

4.15 Utilities

4.15.1 Introduction

This section describes the affected environment and environmental consequences related to water supply, wastewater treatment, solid waste disposal, and stormwater facilities from operation of the NEPA Alternatives. Construction impacts are discussed in Chapter 5, Section 5.5.16, *Utilities*. For information regarding new electrical facilities and communication equipment for the BART Extension Alternative, refer to Chapter 2, *Alternatives*.

The following sources of information were used to prepare the analysis in this section.

- *2010 Urban Water Management Plan* (San Jose Water Company 2011).
- *2010 Urban Water Management Plan* (City of Santa Clara Water and Sewer Utility 2011).
- *City of San Jose Storm Sewer and Sanitary Sewer Annual Reports* (City of San Jose 2013)
- *City of Santa Clara 2010–2035 General Plan* (City of Santa Clara 2010a).
- *City of Santa Clara 2010–2035 General Plan EIR* (City of Santa Clara 2010b).
- *Envision San Jose 2040 General Plan EIR* (City of San Jose 2011).
- *Facility/Site Summary Details: Newby Island Sanitary Landfill (43-AN-003)* (California Department of Resources Recycling and Recovery 2015).
- *Industrial Sector: Estimated Solid Waste Generation Rates* (California Department of Resources Recycling and Recovery 2013).
- Personal Communication with representatives of the Newby Island Landfill.
- *Newby Island Sanitary Landfill and The Recyclery Rezoning Project* (City of San Jose 2009).
- *Sanitary Sewer Master Plan Initial Study/Addendum to General Plan EIR* (City of San Jose 2012).
- *VTA's BART Silicon Valley Phase II Extension Water Supply Assessment* (San Jose Water Company 2015).
- *BART Santa Clara Station and Joint Development [Water Supply Assessment]* (City of Santa Clara Water and Sewer Utility 2016).

4.15.2 Environmental and Regulatory Setting

4.15.2.1 Environmental Setting

Water Supply

San Jose

Water to the San Jose portions of the BART Extension would be provided by San Jose Water Company (SJWC), which provides water to over 219,000 accounts in Santa Clara County, including most of San Jose. In 2011, SJWC's Board of Directors adopted an Urban Water Management Plan (UWMP) in accordance with California's Urban Water Management Planning Act. This document provides an overview of SJWC's water supply sources and usage, recycled water, and conservation programs.

According to the UWMP, SJWC has three sources of potable water supply.

- Groundwater comprises approximately 40 percent of SJWC's water supply. SJWC has 91 active, 5 standby, and 16 inactive wells to draw water from major aquifers within the 225 square-mile Santa Clara Valley subbasin. These aquifers are recharged naturally by rainfall and artificially by recharge ponds operated by Santa Clara Valley Water District (SCVWD).
- Imported surface water provides 50 percent of SJWC's water supply. SJWC is under contract with SCVWD to purchase water originating primarily from the State Water Project and the Central Valley Project. The water is treated at a SCVWD water treatment plant before entering the SJWC system. Some of this imported water is also supplied by local reservoirs.
- Local surface water provides 5 to 10 percent of the SJWC's supply, depending on the amount of rainfall. A series of dams and intakes collect water released from SJWC's lakes and sends it to the Montevina Water Treatment Plant for treatment prior to entering the distribution system.

The UWMP concluded that SJWC has adequate water supplies to meet demand in its service area through 2035, but may encounter system-wide shortages during prolonged periods of drought.

Santa Clara

The City of Santa Clara Water and Sewer Utility (SCWSU) serves as the water retailer for all water users in Santa Clara, and had approximately 25,600 water service connections in 2010. SCWSU's distribution system consists of 334 miles of distribution mains and 7 storage tanks, and has a maximum supply capacity of 88 million gallons per day (mgd) of potable water and 18 mgd of recycled water. Average consumption is 20.9 mgd potable water and 2.5 mgd of recycled water.

Santa Clara operates 28 wells within an extensive local underground aquifer that provides about 68 percent of the City's water supply. Approximately 21 percent of the water supply is provided by two wholesale water agencies: SCVWD and San Francisco Public Utilities Commission. The remaining 11 percent of Santa Clara's water supply is provided by recycled water from the San Jose/Santa Clara Water Pollution Control Plant's (WPCP) South Bay Recycled Water facility, and is used exclusively for irrigation.

