

## **5.14 Public Services and Utilities**

This section evaluates the potential impacts of the SV 50K/Moosa 50K on public services and public utilities. This evaluation includes an assessment of the direct, indirect, short-term, long-term, and cumulative effects of the SV 50K/Moosa 50K Alternative on public services (police, fire, emergency medical services, schools, libraries, and public transit), and public utilities (electrical power, water, natural gas, sewer, storm drainage, and solid waste). The evaluation is based on available engineering information and data from public service and utility providers.

### **5.14.1 Affected Environment**

The SV 50K study area would be a subset of the larger SV 100K study area, and the Moosa 50K study area would be a subset of the larger Moosa 100K study area. Therefore, the following discussion refers to Section 3.14.1 (Public Services and Utilities for the Proposed Action) and Section 4.14.1 (Public Services and Utilities for the Moosa 100K Alternative) of this EIR/EIS for information on the Affected Environment as it applies to the SV 50K/Moosa 50K Alternative.

#### **5.14.1.1 Environmental Setting**

The environmental setting for the SV 50K component of the SV 50K/Moosa 50K Alternative would be the same as described in Section 3.14.1.1 (Public Services and Utilities for the Proposed Action), and the setting for the Moosa 50K component would be the same as described in Section 4.14.1.1 (Public Services and Utilities for the Moosa 100K Alternative) of this EIR/EIS.

#### **5.14.1.2 Regulatory Setting**

Refer to Section 3.14.1.2 (Public Services and Utilities for the Proposed Action) for a discussion of the regulatory setting that applies to the San Vicente component and Section 4.14.1.2 Public Services and Utilities for the Moosa 100K Alternative) for the Moosa component of this alternative.

### **5.14.2 Project Design Features**

General Conditions and Standard Specifications that will be included in the project construction documents to reduce public services and utilities impacts associated with construction of the SV 50K/Moosa 50K Alternative are summarized in Section 1.9.7 (Introduction, Public Services and Utilities) of this EIR/EIS. The SV 50K component of the SV 50K/Moosa 50K Alternative would incorporate the same project design features as those described for the in Section 3.14.2 (Public Services and Utilities for the Proposed Action) including, but not limited to, coordination with all other utility providers, and maintaining water deliveries to Helix Water District.

## 5.14.3 Direct and Indirect Effects

### 5.14.3.1 Thresholds of Significance

The thresholds of significance used to evaluate potential public services and utilities impacts of the SV 50K/Moosa 50K Alternative are the same as those used to evaluate impacts for the Proposed Action and the Moosa 100K Alternative. The thresholds are based on applicable criteria in the State CEQA Guidelines (CCR §§15000-15387), Appendix G. A significant impact on public services would occur if the SV 50K/Moosa 50K Alternative would:

1. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services, such as: police protection, fire protection, emergency medical services, schools, parks, and other public facilities.
2. Require or result in the need for new or expanded water supplies or entitlements.
3. Interrupt or disrupt utility services as a result of physical displacement and subsequent relocation of public utility infrastructure.
4. Result in the need for additional capacity of utility infrastructure or additional services that could not be supplied by existing utility service providers.
5. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

### 5.14.3.2 Impact Analysis

#### Methodology

The methodology used to evaluate impacts on public services and utilities at the SV 50K footprint is the same as described in Section 3.14.3.2 (Public Services and Utilities for the Proposed Action) of this EIR/EIS, and the methodology used to evaluate impacts on public services and utilities at the Moosa 50K footprint is the same as that described in Section 4.14.3.2 (Public Services and Utilities for the Moosa 100K Alternative) of this EIR/EIS.

#### Analysis

***Threshold 1: Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance***

***objectives for any of the public services, such as police protection, fire protection, emergency medical services, schools, parks, and other public facilities***

**Police Protection**

**SV 50K and Moosa 50K**

The conclusions in Sections 3.14.3.2 (Public Services and Utilities for the Proposed Action) and 4.13.3.2 (Public Services and Utilities for the Moosa 100K Alternative) also apply to the SV 50K and Moosa 50K footprints.

