4.16 UTILITY AND SERVICE SYSTEMS

4.16.2 WASTEWATER

INTRODUCTION

This section provides an analysis of the adequacy of wastewater conveyance and treatment systems to serve the landfill alternatives, including wastewater from residual materials associated with environmental control systems. This section is based on correspondence with the Fallbrook Public Utility District (FPUD) and Vallecitos Water District (VWD) and information provided in the County of San Diego Final EIR for the County’s General Plan Update, the County of San Diego Sewer System Management Plan (June 2010), the East Otay Mesa Business Park Specific Plan (September 2010), the City of San Diego General Plan Update Final Program EIR, and the Sycamore Landfill Master Development Plan Revised Final EIR (August 2012).

4.16.2.1 REGULATORY FRAMEWORK

The plans and regulations described below apply to areas within the County and City of San Diego. Sycamore Canyon Landfill is the only alternative located within the City of San Diego, therefore, the local plans discussed are only relevant to the Sycamore Canyon Expansion Alternative.

4.16.2.1.1 State

Porter-Cologne Water Quality Control Act

The 1969 Porter-Cologne Water Quality Control Act, codified in the California Water Code, authorizes the State Water Resources Control Board (SWRCB) to implement programs to control polluted discharges into state waters. The law essentially implements the requirements of the Clean Water Act (CWA). Pursuant to this law, the local regional water quality control board (RWQCB) is required to establish the wastewater concentrations of a number of specific hazardous substances in treated wastewater discharge.

4.16.2.1.2 Regional

County of San Diego Department of Environmental Health

The County of San Diego Department of Environmental Health (DEH) is the primary agency charged with regulating the design, construction, and maintenance of septic tanks, leach lines, seepage pits, and alternative on-site wastewater treatment systems throughout the County through a delegation from the RWQCB.

County of San Diego Department of Public Works Wastewater Management Section

The County of San Diego Department of Public Works Wastewater Management Section is responsible for maintaining sewer lines, pump stations, force mains and several treatment plants for the unincorporated areas of the County. The agency office is also responsible for issuing sewer permits, plan checks for sewers, providing management and engineering services for capital and maintenance projects, sewer maps, billing, and general record keeping associated with sanitation districts managed and operated by the County.
County of San Diego Sewer System Management Plan

The County of San Diego Sewer System Management Plan (June 2010) is a part of the County's long range plan to comply with all applicable requirements including those of the San Diego Regional Water Quality Control Board (RWQCB), State Waste Discharge Requirement (WDRs), and the CWA relative to wastewater. The Sewer System Management Plan provides information regarding the County's wastewater system and a summary of the action plan to comply with the sanitary sewer system requirements imposed by the WDRs and other governing agencies. The plan provides for the efficient management, operation, and maintenance its sanitary sewer system. The plan includes a Capital Improvement Plan for the completion of future improvements for the system.

County of San Diego Uniform Sewer Ordinance

The County sanitation and sewer maintenance districts operate under the County of San Diego Uniform Sewer Ordinance. The ordinance sets forth rules and regulations for operation and maintenance of sewage collection and treatment systems. Provisions for annexation are addressed, along with procedures for obtaining new or modified sewer service.

4.16.2.1.3 Local

City of San Diego Public Utilities Department Wastewater Branch

The City of San Diego Public Utilities Department is the primary division charged with regulating the design, construction, maintenance, and connection of wastewater facilities and systems. The department collects, treats, and disposes of approximately 180 million gallons of sewage per day. The department provides the public with a safe and efficient regional sewer system that protects the ocean water quality, supplements the limited water supply, and meets federal standards. The department conserves water and energy as part of the wastewater treatment process through water reclamation, biosolids production, and cogeneration.

City of San Diego Municipal Code, Chapter 6: Public Works and Property, Article 4: Sewers, Division 4: Construction, Maintenance, Funding and Use of Wastewater Facilities

The City's Municipal Code sets forth rules and regulations for the construction, operation and maintenance of sewage collection and treatment systems, connections to public sewers, and funding and connection fees and services charges.

4.16.2.2 METHODOLOGY FOR REVIEWING EFFECTS UNDER NEPA

This subsection provides the evaluation criteria used to determine the effects of each of the alternatives. In addition, this subsection describes the methodology used to assess impacts on wastewater services.

4.16.2.2.1 Criteria for Assessing Effects

In the absence of federal standards by which adverse levels could be determined, criteria for assessing adverse effects rely on state and local thresholds for guidance. Often a state criterion regarding wastewater impacts addresses whether a project would result in the need to extend a sewer trunk line with capacity to serve the new development, whose construction could lead to significant environmental effects. However, none of the alternatives evaluated includes a proposal to use public sewer systems for conveyance of
wastewater from the alternative sites. Therefore, the criterion is not applicable to any of the alternative sites and has not been evaluated in the wastewater analysis.

