

## 5. Environmental Analysis

### 5.14 UTILITIES AND SERVICE SYSTEMS

This section of the Draft Environmental Impact Report (DEIR) discusses the current conditions for utility providers, including water, wastewater, stormwater, solid waste, electricity, and natural gas services, and the proposed project's effects on these providers. The analysis in this section is based, in part, on the following technical studies:

- *Sewer Analysis Report for OCMA Museum House*, Fuscoe Engineering, Inc., July 2016
- *Water Demand Report for OCMA Museum House*, Fuscoe Engineering, Inc., May 2016

Complete copies of these studies are included in the Technical Appendices to this Draft EIR (Volume II, Appendices M and N). Note that these technical studies were prepared based on an old site plan with the proposed tower oriented along the eastern site boundary (see Figure 4, *Proposed Site Plan*, in the Initial Study [Appendix A]). The revised site plan, shown on Figure 3-4, *Proposed Site Plan*, angles the tower diagonally so the lobby entrance faces the site's southern boundary and entry driveway along San Clemente Drive. However, the revised site plan does not impact or effect the conclusions of the technical studies.

#### 5.14.1 Wastewater Treatment and Collection

##### 5.14.1.1 ENVIRONMENTAL SETTING

###### Regulatory Background

###### *Federal Clean Water Act*

The Clean Water Act establishes regulations to control the discharge of pollutants into the waters of the United States and regulates water quality standards for surface waters (US Code, Title 33, §§ 1251 et seq.). Under the act, the US Environment Protection Agency 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 requires wastewater treatment of all effluent before it is discharged into surface waters.

###### *Local*

###### *Orange County Sanitation District Capital Facilities Charges*

The Orange County Sanitation District (OCSD) Capital Facilities Charge (Ordinance No. OCSD-40) is imposed when a property newly connects to the OCSD system or a previously connected property expands its use. Revenue generated from the charge is used for the acquisition, construction, and reconstruction of OCSD's wastewater collection, treatment, and disposal facilities; to repay principal and interest on debt instruments; or to repay federal or state loans for the construction and reconstruction of sewage facilities, together with costs of administration and provisions for necessary reserves.

## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEMS

### *City of Newport Beach Sewer System Management Plan*

The Sewer System Management Plan (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 and mitigate any that may occur. The plan also outlines the 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 (update of 1996 plan) 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 levels of service for the City's needs. It also ensures that the City meets the statewide General Waste Discharge Requirements issued by the State Water Resources 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 Municipal Code*

The 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 (§ 14.24.030). The sewer connection fee (§ 14.24.050) is \$250 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 Collection*

The City's Municipal Operations Department, Wastewater Division, is responsible for the majority of the City's residential and commercial wastewater collection services, including the project site.

Wastewater from the project site currently discharges into a City-owned, 8-inch, vitrified clay pipe (VCP) sewer line that runs in an easement through the adjacent parking lot to the west of the site before turning southerly, and discharging to an 8-inch VCP sewer in San Clemente Drive. The sewer line in San Clemente

## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEM

Drive drains southwest to another 8-inch VCP line in Santa Barbara Drive, then northwest to Jamboree Road, where it discharges into an OCSD trunk sewer at the intersection of Jamboree Road and Santa Barbara Drive.

### *Wastewater Treatment*

OCSD provides treatment for the majority of the wastewater generated in Newport Beach. 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 Fountain Valley has a capacity of 204 million gallons per day (mgd) for primary treatment and 182 mgd for secondary treatment; it treats an average of 123 mgd. Approximately 120 mgd of effluent is sent to the Groundwater Replenishment System, a cooperative project between the Orange County Water District (OCWD) and OCSD that began operating in 2008. 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 recycled use. Nearly 100 percent of the effluent from Plant No. 1 is sent to the Groundwater Replenishment System (Hadden and Covarrubias 2016).

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. Maximum treatment capacity for Reclamation Plant No. 2 is 168 mgd for primary treated wastewater and 150 mgd for secondary treated wastewater. The average treatment flow rate is 65 mgd; thus, remaining capacity at this plant is approximately 103 mgd (Hadden and Covarrubias 2016). 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 has 503 portholes through which treated wastewater is slowly released.

### **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. Environmental Analysis

### UTILITIES AND SERVICE SYSTEMS

The Initial Study, included as Appendix A, substantiates that impacts associated with the following thresholds would either be less than significant or have no impact:

- Threshold U-1

This threshold will not be addressed in the following analysis.

#### 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 would be adequately collected and treated by the City and Orange County Sanitation District, respectively. [Thresholds U-2 (part) and U-5]**

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#### *Impact Analysis:*

#### **Wastewater Collection**

The proposed project would allow development of a 100-unit condominium tower that would increase wastewater generated in the project area.

The peak flow rates in the City's existing 8-inch VCP sewer lines near the project site—MH-SB01 Santa Barbara Drive and Downstream Reach in Santa Barbara Drive—were determined by flow tests conducted in September 2015. Existing flows are 0.436 cubic feet per second (cfs). The system's capacity is 0.451 cfs; therefore, the existing system is deemed adequate to convey the existing wastewater flows in the project area (Fusco 2016a).

The net peak flow of the proposed tower was determined to be 0.16 cfs. This would increase the existing sewer flow at the project from 0.436 cfs to 0.596 cfs (Fusco 2016a). The threshold to determine the adequacy of sewer line capacities is whether peak wastewater flows fills the bottom half (50 percent) of the pipe.

As shown in Table 5.14-1, post-development flows through MH-SB01 in Santa Barbara Drive (0.550 cfs) would increase flow within the pipe to 42 percent. This is below the 50 percent threshold and, and the pipe would therefore adequately meet the project's peak wastewater flows. However, post-development wastewater flows through the downstream reach in Santa Barbara Drive (0.596 cfs) would exceed the 50 percent threshold and would need to be improved with a wider pipe. However, after conveyance through this pipe, the system does not need additional improvements and is capable of serving project-generated wastewater.

## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEM

**Table 5.14-1 Pre- and Post-development Peak Flow Rates**

Public Sewer Line Location	Existing Pipe Diameter	Existing Condition Peak Flow	Existing Percentage Full	Project Generated Peak Flow	Total Post-Development Peak Flow	Post-development Percentage Full
MH-SB01 Santa Barbara Drive	8-inch VCP	0.390 cfs	35%	0.16 cfs	0.550 cfs	42%
Downstream Reach in Santa Barbara Drive	8-inch VCP	0.436 cfs	49.3%	0.16 cfs	0.596 cfs	Pipe Capacity Exceeded

Source: Fuscoe 2016a.  
cfs = cubic feet per second  
VCP = vitrified clay pipe

It was determined that a 12-inch VCP sewer line would be needed to replace the existing 8-inch VCP in the downstream reach in Santa Barbara Drive. Thus, the project would install a 12-inch VCP sewer pipe at this location to connect with the OCSD sewer system. The 12-inch VCP pipe would be 81 linear feet and connect to the existing OCSD manhole #BAY0010-0665 on Jamboree Road at Santa Barbara Drive (see Appendix 8 of the Sewer Analysis Report [Appendix M of this DEIR]). OCSD would issue a trunk connection permit to the City once plans are approved and would require payment of capital and inspection fees by the project applicant. This 12-inch VCP pipe would adequately meet the post-development peak flow of 0.596 cfs and would only be 33 percent full at post-development conditions (see Table 5.14-2). Therefore, wastewater capacity would adequately accommodate post-development conditions and impacts would be less than significant.

**Table 5.14-2 Proposed Sewer Improvement in Santa Barbara Drive at Jamboree Road**

Public Sewer Line Location	Pre-development Conditions			Post-development Conditions		
	Proposed Pipe Diameter	Existing Condition Peak Flow	Percentage Full During Peak Flow	Generated Peak Flow From Project	Total Peak Flow	Percentage Full
Downstream Reach in Santa Barbara Drive	12-inch VCP	0.436 cfs	49.3%	0.16 cfs	0.596 cfs	33%

Source: Fuscoe 2016a.  
cfs = cubic feet per second  
VCP = vitrified clay pipe

### Wastewater Treatment

As shown in Table 5.14-2, the generated peak flow of the proposed project would be approximately 0.16 cfs or 103,390 gallons per day (gpd). OCSD's Reclamation Plant No. 1 has a capacity of 204 mgd for primary treatment and 182 mgd for secondary treatment, and treats an average of 123 mgd. Therefore, it has a remaining treatment capacity of 81 mgd for primary treatment and 59 mgd for secondary treatment. The

## 5. Environmental Analysis

### UTILITIES AND SERVICE SYSTEMS

proposed project's peak flow rate of 0.103 mgd would require approximately 0.13 percent of remaining capacity for primary treatment and 0.17 percent of remaining capacity for secondary treatment. Thus, OCSD's Reclamation Plant No. 1 would have adequate capacity to accommodate the project's generated wastewater flow.

As previously stated, Reclamation Plant No. 2 has a remaining treatment capacity of 103 mgd (Hadden and Covarrubias 2016). Therefore, if effluent generated by the project is sent to Reclamation Plant No. 2, the plant would have adequate capacity. Therefore, both reclamation plants would have sufficient capacity to treat project-generated wastewater. Impacts would be less than significant.

#### 5.14.1.4 CUMULATIVE IMPACTS

##### Wastewater Collection

Implementation of individual projects would require project-specific analyses during final design to evaluate sewer capacities that would serve individual project sites, including those listed in Table 4-1. For citywide impacts to the City's Municipal Operations Department Wastewater Division sewer facilities, individual projects would be required to pay new-connection fees to the City (per Chapter 14.24 of the municipal code) and install sewer improvements, similar to the proposed project. Overall, payment of City sewer fees on a project-by-project basis would reduce cumulative impacts to wastewater collection services to less than significant levels.

##### Wastewater Treatment

The area considered for cumulative wastewater treatment impacts corresponds to the service boundary of OCSD, which encompasses all cumulative projects listed in Table 4-1. Other projects in the City would increase the total development intensity in the City, thus increasing wastewater generation. In total, the cumulative projects listed in Table 4-1 would introduce up to 4,240 residential units, 331,895 square feet of commercial/retail/restaurant use, 357,509 square feet of office use, and 385 hotel rooms. Using conservative wastewater generation factors from the City's 2010 Sewer Master Plan, the cumulative projects in conjunction with the Museum House project would generate approximately 1,761,115 gpd of wastewater (see Table 5.14-3). Note that the wastewater generated by the Museum House project is for peak flows; thus, this analysis is more conservative.

5. Environmental Analysis  
UTILITIES AND SERVICE SYSTEM

**Table 5.14-3 Cumulative Projects Wastewater Generation**

Land Use	Buildout	Wastewater Generation Factor (gpd per unit/ac/room)	Generated Wastewater (gpd)
Residential	4,240 units	240	1,017,600
Commercial/Retail/Restaurant	331,895 SF (7.62 acres)	2,500	19,050
Office	357,509 SF (8.21 acres)	2,500 <sup>a</sup>	20,525
Hotel	385 rooms	150 <sup>b</sup>	57,750
<b>Subtotal</b>			<b>1,114,925</b>
Museum House Peak Wastewater Generation			646,190
<b>TOTAL</b>			<b>1,761,115 gpd</b>

Sources: Newport Beach 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); therefore wastewater generation factors from the City's 1996 Sewer Master Plan are used.

As stated above, OCSD's Reclamation Plant No. 1 has a capacity of 204 mgd for primary treatment and 182 mgd for secondary treatment, and currently treats an average of 123 mgd. Therefore, Reclamation Plant No. 1 would have substantial capacity to treat the 1.8 mgd of wastewater generated by the proposed project and cumulative projects. Additionally, the wastewater generated by the cumulative projects would be evaluated on an individual basis, and the developer would be required to pay Capital Facilities Fee Charges per Ordinance No. OCSD-40 to reduce cumulative impacts to wastewater treatment services. Payment of these fees would be used towards future acquisition, construction, and reconstruction of OCSD's wastewater collection, treatment, and disposal facilities.

