

3.0 ALTERNATIVES TO THE PROJECT

3.1 INTRODUCTION

The California Environmental Quality Act (CEQA) requires that an EIR describe a reasonable range of alternatives to the Project, or to the Project's location, which could feasibly attain most of the basic project objectives, but avoid or substantially lessen any of the potentially significant project-related effects. The EIR's alternative section is also required to evaluate the comparative merits of the alternatives. DPR, as the lead agency, is responsible for selecting a range of project alternatives for analysis and is required to publicly disclose its reasoning for selecting the discussed alternatives. The EIR should also identify any alternatives that were considered by the lead agency, but were rejected as infeasible during the scoping process, and briefly explain the reasons underlying the determination (Title 14, California Code of Regulations (14 CCR) §15126.6(a,c)). Further, if the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion and include the reasons in the EIR (14 CCR §15126.6 (f)(2)).

3.2 PROJECT OBJECTIVES

To be considered a feasible alternative, a particular alternative must meet most of the Project's objectives (14 CCR § 15126.6 (a)). In this case, the Project is aimed at reducing or eliminating the potential adverse effects of Constituents of Concern (COC) on human or ecological receptors, in compliance with DPR's mission and the following Project objectives:

- Provide for the inspiration and education of the people of California by helping to preserve the state's extraordinary biological diversity and creating opportunities for high-quality outdoor recreation;
- Protect and preserve valuable natural and cultural resources within the Park;
- Protect public health and the environment through minimizing exposure of Park users and DPR personnel to unacceptable health risks; and
- Comply with the intent and terms of the DTSC and RWQCB Joint Order.

As explained in the Project Description (Section 2.3.4.2) the effects of COC can only be realized when an exposure pathway is complete.

An exposure pathway has five parts:

1. A source of COC, such as mine and mill related materials;
2. A way for the COC to travel to the point of contact (e.g., water transporting a COC downstream, or wind blowing a COC through the air);
3. A point of exposure or contact with the constituent;

4. A route of exposure such as ingestion (eating, drinking), inhalation (breathing), or dermal contact (touching); and
5. A receptor, such as humans or sensitive wildlife, birds, and plants.

The exposure pathway is considered to be complete when all five parts are present. Conversely, if any one of these five parts is not present, the exposure pathway is considered to be incomplete.

Thus, alternatives to the Project should be aimed at achieving the basic objectives of the Project, by:

1. Reducing or eliminating the COC source(s);
2. Inhibiting COC transport;
3. Reducing or eliminating receptor exposure; and
4. Reducing or eliminating environmental impacts, as compared with the Project.

3.3 SELECTION OF ALTERNATIVES

3.3.1 RANGE OF ALTERNATIVES

The Department of Toxic Substance Control (DTSC) and the Regional Water Quality Control Board (RWQCB) have ordered (Joint Order) DPR and Newmont (together, Project Proponents) to implement Program Actions at the Park. For this Program EIR, potential alternatives are limited to those: (1) that are located within the Park; and (2) that comply with the Joint Order requiring the characterization, evaluation and remediation of COC at the Park. These two factors necessarily limit DPR's consideration of Alternatives in this EIR.

Subject to concurrence from DTSC and RWQCB, DPR retains some discretion in how those cleanup requirements are met. Further, DPR can address its own concerns and objectives beyond those specified in the Joint Order. As the CEQA Lead Agency for this Project, DPR retains the discretion to protect cultural resources, biological resources and Park visitors and Park personnel to a greater degree than specified in the Joint Order. However, DPR's discretion to evaluate alternatives is ultimately limited because it is legally required to implement clean-up Program Actions and location of the Project (the Park) cannot be different than the Project.

Per CEQA requirements, DPR evaluated a range of alternatives for feasibility regarding their ability to meet Project Objectives and comply with the Joint Order. Section 3.3.2, Alternatives Considered and Rejected as Infeasible, provides a brief discussion of those alternatives that were considered and rejected because they were infeasible (i.e., would not comply with the Joint Order or would not meet most of the Project Objectives). The remaining alternatives consisted of the No-Project Alternative and the Less Intensive Program Actions Alternative. These alternatives are described in Section 3.4, Summary

of Alternatives. They were evaluated for impacts and compared against the Project, both from a programmatic and area-specific perspective in Section 3.5., Alternatives Analysis.

3.3.2 ALTERNATIVES CONSIDERED AND REJECTED AS INFEASIBLE

CEQA defines “feasible” as “...capable of being accomplished in a successful manner, within a reasonable period of time, taking into account economic, environmental, social, and technological factors.” In evaluating alternatives to the Project, DPR considered and rejected as infeasible the following alternatives:

3.3.2.1 Park-Wide Exclusion Fencing and Institutional Controls Alternative

Under this Alternative, the existing exclusionary fencing would permanently remain in place to reduce the potential likelihood of contact and exposure of visitors and DPR employees to unacceptable health risks from COC at the Park. In addition, based on the results of the characterization and evaluation at the Park, additional exclusionary fencing could be implemented throughout the Park surrounding areas containing COC that could expose people to health risks. Under this Alternative, only Program Actions specifically mandated to comply with the Joint Order would be implemented at the Park.

Finding: DPR has determined that this alternative is infeasible because it would not be environmentally and socially beneficial, would reduce opportunities for high quality outdoor recreation by restricting large areas of the Park from public access, and potentially expose people to COC from airborne and waterborne exposure, thereby failing to protect public health and the environment through minimizing exposure of Park users and DPR personnel to unacceptable health risks.

3.3.2.2 Limited Hours of Program Actions Alternative

Under this Alternative, Program and Project Actions would only take place during early morning and late afternoon/early evening hours to reduce noise, aesthetic, and short-term air quality impacts to Park employees and Park visitors. This Alternative could also prohibit implementation of Program or Project Actions during weekends and holidays during the spring, summer, and fall months (high use periods). Implementation of this Alternative would avoid overlap of Park usage and Program and Project actions, thereby further reducing noise, aesthetic, and short-term air quality impacts. In addition, this Alternative would avoid implementation of Project Actions during times of the day that local land-use ordinances would penalize for noise violations (e.g., before 7 AM and after 10 PM).

Finding: DPR has determined that this Alternative would be infeasible because it would not be accomplished in a successful manner in a reasonable amount of time, would violate the intent and terms of the DTSC and RWQCB Joint Order because it would not comply with the scheduling requirements and potentially expose people to COC for a

longer duration than under the Project thereby failing to protect public health and the environment through minimizing exposure of Park users and DPR personnel to unacceptable health risks.

3.3.3 MORE INTENSIVE PROGRAM ACTIONS ALTERNATIVE

Under this Alternative, the Program and Project Actions that most thoroughly remove COC from the Park would be utilized. Thus, Program Actions such as Complete Removal would be implemented rather than Select Removal to maximize the amount of COC that would be managed, treated, or removed from the Park. This alternative would meet the Project Objectives while possibly reducing impacts associated with potential exposure of humans and the environment to COC. The Project, however, could just as effectively reduce long-term risk to humans and the environment while avoiding impacts to environmental resources that would occur under this Alternative. In addition, this Alternative could impact other environmental resources (e.g., cultural resources and vegetation) because more land would be disturbed than would occur under the Project.

Finding: DPR has determined that this Alternative is not feasible because it could not be economically implemented, would be contrary to the Project Objective regarding the protection and preservation of valuable natural and cultural resources within the Park, and would not necessarily protect public health and the environment through minimizing exposure of Park users and DPR personnel to unacceptable health risks.

3.3.3.1 Cultural Values Program Actions Alternative

Under this Alternative, the implementation of Program Actions would avoid areas of the Park with the highest cultural resource values. Since these areas receive higher visitor frequency and time of exposure, this alternative would allow continued use and viewing of higher priority cultural resources, while restricting Program Actions at less visited areas (such as the Sand Dam). Remediation Areas, including the Mine Yard and Stamp Mill (Area 1), Historic Mine and Mill Sites (Area 5), Historic Grounds (Area 8) and Trails (10) would be avoided to allow use and viewing of these higher cultural resource value areas.

Finding: DPR has determined that this Alternative would be infeasible because it would not take into account environmental factors, and would violate the intent and terms of the DTSC and RWQCB Joint Order because it would avoid areas high in COC, potentially exposing people to COC, thereby failing to protect public health and the environment through minimizing exposure of Park users and DPR personnel to unacceptable health risks.

3.4 SUMMARY OF ALTERNATIVES

DPR has evaluated two alternatives to the Project. Alternative 1, the No Project Alternative, is a statutorily mandated alternative to be evaluated when an EIR is

prepared for a project. Alternative 2, the Less Intensive Program Actions (LIPA) Alternative, evaluates an alternative method of implementing Program Actions at the Park to reduce impacts to environmental resources at the programmatic level and within each Remediation Area. These two alternatives are discussed below in sections 3.4.1 and 3.4.2, respectively. Section 3.5 provides the alternatives analysis both from a programmatic (Section 3.5.1) and an area-specific (Section 3.5.2) perspective.

3.4.1 Alternative 1: No Project Alternative

The CEQA requires an evaluation of the specific "no project" alternative and its impact (14 CCR § 15126.6(e)(1)). The "no project" alternative describes the existing conditions, as well as the physical conditions that are likely to occur in the future if the project (the proposed plan) is not approved. The purpose of describing and analyzing a no project alternative is to allow decision-makers to compare the impacts of approving the proposed project with the expected impacts of not approving the project.

While the "no project" alternative would result in fewer short-term environmental impacts when compared to the Project and LIPA, it would result in the continued existence of COC at the Park and the potential for contamination to groundwater, surface water, soil and air resources at the Park. Exposure pathways from constituents to human and ecological receptors therefore remain. In addition, there are physical structures (historic dams) located in the Remediation Areas (Sand Dam (Area 4) and Stacy Lane Pond (Area 7)) that would remain in place under the No Project Alternative.

For these reasons, the "no project" alternative is infeasible and would not meet the Project objectives because it would clearly violate the legal requirements of the Joint Order administered by DTSC and RWQCB. It is, however, a statutorily mandated Alternative and is therefore included in this Alternative Analysis.

3.4.2 Alternative 2: Less Intensive Program Actions Alternative

Under this Alternative, the Project Actions that cause the most potentially significant impacts to environmental resources would be eliminated from consideration. This would narrow the suite of Program Actions and Project Actions that would meet the Project Objectives while reducing impacts associated with more intensive Program Actions (e.g., Complete Removal and Replacement of Surface Materials) and Project Actions (e.g., Removal of Trees and Other Vegetation). This Alternative, while reducing environmental impacts (including those to cultural resources) associated with more intensive Program and Project Actions, could be less effective in removing COC at the Park. However, if there are lower concentrations of COC in a particular Remediation Area, this Alternative could meet the Project Objectives and reduce impacts on environmental impacts, as compared to the Project. The Project Proponents conferred with RWQCB and DTSC to determine the minimum amount of Program Actions that could be implemented to meet the cleanup goals and/or water quality objectives from a

programmatic and area-specific perspective. The Less Intensive Program Actions Alternative would consist of any of the following Remediation Options:

- Use of institutional controls;
- Stormwater collection and diversion structures;
- Other water management measures;
- Remediation of structures (Remediation Area 9 only);
- Use of engineered controls to prevent access;
- Maintenance and enhancement of existing cover;
- In-situ covers, establishment and stabilization;
- Implement active treatment measures (only in Remediation Area 6);
- Implement passive treatment measures (only in Remediation Areas 4 and 7); and/or
- Select removal and/or replacement of surface materials (in water courses only).

3.5 ALTERNATIVES ANALYSIS

3.5.1 PROGRAMMATIC ANALYSIS

Table 3.0-1, Programmatic Analysis of Project and Alternatives, provides a tabular comparison of the Project to the two alternatives described in Section 3.4, above. This table compares Alternatives 1 and 2 with the Project.

**TABLE 3.0-1
PROGRAMMATIC ANALYSIS OF PROJECT AND ALTERNATIVES**

Resource Category	Programmatic Significance Determination	Alternatives	
		Alternative 1: No Project	Alternative 2: Less Intensive Program Actions
Aesthetics			
Impact 4.1-1: Program Actions Could Substantially Degrade the Existing Visual Character or Quality of the Park and its Surroundings	Less than Significant	Less Impact: This Alternative would not have any Program Actions.	Less Impact: Disturbance areas and Project Actions would be less than under the Project.
Impact 4.1-2: Program Actions Could Introduce a Substantially New Source of Light or Glare	Less than Significant	Less Impact: This Alternative would not have any Program Actions.	Similar Impact.
Impact 4.1-3: Program Actions at Area Specific Locations Could Substantially Degrade the Existing Visual Character or Quality of the Park and its Surroundings	Less than Significant	Less Impact: This Alternative would not have any Program Actions.	Less Impact: Disturbance areas and Project Actions would be less than under the Project.
Air Quality			
Impact 4.2-1: Program Actions Could Generate Criteria Pollutant Emissions at the Park	Less than Significant	Less Impact: This Alternative would not have any Program Actions.	Less Impact: Disturbance areas and Project Actions would be less than under the Project.
Impact 4.2-2: Program Actions Would Generate TAC Emissions and Increase Exposure to TAC Emissions at Nearby Receptors	Less than Significant	Less Impact: Short-term during implementation of Project. Greater Impact: Long-term exposure risk would remain without cleanup.	Less Impact: Disturbance areas and Project Actions would be less than under the Project.
Impact 4.2-3: Program Actions Would Generate Localized CO Emissions at Intersections and Roadways in the Project Vicinity Due to Offsite Worker and Haul Truck Emissions	Less than Significant	Less Impact: No Project-related traffic would occur.	Less Impact: Disturbance areas and Project Actions would be less than under the Project, which would reduce Project-related traffic.

Resource Category	Programmatic Significance Determination	Alternatives	
		Alternative 1: No Project	Alternative 2: Less Intensive Program Actions
Impact 4.2-4: Program Actions Could Lead to Increases in Odor Emissions	Less than Significant	Less Impact: Project-related mobile equipment and passive treatment would not occur.	Similar Impact.
Impact 4.2-5: Program Actions Could Conflict with Implementation of State Goals for Reducing Greenhouse Gas (GHG) Emissions and thereby have an Adverse Effect on Global Climate Change	Less than Significant	Less Impact: No Project Actions would occur.	Less Impact: Disturbance areas and Project Actions would be less than under the Project.
Biological Resources			
Impact 4.3-1: Program Actions at the Park Could Have a Substantial Adverse Effect, Either Directly or Through Habitat Modification, on Species Identified as Sensitive, Candidate, or Special-Status Species in Local or Regional Plans, Policies, or Regulations, or by the CDFG or the USFWS	Potentially Significant and Unavoidable	Less Impact: This Alternative would not involve Program and Project Actions. Greater Impact: Long-term exposure risk would remain without cleanup.	Less Impact: In short-term, this Alternative would involve fewer activities and surface disturbance than the Project. Greater Impact: Over the long-term, there could be more exposure with less cleanup.
Impact 4.3-1(A): Program Actions at the Park Could Have a Substantial Adverse Effect, Either Directly or Through Habitat Modification, on California Red-Legged Frog (CRLF)	Less than Significant	Less Impact: This Alternative would not involve Program and Project Actions. Greater Impact: Long-term exposure risk would remain without cleanup.	Less Impact: This Alternative would involve fewer activities and surface disturbance than the Project. Greater Impact: Over the long-term, there could be more exposure with less cleanup.
Impact 4.3-1(B): Program Actions at the Park Could Have a Substantial Adverse Effect, Either Directly or Through Habitat Modification, on Willow Flycatcher	Less than Significant	Less Impact: This Alternative would not involve Program and Project Actions. Greater Impact: Long-term exposure risk would remain without cleanup.	Less Impact: This Alternative would involve fewer activities and surface disturbance than the Project. Greater Impact: Over the long-term, there could be more exposure with less cleanup.

Resource Category	Programmatic Significance Determination	Alternatives	
		Alternative 1: No Project	Alternative 2: Less Intensive Program Actions
<p>Impact 4.3-1(C): Program Actions at the Park Could Have a Substantial Adverse Effect, Either Directly or Through Habitat Modification, on Native Vegetation Potentially Supporting Unlisted Special-Status Species</p>	Less than Significant	<p>Less Impact: This Alternative would not involve Program and Project Actions. Greater Impact: Long-term exposure risk would remain without cleanup.</p>	<p>Less Impact: This Alternative would involve fewer activities and surface disturbance than the Project. Greater Impact: Over the long-term, there could be more exposure with less cleanup.</p>
<p>Impact 4.3-1(D): Program Actions at the Park Could Have a Substantial Adverse Effect, Either Directly or Through Habitat Modification, on Bats</p>	Less than Significant	<p>Less Impact: This Alternative would not involve Program and Project Actions. Greater Impact: Long-term exposure risk would remain without cleanup.</p>	<p>Less Impact: This Alternative would involve fewer activities and surface disturbance than the Project. Greater Impact: Over the long-term, there could be more exposure with less cleanup.</p>
<p>Impact 4.3-1(E): Program Actions at the Park Could Have a Substantial Adverse Effect, Either Directly or Through Habitat Modification, on Nesting Raptors and Migratory Birds</p>	Potentially Significant and Unavoidable	<p>Less Impact: This Alternative would not involve Program and Project Actions. Greater Impact: Long-term exposure risk would remain without cleanup.</p>	<p>Less Impact: This Alternative would involve fewer activities and surface disturbance than the Project. Greater Impact: Over the long-term, there could be more exposure with less cleanup.</p>
<p>Impact 4.3-2: Program Actions at the Park Could Require Activities that Would Have a Substantial Adverse Effect on Riparian Habitat or Other Sensitive Natural Community Identified in Local or Regional Plans, Policies, or Regulations, or by the CDFG or the USFWS</p>	Less than Significant	<p>Less Impact: This Alternative would not involve Program and Project Actions.</p>	<p>Less Impact: This Alternative would involve fewer activities and surface disturbance than the Project.</p>

Resource Category	Programmatic Significance Determination	Alternatives	
		Alternative 1: No Project	Alternative 2: Less Intensive Program Actions
Impact 4.3-3: Program Actions at the Park Could Have a Substantial Adverse Effect on Federally Protected Waters of the U.S., as Defined by CWA §404, Through Direct Removal, Filling, Hydrological Interruption, or Other Means	Potentially Significant and Unavoidable	Less Impact: This Alternative would not involve Program and Project Actions.	Less Impact: This Alternative would involve fewer activities and surface disturbance than the Project.
Impact 4.3-4: Program Actions at the Park Could Interfere with the Movement of Native Resident Fish or Wildlife Species or with Established Native Resident or Migratory Wildlife Corridors	Less than Significant	Less Impact: This Alternative would not involve Program and Project Actions.	Less Impact: This Alternative would have less surface disturbance and Project Actions than the Project.
Cultural Resources			
Impact 4.4-1: Program Actions Could Cause a Substantial Adverse Change in the Significance of a Historic Resource as Defined in CCR §15064.5	Potentially Significant and Unavoidable	Less Impact: The Alternative would not include Program or Project Actions that could impact historic resources.	Less Impact: This Alternative would have less surface disturbance and Project Actions than the Project; thus, there would likely be less impacts to historic resources
Impact 4.4-2: Program Actions Could Cause a Substantial Adverse Change in the Significance of an Archaeological Resource Pursuant to CCR §15064.5	Potentially Significant and Unavoidable	Less Impact: The Alternative would not include Program or Project Actions that could impact archaeological resources.	Less Impact: This Alternative would have less surface disturbance and Project Actions than the Project; thus, there would likely be less impacts to archeological resources
Impact 4.4-3: Program Actions Could Disturb Any Human Remains, Including Those Interred Outside of Formal Cemeteries	Less than Significant	Less Impact: The Alternative would not include Program or Project Actions that could impact archaeological resources.	Less Impact: This Alternative would involve reduced Program and Project Actions, thereby reducing the likelihood of disturbance of human remains.

