3 ENVIRONMENTAL IMPACT ANALYSIS

This chapter describes the approach to the SERP environmental analysis and, for each environmental resource area, details the environmental setting in the Phase 1 SERP coverage area, analyzes the environmental impacts of the SERP, and presents feasible mitigation measures for significant and potentially significant impacts.

3.1 APPROACH TO ENVIRONMENTAL ANALYSIS

An environmental impact report (EIR) must identify the significant environmental effects of a proposed project. A "[s]ignificant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project (CEQA Guidelines, California Code of Regulations [CCR] Title 14, Section 15382). This EIR is a "program" EIR, intended to provide information at a general (or programmatic) level of detail on the potential impacts of implementing the SERP. The SERP CEQA Compliance Checklist would be used to determine whether the existing SERP EIR met CEQA requirements for each of the SERP projects or if further project-level environmental documentation would be required.

3.1.1 SECTION CONTENTS

Sections 3.2 through 3.7 of this DEIR follow the same general format and are each organized into the major components described below.

REGULATORY SETTING

The "Regulatory Setting" section describes the federal, state, regional, and local laws, regulations, plans, and ordinances relevant to the SERP.

ENVIRONMENTAL SETTING

The "Environmental Setting" section describes the existing physical environmental conditions without the proposed project and provides baseline conditions for analyzing the environmental effects of the SERP. The existing conditions generally consist of the existing physical environment as of November 25, 2009, the date when DWR published the notice of preparation (NOP) to prepare an EIR for the SERP and filed it with the State Clearinghouse. Under CEQA, baseline environmental conditions are typically set at the time the NOP is published (CEQA Guidelines, Section 15125[a]). However, baseline information may also describe conditions leading up to the time that the NOP was published.

Thresholds of Significance and Analysis Methodology

This section presents the significance criteria (or "thresholds of significance") used to define the level at which an impact would be considered significant under CEQA. Thresholds may be quantitative or qualitative; they may be based on agency or professional standards or on legislative or regulatory requirements relevant to the impact analysis. Generally, the thresholds of significance are derived from Appendix G of the CEQA Guidelines, as amended; factual or scientific information and data; and regulatory standards. This section also describes the methods, process, procedures, and/or assumptions used to formulate and conduct the impact analysis.

Impacts Analysis

This analysis examines all potentially significant impacts that may occur with implementation of the SERP. The impacts and mitigation measures are numbered sequentially in each resource section, and each mitigation measure corresponds to the impact being addressed (e.g., the first impact in Section 3.2, "Air Quality and Climate Change," is numbered Impact 3.2-1, and Mitigation Measure 3.2-1 corresponds with Impact 3.2-1). An impact title precedes the analysis of the impact. The discussion that follows the impact title includes information to support the significance conclusion that is stated in boldface at the end of the impact discussion.

Following each discussion of a significant or potentially significant impact, any available and feasible mitigation measures are provided to avoid, minimize, rectify, reduce or eliminate, or compensate the significant or potentially significant impacts to a less-than-significant level. In accordance with California Public Resources Code (PRC) Section 21081.6(b), mitigation measures must be fully enforceable through permit conditions, agreements, other legally binding instruments, or by incorporating the measures into the project design. The SERP Manual includes a number of program features that help mitigate potentially significant effects and are included as requirements and conditions of the SERP. These program features will be monitored and reported on using the procedures described in the SERP Manual.

Section 15370 of the CEQA Guidelines defines mitigation as any of the following:

- avoiding the impact altogether by not taking a certain action or parts of an action;
- minimizing impacts by limiting the degree or magnitude of the action and its implementation;
- rectifying the impact by repairing, rehabilitating, or restoring the impacted environment;

- reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; or
- compensating for the impacts by replacing or providing substitute resources or environments.

3.1.2 APPROACH TO IMPACTS AND MITIGATION MEASURES

For each impact discussion, the environmental effect is determined to be either no impact, less than significant, significant, potentially significant, or beneficial, when compared to existing conditions and relative to the thresholds of significance. Definitions for each impact category are provided below.

