (2001) amended the California Urban Water Management Planning Act, Sections 10610 et seq. of the California Water Code. It mandates that a city or county approving certain projects subject to CEQA[1] (i) identify any public water system that may supply water for the project, and (ii) request those public water systems to prepare a specified water supply assessment. The assessment is to include the following:

1. A discussion of whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection would meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses.
2. The identification of existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project and water received in prior years pursuant to those entitlements, rights, and contracts.
3. A description of the quantities of water received in prior years by the public water system under the existing water supply entitlements, water rights, or water service contracts.
4. A demonstration of water supply entitlements, water rights, or water service contracts.

[1] Under Water Code § 10912(a)(7), SB 610 applies to a CEQA project that "would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project." The specific criteria are listed below in Section 5.12.2.3, Impact 5.12-2 analysis.

5. The identification of other public water systems or water service contract holders that receive a water supply or have existing water supply entitlements, water rights, or water service contracts, to the same source of water as the public water system.

6. Additional information is required if groundwater is included in the supply for the proposed project.

The water supply assessment shall be included in any environmental document prepared for the project. The assessment may include an evaluation of any information included in that environmental document. A determination shall be made whether the projected water supplies would be sufficient to satisfy the demands of the project, in addition to existing and planned future uses.

Additionally, SB 610 requires new information to be included as part of an Urban Water Management Plan (UWMP) if groundwater is identified as a source of water available to the supplier. Information must include a description of all water supply projects and programs that may be undertaken to meet total projected water use. SB 610 prohibits eligibility for funds from specified bond acts until the plan is submitted to the State.

20x2020 Water Conservation Plan

The 20x2020 Water Conservation Plan, issued by the California Department of Water Resources (DWR) in 2010 pursuant to the Water Conservation Act of 2009 (SBX7-7), established a statewide water conservation target of 20 percent reduction in water use by 2020 compared to the State's 2005 baseline use.

Local

City of Newport Beach Municipal Code

- **Chapter 14.16 (Water Conservation and Supply Level Regulations)** establishes a water conservation and supply shortage program to enable effective water supply planning, assure reasonable and beneficial use of water, prevent waste of water, maximize the efficient use of water, and minimize the effect and hardship of water shortage. The Chapter outlines permanent water conservation requirements to ensure water use efficiency and also establishes four levels of water supply shortage response actions during times of declared water shortage.

- **Chapter 14.17 (Water-Efficient Landscaping)** establishes effective methods of landscape design to ensure efficient water use through water management practices and water waste prevention on existing landscapes and new construction projects within the City.

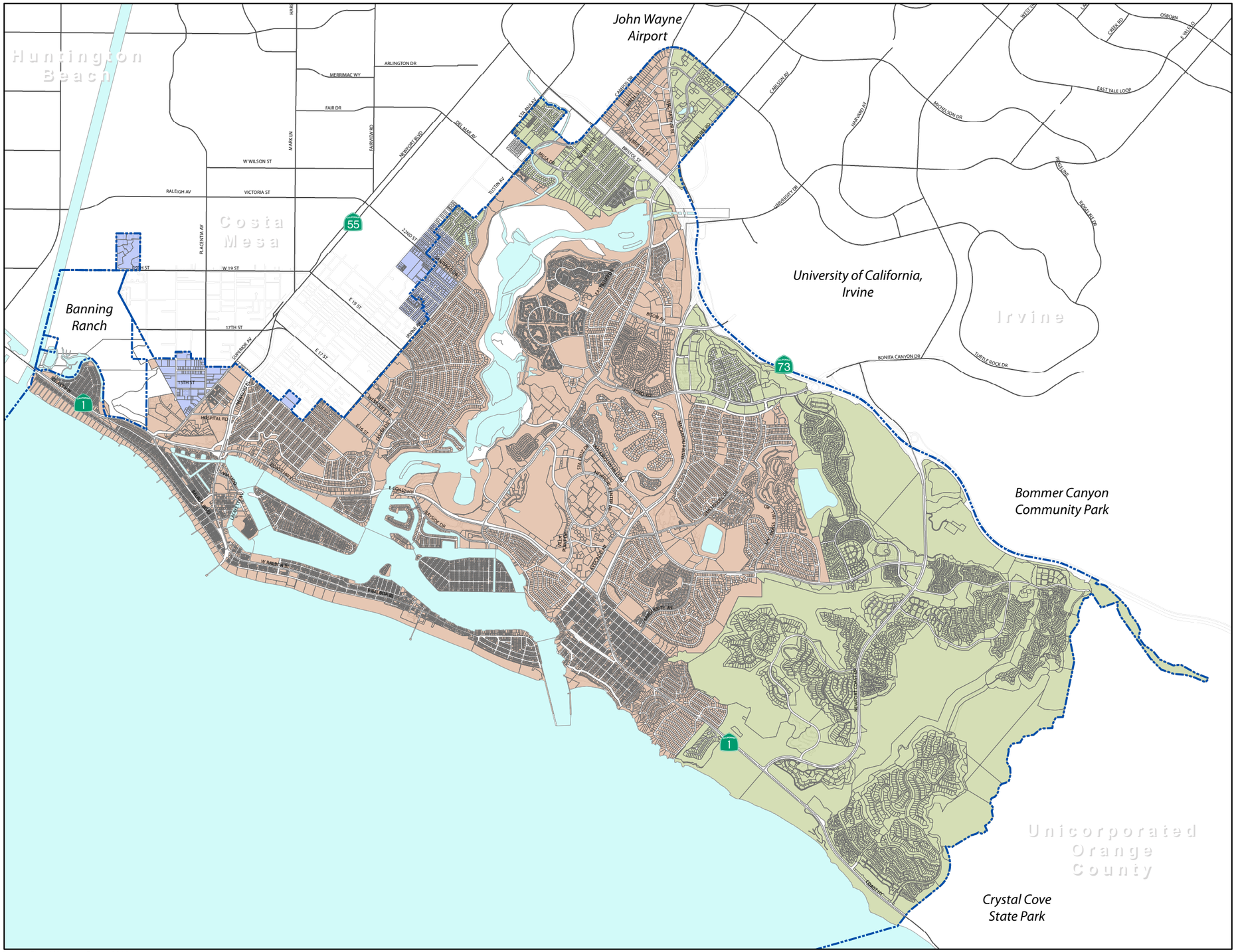
Existing Conditions

Water services are provided to Newport Beach by the City, Irvine Ranch Water District (IRWD), and Mesa Consolidated Water District (Mesa). Figure 5.12-2, *City of Newport Beach Water Service Areas*, shows the service areas of the three water providers for the City of Newport Beach.

5. Environmental Analysis

Figure 5.12-2

City of Newport Beach Water Service Areas



Source: City of Newport Beach, 2014

WATER DISTRICTS

- City Boundary
- Irvine Ranch Water District (IRWD)
- Mesa Consolidated Water District (MCWD)
- Newport Beach Water District (NB)

Note:
The City of Newport Beach Planning Area is surrounded by other developed areas of the cities of Huntington Beach, Costa Mesa, Irvine, and unincorporated areas of Orange County. Directly adjacent to the City's boundaries include Banning Ranch to the northeast, the John Wayne Airport and residential homes to the north, University of California, Irvine along the northeast, Bommer Canyon Community Park to the east, and Crystal Cove State Park to the south.

Land Use Element Update

Supplemental EIR

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5. Environmental Analysis
UTILITIES AND SERVICE SYSTEMS

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City of Newport Beach

The City provides water services to a 36-square mile service area to approximately 67,000 residents through 26,300 service connections. The two main sources of water come from the Lower Santa Ana River Groundwater Basin, which is managed by the Orange County Water District (OCWD), and imported water from the Municipal Water District of Orange County (MWDOC), a member agency of the Metropolitan Water District of Southern California (Metropolitan). Recycled water was recently added to the City's water supply portfolio and accounts for 3 percent of the City's overall water supply. Groundwater accounts for 60 percent and imported water accounts for 37 percent of the overall supply. Groundwater is pumped from four active wells located throughout the City, and imported water is sourced from the Colorado River Aqueduct and the State Water Project, treated at the Diemer Filtration Plant in Yorba Linda and the Weymouth Filtration Plant in the San Gabriel Valley, and delivered through the City's six imported water connections (Newport Beach 2011).

The City is also a member of the Orange County 20x20x20 Regional Alliance formed by MWDOC and consists of 29 retail agencies in Orange County. Furthermore, the passage of the Water Conservation Act of 2009 (SBx7-7) requires a statewide 20 percent reduction in urban per capita water use by 2020. Newport Beach has selected to comply with Option 1 of various compliance options within SBx7-7, which sets the City's 2015 interim water use target goal as 228.1 gallons per capita per day (GPCD) and the 2020 final water use target goal as 202.8 GPCD (Newport Beach 2011).

Water Supply and Demand

The City's 2010 water demand is approximately 16,645 acre-feet per year and consists of 10,052 acre-feet of local groundwater and 432 acre-feet of recycled water (UWMP 2011). Table 5.12-3 shows the projected water supply and demand for the City through 2030.

Table 5.12-3 City of Newport Beach Current and Projected Water Demands (AFY)

	Fiscal Year Ending					
Water Supply Sources	2010	2015	2020	2025	2030	2030-opt
Metropolitan/MWDOC	6,161	6,298	6,430	6,564	6,697	6,830
Groundwater	10,052	10,275	10,492	10,710	10,927	11,144
Recycled Water	432	450	500	500	500	500
TOTAL	16,645	17,023	17,422	17,774	18,124	18,474

Source: City of Newport Beach Urban Water Management Plan, May 2011.

Table 5.12-4 shows water demand by water use sectors in acre-feet per year (afy) for the year of 2010. Categorizing the land use types within the table into residential and nonresidential uses, the City water demands are 9,605 afy (54.5 percent) for residential use and 7,040 afy (40 percent) for nonresidential use.

