3.14.4 WASTEWATER

INTRODUCTION

This section of the Draft EIR describes the wastewater disposal conditions in the area surrounding the project site. The analysis focuses on potential impacts to wastewater disposal service. Potentially significant impacts are quantified and mitigation measures are identified to address these impacts, as necessary. All technical studies related to the discussion and analysis in this section are incorporated herein by this reference, and included in **Appendix 3.14.4.**

ENVIRONMENTAL SETTING

The City of Malibu (City) currently does not maintain a publicly owned and operated sewer system. As a result, residents, businesses and public facilities in the City are required to provide their own on-site wastewater treatment systems (OWTS), commonly known as septic systems, to dispose of wastewater (i.e., percolation through leach lines or dry wells). The project site is currently undeveloped, does not generate any wastewater, and is not served by an OWTS.

The water quality of watersheds and their receiving water bodies can be affected by the discharge of wastewater. The Malibu Creek Watershed has been the subject of numerous recent analyses pertaining to water quality. In particular, permitting decisions and water quality studies have focused on bacterial contamination and nutrient loading to the watershed and, more specifically, to Malibu Creek and Malibu Lagoon, which is situated near Surfrider Beach at the southeastern corner of Malibu Valley. The US Environmental Protection Agency (US EPA) and the Los Angeles Regional Water Quality Control Board (RWQCB) have taken significant strides to ensure the protection of the watershed from non-point source pollution. Previous studies conducted in the Civic Center area have indicated that pathogens and nitrogen in wastewater released from OWTS, which represent a category of potential non-point source pollution, may have impaired underlying groundwater within the Malibu Creek Watershed and the Malibu Valley Groundwater Basin.[1]

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1 California Regional Water Quality Control Board, Los Angeles Region, **Final Technical Staff Report**, Evidence in support of an Amendment to the *Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* to Prohibit On-site Wastewater Disposal Systems in the Malibu Civic Center Area, Technical Memorandum #3: Pathogens in Wastewaters that are in Hydraulic Connection with Beaches Represent a Source of Impairment for Water Contact Recreation, November 5, 2009, website: http://www.waterboards.ca.gov/rwqcb4/press_room/announcements/Public-Hearing-Malibu/Malibu_Final_Resolution_Docs/9.%20TM3.pdf, accessed July 2014.

In response to the findings of these studies, an amendment to the RWQCB's "Water Quality Control Plan for the Coastal Watersheds of Ventura and Los Angeles Counties," also known as the Basin Plan,[2] went into effect on December 23, 2010, for the Malibu Civic Center Area. The amendment (Resolution No. R4-2009-007) was adopted by the RWQCB and ratified by the State Water Resources Control Board (SWRCB) (Resolution No. 2010-0045) to institute a prohibition on new and existing discharges from OWTS in the Malibu Civic Center Area (Prohibition). The Prohibition applies to the "Malibu Civic Center Area," defined as portions of the lower Winter Canyon watershed, Malibu Valley watershed and adjacent coastal strips between and including Amarillo Beach and Surfrider Beach, and also known as the Prohibition Zone (**refer to Figure 3.14.4-1, Prohibition Zone**). The Prohibition calls for discharges from OWTS in the commercial core of the Civic Center area (Area) to cease by November 2015, and for residential properties in the Area to cease discharge by November 2019.

To address the Prohibition, the City entered into a memorandum of understanding (MOU) with the RWQCB and SWRCB to develop a wastewater treatment plant to handle existing and potential future wastewater treatment needs in the Prohibition Zone. The MOU directs the City to design and construct a centralized wastewater treatment facility and to fund it by way of an assessment district. The MOU states that the facility may utilize deep well injection without the use of reverse osmosis, and sets forth a specific schedule and phasing map for properties to cease discharge (i.e., stop the use of OWTSs) and to connect to the new Civic Center Water Treatment Facility (CCWTF) as follows: Phase 1, for the Civic Center Area commercial-core, by November 2015; and Phase 2, the remaining commercial, institutional, residential and multi-family properties in the Area, by November 2019.[3] A third phase of properties may have to cease discharge at a later date, depending on the water quality monitoring results from instituting the first two phases as prescribed in the MOU.

The CCWTF central plant would be located at 24000 Civic Center Way, on a 4.8-acre site bounded by Civic Center Way to the north and the Pacific Coast Highway (PCH) to the south, across the street from Vista Pacifica Drive. At full buildout (i.e., all phases of the Prohibition), the CCWTF would include construction of the centralized wastewater treatment plant, six pump stations, approximately 13.3 miles of pipeline for collection of wastewater and distribution of treated effluent (recycled water) for reuse and/or disposal, disposal facilities such as injection wells and percolation ponds, and associated ancillary facilities. The completed CCWTF is projected to have a treatment capacity of 507,000 gallons per day and the service area would match the boundaries of the Prohibition Zone.

