

## 5. Environmental Analysis

### 5.14 UTILITIES AND SERVICES SYSTEMS

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the CollegeTown Specific Plan (proposed project) to impact utilities and services systems. 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*.

The analysis in this section is based, in part, upon the following information:

- *CollegeTown Specific Plan Infrastructure Technical Report For Hydrology, Sewer, Water, & Water Quality*, Fuscoe Engineering, October 15, 2013
- *CollegeTown Specific Plan Water Supply Assessment*, RBF Consulting, October, 2013

Complete copies of these studies are included as Appendix H and Appendix I to this Draft EIR, respectively.

#### 5.14.1 Wastewater Treatment and Collection

##### 5.14.1.1 ENVIRONMENTAL SETTING

###### Regulatory Background

Wastewater treatment before effluent is discharged to Waters of the United States is required by the federal Clean Water Act, United States Code, Title 33, Sections 1251 et seq.

###### Existing Conditions

###### *Wastewater Collection*

###### ***Sewers***

The City of Fullerton provides sewer/wastewater service to most of the City, including the project site. The 22-square-mile service area has approximately 330 miles of gravity sewers ranging from 6 inches to 36 inches in diameter. The project site is served by several sewer systems ranging from 8 inches to 10 inches in diameter, with smaller laterals connecting the private lots into the City's sewer pipes. Planning Areas 1 and 6 are served by separate 8-inch systems that each tie directly into the 18-inch Orange County Sanitation District (OCSD) trunk line that flows from north to south in State College Boulevard. A small portion of sewer flows from Planning Area 6 may also enter the 8-inch line that flows down Clark Avenue through the residential neighborhood to the south. Effluent from Planning Areas 2 through 5 collects into an 8-inch line which turns into a 10-inch line within Chapman Avenue and flows westerly on Chapman Avenue. The 10-inch line then runs under the alleyway in Planning Area 7 and ties directly into the 18-inch OCSD trunk line in State College Boulevard. Planning Area 7 is served by an 8-inch line that flows parallel to the 10-inch line in Chapman Avenue/Planning Area 7 alleyway. Table 5.14-1 summarizes the existing sewer facilities serving the CollegeTown project site, and locations of major facilities are shown in Figure 3-15, *Conceptual Sewer Plan*.

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**Table 5.14-1 Existing Sewers in Project Site**

Planning Area	Acreage	Existing Imperviousness	Existing Sewer Facilities
Planning Area 1	14.93 acres	85%	18-inch State College Blvd.
Planning Area 2	11.32 acres	85%	8-inch to 10-inch Chapman / Planning Area 7 Alleyway
Planning Area 3	8.18 acres	95%	8-inch to 10-inch Chapman / Planning Area 7 Alleyway
Planning Area 4	5.00 acres	90%	8-inch to 10-inch Chapman / Planning Area 7 Alleyway
Planning Area 5	10.69 acres	90%	8-inch to 10-inch Chapman / Planning Area 7 Alleyway
Planning Area 6	10.43 acres	90%	18-inch N. State College Blvd./ 8-inch Clark Ave.
Planning Area 7	8.48 acres	95%	10-inch Planning Area 7 Alleyway/ 8-inch Parallel Line

Source: Fuscoe 2013.

### *2009 City of Fullerton Sewer Master Plan*

The 2009 City of Fullerton Sewer Master Plan identified needed upgrades in certain sewers in the project site:

- The 10-inch sewer in Nutwood Avenue is running between 75 percent and 100 percent full in dry-weather conditions, and under future scenarios the line is deficient. replacement of the 10-inch line with a 12-inch line for a total length of 3,880 feet is needed to accommodate existing conditions. The construction drawings for the 12-inch line are complete, and the project is currently being bid out for construction.
- A 10-inch sewer in Planning Area 7 and a parallel 8-inch sewer offsite in Balfour Avenue were both identified as deficient in existing condition; however, no upgrades were recommended for these sewers.
- The OCSD Strategic Plan Update (April 2006) identified capacity issues for the 18-inch trunk line in State College Boulevard if the upstream pump station in Yorba Linda is not upgraded. The plan includes upsizing the line from 18 inches to 30 inches next to the project site and ultimately up to 48 inches at the downstream end. OCSD has determined that upgrading the Yorba Linda Pump Station is not feasible due to the costs and to the integrity of the pump station and existing trunk lines. Therefore, the existing sewer trunk line in State College Boulevard requires upsizing.

### *Project Site Sewer Flows*

Existing wastewater generation from the project site was estimated using acreages of existing development (commercial, industrial, etc.) and the number of dwelling units and is approximately 313,000 gallons per day. The sewer demand was also compared with the water demand, and adjustments for water losses and landscaping were incorporated per the City of Fullerton Water Department. Table 5.14-2 summarizes the existing wastewater flows for each Planning Area.

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**Table 5.14-2 Existing Wastewater Generation from Project Site**

Planning Area	Acreage	Number of Dwelling Units	Non-Residential SF	Average Sewer Flow (gpd)
Planning Area 1	14.93 acres	504	5,991	125,778
Planning Area 2	11.32 acres	164	90,617	61,542
Planning Area 3	8.18 acres	0	212,001	22,209
Planning Area 4	5.00 acres	0	74,509	11,310
Planning Area 5	10.69 acres	272	69,496	75,473
Planning Area 6	10.44 acres	0	128,029	23,615
Planning Area 7	8.48 acres	0	120,734	19,182
<b>Sub-Total</b>	<b>69.04 acres</b>	<b>940</b>	<b>701,377</b>	<b>339,108</b>
System Loss Adjustments and Landscape Uses <sup>1</sup>	Not applicable	Not applicable	Not applicable	-26,321
<b>TOTAL</b>	Not applicable	Not applicable	Not applicable	<b>312,787</b>

Source: Fuscoe 2013.

gpd = gallons per day

SF = square feet

<sup>1</sup> Per City of Fullerton Water Department.

