

## Chapter 4

# Approach to Supplemental Analysis

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This chapter provides an overview of the approach to supplemental EIR/EIS analyses as an update to Chapter 4, *Approach to the Environmental Analysis*, presented in the Final EIR/EIS (California Department of Water Resources 2016). This chapter describes the environmental analysis approach used to evaluate the impacts of the “proposed project” (i.e., Alternative 4A with proposed modifications addressed in this Supplemental EIR/EIS). The approach to comparing the proposed project’s effects with effects of the approved project (Alternative 4A), as analyzed in the proposed Final EIR/EIS and certified Final EIR, is also described.<sup>1</sup> Where the approach to analyses in this Supplemental EIR/EIS is the same as presented in the Final EIR/EIS or when analysis approaches provided in the Final EIR/EIS are not relevant to this Supplemental EIR/EIS, the approach description in the Final EIR/EIS is not repeated. The reader is directed to Chapter 4 of the Final EIR/EIS for discussion of those approaches. Specifically, this chapter presents an overview of the following.

- The framework for the environmental consequences analyses, including an overview of the project-level analysis elements.
- The overall organization and content of the resource-specific analyses (Chapters 5–30).

Resource-specific information on the approach and methodology for evaluating the alternatives is provided in each of the specific resource chapters.

## 4.1 Framework for the Environmental Analysis

The overall framework common to the environmental resource evaluations is described below. Specific analytic approaches and variations from the information provided below are described for each resource in Chapters 5–30 of this Supplemental EIR/EIS if they have been modified from that of the Final EIR/EIS.

### 4.1.1 Project-Level Analyses

Analyses for the proposed project are presented in each of the resource chapters and impacts are presented in full impact format with CEQA and NEPA conclusions, and feasible mitigation measures are recommended to reduce significant impacts. This Supplemental EIR/EIS is intended to provide CEQA and NEPA compliance for approval of the proposed modifications to the approved project, and to inform decisions for the issuance of related permits. Description of the proposed project is in sufficient detail for project-level analyses consistent with the analysis provided for the approved project and other non-habitat conservation plan alternatives presented in the Final EIR/EIS.

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<sup>1</sup> Where there is no material difference between the December 22, 2016 proposed Final EIR/EIS and the July 21, 2017 certified Final EIR, a reference to “the Final EIR/EIS” shall be understood to apply to the December 21, 2016 document, which was part of the July 21, 2017 certified Final EIR.

## 1 4.2 Resource Chapter Organization

2 Chapters 5–30 are organized as shown below.

- 3 • Summary Comparison of Proposed Project
- 4 • Environmental Setting/Affected Environment
- 5 • Methods for Analysis
- 6 • Environmental Consequences (including descriptions of methods for analysis, significance
- 7 thresholds, effects and mitigation approaches, and, in some chapters, cumulative impact
- 8 analyses)

9 A brief overview of each of these sections is provided below.

### 10 4.2.1 Summary Comparison of Proposed Project

11 Each resource chapter includes a discussion of the most important impacts associated with the  
12 proposed project compared with those of the approved project to help summarize the impact  
13 analyses and focus the analysis on the modifications to the approved project. For most of the  
14 chapters, an alternatives summary comparison figure is included at the beginning of chapters,  
15 where appropriate, to provide quantitative and qualitative results for the approved project and  
16 proposed project to help the reader consider the magnitude of impact changes associated with the  
17 proposed project. Some of the resource chapters did not include these summary figures if the  
18 proposed project analyses did not change compared to the approved project or if the analyses were  
19 not easily summarized.

### 20 4.2.2 Environmental Setting/Affected Environment

21 Each resource chapter includes an Environmental Setting/Affected Environment section that  
22 contains a description of the environmental conditions in the vicinity of proposed project and  
23 provides a local and regional perspective as it exists at the time of the Notice of Preparation. For this  
24 Supplemental EIR/EIS, only Environmental Setting/Affected Environment information that is  
25 different than that disclosed in the Final EIR/EIS or that adds important contextual information  
26 needed for the impact evaluations is included. In some cases the Environmental Setting/Affected  
27 Environment information in this Supplemental EIR/EIS is identical to that of the Final EIR/EIS and is  
28 not repeated. The reader is referred to the relevant Final EIR/EIS chapter for this information.

29 The CEQA and NEPA baselines for this Supplemental EIR/EIS are similar to those described in the  
30 Final EIR/EIS. The approach and justification provided in the Final EIR/EIS of Existing Conditions  
31 and the No Action Alternative are nearly identical with a few relatively minor revisions. *Existing*  
32 *Conditions* is defined as the environmental conditions that existed at the time of issuance of the  
33 Notice of Preparation on February 13, 2009.

34 For the purposes of the impact analyses presented in resource chapters, the No Action Alternative in  
35 this Supplemental EIR/EIS is identical to the No Action Alternative presented in the Final EIR/EIS,  
36 unless it has been updated for specific resource topics. This approach allows for a reasonable  
37 comparison of the NEPA effects described for the proposed project and the approved project against  
38 a consistent No Action Alternative. This approach is also consistent with State CEQA Guidelines  
39 Section 15163[b], which dictates that a “supplement to the EIR need contain only the information

1 necessary to make the previous EIR adequate for the project as revised.” This directive contemplates  
2 continuation of the basic elements of the prior certified EIR, including the original No Project  
3 Alternative. Here, as noted above, the No Action/No Project has only been updated as needed to  
4 address specific resource topics.