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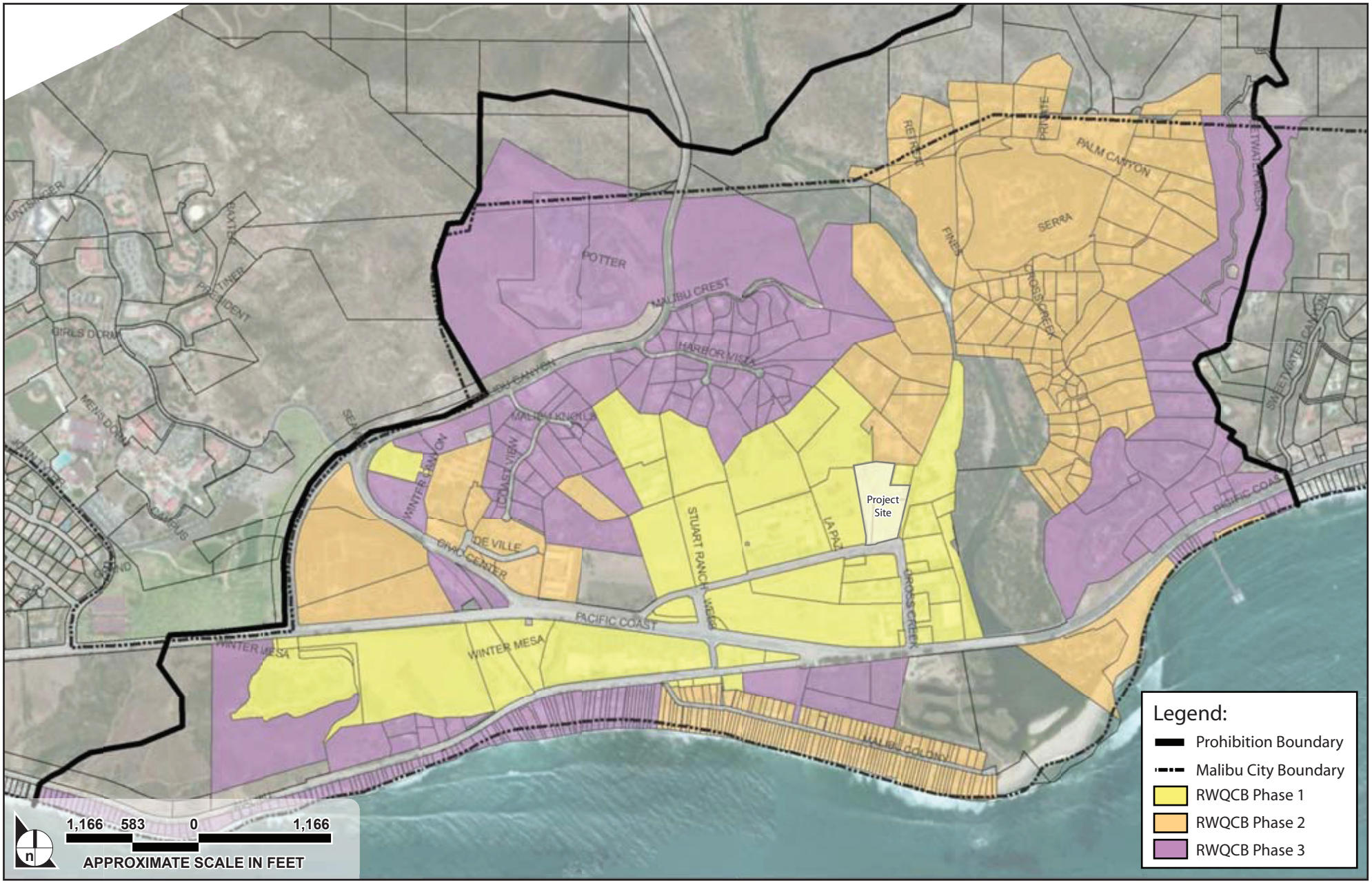
2 Los Angeles Regional Water Quality Control Board, *Water Quality Control Plan*, 1994.