During construction, all vehicles on the road are required to yield to approaching emergency response vehicles when they are operating sirens and/or flashing emergency lights; therefore, any decreases in travel speeds on vicinity roadways resulting from slow-moving construction traffic would not cause a delay in police response times, and impacts on police protection services would be less than significant. Therefore, construction impacts to police protection from the SV 50K component or the Moosa 50K component of this alternative would be less than significant.

The marinas for the SV 50K component and the Moosa 50K component of this alternative would be built to the same capacity as described for the Proposed Action and the Moosa 100K Alternative, respectively. The same approximate number of users would visit the reservoirs as estimated for the Proposed Action (Section 3.15 Recreation) and the Moosa 100K Alternative (Section 4.15 Recreation). The Proposed Action and the Moosa 100K Alternative were found to not create a need for any new or physically altered governmental facilities for police protection. Similar conditions would apply to the SV 50K component and the Moosa 50K component of this alternative. Therefore, operational impacts on police protection from the SV 50K component and the Moosa 50K component of this alternative would be less than significant.

**Combined Impacts**

During construction, the SV 50K/Moosa 50K Alternative would incorporate the same emergency vehicle yield precautions as the Proposed Action and Moosa 100K Alternative, respectively. Therefore, the potential impacts would be less than significant.

During operation of the dam and recreational facilities, an incremental increase in police protection service capacity may be necessary. However, because the relocated San Vicente Marina and the new Moosa Marina would be served by different Sheriff substations, the combined impacts would be isolated from one another and would not create a need for any new or physically altered governmental facilities for police protection. The SV 50K/Moosa 50K Alternative would cover less area and incorporate the same recreational facilities as the Proposed Action and Moosa 100K Alternative, respectively. Therefore, the combined operational impacts of the SV 50K and Moosa 50K components would be less than significant.

## **Fire Protection**

### **SV 50K and Moosa 50K**

Construction and operational impacts on fire protection services from the SV 50K component and the Moosa 50K component of this alternative would be less than significant.

### **Combined Impacts**

The SV 50K/Moosa 50K Alternative would incorporate the same emergency vehicle yield precautions as the Proposed Action and Moosa 100K Alternative, respectively. Also, the relocated San Vicente Marina and the new Moosa Marina would be served by different fire stations, so the combined impacts would be isolated from one another and would not create a need for any new or physically altered governmental facilities for fire protection. Therefore, the combined construction and operational impacts of the SV 50K and Moosa 50K components would be less than significant.

## **Emergency Medical Services**

### **SV 50K and Moosa 50K**

Construction and operational impacts to EMS from the SV 50K component and the Moosa 50K component of this alternative would be less than significant.

### **Combined Impacts**

The SV 50K/Moosa 50K Alternative would incorporate the same emergency vehicle yield precautions as the Proposed Action and Moosa 100K Alternative, respectively. Also, the relocated San Vicente Marina and the new Moosa Marina would be served by different EMS providers, so the combined impacts would be isolated from one another and would not create a need for any new or physically altered governmental facilities for EMS. Therefore, the combined construction and operational impacts of the SV 50K and Moosa 50K components would be less than significant.

## **Schools, Libraries, and Public Transit**

### **SV 50K and Moosa 50K**

There are no schools, libraries or public transit lines located in the immediate vicinity of the SV 50K or Moosa 50K footprints. As discussed in Section 8.1 (Growth-Inducing Effects), the neither the Proposed Action nor the Moosa 100K Alternative would result in a direct increase in population; therefore, schools, libraries, and public transit systems are not anticipated to be affected. New or physically altered school, libraries or public transit facilities would not be required as a result of the Proposed Action or the Moosa 100K Alternative. Similar conditions would apply to the SV 50K and Moosa 50K components of this alternative. Therefore, there would be no impact from the SV 50K/ Moosa 50K Alternative.