Moreover, the project would only contribute a minor amount toward reaching the wastewater treatment capacity of either Reclamation Plant No. 1 or Reclamation Plant No. 2 (approximately 0.13 percent of remaining primary capacity at Reclamation Plant No. 1, and approximately 0.17 percent of remaining advanced primary/secondary treatment capacity at Reclamation Plant No. 2). Overall, no significant cumulative impact is anticipated, and the project's contribution is not considered cumulatively considerable.

**5.14.1.5 EXISTING REGULATIONS AND STANDARD CONDITIONS**

**Existing Regulations**

*Federal*

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

*Local*

- City of Newport Beach Municipal Code, Title 14, Water and Sewers, Chapter 14.24, Sewer Connection, Permits

## 5. Environmental Analysis

### UTILITIES AND SERVICE SYSTEMS

- City of Newport Beach Municipal Code, Title 14, Water and Sewers, Chapter 14.28.020, Prohibited Usage of Sewers

#### City of Newport Beach Standard Conditions of Approval

There are no specific City-adopted standard operating conditions of approval related to wastewater treatment and collection services that are applicable to the proposed project at this time; however, project-specific conditions of approval may be applied to the project by the City during the discretionary approval (site development review, tentative tract map, etc.) subsequent design, and/or construction process.

#### 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

Impacts would be less than significant.

### 5.14.2 Water Supply and Distribution Systems

#### 5.14.2.1 ENVIRONMENTAL SETTING

##### Regulatory Background

###### *State*

###### ***Urban Water Management Planning Act***

The Urban Water Management Planning Act of 1983 (Water Code §§ 10610 et seq.), requires water suppliers to:

- 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 or SBX7-7), which amends the Urban Water Management Planning Act and adds new water conservation provisions to the Water Code.



## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEM

### ***Senate Bill 610***

Senate Bill 610 (SB 610) (2001) amended the Urban Water Management Planning Act to mandate that a city or county approving certain projects subject to CEQA: 1) identify any public water system that may supply water for the project and 2) request those public water systems to prepare a specified water supply assessment.<sup>1</sup> The assessment must include:

- 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.
- 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.
- 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.
- A demonstration of water supply entitlements, water rights, or water service contracts.
- 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.
- Additional information is required if groundwater is included in the supply for the proposed project.

The water supply assessment must be included in any environmental document prepared for the project and may include an evaluation of any information in that environmental document. The assessment must determine if the projected water supplies will be sufficient to satisfy the demands of the project as well as 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 UWMP 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.

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<sup>1</sup> 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." Additional criteria are listed in Section 5.14.2.4, *Cumulative Impacts*. A water supply assessment was not required for the proposed project.

## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEMS

### *Governor's Drought Declaration*

California Governor Edmund Brown Jr. declared a drought state of emergency on January 17, 2014, asking Californians to voluntarily reduce water use by 20 percent. In many parts of California, 2013 was the driest year in recorded history, and the extreme drought is still continuing. Between October 1, 2013, and June 30 2014, statewide precipitation was 50 percent of average, runoff was 35 percent of average, and reservoir storage 60 percent of average. Initially, the DWR announced on January 31, 2014, that if current dry conditions persist, customers would receive no deliveries from the State Water Project (SWP) in 2014, except for small carryover amounts from 2013. Later, DWR increased the SWP allocation to 5 percent, with deliveries to start in August 2014. Almost all areas served by the SWP also have other sources of water, such as groundwater and local reservoirs. Additionally, deliveries from the Central Valley Project in 2014 were cut to zero for agriculture users south of the Sacramento-San Joaquin Delta.

On April 1, 2015, Governor Brown issued Executive Order B-29-15, finding that, among other things, "...conditions of extreme peril to the safety of persons and property continue to exist in California due to water shortage and drought conditions..." and ordering the "State Water Resources Control Board [to] impose restrictions to achieve a statewide 25 percent reduction in potable urban water usage through February 28, 2016."

On February 2, 2016, based on Governor Brown's November 2015 Executive Order, the State Water Board approved an updated and extended emergency regulation that will continue mandatory reductions through October 2016, unless revised before then. The extended regulation continues the conservation structure that has spurred dramatic savings so far and gives greater consideration to some factors that influence water use: climate; population growth; and significant investments in new local, drought-resilient water supplies such as wastewater reuse and desalination.

### *Local*

#### *City of Newport Beach Urban Water Management Plan 2015*

The City's 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 DWR every five years. The City's UWMP outlines current water demands, sources, and supply reliability to the City by forecasting water use based on climate, demographics, and land use changes in 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. The Newport Beach City Council adopted the updated 2015 UWMP in June 2016. .

#### *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, ensure 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 and establishes four levels of response actions during times of declared water shortage.

## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEM

- **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 in the City.

### *City of Newport Beach Mandatory Water Conservation Requirements*

Given current drought conditions, the City of Newport Beach has also implemented several water conservation requirements to ensure continued water supply reliability. The City is in a declared “Level Three Mandatory Drought Requirement.” Per Section 14.16.080 of the City’s municipal code, the following mandatory water conservation requirements are in effect:

- A. No customer shall use potable water to irrigate any lawn, landscape or other vegetated area between the hours of 9:00 A.M. and 5:00 P.M. on any day, except by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off nozzle or device, or for short periods of irrigation for the exclusive purpose of adjusting or repairing an irrigation system.
- B. No customer shall use potable water to irrigate any lawn, landscape or other vegetated area except on the scheduled irrigation days established by City Council resolution. Each customer has two irrigation days per week during the months of April, May, June, July, August, September, and October and one irrigation day per week during the months of November, December, January, February, and March.
- C. No customer shall use more water during any billing period than the percentage of the base amount established in the resolution declaring the Level Three water shortage, which percentage shall be in the range from seventy-five (75) percent to sixty (60) percent of the base amount.
- D. No person shall permit excessive use, loss or escape of water through breaks, leaks or other malfunctions in the user’s plumbing or distribution system for more than twenty-four (24) hours after receiving notice from the City.
- E. No customer may use potable water to fill or refill an ornamental lake, pond, or fountain more than once every other week except to the extent needed to sustain aquatic life.
- F. Customers may use no more than three inches of potable water per week to fill or refill a residential swimming pool or outdoor.