Santa Clara's City Council in 2011 approved and adopted an UWMP, which concluded that the SCWSU has adequate water supplies to meet demand in its service area through 2021, but may encounter system-wide shortages during prolonged periods of drought.

Wastewater

San Jose/Santa Clara Water Pollution Control Plant

The WPCP treats wastewater from San Jose and Santa Clara. The WPCP is a regional wastewater treatment facility serving eight tributary sewage collection agencies and is operated by the City of San Jose's Department of Environmental Services. The WPCP provides primary, secondary, and tertiary treatment of wastewater and has capacity to treat 167 mgd of wastewater under dry weather conditions. The design peak wet-weather flow is 271 mgd (City of Santa Clara 2015). The WPCP currently operates at an average dry weather flow (ADWF) of 109 mgd, or 65 percent of its 167 mgd treatment capacity.

The WPCP is currently operating under a 120 mgd dry weather effluent flow constraint. This constraint is based upon regulatory concerns over the effects of additional freshwater discharges from the WPCP on the saltwater marsh habitat and pollutant loading in the San Francisco Bay (City of San Jose 2011).

San Jose's average dry weather flow is 69.8 mgd, or 64 percent of the City's total allocated 108.6 mgd of wastewater flow to the WPCP (City of San Jose 2011). Santa Clara's average dry weather flow is 13.3 mgd, or 59 percent of the Santa Clara's total allocated 22.585 mgd of wastewater flow to the WPCP (City of Santa Clara 2010b).

San Jose

The San Jose sanitary sewer system includes approximately 2,200 miles of sewer pipelines. In addition, 16 sewer pump stations move wastewater through the system where local topography inhibits gravity flow. Sewage from the West Valley Sanitation District, County Sanitation District 3, and portions of the Cupertino Sanitary District and SCWSU also flow through San Jose's wastewater collection system. Sewer lines are inspected and maintained by the San Jose Department of Transportation, and are rehabilitated or replaced by the San Jose Department of Public Works (SJPW).

The majority of domestic water used in San Jose becomes wastewater. Average wastewater flow rates are approximately 70 to 80 percent of domestic water use. For industries without

internal recycling or reuse programs, approximately 85 to 95 percent of water used becomes wastewater.

San Jose's Sanitary Sewer Level of Service Policy seeks to ensure adequate capacity in existing sewer mains before development occurs that could compromise the ability of the system. There are six levels of service (LOS) that are used to determine under what conditions new developments are allowed to connect to the existing sewer system. The LOS are defined based on comparison of flows to existing sewer capacity. The *Sanitary Sewer Master Plan Initial Study/Addendum to General Plan Environmental Impact Report* identified approximately 200,000 feet of sewer pipeline that operates below the level of service target. These deficiencies will be addressed through ongoing implementation of the City's Sanitary Sewer Capital Program. New development in San Jose that would increase wastewater flow to capacity-deficient areas of the sanitary sewer system must contribute to system improvements.

Santa Clara

Santa Clara's wastewater collection system includes approximately 270 miles of sewer pipelines ranging from 4 to 48 inches in diameter, and 6 sewage pump stations. This system is owned and operated by the SCWSU. In addition to conveying Santa Clara's wastewater flows to the WPCP, Santa Clara's wastewater system must provide conveyance capacity for up to 13.8 mgd from the City of Cupertino. Based on hydraulic modeling of the system, several sewer mains and collector lines are at or near capacity (City of Santa Clara 2010b). Much of the insufficient capacity exists in the northwestern portion of Santa Clara. New development in Santa Clara that would increase wastewater flow to capacity-deficient areas of the sanitary sewer system must contribute to system improvements.

Solid Waste

San Jose

San Jose generates approximately 1.7 million tons of solid waste annually (City of San Jose 2011). In 2008, approximately 60 percent of solid waste was recycled and 40 percent was landfilled. Of the amount landfilled, approximately 36 percent originated from residential sources, 36 percent originated from commercial, industrial and institutional sources, and 28 percent originated from construction and demolition sources. Solid waste and recycling collection services for San Jose businesses are provided by various franchised waste and recycling haulers.

San Jose is served by the Newby Island Landfill, located at 1601 Dixon Landing Road, Milpitas. The Newby Island Landfill has remaining capacity for approximately 21.2 million tons of solid waste and is expected to reach permitted capacity in 2041 (California Department of Resources Recycling and Recovery 2015). San Jose has an arrangement with the owners of the Newby Island Landfill to provide disposal capacity for the City through 2024.