Resource Category	Programmatic Significance Determination	Alternatives	
		Alternative 1: No Project	Alternative 2: Less Intensive Program Actions
Geology and Soils			
<p>Impact 4.5-1: Park Features Subject to Program Actions could be Susceptible to Seismically-Induced Ground Failure</p>	Less than Significant	<p>Similar Impact: Under this Alternative, existing historic dams would remain without characterization and could be susceptible to seismically-induced failure. It should be noted however, that seismicity is part of the existing conditions at the Park and the No Project Alternative would not change existing conditions regarding the susceptibility to seismic failure. However, because the Project would characterize and potentially address any potential issues regarding seismically induced failure of the Sand Dam, DPR is conservatively determining that the No Project Alternative would have similar impacts regarding seismically induced failure (Impact 4.5-4) than the Project.</p>	Similar Impact.
<p>Impact 4.5-2: Park Features Subject to Program Actions could be Susceptible to Ground Subsidence over Underground Excavations</p>	Less than Significant	Similar Impact	Similar Impact.
<p>Impact 4.5-3: Program Actions could have a Substantial Adverse Effect on Slope Hazards (Landslides and Erosion)</p>	Less than Significant	<p>Less Impact: This Alternative would not disturb slope hazards and would therefore have less effect on slope hazards than the Project.</p>	<p>Less Impact: This Alternative would involve less intensive ground-disturbing activities; therefore, adverse effects would be less than the Project.</p>

Resource Category	Programmatic Significance Determination	Alternatives	
		Alternative 1: No Project	Alternative 2: Less Intensive Program Actions
Hazards and Hazardous Materials			
Impact 4.6-1: Program Actions Could Create A Significant Hazard to the Public or the Environment Through the Routine Transport, Use, or Disposal of Hazardous Materials	Less than Significant	Less Impact: This Alternative would not include off-site transport, use, or disposal of hazardous materials.	Less Impact: This Alternative could involve less off-site transportation of hazardous materials from the Park than would occur under the Project.
Impact 4.6-2: Program Actions Could Create A Significant Hazard to the Public or the Environment Through Reasonably Foreseeable Upset And Accident Conditions Involving the Release of Hazardous Materials into the Environment	Less than Significant	Greater Impact: Failure to remediate COC at the Park would increase the likelihood of release of hazardous materials into the environment.	Less Impact: This Alternative would involve less intensive ground-disturbing activities; therefore, adverse effects would be less than the Project.
Impact 4.6-3: The Project Could Emit Hazardous Emissions or Handle Hazardous or Acutely Hazardous Materials, Substances, or Waste Within 1/4 Mile of an Existing or Proposed School	Less than Significant	Less Impact: This Alternative would not include off-site transport, use, or disposal of hazardous materials.	Less Impact: This Alternative could involve less off-site transportation of hazardous materials from the Park than would occur under the Project.
Impact 4.6.4: Be Located on a Site Which is Included on a List of Hazardous Materials Sites Compiled Pursuant to Government Code § 65962.5 and, as a Result, Would Create a Significant Hazard to the Public or the Environment	Less than Significant	Similar Impact.	Similar Impact.
Impact 4.6.5: Expose People or Structures to a Significant Risk of Loss, Injury or Death Involving Wildland Fires, Including Where Wildlands are Adjacent to Urbanized Areas or Where Residences are Intermixed with Wildlands	Less than Significant	Less Impact: This Alternative would introduce less mobile equipment that contains combustible engines.	Less Impact: This Alternative could introduce less mobile equipment that contains combustible engines; thus, impacts would be less than under the Project.
Hydrology and Water Quality			
Impact 4.7-1: Program Actions Could Result in a Release of Sediment, COC, or Alteration of pH that Could	Less than Significant	Less Impact: In the short-term, Project Actions that could raise sedimentation would not occur.	Less Impact: During Project implementation, this Alternative would require less disturbance

Resource Category	Programmatic Significance Determination	Alternatives	
		Alternative 1: No Project	Alternative 2: Less Intensive Program Actions
Violate Water Quality Standards or Waste Discharge Requirements		Greater Impact: In the long-term, failure to implement Program Actions could cause release of COC in violation of DPR's Waste Discharge Requirements at the Magenta Drain.	<p>acreate and less grading activities that could cause sedimentation than would occur under the Project.</p> <p>Greater Impact: In the long-term, failure to fully implement Program Actions could cause more release of COC than would occur under the Project, which could lead to a violation of DPR's Waste Discharge Requirements.</p>
Impact 4.7-2: Program Actions Could Result in a Temporary Release of Chemical Reagents or Water with Chemical Concentrations that Could Violate Water Quality Standards or Site Waste Discharge Requirements.	Less than Significant	Less Impact: This Alternative would not introduce chemical reagents to the Park.	Similar Impact.
Impact 4.7-3: Program Actions Could Result in Alteration of Drainage Patterns, Resulting in Substantial Erosion or Siltation, or a Substantial Increase in Surface Runoff that could Exceed the Capacity of Stormwater Drainage Systems or Result in Substantial Additional Sources of Polluted Runoff.	Less than Significant	Less Impact: This Alternative would not introduce chemical reagents to the Park.	Less Impact: The Alternative would require less disturbance acreage and less grading activities that could cause sedimentation than would occur under the Project; therefore, this Alternative's erosion impacts would be less than under the Project
Impact 4.7-5: Water-Treatment Actions Could Result in a Temporary Release of Chemical Reagents or Water with Chemical Concentrations that Could Violate Water Quality Standards or Site Waste Discharge Requirements at all 10 Remediation Areas	Less than Significant	Less Impact: This Alternative would not introduce chemical reagents to the Park.	Similar Impact.

Resource Category	Programmatic Significance Determination	Alternatives	
		Alternative 1: No Project	Alternative 2: Less Intensive Program Actions
Noise			
Impact 4.9-1: Program Actions Could Result in Exposure of Persons to, or Generation of, Noise Levels in Excess of Standards Established in Local General Plan, Noise Ordinance, or Applicable Standards of Other Agencies at Existing Off-Site Noise-Sensitive Areas, or at the Noise-Sensitive Visitor Center Area of the Park Site	Potentially Significant and Unavoidable	Less Impact: This Alternative would not require noise-generating equipment.	Less Impact: This Alternative would require less acreage disturbance and noise-generating equipment; therefore, noise impacts are expected to be less than would occur under the Project.
Impact 4.9-2: Program Actions Could Result in a Substantial Permanent Increase in Ambient Noise Levels in the Park Vicinity	Potentially Significant and Unavoidable	Less Impact: This Alternative would not require noise-generating equipment.	Less Impact: This Alternative would require less acreage disturbance and noise-generating equipment; therefore, noise impacts are expected to be less than would occur under the Project.
Impact 4.9-3: Program Actions Could Result in Substantial Temporary or Periodic Increase in Ambient Noise Levels in the Park Vicinity	Potentially Significant and Unavoidable	Less Impact: This Alternative would not require noise-generating equipment.	Less Impact: This Alternative would require less acreage disturbance and noise-generating equipment; therefore, noise impacts are expected to be less than would occur under the Project.
Public Services			
Impact 4.10-1: Program Actions Could Result in the Need for Electrical Services in Areas of the Park Currently not Served by PG&E	Less than Significant	Less Impact: This Alternative would not require additional electricity.	Similar Impact.

Resource Category	Programmatic Significance Determination	Alternatives	
		Alternative 1: No Project	Alternative 2: Less Intensive Program Actions
Traffic and Circulation			
Impact 4.11-1: Program Actions and/or Area-Specific Actions Could Cause a Substantial Increase in Traffic Relation to the Existing Traffic Load and Capacity or Result in an Exceedance of Established Level of Service Standards on the Local Street System Providing Access to the Park	Less than Significant	Less Impact: This Alternative would not require additional traffic beyond existing conditions.	Less Impact: Depending on which Program and/or Project Actions would be reduced, this Alternative would be similar to, or less than, the Project.
Impact 4.11-2: Program Actions at the Park Could Result in Inadequate Emergency Access	Less than Significant	Similar Impact.	Similar Impact.
Impact 4.11-3: Program Actions at the Park Could Result in Inadequate Parking Capacity	Less than Significant	Less Impact: The Alternative would not require additional parking.	Less Impact: This Alternative would likely require less parking than the Project.

3.5.2 AREA-SPECIFIC ALTERNATIVES ANALYSIS

3.5.2.1 Remediation Area 1

The Mine Yard is defined as the area of historic mining, mine support, and ore processing facilities associated with the Empire Mine. The Area includes historic buildings, the Visitor's Center parking lot, the Stamp Mill foundation, and the open area between buildings. The historic buildings include the Visitors' Center, Docent Building/Warehouse, Manager's Office/Refinery/ Safety Engineer's Office Building, Machine Shop, Blacksmith Shop, Welding Shop, Compressor Building, Hoist House, and Transformer Building (see Figure 2.0-5).

Aesthetics

Project

The Standard and Specific Project Requirements AES-1 through AES-3 (trail fence color, storage of materials in the viewshed of State Route 174, and posting of information signs) were developed to reduce the visibility of the Program Actions and to explain the Program Actions and provide their anticipated duration. The Project would not result in any significant impacts to aesthetics.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, aesthetics impacts would be less than would occur under the Project at Remediation Area 1.

Less Intensive Program Actions Alternative

Under Alternative 2 (Less Intensive Program Actions Alternative), disturbance areas and Project Actions would be less than would occur under the Project. Therefore, aesthetics impacts would be less than would occur under the Project at Remediation Area 1.

Air Quality

Project

The potential Project-related actions are projected to result in less than significant air quality impacts for Remediation Area 1 assuming they adhere to analytical assumptions (including Maximum Daily Scenario), incorporate Standard Project Requirement AIR-1 (dust and ozone reduction measures), and implement Mitigation Measures 4.2-1(a)

(additional dust suppression measures) and 4.2-1(b) (Remediation and Mitigation Plan), as applicable. The Maximum Daily Scenario (MDS) is an evaluation that is broad in nature to determine what level of activity related to Program Actions would result in emissions and ambient impacts that are less than significant when compared to the Northern Sierra Air Quality Management District (NSAQMD) significance thresholds. This level of activity is an estimate of foreseeable Program Actions that could occur either concurrently or consecutively that are likely potential sources of emissions. If arsenic concentrations are below 363 mg/kg, Standard Project Requirement AIR-1 (dust suppression measures) would be applied to Project Actions taking place in Remediation Area 1. If arsenic concentrations are above 363 mg/kg, but below 3,500 mg/kg, Mitigation Measure 4.2-1(a) (additional dust control measures) would be applied to Project Actions taking place in Remediation Area 1. If arsenic concentrations are above 3,500 mg/kg, the Project Proponents would develop a Remediation and Mitigation Plan that ensures that acute hazard health impacts have a Hazard Index less than 1.0. This MDS scenario is utilized to provide a specific level of Project activities that would, together with Standard Project Requirement AIR-1 and Mitigation Measures 4.2-1(a) and 4.2-1(b), result in less than significant impacts related to criteria pollutants.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, air quality impacts would be less than would occur under the Project at Remediation Area 1.

There could be more potential exposure to humans and the environment without cleanup as remaining COC could become airborne and could be subject to ingestion or dermal contact with humans, wildlife, or plants. This impact would be greater than would occur under the Project at Remediation Area 1.

Less Intensive Program Actions Alternative

During Project implementation, Alternative 2 (Less Intensive Program Actions Alternative) would involve less disturbance areas and Project Actions would be less than would occur under the Project. Therefore, air quality impacts would be less than would occur under the Project at Remediation Area 1.

After Project implementation, there could be more potential exposure to humans and the environment with less cleanup than would occur under the Project as remaining COC could become airborne and could be

subject to ingestion or dermal contact with humans, wildlife, or plants. This impact would be greater than would occur under the Project at Remediation Area 1.

Biological Resources

Project

Project Requirements BIO-3 (protection of California Red Legged Frog, California Horned Lizard, and Northwestern Pond Turtle), BIO-4 (avoidance of nesting bird species), BIO-5 (tree removal), BIO-6 (avoidance of maternal bat colonies), BIO-6 (minimize areas used for Project Actions) would reduce many of the biological impacts to a less than significant level at Remediation Area 1. The impacts to biological resources that were reduced to the extent feasible but remain potentially significant and unavoidable at Remediation Area 1 relate to the potential for adverse effects to bats, nesting raptors and migratory birds.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to biological resources would be less than could occur under the Project at Remediation Area 1.

Biological resources would be exposed to higher concentrations of COC than would occur under the Project because cleanup efforts would not occur under Alternative 1. Thus, potential impacts to biological resources would be greater under this Alternative compared to the Project over the long-term.

Less Intensive Program Actions Alternative

During Project implementation, Alternative 2 (Less Intensive Program Actions Alternative) would involve less surface disturbance and less operation of mechanized equipment; therefore, impacts to biological resources would be less than would occur under the Project at Remediation Area 1.

After Project implementation, biological resources would be exposed to higher concentrations of COC than would occur under the Project because cleanup efforts would be less under Alternative 1 than would occur under the Project. Thus, potential impacts to biological resources would be greater under this Alternative compared to the Project over the long-term.

Cultural Resources

Project

Project Requirements CULT-1 (recordation and mapping of resources), CULT-2 (awareness training), CULT-3 (cultural resource avoidance), CULT-4 (previously undocumented resources), CULT-5 (human remains), CULT-6 (Secretary of the Interior's standards) and CULT-7 (siting and design of facilities) and Mitigation Measure 4.4-1 (thorough recording of historic features), and 4.4-2 (data recovery) have been incorporated into the Project to reduce impacts to cultural resources. However, the Project's impacts to cultural resources are considered potentially significant and unavoidable for the following reasons:

- The Remediation Areas in the Park where Program Actions will be implemented are known to contain significant cultural resources;
- Program Actions could potentially have significant impacts on these cultural resources;
- The full scope and nature of the Project's potential impacts to significant cultural resources cannot be determined at this time without the benefit of a comprehensive and detailed remediation plan; and
- It is not certain that all potential impacts can be mitigated to a less than significant level. If mitigable, it is not known if the required mitigation would be feasible or enforceable, as defined under CEQA.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to cultural resources could be less than would occur under the Project at Remediation Area 1.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less surface disturbance and contact with cultural resources than would occur under the Project; therefore, impacts to cultural resources could be less than would occur under the Project at Remediation Area 1.

Geology and Soils

Project

With the incorporation of Project Requirements GEO-1 (post-earthquake inspections), GEO-2 (pre-disturbance evaluations over known shallow mine workings), and HYDRO-1 (preparation of Storm Water Pollution Prevention Plan), impacts to geology and soils are less than significant.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to geology and soils could be less than would occur under the Project at Remediation Area 1.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less surface disturbance than would occur under the Project; therefore, impacts to geology and soils could be less than would occur under the Project at Remediation Area 1.

Hazards and Hazardous Materials

Project

With the incorporation of Project Requirements HAZMAT-1 (Materials Management Plan), HAZMAT-2 (suspension of work during precipitation events), and HAZMAT-3 (Decontamination of Project Vehicles and Equipment), impacts to hazards and hazardous materials is less than significant.

No Project Alternative

For most of the impacts associated with hazards and hazardous materials, Alternative 1 (No Project Alternative) would have less impact than the Project because it would not involve Program or Project Actions. However, for Impact 4.6-2 (Reasonably foreseeable upset and accidental conditions involving the release of hazardous substances), there would be greater impacts associated with Alternative 1 compared to the Project because the failure to remediate COC at Remediation Area 1 would increase the likelihood of release of hazardous materials into the environment.

Less Intensive Program Actions Alternative

For most of the impacts associated with hazards and hazardous materials, Alternative 2 (Less Intensive Program Actions Alternative) would have less impact than the Project because it would involve less intensive implementation of Program or Project Actions. However, for Impact 4.6-2 (Reasonably foreseeable upset and accidental conditions involving the release of hazardous substances), there would be greater impacts associated with Alternative 2 compared to the Project because reduced remediation of COC at Remediation Area 1 would increase the likelihood of release of hazardous materials into the environment.

Hydrology and Water Quality

Project

With the incorporation of Project Requirements HYDRO-1 (preparation of Storm Water Pollution Prevention Plan) and HYDRO-2 (installation of energy dissipaters at water discharge points), impacts to hydrology and water quality materials is less than significant.

