

# 3 Environmental Analysis

---

This supplemental environmental impact report (SEIR) addresses proposed modifications to the B.F. Sisk Dam Safety of Dams Modification Project, which was previously evaluated in the B.F. Sisk Dam Safety of Dams Modification Project Environmental Impact Statement/Environmental Impact Report (2019 EIS/EIR). The project addressed in the 2019 EIS/EIR is referred to herein as the Approved Project; the Approved Project with proposed modifications identified since certification of the 2019 EIS/EIR is referred to herein as the Modified Project.

## Organization of Environmental Analysis

Each issue analysis section of Chapter 3 of this SEIR is organized under the following major headings:

- Existing Conditions. This section describes the existing environmental conditions relative to each issue area.
- Relevant Plans, Policies, and Ordinances. This section outlines relevant plans, policies, and ordinances applicable to the Modified Project, issue area, and analysis.
- Thresholds of Significance. This section lists the thresholds of significance by which the Modified Project was analyzed.
- Impacts Analysis. This section discusses and analyzes in detail the potential environmental impacts, including cumulative impacts, of the Modified Project related to each threshold of significance and provides a comparison to the 2019 EIS/EIR.
- Mitigation Measures. This section identifies mitigation measures necessary to reduce potentially significant impacts.
- Level of Significance After Mitigation. This section discusses the level of impact after incorporation of the identified mitigation measures.

## Terminology Used in this Supplemental Environmental Impact Report

The level of significance is identified for each impact in this SEIR. Although the criteria for determining significance is unique for each issue area, the environmental analysis applies a uniform classification of the impacts based on the following definitions, consistent with the California Environmental Quality Act (CEQA) and the State of California CEQA Guidelines (CEQA Guidelines):

- No impact. The Modified Project would not change the environment.
- Less than significant. The Modified Project would not cause any substantial, adverse change in the environment.
- Less than significant with mitigation incorporated. The Modified Project could result in a significant impact on the environment, but incorporation of mitigation would reduce the impact to less than significant.
- Significant and unavoidable. The Modified Project would cause a substantial adverse effect on the environment, and no feasible mitigation measures are available to reduce the impact to less than significant.

## Cumulative Effects

Section 15355 of the CEQA Guidelines defines cumulative impacts as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” CEQA Guidelines Section 15130(b) states that “the discussion [of cumulative impacts] need not provide as great detail as is provided for the effects attributable to the project alone.” Section 15130(b) further states that a cumulative impacts discussion “should be guided by standards of practicality and reasonableness.”

Cumulative impacts can occur from the interactive effects of a single project. For example, the combination of noise and dust generated during construction activities can be additive and can have a greater impact than either noise or dust alone. However, substantial cumulative impacts more often result from the combined effects of past, present, and future projects located in proximity to a proposed project. Thus, it is important for a cumulative impacts analysis to be viewed over time and in conjunction with other related past, present, and reasonably foreseeable future projects, the impacts of which might compound or interrelate with those of the project under review.

As provided by Section 15130(b)(1) of the CEQA Guidelines, the evaluation of cumulative impacts is to be based on either of the following:

- A list of past, present, and reasonably anticipated future projects producing related or cumulative impacts, including those projects outside the control of the agency; or
- A summary of projections contained in an adopted general plan or related planning document that is designed to evaluate regional or area-wide conditions. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.

Pursuant to Section 15130(d) of the CEQA Guidelines, cumulative impact discussions may rely on previously approved land use documents—such as general plans, specific plans, plans for the reduction of greenhouse gas emissions, and local coastal plans—which may be incorporated by reference. In addition, no further cumulative impact analysis is required when a project is consistent with such plans and the lead agency determines that the regional or area-wide cumulative impacts of the proposed project have already been adequately addressed in a certified EIR for that plan. In addition, Section 15130(e) of the CEQA Guidelines states that “if a cumulative impact was adequately addressed in a prior EIR for a community plan, zoning action, or general plan, and the project is consistent with that plan or action, then an EIR for such a project should not further analyze that cumulative impact as provided in Section 15183(j).”

If the combined cumulative impact associated with a proposed project’s incremental effects and the effects of other projects would not be significant, an EIR should briefly indicate why the cumulative impact is not significant (CEQA Guidelines Section 15130[a][2]).

Additionally, an EIR can determine that a project’s contribution to a significant cumulative impact will be less than cumulatively considerable and therefore not significant. A project’s contribution can also be less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact. The lead agency must identify facts supporting this conclusion (CEQA Guidelines Section 15130[a][3]).

#### ***Cumulative Projects***

Table 3-1, Cumulative Projects, describes the past, present, and reasonably foreseeable future cumulative actions and projects considered in this SEIR.