### **Existing Conditions**

The City provides water services to a 36-square-mile service area, including the project site, and approximately 67,000 residents through 26,524 service connections (Newport Beach 2016). The two main sources of water are the Lower Santa Ana River Groundwater Basin, which is managed by 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 provided by OCWD was

## 5. Environmental Analysis

### UTILITIES AND SERVICE SYSTEMS

recently added to the City's water supply portfolio and accounts for 3 percent of the City's overall water supply. Groundwater accounts for 70 percent of the overall supply, and imported water accounts for 27 percent (Newport Beach 2016). Groundwater is pumped from four active wells in the City of Fountain Valley, and imported water is sourced from the Colorado River Aqueduct and the SWP, 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 (Murdoch 2016).

The City is also a member of the Orange County 20x20x20 Regional Alliance, which was 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 chosen to comply with Option 1 of SBx7-7's various compliance options—a 20 percent reduction from the City's baseline (253 gpcd) by 2020 and a 10 percent reduction to 228 gpcd by 2015. The City has a current water usage of 176 gallons per capita per day (gpcd), showing compliance with its 2015 interim water use target, and is on track to meeting its 2020 water use target of 202 gpcd (Newport Beach 2016).

Additionally, as previously stated, the Emergency Drought Mandate issued by Governor Brown in April 2015 required a collective reduction in statewide urban water use of 25 percent by February 2016, with each agency in the state given a specific reduction target by DWR. In response to the governor's mandate, the City is carrying out more aggressive conservation efforts and implementing higher (more restrictive) stages of its water conservation ordinance in order to achieve its demand reduction target of 28 percent set for the City itself and the Orange County 20x20x20 Regional Alliance of all participating MWDOC utility agencies. The Regional Alliance's weighted 2015 target is 176 gpcd and 2020 target is 158 gpcd. The actual 2015 water use in the region was 125 gpcd; therefore, the region has already met its 2020 gpcd target (Newport Beach 2016).

More recently, on July 12, 2016, the Newport Beach City Council reduced water restrictions from a Level Three to a Level Two Water Supply Shortage (Resolution No. 2016-85). In addition to permanent restrictions detailed in Section 14.16.040 of the City's municipal code, Level Two restrictions require no automatic irrigation between 9:00 AM and 5:00 PM; specified watering days; fixing water leaks within 48 hours; restricting fill/refill of swimming pools and spas to less than six inches per week; and requiring all Newport Beach water customers to reduce their water usage by 15 percent compared to the same billing period in 2013.

#### *Water Supply and Demand*

The City's 2015 UWMP states that the City's 2015 water supply was approximately 16,033 acre-feet (af), which consisted of 11,203 af of local groundwater, 4,338 af of imported water, and 492 af of recycled water (Newport Beach 2016). Table 5.14-4 shows the current and projected water supply for the City through 2040.

5. Environmental Analysis  
UTILITIES AND SERVICE SYSTEM

**Table 5.14-4 City of Newport Beach Current and Projected Water Supply (af)**

Water Supply Sources	Projected Water Supply					
	2015 (actual)	2020	2025	2030	2035	2040
Imported Water	4,338	4,161	4,491	4,511	4,495	4,487
Groundwater	11,203	10,980	11,787	11,867	11,864	11,881
Recycled Water	492	545	560	575	590	605
<b>Total</b>	<b>16,033</b>	<b>15,685</b>	<b>16,838</b>	<b>16,953</b>	<b>16,949</b>	<b>16,973</b>

Source: Newport Beach 2016.  
af = acre-feet

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 2015 UWMP, Metropolitan will be able to meet full-service demands with existing supplies from now through 2040 during normal, single-dry, and multiple-dry-year scenarios. The City is therefore capable of meeting the water demands of its customers under the same hydrological conditions out to 2040 (Newport Beach 2016).

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 fiscal year 2015/2016, the BPP was set at 75 percent. However, based on discussions with OCWD, a conservative BPP of 70 percent is assumed through 2040 (Newport Beach 2016). The remaining water demand not provided by local groundwater would be met through imported water from Metropolitan/MWDOC, with a small portion from recycled water.

Recycled/reclaimed water is wholesaled by OCWD through its Green Acres Project and used in 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 (Murdoch 2016).

*Water Supply Reliability*

Overall, the City has documented that it is 100 percent reliable for a normal year, single dry year, and multiple dry years from 2020 through 2040. Tables 5.14-5 through 5.14-7 show the City's water demand and supply through normal, single-dry, and multiple dry year conditions.

**Table 5.14-5 City of Newport Beach Projected Normal Year Supply and Demand (af)**

	2020	2025	2030	2035	2040
<b>Total Supply</b>	<b>15,685</b>	<b>16,838</b>	<b>16,953</b>	<b>16,949</b>	<b>16,973</b>
Imported Water	4,161	4,491	4,511	4,495	4,487
Groundwater	10,980	11,787	11,867	11,864	11,881
Recycled Water	545	560	575	590	605
<b>Total Demand</b>	<b>15,685</b>	<b>16,838</b>	<b>16,953</b>	<b>16,949</b>	<b>16,973</b>

Source: Newport Beach 2016.

## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEMS

**Table 5.14-6 City of Newport Beach Projected Single Dry Year Supply and Demand (af)**

	2020	2025	2030	2035	2040
Total Supply	16,626	17,848	17,970	17,966	17,991
Total Demand	16,626	17,848	17,970	17,966	17,991
Difference	0	0	0	0	0

Source: Newport Beach 2016.

**Table 5.14-7 City of Newport Beach Projected Multiple Dry Year Supply and Demand (af)**

		2020	2025	2030	2035	2040
First Year Supply	Total Supply	16,626	17,848	17,970	17,966	17,991
	Total Demand	16,626	17,848	17,970	17,966	17,991
	Difference	0	0	0	0	0
Second Year Supply	Total Supply	16,626	17,848	17,970	17,966	17,991
	Total Demand	16,626	17,848	17,970	17,966	17,991
	Difference	0	0	0	0	0
Third Year Supply	Total Supply	16,626	17,848	17,970	17,966	17,991
	Total Demand	16,626	17,848	17,970	17,966	17,991
	Difference	0	0	0	0	0

Source: Newport Beach 2016.

