3.10 Public Services and Utilities

3.10.1 Introduction

This section describes the regulatory setting, environmental setting, and potential impacts of the Proposed Project related to public services and utilities. These public services and utilities include police and fire services, emergency services, schools, solid waste, and underground and overhead utilities. The Proposed Project would not have any effect on water supply or wastewater demands or capacity; therefore, they are not discussed further in this section. Potential impacts associated with SMP Update maintenance activities on parks and other recreational areas available for public use are discussed in Section 3.11, *Recreation*.

Data used in the preparation of this section were primarily gathered from Santa Clara County, the City of San Jose, and the California Department of Resources Recycling and Recovery (CalRecycle).

3.10.2 Regulatory Setting

Federal Plans, Policies, Regulations, and Laws

No federal plans, policies, regulations, or laws related to public services and utilities are applicable to the Proposed Project.

State Plans, Policies, Regulations, and Laws

The only state regulations pertinent to public services and utilities pertain to the management of solid waste.

California Integrated Waste Management Act

To conserve water, energy and other natural resources, and to protect the environment by reducing the incineration or landfill disposal of waste, the California Integrated Waste Management Act of 1989 requires cities and counties to reduce, reuse, and recycle (including composting) solid waste generated in the state to the maximum extent feasible. The Act requires development of countywide integrated waste management plans (CIWMP). The CIWMP must include source reduction and recycling elements, household hazardous waste elements, and non-disposal facility elements for the county and each city within the county.

The California Integrated Waste Management Act is overseen by the California Integrated Waste Management Board (CIWMB) and managed by CalRecycle. CalRecycle oversees partnerships with local governments, industries, and the public to reduce waste, decrease greenhouse gas emissions, promote the highest and best use of materials, and regulate the handling, processing, and disposal of solid waste.

The CIWMB's 2001 Strategic Plan (CIWMB 2001) included a goal of a "zero-waste" California, and strategic directives were established in 2007 to incorporate efforts to implement the California Global Warming Solutions Act of 2006.

Regional and Local Plans, Policies, Regulations, and Ordinances

Santa Clara County Integrated Waste Management Plan

The Santa Clara County CIWMP was completed and approved by the CIWMB in 1996. Each of the jurisdictions (cities and towns) in the county has completed implementation of the requirements of the CIWMP.

The jurisdictions and the County established the following countywide policies for reducing waste and implementing the programs identified in the CIWMP:

1. Similar programs selected by neighboring jurisdictions should be combined when and if this will result in the achievement of economies of scale in capitalizing and operating programs, and as long as such consolidation does not conflict with the interests of the jurisdictions.

2. The cities of the county will work together to ensure that new disposal and non-disposal facilities are appropriately sized, designed, and sited, in order to avoid duplication of effort, unnecessary expenditure of funds, and environmental degradation, and so that the specific integrated waste management needs of each jurisdiction are met.

3. In order to avoid confusion and duplication of effort, the Solid Waste Commission of Santa Clara County, advised by the Technical Advisory Committee, shall coordinate and oversee implementation of new countywide integrated waste management programs, administer programs selected for countywide implementation, and address issues of regional or countywide concern, as these arise. State and local legislation dealing with integrated waste management issues affecting Santa Clara County shall be monitored and countywide compliance with State and Federal requirements shall be encouraged.

As of 2000, the County and all jurisdictional cities successfully diverted and continue to divert 50 percent or more of the waste stream from landfill disposal.

Santa Clara County Zero Waste 2020 Vision

Santa Clara County developed the "Zero Waste 2020 Vision" to encourage local governments to adopt policies and develop plans that motivate community members to eliminate waste. This vision statement and action plan were developed to provide Santa Clara County jurisdictions with a working document that can be used to guide decision making policies and programs toward achieving zero waste by 2020. (Santa Clara County Integrated Waste Management Division 2010)

Santa Clara County's vision is that by 2020, all discarded materials in the county will be recovered for their highest and best use, and no materials will be sent to landfills or incinerators.