No Project Alternative

For most of the impacts associated with hydrology and water quality, Alternative 1 (No Project Alternative) would have less impact than the Project because it would not involve Program or Project Actions. However, for Impact 4.7-1 (release of sediment, COC or alteration of pH), there could be greater impacts associated with Alternative 1 compared to the Project because the failure to remediate COC at Remediation Area 1 would increase the likelihood of impacts associated with the release of COC or alteration of pH.

Less Intensive Program Actions Alternative

For most of the impacts associated with hydrology and water quality, Alternative 2 (Less Intensive Program Actions Alternative) would have less impact than the Project because it would involve less intensive implementation of Program or Project Actions. However, for Impact 4.7-1 (release of sediment, COC or alteration of pH), there could be greater impacts associated with Alternative 2 compared to the Project because the less remediation of COC at Remediation Area 1 would increase the likelihood of impacts associated with the release of COC or alteration of pH.

Land Use and Planning

Project

The Project's impacts to land use and planning are less than significant. Alternatives 1 (No Project Alternative) and 2 (Less Intensive Program Actions Alternative) would have similar impacts regarding land use and planning as would occur under the Project; therefore, a detailed discussion of the Project and a comparison to each alternative is not warranted.

Noise

Project

Standard Project Requirement NOISE-1 (limitation of Project Actions to daytime hours, incorporation of noise attenuation measures, and utilization of shields and buffers) would reduce the severity of potential impacts from Program and Project Actions, but it is uncertain at this time if all noise impacts could be reduced to a less than significant level.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, noise impacts would be less than would occur under the Project at Remediation Area 1.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less Program and Project Actions with associated decreased use of mechanized equipment than would occur under the Project; therefore, noise impacts would likely be less than would occur under the Project at Remediation Area 1.

Public Services

Project

The Project's impacts to public services are less than significant. Alternatives 1 (No Project Alternative) and 2 (Less Intensive Program Actions Alternative) would have similar impacts regarding public services as would occur under the Project; therefore, a detailed discussion of the Project and a comparison to each alternative is not warranted.

Traffic and Circulation

Project

With the incorporation of Project Requirements TRAFFIC-1 (pre-project implementation coordination with local jurisdictions), TRAFFIC-2 (reservation of main parking lot for visitors) and TRAFFIC-3 (preparation of traffic impact study), impacts to traffic and circulation are less than significant.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, traffic and circulation impacts would be less than would occur under the Project at Remediation Area 1.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less Program and Project Actions with associated decreases in the following:

- Project personnel traveling to and from the Park;
- Materials imported to the Park;
- COC being removed from the Park; and
- Mobilization/demobilization of equipment to and from the Park.

Therefore, traffic and circulation impacts would be less under Alternative 2 compared to the Project at Remediation Area 1

3.5.2.2 Remediation Area 2

The Cyanide Plant Area (Remediation Area 2) encompasses 2.7 acres of cultural and natural resources that warrant protection from the adverse effects of Program Actions or Park visitor use (see Figure 2.0-6). The foundation of the Cyanide Plant has an interior area of approximately 16,000 square feet. The Cyanide Plant was part of the ore processing facilities at the Empire Mine. During operation of the Cyanide Plant, gold was recovered from finely stamped ore by cyanide leaching. The building and mill equipment have been removed; however, the building foundations still exist.

Aesthetics

Project

The Standard and Specific Project Requirements AES-1 through AES-3 (trail fence color, storage of materials in the viewshed of State Route 174, and posting of information signs) were developed to reduce the visibility of the Program Actions and to explain the Program Actions and provide their anticipated duration. The Project would not result in any significant impacts to aesthetics.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, aesthetics impacts would be less than would occur under the Project at Remediation Area 2.

Less Intensive Program Actions Alternative

Under Alternative 2 (Less Intensive Program Actions Alternative), disturbance areas and Project Actions would be less than would occur under the Project. Therefore, aesthetics impacts would be less than would occur under the Project at Remediation Area 2.

Air Quality

Project

The potential Project-related actions are projected to result in less than significant air quality impacts for Remediation Area 2 assuming they adhere to analytical assumptions (including Maximum Daily Scenario), incorporate Standard Project Requirement AIR-1 (dust and ozone reduction measures), and implement Mitigation Measures 4.2-1(a) (additional dust suppression measures) and 4.2-1(b) (Remediation and Mitigation Plan), as applicable. The Maximum Daily Scenario (MDS) is an evaluation that is broad in nature to determine what level of activity related to Program Actions would result in emissions and ambient impacts that are less than significant when compared to the Northern Sierra Air Quality Management District (NSAQMD) significance thresholds. This level of activity is an estimate of foreseeable Program Actions that could occur either concurrently or consecutively that are likely potential sources of emissions. If arsenic concentrations are below 363 mg/kg, Standard Project Requirement AIR-1 (dust suppression measures) would be applied to Project Actions taking place in Remediation Area 2. If arsenic concentrations are above 363 mg/kg, but below 3,500 mg/kg, Mitigation

Measure 4.2-1(a) (additional dust control measures) would be applied to Project Actions taking place in Remediation Area 2. If arsenic concentrations are above 3,500 mg/kg, the Project Proponents would develop a Remediation and Mitigation Plan that ensures that acute hazard health impacts have a Hazard Index less than 1.0. This MDS scenario is utilized to provide a specific level of Project activities that would, together with Standard Project Requirement AIR-1 and Mitigation Measures 4.2-1(a) and 4.2-1(b), result in less than significant impacts related to criteria pollutants.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, air quality impacts would be less than would occur under the Project at Remediation Area 2.

There would be more potential exposure to humans and the environment without cleanup as remaining COC could become airborne and could be subject to ingestion or dermal contact with humans, wildlife, or plants. This impact would be greater than would occur under the Project at Remediation Area 2.

Less Intensive Program Actions Alternative

During Project implementation, Alternative 2 (Less Intensive Program Actions Alternative) would involve less disturbance areas and Project Actions would be less than would occur under the Project. Therefore, air quality impacts would be less than would occur under the Project at Remediation Area 2.

After Project implementation, there could be more potential exposure to humans and the environment with less cleanup than would occur under the Project as remaining COC could become airborne and could be subject to ingestion or dermal contact with humans, wildlife, or plants. This impact would be greater than would occur under the Project at Remediation Area 2.

Biological Resources

Project

Project Requirements BIO-3 (protection of California Red Legged Frog, California Horned Lizard, and Northwestern Pond Turtle), BIO-4 (avoidance of nesting bird species), BIO-5 (tree removal), BIO-6 (avoidance of maternal bat colonies), and BIO-6 (minimize areas used for

Project Actions), have reduced many of the biological impacts to a less than significant level. The impacts to biological resources that were reduced to the extent feasible but remain potentially significant and unavoidable relate to the potential for adverse effects to bats, nesting raptors and migratory birds, riparian habitat, and/or designated Waters of the U.S.

No Project Alternative

In the short-term, Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to biological resources would be less than the Project at Remediation Area 2 because no resource-disturbing (e.g., disturbance of habitat and disturbance of nesting behavior) and no operation of mechanized equipment Project Actions would occur.

Over the long-term, biological resources would be exposed to higher concentrations of COC than would occur under the Project because cleanup efforts would not occur under Alternative 1. Thus, potential impacts to biological resources would be greater under this Alternative compared to the Project at Remediation Area 2.

Less Intensive Program Actions Alternative

During Project implementation, Alternative 2 (Less Intensive Program Actions Alternative) would involve less resource disturbance (e.g., disturbance of habitat and disturbance of nesting behavior) and less operation of mechanized equipment; therefore, impacts to biological resources would be less than would occur under the Project at Remediation Area 2.

After Project implementation, biological resources would be exposed to higher concentrations of COC than would occur under the Project because cleanup efforts would be less under Alternative 1 than would occur under the Project. Thus, potential impacts to biological resources would be greater under this Alternative compared to the Project over the long-term.

Cultural Resources

Project

Project Requirements CULT-1 (recordation and mapping of resources), CULT-2 (awareness training), CULT-3 (cultural resource avoidance), CULT-4 (previously undocumented resources), CULT-5 (human remains), CULT-6 (Secretary of the Interior's standards) and CULT-7 (siting and

design of facilities) and Mitigation Measure 4.4-1 (thorough recording of historic features), and 4.4-2 (data recovery) have been incorporated into the Project to reduce impacts to cultural resources to the extent feasible. However, the Project's impacts to cultural resources are considered potentially significant and unavoidable for the following reasons:

- The Remediation Areas in the Park where Program Actions would be implemented are known to contain significant cultural resources;
- Program Actions could potentially have significant impacts on these cultural resources;
- The full scope and nature of the Project's potential impacts to significant cultural resources cannot be determined at this time without the benefit of a comprehensive and detailed remediation plan; and
- It is not certain that all potential impacts can be mitigated to a less than significant level. If mitigable, it is not known if the required mitigation would be feasible or enforceable, as defined under CEQA.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to cultural resources could be less than would occur under the Project at Remediation Area 2.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less surface disturbance than would occur under the Project; therefore, impacts to cultural resources would be less than would occur under the Project at Remediation Area 2.

Geology and Soils

Project

With the incorporation of Project Requirements GEO-1 (post-earthquake inspections), and HYDRO-1 (preparation of Storm Water Pollution Prevention Plan), impacts to geology and soils are less than significant.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to geology and soils could be less than would occur under the Project at Remediation Area 2.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less surface disturbance than would occur under the Project; therefore, impacts to geology and soils could be less than would occur under the Project at Remediation Area 2.

Hazards and Hazardous Materials

Project

With the incorporation of Project Requirements HAZMAT-1 (Materials Management Plan), HAZMAT-2 (suspension of work during precipitation events), HAZMAT-3 (Decontamination of Project Vehicles and Equipment), and HAZMAT-4 (Wildfire Avoidance and Response), impacts to hazards and hazardous materials is less than significant.

No Project Alternative

For most of the impacts associated with hazards and hazardous materials, Alternative 1 (No Project Alternative) would have less impact than the Project because it would not involve Program or Project Actions. However, for Impact 4.6-2 (Reasonably foreseeable upset and accidental conditions involving the release of hazardous substances), there would be greater impacts associated with Alternative 1 compared to the Project because the failure to remediate COC at Remediation Area 2 would increase the likelihood of release of hazardous materials into the environment.

Less Intensive Program Actions Alternative

For most of the impacts associated with hazards and hazardous materials, Alternative 2 (Less Intensive Program Actions Alternative) would have less impact than the Project because it would involve less intensive implementation of Program or Project Actions. However, for Impact 4.6-2 (Reasonably foreseeable upset and accidental conditions involving the release of hazardous substances), there would be greater impacts associated with Alternative 2 compared to the Project because reduced

remediation of COC at Remediation Area 2 would increase the likelihood of release of hazardous materials into the environment.

Hydrology and Water Quality

Project

With the incorporation of Project Requirements HYDRO-1 (preparation of Storm Water Pollution Prevention Plan) and HYDRO-2 (installation of energy dissipaters at water discharge points), impacts to hydrology and water quality materials is less than significant.

No Project Alternative

For most of the impacts associated with hydrology and water quality, Alternative 1 (No Project Alternative) would have less impact than the Project because it would not involve Program or Project Actions. However, for Impact 4.7-1 (release of sediment, COC or alteration of pH), there could be greater impacts associated with Alternative 1 compared to the Project because the failure to remediate COC at Remediation Area 2 would increase the likelihood of impacts associated with the release of COC or alteration of pH.

Less Intensive Program Actions Alternative

For most of the impacts associated with hydrology and water quality, Alternative 2 (Less Intensive Program Actions Alternative) would have less impact than the Project because it would involve less intensive implementation of Program or Project Actions. However, for Impact 4.7-1 (release of sediment, COC or alteration of pH), there could be greater impacts associated with Alternative 2 compared to the Project because the less remediation of COC at Remediation Area 2 would increase the likelihood of impacts associated with the release of COC or alteration of pH.

Land Use and Planning

Project

The Project's impacts to land use and planning are less than significant. Alternatives 1 (No Project Alternative) and 2 (Less Intensive Program Actions Alternative) would have similar impacts regarding land use and planning as would occur under the Project; therefore, a detailed discussion of the Project and a comparison to each alternative is not warranted.

Noise

Project

Standard Project Requirement NOISE-1 (limitation of Project Actions to daytime hours, incorporation of noise attenuation measures, and utilization of shields and buffers) will reduce the severity of potential impacts from Program and Project Actions. Noise impacts were reduced to the extent feasible, but remain potentially significant and unavoidable because it is uncertain at this time if all noise impacts could be reduced to a less than significant level.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, noise impacts would be less than would occur under the Project at Remediation Area 2.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) would involve less Program and Project Actions with associated decreased use of mechanized equipment than would occur under the Project; therefore, noise impacts would likely be less than would occur under the Project at Remediation Area 2.

Public Services

Project

The Project's impacts to public services are less than significant. Alternatives 1 (No Project Alternative) and 2 (Less Intensive Program Actions Alternative) would have similar impacts regarding public services as would occur under the Project; therefore, a detailed discussion of the Project and a comparison to each alternative is not warranted.

Traffic and Circulation

Project

With the incorporation of Project Requirements TRAFFIC-1 (pre-project implementation coordination with local jurisdictions) and TRAFFIC-2 (reservation of main parking lot for visitors) and TRAFFIC-3 (preparation

of traffic impact study), impacts to traffic and circulation are less than significant.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, traffic and circulation impacts would be less than would occur under the Project at Remediation Area 2.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less Program and Project Actions with associated decreases in the following:

- Project personnel traveling to and from the Park;
- Materials imported to the Park;
- COC being removed from the Park; and
- Mobilization/demobilization of equipment to and from the Park.

Therefore, traffic and circulation impacts could be less under Alternative 2 compared to the Project at Remediation Area 2.

3.5.2.3 Remediation Area 3

The Conveyance Corridor (Remediation Area 3) is approximately 600 feet long and encompasses approximately 8.6 acres. During operation of the Cyanide Plant, gold was recovered from finely milled ore by cyanide leaching. The tailings produced by this operation were hydraulically transported to the Sand Dam Area through the Conveyance Corridor, which follows the natural drainage downgradient of the Cyanide Plant (see Figure 2.0-6). Residual deposits of tailings and other mine and mill related materials still exist within the Conveyance Corridor. Public access to the Conveyance Corridor is excluded by fencing. The exclusion fencing will remain in place until cleanup goals and/or water quality objectives are achieved at the Conveyance Corridor (MFG 2008a).

Aesthetics

Project

The Standard and Specific Project Requirements AES-1 through AES-3 (trail fence color, storage of materials in the viewshed of State Route 174, and posting of information signs) were developed to reduce the visibility of the Program Actions and to explain the Program Actions and provide there

anticipated duration. The Project would not result in any significant impacts to aesthetics.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, aesthetics impacts would be less than would occur under the Project at Remediation Area 3.

Less Intensive Program Actions Alternative

Under Alternative 2 (Less Intensive Program Actions Alternative), disturbance areas and Project Actions would be less than would occur under the Project. Therefore, aesthetics impacts would be less than would occur under the Project at Remediation Area 3.

Air Quality

Project

The potential Project-related actions are projected to result in less than significant air quality impacts for Remediation Area 3 assuming they adhere to analytical assumptions (including Maximum Daily Scenario), incorporate Standard Project Requirement AIR-1 (dust and ozone reduction measures), and implement Mitigation Measures 4.2-1(a) (additional dust suppression measures) and 4.2-1(b) (Remediation and Mitigation Plan), as applicable. The Maximum Daily Scenario (MDS) is an evaluation that is broad in nature to determine what level of activity related to Program Actions would result in emissions and ambient impacts that are less than significant when compared to the Northern Sierra Air Quality Management District (NSAQMD) significance thresholds. This level of activity is an estimate of foreseeable Program Actions that could occur either concurrently or consecutively that are likely potential sources of emissions. If arsenic concentrations are below 363 mg/kg, Standard Project Requirement AIR-1 (dust suppression measures) would be applied to Project Actions taking place in Remediation Area 3. If arsenic concentrations are above 363 mg/kg, but below 3,500 mg/kg, Mitigation Measure 4.2-1(a) (additional dust control measures) would be applied to Project Actions taking place in Remediation Area 3. If arsenic concentrations are above 3,500 mg/kg, the Project Proponents would develop a Remediation and Mitigation Plan that ensures that acute hazard health impacts have a Hazard Index less than 1.0. This MDS scenario is utilized to provide a specific level of Project activities that would, together with Standard Project Requirement AIR-1 and Mitigation Measures 4.2-

1(a) and 4.2-1(b), result in less than significant impacts related to criteria pollutants.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, air quality impacts would be less than would occur under the Project at Remediation Area 3.

There would be more potential exposure to humans and the environment without cleanup as remaining COC could become airborne and could be subject to ingestion or dermal contact with humans, wildlife, or plants. This impact would be greater than would occur under the Project at Remediation Area 3.

Less Intensive Program Actions Alternative

During Project implementation, Alternative 2 (Less Intensive Program Actions Alternative) would involve less disturbance areas and Project Actions would be less than would occur under the Project. Therefore, air quality impacts would be less than would occur under the Project at Remediation Area 3.

After Project implementation, there could be more potential exposure to humans and the environment with less cleanup than would occur under the Project as remaining COC could become airborne and could be subject to ingestion or dermal contact with humans, wildlife, or plants. This impact would be greater than would occur under the Project at Remediation Area 3.

Biological Resources

Project

Project Requirements BIO-1 (avoidance of the Humboldt Lily), BIO-2 (True's Manzanita avoidance), BIO-3 (protection of California Red Legged Frog, California Horned Lizard, and Northwestern Pond Turtle), BIO-4 (avoidance of nesting bird species), BIO-5 (tree removal), BIO-6 (avoidance of maternal bat colonies), BIO-6 (minimize areas used for Project Actions), and BIO-8 (minimize impacts to federally-protected wetlands) and Mitigation Measures 4.3-1 (restoration), 4.3-2 (habitat replacement), 4.3-3 (riparian habitat) and 4.3-4 (restoration of wetlands) have reduced many of the biological impacts to a less than significant level. The impacts to biological resources that were reduced to the extent feasible but remain potentially significant and unavoidable relate to the

potential for adverse effects to bats, nesting raptors and migratory birds, riparian habitat, and/or designated Waters of the U.S.

