
IV. ENVIRONMENTAL IMPACT ANALYSIS

K. UTILITIES AND SERVICE SYSTEMS

INTRODUCTION

This section of the Draft Supplemental Environmental Impact Report (Draft SEIR) evaluates potential utilities and service systems impacts with respect to the proposed project and includes an evaluation of the existing services provided to the project site, future needs, and the potential impacts the proposed project would have on those services. The section describes impacts related to wastewater. Impacts related to water and solid waste were found to be less than significant and are described in the Initial Study (Appendix A).

WASTEWATER

METHODOLOGY

Potential project impacts on wastewater systems were evaluated based on the adequacy of existing and planned infrastructure and the capacity to meet the additional demand for wastewater services resulting from development of the proposed project. The following factors were taken into consideration in performing the impact analysis, whether the proposed project would require construction of new wastewater treatment facilities or expansion of existing facilities; whether the proposed project would require construction of new storm water drainage facilities or expansion of existing facilities; or whether the proposed project would result in a determination by the wastewater treatment provider that it does not have adequate capacity to serve the project. The responsible agencies were contacted regarding the potential impacts on their facilities. Response from utilities and service system agencies are included in Appendix C, Letters From Public Service and Utility Agencies, of this Draft SEIR. In addition, various utilities and service systems policies and guidelines as defined by the Town of Ross (Town) were also reviewed and considered during the project impact analysis.

ENVIRONMENTAL SETTING

Wastewater Treatment Facilities

The Central Marin Sanitation Agency (CMSA) treats wastewater from the central Marin County area, including the Ross Valley. The Agency owns and operates the wastewater treatment plant that provides advanced secondary treatment and disposes of the treated wastewater the central San Francisco Bay via a deep-water outfall pipeline. Wastewater is transported to the CMSA through two major pipelines from the City of San Rafael and the Ross Valley Sanitary District (RVSD). The CMSA wastewater treatment plant operates in accordance with its San

Francisco Bay Regional Water Quality Control Board discharge permit.

The CMSA plant has a permitted dry weather treatment capacity of ten million gallons per day (mgd), and flows averaging approximately seven mgd (“Average Dry Weather Flow”, ADWF). However, CMSA can process up to 30 mgd during dry weather.¹ The plant’s wet weather capacity is greater than 125 mgd. The average wet weather flow varies from the 70 – 80 mgd to near 115 mgd depending on the severity of the weather.² The agency utilizes development projections contained in the general plans of the cities, towns, and unincorporated areas of Marin County to plan for future growth-related demand. According to the Initial Study prepared for the Town of Ross General Plan 2007 – 2025, the facility most likely has sufficient capacity to accommodate build-out throughout the area served. In the unlikely event that significant land use changes occur, capacity at the existing plant could be increased through the permitting process with the Regional Water Quality Board (Town of Ross 2007a). The Initial Study prepared for the Ross General Plan also states that at some point in the future, the treatment facilities may need to be improved to reflect changes in treatment requirements or to support growth outside of Ross.

Wastewater Collection Facilities

The proposed project's sewer collection and transport system is served by Ross Valley Sanitary District (District) and falls under the District's jurisdiction. The District is bordered by San Rafael on the east, Woodacre and Marin County to the north and west, and Mill Valley and Corte Madera to the south. U.S. Highway 101 cuts through the southern corner of the District. The study area largely consists of single and multi-family residential development and commercial areas, primarily located along major roadways such as Sir Francis Drake Boulevard. Major features include the College of Marin, Marin General Hospital, the Larkspur Landing ferry terminal, and the San Quentin State Prison, which is located just east of the District's service area.

The terrain in the District generally slopes from northwest to southeast towards San Francisco Bay. San Anselmo Creek drains the northwest portion of the District and the Tamalpais and Larkspur Creeks drain the southern portion of the District. All three creeks drain into Corte Madera Creek and then into San Francisco Bay (District 2006).

