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 4.6, *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 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. 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 the property owners through the Abalone Cover Sewer Fee for the operation, maintenance and improvements to the system. 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. 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 380 million gallons per day (Ken Rademacher, JWPCP Plant Manager, pers. comm. 5/6/11).

The Abalone Cove Sewer System was designed to serve the 111 single individual lots in the project area. Currently 64 lots are developed with single family residences, and 47 lots are undeveloped. Currently, only 64 of the 111 lots in the Abalone Cove Sewer System service area are connected to the sewer wastewater conveyance system. The remaining 47 undeveloped lots are within the service area but are not connected to the conveyance system. As shown below in Table 4.11-1, the 64 single family residences generate approximately 16,640 gallons of wastewater per day. As part of the update to the City's Sewer System Master Plan, it was indicated[1] that the Abalone Cove Sewer System has adequate capacity to serve the 47 undeveloped lots.

[1] City of Rancho Palos Verdes Public Works Department, *City of Rancho Palos Verdes Sewer System Master Plan*, 2009.

Table 4.11-1
Current Wastewater Generation

Land Use	Water Use Factor ERU[1] (GDP[2])	Wastewater (GPD)
64 Single Family Residences	260/dwelling	16,640
Total Wastewater Generation		**16,640**

Source: City of Rancho Palos Verdes, Annual Report – Abalone Cove Sewer Maintenance Fee – FY 2009-10
[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 prepared a Sewer System Master Plan (SSMP) in 2004, and was subsequently updated in 2009 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 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 CFR, 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.

Appendix G of the CEQA Guidelines. 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 result in one or more of the following:

- *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 will focus 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 onsite 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 2009-10.

b. Project Impacts and Mitigation Measures.

Impact U-1 Wastewater conveyance and treatment systems are adequate to serve the potential for up to 47 new residences to be built in the project area. However, 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, *significant but mitigable*.

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 380 million gallons per day (Ken Rademacher, JWPCP Plant Manager, pers. comm. 5/6/11). Thus the plant has a remaining daily capacity of approximately 120 million gallons per day. As shown below in Table 4.11-2, full buildout under the proposed ordinance revisions would generate approximately 12,220 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 %
300,000,000 GPD[1]	12,220 GPD	0.000047%

Source: Sanitation Districts of Los Angeles County, 2011
[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 Sewer System Master Plan, which was adopted in 2009.

The SSMP included an inventory and evaluation of the Abalone Cove Sewer System. The SSMP identified that the Abalone Cove Sewer System was designed to provide sanitary service to the 111 individual lots in the service area, 64 of which are developed with single family residences and 47 which are vacant (proposed project). The SSMP indicates that there is sufficient capacity in the in the Abalone Cove Sewer System to provide service for 111 lots[2], including the 47 undeveloped lots. Currently, the previously identified wastewater conveyance facilities provide service to the 64 developed lots but not to the 47 undeveloped lots. Without the extension of the Abalone Cover Sewer System conveyance infrastructure to the 47 undeveloped lots, the proposed project would have a potentially significant impact without mitigation. The design, approval and construction of such facilities would be dependent upon the timing of development of the 47 undeveloped lots. As proposals for development of the 47 are submitted to the City of approval, each developer would be required to comply with the City requirements to provide adequate connections for the onsite development. Adherence to City requirements and mitigation measures U-1 through U-5 would ensure impacts to wastewater conveyance would not be significant.

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

U-1 **Holding Tank System.** If the director of Public Works determines that the sanitary sewer system cannot accommodate a new connection at the time of building permit issuance, the project shall be connected to a City approved holding tank system until such time as the sanitary sewer system can accommodate the project. In such cases, once the sanitary sewer system becomes available to serve the project, as determined by the Director of Public Works, the holding tank system shall be removed, and the project shall be connected to the sanitary sewer system.

U-2 **Additional Plumbing**. If the project involves additional plumbing fixtures, or additions of habitable space which exceed 200 square feet, or

[2] City of Rancho Palos Verdes Public Works Department, *City of Rancho Palos Verdes Sewer System Master Plan*, *Appendix K*, 2009

could be used as a new bedroom, bathroom, laundry room or kitchen, and if the lot or parcel is not served by a sanitary sewer system, septic systems shall be replaced with approved holding tank systems in which to dispose of on-site waste water. The capacity of the required holding tank system shall be subject to the review and approval of the City's Building Official. For the purposes of this mitigation measure, the addition of a sink to an existing bathroom, kitchen or laundry room shall not be construed to be an additional plumbing fixture. For those projects which involve additions of less than 200 hundred square feet in total area and which are not to be used as a new bedroom, bathroom, laundry room or kitchen, the applicant shall submit for recordation a covenant specifically agreeing that the addition of the habitable space will not be used for those purposes. Such covenant shall be submitted to the Director for recordation prior to the issuance of a building permit. For lots or parcels which are to be served by a sanitary sewer system on or after July 6, 2000, additional plumbing fixtures may be permitted and the requirement for a holding tank may be waived, provided that the lot or parcel is to be connected to the sanitary sewer system. If a sanitary sewer system is approved and/or under construction but is not yet operational at the time that a project requiring a landslide moratorium exception permit is approved, the requirement for a holding tank may be waived, provided that the lot or parcel is required to be connected to the sanitary sewer system pursuant to Section 15.20.110 of the Rancho Palos Verdes Municipal Code, or by an agreement or condition of project approval.

U-3 **Participation in Future Sewer and/or Storm Drain Assessment District**. If the lot or parcel is not served by a sanitary sewer system, the applicant shall submit for recordation a covenant agreeing to support and participate in existing or future sewer and/or storm drain assessment districts and any other geological and geotechnical hazard abatement measures required by the City. Such covenant shall be submitted to the Director prior to the issuance of a building permit.

U-4 **Sewer and Storm Drain Easement**. If the lot or parcel is not served by a sanitary sewer system, the applicant shall submit for recordation a covenant agreeing to an irrevocable offer to dedicate to the City a sewer and storm drain easement on the subject property, as well as any other easement required by the City to mitigate landslide conditions. Such convenant shall be submitted to the Director prior to the issuance of a building permit.

U-5 **Inspection of Sewer Lateral**. If the lot or parcel is served by a sanitary sewer system, the sewer lateral that served the applicant's property shall be inspected to verifty that there are no cracks, breaks or leaks and, if such deficiencies are present, the sewer lateral shall be repaired or reconstructed to eliminate them, prior to the issuance of a building

permit for the project that is being approved pursuant to the issuance of a moratorium exception permit.

Significance After Mitigation. Onsite development impacts to the wastewater conveyance infrastructure would be less than significant with implementation of specified mitigation measures.

c. Cumulative Impacts. Cumulative projects in the Rancho Palos Verdes area, as listed in Table 3-1 in Section 3.0 *Environmental Setting*, would incrementally increase wastewater generation in the City of Rancho Palos Verdes. The proposed development would incrementally contribute to this cumulative effect. However, all new development would be subject to existing regulations to relative to wastewater generation. 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.