Table 5.12-4 City of Newport Beach 2010 Water Demand by Water Use Sector

Land Use Type	Water Demand (AFY)
Single-Family Residential	7,297
Multifamily Residential	2,308
Commercial/Industrial	2,960
Institutional	370
Landscape	3,710
Water Loss (5.6% of demand)	990
TOTAL	17,635

Source: City of Newport Beach Urban Water Management Plan, May 2011; The Planning Center|DC&E 2013.

Metropolitan/MWDOC's water supply reliability is evaluated based on projected supply and demand conditions for single and multiple years of drought. According to Metropolitan's 2010 Regional Urban Water Management Plan (RUWMP), Metropolitan will be able to meet full-service demands from 2015 through 2035 in single- and multiple-dry-year scenarios.

Local groundwater is managed by OCWD and is regulated by a basin production percentage (BPP) established by OCWD. The BPP is the percentage of groundwater that an agency can pump based on its total potable water demand. The BPP is set uniformly for all water providers by OCWD on an annual basis. Historically, the BPP ranged between 60 to 80 percent depending on groundwater conditions, availability of recharge water supplies, and basin management objectives. For 2010/11, the BPP was set at 62 percent. According to the OCWD, the BPP is assumed to remain at the conservative 62 percent level for the next 25 years. The remaining water demand not provided by local groundwater would be met through imported water from Metropolitan/MWDOC and a small portion from recycled water.

Recycled/reclaimed water is wholesaled by OCWD through its Green Acres Project and used within the City to water greenbelts, parkways, golf courses, and other landscaped areas requiring irrigation. Currently, recycled water usage meets approximately 3 percent of the City's overall water demands.

Water Supply Reliability

Overall, the City has documented that it is 100 percent reliable for a normal year, a single dry year, and multiple dry-year events from 2015 through 2035, with demand increases of 4.6 percent per dry year. Tables 5.12-5 through 5.12-7 show the City's water demand and supply through these conditions.

Table 5.12-5 City of Newport Beach Projected Normal Year Supply and Demand (AFY)

	2015	2020	2025	2030	2035
Total Demand	17,023	17,422	17,774	18,124	18,474
Groundwater	10,275	10,492	10,710	10,927	11,144
Recycled Water	450	500	500	500	500
Imported	6,298	6,430	6,564	6,697	6,830
Total Supply	17,023	17,422	17,774	18,124	18,474

Source: City of Newport Beach Urban Water Management Plan, May 2011.

Table 5.12-6 City of Newport Beach Projected Single Dry Year Supply and Demand (AFY)

	2015	2020	2025	2030	2035
Total Demand	17,806	18,223	18,592	18,958	19,324
Groundwater	10,275	10,492	10,710	10,927	11,144
Recycled Water	450	500	500	500	500
Imported	7,081	7,232	7,382	7,531	7,680
Total Supply	17,806	18,223	18,592	18,958	19,324

Source: City of Newport Beach Urban Water Management Plan, May 2011.

Table 5.12-7 City of Newport Beach Projected Multiple Dry-Year Event Supply and Demand (AFY)

		2015	2020	2025	2030	2035
First Year Supply	Total Demand	17,806	18,223	18,592	18,958	19,324
	Groundwater	10,275	10,492	10,710	10,927	11,144
	Recycled Water	450	500	500	500	500
	Imported Water	7,081	7,232	7,382	7,531	7,680
	Total Supply	17,806	18,223	18,592	18,958	19,324
Second Year Supply	Total Demand	17,806	18,223	18,592	18,958	19,324
	Groundwater	10,275	10,492	10,710	10,927	11,144
	Recycled Water	450	500	500	500	500
	Imported Water	7,081	7,232	7,382	7,531	7,680
	Total Supply	17,806	18,223	18,592	18,958	19,324
Third Year Supply	Total Demand	17,806	18,223	18,592	18,958	19,324
	Groundwater	10,275	10,492	10,710	10,927	11,144
	Recycled Water	450	500	500	500	500
	Imported Water	7,081	7,232	7,382	7,531	7,680
	Total Supply	17,806	18,223	18,592	18,958	19,324

Source: City of Newport Beach Urban Water Management Plan, May 2011.

Irvine Ranch Water District

IRWD provides water services to the City of Irvine and portions of the surrounding cities of Tustin, Santa Ana, Orange, Costa Mesa, Lake Forest, Newport Beach, and unincorporated areas of the county. Its service area encompasses 181 square miles with an estimated population of 338,000 (IRWD 2011). Currently, IRWD provides 77,830 acre-feet of water annually through 99,969 service connections.

Similar to the City, IRWD is also a member of the Orange County 20x20x20 Regional Alliance. Reducing its water usage by 20 percent requires IRWD to meet an interim 2015 target goal of 174 GPCD and a final 2020 target goal of 157 GPCD (IRWD 2011). In order to meet these goals, IRWD will rely on its existing demand management strategies, such as conservation programs, recycled water programs, and allocation-based rate structures.

Water Supply and Demand

IRWD sources its water from Metropolitan/MWDOC, local groundwater, and recycled water. Approximately 27 percent of IRWD's imported potable water needs are met by MWDOC waters from the State Water Project and Colorado River Aqueduct, which is then treated at the Diemer Filtration Plant and the Weymouth Filtration Plant. Nonpotable water supplies are met through recycled water, untreated imported water, surface water, and nonpotable groundwater and used for landscape irrigation and agricultural water demands. IRWD currently produces approximately 18,000 afy of recycled water from its Michelson Water Reclamation Plant and 2,000 afy from its Los Alisos Water Reclamation Plant. This meets over 23 percent of IRWD's overall water demands and is used primarily for landscape and agricultural irrigation.

Approximately 50 percent of IRWD's overall water supply comes from local groundwater wells in the Orange County Groundwater Basin and the Irvine and Lake Forest Subbasins. The Orange County Groundwater Basin is managed solely by OCWD, who sets annual BPPs to regulate the amount of allowable groundwater pumped out of the basin by all water suppliers based on a financial incentive program. As stated above, OCWD adopted a BPP of 62 percent for the 2011 fiscal year. Table 5.12-8 shows the current and projected amount of groundwater pumped in acre-feet per year through 2035.

Table 5.12-8 IRWD Current and Projected Amount of Pumped Groundwater (AFY)

Basin Name	2010	2015	2020	2025	2030	2035
Orange County Groundwater Basin	37,151	49,646	46,005	49,038	49,414	43,870
Irvine Sub-basin	8,695	11,692	11,155	11,692	11,692	10,444
Los Alisos Area	3	435	435	435	435	435
Total groundwater pumped	45,850	61,773	57,595	61,166	61,541	54,749
Percent of total water supply	30.8%	35.0%	31.9%	33.9%	34.1%	30.3%

Source: Irvine Ranch Water District Urban Water Management Plan, June 2011.

Table 5.12-9 shows IRWD's current and projected water demands by various water use sectors within the IRWD service area.

Table 5.12-9 IRWD Current and Projected Water Demand by Water Use Sector (AFY)

	Year End					
Water Use Sector	2010	2015	2020	2025	2030	2035
Single-Family Residential	26,130	28,816	32,590	34,849	35,753	36,652
Multifamily Residential	5,590	12,348	14,822	17,061	17,584	18,053
Commercial	7,735	4,659	5,127	5,455	5,455	5,458
Industrial	4,744	12,586	13,622	14,307	14,119	13,941
Institutional/Governmental	2,293	2,101	2,404	2,650	2,614	2,581
Landscape	24,221	31,272	36,202	39,650	40,362	41,074
Agriculture	6,904	10,191	6,485	1,318	3,303	2,314
Other	212	--	--	--	--	--
TOTAL	77,830	101,972	111,252	133,913	119,191	120,073

Source: Irvine Ranch Water District Urban Water Management Plan, June 2011.

According to IRWD's UWMP, IRWD water supplies remain essentially constant between normal, single-dry, and multiple-dry years primarily due to the fact that groundwater and Metropolitan/MWDOC imported water accounts for all of IRWD's potable water supply, and reclaimed water, groundwater, and imported water compose most of IRWD's nonpotable supply. Therefore, IRWD's water supply is 100 percent reliable through various drought events. Tables 5.12-10 through 5.12-12 compare IRWD's water supply and demand during a normal year, a single dry year, and multiple dry-year events through 2035.

Table 5.12-10 IRWD Normal Year Supply and Demand Comparison (AFY)

	2015	2020	2025	2030	2035
Supply Totals	176,610	180,674	180,674	180,674	180,674
Demand Totals	110,309	120,196	127,692	128,651	129,592
Difference	66,301	60,478	52,982	52,023	51,082
Difference as % of Supply	38%	33%	29%	29%	28%

Source: Irvine Ranch Water District Urban Water Management Plan, June 2011.

Table 5.12-11 IRWD Single Dry Year Supply and Demand Comparison (AFY)

	2015	2020	2025	2030	2035
Supply Totals	173,610	177,674	177,674	177,674	177,674
Demand Totals	118,031	128,609	136,631	137,657	138,663
Difference	55,579	49,065	41,043	40,017	39,011
Difference as % of Supply	32%	28%	23%	23%	22%

Source: Irvine Ranch Water District Urban Water Management Plan, June 2011.

Table 5.12-12 IRWD Multiple Dry-Year Events Supply and Demand Comparison (AFY)

		2015	2020	2025	2030	2035
First Year Supply	Supply Totals	173,610	177,674	177,674	177,674	177,674
	Demand Totals	118,031	120,196	127,692	128,651	129,592
	Difference	55,579	57,478	49,982	49,023	48,082
	Difference as % of Supply	32%	32%	28%	28%	27%
Second Year Supply	Supply Totals	173,610	177,674	177,674	177,674	177,674
	Demand Totals	118,031	120,196	127,692	128,651	129,592
	Difference	55,579	57,478	49,982	49,023	48,082
	Difference as % of Supply	32%	32%	28%	28%	27%
Third Year Supply	Supply Totals	173,610	177,674	177,674	177,674	177,674
	Demand Totals	118,031	120,196	127,692	128,651	129,592
	Difference	55,579	57,478	49,982	49,023	48,082
	Difference as % of Supply	32%	32%	28%	28%	27%

Source: Irvine Ranch Water District Urban Water Management Plan, June 2011.