### *Existing Water Facilities*

The City provides water for domestic service and fire protection to the project site. An existing 8-inch asbestos-cement pipe water line is in a 15-foot easement along the eastern boundary of the project site. In addition, a public fire hydrant is in an easement near the northeast corner of the property. The 8-inch public water line onsite connects to a 12-inch public asbestos-cement pipe water line in San Clemente Drive that also connects to Santa Barbara Drive further to the west.

As stated above, recycled water in the City is provided by OCWD. The OCWD operates a 16-inch recycled water pipeline as part of the Green Acres Project; this pipeline is in Jamboree Road and terminates in Santa Barbara Drive, north of San Clemente Drive. No recycled water lines exist in San Clemente Drive in the vicinity of the project site. Currently, the closest connection point from the project site to OCWD's recycled water main is on Santa Barbara Drive, north of San Clemente Drive, and currently serves the Newport Beach Country Club.

### *Existing Water Demand Onsite*

Existing water demand onsite is estimated as 7,019 gallons per day—that is, about 7.9 afy—based on the 23,395 square feet of existing museum use and a water demand factor of 0.3 gallon per day per square foot for museum use (Fusco 2016b).

## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEM

### 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:

- 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 proposed project would generate a net water supply demand of 48 acre-feet per year and would be adequately served by existing water supply and delivery systems. [Thresholds U-2 (part) and U-4]

#### *Impact Analysis:*

#### Water Supply and Demand

The proposed project would increase water demand on the Museum House project site. Using an average daily flow demand factor of 300 gallons per 1,000 square feet, the existing OCMA building would require 7,019 gpd or 8 afy. Comparatively, the proposed project would require 50,404 gpd or 56 afy. Therefore, the difference in water demand would be 43,385 gpd or 48 afy (see Table 5.14-8).

**Table 5.14-8 Estimated Projected Water Demands**

Proposed Project Land Use	Average Daily Flow	Daily Average Demand (gpd)	Annual Water Demand (afy)
<b>Proposed Project</b>			
100 Residential Units <sup>1</sup>	228.1 gpcd	49,954	55.96
Fitness Center (500 SF)	300 gallons/ksf/day	150	0.168
Pool (500 SF)	300 gallons/ksf/day	150	0.168
Club Room (500 SF)	300 gallons/ksf/day	150	0.168
<b>Project Demand Total</b>		<b>50,404</b>	<b>56</b>
<b>Existing Condition</b>			
Existing Museum	300 gallons/ksf/day	7,019	8
<b>Existing Demand Total</b>		<b>7,019</b>	<b>8</b>
<b>Total Proposed Water Demand Difference</b>		<b>43,385 gpd</b>	<b>48 afy</b>

Source: Fuscoe 2016b.

gpd = gallons per day; gpcd = gallons per capita per day; gpm = gallons per minute; ksf = thousand square feet

<sup>1</sup> The Fuscoe Water Demand Report (2016b) used an average of 2.19 persons per dwelling unit.

## 5. Environmental Analysis

### UTILITIES AND SERVICE SYSTEMS

Based on the 2015 UWMP, the proposed project's water demand for potable water (48 afy) in combination with other water demands throughout the City are accounted for in the City's UWMP water demand growth projections and would be adequately accommodated with existing water supplies during normal, single-dry, and multiple-dry water years. The City's Utilities Department also states that the City would have adequate water supply to meet the needs of the proposed project (Murdoch 2016).

Additionally, as part of the project, the tower is expected to be commissioned and certified as a LEED for New Construction Silver building. Several water efficiency features of the project include installation of water-efficient fixtures for each unit to provide an overall 20 to 30 percent reduction in water use and landscape irrigation systems designed with weather sensors, timers, and low-flow irrigation devices. The estimated peak hour water demand does not account for anticipated water use reduction through these water efficiency features. Further, as with all development in the City, the project would be required to comply with water conservation and supply level regulations and water efficient landscaping design standards under Chapters 14.16 and 14.17 of the City's municipal code. Overall, water supply impacts would be less than significant.

#### Water Delivery Systems

Based on the water demand report prepared by Fuscoe (2016b), the project would necessitate the removal of the existing onsite 8-inch water line along the eastern project boundary, and the existing fire hydrant at the northeast corner would also be relocated to accommodate the proposed building. Three proposed water connections would be installed at the southern project boundary and connected to the existing 12-inch water line in San Clemente Drive, which has sufficient capacity to handle conveyance of the peak water demand. It is anticipated that the existing fire hydrant fronting the building on San Clemente Drive would also require relocation to accommodate the proposed driveway (Fuscoe 2016b).

Fire hydrant flow tests were performed and confirm that adequate flows are available to service the proposed project (Fuscoe 2016b).

As described in *Existing Water Facilities*, above, the OCWD operates a 16-inch recycled water pipeline as part of the Green Acres Project; this pipeline is in Jamboree Road and terminates in Santa Barbara Drive, north of San Clemente Drive. This 16-inch pipeline would be the supply source for the proposed Newport Center recycled water system.

Overall, the proposed project would include sufficient water infrastructure improvements to provide water to the project site. Environmental impacts of these water facility improvements are analyzed as part of the project throughout this Draft EIR. Impacts on water delivery systems would be less than significant.

#### 5.14.2.4 CUMULATIVE IMPACTS

The area considered for cumulative water service impacts is the service area of the City of Newport Beach Municipal Operations Department. Future projects within the water service area of the City include all those listed in Table 4-1, with the exception of the following projects that are served by other water districts:



## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEM

- **Irvine Ranch Water District (IRWD):** Koll Newport Residential, One Newport Hotel at Uptown Newport, Uptown Newport Mixed Use Development, Koll Center Office Building, Newport Business Plaza Project, and PRES Office Building B Project.
- **Mesa Consolidated Water District (MCWD):** West Newport Community Center and Ebb Tide.
- **Others:** The water demand for the Newport Banning Ranch project was accounted for in the City’s 2005, 2010, and 2015 UWMPs; therefore, the project is not included in this cumulative analysis (BonTerra 2011).