As stated in the vision statement, Santa Clara County is working to:

1. Educate and engage businesses, organizations, public agencies and residents.
2. Adopt and implement supporting policies and Zero Waste Action Plans.
3. Support legislation and adopt policies that require minimizing environmental impacts through improved product design.
4. Ensure that facilities and infrastructure are in place to properly manage all recovered materials.

Implementation of Zero Waste 2020 Vision actions to achieve the County's mission is based on the following guiding principle regarding recycling and composting:

1. Recycling and Composting: Manage Materials to Minimize Environmental Impacts Downstream
    1. All organic materials shall be recovered and productively used.
    2. Recovered materials shall be directed to their highest and best use.
    3. Materials sent to landfill shall be minimized.

Cities throughout the county have developed and are implementing Zero Waste plans, following the County's guidance. For example, the City of San Jose adopted a Zero Waste Strategic Plan in 2008 (City of San Jose 2008). More information on the specific zero waste plans for each of the cities and towns within the County are available through their respective Web sites.

3.10.3 Environmental Setting

Police and Fire Services

Law enforcement and public safety services in the Project Area are provided by a combination of County and City departments. The Santa Clara County Sheriff's Department employs over 1,400 staff and is the primary law enforcement agency in unincorporated areas of the County and the communities of Cupertino, Los Altos Hills, and Saratoga. The County Sheriff's Department also provides law enforcement services for the Valley Transportation Authority and the Santa Clara County Parks Department (Santa Clara County Sheriff's Department 2010). Incorporated cities, such as San Jose, Gilroy, and Mountain View, operate independent police departments, which enforce local, state, and federal laws within their city limits. The California Highway Patrol also lends law enforcement and emergency assistance in the Project Area.

The Santa Clara County Fire Department provides fire, safety, and hazardous materials services for the County and the communities of Campbell, Cupertino, Los Altos, Los Altos Hills, Los Gatos, Monte Sereno, Morgan Hill, Saratoga, and unincorporated county areas. The County operates 16 fire stations, 100 emergency response vehicles, and employs over 265 fire prevention, suppression, investigation, administration, and maintenance personnel (Santa Clara County Fire Department 2010.) Other incorporated cities within the County, such as San Jose, Mountain View, and Santa Clara, operate independent fire departments.

Schools

In Santa Clara County, 36 school districts and 347 public schools provide educational services to over 261,000 students (Santa Clara County Office of Education 2010). All of these schools are in session during a traditional school calendar, starting in August and ending in May or June, and some are open year-round. Therefore, children may be present during SMP Update activities implemented near schools.

Solid Waste

Five permitted and active Class III landfills are located in Santa Clara County. The current status of each to receive waste materials is shown in Table 3.10-1. The current status of landfills permitted to receive hazardous waste is discussed in Section 3.6, *Hazards and Hazardous Materials*.

Table 3.10-1: Status of Landfills in Santa Clara County

Landfill	**Maximum Permitted Throughput** (tons per day)	**Maximum Permitted Capacity** (cubic yards)	**Remaining Capacity** (cubic yards)	**Estimated Closure Date** (when maximum capacity may be reached)
Newby Island Sanitary Landfill (43-AN-0003-01)	4,000	50,800,000	18,274,953	June 2025
Kirby Canyon Recycling and Disposal Facility (43-AN-0008-01)	2,600	36,400,000	57,271,507	December 2022
Guadalupe Sanitary Landfill (43-AN-0015-01)	1,300	28,600,000	14,600,000	November 2025
Zanker Road Class III Landfill (43-AN-0007-01)	1,300	1,300,000	700,000	Not available
Zanker Material Processing Facility (43-AN-0001-01)	350	540,100	540,100	December 2018

Source: CalRecycle 2010

Underground and Overhead Utilities

Underground and overhead utilities in the Project Area include natural gas, water, and oil pipelines (including raw water and treated water pipelines owned by SCVWD), sewer and storm drains, and communication lines (i.e., telephone, cable, power, and Internet services). If not visibly apparent, the location of these lines within work sites can be obtained through coordination within SCVWD, with County and municipal utility departments, and with the managing utility company.

