

E. Other Federal Requirements and CEQA Considerations

Section E.1 includes discussions of various topics required by NEPA and/or CEQA, including a description of the long-term implications of the Project, the Project's unavoidable adverse effects, and possible growth-inducing effects. Section E.2 discusses applicable federal environmental regulations and describes how compliance with these regulations will occur as part of the USDA Forest Service's review of the Project.

E.1 Long-Term Implications

E.1.1 Short-term Uses and Long-term Productivity

The Council on Environmental Quality (CEQ) NEPA Regulations (40 CFR Part 1500 et seq.) require that an EIS discuss issues related to environmental sustainability. In general, this EIS discussion is not included as environmental effects for which either significance is defined, or mitigation is recommended. However, the discussion, as it relates to environmental consequences, must be included in the EIS, including consideration of "the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity" (42 USC Section 4332[C] [iv]).

In this section, the short-term effects and uses of various components of the environment in the vicinity of the Project are related to long-term effects and the maintenance and enhancement of long-term productivity. "Short term" refers to the total duration of the Project, whereas "long term" refers to an indefinite period beyond the construction and maintenance of the Project. The specific impacts of the Project vary in kind, intensity, and duration according to the activities occurring at any given time. The Project involves tradeoffs between long-term productivity and short-term uses of the environment.

Construction activities would result in a number of temporary impacts that would cease upon completion of the construction phase. Such impacts include the temporary closure of the Recreation Area; soil disturbance that could mobilize any pollutants attached to the sediment; temporary disturbance to approximately 65 acres of vegetation and unvegetated areas that include riparian woodlands, herbaceous wetland, unvegetated lake bottom, and sandy wash; emissions of air pollutants during Project construction and excavation phases; and disturbance (e.g., noise, traffic) to existing residences adjacent to truck routes and sediment disposal sites. Each of these impacts is described in detail in Section C (Affected Environment and Environmental Consequences). Section C also includes a discussion of SPCs that have been incorporated into the Project to avoid or reduce potential impacts, as well as additional mitigation measures that have been proposed to further minimize impacts to the extent feasible.

As described in Section A.2 (Purpose and Need), the Project has been designed to create a long-term benefit of increasing the capacity of a water resource that serves the City of Palmdale and the surrounding unincorporated communities. By restoring the Reservoir to its 1992 design capacity, PWD would be able to enhance its supply of water during a time of drought, continue to provide recreational opportunities at the Reservoir, and maintain the Dam's ability to provide debris control and flood protection for downstream areas.

E.1.2 Irreversible and Irretrievable Commitment of Resources

Pursuant to Section 15126.2(c) of CEQA Guidelines, an EIR must address significant irreversible and irretrievable environmental changes that would be caused by a proposed project. NEPA Section 1502.16 also requires an EIS to include a discussion of “any irreversible and irretrievable commitments of resources which would be involved in the proposed action/project (Project) should it be implemented.” These changes include uses of nonrenewable resources during construction and operation, long-term or permanent access to previously inaccessible areas, and irreversible damages that may result from project-related accidents.

Implementation of the Project would result in the consumption of energy as it relates to the fuel needed for construction-related activities. As provided in Appendix B, total fossil fuels used by construction vehicles and equipment associated with the Project would include approximately 92,277 gallons of gasoline and 1,210,480 gallons of diesel fuel. The anticipated equipment, vehicles, and materials required for construction and maintenance activities are detailed in Section B.2 (Overview of the Proposed Action/Project).

As described in Sections B.2.2 and B.2.3, excavated sediment would be reused as much as possible (e.g., using Reservoir bed materials for soil cement during construction of the grade control structure; recycling excavated material for use on PWD and other municipal projects). PWD has also incorporated SPC GHG-1 (Recycle Construction Wastes) into the Project, which would require recycling of construction waste and removed sediment to the extent feasible (see Appendix A).

E.1.3 Unavoidable Adverse Effects

As required by the CEQ NEPA Regulations (40 C.F.R. § 1502.16) and Section 15126.2(b) of the CEQA Guidelines, this EIS/EIR describes the adverse or significant environmental effects that cannot be avoided through implementation of the Project or alternatives. In Section C of this document, the direct, indirect, and cumulative environmental effects of the Project are discussed in detail. Impacts that are significant and cannot be avoided or reduced to less than significant levels through the application of feasible mitigation measures or SPCs have been characterized as Class I impacts. All significant and unavoidable Class I impacts resulting from the Project and alternatives are summarized below. Refer to Sections C.2 through C.13 for a complete description of these impacts.