*Wastewater Treatment*

OCSD provides wastewater treatment for the project site. Reclamation Plant No. 1 in the City of Fountain Valley has capacity of 204 million gallons per day (mgd) for advanced primary and secondary treatment; and treated an average of 95 mgd in December 2011. Approximately 66 mgd of effluent is sent to the Groundwater Replenishment System (GWRS), a cooperative project between the Orange County Water District (OCWD) and OCSD that began operating in 2008. Secondary-treated wastewater from OCSD undergoes treatment in the GWRS, consisting of microfiltration, reverse osmosis, and advanced oxidation with ultraviolet light and hydrogen peroxide. It is the largest water purification project of its kind, with 72,000 acre-fee per year (afy) (64.2 mgd) capacity. An additional 3.3 mgd of effluent from Plant No. 1 are sent to the OCWD for tertiary treatment in a separate facility; this water is delivered to customers for irrigation 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 (Covarrubias 2011).

Reclamation Plant No. 2 is adjacent to the Santa Ana River and approximately 1,500 feet from the Pacific Ocean in Huntington Beach. This plant provides a mix of advanced primary and secondary treatment. The plant receives raw wastewater through five major sewers. Approximately 33 percent of the influent receives secondary treatment through an activated sludge system, and all is discharged into the ocean disposal system. OCSD's treated wastewater is discharged through a 120-inch outfall at 200 feet below sea level and nearly five miles offshore. Current capacity for Reclamation Plant No. 2 is 168 mgd of primary treated wastewater and 90 mgd of secondary treated wastewater. The current average flow is 151 mgd; thus, remaining capacity at this plant is approximately 17 mgd. Expansion plans by OCSD are ongoing and designed to address the incremental increase in sewage generation as a result of new development. The secondary treatment capacity at this plant is currently being increased by 60 mgd for a future total capacity of 150 mgd.

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### 5.14.1.2 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 it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

### 5.14.1.3 ENVIRONMENTAL IMPACTS

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.

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**Impact 5.14-1: Project-generated wastewater could be adequately treated by the wastewater service provider for the project. Project development would require upgrades of several sewers [Thresholds U-1, U-2 (part), and U-5].**

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**Impact Analysis:** The proposed project would result in an increase in wastewater generated within the CollegeTown Specific Plan area. Buildout of the CollegeTown Specific Plan is estimated to generate a net increase of 738,518 gallons of wastewater per day, as shown below in Table 5.14-3. The 2009 Sewer Master Plan anticipated redevelopment of the CollegeTown Specific Plan site; however, the proposed project would be much denser than the redevelopment anticipated in the Master Plan.

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**Table 5.14-3 Wastewater Generation Forecast from Project Site**

Planning Area	Proposed Conditions		Wastewater Generation, gallons per day		
	Dwelling Units	Non-Residential SF	Proposed	Existing	Net Change
Planning Area 1	1195	92,600	291,618	125,778	+165,618
Planning Area 2	240	247,650	74,652	61,542	+13,110
Planning Area 3	490	348,300	148,056	22,209	+125,848
Planning Area 4	0	338,750	17,591	11,310	+6,218
Planning Area 5	1,175	39,800	284,067	75,473	+208,594
Planning Area 6	730	159,100	183,462	23,615	+159,847
Planning Area 7	510	118,700	128,564	19,182	+109,382
<b>Subtotal</b>	<b>4,340</b>	<b>1,371,900</b>	<b>1,128,009</b>	<b>339,108</b>	<b>+788,617</b>
System Loss Adjustments and Landscape Uses <sup>1</sup>	Not Applicable	Not Applicable	-67,680	-26,321	-26,321
<b>TOTAL</b>			<b>1,051,305</b>	<b>-26,321</b>	<b>+738,518</b>

Source: Fuscoe 2013.

SF = square feet

<sup>1</sup> Per the City of Fullerton Water Department.

### Wastewater Treatment Capacity Impact

As identified previously, expansion plans by OCS D are ongoing and designed to address— at OCS D Reclamation Plan No. 1 and Reclamation Plan No. 2—the incremental increase in sewage generation as a result of new development. There is adequate residual wastewater treatment capacity in the region for project-generated wastewater, and buildout of the CollegeTown Specific Plan would not require construction of new or expanded wastewater treatment facilities. Impacts would be less than significant.

### Proposed Sewer System and Sewer Impacts

Under the proposed condition, the majority of the existing 8-inch sewer lines would be preserved, and new 8-inch extensions along with smaller laterals and manholes would be provided based on the proposed building configuration. Planning Area 1 and Planning Area 5 are anticipated to undergo the largest increases in sewer flows based on the high density residential proposed (80 dwelling units per acre in PA 1 and 110 dwelling units per acre in PA 5). The majority of Planning Area 1 would tie directly into the 18-inch OCS D trunk, as it does currently, via a newly configured sewer system. A small portion of Planning Area 1 would connect into the existing line within Titan Drive. Planning Area 5 would tie into the existing systems in College Place, Commonwealth, and Chapman Avenue, which then feed into the 10-inch line in Chapman Avenue/Planning Area 7. Similarly, Planning Areas 2, 3, and 4 would tie into existing lines or extensions of existing lines before ultimately draining into the 10-inch line in Chapman Avenue/Planning Area 7. Lastly, a new sewer system is proposed for Planning Area 6 that would tie directly into the 18-inch OCS D trunk line, as the site of Planning Area 6 does presently. The 10-inch line in Chapman Avenue/Planning Area 7 that would receive the increased sewer flows from Planning Areas 2, 3, 4, 5, and 7 requires upsizing to a 12-inch line based on the full buildout condition of the CollegeTown Specific Plan.

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In addition, the OCSD trunk line that serves the project site and the region is currently undersized and requires an upgrade, starting at Yorba Linda Boulevard to the north and ending at Orangewood Avenue to the south. The existing segment of the 18-inch line in the project site would require an upgrade to a 30-inch line from Nutwood Avenue to North Commonwealth Avenue (see Figure 3-15, *Conceptual Sewer Plan*). Other upgrades to the OCSD trunk line upstream and downstream from the site would be covered under separate CEQA clearances. These upgrades are planned and would be constructed by OCSD.