In total, the remaining cumulative projects served by the City would introduce up to 1,278 residential units, 224,095 square feet of commercial/retail/restaurant use, 275,193 square feet of office use, and 130 hotel rooms. Using conservative water demand factors from the Irvine Ranch Water District’s 2003 Water Resources Master Plan (also used for that project’s Water Demand Report [see Appendix N]), the cumulative projects in conjunction with the Museum House project would generate a water demand of approximately 705,098 gpd or 790 afy (see Table 5.14-9).

**Table 5.14-9 Cumulative Projects Water Demand**

Land Use	Buildout	Water Demand Factor (gpd)	Generated Water Demand (gpd)	Acre Feet Per Year (afy)
Residential	1,278 units	450 per unit	575,100	644.62
Commercial/Retail/Restaurant	224,095 SF	220 per 1,000 SF	49,301	55.26
Office	275,193 SF	60 per 1,000 SF	16,512	18.51
Hotel	130 rooms	160 per room	20,800	23.31
<b>Subtotal</b>			<b>661,713</b>	<b>741.7</b>
Museum House Water Demand			43,385	48
<b>TOTAL</b>			<b>705,098 gpd</b>	<b>790 afy</b>

Sources: IRWD 2003.

Per the City’s recently approved 2015 UWMP, the City estimates that it has sufficient water supplies to meet demands in its service area through 2040. The 2015 UWMP also takes into account the current drought conditions that have threatened water resources and has concluded that existing water supply sources would adequately meet the needs of existing and future developments from 2020 through 2040. Per Tables 5.14-5 through 5.14-7, the City would increase its water supply from 2020 to 2040 by 1,288 acre-feet during normal years and 1,365 acre-feet during single- and multiple-dry years. Thus, the cumulative water demand of approximately 790 afy would represent only 61.3 and 57.9 percent of the City’s increase in water supply through 2040, and thus would be adequately accommodated.

All future projects would also be required to implement state- and locally mandated water conservation measures and undergo future environmental review through the CEQA process, after which needed water facilities improvements would be determined and required as part of those projects. Additionally, future projects that meet the definition of “project” under SB 610 (e.g., residential development of more than 500

## 5. Environmental Analysis

### UTILITIES AND SERVICE SYSTEMS

dwelling units, commercial use of more than 500,000 square feet of floor space, hotel or motel having more than 500 rooms) would be required to prepare a water supply assessment to determine whether projected water supply for the next 30 years—based on normal, single-dry, and multiple-dry years—would meet the water demand projected for the project plus existing and planned future uses. Further, all projects in the City are also required to comply with water conservation and supply level regulations and water efficient landscaping design standards under Chapters 14.16 and 14.17 of the City’s municipal code. Therefore, the proposed project’s contribution towards cumulative water demand would not be considered significant.

#### 5.14.2.5 EXISTING REGULATIONS AND STANDARD CONDITIONS

##### Existing Regulations

###### *State*

- Senate Bill 610 (Chapter 643, Statutes of 2001) and SB 221 (Chapter 642, Statutes of 2001): Water Supply Assessments
- 20x2020 Water Conservation Plan
- Governor’s Executive Order No. B-29-15

###### *Local*

- 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 Standard Conditions of Approval

There are no specific City-adopted standard operating conditions of approval related to water supply and distribution systems that are applicable to the proposed project at this time; however, project-specific conditions of approval may be applied to the project by the City during the discretionary approval (site development review, tentative tract map, etc.) subsequent design, and/or construction process.

#### 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. Environmental Analysis UTILITIES AND SERVICE SYSTEM

### 5.14.2.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

## 5.14.3 Storm Drainage Systems

### 5.14.3.1 ENVIRONMENTAL SETTING

#### Regulatory Background

##### *State*

##### ***National Pollutant Discharge Elimination System Program***

The State Water Resources Control Board 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. The project applicant would be required to submit a Notice of Intent to the State Water Resources Control Board for coverage under the NPDES permit and would be obligated to comply with its requirements.

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

## 5. Environmental Analysis

### UTILITIES AND SERVICE SYSTEMS

open/closed channels, catch basins, manholes, junction structures), and to protect offsite properties from the project's water runoff. The storm drain system must be designed in accordance with the standards of the Orange County Flood Division. A drainage fee is also charged to fund improvements to the City's drainage facilities.

#### Existing Conditions

The City of Newport Beach is in the Newport Bay Watershed. The storm drainage system is managed and operated by both the City and the Orange County Flood 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.

The majority of the project site drainage is conveyed via existing ribbon gutters within the parking lot. An 18-inch catch-basin outlet pipe conveys the site's storm flows into a private storm drain system via a 21-foot catch basin on the property at 888 San Clemente Drive (west of the project site), then a 30-inch storm drain in Bombero Drive, and finally to a 36-inch public storm drain in Santa Barbara Drive.

An existing concrete V-ditch along the northern boundary collects drainage from the northern portion of the project site and conveys it to an existing down-drain at the northwest corner of the site. From that point, the drainage is conveyed to and through the adjacent Villas at Fashion Island (currently under construction). The drainage is then conveyed to the 30-inch storm drain in Bombero Street, where it combines with the southerly drainage from the site. The combined site drainage is then conveyed to the existing 36-inch public storm drain in Santa Barbara Drive before ultimately discharging into Upper Newport Bay and Lower Newport Bay.

#### 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: Existing and proposed storm drainage systems are adequate to serve the drainage requirements of the proposed project. [Threshold U-3]**

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***Impact Analysis:*** In the proposed condition, the entire drainage would be conveyed to the discharge location at the southwest corner of the site. The existing discharge location at the northwest corner would be

## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEM

eliminated. The site drainage would continue to flow into the public storm drain system and be conveyed into the storm drain lines in Bombero Street, Santa Barbara Drive, and then into Newport Bay.