Mesa Consolidated Water District

Mesa Consolidated Water District (Mesa) provides water services to the City of Costa Mesa and a small portion of the northwestern area of Newport Beach; it encompasses an approximately 18-square-mile service area and serves a population of 111,166. Within Newport Beach, Mesa serves only a small portion of less than one-half square mile.

Mesa receives its water supply from two sources: MWDOC's imported water from the State Water Project and the Colorado River Aqueduct and local groundwater pumped from the Lower Santa Ana River Groundwater Basin. Currently, the total water demand for customers served by Mesa is approximately 19,400 afy and is broken down into 2,400 afy of imported water, 15,900 afy of local groundwater, and 1,100 afy of recycled water. Mesa relies on 82 percent groundwater, 12 percent imported water, and 6 percent recycled water. It is anticipated that by 2015, Mesa's water supply will comprise 94 percent groundwater and 6 percent recycled water, eliminating the need for imported water.

Furthermore, as a member of the Orange County 20x20x20 Regional Alliance formed by MWDOC, Mesa has an interim water use target goal of 161.1 GPCD and a final target goal of 143.2 GPCD.

Metropolitan's 2010 Regional UWMP concludes that Metropolitan is able to meet full service demands with existing water supplies from 2015 through 2035 during normal years, single dry year, and multiple dry years. Therefore, Mesa is also able to meet water demands of its customers in normal, single dry, and multiple dry years between 2015 and 2035, given that groundwater and recycled water are typically constant through wet and dry years.

Given that Mesa provides services to only a small portion of the City adjacent to the City of Costa Mesa, no analysis on Mesa's water supply and demand will be included in this report.

5.12.2.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

U-2 Would require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

U-4 Would not have sufficient water supplies available to serve the project from existing entitlements and resources, and new and/or expanded entitlements would be needed.

5.12.2.3 ENVIRONMENTAL IMPACTS

2006 General Plan EIR

The City's imported surface water supply comes from the City and IRWD's water supply system, which source their imported water from the Municipal Water District of Orange County. In addition, the City's groundwater supply is treated at the City's Utility Yard. Development in accordance with the 2006 General Plan would increase water demand within the City; however, the 2006 General Plan EIR concluded that impacts to existing water supply and infrastructure would be less than significant.

City of Newport Beach Service Area Analysis

The 2006 General Plan buildout would increase water demands by approximately 998 AFY; however, MWDOC, the City's imported water supplier, indicated that its 2030 projected availability of imported water supply exceeds the 2030 projected regionwide demand for imported water supply by at least 155,000 af. Thus, MWDOC would be able to meet 100 percent of the City's imported water needs through 2030. Beyond 2030, additional water transfers, local projects, conservation efforts, and State Water Project improvements may be necessary to meet Newport Beach's future demand requirements. Groundwater supplies are also identified to meet demands through 2030. Various policies in the 2006 General Plan Natural Resource Element also aim to increase the use of recycled water, provide financial incentives for reduced water use, offer alternative water resources through advance water treatment processes, and implement water conservation measures.

IRWD Service Area Analysis

The 2006 General Plan buildout would increase water demand by 270 afy in the IRWD service area. The additional water demand, however, would not change IRWD's UWMP conclusions with respect to projected water supply reliability. IRWD has identified surplus water supplies under normal, single dry year, and multiple dry year scenarios for both imported and groundwater supplies. Impacts were found to be less than significant to IRWD's water supply.

Mesa Consolidated Water District Service Area Analysis

The Mesa service area would experience an increase in water demand by approximately 58.6 afy. However, Mesa indicated that they have adequate water supply sources to supply the additional demand. Thus, impacts from the 2006 Approved Project on Mesa's water supply sources are less than significant.

In addition, any new development would be subject to site-specific evaluation of existing water system's capacity to service the development. If improvements are required, developers are required to pay its share of costs of all or portions of the needed improvements. Environmental impacts associated with these improvements would be evaluated at a project-level. Policy LU 2.8 of the 2006 General Plan also directs the City to accommodate land uses that can be adequately supported by infrastructure, including water treatment and conveyance facilities. Thus, overall impacts to the three water suppliers were found to be less than significant.

General Plan LUE Amendment (Proposed Project)

The following impact analysis addresses thresholds of significance for which the Initial Study disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.12-2: Water supply and delivery systems provided by the City of Newport Beach, Irvine Ranch Water District, and Mesa Consolidated Water District are adequate to meet project requirements. [Thresholds U-2 (part) and U-4]

Impact Analysis: As shown in Figure 5.12-2, *City of Newport Beach Water Service Areas*, Newport Beach's water supply services are provided by the City, IRWD, and Mesa. These water agencies primarily source their water supply from MWDOC, local groundwater, and recycled water. The subareas proposed for change under the General Plan LUE Amendment are scattered throughout the three water agencies' service areas.

SBx7-7, Statewide Water Conservation Requirements, was introduced by the California Department of Water Resources and passed in November 2009. Given that the 2006 General Plan EIR was adopted prior to SBx7-7 becoming effective, projected water supply demands in the 2006 General Plan EIR were estimated by using individual land use water demand rates. For the proposed project, these rates would not be accurate given that they do not take into account water conservation efforts that existing and future developments would implement in order to comply with SBx7-7. According to the City's updated 2010 Urban Water Management Plan, the City is required to reduce their current water use target by 20 percent by 2020. The following analysis uses the reduced water use target to determine a more accurate estimate of the proposed project's water supply demand.

City of Newport Beach Service Area Analysis

The subareas proposed for change within the City's service area include The Hangars, Saunders Properties, Westcliff Plaza, Gateway Park, Bayside Commercial Center, Harbor View Commercial Center, Harbor Day School, Newport Coast/Fashion Island, 100 Newport Center Drive, 150 Newport Center Drive, and 813 E. Balboa Boulevard. Under compliance with SBx7-7 Water Use Targets, the City would need to reduce their

water use target by 20 percent from the baseline, which is currently at 253.5 gallons per capita per day (GPCD) (Newport Beach 2011). The 2020 final water use target is 202.8 GPCD. Thus, buildout of the proposed project would increase water demand from 22,816 afy from buildout of the 2006 Approved Project to 23,238 afy, a difference of 422 additional afy.[2]

According to the City's 2010 UWMP, the 2035 projected availability of imported water supply from MWDOC meets the 2035 projected imported water demand of 6,830 AFY. Tables 5.12-5 through 5.12-7 show that the City has a 100 percent reliable water supply for its residents during normal years, single dry years, and multiple dry-year events through 2035. Therefore, the City's existing and future water supply is able to accommodate the increased water demand associated with the proposed project, and impacts are less than significant.

IRWD Service Area Analysis

The subareas proposed for change within IRWD's service area include Newport Ridge, Newport Coast Hotel, The Bluffs, Lyon Communities, and UAP Companies (4699 Jamboree Road and 5190 Campus Drive). Of these subareas, only Lyon Communities and UAP Companies, located in the Airport Area, are proposed for increased development capacity. IRWD's existing water system is not deficient and is operating at a high level of service. According to IRWD's 2010 UWMP, its current water supply is 100 percent reliable and will be able to accommodate normal years, single dry years, and multiple dry-year events, if needed. Comparing supply and demand totals in Tables 5.12-10 through 5.12-12, IRWD has a substantial amount of water supply compared to the amount demanded by its customers, which provides a buffer of sufficient water in cases of emergency. For example, Table 5.12-10 shows that the 2035 projected availability of IRWD's water supply exceeds the projected water demands by at least 51,082 afy. IRWD has also indicated that there is adequate existing and planned water supply to accommodate future development and its associated water demands (Corey 2013).

Furthermore, developments on the Lyon Communities and UAP Companies properties may be required to prepare an update or addendum to the 2008 Irvine Business Complex (IBC) Sub-area Master Plan (SAMP), which consists of an analysis of existing deficiencies in the IBC water system based on projected future residential, office, and commercial uses in the master plan. If future developments on the Lyon Communities and UAP Companies properties, in accordance with the General Plan LUE Amendment, do not fall within the land uses analyzed in the 2008 IBC SAMP, an update or amendment may be required to reanalyze IRWD's IBC water system and its ability to meet water demands (Corey 2013). Therefore, an increase in water consumption from future development on the Lyon Communities and UAP Companies property would be accounted for under the 2008 IBC SAMP or a subsequent update or amendment. The proposed project itself,

[2] The projected water supply demand from project buildout is estimated to be 422 AFY. However, as stated in Section 5.12.1.3, the projected wastewater generated from project buildout is estimated to be 431,340 gpd, or approximately 483 AFY. Water supply demand is less than generated wastewater in this case because the wastewater analysis uses generation rates that do not reflect regulations adopted under 2009 SB-7x7; therefore the projected 483 AFY of wastewater is a very conservative estimate. On the other hand, the projected water supply demand does take into account the 20 percent reduced water use target required under SB-7x7 in the City's most recently updated 2010 Urban Water Management Plan and is a more accurate representation of the project's water supply demand.

however, would not have an adverse effect on IRWD's existing water supply. Impacts would be less than significant.

Mesa Consolidated Water District Service Area Analysis

Mesa is responsible for providing water supply service to only a few City parcels adjacent to the City of Costa Mesa on the western end of Newport Beach. Of the subareas proposed for change under the General Plan LUE Amendment, only King's Liquor Store (Map Reference No. 1 on Figure 3-6) at 1526 Placentia Avenue is within the Mesa service area. The property is proposed for a land use designation change from Multi-Unit Residential to General Commercial, changing its allowable density from 18 dwelling units per acre to a 0.5 floor-to-area ratio density. Currently, the only building on the parcel is a 7,524-square-foot liquor store. All subsequent developments on the property would be required to go through a project-level environmental review by the City to determine adequate water supply to the future development. Therefore, given that the General Plan LUE Amendment does not propose for any specific development project, impacts on Mesa's water supply and delivery systems would be less than significant.