E.1.3.1 Air Quality and Climate Change

Under the No Action/No Project Alternative (Alternative 2), air pollutant emissions generated from potential construction activities associated with dam removal may exceed AVAQMMD emissions thresholds, which would contribute to significant and unavoidable impacts (Class I). The Project and Alternative 1 would not exceed AVAQMMD emissions thresholds with the exception of the average daily PM10 emissions during excavation activities. However, with implementation of SPCs AQ-1 through AQ-5, pollutant emissions impacts from the Project and Alternative 1 would be less than significant.

E.1.3.2 Cultural Resources

The Project and Alternative 1 could uncover, expose, and/or damage human remains during construction and maintenance activities. The effect would be considered adverse under the regulations in the National Historic Preservation Act, and therefore treatment of the remains, other than protection in place, would result in a significant and unavoidable impact (Class I).

E.1.3.3 Geology and Soils

Under the No Action/No Project Alternative (Alternative 2), demolition of the Dam and removal of the accumulated sediment could expose construction workers to risks associated with liquefaction and landslide. The geotechnical safeguards for this potential demolition and excavation work are unknown, and therefore could result in a direct, significant and unavoidable impact (Class I). Removal of the Dam under the No Action/No Project Alternative would also contribute to substantial erosion and sedimentation, which would significantly affect downstream resources downstream (Class I).

E.1.3.4 Hazards and Public Safety

Under the No Action/No Project Alternative (Alternative 2), future demolition of the Dam could result in spills and leaks of hazardous materials that may contribute to soil, groundwater, or surface water contamination. As standard project commitments regarding the handling, disposal, and spill response for hazardous materials under a Dam removal project are unknown, the No Action/No Project Alternative could result in a direct and adverse impact that was significant and unavoidable (Class I). A future breach or demolishing the Dam under the No Action/No Project Alternative would also expose downstream communities to dam safety or degradation issues, contributing to a significant and unavoidable safety impact (Class I).

E.1.3.5 Hydrology

The No Action/No Project Alternative (Alternative 2) would eventually result in an increased reliance on groundwater extraction to supply the greater Palmdale area with water, with expected declines in groundwater levels. This alternative would also eliminate the flood-control capacity of the Reservoir due to increased sedimentation, which would increase the flood hazard downstream of the Dam. Impacts from the No Action/No Project Alternative would be significant and unavoidable (Class I).

E.1.3.6 Noise

Under the No Action/No Project Alternative (Alternative 2), noise generated from possible Dam removal activities may not comply with all applicable Los Angeles County and City of Palmdale regulations pertaining to noise and vibration performance standards and allowable construction hours. While such a determination is speculative, possible noise impacts of the No Action/No Project Alternative would be considered significant and unavoidable (Class I).

E.1.3.7 Recreation and Land Use

The Project and alternatives would disturb nearby residences along the truck routes and disposal sites during sediment transport and disposal from construction-related noise and traffic, which would create a significant and unavoidable nuisance impact (Class I). While the proposed action would not preclude or limit future recreation opportunities during peak recreation periods, Alternative 1 may double the number of years that the Recreation Area would be temporarily closed to the public and would require closure earlier in the season. As such, Alternative 1 would create a significant and unavoidable impact to a recreational resource (Class I). The No Action/No Project Alternative (Alternative 2) could contribute to the eventual demolition of the Dam, which would create an irreversible impact (Class I) from the loss of the Recreation Area.

E.1.3.8 Transportation and Traffic

The No Action/No Project Alternative (Alternative 2) may require eventual removal of the Dam as well as 2.8 million cubic yards of sediment and Dam debris, which would generate construction traffic that would create a significant, unavoidable impact (Class I).

E.1.3.9 Water Quality

Under the No Action/No Project Alternative (Alternative 2), substantial downstream erosion and sedimentation would likely result from an eventual breach or demolishing of the Dam. Hazardous materials that would be used during demolition and excavation could be spilled into waterways. Given that Project commitments for this alternative are unknown, impacts to water quality would be considered significant and unavoidable (Class I).