No Project Alternative

In the short-term, Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to biological resources would be less than the Project at Remediation Area 3 because no resource-disturbing (e.g., disturbance of habitat and disturbance of nesting behavior) and no operation of mechanized equipment Project Actions would occur.

Over the long-term, biological resources would be exposed to higher concentrations of COC than would occur under the Project because cleanup efforts would not occur under Alternative 1. Thus, potential impacts to biological resources would be greater under this Alternative compared to the Project at Remediation Area 3.

Less Intensive Program Actions Alternative

During Project implementation, Alternative 2 (Less Intensive Program Actions Alternative) would involve less surface disturbance and less operation of mechanized equipment; therefore, impacts to biological resources would be less than could occur under the Project at Remediation Area 3. After Project implementation, biological resources would be exposed to higher concentrations of COC than would occur under the Project because cleanup efforts would be less under Alternative 1 than would occur under the Project. Thus, potential impacts to biological resources would be greater under this Alternative compared to the Project over the long-term.

Cultural Resources

Project

Project Requirements CULT-1 (recordation and mapping of resources), CULT-2 (awareness training), CULT-3 (cultural resource avoidance), CULT-4 (previously undocumented resources), CULT-5 (human remains), CULT-6 (Secretary of the Interior's standards) and CULT-7 (siting and design of facilities) and Mitigation Measure 4.4-1 (thorough recording of historic features), and 4.4-2 (data recovery) have been incorporated into the Project to reduce impacts to cultural resources to the extent feasible. However, the Project's impacts to cultural resources are considered potentially significant and unavoidable for the following reasons:

- The Remediation Areas in the Park where Program Actions will be implemented are known to contain significant cultural resources;
- Program Actions could potentially have significant impacts on these cultural resources;
- The full scope and nature of the Project's potential impacts to significant cultural resources cannot be determined at this time without the benefit of a comprehensive and detailed remediation plan; and
- It is not certain that all potential impacts can be mitigated to a less than significant level. If mitigable, it is not known if the required mitigation would be feasible or enforceable, as defined under CEQA.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to cultural resources could be less than would occur under the Project at Remediation Area 3.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less surface disturbance than would occur under the Project; therefore, impacts to cultural resources would be less than would occur under the Project at Remediation Area 3.

Geology and Soils

Project

With the incorporation of Project Requirements GEO-1 (post-earthquake inspections), and HYDRO-1 (preparation of Storm Water Pollution Prevention Plan), impacts to geology and soils are less than significant.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to geology and soils would be less than would occur under the Project at Remediation Area 3.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) would involve less surface disturbance than would occur under the Project; therefore, impacts to geology and soils could be less than would occur under the Project at Remediation Area 3.

Hazards and Hazardous Materials

Project

With the incorporation of Project Requirements HAZMAT-1 (Materials Management Plan), HAZMAT-2 (suspension of work during precipitation events), HAZMAT-3 (Decontamination of Project Vehicles and Equipment), and HAZMAT-4 (Wildfire Avoidance and Response), impacts to hazards and hazardous materials is less than significant.

No Project Alternative

For most of the impacts associated with hazards and hazardous materials, Alternative 1 (No Project Alternative) would have less impact than the Project because it would not involve Program or Project Actions. However, for Impact 4.6-2 (Reasonably foreseeable upset and accidental conditions involving the release of hazardous substances), there would be greater impacts associated with Alternative 1 compared to the Project because the failure to remediate COC at Remediation Area 3 would increase the likelihood of release of hazardous materials into the environment.

Less Intensive Program Actions Alternative

For most of the impacts associated with hazards and hazardous materials, Alternative 2 (Less Intensive Program Actions Alternative) would have less impact than the Project because it would involve less intensive implementation of Program or Project Actions. However, for Impact 4.6-2 (Reasonably foreseeable upset and accidental conditions involving the release of hazardous substances), there would be greater impacts associated with Alternative 2 compared to the Project because reduced remediation of COC at Remediation Area 3 would increase the likelihood of release of hazardous materials into the environment.

Hydrology and Water Quality

Project

With the incorporation of Project Requirements HYDRO-1 (preparation of Storm Water Pollution Prevention Plan) and HYDRO-2 (installation of energy dissipaters at water discharge points), impacts to hydrology and water quality materials is less than significant.

No Project Alternative

For most of the impacts associated with hydrology and water quality, Alternative 1 (No Project Alternative) would have less impact than the Project because it would not involve Program or Project Actions. However, for Impact 4.7-1 (release of sediment, COC or alteration of pH), there could be greater impacts associated with Alternative 1 compared to the Project because the failure to remediate COC at Remediation Area 3 would increase the likelihood of impacts associated with the release of COC or alteration of pH.

Less Intensive Program Actions Alternative

For most of the impacts associated with hydrology and water quality, Alternative 2 (Less Intensive Program Actions Alternative) would have less impact than the Project because it would involve less intensive implementation of Program or Project Actions. However, for Impact 4.7-1 (release of sediment, COC or alteration of pH), there could be greater impacts associated with Alternative 2 compared to the Project because the less remediation of COC at Remediation Area 3 would increase the likelihood of impacts associated with the release of COC or alteration of pH.

Land Use and Planning

Project

The Project's impacts to land use and planning are less than significant. Alternatives 1 (No Project Alternative) and 2 (Less Intensive Program Actions Alternative) would have similar impacts regarding land use and planning as would occur under the Project; therefore, a detailed discussion of the Project and a comparison to each alternative is not warranted.

Noise

Project

Standard Project Requirement NOISE-1 (limitation of Project Actions to daytime hours, incorporation of noise attenuation measures, and utilization of shields and buffers) will reduce the severity of potential impacts from Program and Project Actions. Noise impacts were reduced to the extent feasible, but remain potentially significant and unavoidable because it is uncertain at this time if all noise impacts could be reduced to a less than significant level.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, noise impacts would be less than would occur under the Project at Remediation Area 3.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less Program and Project Actions with associated decreased use of mechanized equipment than would occur under the Project; therefore, noise impacts would likely be less than would occur under the Project at Remediation Area 3.

Public Services

Project

The Project's impacts to public services are less than significant. Alternatives 1 (No Project Alternative) and 2 (Less Intensive Program Actions Alternative) would have similar impacts regarding public services as would occur under the Project; therefore, a detailed discussion of the Project and a comparison to each alternative is not warranted.

Traffic and Circulation

Project

With the incorporation of Project Requirements TRAFFIC-1 (pre-project implementation coordination with local jurisdictions), TRAFFIC-2 (reservation of main parking lot for visitors) and TRAFFIC-3 (preparation of traffic impact study), impacts to traffic and circulation are less than significant.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, traffic and circulation impacts would be less than would occur under the Project at Remediation Area 3.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less Program and Project Actions with associated decreases in the following:

- Project personnel traveling to and from the Park;
- Materials imported to the Park;
- COC being removed from the Park; and
- Mobilization/demobilization of equipment to and from the Park.

Therefore, traffic and circulation impacts could be less under Alternative 2 compared to the Project at Remediation Area 3.

3.5.2.4 Remediation Area 4

The Sand Dam is an embankment constructed across Little Wolf Creek, downstream from its confluence with the Conveyance Corridor channel and another ephemeral stream that drains southerly from east of the Work Your Own Diggings (W.Y.O.D.) Mine. The dam construction began in 1917 with waste rock from the Pennsylvania Mine and possibly the W.Y.O.D. mine. An early earthfill and rockfill dam was raised in 1917-1918 to contain the tailings generated from the Cyanide Plant (MacBoyle 1919). The Sand Dam Area (Remediation Area 4) is approximately 35 acres and is located near the southwest boundary of the Park, down gradient from the Red Dirt Pile and the Cyanide Plant (see Figure 2.0-6).

Aesthetics

Project

Through the incorporation of Specific Project Requirement BIO-7 (minimize area necessary for Project Actions), in combination with Specific Project Requirements AES-1 and AES-3 (trail fence color, storage of materials in the viewshed of State Route 174, and posting of information signs), impacts to aesthetics to Remediation Area 4 would be reduced to a less than significant level. The Project would not result in any significant impacts to aesthetics.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, aesthetics impacts would be less than would occur under the Project at Remediation Area 4.

Less Intensive Program Actions Alternative

Under Alternative 2 (Less Intensive Program Actions Alternative), disturbance areas and Project Actions would be less than would occur under the Project. Therefore, aesthetics impacts would be less than would occur under the Project at Remediation Area 4.

Air Quality

Project

The potential Project-related actions are projected to result in less than significant air quality impacts for Remediation Area 4 assuming they adhere to analytical assumptions (including Maximum Daily Scenario), incorporate Standard Project Requirement AIR-1 (dust and ozone reduction measures), and implement Mitigation Measures 4.2-1(a) (additional dust suppression measures) and 4.2-1(b) (Remediation and Mitigation Plan), as applicable. The Maximum Daily Scenario (MDS) is an evaluation that is broad in nature to determine what level of activity related to Program Actions would result in emissions and ambient impacts that are less than significant when compared to the Northern Sierra Air Quality Management District (NSAQMD) significance thresholds. This level of activity is an estimate of foreseeable Program Actions that could occur either concurrently or consecutively that are likely potential sources of emissions. If arsenic concentrations are below 363 mg/kg, Standard Project Requirement AIR-1 (dust suppression measures) would be applied to Project Actions taking place in Remediation Area 4. If arsenic concentrations are above 363 mg/kg, but below 3,500 mg/kg, Mitigation Measure 4.2-1(a) (additional dust control measures) would be applied to Project Actions taking place in Remediation Area 4. If arsenic concentrations are above 3,500 mg/kg, the Project Proponents would develop a Remediation and Mitigation Plan that ensures that acute hazard health impacts have a Hazard Index less than 1.0. This MDS scenario is utilized to provide a specific level of Project activities that would, together with Standard Project Requirement AIR-1 and Mitigation Measures 4.2-1(a) and 4.2-1(b), result in less than significant impacts related to criteria pollutants.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, air quality impacts would be less than would occur under the Project at Remediation Area 4.

There would be more potential exposure to humans and the environment without cleanup as remaining COC could become airborne and could be subject to ingestion or dermal contact with humans, wildlife, or plants. This impact would be greater than would occur under the Project at Remediation Area 4.

Less Intensive Program Actions Alternative

During Project implementation, Alternative 2 (Less Intensive Program Actions Alternative) would involve less surface disturbance and less operation of mechanized equipment than would under the Project. Therefore, air quality impacts would be less than would occur under the Project at Remediation Area 4.

After Project implementation, there could be more potential exposure to humans and the environment with less cleanup than would occur under the Project as remaining COC could become airborne and could be subject to ingestion or dermal contact with humans, wildlife, or plants. This impact would be greater than would occur under the Project at Remediation Area 4.

Biological Resources

Project

Project Requirements BIO-3 (protection of California Red Legged Frog, California Horned Lizard, and Northwestern Pond Turtle), BIO-4 (avoidance of nesting bird species), BIO-5 (tree removal), BIO-6 (avoidance of maternal bat colonies), BIO-6 (minimize areas used for Project Actions), and BIO-8 (minimize impacts to federally-protected wetlands) and Mitigation Measures 4.3-1 (restoration), 4.3-2 (habitat replacement), 4.3-3 (riparian habitat) and 4.3-4 (restoration of wetlands) have reduced many of the biological impacts to a less than significant level. The impacts to biological resources that were reduced to the extent feasible but remain potentially significant and unavoidable relate to the potential for adverse effects to bats, nesting raptors and migratory birds, riparian habitat, and/or designated Waters of the U.S.

No Project Alternative

In the short-term, Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to biological resources would be less than the Project at Remediation Area 4 because no resource-disturbing (e.g., disturbance of habitat and disturbance of nesting behavior) and no operation of mechanized equipment Project Actions would occur.

Over the long-term, biological resources would be exposed to higher concentrations of COC than would occur under the Project because cleanup efforts would not occur under Alternative 1. Thus, potential impacts to biological resources would be greater under this Alternative compared to the Project at Remediation Area 4.

Less Intensive Program Actions Alternative

During Project implementation, Alternative 2 (Less Intensive Program Actions Alternative) would involve less surface disturbance and less operation of mechanized equipment; therefore, impacts to biological resources would be less than would occur under the Project at Remediation Area 4.

After Project implementation, biological resources would be exposed to higher concentrations of COC than would occur under the Project because cleanup efforts would be less under Alternative 2 than would occur under the Project. Thus, potential impacts to biological resources would be greater under this Alternative compared to the Project over the long-term.

Cultural Resources

Project

Project Requirements CULT-1 (recordation and mapping of resources), CULT-2 (awareness training), CULT-3 (cultural resource avoidance), CULT-4 (previously undocumented resources), CULT-5 (human remains), CULT-6 (Secretary of the Interior's standards) and CULT-7 (siting and design of facilities) and Mitigation Measure 4.4-1 (thorough recording of historic features), and 4.4-2 (data recovery) have been incorporated into the Project to reduce impacts to cultural resources to the extent feasible. However, the Project's impacts to cultural resources are considered potentially significant and unavoidable for the following reasons:

- The Remediation Areas in the Park where Program Actions will be implemented are known to contain significant cultural resources;

- Program Actions could potentially have significant impacts on these cultural resources;
- The full scope and nature of the Project's potential impacts to significant cultural resources cannot be determined at this time without the benefit of a comprehensive and detailed remediation plan; and
- It is not certain that all potential impacts can be mitigated to a less than significant level. If mitigable, it is not known if the required mitigation would be feasible or enforceable, as defined under CEQA.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to cultural resources could be less than would occur under the Project at Remediation Area 4.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less surface disturbance than would occur under the Project; therefore, impacts to cultural resources could be less than would occur under the Project at Remediation Area 4.

Geology and Soils

Project

With the incorporation of Project Requirements GEO-1 (post-earthquake inspections), and HYDRO-1 (preparation of Storm Water Pollution Prevention Plan), impacts to geology and soils are less than significant.

No Project Alternative

Under Alternative 1 (No Project Alternative), the existing Sand Dam (Remediation Area 4) would remain without characterization and could be susceptible to seismically-induced failure. It should be noted however, that seismicity is part of the existing conditions at the Park and the No Project Alternative would not change existing conditions regarding the susceptibility to seismic failure. However, because the Project would characterize and potentially address any potential issues regarding seismically induced failure of the Sand Dam, DPR is conservatively determining that the No Project Alternative would have similar impacts regarding seismically induced failure (Impact 4.5-4) than the Project. For

the remaining impact statements, Alternative 1 would have less geology and soils impacts than the Project.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) would involve less surface disturbance than would occur under the Project; therefore, impacts to geology and soils could be less than would occur under the Project at Remediation Area 4.

Hazards and Hazardous Materials

Project

With the incorporation of Project Requirements HAZMAT-1 (Materials Management Plan), HAZMAT-2 (suspension of work during precipitation events), HAZMAT-3 (Decontamination of Project Vehicles and Equipment), and HAZMAT-4 (Wildfire Avoidance and Response), impacts to hazards and hazardous materials is less than significant.

No Project Alternative

For most of the impacts associated with hazards and hazardous materials, Alternative 1 (No Project Alternative) would have less impact than the Project because it would not involve Program or Project Actions. However, for Impact 4.6-2 (Reasonably foreseeable upset and accidental conditions involving the release of hazardous substances), there would be greater impacts associated with Alternative 1 compared to the Project because the failure to remediate COC at Remediation Area 4 would increase the likelihood of release of hazardous materials into the environment.

Less Intensive Program Actions Alternative

For most of the impacts associated with hazards and hazardous materials, Alternative 2 (Less Intensive Program Actions Alternative) would have less impact than the Project because it would involve less intensive implementation of Program or Project Actions. However, for Impact 4.6-2 (Reasonably foreseeable upset and accidental conditions involving the release of hazardous substances), there would be greater impacts associated with Alternative 2 compared to the Project because reduced remediation of COC at Remediation Area 4 would increase the likelihood of release of hazardous materials into the environment.

Hydrology and Water Quality

Project

With the incorporation of Project Requirements HYDRO-1 (preparation of Storm Water Pollution Prevention Plan) and HYDRO-2 (installation of energy dissipaters at water discharge points), impacts to hydrology and water quality materials is less than significant.

No Project Alternative

For most of the impacts associated with hydrology and water quality, Alternative 1 (No Project Alternative) would have less impact than the Project because it would not involve Program or Project Actions. However, for Impact 4.7-1 (release of sediment, COC or alteration of pH), there could be greater impacts associated with Alternative 1 compared to the Project because the failure to remediate COCat Remediation Area 4 would increase the likelihood of impacts associated with the release of COC or alteration of pH.

Less Intensive Program Actions Alternative

For most of the impacts associated with hydrology and water quality, Alternative 2 (Less Intensive Program Actions Alternative) would have less impact than the Project because it would involve less intensive implementation of Program or Project Actions. However, for Impact 4.7-1 (release of sediment, COC or alteration of pH), there could be greater impacts associated with Alternative 2 compared to the Project because the less remediation of COC at Remediation Area 4 would increase the likelihood of impacts associated with the release of COC or alteration of pH.

Land Use and Planning

Project

The Project's impacts to land use and planning are less than significant. Alternatives 1 (No Project Alternative) and 2 (Less Intensive Program Actions Alternative) would have similar impacts regarding land use and planning as would occur under the Project; therefore, a detailed discussion of the Project and a comparison to each alternative is not warranted.

Noise

Project

Standard Project Requirement NOISE-1 (limitation of Project Actions to daytime hours, incorporation of noise attenuation measures, and utilization of shields and buffers) will reduce the severity of potential impacts from Program and Project Actions. Noise impacts were reduced to the extent feasible, but remain potentially significant and unavoidable because it is uncertain at this time if all noise impacts could be reduced to a less than significant level.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, noise impacts would be less than would occur under the Project at Remediation Area 4.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less Program and Project Actions with associated decreased use of mechanized equipment than would occur under the Project; therefore, noise impacts would likely be less than would occur under the Project at Remediation Area 4.