### **Combined Impacts**

Neither the SV 50K nor the Moosa 50K component would affect schools, libraries, or public transit lines. Therefore, there would be no combined impacts on schools, libraries or public transit lines from the SV 50K and Moosa 50K components.

*The SV 50K/Moosa 50K Alternative would not diminish or disrupt police, fire, or EMS protection services, or require the need for new or physically altered police, fire, or EMS facilities. The SV 50K/Moosa 50K Alternative would not affect schools, libraries, or public transit in the study area. Therefore, impacts of the SV 50K/Moosa 50K Alternative would be less than significant.*

### ***Threshold 2: Require or result in the need for new or expanded water supplies or entitlements***

#### **SV 50K**

As discussed in Section 3.14.3 for the Proposed Action, diversion of natural flows in San Vicente Creek is entitled through the City of San Diego's pueblo water rights, and the reservoir would be primarily filled through the Water Authority's existing imported water supplies. Therefore, no new water supplies or entitlements would be required, and there would be no impact on water supplies or entitlements from the SV 50K component.

#### **Moosa 50K**

As discussed in Section 4.14.3 for the Moosa 100K Alternative, the Water Authority proposes to fill the reservoir primarily with imported water deliveries. However, because the project will require the construction of a new dam, the Water Authority will need to apply for an appropriative water right for diversion and storage of natural flows in Moosa Creek, or at least apply for the transfer of the storage rights held by VCMWD for Turner Reservoir. Therefore, the impact related to water supplies and/or entitlements from the Moosa 50K component would be significant.

### **Combined Impacts**

The SV 50K/Moosa 50K Alternative would provide the same volume of carryover water supply as either the Proposed Action or the Moosa 100K Alternative. The Water Authority would not need to expand water supplies or entitlements for the SV 50K component of this alternative, but it would need to acquire a new appropriative water right for the Moosa 50K component. Therefore, this impact would be significant.

*A new water right entitlement will be required for the SV 50K/Moosa 50K Alternative. Therefore, impacts would be significant (Impact SV/M/PS 1).*

***Threshold 3: Interrupt or disrupt utility services as a result of physical displacement and subsequent relocation of public utility infrastructure***

**Water Supply Service Interruption**

**SV 50K and Moosa 50K**

The conclusions in Sections 3.14.3.2 (Public Services and Utilities for the Proposed Action) and 4.13.3.2 (Public Services and Utilities for the Moosa 100K Alternative) also apply to the SV 50K and Moosa 50K footprints.

During construction of the SV 50K dam raise, water supply services would be disrupted during construction. However, implementation of the project design features described in Section 3.14.2 (Public Services and Utilities for the Proposed Action) EIR/EIS would reduce potential disruptions to water lines to less than significant. In addition, any required relocation of water lines would occur prior to their displacement to avoid short-term interruptions in water service to these facilities (see Section 3.14.2). Long-term disruptions are not expected.

Water service lines connecting to existing residences and facilities within the Moosa 100K inundation area would be permanently removed as they would no longer be needed, and implementation of the project design features described in Section 4.14.2 (Public Services and Utilities for the Moosa 100K Alternative) of this EIR/EIS would reduce potential disruptions to water lines to less than significant.

**Combined Impacts**

The SV 50K/Moosa 50K Alternative would affect fewer water service lines than the Proposed Action and Moosa 100K Alternative, respectively. However, the SV 50K/Moosa 50K Alternative would affect water service in two separate locations. Thus, the total impact of the SV 50K/Moosa 50K Alternative is potentially greater than that of either the Proposed Action or the Moosa 100K Alternative alone. However, both the SV 50K and Moosa 50K components would incorporate the same project design features for avoiding short-term interruptions and long-term disruptions in water service. Therefore, the combined impacts of the SV 50K and Moosa 50K components would be less than significant.