However, wastewater would be conveyed from the alternative sites via trucks to treatment plants for appropriate treatment and disposal of residual waste materials. Therefore, an alternative would have a significant adverse effect on wastewater services and facilities if the alternative would generate a demand for wastewater treatment capacity that is greater than the provider’s treatment capacity.

### 4.16.2.2 Methodology

The analysis of wastewater provides information on the public sewer systems in the vicinity of the alternative sites to identify the setting conditions for sites and the context that led to proposed site designs that exclude conveyance to public sewer systems. This information is based on service availability data provided by the FPUD and VWD and information provided in the County of San Diego Final EIR for the County’s General Plan Update, the East Otay Mesa Business Park Specific Plan (September 2010), the City of San Diego General Plan Update Final Program EIR, and the Sycamore Landfill Master Development Plan Revised Final EIR (August 2012). The analysis also describes wastewater generation associated with the alternatives (i.e. disposal of portable toilet waste and residual waste products generated by the environmental control systems), and the methods for conveying that waste for treatment and disposal. Based on the nature of the wastewater generated on site and the most efficient means of processing that wastewater, the analysis draws conclusions regarding the ability of the wastewater to be conveyed off-site and treated in a manner that is consistent with protection of the public safety, and appropriate treatment capacity.

### 4.16.2.3 APPLICANT’S PROPOSED ALTERNATIVE

#### 4.16.2.3.1 Affected Environment

**Regional Setting**

The unincorporated County of San Diego is within the jurisdiction of the RWQCB and the Colorado River Basin Regional Water Quality Control Board (CRBRWQCB). The RWQCB regulates wastewater discharge in the majority of the eastern, central, and western unincorporated County, while the CRBRWQCB regulates wastewater discharge in a smaller portion of the eastern unincorporated County. Twenty-five wastewater districts service the unincorporated County. Wastewater districts are generally responsible for providing collection, transmission, and disposal of sewage. Unincorporated areas not serviced by wastewater districts typically utilize septic systems for wastewater disposal.

The San Luis Rey Municipal Water District (SLRMWD) service area covers approximately 3,000 acres. The District largely exists to establish a boundary, with no general infrastructure, and primarily facilities cooperation between landowners on matters of water rights. The SLRMWD is not authorized as a sewer purveyor and has no infrastructure in place to do so.

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The Rainbow Municipal Water District (RMWD) is an independent local governmental agency that provides water and sewer services to the unincorporated area of northern inland San Diego County. The RMWD provides service to a 49,800-acre service area, which includes the unincorporated communities of Rainbow, Bonsall, and a portion of Fallbrook. Sewer service is primarily concentrated along the eastern side of SR 76 and northeast of I-15. RMWD has its own contracted sewage treatment facility, the San Luis Rey Wastewater Treatment Plant, located in Oceanside, California. The plant has the capacity to treat 1.0 million gallons per day (mgd). Currently, the plant is being rehabilitated and expanded to provide an additional 500,000 gallons per day of treatment capacity and the RMWD is participating in its contracted obligation to fund a proportionate share of the rehabilitation costs. The RMWD maintains all pipelines and pumping equipment to the plant.²

Local Setting

The Gregory Canyon site is located within the jurisdiction of the SLRMWD and RMWD. Approximately 1,420 acres of the Gregory Canyon site are located within the service area of SLRMWD. The SLRMWD is not authorized as a sewer purveyor and has no infrastructure in place to do so. The remaining 350 acres of the Gregory Canyon site, north of the San Luis Rey River, is located within the service area of the RMWD. There are no sewer collection facilities on the Gregory Canyon site. A 12-inch sewer line maintained by RMWD is located approximately 1.5 miles west of the site. There are no plans for future expansion of sewer services to the Gregory Canyon site.

4.16.2.3.2 Design Features from the Gregory Canyon EIR

No design features or mitigation measures from the EIR are associated with wastewater services.

4.16.2.3.3 Environmental Consequences and Mitigation Measures

Criterion: An alternative would have a significant adverse effect on wastewater services if the alternative would generate a demand for wastewater treatment capacity that is greater than the provider’s treatment capacity.

Impact Statement Gregory WW-1: The Applicant’s Proposed Alternative would generate small amounts of wastewater that would be collected on site and trucked to regional treatment facilities and treated as a small component of the routine handling of such wastewater. Therefore, the Applicant’s Proposed Alternative would not generate a demand for wastewater treatment capacity that is greater than treatment capacity of treatment facilities and impacts to wastewater services. The alternative would not result in significant adverse effects relative to wastewater.