3.10.4 Impact Analysis

Methodology

Impacts of the Proposed Project were evaluated qualitatively, based on the potential for the proposed maintenance activities to disrupt existing public services and utilities systems. These activities were identified and evaluated as temporary, short-term impacts; no long-term impacts of the Proposed Project on public services and utilities were identified.

Criteria for Determining Significance

For the purposes of this analysis, the Proposed Project would result in a significant impact on public services and utilities if it would:

A. result in the need for additional, or physically altered, public services or facilities, the provision of which could cause significant environmental impacts, to maintain acceptable service ratios, response times, or other performance objectives for any public service: fire protection, police protection, schools, parks, or other public facilities;

B. result in a need for new, relocated, upgraded, or expanded utilities and service system facilities that could cause significant environmental impacts to maintain acceptable service levels or other performance objectives for: water, wastewater/reclaimed water, stormwater, solid waste, streets and roadways, power systems (e.g., electricity, natural gas), other utility systems;

C. have insufficient water supplies available to serve the project from existing entitlements;

D. be served by a landfill with insufficient permitted capacity to accommodate the Proposed Project's solid waste disposal needs; or

E. fail to comply with federal, state, and local statues and regulation related to solid waste.

Environmental Impacts

Impact PSU-1: Effects on Public Facilities and Services (Significance Criterion A, Less than Significant)

The Proposed Project would not involve the construction of any development or involve any long-term activities that would result in an increased demand for public facilities, such as police, fire, or schools. The proposed maintenance activities would have no effect on the potential need for school facilities or services. However, the Proposed Project may have short-term effects on fire or police services during maintenance activities, as described below.

Vegetation Maintenance

Vegetation maintenance activities may include the use of flamers that, if used improperly, could result in an increased risk of starting a wildfire and the subsequent need for fire protection services. The Proposed Project includes BMPs that would dictate for flamers to be used cautiously by trained personnel and only during appropriate weather and seasonal conditions. As described in Section 3.6, *Hazards and Hazardous Materials*, the potential risk of starting a wildfire would be less than significant. In addition, the removal of debris and excess vegetation may actually reduce the potential for a wildfire and the need for fire protection services.

Vehicles and equipment associated with the proposed vegetation management activities, including the mechanical removal of trees, could require temporary local lane or road closures. In addition, these activities could generate additional management-related traffic. Although temporary, these closures and additional traffic could potentially impact the emergency response times of police or fire services during the maintenance activities.

Bank Stabilization, Sediment Removal, and Minor Maintenance

Bank stabilization and sediment removal activities would require the use of and/or temporary storage of heavy equipment, vehicles, sediments, and other materials. Minor maintenance also may require the use of heavy equipment (e.g., for grading activities) and/or storage of materials (e.g., plants and other landscaping materials). Similar to the vegetation management activities, these activities may require temporary lane or road closures of adjacent roads and may generate additional project-related traffic, resulting in temporary potential impacts on emergency response times.

Management of Animal Conflicts

Management of animal conflicts, particularly physical alteration activities such as surface compaction of levee surfaces or reconstruction of levee side slopes, also may require potential closures of adjacent roads. These closures could temporarily affect emergency response times.

Canal Maintenance

Because routine canal maintenance activities would include all general work activities, effects would be the same as described above for other routine maintenance work.

Applicable Best Management Practices

The following BMPs would be implemented as part of the SMP Update to prevent maintenance activities from resulting in significant effects on public facilities and services. Descriptions of each BMP are provided in Chapter 2, *Project Description*.

BMP GEN-36: Public Outreach
BMP GEN-37: Implement Public Safety Measures
BMP GEN-39: Planning for Pedestrians, Traffic Flow, and Safety Measures

Conclusion

The impact on public facilities and services resulting from the Proposed Project would be less than significant and would not require mitigation.