Most proposed sewer mains within the CollegeTown Specific Plan would be in roadways or under parking lots. The proposed 12-inch upgraded sewer main in the site of Planning Area 7 would be under a service driveway behind proposed commercial buildings. Upgraded sewer mains would be installed in areas that are developed and paved and have been disturbed by previous construction of roads and parking lots. Proposed sewer improvements associated with the CollegeTown Specific Plan would be funded and implemented by the proposed project to ensure infrastructure for sewer can meet the needs of the project. Cost-sharing mechanisms would be developed for the CollegeTown Specific Plan to ensure each developer pays their fair share of improvement costs associated with onsite facilities. An alternative sewer solution may involve the 8-inch impacted line in Balfour. As part of the City's Capital Improvement Program process, the existing 8-inch line is being upsized to a 10-inch line. Provided there is sufficient depth to connect into the line, CollegeTown flows may also be diverted into this upsized line and should be evaluated. Upsizing the Balfour line (potentially upsized from 8-inch to 12-inch instead of planned 10-inch) to accommodate CollegeTown flows from Planning Areas 2 through 5 may alleviate the need to upsized the 10-inch line in Chapman Avenue/Planning Area 7 as previously discussed. Impacts would be less than significant.

#### 5.14.1.4 CUMULATIVE IMPACTS

##### Wastewater Treatment Impacts

Wastewater treatment impacts are analyzed over OCSD's service area, which is most of north and central Orange County (from the City of Irvine north and west to the County boundaries). OCSD's service area is similar to eight combined Regional Statistical Areas (RSAs) used in the Orange County Projections 2010 by the Center for Demographic Research at California State University, Fullerton (CSUF). Estimated total net increases in population and employment in the eight RSAs between 2010 and 2035 from the Orange County Projections 2010 Modified are 317,515 and 245,859, respectively (CDR 2012). Current remaining capacity for primary treatment at Reclamation Plant No. 2 is 17 mgd; expansion of secondary treatment capacity at that facility by 60 mgd is under construction. OCSD is expected to have adequate wastewater treatment capacity for wastewater generation by cumulative developments in its service area. No significant cumulative impact is anticipated, and buildout of the Specific Plan would not contribute to a significant cumulative impact.

##### Sewer Impacts

Implementation of individual projects would require project-specific analyses during final design to evaluate sewer capacities related to the individual project. For regional impacts to OCSD facilities, individual projects would pay Capital Facilities Fee Charges to the OCSD; such fees would reduce cumulative impacts to sewers. Costs for installing and upgrading City of Fullerton sewers are paid from sewer service fees (Fullerton 2013), and onsite improvements would be implemented as part of the proposed project. Thus, payment of OCSD

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and City sewer fees would also reduce cumulative impacts to sewers. No cumulatively considerable impact to sewers would occur, and Specific Plan buildout would not contribute to such an impact.

### 5.14.1.5 EXISTING REGULATIONS AND STANDARD CONDITIONS

#### Federal

- United States Code, Title 33, Sections 1251 et seq.: Clean Water Act.

#### Local

- City of Fullerton Municipal Code, Title 12 Water and Sewers, Chapter 12.08 Sewer Connections.
- City of Fullerton Municipal Code, Title 12 Water and Sewers, Chapter 12.014 Sanitation Charges.

### 5.14.1.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, impact 5.14-1 would be less than significant.

### 5.14.1.7 MITIGATION MEASURES

No mitigation measures are required.

### 5.14.1.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project-level and cumulative impacts to wastewater treatment and collection systems would be less than significant.

## 5.14.2 Water Supply and Distribution Systems

### 5.14.2.1 ENVIRONMENTAL SETTING

#### Regulatory Background

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 (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.

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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.
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.

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 Department of Water Resources (DWR) in 2010 pursuant to the Water Conservation Act of 2009 (SBX7-7), established a water conservation target of 20 percent reduction in water use by 2020 compared to 2005 baseline use.

### Existing Conditions

#### *Water Supplies*

The City of Fullerton is the water service provider and distributes water to the City's residents and businesses. The City of Fullerton receives water from two main sources: imported water from Metropolitan Water District of Southern California (MWD), and groundwater from city wells. MWD is Fullerton's wholesale supplier and the primary sources of imported water are the Colorado River and the State Water Project.

#### *Groundwater*

The Orange County Groundwater Basin underlies the north half of Orange County beneath broad lowlands. The basin covers approximately 350 square miles, bordered by the Coyote and Chino Hills to the north, the Santa Ana Mountains to the northeast, the Pacific Ocean to the southwest, and terminates at the Orange County line to the northwest, where its aquifer systems continue into the Central Basin of Los Angeles

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County. The aquifers comprising this basin extend over 2,000 feet deep and form a complex series of interconnected sand and gravel deposits.

#### ***Groundwater Management, Recharge, and Reliability***

The Orange County Water District (OCWD) was formed in 1933 by a special legislative act of the State of California Legislature to protect and manage the county's vast, natural, underground water supply with the best available technology and to defend its water rights to the basin. OCWD manages total pumping from the basin, using financial incentives to encourage a sustainable level of groundwater production. OCWD establishes the sustainable level of total groundwater production, known as the basin production percentage (BPP), annually. The BPP is the percentage total water demands in OCWD's service area that OCWD considers can be sustainably produced from the basin. The BPP was 70 percent in 2013/2014 and is conservatively estimated to be 62 percent between 2015 and 2035. During fiscal year 2012–2013, the City's share of the BPP was 19,514 acre-feet.