In addition, pursuant to SB 610, developers are required to prepare a Water Supply Assessment (WSA) to determine adequate water supply from the responsible water agency if their project falls within the following parameters:

(1) A proposed residential development of more than 500 dwelling units;

(2) A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;

(3) A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;

(4) A proposed hotel or motel, or both, having more than 500 rooms;

(5) A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;

(6) A mixed-use project that includes one or more of the projects specified in this subdivision;

(7) A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

According to the proposed land use changes under the General Plan LUE Amendment, the Newport Center/Fashion Island subarea would be allowed to develop up to 500,000 square feet of regional office use (Parameter 2), and the Lyon Communities property would allow for 850 replacement dwelling units (Parameter 1). Therefore, future developments in these capacities at the Newport Center/Fashion Island and Lyon Communities subareas would require preparation of WSAs to determine sufficient water supplies to satisfy the project demands, in addition to existing and planned future uses. The developer would be

responsible for coordinating the preparation of the WSA with the respective water agencies. In addition, the City may require the developer to pay water connection and meter installation fees if the existing water system is not able to serve the new project, per Chapter 14.08 (Water Connection) of the City's municipal code. In summary, the proposed project would have a less than significant impact on the City's various water suppliers.

5.12.2.4 RELEVANT GENERAL PLAN POLICIES

Existing Policies

Harbor and Bay Element (HB)

Goal HB 6: Provision and maintenance of public access for recreational purposes to the City's coastal resources (Goal R9).

- **HB 6.5 - Water Transportation Services and Support Facilities:** Enhanced and maintained public water transportation services and expanded public water transportation uses and land support facilities.

Goal HB 8: Enhancement and protection of water quality of all natural water bodies, including coastal waters, creeks, bays, harbors and wetlands.

- **HB 8.3 - Ground Water Contamination:** Suspend activities and implement appropriate health and safety procedures in the event that previously unknown groundwater contamination is encountered during construction. Where site contamination is identified, implement an appropriate remediation strategy that is approved by the City and state agency with appropriate jurisdictions. (Policy NR 3.3)

- **HB 8.7 - Newport Beach Water Quality Ordinance:** Update and enforce the Newport Beach Water Quality Ordinance. (Policy NR 3.7)

- **HB 8.8 - Permit Review Process:** Develop and maintain a water quality checklist to be used in the permit review process to assess potential water quality impacts. (Policy NR 3.8)

- **HB 8.9 - Water Quality Management Plan:** Require new development applications to include a Water Quality Management Plan (WQMP) to minimize runoff from rainfall events during construction and post-construction. (Policy NR 3.9)

- **HB 8.11 - Site Design and Source Control:** Include site design and source control BMPs in all developments. When the combination of site design and source control BMPs are not sufficient to protect water quality as required by the National Pollutant Elimination System, structural treatment BMPs will be implemented along with site design and source control measures. (NR 3.11)

Natural Resources Element (NR)

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

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

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

Goal NR 2: Expanded use of alternative water sources to provide adequate water supplies for present uses and future growth.

- **NR 2.1 - Recycled Water Use:** Increase the use of recycled water in the City by continuing to provide financial incentives, staff assistance, and training opportunities for customers, and expand recycled water infrastructure and programs, when feasible.

- **NR 2.2 - Advanced Water Treatment Processes:** Use alternative water sources for the City's water supply by implementing advanced water treatment processes such as brackish groundwater and seawater desalination programs, when feasible.

New and/or Modified Policies

Proposed modification to General Plan policies as detailed in Section 5.12.1.4 for Wastewater Treatment and Collection are also applicable to water supply services. In addition, the following new and/or amended policies that are relevant to water supply services are shown in underlined/strikeout text for new text and eliminated text, respectively. The goal for a revised policy is provided, even if the goal itself is unchanged.

Goal LU X: Land use development practices that contribute to a sustained natural environment for use by future generations, economy, and well-being of Newport Beach's residents, while reducing greenhouse gas emissions and impacts on climate change.

- **LU X.X - Regulating Sustainable Development:** Promote and, where appropriate, require new development and reconstruction to comply with sustainable building practices incorporating a "whole system" approach to designing and constructing buildings that consume less energy, water, and other resources, facilitate natural ventilation, use daylight effectively, and are healthy, safe, comfortable, and durable.

Goal LU 5.2: Commercial centers and districts that are well-designed and planned, exhibit a high level of architectural and landscape quality, and are vital places for shopping and socialization.

- **LU 5.2.1 - Architecture and Site Design:** Require that new development within existing commercial districts centers and corridors that ~~complement existing uses and~~ exhibit a high level of architectural and site design in consideration of the following principles:

- Seamless connections and transitions with existing buildings, except where developed as a free-standing building
- Modulation of building masses, elevations, and rooflines to promote visual interest
- Architectural treatment of all building elevations, including ancillary facilities such as storage, truck loading and unloading, and trash enclosures
- Treatment of the ground floor of buildings to promote pedestrian activity by avoiding long, continuous blank walls, incorporating extensive glazing for transparency, and modulating and articulating elevations to promote visual interest
- Clear identification of storefront entries
- Incorporation of signage that is integrated with the buildings' architectural character
- Architectural treatment of parking structures consistent with commercial buildings, including the incorporation of retail in the ground floors where the parking structure faces a public street or pedestrian way
- Extensive on-site landscaping, including mature vegetation to provide a tree canopy to provide shade for customers
- Incorporation of plazas and expanded sidewalks to accommodate pedestrian, outdoor dining, and other activities
- Clearly delineated pedestrian connections between business areas, parking, and to adjoining neighborhoods and districts (paving treatment, landscape, wayfinding signage, and so on)
- Integration of building design and site planning elements that reduce the consumption of water, energy, and other nonrenewable resources

Goal LU 6.9: A vibrant pedestrian-oriented village environment that reflects its waterfront location at the gateway to Newport Beach's historic Balboa Peninsula that ~~providing~~ provides a mix of uses ~~that serves~~ serving visitors and local residents.

- **LU 6.9.X5 - Character and Design:** Maintain a high quality of development design in Lido Village in consideration of the following design objectives:
  - Unification: Creating a sense of place through a unifying theme for Lido Village with defined gathering spaces, increased connectivity, and improved wayfinding;
  - Visual Appeal: Creating a distinct identity for Lido Village by encouraging Coastal and Mediterranean architecture, creating an attractive gateway, maximizing view corridors and scenic opportunities, and incorporating art and landscaping; and

- Sustainability: Promoting economic and environmental sustainability by encouraging energy and water efficient practices in consideration of economic realities and viability, and celebrating California-friendly landscapes.

Goal LU 6.15: A mixed-use community that provides jobs, residential, and supporting services in close proximity, with pedestrian-oriented amenities that facilitate walking and enhance livability.

- **LU 6.15.23 - Sustainable Development Practices:** Require that development ~~achieves a high level of environmental sustainability that~~ reduces pollution and consumption of energy, water, and natural resources. This may be accomplished through the mix and density of uses, building location and design, transportation modes, and other techniques. Among the strategies that should be considered are the integration of residential with jobs-generating uses, use of alternative transportation modes, maximized walkability, use of recycled materials, capture and re-use of storm water on-site, water conserving fixtures and landscapes, and architectural elements that reduce heat gain and loss.

5.12.2.5 EXISTING REGULATIONS

- Urban Water Management Planning Act
- Senate Bill 610
- 20x20x20 Water Conservation Plan
- 2008 Irvine Business Complex Sub-area Master Plan
- City of Newport Beach Municipal Code Chapter 14.16 (Water Conservation and Supply Level Regulations)
- City of Newport Beach Municipal Code Chapter 14.17 (Water-efficient Landscaping)
- City of Newport Beach Municipal Code Chapter 14.08 (Water Connection)

5.12.2.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements, the following impacts would be less than significant: 5.12-2.

5.12.2.7 MITIGATION MEASURES

Impacts are less than significant and mitigation measures are not required.

5.12.2.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

No mitigation measures are required and impacts would remain less than significant.

5.12.3 Storm Drainage Systems

5.12.3.1 ENVIRONMENTAL SETTING

Regulatory Background

State

National Pollutant Discharge Elimination System Program

The State Water Resources Control Board (SWRCB) has adopted a statewide Construction General Permit (Order No. 2009-009-DWQ) for stormwater discharges associated with construction activity. These regulations prohibit the discharge of stormwater from construction projects that include one acre or more of soil disturbance. Construction activities subject to this permit include clearing, grading, and other disturbance to the ground such as stockpiling or excavation that results in soil disturbance of at least one acre of total land area. Because construction on project sites within the City could occur over an area greater than one acre, individual developers would be required to submit a Notice of Intent to the SWRCB for coverage under the NPDES permit and would be obligated to comply with its requirements.

The NPDES Construction General Permit requires all dischargers to (1) develop and implement a Stormwater Pollution Prevention Plan (SWPPP), which specifies best management practices (BMP) to be used during construction of the project; (2) eliminate or reduce nonstorm water discharge to stormwater conveyance systems; and (3) develop and implement a monitoring program of all BMPs specified. The two major objectives of the SWPPP are to (1) help identify the sources of sediment and other pollutants that affect the water quality of stormwater discharges and (2) to describe and ensure the implementation of BMPs to reduce or eliminate sediment and other pollutants in stormwater as well as non-stormwater discharges.

Local

Orange County Drainage Area Management Plan

The purpose of the Drainage Area Management Plan (DAMP) is to satisfy NPDES permit conditions for creating and implementing an Urban Runoff Management Program to reduce pollutant discharges to the maximum extent practicable. Stormwater drainage systems are required to be constructed in accordance with low impact development (LID) features and infiltration/biotreatment best management practices (BMPs) identified in the DAMP, which outlines structural and nonstructural BMPs to meet these goals. The DAMP identifies the following six minimum control measures required under the Municipal Permit: public outreach, public involvement, illicit discharge detection and elimination, construction site runoff, existing development, new development and redevelopment, and municipal operations.