Wastewater would be generated at the landfill site by site occupants and by the environmental control systems that would be operated at the Gregory Canyon site: the Leachate Collection and Removal System (LCRS), Landfill Gas Monitoring and Control System (LFG), and the Reverse Osmosis System (RO).

Wastewater generated by site occupants would be limited to that generated by a few number of site employees and site visitors that would use portable toilets that are serviced by the providers. Wastewater

would be trucked to off-site locations for treatment. There would be approximately 35 site workers during initial construction and 22 employees during operations. Truck drivers to the site might also use the portable facilities. This small site population is similar to that for a fairly small construction project that might be served in a similar manner. Some vendors report transporting such wastewater to pump stations that ultimately feed into the Point Loma Wastewater Treatment Plant. This treatment plant is a City of San Diego facility that treats approximately 175 mgd of wastewater, with an overall treatment capacity of 240 mgd.

The proposed LCRS would collect and remove leachate passing through the landfill prism. Leachate is water which percolates through the landfill and becomes contaminated by contact with the various waste materials. Such leachate can affect the integrity of the landfill and/or cause environmental contamination and therefore, must be removed. The LCRS would collect the leachate in pipes and convey it to two 10,000-gallon, above ground leachate collection storage tanks located in the southwest corner of the ancillary facilities area. The estimated peak annual leachate generation from the Applicant's Proposed Alternative would be approximately 414,000 gallons (1,134 gallons per day), with a peak daily leachate volume of 5,700 gallons. The average daily leachate generation is the same amount of wastewater that would be generated by approximately five residential units. The tanks would be periodically serviced by pump trucks that would empty the tanks and transport the leachate to off-site locations for treatment and disposal. Leachate is typically treated at municipal waste treatment plants, such as the San Luis Rey Wastewater Treatment Plant, located in Oceanside, California, which will have treatment capacity for 1.5 mgd, with the completion of currently contracted improvements. There are other facilities located in San Diego County as well as adjacent Counties to the north that could potentially receive the landfill generated leachate.

The purpose of the LFG system is to prevent LFG from migrating into the atmosphere or through the ground to adjacent properties. The system would consist of a landfill gas extraction well field; landfill gas conveyance lines; and a landfill gas treatment facility. A flare station would burn the collected landfill gases. A byproduct of the system is condensate which forms in the gas system piping and must be removed from the system. The condensate would gravity drain to sumps placed at low-points in the system around the landfill. The collected condensate would be removed from the sumps manually or would be pumped automatically to a 3,000 gallon, dual-wall tank that would be located near the flare station. The collected liquid condensate would be treated/burned within the flare when feasible, thus reducing the amount of condensate that would need to be transported for treatment. The treatment would occur at an industrial waste treatment plant, such as Southwest Treatment in Los Angeles.

The RO system would provide a groundwater treatment facility for use in the event that groundwater contamination is identified during groundwater testing that would be performed as a part of landfill operation. Impacted groundwater, if it were to be encountered, would be collected and supplied to the RO system influent tank in the southwestern portion of the ancillary facilities area. The RO treatment would separate the total dissolved solids (TDS) from water by applying pressure to a feed stream passing over a semi-permeable membrane, thereby inducing flow of water molecules through the membrane, leaving the dissolved solids on the influent side. The RO system would create two effluent streams, the reduced TDS water that passed through the membrane (clean water) and the elevated TDS solution (brine) that remains.

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3 This calculation assumes that residential units generate 220 gallons per day per residential unit, as described in the Water Agency Standards (WAS), Design Guidelines for Water, Recycled Water and Sewer Facilities. This report was prepared by seven signatory San Diego County water districts in September 2004. Available at: www.sdwas.com; and accessed on April 10, 2012.
on the feed side of the membrane. The effluent (clean water) would be stored in a tank and used on site, or if standards are met to receive approved permits from the RWQCB, discharged to the San Luis Rey River. The brine, which would be the end waste product that contains the larger TDS particles in a concentrated liquid, would be collected in a tank and hauled off site for disposal. It is anticipated that the brine would be taken to the Hale Avenue Resource Recovery Facility in Escondido (which currently has treatment capacity of 18 million gallon per day and currently has an average flow of 15.6 mgd) or a similar facility.

As described above, the landfill operator would contract with appropriate sewage disposal service provider(s) to remove effluent from the portable chemical toilets, as well as treat residual leachate, brine and condensate collected and stored on-site for off-site treatment and disposal. The amount of wastewater generated would be relatively small and would be generated in a manner that is typical of wastewater treatment occurring with like uses within the regional treatment and disposal systems. Given the small amount of treatment demand generated by the alternative, and the availability of treatment facilities, the demand for wastewater treatment capacity generated by the Applicant’s Proposed Alternative would not be greater than the providers’ treatment capacity inclusive of the providers’ existing commitments for treatment. Therefore, no significant adverse effects to wastewater services would occur.