Development of the project would decrease the amount of impervious area onsite from 1.7 acres, or 85 percent of the project site, to 1.48 acres or 74 percent of the site. Therefore, runoff from the project site would decrease in comparison to existing conditions. Overall, the proposed and existing wetland systems combined would have capacity to treat runoff from the site from an 85th percentile, 24-hour storm (similar to a two-year, 24-hour storm). As detailed in Section 5.7, *Hydrology and Water Quality*, the modular wetland systems would biotreat the design capture volume (DCV) of runoff from the site in postproject conditions. The DCV is 3,583 cubic feet for the entire site. The project site in postproject conditions can be divided into two sections:

1. Runoff from a 1.88-acre area would be treated by three proposed modular wetland systems in the southern and southwestern parts of the site. The DCV for this area would be 3,583 cubic feet. The design treatment flow rates for this area would be 0.363 cfs, and the treatment capacity of the three wetland systems combined would be 0.372 cfs.
2. Runoff from a 0.12-acre area would flow into proposed landscaped areas and would be considered self-treating.

Overall, compared to existing conditions, the proposed project would decrease stormwater discharges from the site to drainage systems because impervious surfaces would be minimized. Any remaining runoff would flow offsite into an existing 18-inch, private, reinforced concrete pipeline and into the existing 30-inch storm drain in Bombero Drive, then to an existing 36-inch public storm drain in Santa Barbara Drive. Flows would ultimately discharge to the Upper Newport Bay.

Given that the proposed project would increase pervious surfaces onsite and implement onsite storm drains and modular wetlands, the City's storm drain systems would not be adversely impacted by the proposed project, and impacts would be less than significant.

### 5.14.3.4 CUMULATIVE IMPACTS

Future projects in the Newport Bay Watershed, which include all those listed in Table 4-1, could increase impervious areas compared to existing conditions and could increase local runoff flow at those project sites. However, all projects in the region would be required to capture and infiltrate runoff from a two-year storm; additionally, many other projects in the region would be required to reduce pollutants in post-construction runoff to the City's storm drain system from new development and redevelopment projects that result in the land disturbance of greater than or equal to one acre, in accordance with the NPDES Permit. Thus, no significant cumulative drainage impact would occur, and project drainage impacts would not be cumulatively considerable.

## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEMS

### 5.14.3.5 EXISTING REGULATIONS AND STANDARD CONDITIONS

#### Existing Regulations

##### *Federal*

- National Pollutant Discharge Elimination System Program

##### *Regional*

- Orange County Drainage Area Management Plan

##### *Local*

- City of Newport Beach Municipal Code Section 19.28.080 (Storm Drains)

#### City of Newport Beach Standard Conditions of Approval

There are no specific City-adopted standard operating conditions of approval related to storm drainage systems that are applicable to the proposed project at this time; however, project-specific conditions of approval may be applied to the project by the City during the discretionary approval (site development review, tentative tract map, etc.) subsequent design, and/or construction process.

### 5.14.3.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, Impact 5.14-3 would be less than significant.

### 5.14.3.7 MITIGATION MEASURES

No mitigation measures are required.

### 5.14.3.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

## 5.14.4 Other Utilities

### 5.14.4.1 ENVIRONMENTAL SETTING

#### Regulatory Background

##### *California Energy Commission*

The CEC was created in 1974 as the state's principal energy planning organization in order to meet the energy challenges facing the state in response to the 1973 oil embargo. The CEC is charged with six basic responsibilities when designing state energy policy:

## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEM

- Forecast statewide electricity needs.
- License power plants to meet those needs.
- Promote energy conservation and efficiency measures.
- Develop renewable energy resources and alternative energy technologies.
- Promote research, development and demonstration.
- Plan for and direct the state's response to energy emergencies.

### ***Title 24, California Code of Regulations, Part 6: Energy Efficiency Standards for Buildings***

Title 24 was first established in 1978 in response to a legislative mandate to reduce California's energy consumption. Since that time, Title 24 has been updated periodically to allow for consideration and possible incorporation of new energy-efficiency technologies and methods.

All new construction in California is subject to the energy conservation standards in Title 24, Part 6, Article 2 of the California Administrative Code. These are prescriptive standards that establish maximum energy consumption levels for the heating and cooling of new buildings. The use of alternative energy applications in development projects, while encouraged, is not required as a development condition. Such applications may include installation of photovoltaic solar panels, active solar water heating systems, or integrated pool deck water heating systems, all of which serve to displace consumption of conventional energy sources. Incentives are primarily state and federal tax credits, as well as reduced energy bills.

### ***Title 20, California Code of Regulations, Sections 1601 et seq.: Appliance Efficiency Regulations***

The 2012 Appliance Efficiency Regulations took effect on February 13, 2013. The regulations include standards for both federally and nonfederally regulated appliances.

### ***Electric Utility Industry Restructuring Act: Assembly Bill 1890 (1996)***

The California Public Utilities Commission regulates investor-owned electric power and natural gas utility companies in the State of California. AB 1890, enacted in 1996, deregulated the power generation industry, allowing customers to purchase electricity on the open market. Under deregulation, the production and distribution of power that were under the control of investor-owned utilities (e.g., Southern California Edison) were decoupled.

## Existing Conditions

### *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 and over 300,000 businesses. The project site is currently connected to the SCE power grid. Based on the air quality modeling prepared for the project, the OCMA building is estimated to use approximately 400,834 kilowatt hours (kWh) per year.

## 5. Environmental Analysis

### UTILITIES AND SERVICE SYSTEMS

#### *Natural Gas*

The Southern California Gas Company (SoCalGas) provides natural gas services to all of Newport Beach. The project site is currently connected to and served by SoCalGas. According to the air quality modeling prepared for the project, the existing OCMA building uses approximately 249,090 kBtus (thousand British thermal units) per year.

#### 5.14.4.2 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.

#### 5.14.4.3 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 5.14-4: Development of the proposed condominium tower would increase demand for electricity and natural gas services. [Threshold U-8]**

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**Impact Analysis:** Development of the proposed project would increase demand for electricity and natural gas services provided by SCE and SoCalGas.