E.1.4 Growth-inducing Effects

Section 15126.2(d) of the CEQA Guidelines requires that an EIR discuss the ways in which a proposed project may foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. The CEQ NEPA Regulations also provide for discussing the growth-inducing impacts of a project. As stated in 40 C.F.R. § 1508.8(b) of the Guidelines, "Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems." The discussion must additionally address how a proposed project may remove obstacles to growth, or encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

Typically, the growth-inducing potential of a project would be considered significant if it fosters growth or a concentration of population above what is assumed in local and regional land use plans, or in projections made by regional planning authorities. Significant growth impacts could also occur if a project provides infrastructure or service capacity to accommodate growth levels beyond those permitted by local or regional plans and policies.

As described in Section A.2 (Purpose and Need), the Project would not increase the water storage capacity of the Reservoir beyond its 1992 design. Consequently, the Project would not serve to induce population growth either directly or indirectly. The construction and maintenance phases of the Project would not affect employment in the area. The Project would have a daily workforce of approximately 30 personnel, and it is anticipated that the majority of the construction personnel would come from the existing labor pool of the City of Palmdale and Los Angeles County. Project operation would not create any new jobs. Over the long term, the hiring of employees for the Project would have no impact on population growth, as no long-term employment growth would result from Project operations.

E.2 Compliance with Applicable Federal Environmental Regulations and Policies

Section E.2 discusses applicable federal environmental regulations, and describes how the Project has been developed in accordance with the requirements of these environmental statutes and regulations.

E.2.1 Endangered Species Act and Fish

The arroyo toad (*Anaxyrus californicus*) is a federally listed endangered species that is known to occur in Little Rock Creek (above Rocky Point) and Santiago Creek. This species has been fully addressed within the context of this EIS/EIR (see Section C.3, Biological Resources) and SPCs have been proposed to minimize potential impacts. In compliance with the requirements of the ESA, the USDA Forest Service will consult with the USFWS regarding the effects of the Project on the arroyo toad. As part of consultation with USFWS, the USDA Forest Service will prepare and submit a Biological Assessment for federally endangered or threatened species that could potentially be adversely affected by the Project. Subsequently, any “take” of a federally endangered or threatened species as a result of implementation of the Project would only be allowed under the context of a Biological Opinion issued by USFWS.

E.2.2 Clean Water Act

For the Project, NPDES permits would be issued by the Lahontan RWQCB. In order to comply with NPDES regulations, a Stormwater Pollution Prevention Plan (SWPPP) would be prepared for Project construction activities. For more information about the SWPPP, see Section C.12 (Water Quality).

A Section 404 permit would be required for Project construction activities involving excavation or replacement of fill material into waters of the United States. In addition, a Water Quality Certification pursuant to Section 401 of the CWA is required for Section 404 permit actions. See Section C.12 (Water Quality) for further information on the 404 permit requirements.

E.2.3 National Historic Preservation Act

Section 106 applies to the Project because proposed grade control construction and sediment excavation would occur on NFS lands, and a permit from the USDA Forest Service is required for implementation of the Project. For cultural resources that cannot be avoided by the Project, NRHP eligibility will be evaluated and a determination of eligibility will be made by the Forest Service in concurrence with the SHPO.

E.2.4 Clean Air Act

The 1990 amendments to the federal CAA Section 176 require the U.S. EPA to promulgate rules to ensure that federal actions conform to the appropriate State Implementation Plan (SIP). These rules, known together as the General Conformity Rule (40 CFR Sections 51.850-51.860; 40 CFR Sections 93.150-93.160), require any federal agency responsible for an action in a nonattainment or attainment/maintenance area to determine that the action conforms to the applicable SIP or that the action is exempt from the General Conformity Rule requirements. This means that federally supported or funded activities will not (1) cause or contribute to any new federal air quality standard violation, (2) increase the frequency or severity of any existing federal standard violation, or (3) delay the timely attainment of any federal standard, interim emission reduction, or other milestone. Actions can be exempt from a conformity determination if an applicability analysis shows that the total direct and indirect emissions from the Project construction and operation activities would be less than specified emission rate thresholds, known as *de minimis* limits, and that the emissions would be less than 10 percent of the area emission budget.

E.2.4.1 CAA Conformity

The USDA Forest Service regulates the portion of the Project's route that goes through the ANF and the Forest Service has prepared a planning document for the ANF. The Angeles National Forest Strategy does not include any air quality strategies that would be significantly impacted by the construction or operation of the Project.