The District has a contract with the Central Marin Sanitation Agency (CMSA) for wastewater treatment, where ultimately sewage flow transported by three member agencies (the District, Sanitary District No. 2 of Marin County (Corte Madera), and San Rafael Sanitation District) is sent to and treated by CMSA. The District owns, operates and maintains approximately 194

¹ *Phone conversation between Jason Dow, CMSA General Manager, and Tyler Barns of WRA. November 27, 2012.*

² *ibid.*

miles of collection sewer lines, seven miles of force mains, and 20 pumping stations which collect and transport an average of approximately five million gallons per day (MGD) of wastewater to Central Marin Sanitation Agency (CMSA) for treatment and disposal (District 2006, 2007). Almost 90 percent of the gravity system is comprised of 8-inch and smaller diameter sewers, primarily constructed of vitrified clay pipe (VCP). Although the exact age of most of the District's collection system is unknown, the majority of the pipes were installed before 1950, and some portions of the system are over 100 years old. According to the District, there is a 6-inch diameter VCP gravity sewer mainline that runs under Upper Road.³

In 2006 the District completed a capacity evaluation of their collection system, the System Hydraulic Analysis and Capacity Assurance Plan ("the SHECAP project"). The evaluation found that no capacity deficiencies were identified for dry weather conditions, but significant portions of the system were found to have inadequate capacity for wet weather flows. The model results indicate that the system would surcharge significantly under a design wet weather event and potentially result in overflows in many locations in the District if the sewer system remains in its current condition. The capacities of the pump stations and force mains were also analyzed under the design storm scenario. All of the pump stations except for Bon Air have sufficient capacity to handle the predicted 5-year design storm peak wet weather flows under normal pump operation. However, three of the pump stations (Bon Air, Larkspur Main, and Kentfield) may not have sufficient capacity to handle peak storm flow with the largest pump out of service. Based on results from the hydraulic analysis, SHECAP identified the need for 21 sewer improvement projects. Planned improvements to the collection system are described in the District's Sewer System Replacement Master Plan (District 2007).

Existing Sewer Fees and Connection Charges

In order to fund its wastewater collection and treatment services, the District currently charges a flat annual service fee of \$638 for residential developments.⁴ Sewer service fees appear on Marin County Property Tax Statements as one charge but the fee actually funds two separate and independent organizations: the District, which provides the collection system that delivers wastewater to the treatment plant, and the CMSA, which treats wastewater before pumping it into the San Francisco Bay. The residential rate, which is consistent through most of the Ross Valley, is a fixed fee regardless of the size of the home.⁵ In addition to these annual service charges, the proposed project must apply for and pay a one-time public sewer extension (PSX) application fee of five percent of the estimated cost of construction or five hundred dollars,

³ Letter response from Ross Valley Sanitary District's Engineer, Randell Y. Ishii. October 19, 2012.

⁴ Ross Valley Sanitation District, Rate Information, Effective January 1, 2009, Accessed at: <http://rvsd.org/customers/sewer-installations-and-extensions> on November 27, 2012.

⁵ Ibid.

whichever is greater.⁶ The analysis requested as part of the PSX permit application would determine the need, and size and extent of replacement. As stated in the District Sanitary Code and the District Standard Specifications and Drawings, the PSX Permit applicant is responsible to fund the improvements (including, but not limited to, the PSX Permit sewer mainline, the private sewer laterals, the asphalt pavement required by the Town/municipality, road encroachment permit, and erosion control measures included in possible California Department of Fish and Game Streambed Alteration Agreement, etc.).⁷

REGULATORY SETTING

Federal

United States Environmental Protection Agency (U.S. EPA)

Clean Water Act

The federal Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the U.S. The CWA made it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit was obtained under its provisions. The CWA assists in the development and implementation of waste treatment management plans and practices by requiring provisions for treatment of waste using best management practices (BMPs) technology before there is any discharge of pollutants into receiving waters, as well as the confined disposal of pollution, so that it will not migrate to cause water or other environmental pollution. Additionally, CWA funds the construction of sewage treatment plants under the construction grants program.

National Pollutant Discharge Elimination System

The Water Permits Division (WPD) within the U.S. EPA Office of Wastewater Management leads and manages the National Pollutant Discharge Elimination System (NPDES) permit program. As authorized by the CWA, the NPDES permit program controls water pollution by regulating point sources that discharge pollutants into waters of the U.S. The NPDES permit program oversees stormwater management and sewer and sanitary sewer overflows.