**Mitigation Measures**

The Applicant’s Proposed Alternative would not result in a significant adverse effect on wastewater services. No mitigation measures are proposed.

**4.16.2.4 NO FEDERAL ACTION ALTERNATIVE**

**4.16.2.4.1 Affected Environment**

The No Federal Action Alternative would provide a conservation bank at the Gregory Canyon site. As such, the affected environment for the No Federal Action Alternative is the same as described above for the Applicant’s Proposed Alternative.

**4.16.2.4.2 Design Features**

No design features for the No Federal Action Alternative are associated with wastewater services.

**4.16.2.4.3 Environmental Consequences and Mitigation Measures**

*Criterion:* An alternative would have a significant adverse effect on wastewater services if the alternative would generate a demand for wastewater treatment capacity that is greater than the provider’s treatment capacity.

*Impact Statement No Action WW-1:* The No Federal Action Alternative would generate virtually no wastewater and therefore would not require notable treatment of wastewater. Therefore, the demand for wastewater treatment would not exceed treatment capacity of treatment providers and impacts to wastewater services and adverse effects would not occur.

The construction of the conservation bank would not generate a demand for wastewater treatment capacity. Thus, adverse effects to wastewater services would not occur.
Mitigation Measures

No adverse effects to wastewater services would occur under the No Federal Action Alternative. No mitigation measures are proposed.

4.16.2.5 ASPEN ROAD ALTERNATIVE

4.16.2.5.1 Affected Environment

Regional Setting

The Aspen Road Alternative is located within the same regional setting as the Gregory Canyon site, as described in more detail above. It lies within San Diego County and the jurisdiction of the RWQCB and CRBRWQCB. It also falls within the boundaries of two water/sewer service agencies: the RMWD; and the FPUD.

The RMWD also includes within its boundaries the site of the Applicants Proposed Alternative and is described above in the analysis of that alternative, above. The FPUD is a provider of both water and wastewater service. The FPUD is an independent sanitation district that provides sewer service to an area of 4,200 acres and operates over 75 miles of sewer pipelines, six pump stations, and conveys wastewater locally to the FPUD Water Treatment Plant. Effluent from this plant is discharged into a land outfall pipeline that joins with the City of Oceanside’s outfall line for release into the Pacific Ocean. The FPUD pass-through capacity is 2.7 mgd with an average flow of 1.9 mgd. The wastewater treatment plant has a capacity of 3.1 mgd and an average flow of 1.9 mgd. Effluent is used for landscape irrigation, freeway landscape irrigation, nurseries, golf courses, and treatment plant reuse. The FPUD has 8,400 equivalent dwelling units (EDUs) allocated and 2,600 EDUs available.

Local Setting

While the Aspen Road site is located within the larger jurisdiction of the FPUD and RMWD, it lies outside of the current sewer service areas of both. The FPUD sewer service area only covers the downtown portion of Fallbrook; far outside of the boundaries of the Aspen Road site, and no FPUD facilities could serve the site.4 The same is true for RMWD. No sewer collection facilities currently exist on the Aspen Road site.

4.16.2.5.2 Design Features

No design features for the Aspen Road Alternative are associated with wastewater services.

4.16.2.5.3 Environmental Consequences and Mitigation Measures

Criterion: An alternative would have a significant adverse effect on wastewater services if the alternative would generate a demand for wastewater treatment capacity that is greater than the provider’s treatment capacity.

Impact Statement Aspen WW-1: The Aspen Road Alternative would generate small amounts of wastewater that would be collected on site and trucked to regional treatment facilities; and treated

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as a small component of the routine handling of such wastewater. Therefore, the Aspen Road Alternative would not generate a demand for wastewater treatment capacity that is greater than treatment capacity of treatment facilities and impacts to wastewater services. The alternative would not have a significant adverse effect relative to wastewater.

As with the Applicant’s Proposed Alternative, wastewater generated by site occupants would be limited to that generated by a few number of site employees and site visitors that would use portable toilets that are serviced by the providers. This small site population is similar to that for a fairly small construction project that might be served in a similar manner.

Further, as with the Applicant’s Proposed Alternatives, the Aspen Road Alternative would generate wastewater from the LCRS and LFG, environmental control systems, which would collect liquid waste materials that would be transported off-site for treatment. No brine would be generated at the site as an RO system would not be developed at the Aspen Road Alternative site.