Recharging water into the basin through natural and artificial means is essential to support pumping from the basin. Active recharge of groundwater began in 1949, in response to increasing drawdown of the basin and the threat of seawater intrusion. In 1949, OCWD began purchasing imported Colorado River water from Metropolitan, which was delivered to Orange County via the Santa Ana River upstream of Prado Dam. The basin's primary source of recharge is flow from the Santa Ana River. OCWD diverts river flows into recharge basins in and adjacent to the Santa Ana River and its main Orange County tributary, Santiago Creek. Other sources of recharge water include natural infiltration and recycled water. OCWD owns and operates a network of recharge facilities that cover 1,067 acres. Completion of the six-acre La Jolla Recharge Basin in 2008 increased recharge capacity by over 10,000 afy.

One of OCWD's primary efforts has been the control of seawater intrusion into the basin, especially via the Talbert and Alamitos seawater intrusion barriers. OCWD currently obtains tertiary-treated wastewater for the Talbert Injection Barrier, as well as for recharge basins in the City of Anaheim, from the Groundwater Replenishment System, a cooperative project between OCWD and OCSJ that began operating in 2008. Secondary-treated wastewater from OCSJ undergoes treatment in the GWRS, consisting of microfiltration, reverse osmosis, and advanced oxidation with ultraviolet light and hydrogen peroxide. It is the largest water purification project of its kind, with 72,000 afy capacity (64.2 million gallons per day).

#### ***Groundwater Quality***

OCWD collects 600 to 1,700 samples each month to monitor the quality of the basin's water. These samples are collected and tested according to approved federal and state procedures as well as industry-recognized quality assurance and control protocols. OCWD and the City of Fullerton do not anticipate that groundwater quality would be a constraint on City water supplies through the 2015–2035 period (Malcolm Pirnie 2011).

#### ***Imported Water***

MWD supplies the City with imported water from northern California through the State Water Project (SWP) and from the Colorado River. The City of Fullerton is one of only three retail member agencies of MWD in Orange County. As a member agency, the City has preferential rights to a certain percentage of water

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delivered to MWD each year. During the 2012-2013 fiscal year, the City received an estimated 9,183 acre-feet of MWD water.

#### *Imported Water Reliability*

MWD's SWP supplies have been impacted in recent years by restrictions on SWP operations in accordance with the biological opinions of the U.S. Fish and Wildlife Service and National Marine Fishery Service issued on December 15, 2008, and June 4, 2009, respectively. In dry, below-normal conditions, MWD has increased the supplies received from the California Aqueduct by developing flexible Central Valley/SWP storage and transfer programs.

In June 2007, MWD's board approved a Delta Action Plan that provides a framework for staff to pursue actions with other agencies and stakeholders to build a sustainable Delta and reduce conflicts between water supply conveyance and the environment. The Delta action plan aims to prioritize immediate short-term actions to stabilize the Delta while an ultimate solution is selected, and midterm steps to maintain the Bay-Delta while the long-term solution is implemented.

State and federal resource agencies and various environmental and water user entities are currently engaged in the development of The Delta Plan , which is aimed at addressing the Delta ecosystem restoration, water supply conveyance, and flood control protection and storage development. The Delta Reform Act of 2009 (California Water Code Sections 85000 et seq.) set forth two coequal goals for State policy toward the Delta: providing a more reliable water supply for California, and protecting, restoring, and enhancing the Delta ecosystem (DSC 2013). MWD assumes a new Delta conveyance would be fully operational by 2022 that would return supply reliability to something like 2005 condition, prior to supply restrictions imposed due to the biological opinions. Storage is another major component of MWD's dry-year resource management strategy.

The following are some of the factors identified by MWD that may have an impact on the reliability of MWD supplies.

***Environment:*** Endangered species protection in the Sacramento-San Joaquin River Delta has constrained operation of the SWP system. The Bay-Delta's declining ecosystem, caused by agricultural runoff, operation of water pumps, and other factors, has led to historical restrictions in SWP supply deliveries. SWP delivery restrictions due to the biological opinions resulted in the loss of about one-third of the available SWP supplies in 2008.

***Regulatory:*** Listings of additional species under the Endangered Species Act and new regulatory requirements could impact SWP operations by requiring additional export reductions, releases of additional water from storage, or other operational changes impacting water supply operations. Court challenges regarding entitlements to Colorado River water may impact the Imperial Irrigation District and San Diego County Water Authority. If there are negative impacts, San Diego could become more dependent on MWD supplies, thus potentially reducing supplies available to other MWD member agencies

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**Water Quality:** Water imported from the Colorado River Aqueduct (CRA) contains high levels of salts. The operational constraint is that this water needs to be blended with SWP supplies to meet the target salinity of 500 mg/L of total dissolved solids (TDS). Another water quality concern is related to the quagga mussel. Controlling the spread and impacts of quagga mussels within the Colorado River Aqueduct requires extensive maintenance and results in reduced operational flexibility.

**Climate Change:** Changing climate is expected to shift precipitation patterns and affect water supply. Unpredictable weather patterns would make water supply planning even more challenging. The concerns for California include the reduction in Sierra Nevada snowpack, increased intensity and frequency of extreme weather events, and rising sea levels causing increased risk of levee failure. Climate change would have more of an impact than the other factors discussed here.

### *Summary of Existing and Forecast City Water Supplies and Demands*

Existing and forecast City water supplies and demands are shown in Table 5.14-4.

**Table 5.14-4 Existing and Forecast City Water Supplies and Demands, Normal Conditions**

	Fiscal Year Ending				
	2015	2020	2025	2030	2035
BPP Groundwater	20,029	20,386	20,248	20,213	20,331
Imported	12,276	12,495	12,410	12,389	12,461
<b>Total Supply</b>	<b>32,305</b>	<b>32,881</b>	<b>32,658</b>	<b>32,602</b>	<b>32,792</b>
<b>Total Demand</b>	<b>32,305</b>	<b>32,881</b>	<b>32,658</b>	<b>32,602</b>	<b>32,792</b>

Source: RBF 2013  
BPP: Basin Production Percentage

### *Estimated Existing Water Demands in Project Site*

Existing water demands onsite are estimated at 316,743 gallons per day.