City of Newport Beach Municipal Code Section 19.28.080

Section 19.28.080 (Storm Drains) of the City's municipal code requires developers to design and construct all drainage facilities (e.g., open/closed channels, catch basins, manholes, junction structures, etc.) necessary for the removal of surface water from their proposed project site, and also to protect offsite properties from the project's water runoff. The storm drain system shall be designed in accordance with the standards of the

Orange County Flood Control District. A drainage fee is also charged to fund improvements to the City's drainage facilities.

Existing Conditions

The storm drainage systems in the City of Newport Beach are managed and operated by both the City and the Orange County Flood Control Division of the Orange County Public Works Department. Newport Beach has over 95 miles of storm drain pipe, 3,224 catch basins, and 86 tidal valves. The county is responsible for maintaining and repairing regional systems, and the City is in charge of local improvements, such as clearing blocked drains, removing debris, and cleaning or repairing damaged pipes (Newport Beach 2012).

Figure 5.12-3, *City of Newport Beach Existing Drainage System*, shows the City's existing drainage system that runs throughout Newport Beach.

5.12.3.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

U-3 Would require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

5.12.3.3 ENVIRONMENTAL IMPACTS

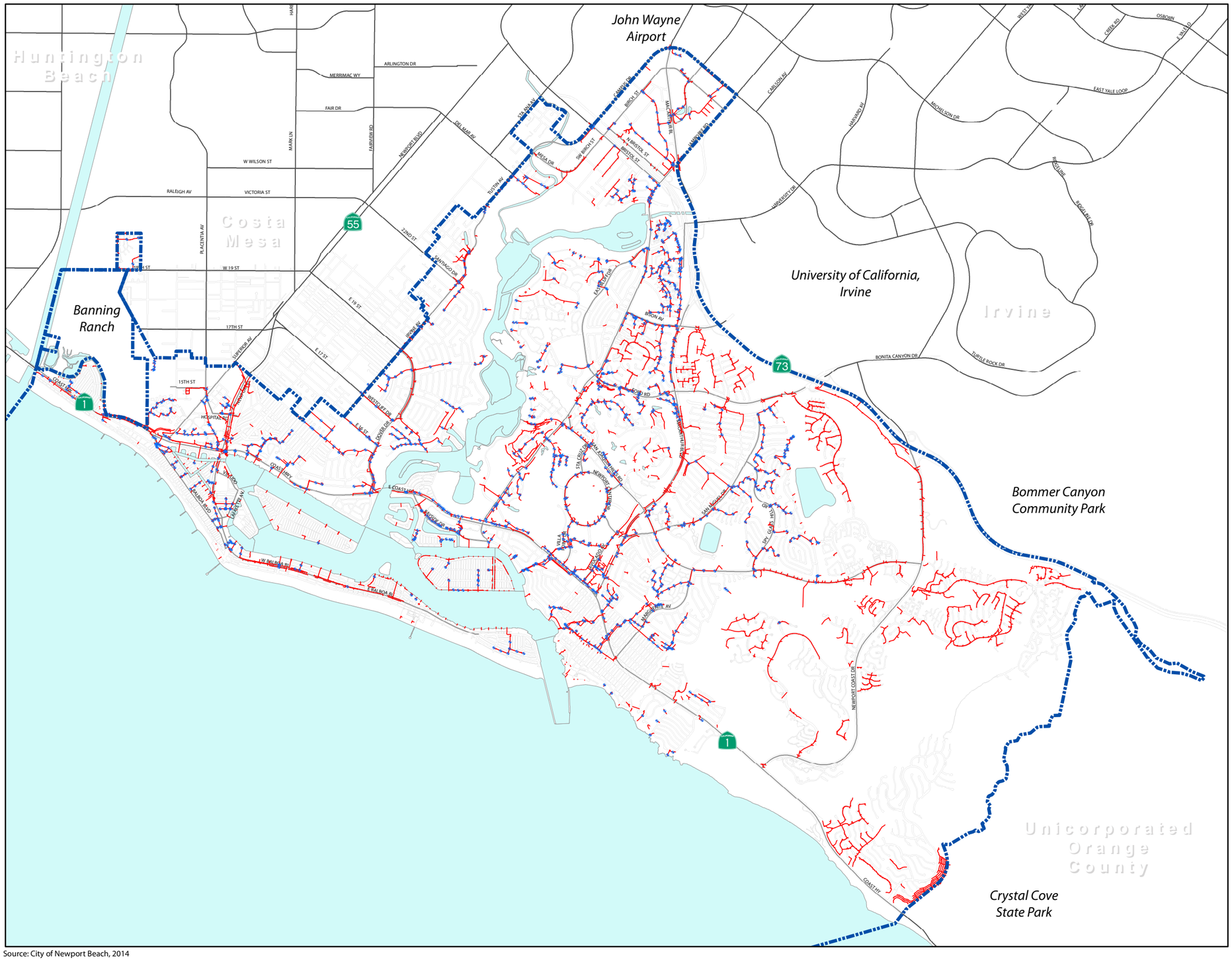
2006 General Plan EIR

The 2006 General Plan EIR found that development would have a less than significant impact on Newport Beach's storm drainage system capacity. Buildout would generally result in infill development or redevelopment, which would not substantially alter drainage patterns because these areas are already developed with existing uses and impervious surfaces. The City's Storm Drain Master Plan was completed in 2000 and addressed drainage deficiencies. However, no upgrades were proposed as necessary with implementation of the 2006 General Plan. Several General Plan policies address stormwater, including NR 3.10, NR 3.11, NR 3.16, NR 3.20, NR 3.21, NR 4.4, and S 5.3. These policies discuss and regulate the preparation of WQMPs, implementation of BMPs, application of stormwater detention facilities, improvements to drainage facilities, and reductions in impervious surfaces to minimize adverse impacts on water quality. Additional policies in the 2006 General Plan Safety Element require storm drain maintenance, mitigation of flood hazards, installation of onsite drainage systems, site-specific grading requirements, etc. are included in Policies S 2.6, S 5.1, and S 5.3. Section 15.50.160 of the City's municipal code also regulates flood hazards resulting from drainage alterations. By complying with the General Plan policies and City's municipal code, impacts to existing drainage system capacities would be less than significant.

5. Environmental Analysis

Figure 5.12-3

City of Newport Beach Existing Drainage System



Source: City of Newport Beach, 2014

- City Boundary
- Storm Drain Manhole
- Storm Drain Line

Note:
The City of Newport Beach Planning Area is surrounded by other developed areas of the cities of Huntington Beach, Costa Mesa, Irvine, and unincorporated areas of Orange County. Directly adjacent to the City's boundaries include Banning Ranch to the northeast, the John Wayne Airport and residential homes to the north, University of California, Irvine along the northeast, Bommer Canyon Community Park to the east, and Crystal Cove State Park to the south.

Land Use Element Update

Supplemental EIR

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5. Environmental Analysis
UTILITIES AND SERVICE SYSTEMS

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General Plan LUE Amendment (Proposed Project)

The following impact analysis addresses thresholds of significance for which the Initial Study disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.12-3: Existing and/or proposed storm drainage systems are adequate to serve the drainage requirements of the proposed project. [Threshold U-3]

Impact Analysis: Implementation of the General Plan LUE Amendment would allow for development in various subareas proposed for changes in land use designation and/or development capacities. Since the City of Newport Beach is almost entirely built out, development would occur only in areas with existing storm drainage infrastructure. The Orange County DAMP requires new developments to create and implement an Urban Runoff Management Program, including a formal drainage map, which would ensure pollutant discharges are reduced to the maximum extent practicable and do not exceed existing storm drainage capacities. The DAMP is required to satisfy the NPDES program permit conditions and must implement structural and nonstructural BMPs that would mimic predevelopment quantity and quality runoff conditions for new development. BMPs related to low impact development features and infiltration/biotreatment would help to decrease and maintain existing levels of stormwater runoff. Each development project approved under the proposed project would also be required to install and maintain onsite storm drainage improvements pursuant to DAMP requirements. Thus, any additional stormwater runoff expected at buildout of the General Plan LUE Amendment would not exceed existing storm drainage capacities.

In addition, Section 19.28.080 (Storm Drains) requires developers to design and construct any drainage improvements (e.g., facilities, open/closed channels, catch basins, manholes, etc.) for the removal of surface water from the project site and to protect offsite properties from such runoff. Developers are also required to pay storm drainage fees for master plan facilities in accordance with City Council resolution.

Therefore, compliance with existing DAMP and NPDES program regulations and Section 19.28.080 of the City's municipal code would ensure that development pursuant to the General Plan LUE Amendment would be adequately served by the City's storm drainage systems. Therefore, impacts related to storm drainage systems are less than significant.

5.12.3.4 RELEVANT GENERAL PLAN POLICIES

Existing Policies

Harbor and Bay Element (HB)

Goal HB 8: Enhancement and protection of water quality of all natural water bodies, including coastal waters, creeks, bays, harbors and wetlands.

- **HB 8.1 - Chemical Uses Impacting Water Quality:** Support regulations limiting or banning the use insecticides, fertilizers, and other chemicals, which are shown to be detrimental to water quality. (Policy NR 3.1)

- **HB 8.2 - Water Pollution Prevention -** Promote pollution prevention and elimination methods that minimize the introduction of pollutants into natural water bodies.