Feasible mitigation measures are identified to address impacts identified as significant or potentially significant. The specificity of the mitigation measures is consistent with the broad, program-level nature of the SERP and the parallel program-level analysis in this EIR. Mitigation measures identified in this EIR would be applied as appropriate to specific future projects implemented under the SERP. If project-specific CEQA analyses are needed for future projects, mitigation measures in this EIR would be incorporated as applicable into future CEQA documents and would be used to guide the development of project-specific mitigation measures. Implementation, monitoring, and reporting of the EIR mitigation measures would be carried out by DWR.

TERMINOLOGY USED TO DESCRIBE IMPACTS

The EIR uses the following CEQA terminology to denote the significance of environmental impacts:

- **No impact** indicates that the construction, operations, and maintenance of the SERP would not have any direct or indirect impacts on the physical environment. It means that no change from existing conditions would result. This impact level does not require mitigation.
- A **less-than-significant impact** is one that would not result in a substantial or potentially substantial change in the physical environment. This impact level does not require mitigation, even if applicable measures are available; however, measures may be recommended to further reduce less-than-significant impacts.
- A **significant impact** is defined by PRC Section 21068 as one that would cause “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project.” Under CEQA, mitigation measures and alternatives must be identified, where applicable and feasible, to avoid, minimize, rectify, reduce or eliminate, or compensate significant impacts to a less-than-significant level. Alternatives to the SERP are discussed in Chapter 4, “Alternatives Analysis.”

- A **potentially significant impact** is one that, if it were to occur, would be considered a significant impact as described above; however, the occurrence of the impact cannot be immediately determined with certainty. For CEQA purposes, a potentially significant impact is treated as if it were a significant impact. Therefore, under CEQA, mitigation measures and alternatives must be identified, where feasible, to avoid, minimize, rectify, reduce or eliminate, or compensate significant impacts to a less-than-significant level.

- A **significant and unavoidable impact** is one that, if it were to occur, would result in a substantial adverse effect on the physical environment and could not be reduced to a less-than-significant level even with implementation of any applicable feasible mitigation. Under CEQA, a project with significant and unavoidable impacts may proceed, but the CEQA lead agency (DWR) would be required to (1) conclude in findings that no feasible means of substantially lessening or avoiding the significant impact existed, in accordance with the CEQA Guidelines (14 CCR Sections 15091[a][3]); and (2) prepare a statement of overriding considerations, in accordance with the CEQA Guidelines (14 CCR Section 15093), explaining why the CEQA lead agency had chosen to proceed with the project in spite of the potential for significant impacts on the physical environment.

- A **potentially significant and unavoidable impact** is one that, if it were to occur, would be considered a significant and unavoidable impact as described above; however, uncertainty exists regarding the occurrence or severity of the impact and/or the inability of mitigation measures to reduce the impact to a less-than-significant level. For CEQA purposes, a potentially significant and unavoidable impact is treated as if it were significant and unavoidable, and findings and a statement of overriding considerations must be prepared as described above.

- A **beneficial effect** is one that would result in a positive change in any of the physical conditions within the Phase 1 SERP coverage area.

IMPACT MECHANISMS

Mechanisms that could cause impacts are discussed for each resource area. General categories of impact mechanisms are project construction and activities related to future operations and maintenance, as described in Chapter 2, “Project Description.”

Project impacts are effects that are categorized, pursuant to CEQA, to describe their context and intensity. They fall into the following categories:

- A **temporary impact** would occur only during construction.

- A **short-term impact** would last from the time construction ceases to within 3 years after construction.

- A **long-term impact** would last longer than 3 years after construction. In some cases, a long-term impact could be considered a permanent impact.
- A **direct impact** is an impact that would be caused by an action and would occur at the same time and place as the action.
- An **indirect impact** is an impact that would be caused by an action but would occur later in time or at a distance that was removed from the impact area, but one that is reasonably foreseeable, such as growth-inducing effects and other changes related to changes in land use patterns and related effects on the physical environment.
- A **residual impact** is an impact that would remain after implementation of mitigation. This type of impact is not defined in the CEQA Guidelines.
- A **cumulative impact** refers to two or more individual effects that, when considered together, are considerable or that compound or increase other environmental impacts. “Cumulatively considerable” means that the incremental effects of an individual project, even if individually limited, are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. Cumulative impacts are discussed in Chapter 5, “Other CEQA-Required Sections.”

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