**Electrical Power Service Interruption**

**SV 50K and Moosa 50K**

The conclusions in Sections 3.14.3.2 (Public Services and Utilities for the Proposed Action) and 4.13.3.2 (Public Services and Utilities for the Moosa 100K Alternative) also apply to the SV 50K and Moosa 50K footprints.

Relocation of existing electrical lines servicing the area in the vicinity of the San Vicente Dam would be required. Low-voltage electric lines connecting to existing residences and facilities within the Moosa 50K inundation area would be permanently removed as they would no longer be needed. In addition, implementation of the project design features described in Section 3.14.2

(Public Services and Utilities for the Proposed Action) would require that all electrical lines would be constructed and brought on-line prior to displacement of the old facility to avoid short-term interruptions in electrical service. Temporary impacts on electrical utilities would be limited to service interruptions in the event an electrical line is inadvertently damaged during construction, or if a temporary disruption in service should occur during transition from an old facility to a new one. Long-term disruptions are not expected. Therefore, impacts on electrical power service from the SV 50K/Moosa 50K component would be less than significant.

### **Combined Impacts**

The SV 50K/Moosa 50K Alternative would affect fewer electrical power lines than the Proposed Action and Moosa 100K Alternative, respectively. A few large transmission lines would need to be relocated at both the SV 50K site and the Moosa 50K site. Thus, the total impact of the SV 50K/Moosa 50K Alternative would be greater than that of either the Proposed Action or the Moosa 100K Alternative alone. However, both the SV 50K and Moosa 50K components would incorporate the same project design features for avoiding short-term interruptions and long-term disruptions in electrical power service. Therefore, the combined impacts of the SV 50K and Moosa 50K components would be less than significant.

### **Solid Waste Service Interruption**

#### **SV 50K and Moosa 50K**

Solid waste service would not be interrupted in either study area. Therefore, impacts to solid waste service from the SV 50K and Moosa 50K components of this alternative would be less than significant.

### **Combined Impacts**

The SV 50K/Moosa 50K Alternative would incorporate the same project design features for solid waste service as the larger Proposed Action and Moosa 100K Alternative, respectively. Solid waste service would not be interrupted for either alternative. Therefore, service would not be interrupted for the SV 50K and Moosa 50K components, and there would be no combined impacts on solid waste service from the SV 50K and Moosa 50K components.

### **Natural Gas, Wastewater Facilities Service Interruption**

#### **SV 50K and Moosa 50K**

The conclusions in Sections 3.14.3.2 (Public Services and Utilities for the Proposed Action) and 4.13.3.2 (Public Services and Utilities for the Moosa 100K Alternative) also apply to the SV 50K and Moosa 50K components.

There are no natural gas lines in the SV 50K footprint. Therefore, no natural gas lines would be affected by the SV 50K component. The existing sewer conveyance facilities for the City operations yard downstream of the dam would not be affected.

Natural gas lines in the Moosa 50K footprint would be abandoned, as they would no longer be needed. Project design features would be incorporated to minimize potential disruptions to natural gas and sewer lines. In addition, any required relocation of these lines would occur prior to their displacement to avoid short-term interruptions in natural gas and sewer service to these facilities. Long-term disruptions are not expected. Therefore, impacts on natural gas and wastewater facilities service from the SV 50K and Moosa 50K components of this alternative would be less than significant.

### **Combined Impacts**

The SV 50K/Moosa 50K Alternative would affect fewer natural gas and wastewater facilities lines than the larger Proposed Action and Moosa 100K Alternative, respectively, and incorporate the same project design features to minimize potential disruptions. Therefore, the combined impacts of the SV 50K and Moosa 50K components would be less than significant.