3 Phase 1 of the wastewater treatment facility infrastructure associated with raw wastewater collection and recycled water distribution would be constructed beginning around October 2015 with completion anticipated in April 2017. The MOU was amended in December 2014 to allow properties in Phase 1 of the Prohibition Area (primarily the commercial core of the Civic Center) to connect by June 2017 and Phase 2 (primarily residential properties) to connect by November 2022.



SOURCE: City of Malibu, 2013

FIGURE **3.14.4-1**

Prohibition Zone

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Wastewater flow generation estimates were developed for each type of land use and were applied, by parcel, to develop the flow rates used in CCWTF project design and phasing. These flow rates were applied to each parcel in the Prohibition Zone to arrive at the estimated buildout average dry weather flow (ADWF) for the entire Prohibition Zone. Based on existing wastewater flow rates, winter water use records, and projections of infill development, CCWTF buildout flows for each phase would be subdivided as follows:[4]

- **Phase 1 (2017), Civic Center Area:** 191,000 gallons per day (gpd)
- **Phase 2 (2022):** 17,000 gpd
- **Potential Phase 3 (to be determined):** 146,000 gpd

The pipeline system would include both a *collection* system to convey wastewater flows from within the Prohibition Zone to the CCWTF, and a *distribution* system to distribute the treated effluent (recycled water) from the CCWTF to various land uses for reuse purposes, such as landscape irrigation, as well as to groundwater injection wells or other disposal sites, such as percolation ponds. The pipelines would be installed underground and would generally run beneath public rights-of-way or within easements. Easements would need to be acquired where facilities would occur on private lands. For Phase 1, both the collection and distribution systems would follow along existing street alignments, including Civic Center Way, Stuart Ranch Road, Cross Creek Road, Webb Way, Malibu Road, and a small portion of PCH, refer to **Figure 3.14.4-2, Civic Center Water Treatment Facility Phasing and Pipeline Map**. The collection and distribution pipeline systems are expected to be placed in the same trench along the same pipeline alignment, except where a distribution line may have to run independently in order to reach a potential recycled water use site. Pump stations would be located along the pipelines, mostly below ground. For Phase 1, the pump stations would be located at Legacy Park and Bluffs Park, and for future phases, they would be located in public rights-of-way and/or easements. The aboveground portions for each of the Phase 1 pump stations at Legacy Park and Bluffs Park would include equipment such as a generator, transformer, electrical panel, and switchboard meter. None of the equipment is expected to exceed 8.5 feet in height. The only above-ground features of the collection and distribution infrastructure would be air release valves along pipelines at high or low elevation points (+/- 3 feet tall and 18 inches in diameter), vent pipes at the pump stations, and backup generators, transformers, switchboards/meters and electrical panels, which would be fenced and screened for security and aesthetic reasons.

Pursuant to the California Environmental Quality Act (CEQA), the City has prepared an Environmental Impact Report (EIR) for all phases of implementation of the CCWTF, which was certified by the City on

4 RMC Water and Environment: *Preliminary Design Concept Report for Malibu Wastewater System*, February 10, 2014.

January 12, 2015. Further information regarding the MOU, construction phasing of the CCWTF Project and CEQA review can be found on the City's website page for the Civic Center Wastewater Treatment Facility Project at: http://www.malibucity.org/index.aspx?NID=602.

REGULATORY FRAMEWORK

State Regulations

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) established the principal state program for water quality control.[5] The Porter-Cologne Act also authorized the State Water Resources Control Board (SWRCB) to implement the provisions of the federal Clean Water Act (CWA). The Porter-Cologne Act divided the state into nine RWQCB areas. Each RWQCB implements and enforces provisions of the Porter-Cologne Act and the CWA subject to policy guidance and review by the SWRCB. The Porter-Cologne Act requires each RWQCB to develop a Basin Plan for all areas within its region. The Basin Plan is the basis for each RWQCB's regulatory programs.

Regional and Local Regulations

Water Quality Control Plan, Los Angeles Region

As previously discussed, the project site is located within the Los Angeles Region, which is governed by the Los Angeles RWQCB, also known as Region 4. The Los Angeles RWQCB has jurisdiction over the majority of the Ventura and Los Angeles Counties. The Los Angeles RWQCB has adopted a Basin Plan in accordance with criteria contained in the CWA, the Porter-Cologne Act, and other pertinent state and federal rules and regulations. The intent of the Basin Plan is to provide definitive guidelines and give direction to the scope of RWQCB activities that will optimize the beneficial uses of the state waters within the Los Angeles Basin by preserving and protecting the quality of these waters. The intended beneficial use of water determines the water quality objectives. For example, drinking water must be of higher quality than the water used to irrigate pastures. Both of these are beneficial water uses, but the quality requirements for irrigation water are different from those for drinking water.