Santa Clara

Solid waste collection in the City of Santa Clara is provided by Mission Trail Waste Systems through a contract with the City. In 2013, Santa Clara disposed of 120,563 tons of solid waste (Local Agency Formation Commission of Santa Clara County 2015). Mission Trail Waste Systems also has a contract to implement the Clean Green portion of the City's recycling plan by collecting yard waste. Recology Silicon Valley provides supplementary recycling services.

Santa Clara has an arrangement with the Newby Island Landfill to provide disposal capacity for the City through 2024 (City of Santa Clara 2010b).

Stormwater

San Jose

The San Jose stormwater system is designed to convey stormwater away from urban areas to local creeks and rivers, and ultimately to the San Francisco Bay. This system consists of approximately 1,150 miles of stormwater pipe, 29,900 storm drain inlets, 4,500 miles of curb and gutter, 1,500 outfalls, and 29 pump stations. These facilities are maintained by the San Jose Department of Transportation and upgraded by the SJPW (City of San Jose 2013).

Since the mid-1980s, San Jose has required that storm sewer systems be designed to convey stormwater from a 10-year storm event (a storm large enough to have a 10 percent chance of occurring in any year). However, over 93 percent of the existing stormwater system is designed to an older 3-year storm event standard. While new development is required to design their onsite storm system to accommodate a 10-year event, they are not required to address deficiencies of the downstream system to which they connect.

San Jose is currently preparing a Storm Drain Master Plan to meet long-term system capacity and water quality objectives. This document is anticipated in 2017.

Santa Clara

Santa Clara's storm drain system consists of curb inlets that collect and channel surface water, from rainfall and other sources, into a series of pipelines beneath city roadways. Stormwater is conveyed through these underground pipelines to the channelized creeks within Santa Clara, which then direct flow into the San Francisco Bay (City of Santa Clara 2010b).

4.15.2.2 Regulatory Setting

There are no federal regulations regarding utilities that would be applicable to the BART Extension under NEPA. However, there are several state and local land use regulations applicable to the BART Extension. Please refer to Chapter 6, Section 6.13, *Utilities*, for a summary of state and local land use policies applicable to the BART Extension.

4.15.3 Methodology

In the following section, the BART Extension's potential impacts on utilities are measured by intensity using the terms *no effect*, *no adverse effect*, and *adverse effect*, which are defined as follows.

- *No effect* on utilities would mean no measurable increase in use of utilities.
- *No adverse effect* on utilities is defined as an impact that would increase use of utilities but that would not result in substantial degradation in service, violate a regulatory standard, or conflict with or exceed the capacity of existing utilities.
- An *adverse effect* on utilities is defined as an impact that would contribute to a violation of regulatory standards or would exceed the capacity of existing utilities.

Adverse effects on water utilities would result if the BART Extension operations exceeded existing water entitlements or required the construction of new or expanded water infrastructure. Adverse impacts on wastewater utilities would result if the BART Extension operations exceeded existing wastewater infrastructure capacity and directly required the construction of new or expanded wastewater infrastructure. Adverse impacts on solid waste services would result if landfills serving the BART Extension lacked adequate capacity to accommodate the BART Extension solid waste disposal needs. Adverse impacts on stormwater systems would result if the BART Extension operations exceeded existing stormwater infrastructure capacity and directly required the construction of new or expanded wastewater infrastructure.

4.15.4 Environmental Consequences and Mitigation Measures

This section identifies impacts on utilities and evaluates whether they would be adverse according to NEPA, using the criteria (i.e., context and intensity) identified in Section 4.15.3, *Methodology*, and in Section 4.1, *Introduction*.

4.15.4.1 No Build Alternative

The No Build Alternative consists of the existing transit and roadway networks and planned and programmed improvements (see Chapter 2, Section 2.2.1, *NEPA No Build Alternative*, for lists of these projects). These projects would likely result in effects on utilities typically associated with transit, highway, bicycle, pedestrian facility and roadway projects. Projects planned under the No Build Alternative would undergo separate environmental review to determine whether the projects would adversely affect utilities, which would include an analysis of mitigation measures to mitigate potential impacts on utilities.

4.15.4.2 BART Extension Alternative

The BART Extension consists of an approximately 6-mile extension of the BART system and includes the construction and operation of four new BART stations, two ventilation

facilities, and the Newhall Maintenance Facility. Other features include electrical facilities, power stations, and pump stations, and communication equipment.