⁶ *Ross Valley Sanitation District. Procedures and Requirements for Public Sewer Extensions. Website http://rvsd.org/Portals/0/Documents/pdfs/Extension_Requirements_Procedures_Application.pdf. Accessed: November 27, 2012.*

⁷ *Letter response from Ross Valley Sanitary District's Engineer, Randell Y. Ishii. October 19, 2012.*

State*Porter-Cologne Water Quality Control Act*

In 1969, the California Legislature enacted the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) to preserve, enhance and restore the quality of the State's water resources. The Porter-Cologne Act established the State Water Resources Control Board (SWRCB) and the nine individual Regional Water Quality Control Boards (RWQCBs) as the principal state agencies with the responsibility for controlling water quality in California. Under the Porter-Cologne Act, water quality policy is established, water quality standards are enforced for both surface and groundwater, and the discharges of pollutants from point and non-point sources are regulated. The Porter-Cologne Act authorizes the SWRCB to establish water quality principles and guidelines for long-range resource planning, including groundwater and surface water management programs and control and use of recycled water.⁸

The Region 2 (San Francisco Bay) RWQCB office has jurisdiction over the portions of Marin County that drain to San Francisco Bay, which include Ross and Ross Creek. The RWQCB develops and enforces water quality objectives and implementation plans that safeguard the quality of water resources throughout the Bay Area. In accordance with Section 13263 of the California Water Code, RWQCBs are authorized to issue Waste Discharge Requirements (WDR), as well as periodically review self-monitoring reports submitted by the discharger, and perform independent compliance checking, and take enforcement action if necessary.

Local*Town of Ross General Plan*

The proposed project is subject to relevant goals, policies, and actions listed in the Town of Ross General Plan 2007-2025. Goals, policies, and actions related to wastewater are included below. For a discussion of project consistency with additional applicable land use policies please refer to Section IV.H Land Use and Planning, of this Draft SEIR.

Goal 8: A Beautiful, Safe and Close-Knit Community

Policy 8.2: Densities and Intensities of Land Uses. Define limits on densities of development as shown on the Land Use Plan. Development on any site shall conform to existing zoning and the following factors: site resources and constraints; potentially hazardous conditions; traffic and access; adequacy of

⁸ *United States Department of Energy, Porter-Cologne Water Quality Control Act, Accessed at: <http://www.etec.energy.gov/Regulation/Porter-Cologne-Water-Quality-Control-Act.htm> on April 22, 2008.*

infrastructure (water, sewer, etc.); design policies; development patterns of adjacent areas; and prevailing densities or intensities of adjacent areas.

Goal 9: Excellence of Community Stewardship

Policy 9.3: Water and Sewer Service. Coordinate with Marin Municipal Water District (MMWD) and Ross Valley Sanitary District (Sanitary District No. 1) in the provision of adequate water and sewer facilities to meet the current and future needs of the Town.

Ross Valley Sanitation District

In accordance with the Town of Ross General Plan Policy 9.3, the proposed project is subject to the regulations, policies, and sanitary codes of the Ross Valley Sanitation District. For example, the proposed project requires a public sewer extension permit and must comply with specific District regulations as outlined in their *Procedures and Requirements for Public Sewer Extensions* document.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

Based on the Appendix G, Environmental Checklist Form, of the State *CEQA Guidelines*, the project would have a significant impact on the environment related to wastewater if it would:

- (a) exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- (b) 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; or
- (c) result in a determination by the wastewater treatment provider that 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.

Utilities and Service Systems Issues not Further Analyzed

The following issues were addressed in the Initial Study (see Appendix A) and Section IV.A of this Draft SEIR and were determined to result in no impact or a less-than-significant impact and not warrant further analysis:

- Exceed Wastewater Treatment Requirements
- Have Sufficient Water Supplies Available to Serve the Project
- 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

Project Impacts and Mitigation Measures

Impact UTIL-1 Wastewater Collection Impacts

As discussed in the Initial Study (Population and Housing), Section IV.A (Impacts Found To Be Less Than Significant), and Section III (Project Description), of this Draft SEIR, the proposed project would only consist of approximately 9 to 15 residents. As such, the amount of wastewater generated at the project site would increase as a part of the proposed project.

The proposed project's sewer collection and transport system is served by the RVSD and falls under the District's jurisdiction. Upon build-out and occupancy of the proposed project, per the District's Standard Specifications and Drawings, the general default for the average daily domestic wastewater usage could be as much as 250 gallons per day (gpd) for each dwelling unit for dry weather.⁹ The District has a contract with CMSA for wastewater treatment, which ultimately the sewage flow transported by three member agencies (the District, Sanitary District No. 2 of Marin County (Corte Madera), and San Rafael Sanitation District) are sent to and treated by CMSA.