The 2019 EIS/EIR underwent public scoping and public review periods and received a variety of comment letters addressing the Approved Project. During the public review period of the 2019 EIS/EIR, the California Department of Water Resources received the following comment relative to cumulative analysis:

- Public review comment from the U.S. Environmental Protection Agency: The commenter requested the inclusion of the San Luis Low Point Improvement Project in the cumulative project list and analysis.

In response to this public review comment, the 2019 EIS/EIR was revised to include the requested project. This project is also included in Table 3-1. The 2019 EIS/EIR also included the Bay Delta Conservation Plan; this project is not included in Table 3-1 herein because the scope of analysis within this SEIR of the proposed modifications and changes to the Approved Project has narrowed compared to the 2019 EIS/EIR.

Additionally, the B.F. Sisk Dam Raise and Reservoir Expansion Project (reservoir expansion project) proposed by the San Luis & Delta–Mendota Water Authority has been included in the cumulative projects list for this SEIR. Although the reservoir expansion project relates directly to B.F. Sisk Dam, it has separate utility to the Modified Project analyzed in this SEIR. As such, it is included as a cumulative project for the purposes of analysis.

Each resource area addressed in Chapter 3 of this SEIR includes an analysis of cumulative impacts in the context of the cumulative projects listed in Table 3-1.

**Table 3-1. Cumulative Projects**

Project Name	Project Proponent/ Agency	Project Description	Project Status
California High-Speed Rail Project EIR/EIS: Merced to Fresno	California High Speed Rail Authority	The Merced to Fresno High-Speed Rail Project would connect a Merced station to a Fresno station. The approximately 35-mile-long corridor between Merced and Fresno is an essential part of the statewide high-speed train system.	Began in 2012, estimated to occur over approximately 20 years
Central Valley Project Municipal & Industrial Water Shortage Policy Environmental Impact Statement	Bureau of Reclamation	This project is intended to provide detailed, clear, and objective guidelines for the distribution of Central Valley Project water supplies during water shortage conditions.	Began in 2015, estimated to occur over approximately 20 years
San Luis Reservoir State Recreation Area, Resource Management Plan/General Plan, Environmental Impact Statement/Report-Park Plan	Bureau of Reclamation and California Department of Parks and Recreation	Improvements to 27,000 acres of federally owned and state-run property, including the water surfaces of San Luis Reservoir, O'Neill Forebay, Los Banos Reservoir, and adjacent recreation lands.	Began in 2013, estimated to occur over approximately 25 years
San Luis Transmission Project Final EIS/EIR	Western Area Power Administration, U.S. Department of Energy, and San Luis & Delta–Mendota Canal Authority	Western Area Power Administration (Western) would construct, own, maintain, and operate new transmission lines that would be located mostly adjacent to existing lines in Alameda, San Joaquin, Stanislaus, and Merced Counties in California. Additional components of the San Luis Transmission Project would include new 230 kV line terminal bays at Western's San Luis and Dos Amigos Substations, as well as a new 230/70 kV transformer bank and interconnection facilities at the San Luis Substation.	Began in 2016, estimated to occur from 2017 to 2021

Table 3-1. Cumulative Projects

Project Name	Project Proponent/ Agency	Project Description	Project Status
San Luis Solar Project Final Environmental Assessment and Plan of Development	Bureau of Reclamation	30-year Land Use Authorization to access, install, operate, maintain, and remove a 26-megawatt solar photovoltaic energy generating project in and adjacent to the State Recreation Area.	Began in 2018, estimated to occur over 30 years
Merced County General Plan	County of Merced	General Plan covering future planning horizons for Merced County.	Released in 2013 with projections to 2030
San Luis Reservoir Low Point Improvement Project Draft Feasibility Report	Bureau of Reclamation and Santa Clara Valley Water District	The Pacheco Reservoir Expansion Alternative Plan includes construction of a new dam and reservoir on Pacheco Creek 0.5 miles upstream from the existing North Fork Dam and would inundate most of the existing Pacheco Reservoir.	Began in 2019, estimated to occur over approximately 20 years
B.F. Sisk Dam Raise and Reservoir Expansion Project	San Luis & Delta – Mendota Canal Authority	The project would increase storage capacity in San Luis Reservoir, achieved by an additional 10-foot raise of the B.F. Sisk Dam embankment across the entire dam crest.	Environmental analysis began in 2020
Del Puerto Canyon Reservoir and Dam	Del Puerto Water District	Located in Del Puerto Canyon, construction of a dam would create an 800-acre reservoir and water would be delivered from the Delta – Mendota Canal.	Approved, construction anticipated to begin in 2022

Notes: EIR/EIS = environmental impact report/environmental impact statement; kV = kilovolt.