Public Services

Project

The Project's impacts to public services are less than significant. Alternatives 1 (No Project Alternative) and 2 (Less Intensive Program Actions Alternative) would have similar impacts regarding public services as would occur under the Project; therefore, a detailed discussion of the Project and a comparison to each alternative is not warranted.

Traffic and Circulation

Project

With the incorporation of Project Requirements TRAFFIC-1 (pre-project implementation coordination with local jurisdictions), TRAFFIC-2 (reservation of main parking lot for visitors) and TRAFFIC-3 (preparation of traffic impact study), impacts to traffic and circulation are less than significant.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, traffic and circulation impacts would be less than would occur under the Project at Remediation Area 4.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less Program and Project Actions with associated decreases in the following:

- Project personnel traveling to and from the Park;
- Materials imported to the Park;
- COCCOC being removed from the Park; and
- Mobilization/demobilization of equipment to and from the Park.

Therefore, traffic and circulation impacts could be less under Alternative 2 compared to the Project at Remediation Area 4.

3.5.2.5 Remediation Area 5

The Historic Mine and Mill Areas (Remediation Area 5) are not one particular area at the Park; instead, they encompasses the former Empire Mine and a number of smaller historic mine and mill facilities. The most extensive known mine workings are associated with the Empire, the Pennsylvania, and the W.Y.O.D Mines, which are located in the central area of the Park. Less extensive mine workings are associated with mines located in the Osborne Hill area in the southern part of the Park. The Sulphuret Works, a milling plant located on the northern Park boundary, and a number of tunnels and shafts are located in the Union Hill Area (see Figure 2.0-7). Surrounding these facilities and structures are areas of surface disturbance and depositions of waste rock and tailings that were historically placed on the surface near mine entrances and in holes resulting from previous mining.

Aesthetics

Project

Through the incorporation of Specific Project Requirement BIO-7 (minimize area necessary for Project Actions), in combination with Specific Project Requirements AES-1 and AES-3 (trail fence color, storage of materials in the viewshed of State Route 174, and posting of information signs), aesthetics impacts to Remediation Area 5 would be reduced to a

less than significant level. The Project would not result in any significant impacts to aesthetics.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, aesthetics impacts would be less than would occur under the Project at Remediation Area 5.

Less Intensive Program Actions Alternative

Under Alternative 2 (Less Intensive Program Actions Alternative), disturbance areas and Project Actions would be less than would occur under the Project. Therefore, aesthetics impacts would be less than would occur under the Project at Remediation Area 5.

Air Quality

Project

The potential Project-related actions are projected to result in less than significant air quality impacts for Remediation Area 5 assuming they adhere to analytical assumptions (including Maximum Daily Scenario), incorporate Standard Project Requirement AIR-1 (dust and ozone reduction measures), and implement Mitigation Measures 4.2-1(a) (additional dust suppression measures) and 4.2-1(b) (Remediation and Mitigation Plan), as applicable. The Maximum Daily Scenario (MDS) is an evaluation that is broad in nature to determine what level of activity related to Program Actions would result in emissions and ambient impacts that are less than significant when compared to the Northern Sierra Air Quality Management District (NSAQMD) significance thresholds. This level of activity is an estimate of foreseeable Program Actions that could occur either concurrently or consecutively that are likely potential sources of emissions. If arsenic concentrations are below 363 mg/kg, Standard Project Requirement AIR-1 (dust suppression measures) would be applied to Project Actions taking place in Remediation Area 5. If arsenic concentrations are above 363 mg/kg, but below 3,500 mg/kg, Mitigation Measure 4.2-1(a) (additional dust control measures) would be applied to Project Actions taking place in Remediation Area 5. If arsenic concentrations are above 3,500 mg/kg, the Project Proponents would develop a Remediation and Mitigation Plan that ensures that acute hazard health impacts have a Hazard Index less than 1.0. This MDS scenario is utilized to provide a specific level of Project activities that would, together with Standard Project Requirement AIR-1 and Mitigation Measures 4.2-

1(a) and 4.2-1(b), result in less than significant impacts related to criteria pollutants.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, air quality impacts would be less than would occur under the Project at Remediation Area 5.

There could be more potential exposure to humans and the environment without cleanup as remaining COC could become airborne and could be subject to ingestion or dermal contact with humans, wildlife, or plants. This impact could be greater than would occur under the Project at Remediation Area 5.

Less Intensive Program Actions Alternative

During Project implementation, Alternative 2 (Less Intensive Program Actions Alternative) would involve less surface disturbance and less operation of mechanized equipment than would under the Project. Therefore, air quality impacts would be less than would occur under the Project at Remediation Area 5.

After Project implementation, there could be more potential exposure to humans and the environment with less cleanup than would occur under the Project as remaining COC could become airborne and could be subject to ingestion or dermal contact with humans, wildlife, or plants. This impact would be greater than would occur under the Project at Remediation Area 5.

Biological Resources

Project

Project Requirements BIO-3 (protection of California Red Legged Frog, California Horned Lizard, and Northwestern Pond Turtle), BIO-4 (avoidance of nesting bird species), BIO-5 (tree removal), BIO-6 (avoidance of maternal bat colonies), BIO-6 (minimize areas used for Project Actions), and BIO-8 (minimize impacts to federally-protected wetlands) and Mitigation Measures 4.3-1 (restoration), 4.3-2 (habitat replacement), 4.3-3 (riparian habitat) and 4.3-4 (restoration of wetlands) have reduced many of the biological impacts to a less than significant level. The impacts to biological resources that were reduced to the extent feasible but remain potentially significant and unavoidable relate to the

potential for adverse effects to bats, nesting raptors and migratory birds, riparian habitat, and/or designated Waters of the U.S.

No Project Alternative

In the short-term, Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to biological resources would be less than the Project at Remediation Area 5 because no resource-disturbing (e.g., disturbance of habitat and disturbance of nesting behavior) and no operation of mechanized equipment Project Actions would occur.

Over the long-term, biological resources would be exposed to higher concentrations of COC than would occur under the Project because cleanup efforts would not occur under Alternative 1. Thus, potential impacts to biological resources would be greater under this Alternative compared to the Project at Remediation Area 5.

Less Intensive Program Actions Alternative

During Project implementation, Alternative 2 (Less Intensive Program Actions Alternative) would involve less surface disturbance and less operation of mechanized equipment; therefore, impacts to biological resources would be less than could occur under the Project at Remediation Area 5. After Project implementation, biological resources would be exposed to higher concentrations of COC than would occur under the Project because cleanup efforts would be less under Alternative 2 than would occur under the Project. Thus, potential impacts to biological resources would be greater under this Alternative compared to the Project over the long-term.

Cultural Resources

Project

Project Requirements CULT-1 (recordation and mapping of resources), CULT-2 (awareness training), CULT-3 (cultural resource avoidance), CULT-4 (previously undocumented resources), CULT-5 (human remains), CULT-6 (Secretary of the Interior's standards) and CULT-7 (siting and design of facilities) and Mitigation Measure 4.4-1 (thorough recording of historic features), and 4.4-2 (data recovery) have been incorporated into the Project to reduce impacts to cultural resources to the extent feasible. However, the Project's impacts to cultural resources are considered potentially significant and unavoidable for the following reasons:

- The Remediation Areas in the Park where Program Actions will be implemented are known to contain significant cultural resources;
- Program Actions could potentially have significant impacts on these cultural resources;
- The full scope and nature of the Project's potential impacts to significant cultural resources cannot be determined at this time without the benefit of a comprehensive and detailed remediation plan; and
- It is not certain that all potential impacts can be mitigated to a less than significant level. If mitigable, it is not known if the required mitigation would be feasible or enforceable, as defined under CEQA.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to cultural resources could be less than would occur under the Project at Remediation Area 5.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) would involve less surface disturbance than would occur under the Project; therefore, impacts to cultural resources could be less than would occur under the Project at Remediation Area 5.

Geology and Soils

Project

With the incorporation of Project Requirements GEO-1 (post-earthquake inspections), GEO-2 (pre-disturbance evaluations over known shallow mine workings), and HYDRO-1 (preparation of Storm Water Pollution Prevention Plan), impacts to geology and soils are less than significant.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to geology and soils could be less than would occur under the Project at Remediation Area 5.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) would involve less surface disturbance than would occur under the Project; therefore, impacts to geology and soils could be less than would occur under the Project at Remediation Area 5.

Hazards and Hazardous Materials

Project

With the incorporation of Project Requirements HAZMAT-1 (Materials Management Plan), HAZMAT-2 (suspension of work during precipitation events), HAZMAT-3 (Decontamination of Project Vehicles and Equipment), and HAZMAT-4 (Wildfire Avoidance and Response), impacts to hazards and hazardous materials is less than significant.

No Project Alternative

For most of the impacts associated with hazards and hazardous materials, Alternative 1 (No Project Alternative) would have less impact than the Project because it would not involve Program or Project Actions. However, for Impact 4.6-2 (Reasonably foreseeable upset and accidental conditions involving the release of hazardous substances), there would be greater impacts associated with Alternative 1 compared to the Project because the failure to remediate COC at Remediation Area 5 would increase the likelihood of release of hazardous materials into the environment.

Less Intensive Program Actions Alternative

For most of the impacts associated with hazards and hazardous materials, Alternative 2 (Less Intensive Program Actions Alternative) would have less impact than the Project because it would involve less intensive implementation of Program or Project Actions. However, for Impact 4.6-2 (Reasonably foreseeable upset and accidental conditions involving the release of hazardous substances), there would be greater impacts associated with Alternative 2 compared to the Project because reduced remediation of COC at Remediation Area 5 would increase the likelihood of release of hazardous materials into the environment.

Hydrology and Water Quality

Project

With the incorporation of Project Requirements HYDRO-1 (preparation of Storm Water Pollution Prevention Plan) and HYDRO-2 (installation of energy dissipaters at water discharge points), impacts to hydrology and water quality materials is less than significant.

No Project Alternative

For most of the impacts associated with hydrology and water quality, Alternative 1 (No Project Alternative) (would have less impact than the Project because it would not involve Program or Project Actions. However, for Impact 4.7-1 (release of sediment, COC or alteration of pH), there could be greater impacts associated with Alternative 1 compared to the Project because the failure to remediate COC at Remediation Area 5 would increase the likelihood of impacts associated with the release of COC or alteration of pH.

Less Intensive Program Actions Alternative

For most of the impacts associated with hydrology and water quality, Alternative 2 (Less Intensive Program Actions Alternative) would have less impact than the Project because it would involve less intensive implementation of Program or Project Actions. However, for Impact 4.7-1 (release of sediment, COC or alteration of pH), there could be greater impacts associated with Alternative 2 compared to the Project because the less remediation of COC at Remediation Area 5 would increase the likelihood of impacts associated with the release of COC or alteration of pH.

Land Use and Planning

Project

The Project's impacts to land use and planning are less than significant. Alternatives 1 (No Project Alternative) and 2 (Less Intensive Program Actions Alternative) would have similar impacts regarding land use and planning as would occur under the Project; therefore, a detailed discussion of the Project and a comparison to each alternative is not warranted.

Noise

Project

Standard Project Requirement NOISE-1 (limitation of Project Actions to daytime hours, incorporation of noise attenuation measures, and utilization of shields and buffers) will reduce the severity of potential impacts from Program and Project Actions. Noise impacts were reduced to the extent feasible, but remain potentially significant and unavoidable because it is uncertain at this time if all noise impacts could be reduced to a less than significant level.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, noise impacts would be less than would occur under the Project at Remediation Area 5.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less Program and Project Actions with associated decreased use of mechanized equipment than would occur under the Project; therefore, noise impacts would likely be less than would occur under the Project at Remediation Area 5.

Public Services

Project

The Project's impacts to public services are less than significant. Alternatives 1 (No Project Alternative) and 2 (Less Intensive Program Actions Alternative) would have similar impacts regarding public services as would occur under the Project; therefore, a detailed discussion of the Project and a comparison to each alternative is not warranted.

Traffic and Circulation

Project

With the incorporation of Project Requirements TRAFFIC-1 (pre-project implementation coordination with local jurisdictions), TRAFFIC-2 (reservation of main parking lot for visitors) and TRAFFIC-3 (preparation of traffic impact study), impacts to traffic and circulation are less than significant.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, traffic and circulation impacts would be less than would occur under the Project at Remediation Area 5.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less Program and Project Actions with associated decreases in the following:

- Project personnel traveling to and from the Park;
- Materials imported to the Park;
- COC being removed from the Park; and
- Mobilization/demobilization of equipment to and from the Park.

Therefore, traffic and circulation impacts could be less under Alternative 2 compared to the Project at Remediation Area 5.

3.5.2.6 Remediation Area 6

The Magenta Drain was constructed to drain groundwater from the Empire Mine. Water flowing from the Magenta Drain enters a surface channel, which then flows to an unnamed creek, historically referred to as Woodpecker Ravine (see Figure 2.0-8, Remediation Area 6 – Magenta Drain). Woodpecker Ravine flows into the South Fork of Wolf Creek. The Magenta Drain tunnel extends for approximately 3000 feet from the mine shaft to a portal in Woodpecker Ravine. Remediation Area 6 is located in the northwest part of the Park near SR 174.

Aesthetics

Project

The Standard and Specific Project Requirements AES-1 through AES-3 (trail fence color, storage of materials in the viewshed of State Route 174, and posting of information signs), were developed to reduce the visibility of the Program Actions and to explain the Program Actions and provide there anticipated duration. The Project would not result in any significant impacts to aesthetics.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, aesthetics impacts would be less than would occur under the Project at Remediation Area 6.

Less Intensive Program Actions Alternative

During Project implementation, Alternative 2 (Less Intensive Program Actions Alternative) would involve less surface disturbance and less operation of mechanized equipment than would occur under the Project. Therefore, air quality impacts would be less than would occur under the Project at Remediation Area 6.

Air Quality

Project

The potential Project-related actions are projected to result in less than significant air quality impacts for Remediation Area 6 assuming they adhere to analytical assumptions (including Maximum Daily Scenario), incorporate Standard Project Requirement AIR-1 (dust and ozone reduction measures), and implement Mitigation Measures 4.2-1(a) (additional dust suppression measures) and 4.2-1(b) (Remediation and Mitigation Plan), as applicable. The Maximum Daily Scenario (MDS) is an evaluation that is broad in nature to determine what level of activity related to Program Actions would result in emissions and ambient impacts that are less than significant when compared to the Northern Sierra Air Quality Management District (NSAQMD) significance thresholds. This level of activity is an estimate of foreseeable Program Actions that could occur either concurrently or consecutively that are likely potential sources of emissions. If arsenic concentrations are below 363 mg/kg, Standard Project Requirement AIR-1 (dust suppression measures) would be applied to Project Actions taking place in Remediation Area 6. If arsenic concentrations are above 363 mg/kg, but below 3,500 mg/kg, Mitigation Measure 4.2-1(a) (additional dust control measures) would be applied to Project Actions taking place in Remediation Area 6. If arsenic concentrations are above 3,500 mg/kg, the Project Proponents would develop a Remediation and Mitigation Plan that ensures that acute hazard health impacts have a Hazard Index less than 1.0. This MDS scenario is utilized to provide a specific level of Project activities that would, together with Standard Project Requirement AIR-1 and Mitigation Measures 4.2-1(a) and 4.2-1(b), result in less than significant impacts related to criteria pollutants.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, air quality impacts would be less than would occur under the Project at Remediation Area 6.

There could be more potential exposure to humans and the environment without cleanup as remaining COC could become airborne and could be subject to ingestion or dermal contact with humans, wildlife, or plants. This impact would be greater than would occur under the Project at Remediation Area 6.

Less Intensive Program Actions Alternative

During Project implementation, Alternative 2 (Less Intensive Program Actions Alternative) would involve less disturbance areas and Project Actions would be less than would occur under the Project. Therefore, air quality impacts would be less than would occur under the Project at Remediation Area 6.

After Project implementation, there could be more potential exposure to humans and the environment with less cleanup than would occur under the Project as remaining COC could become airborne and could be subject to ingestion or dermal contact with humans, wildlife, or plants. This impact would be greater than would occur under the Project at Remediation Area 6.

Biological Resources

Project

Project Requirements BIO-3 (protection of California Red Legged Frog, California Horned Lizard, and Northwestern Pond Turtle), BIO-4 (avoidance of nesting bird species), BIO-5 (tree removal), BIO-6 (avoidance of maternal bat colonies), BIO-6 (minimize areas used for Project Actions), and BIO-8 (minimize impacts to federally-protected wetlands) and Mitigation Measures 4.3-1 (restoration), 4.3-2 (habitat replacement), 4.3-3 (riparian habitat) and 4.3-4 (restoration of wetlands) have reduced many of the biological impacts to a less than significant level. The impacts to biological resources that were reduced to the extent feasible but remain potentially significant and unavoidable relate to the potential for adverse effects to bats, nesting raptors and migratory birds, riparian habitat, and/or designated Waters of the U.S.

No Project Alternative

In the short-term, Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to biological resources would be less than the Project at Remediation Area 6 because no resource-disturbing (e.g., disturbance of habitat and disturbance of nesting behavior) and no operation of mechanized equipment Project Actions would occur.

Over the long-term, biological resources would be exposed to higher concentrations of COC than would occur under the Project because cleanup efforts would not occur under Alternative 1. Thus, potential impacts to biological resources would be greater under this Alternative compared to the Project at Remediation Area 6.

Less Intensive Program Actions Alternative

During Project implementation, Alternative 2 (Less Intensive Program Actions Alternative) would involve less resource-disturbing (e.g., disturbance of habitat and disturbance of nesting behavior) and less operation of mechanized equipment; therefore, impacts to biological resources would be less than would occur under the Project at Remediation Area 6.

After Project implementation, biological resources would be exposed to higher concentrations of COC than would occur under the Project because cleanup efforts would be less under Alternative 2 than would occur under the Project. Thus, potential impacts to biological resources would be greater under this Alternative compared to the Project over the long-term.