### *Water Distribution*

The City's water distribution system consists of four existing pressure zones defined by elevations and eight subzones. The CollegeTown project falls within Zone 1 and 2 of the City's water distribution system. Planning Areas 1 through 6 are part of Zone 2, and Planning Area 7 is served by Zone 1. The project site is served by a variety of 6-inch to 12-inch lines built of cast iron, ductile iron, and polyvinyl chloride (PVC) in public streets, alleyways, and parking lots (see Figure 3-16, *Conceptual Water Plan*). The City currently maintains six operational connections to the MWD's water transmission system along the Orange County, West Orange County, and Second Lower Feeder pipelines.

#### 5.14.2.2 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:

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- 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.

### 5.14.2.3 ENVIRONMENTAL IMPACTS

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 5.14-2:** The City of Fullerton would have adequate water supplies to meet project-related water demand, and water delivery infrastructure would be constructed to meet project needs. [Thresholds U-2 (part) and U-4]

**Impact Analysis:** The proposed project would result in an increase in water demand within the CollegeTown Specific Plan site. The CollegeTown Specific Plan at buildout would use an estimated net increase of 898,000 gallons of water per day compared to existing conditions, as shown below in Table 5.14-5.

**Table 5.14-5 Estimated Project Water Demands**

Planning Area	Proposed Conditions		Water Demand, gallons per day		
	Dwelling Units	Non-Residential SF	Existing	Proposed	Net Change
Planning Area 1	1,195	92,600	121,947	286,441	+164,494
Planning Area 2	240	247,650	42,941	76,871	+33,930
Planning Area 3	490	348,300	5,227	140,558	+135,331
Planning Area 4	0	338,750	15,260	28,270	+13,010
Planning Area 5	1,175	39,800	73,625	290,322	+216,697
Planning Area 6	730	159,100	31,863	226,928	+195,065
Planning Area 7	510	118,700	25,881	165,246	+139,365
<b>TOTAL</b>	<b>4,340</b>	<b>1,371,900</b>	<b>316,743</b>	<b>1,214,635</b>	<b>+897,893</b>

Source: Fuscoe 2013.  
SF = square feet

Based on the findings of the WSA, the City of Fullerton Water Department determined that sufficient water supplies are available—and would be available 20 years from now—for its existing and projected demands, including the CollegeTown Specific Plan, based on the following:

1. The City of Fullerton is the identified Public Water System (supplier) for the CollegeTown Specific Plan.
2. The City is a member agency of OCWD and the Metropolitan Water District of Southern California.

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3. The CollegeTown Specific Plan project is not specifically identified in the 2010 UWMP; however, demand growth in the service area through Year 2035 has been projected, which is estimated and planned to be met by the City's current groundwater production and imported water rights.
4. The estimated average annual water demand increase due to buildout of the Project is 1,006 afy, which is equivalent to approximately 12 to 45 percent of the expected water demand growth of the City's service area for the projected project absorption period (Year 2015 to Year 2030).
5. Under single-dry and multidry year conditions, the City would meet its water demand by (1) increasing production of groundwater beyond the BPP, (2) increasing imported water purchases, and/or (3) decreasing demand through water conservation measures.
6. In general, the City's current water supply is highly reliable now and through Year 2035 based on performance of existing supplies and related management activities, as well as development of additional programs currently underway by OCWD and MWD and the cooperative efforts of MWD of Orange County and its member agencies.
7. OCWD's ongoing coordination with MWD and its Integrated Water Resource Plan (IRP), including in-lieu and groundwater banking programs, have provided a high level of reliability for all MWD member agencies, including the City of Fullerton.
8. Reliability of the City's future water supplies would continue through ongoing implementation of the OCWD Groundwater Management Plan, OCWD's Long Term Facilities Plan, local agency programs, and the combined efforts and programs among member and cooperative agencies of MWD. These agencies include all water wholesalers and retailers, OCSA, the Santa Ana Regional Water Quality Control Board, and the Santa Ana Watershed Project Authority (RBF 2013).

Impacts to water supplies would be less than significant.

### Water Distribution

The majority of the existing water lines would be removed and replaced based on the proposed building configuration. Planning Area 1 would be served by a 12-inch line in the proposed extension of College Place. Planning Area 2 would be served by a 12-inch line that replaces an existing 6-inch line. Commonwealth Avenue and Langsdorf Drive would both be served by 12-inch lines that replace existing 8-inch lines. Planning Areas 5 and 6 would be served by separate 12-inch water lines in Chapman Avenue that replace existing 6- to 8-inch lines. Planning Area 7 would be served by a new 10-inch line in Chapman Avenue that replaces a 6-inch line (see Figure 3-16, *Conceptual Water Plan*).

All proposed water main upgrades would be in roadways or under parking lots. Upgraded water mains would be installed in areas that are developed and paved and have been disturbed by previous construction of roads and parking lots. Impacts of construction of upgraded water mains would be part of the impacts of development of the whole project, which are analyzed throughout Chapter 5 of this DEIR. No additional impact would occur.

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As part of the water infrastructure improvements, the water system for this area of the City must be updated to confirm pipe sizing, flows, pressure, and flow duration (i.e., fire flow protection) prior to the approval of individual projects. This update could occur as a regional update to the City's water model system or would be done on an individual project-by-project basis. With compliance with this existing regulation, impacts would be less than significant.

#### 5.14.2.4 CUMULATIVE IMPACTS

##### Water Supplies

Cumulative impacts to water supplies in the City of Fullerton water service area would be less than significant, as substantiated above under Impact 5.14-2.

##### Water Distribution

Each related project would be required to estimate its water demand; water main sizes required to deliver such water demand; and existing sizes of water mains serving that project site. Each project would pay Front Footage Fees to the City of Fullerton to defray City utility costs for installation of water mains; such charges would reduce cumulative impacts to water distribution capacity.

#### 5.14.2.5 EXISTING REGULATIONS AND STANDARD CONDITIONS

##### CollegeTown Specific Plan

Specific Plan water conservation and water efficiency measures include:

- The use of sustainable design features, such as use of the water district's reclaimed water system.
- Large open space areas with groundcover plants should utilize water-conserving native grasses.
- Green roofs shall utilize plant materials that require less water and have shallow root systems to minimize weight impacts to the roof.