Mitigation Measures: No mitigation is required.

Impact PSU-2: Disruption to Utilities and Service System Facilities (Significance Criterion B, Less than Significant)

Buried and aboveground pipes, cables, or other utility delivery systems, for utilities including wastewater, stormwater, water, and power systems, are present within the Project Area. Stormwater pipelines and outfalls, in particular, commonly are located within or near stream channels and canals. Any of these utilities could potentially experience a disruption in service if the Proposed Project's maintenance activities accidentally damaged the utilities' distribution or transmission systems. In addition, the Proposed Project could potentially cause new environmental impacts if it would result in a need for new, relocated, upgraded, or expanded utilities and service system facilities. The Proposed Project's potential to affect utilities is further described below. The Proposed Project's potential to affect the acceptable service levels of streets and roadways is described in Section 3.12, *Traffic and Transportation*.

Vegetation Maintenance

Vegetation maintenance activities would have the potential to affect overhead utility lines during the removal or pruning of vegetation, particularly trees, and to potentially affect underlying utilities during discing activities. A beneficial impact of the vegetation maintenance activities would be vegetation removal from stream channels, which would restore the conveyance capacities of the channels during storm-flows. In addition, vegetation maintenance activities also would reduce fire hazards for adjacent properties.

Sediment Removal/Bank Stabilization Activities/Minor Maintenance

Grading, digging, and other ground-disturbing activities related to sediment removal, bank stabilization, and minor maintenance activities would potentially affect buried utilities that cross or are adjacent to Project Area water bodies. However, a beneficial effect of the sediment removal and minor maintenance activities would be the clearing of sediment or debris from stormwater outfalls and/or the replacement of these outfalls where needed.

Management of Animal Conflicts

Animal conflicts management would not be conducted in locations of underground utilities, and would be conducted without equipment that could interfere with any buried utilities. In particular, physical facility alterations, such as surface compaction of levees after filling of burrows, would avoid buried utilities at maintenance work sites.

Canal Maintenance

Because routine canal maintenance activities would include all general work activities, effects would be the same as described above for other routine maintenance work.

Applicable Best Management Practices

SCVWD would implement the following BMPs as part of the SMP Update to prevent maintenance activities from disrupting utilities and service system facilities. Descriptions of each BMP are provided in Chapter 2, Project Description.

BMP GEN-4: Minimize the Area of Disturbance
BMP GEN-23: Stream Access
BMP GEN-36: Public Outreach
BMP GEN-42: Investigation of Utility Line Locations

These BMPs would minimize the potential disturbed areas and the potential to affect buried utilities in part by utilizing existing access ramps and roads to the extent feasible. In addition, these BMPs would provide for all public works departments in the Project Area to be notified of the annual work plan and proposed maintenance locations, thereby giving the departments the opportunity to provide input regarding the locations of utilities near the maintenance work sites.

Conclusion

By implementing the BMPs listed above, the impact on utilities and service system facilities resulting from the Proposed Project would be less than significant and would not require mitigation.

Mitigation Measures: No mitigation is required.

Impact PSU-3: Insufficient Available Water Supplies resulting in the Need for New or Additional Water Supply or Distribution Facilities (Significance Criteria B and C, Less than Significant)

Potential construction-related impacts could result if new water distribution or supply facilities were needed to supply Proposed Project activities. The Proposed Project would require water for various maintenance activities, as described next.

Bank Stabilization Activities

Potential activities related to bank stabilization that may require water include vehicle cleaning, sediment/soil watering related to dust control activities, and irrigation of mitigation sites. As described in BMP GEN-31 (Chapter 2, Project Description), on-site vehicle cleaning may occur but only as needed to prevent the spread of sediment, pathogens, or exotic/invasive species. In addition, as detailed in BMP GEN-29, active maintenance areas and/or stockpiled soils would be watered following required dust control measures set by the Bay Area Air Quality Management District.