#### **Electricity**

Based on the air quality modeling prepared for the proposed project, the Museum House project would require approximately 988,512 kWh per year. In comparison, the existing OCMA building requires approximately 400,834 kWh per year. The increased demand is expected to be adequately served by the existing SCE electrical facilities on the project site currently serving the OCMA building. 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 (CEC 2012). The increase in electricity demand from the proposed project would be 0.0008 percent of overall demand in SCE's service area. Therefore, projected electrical demand would not significantly impact SCE's level of service.

Prior to issuance of a building permit, the City of Newport Beach Public Utilities Department would review and verify that the project plans demonstrate compliance with the 2013 Building and Energy Efficiency Standards. The project would also be required adhere to the provisions of CALGreen, which establishes 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.



## 5. Environmental Analysis

### UTILITIES AND SERVICE SYSTEM

Furthermore, the proposed condominium tower is designed to be 10 to 15 percent more energy efficient than required under the California Energy Code (Title 24). Some design features include high efficiency wall assemblies and windows to reduce heating and cooling loads; Energy Star refrigerators, dishwashers, clothes washers, etc.; high efficiency heating and cooling systems; high efficiency domestic hot water systems; and high efficiency light-emitting diode (LED) lighting in residential units, common areas, and landscape design.

Overall, impacts to electricity services would be less than significant.

#### Natural Gas

The proposed project would generate a demand for 1,151,230 kBTU per year compared to 249,090 kBTU per year for the existing OCMA building. This is an increase in natural gas demand of approximately 902,140 kBTU per year.

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, 1,414,375 billion BTU per year, between 2015 and 2035 (CGEU 2014). Total natural gas consumption in SoCalGas's service area is forecast to be 2.647 bcfd (966,155 billion BTU per year) in 2035. Therefore, the natural gas demand from the proposed project would represent a nominal percentage of overall demand in SoCalGas' service area.

Additionally, the 2014 California Gas Report discussed that in 2013, single-family and multifamily average annual use per meter was 49.3 and 32.3 kBTU, respectively. Over the forecast period through 2035, the demand per customer is expected to decline at an annual rate of 1.3 percent due to conservation and the energy savings resulting from tightened building and appliance standards and energy efficiency programs and from demand reductions anticipated as a result of the deployment of the Advanced Meter Infrastructure (AMI) project in the Southern California area. With AMI, customers will have more timely information available about their daily and hourly gas use and are expected to use gas more efficiently.

Thus, SoCalGas facilities that currently provide natural gas to the OCMA building can also serve the proposed project. SoCalGas can provide additional connections if necessary once utility plans are finalized for the proposed project. Impacts to natural gas services would be less than significant.

#### 5.14.4.4 CUMULATIVE IMPACTS

The areas considered for cumulative impacts are the SCE and SoCalGas service areas for electricity and natural gas, respectively. Cumulative development projects listed in Table 4-1 would result in net increases in residential units and nonresidential square feet. However, future projects would be required to achieve more rigorous energy efficiency standards than existing developments in Newport Beach. Therefore, although residential and nonresidential development would increase, energy efficiency per residential unit or nonresidential square foot is expected to also increase compared to existing homes and buildings. SCE and SoCalGas both forecast adequate electricity and gas supplies through 2022 and 2035, respectively, to meet demands within their service areas (CEC 2012; CGEU 2014). Thus, cumulative development projects in addition to the proposed project would not result in significant cumulative impacts.

## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEMS

### 5.14.4.5 EXISTING REGULATIONS AND STANDARD CONDITIONS

#### Existing Regulations

##### *State*

- Title 24, California Code of Regulations, Part 6: Energy Efficiency Standards for Buildings
- Title 20, California Code of Regulations, Sections 1601 et seq.: Appliance Efficiency Regulations
- Electric Utility Industry Restructuring Act: Chapter 854, Statutes of 1996

#### City of Newport Beach Standard Conditions of Approval

There are no specific City-adopted standard operating conditions of approval related to natural gas and electricity services that are applicable to the proposed project at this time; however, project-specific conditions of approval may be applied to the project by the City during the discretionary approval (site development review, tentative tract map, etc.) subsequent design, and/or construction process.

### 5.14.4.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

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

### 5.14.4.7 MITIGATION MEASURES

No significant adverse impacts were identified and no mitigation measures are necessary

### 5.14.4.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

## 5.14.5 References

BonTerra Consulting. 2011, September 9. Draft Environmental Impact Report: Newport Banning Ranch Project, City of Newport Beach. State Clearinghouse No. 2009031061.

California Energy Commission (CEC). 2012, June. California Energy Demand 2012-2022 Final Forecast, Volume 2: Electricity Demand by Utility Planning Area.  
<http://www.energy.ca.gov/2012publications/CEC-200-2012-001/CEC-200-2012-001-CMF-V2.pdf>.

California Gas and Electric Utilities (CGEU). 2014. 2014 California Gas Report.  
<https://www.socalgas.com/regulatory/documents/cgr/2014-cgr.pdf>.

California, State of. 2014, January 17. Governor Brown Declares Drought State of Emergency.  
<http://gov.ca.gov/news.php?id=18368>.

Fusco Engineering, Inc. 2016a, July. Sewer Analysis Report for OCMA Museum House.

## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEM

———. 2016b, May. Water Demand Report for OCMA Museum House.

Hadden, Kevin (principal staff analyst) and Daisy Covarrubias (senior staff analyst). 2016, February 29. Questionnaire Response. Orange County Sanitation District.

Irvine Ranch Water District (IRWD). 2003. Water Resources Master Plan.

Murdoch, George (municipal operations director). 2016, March 3. Questionnaire Response. City of Newport Beach Municipal Operations Department.

Newport Beach, City of. 2016, June. City of Newport Beach 2015 Urban Water Management Plan. Prepared by Arcadis U.S. Inc.

———. 2010, August. City of Newport Beach Sewer Master Plan. Prepared by AKM Consulting Engineers.

State Water Resources Control Board (SWRCB). 2016, April 21. March 2016 Supplier Conservation Compliance.

[http://www.waterboards.ca.gov/water\\_issues/programs/conservation\\_portal/docs/2016may/suppliercompliance\\_050316.pdf](http://www.waterboards.ca.gov/water_issues/programs/conservation_portal/docs/2016may/suppliercompliance_050316.pdf).

## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEMS

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