##### State

- California Water Code Sections 10610 et seq; SB 610, Urban Water Management Planning Act
- Water Conservation Act of 2009 (SBX7-7)
- Green Building Standards Code

##### Local

- Fire flow requirements are set forth in California Fire Code (CFC) Appendix B. The 2013 CFC is scheduled to take effect on January 1, 2014. The 2010 CFC is adopted by the City of Fullerton, with certain specified amendments, as Section 13.20.010 of the Fullerton Municipal Code.

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- City of Fullerton Municipal Code, Title 12 Water and Sewers, Chapter 12.04 Water Regulations.
- City of Fullerton Municipal Code, Title 12 Water and Sewers, Chapter 12.06 Water Supply Shortage Conservation Plan.
- City of Fullerton Municipal Code, Title 14, Buildings and Construction, Chapter 14.06, Green Building Standards Code.
- City of Fullerton Municipal Code, Title 15, Zoning, Chapter 15.50, Landscape and Irrigation Requirements.

### 5.14.2.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, impact 5.14-2 would be less than significant.

### 5.14.2.7 MITIGATION MEASURES

No mitigation measures are required.

### 5.14.2.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project-level and cumulative impacts to water supply and distribution systems would be less than significant.

## 5.14.3 Storm Drainage Systems

### 5.14.3.1 ENVIRONMENTAL SETTING

#### Regulatory Background

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 City of Fullerton's Local Implementation Plan (LIP) and Orange County's Drainage Area Management Plan (DAMP). As required by the City of Fullerton's LIP and municipal ordinances on stormwater quality management, projects that result in 5,000 square feet or more of impervious surfaces must submit a Priority Project-Specific Water Quality Management Plan (WQMP) to the City for approval prior to the City issuing any building or grading permits. Since the CollegeTown Specific Plan includes multiple land owners with multiple projects, the individual projects would be subject to the requirements of the City of Fullerton LIP, requiring the development of a project-specific priority project WQMP. Project-specific WQMP's within the Specific Plan area would be required to ensure that all of the requirements of the City's LIP and ordinances on stormwater quality are addressed for that project. This includes meeting any new requirements associated with Priority Projects, as well as the requirements of the Fourth-Term Municipal Separate Stormwater (MS4) permit (or subsequent MS4 permits).

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#### Existing Conditions

The CollegeTown Specific Plan area is within the Orange County portion of the Coyote Creek Watershed, which is tributary to the San Gabriel River in Los Angeles County. Most of the project site is in Federal Emergency Management Agency (FEMA) Zone X, meaning that it is outside of 100-year and 500-year flood zones. The west part of Planning Area 1, and the west edges of Planning Area 6 and Planning Area 7, is in Shaded Zone X, meaning that they are in 500-year flood zones but outside of 100-year flood zones (see Figure 5.7-4, *Flood Zones*). Under the existing conditions, runoff generally drains in north to south or east to west. Runoff from Planning Areas 2, 3, 4, and 5 drains into Titan Drive, Langsdorf Drive and Commonwealth Avenue, which flow from north to south. A portion of flows also drain into College Drive, which delivers flows to Commonwealth Avenue from both the east and the west. All flows are picked up in catch basins at the intersection of Commonwealth Avenue and College Drive. The catch basins are connected to a public 36-inch reinforced concrete pipe (RCP) storm drain in Commonwealth that flows southerly before connecting up with a 42-inch RCP in Chapman Avenue. The 42-inch RCP flows westerly along Chapman Avenue before heading southwest through the residential neighborhood south of Chapman Avenue. The 42-inch RCP ultimately connects into a 60-inch RCP in State College Boulevard southwest of the project site between Clark Avenue and Balfour Avenue.

Flows from Planning Areas 1, 6, and 7 flow westerly and are picked up by catch basins and tie into a 48-inch RCP in State College Boulevard. The 48-inch RCP converts to a 60-inch RCP downstream of the project, where the 42-inch RCP carrying runoff from Planning Areas 2, 3, 4, and 5 joins it. The 60-inch RCP flows south along State College Boulevard until it connects into the existing storm drain in Commonwealth Avenue and then flows westerly to Fullerton Creek. Existing storm drains in and next to the site are shown in Figure 3-14, *Conceptual Stormwater Drainage Plan*.

#### 5.14.3.2 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.

#### 5.14.3.3 ENVIRONMENTAL IMPACTS

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.

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**Impact 5.14-3: Proposed storm drainage systems would provide adequate drainage for the proposed project. [Threshold U-3]**

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**Impact Analysis:** The storm drain system would be reconfigured to better serve the proposed building layouts (see Figure 3-14, *Conceptual Stormwater Drainage Plan*). Under the proposed conditions, the majority of

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the parking lots would be replaced with parking structures and buildings. Impervious conditions would remain the same or slightly reduced and peak flows would also remain similar or slightly reduced.

Planning Areas 3 and 4 along with a portion of Planning Area 2 would continue to tie into the existing 36-inch RCP in Commonwealth Avenue. Storm drain facilities, catch basins, and laterals would be extended from the existing 36-inch RCP northwards and separately into Langsdorf Drive, Commonwealth, and Planning Area 2 to reduce sheet flow conditions and reduce the amount of surface flows in the streets. For Planning Area 5, the 42-inch RCP in Chapman Avenue would be extended easterly in Chapman Avenue to pick up flows from this planning area. For Planning Area 6, a storm drain extension off the 48-inch RCP in State College Boulevard is recommended and included in the conceptual stormwater drainage plan. The extension would drain from east to west in Chapman Avenue, with lateral collecting flows from Planning Area 6 before connecting with the 48-inch RCP in State College Boulevard. The existing storm drain in State College Boulevard would also be extended northerly up State College Boulevard and easterly in College Place to pick up flows from Planning Area 1. A storm drain system that drains from east to west into the 48-inch in State College Boulevard is also recommended in Planning Area 7 to pick up flows throughout the site. The onsite storm drain systems would be designed to safely collect and convey the 100-year flood while protecting all proposed buildings, structures, and public safety.