On-site mitigation may be performed, if necessary, as part of bank stabilization activities, depending on the results of each site's Mitigation Feasibility Assessment (MFA) (as described in the 2012 SMP Manual, Appendix A). Newly planted vegetation at the on-site mitigation sites may require irrigation until the plants became established. The amount of water needed for irrigation of these sites cannot be quantified at this time because bank stabilization activities are not projected activities and the MFAs would determine the specific vegetation types and quantities to be planted at each site. However, the MFAs would recommend planting species appropriate to the site conditions to minimize the use of natural resources (e.g., water). In general, SCVWD water trucks and supplies would be used to meet the limited water demands related to bank stabilization activities. Other methods of meeting water demands may include tie-ins to SCVWD water meters or, at irrigation sites with limited access, use of a technology that would release water to a plant's roots over an extended period of time. These activities would not require the construction of any long-term water distribution or supply facilities.

Sediment Removal Activities

Dust control-related watering and vehicle cleaning could be performed as part of sediment removal activities, similar to that described for bank stabilization.

Minor Maintenance Activities

Water may be used as part of minor maintenance activities for the irrigation of mitigation and landscaping sites, similar to the activities described for bank stabilization. In addition, watering may be performed to control dust occurring from any soils exposed during minor grading activities. The water quantity necessary for these activities would not require the construction of long-term water distribution or supply facilities.

Management of Animal Conflicts

Animal conflicts management generally would not result in any water demands. Limited water demands related to vehicle cleaning or dust control-related watering would result if any physical alterations of levee slopes, including surface compaction of levee slopes with heavy construction equipment, were performed.

Vegetation Management

Vegetation management activities (e.g., mowing, pruning, tree removals, or herbicide applications) generally would not result in any water demands. Flaming and grazing activities may require some water, to wet dry vegetation before and during flaming activities or to supply water for grazing animals. Both flaming and grazing are not projected activities under the Proposed Project. Discing for the Proposed Project may require the water for dust control. Because flaming and grazing activities are not projected and water for discing would be limited to dust control, these activities are anticipated to have limited water demands that would be met by trucked-in SCVWD water supplies.

Canal Maintenance

Because routine canal maintenance activities would include all general work activities, effects would be the same as described above for other routine maintenance work.

Applicable Best Management Practices

To minimize the potential water needed for dust-control, SCVWD would implement the following BMP as part of maintenance activities. A description of this BMP is provided in Chapter 2, Project Description.

BMP GEN-4: Minimize the Area of Disturbance

Conclusions

Proposed maintenance activities would require limited quantities of water for dust control, irrigation, or vehicle cleaning. Water demands would be met with SCVWD supplies and generally trucked into work sites, as necessary. Therefore, sufficient water supplies would be available for the Proposed Project. Thus, this impact would be less than significant and no mitigation would be required.

Mitigation Measures: No mitigation is required.

Impact PSU-4: Disposal of Excavated Sediment and Other Materials at Off-Site Locations, Including Landfills (Significance Criteria B, E, and F, Less than Significant)

Although the SCVWD does not have a projection for the volume of sediment and other materials (e.g., vegetation) to be removed under the SMP Update, historical data indicates that an average of 46,500 cubic yards of material was removed per year from 2002–2009 (Table 2-1). Furthermore, although the overall projected work area for sediment has increased since implementation of the 2002 SMP, sediment removal volumes would likely remain similar because the overall effort in terms of equipment and staff would not be significantly higher under the Proposed Project than the historic level of effort. Based on the historical trends, the Proposed Project likely would involve the removal of between 8,900 and 97,000 cubic yards of sediment (approximately 13,350 to 145,500 tons[1]) per year. In addition, the Proposed Project likely would involve the removal of approximately 11,378

[1] Estimate of tons is approximate and variable (basis for estimate is 1.5 tons per cubic yard). Sediment weight in a given volume is dependent on several factors including moisture content, particle size, and density.

tons per year of other materials. On average, 46,500 cubic yards (approximately 69,750 tons) of sediment and other materials was removed per year from 2002–2009.