Cultural Resources

Project

Project Requirements CULT-1 (recordation and mapping of resources), CULT-2 (awareness training), CULT-3 (cultural resource avoidance), CULT-4 (previously undocumented resources), CULT-5 (human remains), CULT-6 (Secretary of the Interior's standards) and CULT-7 (siting and design of facilities) and Mitigation Measure 4.4-1 (thorough recording of historic features), and 4.4-2 (data recovery) have been incorporated into the Project to reduce impacts to cultural resources to the extent feasible. However, the Project's impacts to cultural resources are considered potentially significant and unavoidable for the following reasons:

- The Remediation Areas in the Park where Program Actions will be implemented are known to contain significant cultural resources;
- Program Actions could potentially have significant impacts on these cultural resources;
- The full scope and nature of the Project's potential impacts to significant cultural resources cannot be determined at this time without the benefit of a comprehensive and detailed remediation plan; and
- It is not certain that all potential impacts can be mitigated to a less than significant level. If mitigable, it is not known if the required mitigation would be feasible or enforceable, as defined under CEQA.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to cultural resources could be less than would occur under the Project at Remediation Area 6.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less surface disturbance than would occur under the Project; therefore, impacts to cultural resources could be less than would occur under the Project at Remediation Area 6.

Geology and Soils

Project

With the incorporation of Project Requirements GEO-1 (post-earthquake inspections), GEO-2 (pre-disturbance evaluations over known shallow mine workings), and HYDRO-1 (preparation of Storm Water Pollution Prevention Plan), impacts to geology and soils are less than significant.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to geology and soils could be less than would occur under the Project at Remediation Area 6.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less surface disturbance than would occur under the Project; therefore, impacts to geology and soils could be less than would occur under the Project at Remediation Area 6.

Hazards and Hazardous Materials

Project

With the incorporation of Project Requirements HAZMAT-1 (Materials Management Plan), HAZMAT-2 (suspension of work during precipitation events), HAZMAT-3 (Decontamination of Project Vehicles and Equipment), and HAZMAT-4 (Wildfire Avoidance and Response), impacts to hazards and hazardous materials would be less than significant.

No Project Alternative

For most of the impacts associated with hazards and hazardous materials, Alternative 1 (No Project Alternative) would have less impact than the Project because it would not involve Program or Project Actions. However, for Impact 4.6-2 (Reasonably foreseeable upset and accidental conditions involving the release of hazardous substances), there would be greater impacts associated with Alternative 1 compared to the Project because the failure to remediate COC at Remediation Area 6 would increase the likelihood of release of hazardous materials into the environment.

Less Intensive Program Actions Alternative

For most of the impacts associated with hazards and hazardous materials, Alternative 2 (Less Intensive Program Actions Alternative) would have less impact than the Project because it would involve less intensive implementation of Program or Project Actions. However, for Impact 4.6-2 (Reasonably foreseeable upset and accidental conditions involving the release of hazardous substances), there would be greater impacts associated with Alternative 2 compared to the Project because reduced remediation of COC at Remediation Area 6 would increase the likelihood of release of hazardous materials into the environment.

Hydrology and Water Quality

Project

With the incorporation of Project Requirements HYDRO-1 (preparation of Storm Water Pollution Prevention Plan) and HYDRO-2 (installation of energy dissipaters at water discharge points), impacts to hydrology and water quality materials is less than significant.

No Project Alternative

For most of the impacts associated with hydrology and water quality, Alternative 1 (No Project Alternative) would have less impact than the Project because it would not involve Program or Project Actions. However, for Impact 4.7-1 (release of sediment, COC or alteration of pH), there could be greater impacts associated with Alternative 1 compared to the Project because the failure to remediate COC at Remediation Area 6 would increase the likelihood of impacts associated with the release of COC or alteration of pH.

Less Intensive Program Actions Alternative

For most of the impacts associated with hydrology and water quality, Alternative 2 (Less Intensive Program Actions Alternative) would have less impact than the Project because it would involve less intensive implementation of Program or Project Actions. However, for Impact 4.7-1 (release of sediment, COC or alteration of pH), there could be greater impacts associated with Alternative 2 compared to the Project because the less remediation of COC at Remediation Area 6 would increase the likelihood of impacts associated with the release of COC or alteration of pH.

Land Use and Planning

Project

The Project's impacts to land use and planning are less than significant. Alternatives 1 (No Project Alternative) and 2 (Less Intensive Program Actions Alternative) would have similar impacts regarding land use and planning as would occur under the Project; therefore, a detailed discussion of the Project and a comparison to each alternative is not warranted.

Noise

Project

Standard Project Requirement NOISE-1 (limitation of Project Actions to daytime hours, incorporation of noise attenuation measures, and utilization of shields and buffers) will reduce the severity of potential impacts from Program and Project Actions. Noise impacts were reduced to the extent feasible, but remain potentially significant and unavoidable because it is uncertain at this time if all noise impacts could be reduced to a less than significant level.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, noise impacts would be less than would occur under the Project at Remediation Area 6.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) would involve less Program and Project Actions with associated decreased use of mechanized equipment than would occur under the Project; therefore, noise impacts would likely be less than would occur under the Project at Remediation Area 6. However, the construction and operation of the active treatment plant, and associated noise impacts, would occur under both the Project and this Alternative.

Public Services

Project

The Project's impacts to public services are less than significant. Alternatives 1 (No Project Alternative) and 2 (Less Intensive Program Actions Alternative) would have similar impacts regarding public services as would occur under the Project; therefore, a detailed discussion of the Project and a comparison to each alternative is not warranted.

Traffic and Circulation

Project

With the incorporation of Project Requirements TRAFFIC-1 (pre-project implementation coordination with local jurisdictions), TRAFFIC-2 (reservation of main parking lot for visitors) and TRAFFIC-3 (preparation

of traffic impact study), impacts to traffic and circulation are less than significant.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, traffic and circulation impacts would be less than would occur under the Project at Remediation Area 6.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less Program and Project Actions with associated decreases in the following:

- Project personnel traveling to and from the Park;
- Materials imported to the Park;
- COC being removed from the Park; and
- Mobilization/demobilization of equipment to and from the Park.

Therefore, traffic and circulation impacts could be less under Alternative 2 compared to the Project at Remediation Area 6.

3.5.2.7 Remediation Area 7

The Stacy Lane Pond consists of an embankment constructed from waste rock and a tailing deposit suspected to originate from the Pennsylvania or W.Y.O.D. milling operations. McQuiston (1986) indicates that from 1918 through 1928 the mine produced and milled an additional 1.4 million tons of ore, with approximately 58,000 tons being discharged to Stacy Lane Pond. Remediation Area 7 is an approximate 2.8-acre tailings deposit with an embankment constructed from waste rock material. The embankment could also contain tailings. The Stacy Lane Pond dam is approximately 25 to 30 feet in height. The pond accumulates storm water during periods of heavy precipitation and dries during the summer. The Stacy Lane Trail crosses the tailings deposit just south of the pond.

Aesthetics

Project

Through the incorporation of Specific Project Requirement BIO-7 (minimize area necessary for Project Actions), in combination with Specific Project Requirements AES-1 and AES-3 (trail fence color, storage of materials in the viewshed of State Route 174, and posting of information

signs), aesthetics impacts to Remediation Area 7 would be reduced to a less than significant level. The Project would not result in any significant impacts to aesthetics.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, aesthetics impacts would be less than would occur under the Project at Remediation Area 7.

Less Intensive Program Actions Alternative

Under Alternative 2 (Less Intensive Program Actions Alternative), disturbance areas and Project Actions would be less than would occur under the Project. Therefore, aesthetics impacts would be less than would occur under the Project at Remediation Area 7.

Air Quality

Project

The potential Project-related actions are projected to result in less than significant air quality impacts for Remediation Area 7 assuming they adhere to analytical assumptions (including Maximum Daily Scenario), incorporate Standard Project Requirement AIR-1 (dust and ozone reduction measures), and implement Mitigation Measures 4.2-1(a) (additional dust suppression measures) and 4.2-1(b) (Remediation and Mitigation Plan), as applicable. The Maximum Daily Scenario (MDS) is an evaluation that is broad in nature to determine what level of activity related to Program Actions would result in emissions and ambient impacts that are less than significant when compared to the Northern Sierra Air Quality Management District (NSAQMD) significance thresholds. This level of activity is an estimate of foreseeable Program Actions that could occur either concurrently or consecutively that are likely potential sources of emissions. If arsenic concentrations are below 363 mg/kg, Standard Project Requirement AIR-1 (dust suppression measures) would be applied to Project Actions taking place in Remediation Area 7. If arsenic concentrations are above 363 mg/kg, but below 3,500 mg/kg, Mitigation Measure 4.2-1(a) (additional dust control measures) would be applied to Project Actions taking place in Remediation Area 7. If arsenic concentrations are above 3,500 mg/kg, the Project Proponents would develop a Remediation and Mitigation Plan that ensures that acute hazard health impacts have a Hazard Index less than 1.0. This MDS scenario is utilized to provide a specific level of Project activities that would, together with Standard Project Requirement AIR-1 and Mitigation Measures 4.2-

1(a) and 4.2-1(b), result in less than significant impacts related to criteria pollutants.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, air quality impacts would be less than would occur under the Project at Remediation Area 7.

There could be more potential exposure to humans and the environment without cleanup as remaining COC could become airborne and could be subject to ingestion or dermal contact with humans, wildlife, or plants. This impact would be greater than would occur under the Project at Remediation Area 7.

Less Intensive Program Actions Alternative

During Project implementation, Alternative 2 (Less Intensive Program Actions Alternative) would involve less surface disturbance and less operation of mechanized equipment than would under the Project. Therefore, air quality impacts would be less than would occur under the Project at Remediation Area 7.

After Project implementation, there would be more potential exposure to humans and the environment with less cleanup than would occur under the Project as remaining COC could become airborne and could be subject to ingestion or dermal contact with humans, wildlife, or plants. This impact would be greater than would occur under the Project at Remediation Area 7.

Biological Resources

Project

Project Requirements BIO-3 (protection of California Red Legged Frog, California Horned Lizard, and Northwestern Pond Turtle), BIO-4 (avoidance of nesting bird species), BIO-5 (tree removal), BIO-6 (avoidance of maternal bat colonies), BIO-6 (minimize areas used for Project Actions), and BIO-8 (minimize impacts to federally-protected wetlands) and Mitigation Measures 4.3-1 (restoration), 4.3-2 (habitat replacement), 4.3-3 (riparian habitat) and 4.3-4 (restoration of wetlands) have reduced many of the biological impacts to a less than significant level. The impacts to biological resources that were reduced to the extent feasible but remain potentially significant and unavoidable relate to the

potential for adverse effects to bats, nesting raptors and migratory birds, riparian habitat, and/or designated Waters of the U.S.

No Project Alternative

In the short-term, Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to biological resources would be less than the Project at Remediation Area 7 because no resource-disturbing (e.g., disturbance of habitat and disturbance of nesting behavior) and no operation of mechanized equipment Project Actions would occur.

Over the long-term, biological resources would be exposed to higher concentrations of COC than would occur under the Project because cleanup efforts would not occur under Alternative 1. Thus, potential impacts to biological resources would be greater under this Alternative compared to the Project at Remediation Area 7.

Less Intensive Program Actions Alternative

During Project implementation, Alternative 2 (Less Intensive Program Actions Alternative) would involve less resource-disturbing (e.g., disturbance of habitat and disturbance of nesting behavior) and less operation of mechanized equipment; therefore, impacts to biological resources would be less than would occur under the Project at Remediation Area 7.

After Project implementation, biological resources would be exposed to higher concentrations of COC than would occur under the Project because cleanup efforts would be less under Alternative 2 than would occur under the Project. Thus, potential impacts to biological resources would be greater under this Alternative compared to the Project over the long-term.

Cultural Resources

Project

Project Requirements CULT-1 (recordation and mapping of resources), CULT-2 (awareness training), CULT-3 (cultural resource avoidance), CULT-4 (previously undocumented resources), CULT-5 (human remains), CULT-6 (Secretary of the Interior's standards) and CULT-7 (siting and design of facilities) and Mitigation Measure 4.4-1 (thorough recording of historic features), and 4.4-2 (data recovery) have been incorporated into the Project to reduce impacts to cultural resources to the extent feasible.

However, the Project's impacts to cultural resources are considered potentially significant and unavoidable for the following reasons:

- The Remediation Areas in the Park where Program Actions will be implemented are known to contain significant cultural resources;
- Program Actions could potentially have significant impacts on these cultural resources;
- The full scope and nature of the Project's potential impacts to significant cultural resources cannot be determined at this time without the benefit of a comprehensive and detailed remediation plan; and
- It is not certain that all potential impacts can be mitigated to a less than significant level. If mitigable, it is not known if the required mitigation would be feasible or enforceable, as defined under CEQA.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to cultural resources could be less than would occur under the Project at Remediation Area 7.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less surface disturbance than would occur under the Project; therefore, impacts to cultural resources could be less than would occur under the Project at Remediation Area 7.

Geology and Soils

Project

With the incorporation of Project Requirements GEO-1 (post-earthquake inspections), and HYDRO-1 (preparation of Storm Water Pollution Prevention Plan), impacts to geology and soils are less than significant.

No Project Alternative

Under Alternative 1 (No Project Alternative), the existing Stacy Lane Pond Dam (Remediation Area 7) would remain without characterization and could be susceptible to seismically-induced failure. It should be noted however, that seismicity is part of the existing conditions at the Park and the No Project Alternative would not change existing conditions regarding

the susceptibility to seismic failure. However, because the Project would characterize and potentially address any potential issues regarding seismically induced failure of the Stacy Lane Pond Dam, DPR is conservatively determining that the No Project Alternative would have similar impacts regarding seismically induced failure (Impact 4.5-4) than the Project. For the remaining impact statements, Alternative 1 would have less geology and soils impacts than the Project.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less surface disturbance than would occur under the Project; therefore, impacts to geology and soils could be less than would occur under the Project at Remediation Area 7.

Hazards and Hazardous Materials

Project

With the incorporation of Project Requirements HAZMAT-1 (Materials Management Plan), HAZMAT-2 (suspension of work during precipitation events), HAZMAT-3 (Decontamination of Project Vehicles and Equipment), and HAZMAT-4 (Wildfire Avoidance and Response), impacts to hazards and hazardous materials is less than significant.

No Project Alternative

For most of the impacts associated with hazards and hazardous materials, Alternative 1 (No Project Alternative) would have less impact than the Project because it would not involve Program or Project Actions. However, for Impact 4.6-2 (Reasonably foreseeable upset and accidental conditions involving the release of hazardous substances), there would be greater impacts associated with Alternative 1 compared to the Project because the failure to remediate COC at Remediation Area 7 would increase the likelihood of release of hazardous materials into the environment.

Less Intensive Program Actions Alternative

For most of the impacts associated with hazards and hazardous materials, Alternative 2 (Less Intensive Program Actions Alternative) would have less impact than the Project because it would involve less intensive implementation of Program or Project Actions. However, for Impact 4.6-2 (Reasonably foreseeable upset and accidental conditions involving the release of hazardous substances), there would be greater impacts

associated with Alternative 2 compared to the Project because reduced remediation of COC at Remediation Area 7 would increase the likelihood of release of hazardous materials into the environment.

Hydrology and Water Quality

Project

With the incorporation of Project Requirements HYDRO-1 (preparation of Storm Water Pollution Prevention Plan) and HYDRO-2 (installation of energy dissipaters at water discharge points), impacts to hydrology and water quality materials is less than significant.

No Project Alternative

For most of the impacts associated with hydrology and water quality, Alternative 1 (No Project Alternative) would have less impact than the Project because it would not involve Program or Project Actions. However, for Impact 4.7-1 (release of sediment, COC or alteration of pH), there could be greater impacts associated with Alternative 1 compared to the Project because the failure to remediate COC at Remediation Area 7 would increase the likelihood of impacts associated with the release of COC or alteration of pH.

Less Intensive Program Actions Alternative

For most of the impacts associated with hydrology and water quality, Alternative 2 (Less Intensive Program Actions Alternative) would have less impact than the Project because it would involve less intensive implementation of Program or Project Actions. However, for Impact 4.7-1 (release of sediment, COC or alteration of pH), there could be greater impacts associated with Alternative 2 compared to the Project because the less remediation of COC at Remediation Area 7 would increase the likelihood of impacts associated with the release of COC or alteration of pH.

Land Use and Planning

Project

The Project's impacts to land use and planning are less than significant. Alternatives 1(No Project Alternative) and 2 (Less Intensive Program Actions Alternative) would have similar impacts regarding land use and planning as would occur under the Project; therefore, a detailed

discussion of the Project and a comparison to each alternative is not warranted.

Noise

Project

Standard Project Requirement NOISE-1 (limitation of Project Actions to daytime hours, incorporation of noise attenuation measures, and utilization of shields and buffers) will reduce the severity of potential impacts from Program and Project Actions. Noise impacts were reduced to the extent feasible, but remain potentially significant and unavoidable because it is uncertain at this time if all noise impacts could be reduced to a less than significant level.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, noise impacts would be less than would occur under the Project at Remediation Area 7.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less Program and Project Actions with associated decreased use of mechanized equipment than would occur under the Project; therefore, noise impacts would likely be less than would occur under the Project at Remediation Area 7.

Public Services

Project

The Project's impacts to public services are less than significant. Alternatives 1 (No Project Alternative) and 2 (Less Intensive Program Actions Alternative) would have similar impacts regarding public services as would occur under the Project; therefore, a detailed discussion of the Project and a comparison to each alternative is not warranted.

Traffic and Circulation

Project

With the incorporation of Project Requirements TRAFFIC-1 (pre-project implementation coordination with local jurisdictions), TRAFFIC-2

(reservation of main parking lot for visitors) and TRAFFIC-3 (preparation of traffic impact study), impacts to traffic and circulation are less than significant.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, traffic and circulation impacts would be less than would occur under the Project at Remediation Area 7.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less Program and Project Actions with associated decreases in the following:

- Project personnel traveling to and from the Park;
- Materials imported to the Park;
- COC being removed from the Park; and
- Mobilization/demobilization of equipment to and from the Park.

Therefore, traffic and circulation impacts could be less under Alternative 2 compared to the Project at Remediation Area 7.