5 California Water Code, Sections 13000 et seq., Porter-Cologne Act.

SOURCE: City of Malibu, 2013

FIGURE **3.14.4-2**

Civic Center Water Treatment Facility Phasing and Pipeline Map

The RWQCB implements the Basin Plan by issuing and enforcing waste discharge requirements for appropriate persons and groups; these can include individuals, communities, or businesses whose waste discharges may affect water quality. These requirements can be either State Waste Discharge Requirements for discharge to land, or federally delegated permits for discharges to surface water. Dischargers are required to meet water quality objectives and thus protect beneficial uses. For further discussion regarding stormwater discharge and water quality, refer to **Section 3.8, Hydrology and Water Quality**.

City of Malibu Local Coastal Program

The City lies entirely within with the California Coastal Zone, as defined by the California Coastal Act. The California Coastal Act requires that its goals and policies be implemented by local governments through the Local Coastal Program (LCP). The Malibu LCP consists of two subparts, the Land Use Plan (LUP) and the Local Implementation Plan (LIP).

LCP Land Use Plan (LUP)

The LUP has specific wastewater services policies. These are listed below.

LUP Policy 3.78 New development shall prevent or reduce nonpoint-source pollution in the near-shore environment through implementation of the nonpoint-source pollution and private sewage disposal system policies.

LUP Policy 4.11 New development involving a structure dependent on a wastewater disposal system shall utilize secondary treatment, at a minimum, and evapotranspiration waste disposal systems or other innovative measures, where feasible.

LUP Policy 5.48 A water conservation and wastewater recycling program should be developed in coordination with Los Angeles County and the applicable water purveyors for respective water service areas.

LUP Policy 5.49 All new development shall comply with the City's water conservation and wastewater regulation.

LCP Local Implementation Plan (LIP)

LIP Section 18.10, Water Systems/Wastewater Management, contains guidelines about expansion of water and wastewater systems of the City. The section emphasizes that the expansion of existing community sewer facilities (package wastewater treatment plants, dedicated sewer service systems, existing trunk

lines, etc.) in existing developed areas shall be limited in capacity to the maximum level of development allowed by the LCP. According to the section, a public sewer system may be designed and proposed where it is found to be the least environmentally damaging wastewater treatment alternative, where it is designed to serve a capacity of development that does not exceed the amount allowed by the LCP, and where it is found to be consistent with all other policies of the LCP.

City of Malibu Ordinance 377 – Uniform Plumbing Code

The City of Malibu has adopted the California Plumbing Code, 2013 Edition (Part 5 of Title 24 of the California Code of Regulations), which constitutes the City of Malibu Uniform Plumbing Code (UPC). UPC Appendix H (Private Sewage Disposal Systems), Subsection H 1.11 states, "Commercial building and multiple family dwellings to be constructed, or remodeled, after the effective date of this section shall have an on-site wastewater treatment system which provides tertiary sewage effluent treatment as defined by the Building Official, prior to final sewage effluent disposal, unless otherwise approved by the Building Official. However, as the proposed project would be connecting to the new Civic Center Wastewater Treatment Facility, no OWTS is included as part of the proposed project, as such, it will not be subject to this Ordinance.

PROPOSED PROJECT IMPROVEMENTS

The Whole Foods and the Park Shopping Center project (proposed project) consisting of a new 38,425 square foot (sf) neighborhood shopping center in the Civic Center Area designed to be anchored by a Whole Foods Market (24,549 sf) and four smaller commercial buildings (3,015 sf, 3,086 sf, 3,592 sf, and 4,183 sf, respectively). The buildings would have pitched roofs up to 28 feet in height and surround a central parking area, with walkways, landscaping and outdoor amenities integrated throughout. The proposed project is intended provide a variety of community and visitor-serving goods and services, including restaurant uses and additional space designed for outdoor dining. Primary vehicle access would be provided from a driveway on Civic Center Way that would be designed to align with the driveway serving the existing commercial office complex across the street. Secondary access would be provided by a driveway on Cross Creek Road, a private street.

Outdoor areas would incorporate storm water management features such as biofiltration. For further discussion regarding stormwater discharge and water quality, refer to **Section 3.8, Hydrology and Water Quality**.