- **HB 8.4 - Storm Drain Sewer System Permit:** Require all development to comply with the regulations under the City's municipal separate storm sewer system permit under the National Pollutant Discharge Elimination System. (Policy NR 3.4)

- **HB 8.6 - Watershed Runoff Quality Control:** Represent Newport Beach by participating in watershed-based runoff reduction, water quality control, and other planning efforts with the California Regional Water Quality Control Board (RWQCB), the County of Orange, and upstream cities. Promote regulation of upstream dischargers (cities, Orange County, residential and commercial uses) in the San Diego Creek and Santa Ana/Delhi Channel watersheds. (Policy NR 3.6)

- **HB 8.11 - Site Design and Source Control:** Include site design and source control BMPs in all developments. When the combination of site design and source control BMPs are not sufficient to protect water quality as required by the National Pollutant Elimination System, structural treatment BMPs will be implemented along with site design and source control measures. (NR 3.11)

- **HB 8.14 - Runoff Reduction on Private Property:** Retain runoff on private property to prevent the transport of pollutants into recreational waters, to the maximum extent practicable. (Policy NR 3.14)

- **HB 8.15 - Street Drainage Systems:** Require all street drainage systems and other physical improvements created by the City, or developers of new subdivisions, to be designed, constructed, and maintained to minimize adverse impacts on water quality. Investigate the possibility of treating or diverting street drainage to minimize impacts to water bodies. (NR 3.15)

- **HB 8.19 - Natural Drainage Systems:** Require incorporation of natural drainage systems and stormwater detention facilities into new developments, where appropriate and feasible, to retain stormwater in order to increase groundwater recharge. (Policy NR 3.19)

- **HB 8.20 - Impervious Surfaces:** Require new development and public improvements to minimize the creation of and increases in impervious surfaces, especially directly connected impervious areas, to the maximum extent practicable. Require redevelopment to increase area of pervious surfaces, where feasible. (Policy NR 3.20)

New and/or Modified Policies

The new and/or modified LUE policies detailed in Sections 5.12.1.4 (Wastewater Treatment and Collection) and 5.12.2.4 (Water Supply and Distribution Systems) are also applicable to storm drainage services.

5.12.3.5 EXISTING REGULATIONS

- National Pollutant Discharge Elimination System Program

- Orange County Drainage Area Management Plan
- City of Newport Beach Municipal Code Section 19.28.080 (Storm Drains)

5.12.3.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements, the following impacts would be less than significant: 5.12-3.

5.12.3.7 MITIGATION MEASURES

Impacts are less than significant and mitigation measures are not required.

5.12.3.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

No mitigation measures are required and impacts would remain less than significant.

5.12.4 Solid Waste

5.12.4.1 ENVIRONMENTAL SETTING

Regulatory Background

Federal

The Resource Conservation and Recovery Act of 1976 (RCRA) (Title 40 of the Code of Federal Regulations), Part 258, contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the federal landfill criteria. The federal regulations address the location, operation, design (liners, leachate collection, run-off control, etc.), groundwater monitoring, and closure of landfills.

State

Assembly Bill 939 and 341

Assembly Bill AB 939 (California Integrated Solid Waste Management Act of 1989; Public Resources Code 40050 et seq.) established an integrated waste-management system that focused on source reduction, recycling, composting, and land disposal of waste. AB 939 required every California city and county to divert 50 percent of its waste from landfills by the year 2000. Compliance with AB 939 is measured in part by comparing solid waste disposal rates for a jurisdiction with target disposal rates; actual rates at or below target rates are consistent with AB 939. AB 939 also requires California counties to show 15 years disposal capacity for all jurisdictions within the county; or show a plan to transform or divert its waste.

Assembly Bill 341 (Chapter 476, Statutes of 2011) increased the statewide solid waste diversion goal to 75 percent by 2020. The law also mandates recycling for commercial and multi-family residential land uses.

Local

City of Newport Beach Municipal Code

The City of Newport Beach Municipal Code identifies land use categories, development standards, and other general provisions that ensure consistency between the City's General Plan and proposed development projects. The following provisions from the City's municipal code focus on solid waste services impacts:

- **Section 12.63.030 (Franchise to Operate Required):** States that no person shall provide commercial solid waste handling services or conduct a solid waste enterprise in the City without have first been awarded a franchise and entered into a franchise agreement with the City.

- **Section 12.63.120 (Recycling Requirement):** Allows a solid waste enterprise to deposit a maximum of fifty percent of the solid waste collected by the person in the City at any landfill. This encourages recycling of solid waste materials to meet the requirements of the California Integrated Waste Management Act of 1989.

Existing Conditions

Solid Waste Collection

Solid waste in the City of Newport Beach is collected primarily by the City's Municipal Operations Department – Refuse Division and various franchised solid waste haulers. The solid waste is taken to a City-owned transfer station where it is consolidated and transferred to a materials recovery facility for sorting of recyclable materials. The majority of the remaining waste is taken to one of three county landfills: Frank R. Bowerman Landfill in Irvine, Olinda Alpha Landfill in Brea, and Prima Deshecha Landfill in San Juan Capistrano.

The City's Municipal Operations Department currently provides refuse collection to single-family and small multifamily homes in the area of the City that existed as of 1996 (pre-annexations). However, effective March 31, 2014, this service will be taken over by a private hauler, CR&R in Stanton (Pisani 2013).

Solid waste collection services for commercial areas are provided by franchised haulers. Pursuant to Section 12.63.030 of the City's Municipal Code, these commercial haulers were awarded exclusive franchise and entered into an agreement with the City. The following franchised commercial solid waste haulers provide solid waste collection services for the City (Newport Beach 2013):

- Federal Disposal in Irvine
- Rainbow Disposal in Huntington Beach
- CR&R in Stanton
- Ware Disposal in Newport Beach
- Briggeman Disposal Services, Anaheim
- Waste Management of Orange County in Santa Ana
- Key Disposal, Montebello
- EZ Disposal, Fountain Valley
- Tight Quarters, Inc. in Santa Ana
- American Wrecking, Inc. in South El Monte
- Kevin Ray Demolition in Brea
- The Lane Company in Whittier
- Cousyn Grading and Demolition in Costa Mesa
- RB Holt (Pacific Earthworks) in Capistrano Beach
- Tim Greenleaf Engineering in Huntington Beach
- Roche Excavating in Santa Ana
- Progressive Land Clearing, dba Thomas Demolition in Gardena
- Southern California Environmental in Lake Forest
- Direct Disposal in Huntington Beach
- Goodwin Enterprises in Capistrano Beach
- IRS Demolition in South Gate
- Robert's Waste Recycling Inc. in Irvine
- JB Services in Lake Elsinore
- Newport Coast Demolition in Laguna Beach
- Universal Bobcat & Hauling in Newport Beach
- California Waste Services, LLC in Gardena
- GB Services, Inc. in Montebello
- A2Z Recycling Services, Inc. in Irvine
- JD Demolition and Grading, Inc. in Huntington Beach
- Haul Away Rubbish Service Co., Inc. in Montebello
- Athens Services in City of Industry
- Universal Waste Systems Inc. in Whittier
- United Pacific Waste in Pico Rivera
- Ecology Auto Parts, Inc. in Cerritos

Solid Waste Recycling and Disposal

The solid waste collected by the City's Municipal Operations Department and the franchised haulers is taken to transfer stations for sorting of recyclable materials. In accordance with AB 939 and Section 12.63.120 of the City's Municipal Code, solid waste haulers are only able to deposit a maximum of fifty percent of the solid waste collected in the City at any of the three landfills. The transfer and material recovery facilities for the City include:

- Stanton Transfer and Recycling Center #8 in Stanton
- Rainbow Recycling/Transfer Station in Huntington Beach
- Consolidated Volume Transporters in Anaheim
- Sunset Environmental Inc. Transfer Station and Resource Recycling Facility in Irvine
- Waste Management of Orange in Orange
- City of Newport Beach Transfer Station in Newport Beach

After recyclable materials are removed from the waste stream, nonrecyclable materials are sent to landfills. In 2012, the City of Newport Beach sent the majority of its waste (96.7 percent) to Frank R. Bowerman Landfill and Olinda Alpha Landfill, 75.7 percent (71,599 tons) and 21 percent (19,857 tons), respectively (CalRecycle 2012b). Both facilities, as well as Prima Deshecha in San Juan Capistrano, are operated by OC Waste & Recycling. Table 5.12-13 provides capacity details for each of the county landfills.

Table 5.12-13 OC Waste & Recycling Landfill Capacities

Landfill	Location	Remaining Airspace Capacity as of 6/30/13 (cubic yards)	Total Airspace Capacity as of 6/30/13 (cubic yards)	Estimated Closure Date	Maximum Daily Permitted Tonnage (tons per day)	Annual Usage (tons)
Frank R. Bowerman	11002 Bee Canyon Access Road Irvine, CA 92602	192,300,000	266,000,000	2053	11,500	1,505,757
Olinda Alpha	1942 North Valencia Avenue Brea, CA 92823	43,900,000	148,800,000	2021	8,000	1,571,903
Prima Deshecha	32250 La Pata Avenue San Juan Capistrano, CA 92675	139,700,000	171,600,000	2067	4,000	350,898

Source: Arnau 2013.

Waste Diversion Programs

In accordance with state-mandated recycling goals under AB 939, the City's franchised commercial solid waste haulers and residential haulers transport all solid waste to materials recovery facilities prior to county landfills in order to sort and recover recyclable materials. Currently, Newport Beach is engaged in various waste diversion programs, including composting (i.e., residential curbside greenwaste collection), policy incentives, public education (i.e., print and electronic brochures, websites, news articles, school curriculums, outreach), recycling (i.e., residential and commercial pickup, school and government recycling programs), source reduction (i.e., procurement, xeriscaping/grasscycling, composting/mulching, business waste reduction, school source reduction), and special waste materials (i.e., concrete and debris recycling) (CalRecycle 2012a). The City and county are currently meeting the 50-percent diversion rate requirement of AB 939 (Arnau 2013).

5.12.4.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

U-6 Would be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.

U-7 Would not comply with federal, state, and local statutes and regulations related to solid waste.