3.5.2.8 Remediation Area 8

The Historic Grounds Area (Remediation Area 8) is approximately 13 acres and encompasses the lawns, gardens, paths/trails, natural areas surrounding the Empire (Bourn) Cottage, the Starr House foundation, the Anderson residence, Empire Mine Clubhouse, greenhouse, and two garages (see Figure 2.0-5). The Historic Grounds include the Empire Cottage, The Empire Cottage, formerly the Bourn residence, and surrounding gardens and lawns in the Historic Grounds Area were established in 1897 by William Bourn Jr., owner of the Empire Mine for approximately 50 years (Empire Mine Park Association 2003). The original Starr house, built by George Starr, long-time superintendent of the Empire Mine, was destroyed by fire around 1913; the second Starr house also burned in 1935, leaving only the foundation remaining. The Clubhouse was built in 1905, with improvements completed over the years. The Historic Grounds are currently maintained by Park grounds keepers and are open to Park visitors.

Aesthetics

Project

The Standard and Specific Project Requirements AES-1 through AES-3 (trail fence color, storage of materials in the viewshed of State Route 174, and posting of information signs), were developed to reduce the visibility of the Program Actions and to explain the Program Actions and provide there anticipated duration. The Project would not result in any significant impacts to aesthetics.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, aesthetics impacts would be less than would occur under the Project at Remediation Area 8.

Less Intensive Program Actions Alternative

Under Alternative 2 (Less Intensive Program Actions Alternative), disturbance areas and Project Actions would be less than would occur under the Project. Therefore, aesthetics impacts would be less than would occur under the Project at Remediation Area 8.

Air Quality

Project

The potential Project-related actions are projected to result in less than significant air quality impacts for Remediation Area 8 assuming they adhere to analytical assumptions (including Maximum Daily Scenario), incorporate Standard Project Requirement AIR-1 (dust and ozone reduction measures), and implement Mitigation Measures 4.2-1(a) (additional dust suppression measures) and 4.2-1(b) (Remediation and Mitigation Plan), as applicable. The Maximum Daily Scenario (MDS) is an evaluation that is broad in nature to determine what level of activity related to Program Actions would result in emissions and ambient impacts that are less than significant when compared to the Northern Sierra Air Quality Management District (NSAQMD) significance thresholds. This level of activity is an estimate of foreseeable Program Actions that could occur either concurrently or consecutively that are likely potential sources of emissions. If arsenic concentrations are below 363 mg/kg, Standard Project Requirement AIR-1 (dust suppression measures) would be applied to Project Actions taking place in Remediation Area 8. If arsenic concentrations are above 363 mg/kg, but below 3,500 mg/kg, Mitigation

Measure 4.2-1(a) (additional dust control measures) would be applied to Project Actions taking place in Remediation Area 8. If arsenic concentrations are above 3,500 mg/kg, the Project Proponents would develop a Remediation and Mitigation Plan that ensures that acute hazard health impacts have a Hazard Index less than 1.0. This MDS scenario is utilized to provide a specific level of Project activities that would, together with Standard Project Requirement AIR-1 and Mitigation Measures 4.2-1(a) and 4.2-1(b), result in less than significant impacts related to criteria pollutants.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, air quality impacts would be less than would occur under the Project at Remediation Area 8.

There could be more potential exposure to humans and the environment without cleanup as remaining COC could become airborne and could be subject to ingestion or dermal contact with humans, wildlife, or plants. This impact would be greater than would occur under the Project at Remediation Area 8.

Less Intensive Program Actions Alternative

During Project implementation, Alternative 2 (Less Intensive Program Actions Alternative) would involve less surface disturbance and less operation of mechanized equipment than would under the Project. Therefore, air quality impacts would be less than would occur under the Project at Remediation Area 8.

After Project implementation, there would be more potential exposure to humans and the environment with less cleanup than would occur under the Project as remaining COC could become airborne and could be subject to ingestion or dermal contact with humans, wildlife, or plants. This impact would be greater than would occur under the Project at Remediation Area 8.

Biological Resources

Project

Project Requirements BIO-3 (protection of California Red Legged Frog, California Horned Lizard, and Northwestern Pond Turtle), BIO-4 (avoidance of nesting bird species), BIO-5 (tree removal), BIO-6 (avoidance of maternal bat colonies), BIO-6 (minimize areas used for

Project Actions), and BIO-8 (minimize impacts to federally-protected wetlands) and Mitigation Measures 4.3-1 (restoration), 4.3-2 (habitat replacement), 4.3-3 (riparian habitat) and 4.3-4 (restoration of wetlands) have reduced many of the biological impacts to a less than significant level. The impacts to biological resources that were reduced to the extent feasible but remain potentially significant and unavoidable relate to the potential for adverse effects to bats, nesting raptors and migratory birds, riparian habitat, and/or designated Waters of the U.S.

No Project Alternative

In the short-term, Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to biological resources would be less than the Project at Remediation Area 8 because no resource-disturbing (e.g., disturbance of habitat and disturbance of nesting behavior) and no operation of mechanized equipment Project Actions would occur.

Over the long-term, biological resources would be exposed to higher concentrations of COC than would occur under the Project because cleanup efforts would not occur under Alternative 1. Thus, potential impacts to biological resources would be greater under this Alternative compared to the Project at Remediation Area 8.

Less Intensive Program Actions Alternative

During Project implementation, Alternative 2 (Less Intensive Program Actions Alternative) would involve less resource-disturbing (e.g., disturbance of habitat and disturbance of nesting behavior) and less operation of mechanized equipment; therefore, impacts to biological resources would be less than would occur under the Project at Remediation Area 8.

After Project implementation, biological resources would be exposed to higher concentrations of COC than would occur under the Project because cleanup efforts would be less under Alternative 2 than would occur under the Project. Thus, potential impacts to biological resources would be greater under this Alternative compared to the Project over the long-term.

Cultural Resources

Project

Project Requirements CULT-1 (recordation and mapping of resources), CULT-2 (awareness training), CULT-3 (cultural resource avoidance),

CULT-4 (previously undocumented resources), CULT-5 (human remains), CULT-6 (Secretary of the Interior's standards) and CULT-7 (siting and design of facilities) and Mitigation Measure 4.4-1 (thorough recording of historic features), and 4.4-2 (data recovery) have been incorporated into the Project to reduce impacts to cultural resources to the extent feasible. However, the Project's impacts to cultural resources are considered potentially significant and unavoidable for the following reasons:

- The Remediation Areas in the Park where Program Actions will be implemented are known to contain significant cultural resources;
- Program Actions could potentially have significant impacts on these cultural resources;
- The full scope and nature of the Project's potential impacts to significant cultural resources cannot be determined at this time without the benefit of a comprehensive and detailed remediation plan; and
- It is not certain that all potential impacts can be mitigated to a less than significant level. If mitigable, it is not known if the required mitigation would be feasible or enforceable, as defined under CEQA.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to cultural resources could be less than would occur under the Project at Remediation Area 8.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less surface disturbance than would occur under the Project; therefore, impacts to cultural resources could be less than would occur under the Project at Remediation Area 8.

Geology and Soils

Project

With the incorporation of Project Requirements GEO-1 (post-earthquake inspections), GEO-2 (pre-disturbance evaluations over known shallow mine workings), and HYDRO-1 (preparation of Storm Water Pollution Prevention Plan), impacts to geology and soils are less than significant.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to geology and soils could be less than would occur under the Project at Remediation Area 8.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less surface disturbance than would occur under the Project; therefore, impacts to geology and soils could be less than would occur under the Project at Remediation Area 8.

Hazards and Hazardous Materials

Project

With the incorporation of Project Requirements HAZMAT-1 (Materials Management Plan), HAZMAT-2 (suspension of work during precipitation events), HAZMAT-3 (Decontamination of Project Vehicles and Equipment), and HAZMAT-4 (Wildfire Avoidance and Response), impacts to hazards and hazardous materials is less than significant.

No Project Alternative

For most of the impacts associated with hazards and hazardous materials, Alternative 1 (No Project Alternative) would have less impact than the Project because it would not involve Program or Project Actions. However, for Impact 4.6-2 (Reasonably foreseeable upset and accidental conditions involving the release of hazardous substances), there would be greater impacts associated with Alternative 1 compared to the Project because the failure to remediate COC at Remediation Area 8 would increase the likelihood of release of hazardous materials into the environment.

Less Intensive Program Actions Alternative

For most of the impacts associated with hazards and hazardous materials, Alternative 2 (Less Intensive Program Actions Alternative) would have less impact than the Project because it would involve less intensive implementation of Program or Project Actions. However, for Impact 4.6-2 (Reasonably foreseeable upset and accidental conditions involving the release of hazardous substances), there would be greater impacts associated with Alternative 2 compared to the Project because reduced

remediation of COC at Remediation Area 8 would increase the likelihood of release of hazardous materials into the environment.

Hydrology and Water Quality

Project

With the incorporation of Project Requirements HYDRO-1 (preparation of Storm Water Pollution Prevention Plan) and HYDRO-2 (installation of energy dissipaters at water discharge points), impacts to hydrology and water quality materials is less than significant.

No Project Alternative

For most of the impacts associated with hydrology and water quality, Alternative 1 (No Project Alternative) would have less impact than the Project because it would not involve Program or Project Actions. However, for Impact 4.7-1 (release of sediment, COC or alteration of pH), there could be greater impacts associated with Alternative 1 compared to the Project because the failure to remediate COC at Remediation Area 8 would increase the likelihood of impacts associated with the release of COC or alteration of pH.

Less Intensive Program Actions Alternative

For most of the impacts associated with hydrology and water quality, Alternative 2 (Less Intensive Program Actions Alternative) would have less impact than the Project because it would involve less intensive implementation of Program or Project Actions. However, for Impact 4.7-1 (release of sediment, COC or alteration of pH), there could be greater impacts associated with Alternative 2 compared to the Project because the less remediation of COC at Remediation Area 8 would increase the likelihood of impacts associated with the release of COC or alteration of pH.

Land Use and Planning

Project

The Project's impacts to land use and planning are less than significant. Alternatives 1(No Project Alternative) and 2 (Less Intensive Program Actions Alternative) would have similar impacts regarding land use and planning as would occur under the Project; therefore, a detailed discussion of the Project and a comparison to each alternative is not warranted.

Noise

Project

Standard Project Requirement NOISE-1 (limitation of Project Actions to daytime hours, incorporation of noise attenuation measures, and utilization of shields and buffers) will reduce the severity of potential impacts from Program and Project Actions. Noise impacts were reduced to the extent feasible, but remain potentially significant and unavoidable because it is uncertain at this time if all noise impacts could be reduced to a less than significant level.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, noise impacts would be less than would occur under the Project at Remediation Area 8.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less Program and Project Actions with associated decreased use of mechanized equipment than would occur under the Project; therefore, noise impacts would likely be less than would occur under the Project at Remediation Area 8.

Public Services

Project

The Project's impacts to public services are less than significant. Alternatives 1 (No Project Alternative) and 2 (Less Intensive Program Actions Alternative) would have similar impacts regarding public services as would occur under the Project; therefore, a detailed discussion of the Project and a comparison to each alternative is not warranted.

Traffic and Circulation

Project

With the incorporation of Project Requirements TRAFFIC-1 (pre-project implementation coordination with local jurisdictions), TRAFFIC-2 (reservation of main parking lot for visitors) and TRAFFIC-3 (preparation

of traffic impact study), impacts to traffic and circulation are less than significant.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, traffic and circulation impacts would be less than would occur under the Project at Remediation Area 8.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less Program and Project Actions with associated decreases in the following:

- Project personnel traveling to and from the Park;
- Materials imported to the Park;
- COC being removed from the Park; and
- Mobilization/demobilization of equipment to and from the Park.

Therefore, traffic and circulation impacts could be less under Alternative 2 compared to the Project at Remediation Area 8.

3.5.2.9 Remediation Area 9

There are eight residential areas located within the Park, three of which DPR employees currently occupy. Six of the areas contain a residential structure, one contains a mobile home, and the remaining area is a vacant mobile home pad. All of the residences have defined lawns, which are irrigated with non-potable water pumped from the Empire Mine Shaft. The landscaping is maintained by Park maintenance personnel.

Aesthetics

Project

The Standard and Specific Project Requirements AES-1 through AES-3 (trail fence color, storage of materials in the viewshed of State Route 174, and posting of information signs), were developed to reduce the visibility of the Program Actions and to explain the Program Actions and provide there anticipated duration. The Project would not result in any significant impacts to aesthetics.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, aesthetics impacts would be less than would occur under the Project at Remediation Area 9.

Less Intensive Program Actions Alternative

Under Alternative 2 (Less Intensive Program Actions Alternative), disturbance areas and Project Actions would be less than would occur under the Project. Therefore, aesthetics impacts would be less than would occur under the Project at Remediation Area 9.

Air Quality

Project

The potential Project-related actions are projected to result in less than significant air quality impacts for Remediation Area 9 assuming they adhere to analytical assumptions (including Maximum Daily Scenario), incorporate Standard Project Requirement AIR-1 (dust and ozone reduction measures), and implement Mitigation Measures 4.2-1(a) (additional dust suppression measures) and 4.2-1(b) (Remediation and Mitigation Plan), as applicable. The Maximum Daily Scenario (MDS) is an evaluation that is broad in nature to determine what level of activity related to Program Actions would result in emissions and ambient impacts that are less than significant when compared to the Northern Sierra Air Quality Management District (NSAQMD) significance thresholds. This level of activity is an estimate of foreseeable Program Actions that could occur either concurrently or consecutively that are likely potential sources of emissions. If arsenic concentrations are below 363 mg/kg, Standard Project Requirement AIR-1 (dust suppression measures) would be applied to Project Actions taking place in Remediation Area 9. If arsenic concentrations are above 363 mg/kg, but below 3,500 mg/kg, Mitigation Measure 4.2-1(a) (additional dust control measures) would be applied to Project Actions taking place in Remediation Area 9. If arsenic concentrations are above 3,500 mg/kg, the Project Proponents would develop a Remediation and Mitigation Plan that ensures that acute hazard health impacts have a Hazard Index less than 1.0. This MDS scenario is utilized to provide a specific level of Project activities that would, together with Standard Project Requirement AIR-1 and Mitigation Measures 4.2-1(a) and 4.2-1(b), result in less than significant impacts related to criteria pollutants.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, air quality impacts would be less than would occur under the Project at Remediation Area 9.

There could be more potential exposure to humans and the environment without cleanup as remaining COC could become airborne and could be subject to ingestion or dermal contact with humans, wildlife, or plants. This impact would be greater than would occur under the Project at Remediation Area 9.

Less Intensive Program Actions Alternative

During Project implementation, Alternative 2 (Less Intensive Program Actions Alternative) would involve less surface disturbance and less operation of mechanized equipment than would under the Project. Therefore, air quality impacts would be less than would occur under the Project at Remediation Area 9.

After Project implementation, there would be more potential exposure to humans and the environment with less cleanup than would occur under the Project as remaining COC could become airborne and could be subject to ingestion or dermal contact with humans, wildlife, or plants. This impact would be greater than would occur under the Project at Remediation Area 9.

Biological Resources

Project

Project Requirements, BIO-4 (avoidance of nesting bird species), BIO-6 (avoidance of maternal bat colonies), and BIO-6 (minimize areas used for Project Actions) have reduced many of the biological impacts to a less than significant level. The impacts to biological resources that were reduced to the extent feasible but remain potentially significant and unavoidable relate to the potential for adverse effects to bats, nesting raptors and migratory birds, riparian habitat, and/or designated Waters of the U.S.

No Project Alternative

In the short-term, Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to biological resources would be less than the Project at Remediation Area 9 because no

resource-disturbing (e.g., disturbance of habitat and disturbance of nesting behavior) and no operation of mechanized equipment Project Actions would occur.

Over the long-term, biological resources would be exposed to higher concentrations of COC than would occur under the Project because cleanup efforts would not occur under Alternative 1. Thus, potential impacts to biological resources would be greater under this Alternative compared to the Project at Remediation Area 9.

Less Intensive Program Actions Alternative

During Project implementation, Alternative 2 (Less Intensive Program Actions Alternative) would involve less resource-disturbing (e.g., disturbance of habitat and disturbance of nesting behavior) and less operation of mechanized equipment; therefore, impacts to biological resources would be less than would occur under the Project at Remediation Area 9.

After Project implementation, biological resources would be exposed to higher concentrations of COC than would occur under the Project because cleanup efforts would be less under Alternative 2 than would occur under the Project. Thus, potential impacts to biological resources would be greater under this Alternative compared to the Project over the long-term.

Cultural Resources

Project

Project Requirements CULT-1 (recordation and mapping of resources), CULT-2 (awareness training), CULT-3 (cultural resource avoidance), CULT-4 (previously undocumented resources), CULT-5 (human remains), CULT-6 (Secretary of the Interior's standards) and CULT-7 (siting and design of facilities) and Mitigation Measure 4.4-1 (thorough recording of historic features), and 4.4-2 (data recovery) have been incorporated into the Project to reduce impacts to cultural resources to the extent feasible. However, the Project's impacts to cultural resources are considered potentially significant and unavoidable for the following reasons:

- The Remediation Areas in the Park where Program Actions will be implemented are known to contain significant cultural resources;
- Program Actions could potentially have significant impacts on these cultural resources;
- The full scope and nature of the Project's potential impacts to significant cultural resources cannot be determined at this time

without the benefit of a comprehensive and detailed remediation plan; and

- It is not certain that all potential impacts can be mitigated to a less than significant level. If mitigable, it is not known if the required mitigation would be feasible or enforceable, as defined under CEQA.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to cultural resources could be less than would occur under the Project at Remediation Area 9.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less surface disturbance than would occur under the Project; therefore, impacts to cultural resources could be less than would occur under the Project at Remediation Area 9.

Geology and Soils

Project

With the incorporation of Project Requirements GEO-1 (post-earthquake inspections), and HYDRO-1 (preparation of Storm Water Pollution Prevention Plan), impacts to geology and soils are less than significant.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to geology and soils could be less than would occur under the Project at Remediation Area 9.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less surface disturbance than would occur under the Project; therefore, impacts to geology and soils could be less than would occur under the Project at Remediation Area 9.