*The SV 50K/Moosa 50K Alternative would not disrupt water supply, electrical, solid waste, and natural gas or wastewater services. Therefore, impacts of the SV 50K/Moosa 50K Alternative would be less than significant.*

***Threshold 4: Result in the need for additional capacity of utility infrastructure or additional services that could not be supplied by existing utility service providers***

### **Water Supply Additional Capacity Needs**

#### **SV 50K and Moosa 50K**

The conclusions in Sections 3.14.3.2 (Public Services and Utilities for the Proposed Action) and 4.13.3.2 (Public Services and Utilities for the Moosa 100K Alternative), that water to refill the SV 50K reservoir and fill the Moosa 50K reservoir after construction of the dam would be provided through the Water Authority's existing water delivery system and would not require an increase in infrastructure capacity, also apply to the SV 50K and Moosa 50K footprints. Therefore, impacts from the SV 50K and Moosa 50K components of this alternative would be less than significant.

### **Combined Impacts**

The combined SV 50K/Moosa 50K project will not require additional water delivery infrastructure. Therefore, the combined impacts of the SV 50K and Moosa 50K components would be less than significant.

### **Electrical Power, Natural Gas Additional Capacity Needs**

#### **SV 50K and Moosa 50K**

The energy requirements for the SV 50K and Moosa 50K components could be met by available resources. Therefore, electrical power and natural gas impacts due to the SV 50K component and Moosa 50K component of this alternative would be less than significant.

### **Combined Impacts**

The SV 50K/Moosa 50K Alternative would not require substantial additional electrical power or natural gas supplies or infrastructure; therefore, combined impacts of the SV 50K and Moosa 50K components would be less than significant.

### **Solid Waste Facilities Additional Capacity Needs**

#### **SV 50K**

As discussed in Section 3.14.3, in terms of landfill capacity, the Proposed Action would generate demolition debris and organic waste requiring disposal in a local solid waste landfill. The closest facility to San Vicente Reservoir is the Sycamore Landfill. It is likely that solid waste generated from preparation of the existing dam, demolition of the existing marina facilities, and vegetation clearing at the marina relocation area would be disposed of at Sycamore Landfill, which has a current remaining capacity of approximately 24 million cubic yards. The comparative amount of solid waste generated by the Proposed Action would be negligible. Impacts would be less than significant. Similar conditions would apply to the SV 50K component. The impact of solid waste disposal from the SV 50K component would be less than significant.

#### **Moosa 50K**

As discussed in Section 4.14.3, routine demolition debris and organic waste generated by the Moosa 100K component would likely be disposed of at Sycamore Landfill. The amount of solid waste generated by the Moosa 100K component would be negligible compared to the current remaining capacity of approximately 24 million cubic yards at this landfill. Impacts would be less than significant. Similar conditions would apply to the Moosa 50K component. Therefore, the impact of routine solid waste disposal from the Moosa 50K component would be less than significant.

### **Combined Impacts**

In a worst-case scenario, waste generated by the SV 50K/Moosa 50K Alternative from clearing and construction debris would be the same as the amount of waste estimated to be generated as a result of the construction of the Proposed Action and the Moosa 100K Alternative combined. This amount would be 80,000 cubic yards of waste, or 0.3 percent of the current remaining capacity of the Sycamore Landfill, the closest landfill to both project sites (County of San Diego, 2005). Therefore, combined solid waste impacts of the SV 50K and Moosa 50K components would be less than significant.

### **Wastewater Facilities Additional Capacity Needs**

#### **SV 50K**

As discussed in Section 3.14.3 for the Proposed Action, the City operations yard downstream of the dam would be replaced after dam construction, and no additional development is proposed in this area; therefore, the existing sewer lines serving this area would be adequate. Wastewater generated by restrooms and other facilities at the marina would be contained in holding tanks and would be regularly maintained as under the existing conditions. No additional wastewater lines

to the project area would be needed, and any impacts would be less than significant. Similar conditions would apply to the SV 50K component. Therefore, impacts from the SV 50K component would be less than significant.