Water Supply

San Jose

The Alum Rock/28th Street, Downtown San Jose, and Diridon BART Stations would require water supply for operational purposes, including restrooms and custodial needs. The portion of the Newhall Maintenance Facility located in San Jose would also require water supply, mostly related to the train car washer. According to SJWC calculations based on information provided by VTA, daily water usage for the stations and maintenance facilities in San Jose would be approximately 0.04 acre-feet (AF¹), which would be provided by SJWC (SJWC 2015).

SJWC prepared a Water Supply Assessment (WSA) for the BART Extension, which was approved by the City of San Jose on January 27, 2016. According to this WSA, SJWC supplied customers with 336 AF of water per day in 2010 (SJWC 2015). The BART Extension Alternative's daily water demand in San Jose represents a 0.01 percent increase in SJWC's 2010 water demand.² SJWC concluded that there are sufficient water supplies to provide service to the BART station and facilities in San Jose. Therefore, the BART Extension Alternative would have *no adverse effect* on SJWC's water supply, and no mitigation would be required.

Santa Clara

The Santa Clara BART station would require water supply for operational purposes, including restrooms and custodial needs. The portion of the Newhall Maintenance Facility located in Santa Clara would also require water supply, mostly related to the blowdown facility. According to SCWSU's calculations based on information provided by VTA, daily water usage at the BART station and Newhall Maintenance Facility in Santa Clara would be approximately 0.02 AF, which would be provided by SCWSU (2016).

SCWSU prepared a WSA for the BART Extension, which was approved by the City of Santa Clara on April 5, 2016. According to this WSA, SCWSU supplied customers with 63.6 AF per day in 2010 (SCWSU 2016). Therefore, the BART Extension's water demands in Santa Clara would represent a 0.03 percent increase in SCWSU's 2010 water demand.³ SCWSU concluded that there are sufficient water supplies to service to the BART station and facilities in Santa Clara. Therefore, the BART Extension Alternative would have *no adverse effect* on SCWSU's water supply, and no mitigation would be required.

¹ 1 acre-foot is approximately 325,851 gallons.

² 0.04 AF (estimated daily water usage at BART Extension in San Jose) divided by 336 AF (daily water supplied by SJWC in 2010) = 0.0001.

³ 0.02 AF (estimated daily water usage at BART Extension Alternative in Santa Clara) divided by 63.6 AF (daily water supplied by SCWSU in 2010) = 0.0003.

Water Conveyance Infrastructure

SJWC owns and operates the water conveyance system that would serve the BART Extension Alternative in San Jose. SCWSU owns and operates the water conveyance system that would serve the BART Extension Alternative in Santa Clara. SJWC and SCWSU would be responsible for providing onsite water infrastructure to connect BART stations and facilities to the existing water supply system.

Water supply at the BART stations and facilities may contribute to capacity deficiencies within offsite supply networks, which represents a potential impact to utility systems. With implementation of Mitigation Measures UTIL-A and UTIL-B, this impact would have *no adverse effect*.

Mitigation Measure UTIL-A: Prepare a San Jose Water Supply Infrastructure Capacity Assessment

Prior to the issuance of a building permit, VTA will coordinate with SJWC and prepare a Cooperative Agreement to establish the BART Extension Alternative's participation in improvements to offsite water supply infrastructure. The SJWC may conduct a detailed engineering study and flow analysis to determine the extent of these impacts.

Capacity-relief upgrades will occur during the utility relocation phase of construction and will be implemented in accordance with SJWC requirements. Construction activities will be subject to provisions outlined in this environmental document, including implementation of the construction education and outreach plan, to reduce potential impacts.

Mitigation Measure UTIL-B: Prepare a Santa Clara Water Supply Infrastructure Capacity Assessment

Prior to the issuance of a building permit, VTA will coordinate with SCWSU and prepare a Cooperative Agreement to establish the BART Extension Alternative's participation in improvements to offsite water supply infrastructure. The SCWSU may conduct a detailed engineering study and flow analysis to determine the extent of these impacts.

Capacity-relief upgrades will occur during the utility relocation phase of construction, and will be implemented in accordance with Chapter 17.15.210 of the Santa Clara City Code. Construction activities will be subject to provisions outlined in this environmental document, including implementation of the construction education and outreach plan, to reduce potential impacts.