These wastewater materials would be collected on site and transported to sewage treatment facilities for treatment and disposal by the purveyors who provide such service. The amount of wastewater would be similar to that which would be generated by the Applicant’s Proposed Alternative. As noted above, the portable toilet waste is similar to that generated by a small construction project; the average leachate volume is equivalent to the wastewater volume generated by approximately five residential units; and the LFG condensate would be mostly, if not completely treated on-site, without a need for off-site processing. The truck conveyance of the wastewater for treatment and disposal would be typical of that occurring with like uses within in the regional treatment and disposal systems. Potential treatment plants may include the FPUD Water Treatment Plant and the San Luis Rey Wastewater Treatment Plant, in whose jurisdiction the alternative site lies; and which have capacities to treat 3.1 mgd and 1.5 mgd respectively. Other treatment facilities that are relied upon for treatment of wastewater that would be generated at the alternative site include the Point Loma Wastewater Treatment Plant in San Diego, the Hale Avenue Resource Recovery Facility in Escondido, the Southwest Industrial Treatment Plant in Los Angeles County, and/or other facilities throughout the region. Given the small amount of treatment demand generated by the Aspen Road Alternative, and the availability of treatment facilities, the demand for wastewater treatment capacity generated by the alternative would not be greater than the providers’ treatment capacity inclusive of the providers’ existing commitments for treatment. Therefore, no significant adverse effects relative to wastewater would occur.

Mitigation Measures

The Aspen Road Alternative would have no significant adverse effects on wastewater services. No mitigation measures are proposed.
4.16.2.6 GOPHER CANYON ROAD ALTERNATIVE

4.16.2.6.1 Affected Environment

Regional Setting

The Gopher Canyon Road Alternative is located within the same regional setting as the Gregory Canyon site, as described in more detail above. It lies within San Diego County and the jurisdiction of the RWQCB and CBRRWQCB. It also falls within the boundaries of two water/sewer service agencies: RMWD and the VWD. The RMWD also includes within its boundaries the site of the Applicants Proposed Alternative and is described above in the analysis of that alternative, above. The VWD is an independent district that provides water and wastewater service to the City of San Marcos, portions of the Cities of Vista, Escondido, and Carlsbad, as well as portions of the North County Metro, Twin Oaks, Bonsall, and San Dieguito CPAs. The VWD provides wastewater service to approximately 18,700 accounts. VWD operates 235 miles of sewer pipelines, three pump stations, and conveys wastewater locally. There are two VWD treatment facilities utilized by VWD: Meadowlark Reclamation Facility and Encina Wastewater Authority Facility. The Meadowlark Reclamation Facility has a pass-through capacity of 2.25 mgd and an average flow of 1.95 mgd. The Encina Facility provides advanced secondary treatment and has a pass through capacity of 7.54 mgd. Effluent is sold to the Carlsbad Municipal Water District and used for irrigation. The VWD has allocated 3,713 EDUs and has 11,447 EDUs available.

Local Setting

While, while the Gopher Canyon Road site is located within the jurisdiction of the VWD and RMWD, it is not located within the sewer service area of either, and no sewer lines are located in the vicinity of the alternative site. No sewer collection facilities currently exist on the Gopher Canyon Road site.

4.16.2.6.2 Design Features

No design features for the Gopher Canyon Road Alternative are associated with wastewater services.

4.16.2.6.3 Environmental Consequences and Mitigation Measures

Criterion: An alternative would have a significant adverse effect on wastewater services if the alternative would generate a demand for wastewater treatment capacity that is greater than the provider’s treatment capacity.

Impact Statement Gopher WW-1: The Gopher Canyon Road Alternative would generate small amounts of wastewater that would be collected on site and trucked to regional treatment facilities and treated as a small component of the routine handling of such wastewater. Therefore, the landfill would not generate a demand for wastewater treatment capacity that is greater than treatment capacity of treatment facilities and impacts to wastewater services. The alternative would not have a significant adverse effect relative to wastewater.

As with the Applicant’s Proposed Alternative, wastewater generated by site occupants would be limited to that generated by a few number of site employees and site visitors that would use portable toilets that are serviced by the providers. This small site population is similar to that for a fairly small construction project that might be served in a similar manner.
Further, as with the Applicant’s Proposed Alternative, the Gopher Canyon Road Alternative would generate wastewater from the LCRS and LFG environmental control systems, which would collect liquid waste materials that would be transported off-site for treatment. No brine would be generated at the site as an RO system would not be developed at the Gopher Canyon Road Alternative site.

These wastewater materials would be collected on site and transported to sewage treatment facilities for treatment and disposal by the purveyors who provide such service. The amount of wastewater would be similar to that which would be generated by the Applicant’s Proposed Alternative. As noted above, the portable toilet waste is similar to that generated by a small construction project; the average daily leachate volume is equivalent to the wastewater volume generated by approximately five residential units; and the LFG condensate would be mostly, if not completely treated on-site, without a need for off-site processing. The truck conveyance of the wastewater for treatment and disposal would be typical of that occurring with like uses within in the regional treatment and disposal systems.