### **Moosa 50K**

As discussed in Section 4.14.4, existing sewer capacities and levels of service would not be affected by the Moosa 100K component. Wastewater generated at the marina would be contained in holding tanks, and any impacts would be less than significant. Similar conditions would apply to the Moosa 50K component. Therefore, impacts from the Moosa 50K component would be less than significant.

### **Combined Impacts**

The SV 50K/Moosa 50K Alternative would not require increased capacity for wastewater treatment or sewer conveyance facilities. The amount of wastewater generated by the marinas of the SV 50K and Moosa 50K components would not be substantial and would not require expansion of existing wastewater treatment plants. Existing sewer capacities and levels of service would not be affected by the SV 50K and Moosa 50K components. Therefore, combined wastewater facilities impacts of the SV 50K and Moosa 50K components would be less than significant.

*The SV 50K/Moosa 50K Alternative would not likely require any substantial additional electrical power or natural gas supplies or infrastructure. The SV 50K/Moosa 50K Alternative would utilize a negligible percentage of regional solid waste landfill capacity, and would not affect existing sewer capacities and levels of service. Therefore, public utilities and services capacity impacts of the SV 50K/Moosa 50K Alternative would be less than significant.*

*The SV50K/Moosa 50K Alternative would not require any new delivery infrastructure. This impact would be less than significant.*

***Threshold 5: Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects***

### **SV 50K**

As required by NPDES regulations, a Storm Water Pollution Prevention Plan (SWPPP) would be designed and implemented to reduce or eliminate pollutants that may affect the quality of storm water during construction.

In addition, construction of permanent storm water facilities would be required at the SV 50K component and Moosa 50K component of this alternative to reduce water quality impacts from new facilities, including the dam structure, the marina, new access roads and other new or relocated facilities. Storm water runoff from the downstream face of the dam would be conveyed via the spillway chute, which leads into a stilling basin at the toe of the dam. Energy

dissipation of the discharge water (including storm water) would be accomplished by the stepped chute and the stilling basin. Therefore, storm water impacts due to the operation of the SV 50K component and Moosa 50K component of this alternative would be less than significant.

### **Combined Impacts**

The SV 50K/Moosa 50K Alternative would impact smaller areas than the Proposed Action and Moosa 100K Alternative, respectively. However, the SV 50K/Moosa 50K Alternative would affect storm water from construction and operation in two separate locations. Thus, the total impact of the SV 50K/Moosa 50K Alternative is potentially greater than that of either the Proposed Action or the Moosa 100K Alternative alone. However, both the SV 50K and Moosa 50K components would incorporate the same project design features for storm water pollution prevention. Therefore, the combined impacts of the SV 50K and Moosa 50K components would be less than significant.

*The SV 50K/Moosa 50K Alternative would implement SWPPP measures during construction, and replace existing storm water drainage facilities with site design measures or appropriately sized new facilities. Therefore, impacts of the SV 50K/Moosa 50K Alternative would be less than significant.*

### **5.14.3.3 Mitigation Measures**

To reduce significant impacts caused by the need to acquire a new water entitlement (**Impact SV/M/PS 1**), the Water Authority will implement the following mitigation measure:

**SV/M/PS 1-1** Prior to commencing any activities that would result in diversion or storage of natural flows in Moosa Creek, the Water Authority will: (1) file an application with the SWRCB for a new appropriative right; and (2) conduct additional environmental analysis to support this application.

### **5.14.3.4 Residual Impacts after Mitigation**

Public services and utilities impacts from the SV 50K/Moosa 50K Alternative as a result of the need for a new water right entitlement may not be mitigable to a less-than-significant level, even after implementation of this mitigation measure. Therefore, a Statement of Overriding Considerations will be required.