Wastewater Treatment

Wastewater would be generated at the BART stations and Newhall Maintenance Facility. The total amount of wastewater generated by the BART Extension Alternative is not anticipated to exceed the amount of water supplied to the BART Extension. The WPCP treats wastewater from both San Jose and Santa Clara, and has the capacity to treat 167 mgd

(ADWF). The WPCP presently operates at an ADWF of 109 mgd, or 65 percent of its 167 mgd treatment capacity. In addition, BART recycles (treats and reuses) its train wash water through onsite treatment systems at all of its existing yards. The feasibility of implementing a water recycling system, which would reduce wastewater generation at the Newhall Maintenance Facility, also would be evaluated during final design.

San Jose's current ADWF is 69.8 mgd, or 64 percent of San Jose's allocated 108.6 mgd of wastewater flow to the WPCP. According to the SJWC WSA, the BART Extension Alternative within San Jose would increase the amount of wastewater flowing to the WPCP by approximately 8,000 gpd. This represents 0.02 percent of San Jose's remaining allocated capacity at the WPCP.⁴ Santa Clara's current ADWF is 13.3 mgd, or 59 percent of Santa Clara's allocated 22.585 mgd of wastewater flow to the WPCP. According to SCWSU's WSA, the BART Extension Alternative within Santa Clara would increase the amount of water flowing to the WPCP by 4,841.8 gpd. This represents 0.05 percent Santa Clara's remaining allocated capacity at the WPCP.⁵

The BART Extension Alternative would incrementally increase wastewater flowing to WPCP, but is not likely to trigger the need for new or expanded wastewater treatment facilities. There would be *no adverse effect* on the WPCP, and no mitigation would be required.

Wastewater Conveyance Infrastructure

Wastewater generated by operation of the BART Extension Alternative in San Jose would be conveyed to the WPCP through the San Jose sanitary sewer system. Wastewater generated by operation of the BART Extension Alternative in Santa Clara would be conveyed to the WPCP through the Santa Clara sanitary sewer system.

The BART Extension Alternative would be responsible for providing onsite sewer infrastructure, such as laterals and extensions, connecting BART stations and facilities to the existing sewer system. New sewer infrastructure would be designed in accordance with applicable LOS guidelines and installed during BART Extension construction.

Wastewater generated at the BART stations and facilities may contribute to capacity deficiencies within offsite sewer systems. This represents a potential impact on utility systems; however, with implementation of Mitigation Measures UTIL-C and UTIL-D, this impact would have *no adverse effect*.

⁴ 8,000 gallons (daily water requirements for San Jose's portions of the BART Extension Alternative) divided by 38,800,000 gallons (San Jose's remaining capacity at the WPCP) = 0.0002.

⁵ 4,841.8 gallons (daily water requirements for Santa Clara's portions of the BART Extension Alternative) divided by 9,285,000 gallons (Santa Clara's remaining capacity at the WPCP) = 0.0005.

Mitigation Measure UTIL-C: Prepare a San Jose Sewer Capacity Assessment

Prior to zoning approval, VTA will coordinate with SJPW to prepare a Cooperative Agreement to establish the BART Extension Alternative's participation in improvements to offsite sanitary sewer capacity deficiencies. SJPW may conduct a detailed engineering study and hydraulic analysis to determine the extent of these impacts.

VTA will mitigate impacts on downstream sewer systems in San Jose through payment of the Sanitary Sewer Connection Fee, which is used to rehabilitate and enhance sewer capacity through San Jose's Sanitary Sewer Capital Improvement Program. If payment to the Sanitary Sewer Connection Fee does not adequately mitigate potential offsite sewer capacity impacts related to the BART Extension, direct upgrades to the sewer system will be required. If sewer system overcapacity is a result of projected cumulative development, San Jose and VTA shall develop a Cooperative Agreement to determine the BART Extension Alternative's participation in upgrades to the current system.

Capacity-relief upgrades will occur during the BART Extension's construction phase, and will be conducted in accordance with applicable San Jose standards regarding sewer infrastructure improvements. Generally, sewer infrastructure improvements will be located within the existing public right-of-way, with minimal potential to impact sensitive environmental resources. Construction activities will be subject to provisions outlined in this environmental document, including implementation of the construction education and outreach plan, to reduce potential impacts.

Mitigation Measure UTIL-D: Prepare a Santa Clara Sewer Capacity Assessment

Prior to zoning approval, VTA will coordinate with SCWSU to prepare a Cooperative Agreement to establish the BART Extension Alternative's participation in improvements to offsite sanitary sewer capacity deficiencies. SCWSU may conduct a detailed engineering study and hydraulic analysis to determine the extent of these impacts.