Potential treatment plants may include the VWD treatment facilities and/or the San Luis Rey Wastewater Treatment Plant in whose jurisdictions, the alternative sites lie. VWD has allocated 3,713 EDUs and has 11,447 EDUs available for future use. The San Luis Rey Wastewater Treatment Plant, has capacity 1.5 mgd, inclusive of current up-grades to the system. Other treatment facilities that may be relied upon for treatment of wastewater that would be generated at the alternative site include the Point Loma Wastewater Treatment Plant in San Diego, the Hale Avenue Resource Recovery Facility in Escondido, the Southwest Industrial Treatment Plant in Los Angeles County, and/or other facilities throughout the region.

Given the small amount of treatment demand generated by the alternative, and the availability of treatment facilities, the demand for wastewater treatment capacity generated by the alternative would not be greater than the providers’ treatment capacity inclusive of the providers’ existing commitments for treatment. Therefore, no significant adverse effects would occur.

Mitigation Measures

The Gopher Canyon Road Alternative would have no significant adverse effects on wastewater services. No mitigation measures are proposed.

4.16.2.7 MERRIAM MOUNTAIN ALTERNATIVE

4.16.2.7.1 Affected Environment

Regional Setting

The Merriam Mountain Alternative is located within the same regional setting as the Gregory Canyon site, as described in more detail above. It lies within San Diego County and the jurisdiction of the RWQCB and CRBRWQCB. It also lies within the jurisdiction of the VWD, which is discussed under the setting section for the Gopher Canyon Road Alternative above. As indicated, therein, the VWD has allocated 3,713 EDUs and has 11,447 EDUs available for future use.
Local Setting

The Merriam Mountain site is located within the jurisdiction of the VWD. The VWD owns an existing 8-inch public sewer main located approximately 0.25 miles south of the site in Saver Lane. No sewer collection facilities currently exist on the Merriam Mountain site.

4.16.2.7.2 Design Features

No design features for the Merriam Mountain Alternative are associated with wastewater services.

4.16.2.7.3 Environmental Consequences and Mitigation Measures

Criterion: An alternative would have a significant adverse effect on wastewater services if the alternative would generate a demand for wastewater treatment capacity that is greater than the provider’s treatment capacity.

Impact Statement Merriam WW-1: The Merriam Mountain Alternative would generate small amounts of wastewater that would be collected on site and trucked to regional treatment facilities and treated as a small component of the routine handling of such wastewater. Therefore, the landfill would not generate a demand for wastewater treatment capacity that is greater than treatment capacity of treatment facilities and impacts to wastewater services. The alternative would not result in significant adverse effects relative to wastewater.

As with the Applicant’s Proposed Alternative, wastewater generated by site occupants would be limited to that generated by a few number of site employees and site visitors that would use portable toilets that are serviced by the providers. This small site population is similar to that for a fairly small construction project that might be served in a similar manner.

Further, as with the Applicant’s Proposed Alternative, the Merriam Mountain Alternative would generate wastewater from the LCRS and LFG environmental control systems, which would collect liquid waste materials that would be transported off-site for treatment. No brine would be generated at the site as an RO system would not be developed at the Merriam Mountain Alternative site.

All of these wastewater materials would be collected on site and transported to sewage treatment facilities for treatment and disposal by the purveyors who provide such service. The amount of wastewater would be similar to that which would be generated by the Applicant’s Proposed Alternative. As noted above, the portable toilet waste is similar to that generated by a small construction project; the average daily leachate volume is equivalent to the wastewater volume generated by approximately five residential units; and the LFG condensate would be mostly, if not completely treated on-site, without a need for off-site processing. The truck conveyance of the wastewater for treatment and disposal would be typical of that occurring with like uses within in the regional treatment and disposal systems.

Potential treatment may be provided by the VWD in whose jurisdiction the alternative site lies. The VWD has allocated 3,713 EDUs and has 11,447 EDUs available for future use. Other treatment facilities that may be relied upon for treatment of wastewater that would be generated at the alternative site, include the Point Loma Wastewater Treatment Plant in San Diego, the Hale Avenue Resource Recovery Facility in Escondido, the Southwest Industrial Treatment Plant in Los Angeles County, and/or other facilities throughout the
region. Given the small amount of treatment demand generated by the alternative, and the availability of treatment facilities, the demand for wastewater treatment capacity generated by the alternative would not be greater than the providers’ treatment capacity inclusive of the providers’ existing commitments for treatment. Therefore, no significant adverse effects relative to wastewater would occur.

Mitigation Measures

The Merriam Mountain Alternative would have no significant adverse effects on wastewater services. No mitigation measures are proposed.