The SCVWD would test samples from all material to be dredged to determine its appropriate reuse or disposal. As described in Section 3.13, Water Quality, sediments of sufficient quality could be used for wetland restoration projects; sediments of insufficient quality to be used for wetland restoration could be used as cover material at landfills (i.e., spread in layers over solid waste debris to contain gases and assist in the decomposition process). As described in Section 3.10.3, Environmental Setting, three landfills have closure dates near or within the time horizon of the SMP Update. Sediment that exceeded hazardous waste criteria would be disposed at sites designated to receive hazardous waste (e.g., Buttonwillow, a hazardous waste landfill).

Maintenance activities could generate up to 970,000 cubic yards of material waste over the 10-year lifetime of the Proposed Project. For sediment meeting the wetland reuse criteria, SCVWD has identified several wetland restoration areas that would be available to accept such sediment. Of these, Pond A8 has sufficient capacity for sediment reuse for the next 2–5 years. As described in Chapter 2, Project Description, additional ponds have been identified as potentially other suitable long-term sediment reuse locations. No other specific sites for the beneficial reuse of sediments for pond, upland, or aquatic restoration projects have been identified. For sediment that did not meet the wetland reuse criteria but was not considered hazardous, the SCVWD could dispose it at a local landfill, either to be disposed as waste or used for beneficial purposes (i.e., cover material). The overall capacities and daily/yearly constraints of existing landfills would be sufficient to serve the needs of the Proposed Project.

As described further in Section 3.6, Hazards and Hazardous Materials, three hazardous waste disposal sites are located in California: Chemical Waste Management's Kettleman Hills facility (Kettleman Hills); Clean Harbors' Buttonwillow facility (Buttonwillow); and Clean Harbors' Westmorland facility (Westmorland). These facilities would be capable of treating, storing, and/or disposing virtually all solid, semi-solid, and liquid hazardous, extremely hazardous, and non-hazardous wastes, including contaminated sediments and other materials. The Kettleman Hills hazardous waste landfill has a capacity of approximately 10.7 million cubic yards but could only accept very small quantities of hazardous waste (Brady, pers. comm., 2011) because it has nearly reached capacity. Buttonwillow, located west of Bakersfield, has a permitted capacity of 13,325,000 cubic yards and its constructed landfill capacity is 950,000 cubic yards. That facility would be capable of accepting large quantities of waste, including the amounts potentially generated by the Proposed Project (Winwood, pers. comm., 2011). The Westmorland facility, located near the Salton Sea, has a design capacity of 5,000,000 cubic yards (Clean Harbors 2010b). Sediment or materials classified as hazardous that would be excavated as part of the proposed maintenance activities likely would be disposed at Buttonwillow because it would have sufficient capacity and would be the second closest facility (after Kettleman Hills) to Santa Clara County. Sufficient capacity would be available at the three existing hazardous waste disposal sites to meet SCVWD's needs over the life of the Proposed Project.

Applicable Best Management Practices

The following BMPs would be implemented as part of the SMP Update so that the quantity of excavated or disturbed sediments, particularly hazardous sediments, would be minimized through the use of existing access ramps/roads, avoidance of hazardous sediments or sites, and minimization of the area of soils disturbed. Descriptions of each BMP are provided in Chapter 2, Project Description.

BMP GEN-3: Avoid Exposing Soils with High Mercury Levels
BMP GEN-4: Minimize the Area of Disturbance
BMP GEN-23: Stream Access
BMP GEN-27: Existing Hazardous Sites

Conclusion

Known disposal sites generally would be able to accommodate the volume of sediment and other materials generated by the Proposed Project. In addition, new disposal sites may be identified over time, which would provide additional disposal capacity. The Proposed Project would comply with state and local statutes applicable to solid waste by reusing sediments as much as possible, depending on the sediment quality. Therefore, this impact would be less than significant and no mitigation would be required.

Mitigation Measures: No mitigation is required.