4.11 UTILITIES AND SERVICE SYSTEMS

This section analyzes the proposed project's potential impacts to the City's wastewater conveyance infrastructure system. Storm drain infrastructure issues are discussed in Section 4.8, *Hydrology and Water Quality*.

4.11.1 Setting

a. Project Area Setting. The City of Rancho Palos Verdes sanitary sewer services are provided by the County Sanitation Districts of Los Angeles County. Due to landslide hazards in the Portuguese Bend area of the Palos Verdes Peninsula, which were exacerbated by leachate that drains underground from residential septic systems, the Abalone Cove Landslide Abatement District was established in 1980, with the City's Redevelopment Agency responsible for, among other things, the funding and installation of a sanitary sewer system to serve this area. To help stabilize this landslide area the Abalone Cove Sewer System was installed in 2001 pursuant to applicable code regulations at the time. The Abalone Cove Sewer Conveyance System is the only system in the City that is owned, operated and maintained by the City, with the remainder of the City continuing to be served by the County Sanitation Districts of Los Angeles County (CSDLAC). The City collects fees from property owners through the Abalone Cove Sewer Fee for the operation, maintenance and improvements to the system. The owner of any new lots that connect to the existing system would be required to pay fees if not already doing so.

The Abalone Cove Sewer System consists of 44 grinder pumps, 130 manholes, one diversion structure, approximately 19,000 linear feet of gravity pipeline, 19,615 feet of low pressure pipeline, 2,505 linear feet of force main, and four lift stations. Wastewater from the Abalone Cove Sewer System is conveyed to a pump station, where it is connected to a trunk sewer network maintained by the CSDLAC. The flow would enter the Districts' Joint Outfall J Unit IG Trunk Sewer, located in Palos Verdes Drive South just west of Seacove Drive. This 21-inch diameter trunk sewer has a design capacity of 4.5 million gallons per day (mgd) and conveyed a peak flow of 2.5 mgd when last measured in 2010. Wastewater is conveyed via this trunk sewer network to the CSDLAC Joint Water Pollution Control Plant (JWPCP) located in the City of Carson. The JWPCP has a capacity of 400 million gallons per day and currently average daily flows are approximately 257 million gallons per day (JWPCP 2017 Annual Performance Data).

The City's Public Works Department reports two overflows in the system since its installation and the replacement of ten grinder pumps since July of 2017. The Public Works Department reports that the replacement of grinder pumps is a result of foreign objects making their way into the system and stopping the pumps. The Public Works Department reports that it is the City's work practice to remove and replace failed grinder pumps as soon as possible.

Currently 69 project area lots are developed with single family residences (115 system wide), owners of 11 lots in the project area have obtained planning entitlements for development via Exception "P", and 31 lots are undeveloped with no entitlements. Only 69 of the 111 lots in the project area are currently connected to the Abalone Cove sewer wastewater conveyance system. The remaining 31 undeveloped lots and 11 lots with planning entitlements are in the service

area, but are not connected to the conveyance system. As shown below in Table 4.11-1, the 69 existing single family residences generate approximately 17,940 gallons of wastewater per day. The Abalone Cove Sewer System Management Plan (SSMP - John L. Hunter and Associates, Inc. 2015) indicates that the current rate structure in place in the Abalone Cove area is sufficient to fund the maintenance of the current system and that the existing grinder pumps and low pressure main connections are adequate for current flow scenarios. The Abalone Cove Sewer Capacity Report (City of Rancho Palos Verdes 2019 – see Appendix H) indicates that the capacities of all components of the Abalone Cove sewer system are adequate for projected flows in the area.

Table 4.11-1
Current Wastewater Generation

Land Use	Water Use Factor ERU[1] (GDP[2])	Wastewater (GPD)
69 Single Family Residences	260/dwelling	17,940
Total Wastewater Generation		**17,940**

Source: City of Rancho Palos Verdes, Annual Report – Abalone Cove Sewer Maintenance Fee – FY 2014-15.
[1]ERU = Equivalent Residential Unit
[2]GPD = gallons per day

Wastewater Regulatory Setting. The City's sewer system is subject to Section 201 of the Federal Clean Water Act (CWA). According to the CWA, the City must adopt a facilities plan in accordance with the United States Environmental Protection Agency (USEPA) Rules and Regulations, 40 CFR, Section 35.917. Section 201 specifies the following:

> *Facilities planning will demonstrate the need for facilities and, by a systematic evaluation of feasible alternatives, will also demonstrate that the proposed measures represent the most cost-effective means of meeting established effluent and water quality goals while recognizing environmental and social considerations.*

The City commissioned the Abalone Cove Sewer System Management Plan (SSMP) in 2015 to comply with the Regional Water Quality Board requirements. The SSMP includes capacity analysis, maintenance schedules, and capital improvement plans.

Conveyance. The Los Angeles Regional Water Quality Control Board (LARWQCB) enforces Section 122.41(m) of part 40 of the Code of Federal Regulations (CFR), which prohibits the bypassing of water treatment facilities and sanitary sewer overflows.

In addition to the LARWQCB, the sewer conveyance system is subject to regulation by the South Coast Air Quality Management District, which responds to claims regarding odors.