5.12.4.3 ENVIRONMENTAL IMPACTS

2006 General Plan EIR

The 2006 General Plan EIR found that impacts on existing solid waste facilities from project-generated solid waste were less than significant. Development of the 2006 General Plan would result in an additional 21,659 tons per year of solid waste to be disposed of at the Frank R. Bowerman Sanitary Landfill, which represented approximately 0.68 percent of the amount of solid waste the landfill accepts annually. Given the landfill's 16-year lifespan and remaining capacity of approximately 44.6 million tons at the time the 2006 General Plan EIR was prepared, the increase in solid waste generated from buildout of the 2006 General Plan was considered less than significant. In addition, AB 939 requires a diversion of at least 50 percent of all solid waste collected in the City. Therefore, the analysis assumed a worst-case scenario, as it is anticipated that the City will divert approximately 50 percent of the 21,659.10 tons per year generated from the 2006 General Plan buildout. Thus, impacts were considered to be less than significant.

General Plan LUE Amendment (Proposed Project)

The following impact analysis addresses thresholds of significance for which the Initial Study disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.12-4: Existing and/or proposed facilities would be able to accommodate project-generated solid waste and comply with related solid waste regulations. [Thresholds U-6 and U-7]

Impact Analysis: Implementation of the proposed project would increase the City's population at buildout by up to 2,798 residents compared to the 2006 Certified EIR. In total, approximately 1,729 additional residential units could be built; commercial use could increase by 71,110 square feet; office use could increase by 493,677 square feet, schools could increase student capacity by 72 students; and hotel rooms could decrease by 701 rooms.

Of the subareas proposed for change under the General Plan LUE Amendment, only 813 E. Balboa Boulevard, designated as Two-Unit Residential (RT), currently receives refuse collection from the City. If the land use designation for 813 E. Balboa Boulevard is changed to Mixed-Use Vertical (MU-V) under the proposed project, the only refuse that the City would collect would be from residential uses on the property. Nonresidential property owners at 813 E. Balboa Boulevard would need to arrange private collection for any business waste.

The remaining subareas proposed for change would be served by franchised commercial solid waste haulers. Using CalRecycle data obtained by OC Waste & Recycling, Table 5.12-14 shows that the buildout of the General Plan LUE Amendment is estimated to generate an additional 62,102 pounds of solid waste per day (approximately 11,334 tons per year) when compared to the 2006 General Plan buildout. The two landfills accepting nearly all solid waste landfilled from Newport Beach—Frank R. Bowerman Landfill and Olinda Alpha Landfill—have residual capacities of 192,300,000 and 43,900,000 cubic yards and estimated closure dates of 2053 and 2021, respectively. For a more conservative approach, if all 62,102 pounds generated per day (approximately 31.1 tons per day) from the proposed project were sent to the Frank R. Bowerman

Landfill, it would represent only 0.27 percent of its maximum daily permitted tonnage. If all 31.1 tons generated per day from the proposed project were sent to the Olinda Alpha Landfill, it would represent only 0.39 percent of its maximum daily permitted tonnage. Thus, both landfills, individually, would be able to take in the complete amount of solid waste generated from buildout of the proposed project.

Table 5.12-14 Projected Increase in Solid Waste Generation

Land Use	Net Increase	Solid Waste Generation, pounds per day	
		Per unit	Total
Residential	1,729 units	12.23	21,146
Commercial	71,110 SF	0.0312	2,219
Office	493,677 SF	0.084	41,469
Schools	72 students	1	72
Hotel	(701) rooms	4	(2,804)
		Total-	62,102 lb/day (11,334 tons per year)

Source: Arnau 2013.

In addition, the City is required to recycle at least 50 percent of the generated solid waste as required by AB 939. Therefore, the landfills would be taking in half of the solid waste generated by the project, and impacts would be reduced even more. Consequently, there is substantial solid waste disposal capacity in the landfills serving Newport Beach for the proposed project's estimated solid waste generation, and it would not require increased permitted landfill capacity. Impacts would be less than significant.

5.12.4.4 RELEVANT GENERAL PLAN POLICIES

Existing Policies

No existing policies are directly relevant to the topic of solid waste services.

New and/or Modified Policies

Proposed modifications to General Plan policies as detailed in Section 5.12.1.4, *Wastewater Treatment and Collection*, are also applicable to solid waste services. In addition, the following new and/or amended policies that are relevant to solid waste services are shown in underlined/strikeout text for new text and eliminated text, respectively. The goal for a revised policy is provided, even if the goal itself is unchanged.

Goal LU X: Land use development practices that contribute to a sustained natural environment for use by future generations, economy, and well-being of Newport Beach's residents, while reducing greenhouse gas emissions and impacts on climate change.

- **LU X.X2 - Existing Structure Reuse:** Encourage the retention, adaptive reuse, and renovation of existing buildings with "green" building technologies to retain the structure's embodied energy, increase energy efficiency, and limit the generation of construction waste.

5.12.4.5 EXISTING REGULATIONS

- Public Resources Code 40050 et seq. (AB 939)
- Assembly Bill 341 (Chapter 476, Statutes of 2011)
- City of Newport Beach Municipal Code Section 12.63.030 (Franchise to Operate Required)

City of Newport Beach Municipal Code Section 12.63.120 (Recycling Requirement)

5.12.4.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements, the following impacts would be less than significant: 5.12-4.

5.12.4.7 MITIGATION MEASURES

Impacts are less than significant and mitigation measures are not required.

5.12.4.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

No mitigation measures are required and impacts would remain less than significant.

5.12.5 Other Utilities

5.12.5.1 ENVIRONMENTAL SETTING

Regulatory Background

California Building and Energy Efficiency Standards (CCR Title 24)

Energy conservation standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission in June 1977 and updated triennially (Title 24, Part 6, of the California Code of Regulations [CCR]). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. On May 31, 2012, the CEC adopted the 2013 Building and Energy Efficiency Standards, which went into effect on January 1, 2014. Buildings that are constructed in accordance with the 2013 Building and Energy Efficiency Standards are 25 percent (residential) to 30 percent (nonresidential) more energy efficient than the 2008 standards as a result of better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses. Plans submitted for building permits shall include written notes demonstrating compliance with the 2013 building and energy standards and shall be reviewed and approved by the Public Utilities Department prior to issuance of building permits.

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11, Title 24, known as CALGreen) was adopted as part of the California Building Standards Code (Title 24, California Code of Regulations).

CALGreen established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The mandatory provisions of the California Green Building Code Standards became effective January 1, 2011.

Appliance Efficiency Regulations (CCR Title 20)

The 2006 Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608) were adopted by the California Energy Commission on October 11, 2006, and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally and non–federally regulated appliances.

Existing Conditions

Natural Gas

The Southern California Gas Company (SoCalGas) provides natural gas services to the City of Newport Beach; the company's service territory encompasses approximately 20,000 square miles throughout central and Southern California. It is considered the nation's largest natural gas distribution utility and serves 20.9 million consumers through 5.8 million meters in more than 500 communities (SoCalGas 2013). SoCalGas operations are regulated by the California Public Utilities Commission, who is the default provider of natural gas to Newport Beach, required by state law. The state of California imports approximately 87 percent of its statewide natural gas supply. SoCalGas purchases natural gas from several bordering states and is continuously expanding its network of gas pipelines to meet the needs of new commercial and residential developments in Southern California—including Orange County and the City of Newport Beach. SoCalGas provides natural gas as customers request the service. Current supplies are adequate to meet demands.

Total natural gas supplies available to SoCalGas are estimated to remain stable at 3.875 billion cubic feet per day (bcfd) through the 2010 and 2030 period. Total natural gas consumption in SoCalGas's service area is forecast to be 2.615 bcfd in 2015 and 2.619 bcfd in 2030 (CGEU 2012). Estimated existing natural gas use in the City is about 1,398,835,294 thousand British thermal units (kBTU) per year.

Electricity

Southern California Edison (SCE) is the primary distribution provider of electricity to Newport Beach and much of southern and central California. SCE serves 180 cities over 50,000 square miles of service area, providing power to over 13 million people, 5,000 large businesses, and 280,000 small businesses. Their operation includes 16 utility interconnections, 4,990 transmission and distribution circuits, and 425 transmission and distribution crews.

According to the California Energy Commission, total electricity consumption in SCE's service area in gigawatt-hours is forecasted to be 103,791 GWh in 2015 and increase to 112,535 GWh in 2022 for the mid-demand scenario. The high-demand scenario forecasts consumption at 106,809 GWh in 2015 and 116,637 GWh in 2022. The low-demand scenario forecasts 100,884 GWh in 2015 and 109,350 GWh in 2022 (CEC 2012). Estimated existing electricity use in the City is about 197.5 million kilowatt-hours (kWh) per year.

Communications Facilities

Local telephone service is offered in the City by several providers, including AT&T and Verizon, depending on the provider's service boundaries. Several providers, including AT&T and Verizon, provide long-distance phone service to Newport Beach and wireless, high speed, and dial-up internet service; wireless phone service; and digital satellite TV.

Time Warner Cable and Cox Communications provide digital cable service, digital video recorder (DVR), high definition television, and other digital cable services; additional video service providers operating in Newport Beach include AT&T U-verse and DirecTV.

Internet service providers serving Newport Beach include AT&T, Verizon, Time Warner, and local ISPs.

Cellular phone service in Newport Beach is provided by Verizon, AT&T, Sprint PCS, and T-Mobile.

5.12.5.2 THRESHOLDS OF SIGNIFICANCE

Although not specifically in Appendix G of the CEQA Guidelines, the following additional threshold is also addressed in the impact analysis: a project would normally have a significant effect on the environment if the project:

U-8 Would increase demand for other public services or utilities.