4.16.2.8 EAST OTAY MESA ALTERNATIVE

4.16.2.8.1 Affected Environment

Regional Setting

The East Otay Mesa Alternative is located within the same regional setting as the Gregory Canyon site, as described in more detail above. It lies within San Diego County and the jurisdiction of the RWQCB and CRBRWQCB. The East Otay Mesa Alternative site also lies within the jurisdiction of the East Otay Mesa Sewer Maintenance District (EOMSMD) and the Otay Water District (OWD).

The EOMSMD has a service area of 2,619. The district has 1.0 mgd of the City of San Diego Metropolitan Wastewater Department (SDMWD) treatment/disposal capacity rights. The capacity was purchased from the Spring Valley Sanitation District. The district operates two miles of pipeline and conveys wastewater to the SDMWD system. The district has 398 allocated EDUs and has 3,768 EDUs available for future use.

The OWD is an independent water and sanitation district. The OWD service area is 80,320 acres and facilities serve the water and/or sewer service needs of people living in the communities of southern El Cajon, La Mesa, Rancho San Diego, Jamul, Spring Valley, Bonita, eastern Chula Vista, East Lake, and Otay Mesa along the U.S./Mexico international border. The OWD wastewater system operates 85 miles of sewer pipelines, five pump stations and conveys wastewater to SDMWD. OWD operates one wastewater treatment facility, the Ralph W. Chapman Water Reclamation Facility, which has a capacity of 1.3 mgd and an average flow of 0.8 mgd. The OWD has 6,053 allocated EDUs and has 10,000 EDUs available for future use.

Local Setting

The East Otay Mesa Alternative site is located within the jurisdiction of the EOMSMD and OWD. No sewer collection facilities currently exist on the East Otay Mesa Alternative site.

4.16.2.8.2 Design Features

No design features for the East Otay Mesa Alternative are associated with wastewater services.
4.16.2.8.3 Environmental Consequences and Mitigation Measures

Criterion: An alternative would have a significant adverse effect on wastewater services if the alternative would generate a demand for wastewater treatment capacity that is greater than the provider's treatment capacity.

Impact Statement East Otay WW-1: The East Otay Mesa Alternative would generate small amounts of wastewater that would be collected on site and trucked to regional treatment facilities and treated as a small component of the routine handling of such wastewater. Therefore, the East Otay Mesa Alternative would not generate a demand for wastewater treatment capacity that is greater than treatment capacity of treatment facilities. The alternative would not result in significant adverse effects relative to wastewater.

As with the Applicant's Proposed Alternative, wastewater generated by site occupants would be limited to that generated by a few number of site employees and site visitors that would use portable toilets that are serviced by the providers. This small site population is similar to that for a fairly small construction project that might be served in a similar manner.

Further, as with the Applicant’s Proposed Alternative, the East Otay Mesa Alternative would generate wastewater from the LCRS and LFG environmental control systems, which would collect liquid waste materials that would be transported off-site for treatment. No brine would be generated at the site as an RO system would not be developed at the East Otay Mesa Alternative site.

All of these wastewater materials would be collected on site and transported to sewage treatment facilities for treatment and disposal by the purveyors who provide such service. The amount of wastewater would be similar to that which would be generated by the Applicant's Proposed Alternative. As noted above, the portable toilet waste is similar to that generated by a small construction project; the average daily leachate volume is equivalent to the wastewater volume generated by approximately five residential units; and the LFG condensate would be mostly, if not completely treated on-site, without a need for off-site processing. The truck conveyance of the wastewater for treatment and disposal would be typical of that occurring with like uses within in the regional treatment and disposal systems.

Potential treatment may be provided by the EOMSMD and OWD in whose jurisdiction the alternative site lies. The EOMSMD has 398 allocated EDUs and has 3,768 EDUs available for future use. The OWD has 6,053 allocated EDUs and has 10,000 EDUs available for future use. The Ralph W. Chapman Water Reclamation Facility and/or other facilities throughout the region may be relied upon for treatment of wastewater that would be generated at the alternative site. Given the small amount of treatment demand generated by the alternative, and the availability of treatment facilities, the demand for wastewater treatment capacity generated by the alternative would not be greater than the providers’ treatment capacity inclusive of the providers’ existing commitments for treatment. Therefore, no significant adverse effects would occur.