## **5.14.4 Cumulative Effects**

### **5.14.4.1 Other CIP Projects**

CIP projects that would contribute to cumulative public services impacts of the SV 50K/Moosa 50K Alternative would include those projects that would also affect the Proposed Action and the Moosa 100K Alternative identified in Sections 3.14.4.1 and 4.14.4.1, respectively. These

projects would include the Slaughterhouse Terminal Reservoir, Hubbard Hill Flow Regulatory Structure, North County Distribution Pipeline Flow Regulatory Structure, and Second Crossover Pipeline. The PEIR for the Regional Water Facilities Master Plan concluded that these CIP projects would increase the demand for electric and natural gas services. These anticipated projects would be required to provide for adequate utility service before their approval, and it is not expected that these projects would require more utility service than could be provided through the usual procedures. In addition, utility providers plan ahead and forecast future utility in the region as a whole and expand their capacity to meet future needs and provide adequate levels of service. The above conclusions regarding cumulative public services and utilities impacts for the four CIP projects described above are incorporated into the cumulative public services and utilities analyses in Section 5.14.4.3.

#### **5.14.4.2 ESP Projects**

ESP projects that would be in the vicinity of the SV 50K component would include the San Vicente Pipeline, the San Vicente Pump Station, and the San Vicente Surge Control Facility. Each of these projects included General Conditions and Standard Specifications or project design features to minimize public services and utilities impacts. In addition, the ESP EIR/EIS concluded cumulative public services and utilities impacts would not be significant. The above conclusions regarding public services and utilities impacts for the ESP projects are incorporated into the cumulative public services and utilities analyses in Section 5.14.4.3.

#### **5.14.4.3 Other Planned Projects with CIP and ESP Projects**

This section evaluates the cumulative public services and utilities impacts of the SV 50K/Moosa 50K Alternative when considered in conjunction with the other planned projects listed in Table 5.2-1 (Section 5.2 [Cumulative Projects] of this EIR/EIS), and incorporates the cumulative public services and utilities impacts associated with the CIP and ESP projects described in the above sections. The following cumulative public services and utilities analysis addresses each of the five significance thresholds listed in Section 5.14.3 above.

***Cumulative Threshold 1: Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services, such as police protection, fire protection, emergency medical services, schools, parks, and other public facilities***

Construction activities and operation of the SV 50K/Moosa 50K Alternative would not require the need to construct new or physically altered governmental facilities to maintain acceptable service ratios or response times for any public service including police, fire, EMS, schools, libraries, or public transit. Construction and operation of the CIP and ESP projects listed above would not require additional fire, police, EMS, schools, libraries, or public transit facilities to maintain adequate public services. A high volume of construction-related truck traffic may be generated from SV 50K/Moosa 50K Alternative, CIP and ESP projects, and other planned

cumulative projects listed in Table 5.2-1. However, all vehicles on the road are required to yield to approaching emergency response vehicles when they are operating sirens and/or flashing emergency lights. Therefore, any decreases in travel speeds on vicinity roadways resulting from slow-moving construction traffic associated with the SV 50K/ Moosa 50K Alternative would not cause a delay in response times; therefore, construction-related impacts on police, fire, and EMS protection services would be less than significant.

Cumulative public services and utilities impacts due to other cumulative projects in the vicinity of the SV 50K/Moosa 50K Alternative would be the same as those identified for the Proposed Action and the Moosa 100K Alternative discussed in Sections 3.14.4.3 and 4.14.4.3. Other cumulative projects in the area primarily include several small and large subdivisions, along with a few small commercial, institutional and industrial developments. As discussed in Section 4.2, the cumulative projects in the vicinity of the Moosa 50K project area may require additional police, fire, EMS, schools, libraries, or public transit facilities because the construction of new housing would add additional residents to the Moosa area. However, the SV 50K/Moosa 50K Alternative would not contribute to the local population growth. Therefore, cumulative public services impacts due to the SV 50K/Moosa 50K Alternative, when combined with cumulative public services impacts due to CIP, ESP, and other planned cumulative projects listed in Table 5.2-1, would be less than significant.