5.12.5.3 ENVIRONMENTAL IMPACTS

2006 General Plan EIR

The 2006 General Plan EIR found that implementation of the project would have no impact on existing transmission facilities, and no new energy production facilities would be required. While the state experiences constraints related to energy supply and delivery during peak demand days of the summer months, the majority of the calendar year is more stable, and adequate energy supplies are reliably provided to consumers. Development in accordance with the 2006 approved project would increase use of electricity for lighting, heating, air conditioning, etc. for new residential, commercial, and business developments; however, all developments would be constructed in compliance with Title 24 building energy efficiency standards. Policy 24.1 of the Natural Resources Element requires the City to develop incentives that encourage energy conservation strategies for private and public development. Compliance with these requirements would ensure that no impacts related to electricity supply occur. In addition, buildout of the 2006 General Plan was expected to be within SCE's 10-year load forecasts, and SCE's total system is continually upgraded as growth and demand increases. Thus, no new infrastructure would be required to serve the City, and existing infrastructure would adequately serve the project buildout. No impact would result.

General Plan LUE Amendment (Proposed Project)

The following impact analysis addresses thresholds of significance for which the Initial Study disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.12-5: Implementation of the General Plan LUE Amendment would not require or result in the construction of new energy production or transmission facilities. [Threshold U-8]

Impact Analysis: Similar to the 2006 General Plan EIR, implementation of the General Plan LUE Amendment would not increase energy demands to exceed forecast energy supply through 2030. Table 5.12-15 compares energy demands from buildout of the 2006 General Plan and the LUE Amendment.

Table 5.12-15 Comparison of Energy Demands: 2006 Approved Project vs. Proposed Project Buildout

Energy Type	2006 General Plan Buildout	Proposed Project Buildout	Difference
Natural Gas			
Residential	984,757,939	1,004,674,913	19,916,974
Non-Residential	615,482,860	595,945,929	(19,536,931)
TOTAL	1,600,240,799 KBTU/Year	1,600,620,842 KBTU/Year	380,043 KBTU/Year
Electricity			
Residential	260,086,286	268,318,113	8,231,827
Non-Residential	451,623,375	451,417,996	(205,379)
TOTAL	711,709,661 KWh/Year	719,736,109 KWh/Year	8,026,448 KWh/Year

Source: CalEEMod Version 2013.2.2 and User's Guide.

Electricity

Development in accordance with the proposed project would result in a net increase for electricity demand of approximately 8,026,488 KWh per year. SCE forecasts that it would have adequate electricity to meet the expected growth in its service area through 2022. Using SCE's anticipated consumption in 2022 in a high-demand consumption scenario, electricity demand is expected to be 116,637 GWh. The increase in electricity demand from the proposed project would be 0.006 percent of overall demand in SCE's service area. The increase in demand would be nominal from that expected from the 2006 General Plan buildout. Therefore, no additional electricity production facilities would be needed.

Natural Gas

Implementation of the proposed project would result in a net increase for natural gas demand of 380,043 KBTU per year, approximately 1,014 cubic feet per day, in comparison to the 2006 General Plan buildout. As stated above, total supplies of natural gas available to SoCalGas are expected to remain stable at 3.875 billion cubic feet of natural gas per day (bcfd), that is, 1,457,000 billion BTU per year, between 2015 and 2030 (CGEU 2012). Total natural gas consumption in SoCalGas's service area is forecast to be 2.619 bcfd in 2030. The increase in natural gas demand from the proposed project would be less than 0.0001 percent of overall demand in SoCalGas' service area. Thus, the increase in demand would be nominal from that expected from the 2006 approved project buildout, and no additional natural gas facilities would be needed.

In addition, all new developments would be required to comply with Title 24 building energy efficiency standards and Title 20 appliance efficiency regulations, which would decrease overall energy use in both residential and nonresidential buildings. Thus, impacts would be less than significant.

5.12.5.4 RELEVANT GENERAL PLAN POLICIES

Existing Policies

Housing Element (H)

Goal H 4: Preservation and increased affordability of the City's housing stock for extremely low-, very low–, low-, and moderate-income households.

- **H 4.2 -** Improve energy efficiency of all housing unit types (including mobile homes).

Natural Resources Element (NR)

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

- **NR 24.1 - Incentives for Energy Conservation:** Develop incentives that encourage the use of energy conservation strategies by private and public developments.

- **NR 24.2- Energy-Efficient Design Features:** Promote energy-efficient design features.

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

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

New and/or Modified Policies

Proposed modification to General Plan policies as detailed in Section 5.12.1.4 for Wastewater Treatment and Collection are also applicable to energy production services. In addition, the following new and/or amended policies that are relevant to energy production services are shown in underlined/~~strikeout~~ text for new text and eliminated text, respectively. The goal for a revised policy is provided, even if the goal itself is unchanged.

Goal LU 3: A development pattern that retains and complements the City's residential neighborhoods, commercial and industrial districts, open spaces, and natural environment.

- **LU 3.2 - Growth and Change:** Enhance existing neighborhoods, districts, and corridors, allowing for re-use and infill with uses that are complementary in type, form, scale, and character. Changes in use and/or density/intensity should be considered ~~only in those areas that are economically underperforming, are necessary~~ to accommodate Newport Beach's share of projected regional population growth, improve the relationship and reduce commuting distance between home and jobs,

reduce greenhouse gas emissions and energy consumption on an overall, citywide basis, facilitate walking, bicycling, and transit uses, provide places for people to congregate and interact socially, or enhance the values that distinguish Newport Beach as a special place to live and work for its residents. The scale of growth and new development shall be coordinated with the provision of adequate infrastructure and public services, including standards for acceptable traffic level of service.

Goal LU X: Land use development practices that contribute to a sustained natural environment for use by future generations, economy, and well-being of Newport Beach's residents, while reducing greenhouse gas emissions and impacts on climate change.

- **LU X.X - Regulating Sustainable Development:** Promote and, where appropriate, require new development and reconstruction to comply with sustainable building practices incorporating a "whole system" approach to designing and constructing buildings that consume less energy, water, and other resources, facilitate natural ventilation, use daylight effectively, and are healthy, safe, comfortable, and durable.

- **LU X.X2 - Existing Structure Reuse:** Encourage the retention, adaptive reuse, and renovation of existing buildings with "green" building technologies to retain the structure's embodied energy, increase energy efficiency, and limit the generation of construction waste.

- **LU X.X6 - Orange County Sustainable Communities Strategy:** Implement practices for infill and mixed use development, affordable housing, and density to achieve objectives for reduction of vehicle trips and commute distances, air pollution, greenhouse gas emissions and energy consumption and improvement of public health consistent with applicable policies of the Orange County Sustainable Communities Strategy (SCS).

Goal LU 5.2: Commercial centers and districts that are well-designed and planned, exhibit a high level of architectural and landscape quality, and are vital places for shopping and socialization.

- **LU 5.2.1 - Architecture and Site Design:** Require that new development within existing commercial districts centers and corridors that ~~complement existing uses and~~ exhibit a high level of architectural and site design in consideration of the following principles:

  - Seamless connections and transitions with existing buildings, except where developed as a free-standing building

  - Modulation of building masses, elevations, and rooflines to promote visual interest

  - Architectural treatment of all building elevations, including ancillary facilities such as storage, truck loading and unloading, and trash enclosures

  - Treatment of the ground floor of buildings to promote pedestrian activity by avoiding long, continuous blank walls, incorporating extensive glazing for transparency, and modulating and articulating elevations to promote visual interest

- Clear identification of storefront entries
- Incorporation of signage that is integrated with the buildings' architectural character
- Architectural treatment of parking structures consistent with commercial buildings, including the incorporation of retail in the ground floors where the parking structure faces a public street or pedestrian way
- Extensive on-site landscaping, including mature vegetation to provide a tree canopy to provide shade for customers
- Incorporation of plazas and expanded sidewalks to accommodate pedestrian, outdoor dining, and other activities
- Clearly delineated pedestrian connections between business areas, parking, and to adjoining neighborhoods and districts (paving treatment, landscape, wayfinding signage, and so on)
- Integration of building design and site planning elements that reduce the consumption of water, energy, and other nonrenewable resources

Goal LU 6.9: A vibrant pedestrian-oriented village environment that reflects its waterfront location at the gateway to Newport Beach's historic Balboa Peninsula that ~~providing~~ provides a mix of uses ~~that serves~~ serving visitors and local residents.

- **LU 6.9.X5 - Character and Design:** Maintain a high quality of development design in Lido Village in consideration of the following design objectives:
  - Unification: Creating a sense of place through a unifying theme for Lido Village with defined gathering spaces, increased connectivity, and improved wayfinding;
  - Visual Appeal: Creating a distinct identity for Lido Village by encouraging Coastal and Mediterranean architecture, creating an attractive gateway, maximizing view corridors and scenic opportunities, and incorporating art and landscaping; and
  - Sustainability: Promoting economic and environmental sustainability by encouraging energy and water efficient practices in consideration of economic realities and viability, and celebrating California-friendly landscapes.

Goal LU 6.15: A mixed-use community that provides jobs, residential, and supporting services in close proximity, with pedestrian-oriented amenities that facilitate walking and enhance livability.

- **LU 6.15.23 - Sustainable Development Practices:** Require that development ~~achieves a high level of environmental sustainability that~~ reduces pollution and consumption of energy, water, and natural resources. This may be accomplished through the mix and density of uses, building location and design, transportation modes, and other techniques. Among the strategies that should be considered are the

integration of residential with jobs-generating uses, use of alternative transportation modes, maximized walkability, use of recycled materials, capture and re-use of storm water on-site, water conserving fixtures and landscapes, and architectural elements that reduce heat gain and loss.

5.12.5.5 EXISTING REGULATIONS

- California Building Code
- California Code of Regulations Title 20: Appliance Efficiency Regulations
- California Code of Regulations, Title 24: Building Energy Efficiency Standards

5.12.5.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements, the following impacts would be less than significant: 5.12-5.

5.12.5.7 MITIGATION MEASURES

Impacts are less than significant and mitigation measures are not required.

5.12.5.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

No mitigation measures are required and impacts would remain less than significant.

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5. Environmental Analysis
UTILITIES AND SERVICE SYSTEMS

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