The Project is located within an area of the Mojave Desert Air Basin (MDAB) that is under the jurisdiction of the Antelope Valley Air Quality Management District. This portion of the MDAB is in nonattainment for the federal and State ozone standards and the State PM10 standard. Potential air quality impacts have been assessed in Section C.2 (Air Quality and Climate Change) of this EIS/EIR. Both short and long-term emissions of criteria pollutants resulting from the construction and operation of the Project were evaluated. As discussed in Section C.2, the annual NOx and VOC emissions for the Project were calculated to be well below the General Conformity *de minimis* thresholds for the Antelope Valley portion of the MDAB. Therefore, a comprehensive General Conformity analysis would not be required for the Project.

E.2.5 Executive Order 12898 on Environmental Justice

On February 11, 1994, President Clinton issued an "Executive Order on Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (Executive Order 12898), which was designed to focus federal attention on environmental and human health conditions in minority communities and low-income communities. The Order also intended to promote non-discrimination in Federal Programs substantially affecting human health and the environment. As described in Section A.5.2 (Topics not relevant to the EIS/EIR), census tract data indicates that the Project would not disproportionately affect minority or low-income populations.

E.2.5.1 Methodology

As defined by the "Final Guidance for Incorporating Environmental Justice Concerns" contained in EPA's NEPA Compliance Analysis (Guidance Document, EPA 1998), minority (people of color) and low-income populations are identified where either:

- The minority or low-income population of the affected area is greater than 50 percent of the affected area's general population; or
- The minority or low-income population percentage of the area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.

In 1997, the President's Council on Environmental Quality issued Environmental Justice Guidance that defines minority and low-income populations as follows:

- Minorities are individuals who are members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black not of Hispanic origin; or Hispanic (without double-counting non-white Hispanics falling into the Black/African-American, Asian/ Pacific Islander, and Native American categories).
- Low-income populations are identified as populations with mean annual incomes below the annual statistical poverty level.

E.2.5.2 Environmental Justice Analysis

In the following Environmental Justice analysis, the percentages of minority and low-income populations were examined for each census tract traversed by the haul truck vehicle routes, as well as the sediment storage and disposal sites. U.S. Census data is not applicable for the unoccupied portions of the Project within NFS lands. The screening analysis seeks to identify if the minority and low-income populations within these tracts is disproportionate to the larger general population or other appropriate unit of geographic analysis, which is the City of Palmdale. The results are shown in Table E-1.

Table E-1. 2012 U.S. Census ACS Demographic Characteristics¹ of Census Tracts Traversed or Within 0.5 Miles of Project Activities and the City of Palmdale				
City of Palmdale				
City	Total Population	Minority Population	Low Income Percentage	Minority Percentage
Palmdale	151,841	114,115	75.4%	19.4%
Project Census Tracts				
Tract	Total Population	Minority Population	Low Income Percentage	Minority Percentage
9107.09	1,663	744	44.7%	11.9%
9108.04	3,087	622	20.1%	9.8%
9108.12	407	81	19.9%	5.7%

Source: US Census Bureau, 2014a and 2014b.

¹ Because U.S. Census 2008-2012 American Community Survey (ACS) estimates come from a sample population, a certain level of variability is associated with the estimates. Supporting documentation on ACS data accuracy and statistical testing can be found on the ACS website in the Data and Documentation section available here: http://www.census.gov/acs/www/data_documentation/documentation_main/. For purposes of this analysis, U.S. Census ACS data was utilized for providing current data, consistency between the data used to identify minority and low-income populations, and consistency between the different geographies presented. For these reasons, U.S. Census ACS data is considered best available for representing the demographic makeup of Plan Area communities for this programmatic EIS/EIR. Use of published U.S. Census ACS data estimates is commonly used by Lead Agencies in compliance with Executive Order 12898, California Government Code Section 65040.12 and Public Resources Code Section 72000, as well as CEQ and EPA guidance for incorporating Environmental Justice Concerns under NEPA and CEQA.

As identified above in Table E-1, no census tracts identified as being traversed or within 0.5 mile of any Project activities contain a minority or low-income population greater than 50 percent or disproportionate to the larger general population or other appropriate unit of geographic analysis, which is the City of Palmdale. Therefore, any identified significant impacts that cannot be mitigated associated with the Project would not be disproportionate to minority or low-income populations within the affected area of the Project. No Environmental Justice impacts would occur.