For wastewater disposal, the project proposes to connect to the future CCWTF system via points of connection to the projected Phase 1 pipelines in either Civic Center Way or Cross Creek Road. No OWTS is included as part of the proposed project design.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

The *State CEQA Guidelines* (Appendix G) identifies applicable criteria for determining whether a project's impacts are considered to have a significant effect on the environment. A project is considered to create a significant impact if it would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.
- Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Impact Analysis

Threshold 3.14.4.1 Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

As discussed above, the proposed project would connect to the new CCWTF, which under the conditions of the MOU will be designed to meet the requirements of the RWQCB and the SWRCB. The proposed project has been included in the capacity calculations for the CCWTF and therefore would not exceed any necessary treatment requirements. Therefore, impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

Residual Impacts

Impacts would be less than significant.

Threshold 3.14.4.2 Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Based on the Water Reuse Analysis Report produced by EPD Consultants, Inc., dated September 2, 2011, prepared for the proposed project, wastewater discharge from the proposed project would be approximately 9,340 gallons per day, as shown in **Table 3.14.4-1**:

Table 3.14.4-1
Whole Foods in the Park Shopping Center Project – Projected Wastewater Generation

Land Use	Size	Generation Rate (gallons per day)	Wastewater Generation (Gallons per day)
Whole Foods Market	24,549 sf	0.20 gpd/sf	4,910 gpd
Building 1			
Fine-Dining Restaurant 1	54 seats	30 gpd/seat	1,620 gpd
Carry-out Restaurant 1	515 sf	40 gpd/sf	206 gpd
	5 employees	10 gpd/employee	50 gpd
	Grease Flow	(flat rate[a])	103 gpd
Subtotal Building 1			**1,979 gpd**
Building 2			
Retail 1	1,100 sf	0.08 gpd/sf	88 gpd
Fine Dining Restaurant 2	35 seats	30 gpd/seat	1,050 gpd
Carry Out Restaurant 2	500 sf	40 gpd/sf	200 gpd
	5 employees	10 gpd/employee	50 gpd
	Grease Flow	(flat rate[a])	100 gpd
Carry Out Restaurant 3	485 sf	40 gpd/sf	194 gpd
	5 employees	10 gpd/employee	50 gpd
	Grease Flow	(flat rate[a])	97 gpd
Subtotal Building 2			**1,829 gpd**
Building 3			
Retail 2	3,592 sf	0.08 gpd/sf	287 gpd
Building 4			
Retail 3	4,183 sf	0.08 gpd/sf	335 gpd
TOTAL PROJECT WASTE GENERATION			**9,340 gpd**

gpd = gallons per day; sf = square feet
[a] – engineers estimate
Source: EPD Consultants, Inc. Wastewater Average Flow Estimate, September 2, 2011

These projected wastewater flows have all been factored into the design capacity of Phase 1 of the new CCWTF. As described above, wastewater flow generation estimates for the CCWTF were developed for each type of land use within the Prohibition Area including the Civic Center Area and specifically the proposed project. These generation estimates were applied, by parcel, to develop the flow rates used in CCWTF project design and phasing. These flow rates were applied to each parcel in the Prohibition Zone to arrive at the estimated buildout average dry weather flow for the entire Prohibition Zone. Thus the proposed project would not require or result in the construction of new wastewater treatment facilities or expansion of existing facilities. Impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

Residual Impacts

Impacts would be less than significant.

Threshold 3.14.4.3 **Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.**

As discussed in **Threshold 3.14.4.**2, above, wastewater flows from the proposed project have all been factored into the design capacity of Phase 1 of the new CCWTF; thus the proposed project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand. Impacts will be less than significant.

Mitigation Measures

No mitigation measures are required.

Residual Impacts

Impacts would be less than significant.

Cumulative Impacts

The completed CCWTF is expected to have a treatment capacity of 507,000 gpd and the service area would match the boundaries of the Prohibition Zone. The currently projected wastewater flow generation estimates aggregated from each parcel in the Prohibition Zone following Phase 3 build out would be approximately 354,000 gpd.[6] Therefore excess capacity, beyond Phase 3 buildout in the Prohibition Zone, would exist in the CCWTF, thus the sewer system could accommodate all projected wastewater flow from the Area's proposed projects.

6 RMC Water and Environment: *Preliminary Design Concept Report for Malibu Wastewater System*, February 10, 2014.

Furthermore, each future project would be required to provide adequate capacity to convey sewage to a safe point of discharge and pay fees to connect to the sewage system. In this manner, the existing sewage collection and conveyance system would be upgraded to accommodate sewage created by the development of future projects. Therefore, cumulative impacts would be less than significant and the proposed project's contribution would not be cumulatively considerable.

Mitigation Measures

No mitigation measures are required.

Residual Impacts

Impacts would be less than significant.