***Cumulative Threshold 2: Require or result in the need for new or expanded water supplies or entitlements***

It is expected that a new water right entitlement would be required for the construction or operation of the Moosa 50K Alternative component of the SV50K/ Moosa 50K Alternative. The addition of residential and industrial uses to the Moosa Canyon area would also require the need for new or expanded water supplies or entitlements. It is possible that other projects in the CIP may also require additional water supplies and/or entitlements. Therefore, any impacts due to the SV 50K/Moosa 50K Alternative would be significant.

***Cumulative Threshold 3: Interrupt or disrupt utility services as a result of physical displacement and subsequent relocation of public utility infrastructure***

Any required relocation of water supply, electrical power, natural gas, or wastewater lines in the vicinity of the SV 50K/Moosa 50K Alternative would occur prior to their displacement. This would avoid short-term interruptions for these services. The cumulative projects may also require relocation of utility service lines. It is expected that these projects would also ensure that short-term or long-term service interruptions do not occur. In addition, any required relocation of utilities as a result of construction of the CIP and ESP projects listed above would occur prior to their displacement. Therefore, cumulative public utilities impacts due to construction and operation of the SV 50K/Moosa 50K Alternative, when combined with public utilities impacts from the CIP, ESP, and other planned projects listed in Table 5.2-1, would be less than significant.

***Cumulative Threshold 4: Result in the need for additional capacity of utility infrastructure or additional services that could not be supplied by existing utility service providers***

The construction and operation of the SV 50K/Moosa 50K Alternative would not require additional water, natural gas, or electric supplies, and would not require additional solid waste or wastewater facility capacity. Although other cumulative projects may contribute to the cumulative impact on water, electric and natural gas supplies or solid waste capacity, the SV 50K/Moosa 50K Alternative's contribution to this impact would not be cumulatively considerable because it would not require additional utility supplies or capacity. Therefore, cumulative public utilities impacts due to construction and operation of the SV 50K/Moosa 50K Alternative, when combined with the additional water, electric, and natural gas supply, and solid waste capacity needs of the CIP, ESP, and other planned cumulative projects listed in Table 5.2-1, would be less than significant.

***Cumulative Threshold 5: Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects***

The SV 50K/Moosa 50K Alternative would involve the construction of new temporary and permanent storm water drainage facilities at each location to appropriately manage storm water runoff as a result of the SV 50K/Moosa 50K Alternative. The SV 50K/Moosa 50K Alternative would follow NPDES regulations to reduce or eliminate pollutants that may affect the quality of storm water. Cumulative residential and industrial projects as well as the CIP and ESP projects would be required to follow NPDES regulations, and would install temporary and permanent storm water control facilities in order to minimize flooding and reduce or eliminate pollutants that may affect the quality of storm water during construction and in the long-term. Therefore, cumulative impacts due to construction and operation of the SV 50K/Moosa 50K Alternative, when combined with storm water impacts due to the CIP, ESP, and other planned cumulative projects listed in Table 5.2-1, would be less than significant.

*The SV 50K/Moosa 50K Alternative would not diminish or disrupt public services, would not require additional utilities services, and would involve the construction of storm water drainage facilities that would not cause significant environmental effects. Therefore, cumulative public services and utilities impacts due to the SV 50K/Moosa 50K Alternative for these activities, when combined with the short-term (construction-related) and long-term (operational) public services and utilities impacts associated with the CIP and ESP projects listed above, and other planned cumulative projects listed in Table 5.2-1, would be less than significant.*

*The SV 50K/Moosa 50K Alternative would require the need for a water right entitlement (**Impact SV/M/PS 1C**), which would result in a significant cumulative impact, when combined with the water supply and/or entitlement impacts associated with the CIP and projects and the planned cumulative projects listed in Table 5.2-1. Even with implementation of Mitigation Measure SV/M/PS-1, it may not be possible to mitigate the impact to a below a level of significance. A Statement of Overriding Considerations would be necessary for approval of the SV 50K/Moosa 50K Alternative.*