Most proposed storm drains would be in roadways or under parking lots; one proposed storm drain in Planning Area 3 would be in proposed landscaping in the east half of Nutwood Plaza. Proposed storm drains would be installed in areas that are developed and paved and have been disturbed by previous construction of roads and parking lots. Based on the comparison between existing and proposed impervious surfaces, there would be an overall net reduction in impervious surfaces under the proposed condition. The development of CollegeTown would also include the requirement for LID features, which further reduce volumes and rates of runoff. Between the reduced impervious surfaces and the incorporation of LID features, runoff rates are anticipated to be reduced below existing-condition rates. Impacts of construction of proposed storm drains would be part of the impacts of development of the whole project, which are analyzed throughout Chapter 5 of this Draft EIR. Impacts would be less than significant.

#### 5.14.3.4 CUMULATIVE IMPACTS

Cumulative impacts are considered for the Coyote Creek Watershed, which spans 165 square miles of north Orange County and southeast Los Angeles County. Other projects in the watershed may increase the amount of impervious surfaces in the watershed and thus may increase flow rates and volumes of runoff entering storm drains in the region. Other projects in the watershed would be required by MS4 permits to be sized and designed to ensure onsite retention of the volume of runoff produced from a 24-hour, 85th percentile storm event, which is similar to a two-year storm. Other impacts to storm drainage would be analyzed in separate CEQA processing for each cumulative project, and mitigation measures would be required as appropriate to minimize significant impacts.

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#### 5.14.3.5 EXISTING REGULATIONS AND STANDARD CONDITIONS

##### Regional

- MS4 Permit, Order No. R8-2009-0030, Santa Ana Regional Water Quality Control Board

##### Local

- City of Fullerton Municipal Code, Title 12 Water and Sewers, Chapter 12.18 Water Quality Ordinance.

#### 5.14.3.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.14-3.

#### 5.14.3.7 MITIGATION MEASURES

No mitigation measures are required.

#### 5.14.3.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project-level and cumulative impacts to storm water drainage systems would be less than significant.

### 5.14.4 Solid Waste Disposal

#### 5.14.4.1 ENVIRONMENTAL SETTING

##### Regulatory Background

Assembly Bill AB 939 (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 multifamily residential land uses.

##### Existing Conditions

##### *Solid Waste Collection*

MG Disposal collects solid waste from residential, commercial, and industrial customers in Fullerton under contract with the City. Residential customers are provided with three containers: a black container for trash, a green container for recyclable items, and a brown container for yard waste.

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### *Solid Waste Recycling and Disposal*

Solid waste is taken to the CVT Regional Material Recovery Facility and Transfer Station in the City of Anaheim. Recyclable materials are removed from the waste stream; nonrecyclable materials are sent to landfills. Over 98 percent of solid waste from the City of Fullerton landfilled in 2012 was sent to two landfills: the Olinda Alpha Sanitary Landfill in the City of Brea and the Frank R. Bowerman Sanitary Landfill in the City of Irvine (CalRecycle 2013a). Both facilities are owned and operated by OC Waste & Recycling, an agency of the County of Orange. The two landfills are described in Table 5.14-6.

The nearest facility to the project site that is listed as accepting construction and demolition debris on the California Department of Resource Recovery and Recycling's (CalRecycle) website is the Olinda Alpha Sanitary Landfill in the City of Brea (CalRecycle 2013b).

**Table 5.14-6 Landfill Capacity**

Landfill	Location	Current Remaining Capacity (Cubic Yards)	Estimated Close Date	Maximum Daily Load (tons)	Average Daily Disposal, 2012 (tons)
Frank R. Bowerman	11002 Bee Canyon Access Road Irvine, CA 92602	205,000,000	2053	11,500	4,825
Olinda Alpha	1942 North Valencia Avenue Brea, CA 92823	38,578,383	2021	8,000	5,210
<b>Total</b>	<b>Not applicable</b>	<b>243,578,383 (129,827,278 tons)</b>	<b>Not applicable</b>	<b>19,500</b>	<b>10,035</b>

Source: CalRecycle 2013a; CalRecycle 2013b; CalRecycle 2013c; CalRecycle 2013d.

#### 5.14.4.2 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.

The Initial Study, included as Appendix A, substantiates that impacts associated with impact U-7 would be less than significant. This impact will not be addressed in the following analysis.

#### 5.14.5 Environmental Impacts

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.

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**Impact 5.14-4: 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:** Buildout of the CollegeTown Specific Plan is estimated to generate a net increase of about 23,367 pounds of solid waste per day, as shown in Table 5.14-7. The two landfills accepting nearly all solid waste landfilled from Fullerton—Olinda Alpha Sanitary Landfill and Frank Bowerman Sanitary Landfill—have residual capacity of 9,465 tons per day, with estimated closure dates of 2021 (Olinda Alpha) and 2053 (Frank Bowerman). The proposed Specific Plan is expected to be built out over 15 years, with completion expected in about 2030, which is after the scheduled closure of Olinda Alpha Sanitary Landfill. There would be sufficient landfill capacity for project-generated solid waste at the Frank Bowerman Sanitary Landfill after the planned closure of the Olinda Alpha Sanitary Landfill. There is adequate solid waste disposal capacity in the region for estimated solid waste generation by Specific Plan buildout, and Specific Plan approval would not require increased permitted landfill capacity. Impacts would be less than significant.

**Table 5.14-7 Forecast Net Increase in Solid Waste Generation, Buildout of CollegeTown Specific Plan**

Land Use	Net Increase, Units/Square Feet	Solid Waste Generation, pounds per day	
		Per unit <sup>1</sup>	Total
Residential	3,400 units	5.31	18,054
Commercial	199,138	0.013	2,589
Office	297,603	0.006	1,786
Institutional	173,782	0.0054	938
<b>Total</b>			<b>23,367</b>

<sup>1</sup> Source: CalRecycle 2013e.