Mitigation Measures

The East Otay Mesa Alternative would have no significant adverse effects on wastewater services. No mitigation measures are proposed.
4.16.2.9 Sycamore Canyon Expansion Alternative

4.16.2.9.1 Affected Environment

Regional Setting

The City of San Diego's metropolitan wastewater system treats the wastewater from the City and 15 other cities and districts (called Participating Agencies) from a 450-square-mile area with a population of over 2.2 million. The Participating Agencies are the cities of Chula Vista, Coronado, Del Mar, El Cajon, Imperial Beach, La Mesa, National City, Poway, the Lemon Grove Sanitation District, the OWD, the Padre Dam Municipal Water District, and the County of San Diego including the community planning areas of Lakeside, Alpine, Spring Valley, Wintergardens, and East Otay Mesa. The system treats an average of 180 mgd of wastewater. Wastewater is conveyed through 2,897 miles of collection pipeline, 83 pump stations, to the Point Loma Wastewater Treatment Plant (PLWTP), the North City Water Reclamation Plant, and the South Bay Water Reclamation Plant (SBWRP). The treatment plant and two reclamation plants provide a system capacity of 285 mgd, sufficient to meet the projected needs of the service area through at least 2020. The two water reclamation plants produce reclaimed water for appropriate uses including plant operation and irrigation, and support of the City's water service strategy of diversifying water supply sources to reduce future reliance on imported water. Reclaimed water is sold and distributed by the City. Treated effluent is discharged to the Pacific Ocean through two ocean outfalls. Solids from the wastewater treatment plants are processed at the Metro Biosolids Center located at the Miramar Marine Corps Air Station.

Local Setting

The Sycamore Canyon Expansion Alternative site is located within the jurisdiction of the City of San Diego's metropolitan wastewater system. Sanitary facilities of the existing landfill include a septic holding tank system and portable toilet facilities located near active areas of the landfill. The Sycamore Canyon Landfill generates wastewater from the existing LCRS and LFG environmental control systems, which is collected on site and transported to sewage treatment facilities for treatment and disposal by the purveyors who provide such service.

4.16.2.9.2 Design Features

No design features for the Sycamore Canyon Expansion Alternative are associated with wastewater services.

4.16.2.9.3 Environmental Consequences and Mitigation Measures

Criterion: An alternative would have a significant adverse effect on wastewater services if the alternative would generate a demand for wastewater treatment capacity that is greater than the provider's treatment capacity.

Impact Statement Sycamore WW-1: The Sycamore Canyon Expansion Alternative would generate small amounts of wastewater that would be collected on site and trucked to regional treatment facilities and treated as a small component of the routine handling of such wastewater. Therefore, the Sycamore Canyon Expansion Alternative would not generate a demand for wastewater treatment capacity that is greater than treatment capacity of treatment facilities and no significant adverse effects to wastewater services would occur.
The Sycamore Canyon Expansion Alternative would not add population to the area that would contribute to a demand for wastewater treatment. The Sycamore Canyon Expansion Alternative would result in the expansion of capacity and increase in facility services, including 24-hour operation, seven days per week. The alternative would result in an increase of ten employees, and could result in some additional construction workers, all of which would likely be drawn from an existing work pool. Wastewater generated by site occupants would be limited to that generated by a few number of site employees and site visitors that would use portable toilets that are serviced by the providers. This small site population is similar to that for a fairly small construction project that might be served in a similar manner.

The proposed scale facilities would require a septic holding tank system of three tanks with regular collections of effluent, one for each scale house. New septic holding tanks would also be used for the proposed maintenance facility building and the new permanent administrative office building, as in the current operation. No sewer connection is being proposed, although a sewer connection hookup in Sycamore Landfill Road to Mast Boulevard would be possible if the City expands the system and sewer becomes available in the future.

In accordance with requirements of the County of San Diego DEH, the limited amount of wastewater generated at the scales, maintenance facility, and administrative offices would be disposed as it is currently, using regularly pumped septic holding tanks with contents disposed of at an authorized wastewater treatment plant. Specific design details of any changes or relocations of the on-site system would be overseen by the County of San Diego DEH. Treatment of the wastewater could be provided by the City of San Diego’s metropolitan wastewater system. The PLWTP, North City Water Reclamation Plant, and the SBWRP provide a system capacity of 285 mgd, sufficient to meet the projected needs of the service area through at least 2020. Given the small increase of treatment demand generated by the alternative, and the availability of treatment facilities, the demand for wastewater treatment capacity generated by the alternative would not be greater than the providers’ treatment capacity inclusive of the providers’ existing commitments for treatment. Therefore, no significant adverse effects would occur.

**Mitigation Measures**

The Sycamore Canyon Expansion Alternative would have no significant adverse effects on wastewater services. No mitigation measures are proposed.

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5 As indicated in the Revised Final EIR for the Sycamore Canyon Master Development Plan, the Sycamore Canyon Landfill personnel have met with the County of San Diego DEH and obtained a conceptual agreement that a system of septic holding tanks is appropriate for the site.

6 City of San Diego. August 2012. Sycamore Landfill Master Development Plan Revised Final EIR.