Water and sanitary sewer lines would be installed beneath the new road and driveways (Figure III-12). The sewer lines would connect with an existing 6-inch diameter VCP gravity sewer mainline beneath Upper Road. The Upper Road water main would be upsized from the entrance to 7 Upper Road to the project entrance. A new water main would extend up and along the new road with laterals serving each of the three residences.

Wastewater conveyance to the CMSA is regulated by the RVSD. Although the existing 6-inch VCP may be properly sized to accommodate future needs of the project, RVSD has indicated that the mainline system downstream to the trunkline may be required to be replaced to accommodate the increased flows. Upgrades to the mainline down to the trunkline would take place within areas either under or immediately adjacent to Upper Road that have previously been disturbed through roadway construction or utility work. Furthermore, any activities related to construction of a new mainline would be required to adhere to Best Management Practices (BMPs), NPDES permitting and other regulations controlling storm water runoff.

On March 19, 2013 the applicant filed a public sewer extension (PSX) application with RSVD. This application is a four step process, with the project having to go through: 1) Tentative Approval of Public Sewer Extension by the Sanitary District 1; 2) Local Planning Jurisdiction

⁹ Letter response from Ross Valley Sanitary District's Engineer, Randell Y. Ishii. October 19, 2012.

Approval, 3) CEQA Review; and 4) Final Review. The procedures and requirements for a PSX permit along with the applicant's application can be found in Appendix K. During this review process it will be determined what improvements to the trunkline, if any, the applicant must adhere by. Therefore, this is a **potentially significant** impact.

Mitigation Measure UTIL-1, which requires adherence to all requirements of the PSX permit in combination with not exceeding availability distribution capacity of off-site sewer lines, would reduce the project's potentially significant impacts to wastewater collection to a less-than-significant level.

Mitigation Measure UTIL-1 Wastewater Collection Impacts

The following measures shall be implemented to address potentially significant wastewater collection impacts:

- Prior to the issuance of a building permit, the applicant shall adhere to all requirements pursuant to the PSX permit, such as the responsibility to fund improvements (including, but not limited to, the PSX Permit sewer mainline, the private sewer laterals, the asphalt pavement required by the Town/municipality road encroachment permit, and erosion control measures from the possible California Dept. of Fish and Game Streambed Alteration Agreement, etc.).
- The project shall not exceed available distribution capacity of off-site sewer lines as defined in the PSX application and the Sanitary Sewer Hydraulic Evaluation and Capacity Assurance Plan.

This measure would ensure that the appropriate upgrades are made to the existing sewer line, if necessary, resulting in a **less-than-significant** impact related to wastewater treatment capacity. As previously stated, any necessary physical improvements would take place within the existing right-of-way for the sewer line and therefore not result in significant secondary environmental impacts.

Impact UTIL-2 Wastewater Treatment Impacts

The proposed project's estimated ADWF of 750 gpd (or 250 gpd per dwelling unit) is an insignificant contribution to the treatment capacity of the CMSA.¹⁰ Therefore, impacts to the District's wastewater treatment system or to the District's ability to provide wastewater treatment services would be **less than significant** and no mitigation measures are warranted.

¹⁰ Phone conversation between Jason Dow, CMSA General Manager, and Tyler Barns of WRA. November 27, 2012.

CUMULATIVE IMPACTS

Implementation of the proposed project in conjunction with the related projects listed in Table III-1, Related Projects, in Subsection B, Related Projects, Project Description, of this Draft SEIR would result in the continued development (or redevelopment) in the Town of Ross. All of the related projects are generally consistent with their respective Town of Ross General Plan 2007-2025 land use designations. The General Plan 2007-2025 Initial Study determined that the limited growth that could occur under the General Plan would not create significant amounts of wastewater that would result in the wastewater treatment plant exceeding its treatment capacity or requiring additional expansion. Therefore, cumulative impacts on wastewater service in Ross would be less than significant and no mitigation measures are would be required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project-specific and cumulative impacts related to wastewater service would be ***less than significant***, with the implementation of Mitigation Measure UTIL-1, wastewater collection impacts related to PSX permit requirements.

This page intentionally left blank.