#### 5.14.5.1 CUMULATIVE IMPACTS

Cumulative impacts are considered for Orange County, the service area for OC Waste & Recycling, which operates the three landfills serving the county. Capacities and estimated closing dates for two of the three landfills in the county are listed in Table 5.14-6. The third landfill, Prima Deschecha in the City of San Juan Capistrano, has remaining capacity of about 87.4 million cubic yards, maximum permitted disposal of 4,000 tons per day, actual disposal of 1,300 tons per day, and an estimated closing date of 2067 (CalRecycle 2013a; CalRecycle 2013b; CalRecycle 2013c; CalRecycle 2013d). There is adequate landfill capacity in the County to accommodate forecast growth for the next 20 years. No significant cumulative impact to landfill capacity would occur, and buildout of the CollegeTown Specific Plan would not contribute to a significant cumulative impact.

#### 5.14.5.2 EXISTING REGULATIONS AND STANDARD CONDITIONS

##### State

- Public Resources Code 40050 et seq. (AB 939)
- Assembly Bill 341 (Chapter 476, Statutes of 2011)

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### 5.14.5.3 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, impact 5.14-4 would be less than significant.

### 5.14.5.4 MITIGATION MEASURES

No mitigation measures are required.

### 5.14.5.5 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project-level and cumulative impacts to solid waste disposal would be less than significant.

## 5.14.6 Other Utilities

### 5.14.6.1 ENVIRONMENTAL SETTING

#### Regulatory Background

##### *California Building Code*

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 California Energy Commission (CEC) adopted the 2013 Building and Energy Efficiency Standards, which go 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.

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.

##### *2006 Appliance Efficiency Regulations*

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 regulated appliances and nonfederally regulated appliances.

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#### Existing Conditions

##### *Electricity*

Southern California Edison (SCE) provides electricity to Fullerton. The nearest SCE substation to the project site is the Titans Substation; other substations in Fullerton include the Paper, Fullerton, Basta, Sunnyhills, and Gilbert substations (CEC 2012). Total electricity consumption in SCE's service area in gigawatt-hours is forecast to be 103,791 GWh in 2015 and to increase to 112,535 GWh in 2022 (CEC 2012). Estimated existing electricity use onsite is about 16 million kilowatt-hours (kWh) per year.

##### *Natural Gas*

The Southern California Gas Company (SoCalGas) provides natural gas to Fullerton. Total supplies of natural gas available to SoCalGas are expected to remain stable at 3.875 billion cubic feet per day (bcfd) between 2015 and 2030. 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 annual natural gas usage onsite is about 14.7 billion BTU.

##### *Communications Facilities*

Land line telephone service is offered in the project site by several providers, including AT&T, Verizon, Comcast, Time Warner, Charter, and Cox. Time Warner Cable provides cable television and cable broadband internet services to the project site.

#### 5.14.6.2 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 demands for other public services or utilities.

#### 5.14.7 Environmental Impacts

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.

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**Impact 5.14-5:** Existing and/or proposed facilities for other public utilities would be able to accommodate project-generated electricity, natural gas, and communication facility demands. [Threshold U-8]

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**Impact Analysis:** The increase of residential and nonresidential land uses within the CollegeTown Specific Plan would increase demand for other utilities.

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### Electricity

Total annual electricity consumption by the CollegeTown Specific Plan at buildout would be approximately 50.9 million kWh, for a net increase of approximately 34.9 million kWh. SCE forecasts that it would have sufficient electricity supplies for project demands (CEC 2012), and buildout of the Specific Plan would not require SCE to obtain new or expanded electricity supplies.

### Natural Gas

Total annual natural gas demand by buildout of the CollegeTown Specific Plan would be about 40.9 billion BTU per year, for a net increase of about 26.2 billion BTU. SoCalGas forecasts that it would have adequate natural gas supplies for project demands (CGEU 2012), and Specific Plan buildout would not require SoCalGas to obtain new or expanded natural gas supplies.

### Communications Facilities

Additional residential and nonresidential tenants would increase the demand for communications facilities such as cable, internet, and telephone service. Additional facilities would be necessary to accommodate the additional residential units, such as new cabling, node locations, and power supplies. To serve future residential and nonresidential development, enhancement and/or extensions of existing facilities within the project site would be required. These facilities are regulated by the California Public Utilities Commission and can be upgraded without any significant impact on the environment. Impacts would be less than significant.

#### 5.14.7.2 CUMULATIVE IMPACTS

The analyses of electricity and natural gas supplies and impacts above considers electricity demands and natural gas supplies over the entire service areas of the respective providers—the electricity demand forecast extends to 2022 and the natural gas forecast to 2030. The analysis in this EIR assumes that the Specific Plan would be fully built out by 2030. SCE and SoCalGas sell electricity and natural gas, respectively, in response to demands, and would obtain increased supplies as needed. In May 2013 2.03 GW of gas-fired electrical generation capacity was under construction in California, and the governor's office has set an overall target of 12 GW of renewable distributed electricity generation by 2020 (Vidaver 2013). No significant cumulative impact would occur, and Specific Plan buildout would not contribute to a significant cumulative impact on electricity, natural gas supplies, and communications facilities.

#### 5.14.7.3 EXISTING REGULATIONS AND STANDARD CONDITIONS

##### State

- Title 24, Part 6, California Code of Regulations: Building and Energy Efficiency Standards
- Title 24, Part 11, California Code of Regulations: Green Building Standards Code
- Title 20 California Code of Regulations: Appliance Energy Efficiency Standards

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#### Local

- City of Fullerton Municipal Code, Title 16 Subdivisions, Chapter 16.05, Public Improvements, Dedications, Performance Agreements, and Improvement Securities.

#### 5.14.7.4 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, Impact 5.14-5 would be less than significant.

#### 5.14.7.5 MITIGATION MEASURES

No mitigation measures are required.

#### 5.14.7.6 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project-level and cumulative impacts to other utilities would be less than significant.

### 5.14.8 References

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