Hazards and Hazardous Materials

Project

With the incorporation of Project Requirements HAZMAT-1 (Materials Management Plan), HAZMAT-2 (suspension of work during precipitation events), HAZMAT-3 (Decontamination of Project Vehicles and Equipment), and HAZMAT-4 (Wildfire Avoidance and Response), impacts to hazards and hazardous materials is less than significant.

No Project Alternative

For most of the impacts associated with hazards and hazardous materials, Alternative 1 (No Project Alternative) would have less impact than the Project because it would not involve Program or Project Actions. However, for Impact 4.6-2 (Reasonably foreseeable upset and accidental conditions involving the release of hazardous substances), there would be greater impacts associated with Alternative 1 compared to the Project because the failure to remediate COC at Remediation Area 9 would increase the likelihood of release of hazardous materials into the environment.

Less Intensive Program Actions Alternative

For most of the impacts associated with hazards and hazardous materials, Alternative 2 (Less Intensive Program Actions Alternative) would have less impact than the Project because it would involve less intensive implementation of Program or Project Actions. However, for Impact 4.6-2 (Reasonably foreseeable upset and accidental conditions involving the release of hazardous substances), there would be greater impacts associated with Alternative 2 compared to the Project because reduced remediation of COC at Remediation Area 9 would increase the likelihood of release of hazardous materials into the environment.

Hydrology and Water Quality

Project

With the incorporation of Project Requirements HYDRO-1 (preparation of Storm Water Pollution Prevention Plan) and HYDRO-2 (installation of energy dissipaters at water discharge points), impacts to hydrology and water quality materials is less than significant.

No Project Alternative

For most of the impacts associated with hydrology and water quality, Alternative 1 (No Project Alternative) would have less impact than the Project because it would not involve Program or Project Actions. However, for Impact 4.7-1 (release of sediment, COC or alteration of pH), there could be greater impacts associated with Alternative 1 compared to the Project because the failure to remediate COC at Remediation Area 9 would increase the likelihood of impacts associated with the release of COC or alteration of pH.

Less Intensive Program Actions Alternative

For most of the impacts associated with hydrology and water quality, Alternative 2 (Less Intensive Program Actions Alternative) would have less impact than the Project because it would involve less intensive implementation of Program or Project Actions. However, for Impact 4.7-1 (release of sediment, COC or alteration of pH), there could be greater impacts associated with Alternative 2 compared to the Project because the less remediation of COC at Remediation Area 9 would increase the likelihood of impacts associated with the release of COC or alteration of pH.

Land Use and Planning

Project

The Project's impacts to land use and planning are less than significant. Alternatives 1 (No Project Alternative) and 2 (Less Intensive Program Actions Alternative) would have similar impacts regarding land use and planning as would occur under the Project; therefore, a detailed discussion of the Project and a comparison to each alternative is not warranted.

Noise

Project

Standard Project Requirement NOISE-1 (limitation of Project Actions to daytime hours, incorporation of noise attenuation measures, and utilization of shields and buffers) will reduce the severity of potential impacts from Program and Project Actions. Noise impacts were reduced to the extent feasible, but remain potentially significant and unavoidable because it is uncertain at this time if all noise impacts could be reduced to a less than significant level.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, noise impacts would be less than would occur under the Project at Remediation Area 9.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less Program and Project Actions with associated decreased use of mechanized equipment than would occur under the Project; therefore, noise impacts would likely be less than would occur under the Project at Remediation Area 9.

Public Services

Project

The Project's impacts to public services are less than significant. Alternatives 1 (No Project Alternative) and 2 (Less Intensive Program Actions Alternative) would have similar impacts regarding public services as would occur under the Project; therefore, a detailed discussion of the Project and a comparison to each alternative is not warranted.

Traffic and Circulation

Project

With the incorporation of Project Requirements TRAFFIC-1 (pre-project implementation coordination with local jurisdictions) and TRAFFIC-2 (reservation of main parking lot for visitors) and TRAFFIC-3 (preparation of traffic impact study), impacts to traffic and circulation are less than significant.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, traffic and circulation impacts would be less than would occur under the Project at Remediation Area 9.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less Program and Project Actions with associated decreases in the following:

- Project personnel traveling to and from the Park;
- Materials imported to the Park;
- COC being removed from the Park; and
- Mobilization/demobilization of equipment to and from the Park.

Therefore, traffic and circulation impacts could be less under Alternative 2 compared to the Project at Remediation Area 9.

3.5.2.10 Remediation Area 10

The trails generally are constructed on native ground surfaces, thus the surfaces of the trails are comprised largely of native soils and sand to cobble-size rock fragments and are often partially or fully covered by layers of organic litter. Trail surfaces going through, adjacent to, or adjoining historic mine features could contain mine or mill materials (MFG 2007h).

Aesthetics

Project

The Standard and Specific Project Requirements AES-1 through AES-3 (trail fence color, storage of materials in the viewshed of State Route 174, and posting of information signs), were developed to reduce the visibility of the Program Actions and to explain the Program Actions and provide there anticipated duration. The Project would not result in any significant impacts to aesthetics.

No Project Alternative

(No Project Alternative) would not involve Program or Project Actions; therefore, aesthetics impacts would be less than would occur under the Project at Remediation Area 10.

Less Intensive Program Actions Alternative

Under Alternative 2 (Less Intensive Program Actions Alternative), disturbance areas and Project Actions would be less than would occur

under the Project. Therefore, aesthetics impacts would be less than would occur under the Project at Remediation Area 10.

Air Quality

Project

The potential Project-related actions are projected to result in less than significant air quality impacts for Remediation Area 10 assuming they adhere to analytical assumptions (including Maximum Daily Scenario), incorporate Standard Project Requirement AIR-1 (dust and ozone reduction measures), and implement Mitigation Measures 4.2-1(a) (additional dust suppression measures) and 4.2-1(b) (Remediation and Mitigation Plan), as applicable. The Maximum Daily Scenario (MDS) is an evaluation that is broad in nature to determine what level of activity related to Program Actions would result in emissions and ambient impacts that are less than significant when compared to the Northern Sierra Air Quality Management District (NSAQMD) significance thresholds. This level of activity is an estimate of foreseeable Program Actions that could occur either concurrently or consecutively that are likely potential sources of emissions. If arsenic concentrations are below 363 mg/kg, Standard Project Requirement AIR-1 (dust suppression measures) would be applied to Project Actions taking place in Remediation Area 10. If arsenic concentrations are above 363 mg/kg, but below 3,500 mg/kg, Mitigation Measure 4.2-1(a) (additional dust control measures) would be applied to Project Actions taking place in Remediation Area 10. If arsenic concentrations are above 3,500 mg/kg, the Project Proponents would develop a Remediation and Mitigation Plan that ensures that acute hazard health impacts have a Hazard Index less than 1.0. This MDS scenario is utilized to provide a specific level of Project activities that would, together with Standard Project Requirement AIR-1 and Mitigation Measures 4.2-1(a) and 4.2-1(b), result in less than significant impacts related to criteria pollutants.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, air quality impacts would be less than would occur under the Project at Remediation Area 10.

There would be more potential exposure to humans and the environment without cleanup as remaining COC could become airborne and could be subject to ingestion or dermal contact with humans, wildlife, or plants. This impact would be greater than would occur under the Project at Remediation Area 10.

Less Intensive Program Actions Alternative

During Project implementation, Alternative 2 (Less Intensive Program Actions Alternative) would involve less surface disturbance and less operation of mechanized equipment than would occur under the Project. Therefore, air quality impacts would be less than would occur under the Project at Remediation Area 10.

After Project implementation, there would be more potential exposure to humans and the environment with less cleanup than would occur under the Project as remaining COC could become airborne and could be subject to ingestion or dermal contact with humans, wildlife, or plants. This impact would be greater than would occur under the Project at Remediation Area 10.

Biological Resources

Project

Project Requirements BIO-1 (avoidance of the Humboldt Lily), BIO-2 (True's Manzanita avoidance), BIO-3 (protection of California Red Legged Frog, California Horned Lizard, and Northwestern Pond Turtle), BIO-4 (avoidance of nesting bird species), BIO-5 (tree removal), BIO-6 (avoidance of maternal bat colonies), BIO-6 (minimize areas used for Project Actions), and BIO-8 (minimize impacts to federally-protected wetlands) and Mitigation Measures 4.3-1 (restoration), 4.3-2 (habitat replacement), 4.3-3 (riparian habitat) and 4.3-4 (restoration of wetlands) have reduced many of the biological impacts to a less than significant level. The impacts to biological resources that were reduced to the extent feasible but remain potentially significant and unavoidable relate to the potential for adverse effects to bats, nesting raptors and migratory birds, riparian habitat, and/or designated Waters of the U.S.

No Project Alternative

In the short-term, Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to biological resources would be less than the Project at Remediation Area 10 because no resource-disturbing (e.g., disturbance of habitat and disturbance of nesting behavior) and no operation of mechanized equipment Project Actions would occur.

Over the long-term, biological resources would be exposed to higher concentrations of COC than would occur under the Project because cleanup efforts would not occur under Alternative 1. Thus, potential

impacts to biological resources would be greater under this Alternative compared to the Project at Remediation Area 10.

Less Intensive Program Actions Alternative

During Project implementation, Alternative 2 (Less Intensive Program Actions Alternative) would involve less resource-disturbing (e.g., disturbance of habitat and disturbance of nesting behavior) and less operation of mechanized equipment; therefore, impacts to biological resources would be less than would occur under the Project at Remediation Area 10.

After Project implementation, biological resources would be exposed to higher concentrations of COC than would occur under the Project because cleanup efforts would be less under Alternative 2 than would occur under the Project. Thus, potential impacts to biological resources would be greater under this Alternative compared to the Project over the long-term.

Cultural Resources

Project

Project Requirements CULT-1 (recordation and mapping of resources), CULT-2 (awareness training), CULT-3 (cultural resource avoidance), CULT-4 (previously undocumented resources), CULT-5 (human remains), CULT-6 (Secretary of the Interior's standards) and CULT-7 (siting and design of facilities) and Mitigation Measure 4.4-1 (thorough recording of historic features), and 4.4-2 (data recovery) have been incorporated into the Project to reduce impacts to cultural resources to the extent feasible. However, the Project's impacts to cultural resources are considered potentially significant and unavoidable for the following reasons:

- The Remediation Areas in the Park where Program Actions will be implemented are known to contain significant cultural resources;
- Program Actions could potentially have significant impacts on these cultural resources;
- The full scope and nature of the Project's potential impacts to significant cultural resources cannot be determined at this time without the benefit of a comprehensive and detailed remediation plan; and
- It is not certain that all potential impacts can be mitigated to a less than significant level. If mitigable, it is not known if the required mitigation would be feasible or enforceable, as defined under CEQA.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to cultural resources could be less than would occur under the Project at Remediation Area 10.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less surface disturbance than would occur under the Project; therefore, impacts to cultural resources could be less than would occur under the Project at Remediation Area 10.

Geology and Soils

Project

With the incorporation of Project Requirement HYDRO-1 (preparation of Storm Water Pollution Prevention Plan), impacts to geology and soils are less than significant.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, impacts to geology and soils could be less than would occur under the Project at Remediation Area 10.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less surface disturbance than would occur under the Project; therefore, impacts to geology and soils could be less than would occur under the Project at Remediation Area 10.

Hazards and Hazardous Materials

Project

With the incorporation of Project Requirements HAZMAT-1 (Materials Management Plan), HAZMAT-2 (suspension of work during precipitation events), HAZMAT-3 (Decontamination of Project Vehicles and Equipment), and HAZMAT-4 (Wildfire Avoidance and Response), impacts to hazards and hazardous materials is less than significant.

No Project Alternative

For most of the impacts associated with hazards and hazardous materials, Alternative 1 (No Project Alternative) would have less impact than the Project because it would not involve Program or Project Actions. However, for Impact 4.6-2 (Reasonably foreseeable upset and accidental conditions involving the release of hazardous substances), there would be greater impacts associated with Alternative 1 compared to the Project because the failure to remediate COC at Remediation Area 10 would increase the likelihood of release of hazardous materials into the environment.

Less Intensive Program Actions Alternative

For most of the impacts associated with hazards and hazardous materials, Alternative 2 (Less Intensive Program Actions Alternative) would have less impact than the Project because it would involve less intensive implementation of Program or Project Actions. However, for Impact 4.6-2 (Reasonably foreseeable upset and accidental conditions involving the release of hazardous substances), there would be greater impacts associated with Alternative 2 compared to the Project because reduced remediation of COC at Remediation Area 10 would increase the likelihood of release of hazardous materials into the environment.

Hydrology and Water Quality

Project

With the incorporation of Project Requirements HYDRO-1 (preparation of Storm Water Pollution Prevention Plan) impacts to hydrology and water quality materials is less than significant.

No Project Alternative

For most of the impacts associated with hydrology and water quality, Alternative 1 (No Project Alternative) would have less impact than the Project because it would not involve Program or Project Actions. However, for Impact 4.7-1 (release of sediment, COC or alteration of pH), there could be greater impacts associated with Alternative 1 compared to the Project because the failure to remediate COC at Remediation Area 10 would increase the likelihood of impacts associated with the release of COC or alteration of pH.

Less Intensive Program Actions Alternative

For most of the impacts associated with hydrology and water quality, Alternative 2 (Less Intensive Program Actions Alternative) would have less impact than the Project because it would involve less intensive implementation of Program or Project Actions. However, for Impact 4.7-1 (release of sediment, COC or alteration of pH), there could be greater impacts associated with Alternative 2 compared to the Project because the less remediation of COC at Remediation Area 10 would increase the likelihood of impacts associated with the release of COC or alteration of pH.

Land Use and Planning

Project

The Project's impacts to land use and planning are less than significant. Alternatives 1 (No Project Alternative) and 2 (Less Intensive Program Actions Alternative) would have similar impacts regarding land use and planning as would occur under the Project; therefore, a detailed discussion of the Project and a comparison to each alternative is not warranted.

Noise

Project

Standard Project Requirement NOISE-1 (limitation of Project Actions to daytime hours, incorporation of noise attenuation measures, and utilization of shields and buffers) will reduce the severity of potential impacts from Program and Project Actions. Noise impacts were reduced to the extent feasible, but remain potentially significant and unavoidable because it is uncertain at this time if all noise impacts could be reduced to a less than significant level.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, noise impacts would be less than would occur under the Project at Remediation Area 10.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve more Program and Project Actions with associated decreased use of

mechanized equipment than would occur under the Project; therefore, noise impacts would likely be less than would occur under the Project at Remediation Area 10.

Public Services

Project

The Project's impacts to public services are less than significant. Alternatives 1 (No Project Alternative) and 2 (Less Intensive Program Actions Alternative) would have similar impacts regarding public services as would occur under the Project; therefore, a detailed discussion of the Project and a comparison to each alternative is not warranted.

Traffic and Circulation

Project

With the incorporation of Project Requirements TRAFFIC-1 (pre-project implementation coordination with local jurisdictions), TRAFFIC-2 (reservation of main parking lot for visitors) and TRAFFIC-3 (preparation of traffic impact study), impacts to traffic and circulation are less than significant.

No Project Alternative

Alternative 1 (No Project Alternative) would not involve Program or Project Actions; therefore, traffic and circulation impacts would be less than would occur under the Project at Remediation Area 10.

Less Intensive Program Actions Alternative

Alternative 2 (Less Intensive Program Actions Alternative) could involve less Program and Project Actions with associated decreases in the following:

- Project personnel traveling to and from the Park;
- Materials imported to the Park;
- COC being removed from the Park; and
- Mobilization/demobilization of equipment to and from the Park.

Therefore, traffic and circulation impacts could be less under Alternative 2 compared to the Project at Remediation Area 10.

3.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines Section 15126.6(e)(2) requires that an EIR identify the environmentally superior alternative. Additionally, if the environmentally superior alternative is the “No Project Alternative”, the EIR must also identify an environmentally superior alternative from the remaining alternatives (other than the proposed Project). The environmentally superior alternative for this Project should be one that meets the basic objectives of the Project, while reducing or eliminating environmental impacts to the greatest degree.

For this EIR, the environmentally superior alternative is a hybrid alternative that depends on the COC to be cleaned-up, the Program Action and Project Actions being implemented, and the particular Remediation Area involved. There could be some areas of the Park or a particular Remediation Area with low concentrations of COC where the Less Intensive Program Action Alternative could be the environmentally superior alternative because it addresses the intent of the Joint Order (reduce risk associated with the exposure to COC) while minimizing impacts to other environmental resources (e.g., cultural resources, biological, noise, etc). In other instances, at the conclusion of characterization and evaluation, there could be some areas of the Park or a particular Remediation Area where the Project Proponents, with concurrence by DTSC and RWQCB, determine that the No Project Alternative is the appropriate action for that particular area. However, the Project has Project Requirements and mitigation measures that would be implemented to reduce impacts. Therefore, the environmentally superior Alternative is the Project because it can be tailored to reduce unacceptable risks to humans and the environment associated with exposure to COC, whereas the No Project Alternative and the LIPA Alternative constrain the Project Proponent’s flexibility in addressing COC at the Park.

3.7 FINDINGS

The alternatives presented in this EIR are the only feasible alternatives reasonably available to accomplish the majority of the Project objectives. No single alternative completely preserves existing conditions at any location and there are no alternatives by themselves that have the least significant environmental impacts for all resources. As discussed above in more detail in Section 3.3.1, DPR’s discretion regarding the range of alternatives to be evaluated at the Park is limited. For this Program EIR, potential alternatives are limited to those: (1) that are located within the Park; and (2) that comply with the Joint Order requiring the characterization, evaluation and remediation of COC at the Park. These two factors necessarily limit DPR’s consideration of Alternatives in this EIR.

Alternative 2 (Less Intensive Program Actions) contains remediation options outlined in Section 2.6.3, Range of Possible Remediation Options. However, the Project incorporates Standard and Specific Project Requirements and implements mitigation measures to ensure that environmental impacts are minimized to the extent feasible

during Program Actions at the Park. Thus, the Project appears to provide the most effective balance for achieving the project's intent while avoiding potential adverse environmental impacts or reducing them to the lowest level feasible.