VTA will mitigate impacts on downstream sewer systems in Santa Clara through payment of the Sanitary Sewer Connection Charge, which is used to rehabilitate and enhance sewer capacity through Santa Clara's Capital Improvement Program. If payment to the Sanitary Sewer Connection Charge does not adequately mitigate potential offsite sewer capacity impacts related to the BART Extension, direct upgrades to the sewer system may be required. If sewer system overcapacity is a result of cumulative development, Santa Clara and VTA shall develop a Cooperative Agreement to determine the BART Extension Alternative's proportional participation to the upgrades to current system capacity.

Capacity-relief upgrades improvements would occur during the BART Extension's construction phase, and will be implemented in accordance with Chapter 17.15.210-280 of the Santa Clara City Code. Generally, sewer infrastructure improvements will be located within the existing public right-of-way, with minimal potential to impact sensitive

environmental resources. Construction activities will be subject to provisions outlined in this environmental document, including implementation of the construction education and outreach plan, to reduce potential impacts.

Solid Waste

BART facilities would generate solid waste at the Newhall Maintenance Facility and the stations. The Newhall Maintenance Facility would generate approximately 0.8 tons per day (tpd) of solid waste in San Jose, and 0.7 tpd in Santa Clara. Users of the three stations in San Jose would generate approximately 3.3 tpd of solid waste, and users of the Santa Clara station would generate approximately 1.1 tpd of solid waste. In total, 5.9 tpd of solid waste would be generated by the BART Extension. Track corridors along the BART alignment would not generate solid waste. Daily maintenance of right-of-way might be required to dispose of waste items that stray onto tracks, but this amount of waste is expected to be negligible.

The Newby Island Landfill has a maximum permitted throughput of 4,000 tpd of solid waste, and currently receives an average of 2,600 tpd of solid waste (Boccaleoni pers. comm.). Annual solid waste generated by the BART facilities would represent 0.4 percent of Newby Island Landfill's remaining daily capacity.⁶

The BART Extension Alternative is scheduled for operation beginning in 2026, and therefore extends beyond current contracts between Newby Island Landfill and San Jose and Santa Clara. These contracts were based on Newby Island Landfill's original 2025 closure date. In 2014, the state granted an expansion of the Newby Island Landfill and extended the landfill's estimated closure date from 2024 to 2041. Though it is uncertain whether San Jose and Santa Clara will continue to dispose of solid waste at the Newby Island Landfill beyond 2024, this facility has sufficient capacity to accept solid waste generated by the BART Extension Alternative. Therefore, solid waste generated by the BART Extension Alternative would not exceed the collective capacity of regional landfills that may serve the project beyond 2024, and *no adverse effect* would occur.

Stormwater

New and renovated facilities would be drained by a combination of existing, new, and modified stormwater infrastructure throughout San Jose and Santa Clara. As discussed in Section 6.15, *Water Resources, Water Quality, and Floodplains*, the BART Extension would increase the total amount of impervious surfaces relative to existing conditions, thus resulting in higher stormwater volumes and velocities into the stormwater system. However, new drainage improvements would be implemented to ensure that runoff does not exceed the capacity of existing or planned stormwater infrastructure.

⁶ 5.9 tons (daily solid waste generated by BART Extension Alternative) divided by 1,400 tons (daily input capacity remaining at Newby Island Landfill) = 0.004

After designs are finalized, a Stormwater Management Report will be prepared to document the final design for stormwater management and ensure sufficient storm drain capacity. The storm drainage infrastructure would be operated in accordance with the Phase II MS4 NPDES Permits within BART fenced areas and VTA-owned right-of-way. New drainage systems within VTA managed areas would be designed in accordance with the post-construction stormwater treatment measures included in VTA's Stormwater and Landscaping Design Criteria Manual, which includes the requirements of the Phase II MS4 NPDES Permit. Other applicable NPDES requirements will be applied when facilities are built within other agencies' fee owned right-of-way (for example, City streets and/or Caltrans jurisdiction) and when constructing facilities that will be subject to the Industrial General Permit (for example, the Newhall Maintenance Facility). Therefore, operation of the BART Extension would have *no adverse effect* on stormwater infrastructure, and no mitigation is required.

4.15.5 NEPA Conclusion

With implementation of Mitigation Measures UTIL-A through UTIL-D, the BART Extension Alternative would result in *no adverse effects* on utility systems.

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