4.11.2 Impact Analysis

a. Methodology and Significance Thresholds. Based on Appendix G of the *CEQA Guidelines*, the proposed project could have a potentially significant impact to utilities and service systems if it were to:

- *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board*
- *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*
- *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*
- *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed*
- *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*
- *Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs*
- *Comply with federal, state, and local statutes and regulations related to solid waste*

As discussed in the Initial Study (Appendix A), the project would not result in significant impacts related to water supply, landfill capacity or solid waste regulations (the fourth, sixth and seventh bullets above). As noted above, impacts related to drainage facilities are discussed in Section 4.8, *Hydrology and Water Quality*. Therefore, the following discussion focuses on wastewater facilities and infrastructure.

The environmental impacts of the proposed project with respect to wastewater are determined based on the potential increase in wastewater generation from buildout under the proposed ordinance revisions and the capacity of existing and proposed wastewater treatment facility and infrastructure. The existing sewer capacity and wastewater generation is compared to the proposed project's potential wastewater generation, including improvements associated with the on-site development. Wastewater generation is estimated based on water demand rates from the City of Rancho Palos Verdes Annual Report – Abalone Cove Sewer Maintenance Fee – FY 2014-15.

b. Project Impacts and Mitigation Measures.

Impact U-1 Wastewater conveyance and treatment systems are adequate to serve new residences that could be built in the project area. However, the 31 individual new residences that could be constructed under the proposed ordinance revisions would require the extension of wastewater conveyance facilities. This impact would be Class II, *less than significant with mitigation incorporated*.

As previously discussed, wastewater from the Abalone Cove Sewer System is conveyed via a trunk sewer network to the CSDLAC Joint Water Pollution Control Plant (JWPCP) located in the City of Carson. This wastewater treatment plant provides both primary and secondary treatment for approximately 3.5 million people throughout Los Angeles County. The JWPCP has a capacity of 400 million gallons per day and currently average daily flows are approximately 257 million gallons per day (JWPCP 2017 Plant Performance Data). Thus, the

plant has a remaining daily capacity of approximately 143 million gallons per day. As shown below in Table 4.11-2, full buildout under the proposed ordinance revisions would generate approximately 8,060 gallons of wastewater per day. This increase would be well within the existing unused capacity of the JWPCP.

Table 4.11-2
Wastewater Treatment

Current Wastewater Treatment	Proposed Project Wastewater Generation	Increased Wastewater Treatment %
257,000,000 GPD[1]	8,060 GPD	0.00003%

Source: Sanitation Districts of Los Angeles County, 2017.
[1]GPD = gallons per day

In May 2006, the State Water Resources Control Board adopted Statewide General Waste Discharge Requirements (GWDR) for publicly owned sanitary sewer systems. The GWDR requires that agencies that own or operate a sanitary sewer system comprised of one mile or more to develop and implement a Sewer System Management Plan (SSMP) that documents a comprehensive program for sewer system operation, maintenance and repair. In compliance with this requirement, the City of Rancho Palos Verdes Public Works Department prepared the City of Rancho Palos Verdes SSMP, which was adopted in 2009. The City has an SSMP for the Abalone Cove sewer system, which is updated every five years and was updated in 2015 and amended in 2018. As noted in the Setting, hydraulic modeling conducted as part of the SSMP identified potential capacity-related deficiencies. However, the 2019 Abalone Cove Sewer Capacity Report indicates that the capacities of all components of the Abalone Cove sewer system are adequate for projected flows in the area. The design, approval and construction of individual connections to the sewer system would occur at such time as the 31 undeveloped lots are developed. As proposals for development of the 31 lots are submitted to the City for approval, each developer would be required to comply with the City requirements to provide adequate sewer connections for each new residence. Adherence to City requirements and mitigation measures U-1(a) and U-1(b) would reduce impacts related to wastewater conveyance to a less than significant level.

Mitigation Measures. The following measures would ensure that impacts related to the need for individual sewer connections would be less than significant.

U-1(a) **Participation in Geotechnical Hazard Abatement**. Future project area applicants shall participate in existing or future geological and geotechnical hazard abatement requirements of the City, including but not limited to any easement required by the City to mitigate landslide conditions and the items listed in Measures GEO-3(a) and GEO-3(b) in Section 4.5, *Geology*. Compliance with such measures shall be verified by the Director of Community Development or his/her designee, prior to the issuance of any grading or building permit.

U-1(b) **Review and, as Necessary, Upgrade of Project Area Sewer System**. The City shall update the Abalone Cove Sewer Capacity

> Report biennially~~biannually~~. If deficiencies in the project area sewer system are identified as part of the biennial~~biannual~~ update, such deficiencies shall be corrected to the satisfaction of the City prior to or in conjunction with any future project area development that would add to or be affected by such deficiencies.

Significance After Mitigation. Project area development impacts to the wastewater conveyance infrastructure would be less than significant with implementation of the above mitigation measures, which would ensure that necessary system improvements are implemented.

c. Cumulative Impacts. Cumulative projects in and around Rancho Palos Verdes, as listed in Table 3-1 in Section 3.0, *Environmental Setting*, would incrementally increase wastewater generation in the City of Rancho Palos Verdes, but the increase is not expected to exceed wastewater treatment capacity. The proposed development would incrementally contribute to the cumulative increase in wastewater generation, but as discussed under Impact U-1 would not adversely affect wastewater treatment capabilities. All new development would be subject to existing regulations relative to wastewater generation and impacts associated with individual developments would be addressed on a case-by-case basis as needed. With implementation of the project-specific mitigation measures listed above the project's contribution to wastewater impacts would not be cumulatively considerable.

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