5 As a practical matter, however, the real-world consequences of decisions by DWR and other  
6 agencies not to pursue the proposed changes addressed in this Supplemental EIR/EIRs would not be  
7 the abandonment of the approved project. In other words, the original No Action/No Project  
8 Alternative, in which no new north Delta conveyance of any kind would be pursued, would not  
9 spring back to life. Instead, a decision by DWR and other agencies not to pursue the proposed  
10 project changes would amount to a decision to instead continue to pursue the original approved  
11 project (Alternative 4A) in the form embodied in the NOD filed by DWR on July 21, 2017, as well as  
12 the 2018 Addendum. In addition, the other ongoing projects and programs unrelated to California  
13 WaterFix assumed in the No Action Alternative in the Final EIR/EIS would also continue to be  
14 implemented.

### 15 **4.2.3 Methods for Analysis**

16 Chapters 5–30 of the Final EIR/EIS each include a description of the resource-specific methodology  
17 used to identify and assess the potential environmental impacts that may result from  
18 implementation of the proposed project. This Supplemental EIR/EIS uses all of the same methods  
19 identified in Chapters 5–30 of the Final EIR/EIS, and the approach and methodologies for computer  
20 modeling are consistent with those of the Final EIR/EIS. Some resource chapter provide  
21 clarifications or slight revisions to the methodology required to understand the analysis approach.  
22 For Chapter 19, *Transportation*, and 22, *Air Quality and Greenhouse Gases*, an updated construction  
23 schedule with construction assumptions and equipment estimates were used to revise these  
24 analyses.

### 25 **4.2.4 Environmental Consequences**

26 Chapters 5–30 each include an evaluation of the direct and reasonably foreseeable indirect impacts  
27 associated with the modifications to the approved project. Under NEPA, the purpose of an EIS is to  
28 describe and disclose the impacts of the alternatives. Under CEQA, however, the significance of the  
29 impact needs to be described. A “significant effect on the environment” is defined as a substantial, or  
30 potentially substantial, adverse change in the environment (Public Resources Code Section 21068).  
31 Therefore, to facilitate both CEQA and NEPA reviews, the *Environmental Consequences* sections in  
32 Chapters 5–30 document and describe thresholds of significance (reprinted from the Final EIR/EIS),  
33 potential resource-specific impacts, including for CEQA adequacy, feasible mitigation that would  
34 reduce the level of significant impacts (if any), and a statement of each impact’s significance before  
35 and after mitigation. Chapter 31, *Other CEQA/NEPA Required Sections*, addresses significant  
36 irreversible and irretrievable changes, short-term uses versus long-term productivity, selection of  
37 the environmentally superior alternatives, and a summary of significant and unavoidable impacts  
38 under CEQA.

39 Throughout the Supplemental EIR/EIS, impacts are sometimes identified as temporary or  
40 permanent. These terms apply differently to different resources and are defined, where relevant, in  
41 each individual resource chapter (Chapters 5–30). Because of the nature of the impact, in some  
42 cases impacts are treated as permanent, even though the impact mechanism would end following  
43 construction of water conveyance facilities. For example, impacts on terrestrial biological resources

1 that would end following construction activities are nonetheless treated as permanent impacts for  
2 the purposes of impact analysis where the resource would be removed or lost and would not be  
3 replaced at its original site. Even where the resource would be replaced, these impacts were  
4 characterized as being permanent because of the length of time between the loss of the resource and  
5 the first opportunity to restore or replace the resource. In this manner, such a definition represents  
6 a conservative characterization of the impact. For other resources, however, such as noise, when  
7 construction ceases, so do related impacts associated with construction. In these cases, impacts are  
8 characterized as temporary.

#### 9 **4.2.4.1 Proposed Project Analysis**

10 The impact analyses provided in Chapters 5–30 are focused on changes to the approved project  
11 (Alternative 4A in the Final EIR/EIS) and the potential environmental impacts of those changes.  
12 Each chapter discusses the conveyance facility design changes and their environmental effects to  
13 present the effects of modifying the approved project. This approach provides a clear discussion of  
14 the possible environmental impacts related to facility design of the proposed project and its  
15 incremental effect compared with the impacts of the approved project. The analyses describe the  
16 potential effects of each proposed project facility component separately and combined with the  
17 effects of the approved project, then compares the effects of the proposed project against those of  
18 the approved project to estimate the magnitude and intensity of proposed facility modification  
19 impacts. This analysis focuses on changes in locations and sizes of reusable tunnel material (RTM)  
20 storage areas and on conveyance facility changes near Clifton Court Forebay. This multiple step  
21 analysis ultimately discloses the incremental differences between the expected impacts of the  
22 proposed project and those of the approved project. In general, the proposed project changes  
23 represent strategies for avoiding or minimizing environmental impacts that the proposed Final  
24 EIR/EIS and certified Final EIR assume will result under Alternative 4A. Please refer to Chapter 3,  
25 *Project Description*, for a full discussion of these facility modifications to the approved project.

26 Presentation of CEQA conclusions at the end of each impact topic is included to clearly show impact  
27 significance conclusions and reasons for the impact level of significance (significant, less than  
28 significant, significant and unavoidable, no impact, or beneficial) of the proposed project. A  
29 discussion of the incremental effects from the proposed project modifications is also provided to  
30 reinforce that analyses are focused on the proposed changes to the approved project.

31 Impacts related to the proposed project are entirely focused on construction-related and facility  
32 footprint impacts of approved project modifications. No additional analyses are presented for effects  
33 of water operations in this Supplemental EIR/EIS because the proposed project and approved  
34 project water conveyance operations would be identical. The reader is referred to the Final EIR/EIS  
35 for operation-based impact analyses. Similarly, the impacts of Environmental Commitments needed  
36 to offset conveyance facility effects are not repeated in this Supplemental EIR/EIS because  
37 Environmental Commitments for the approved project and proposed project would be  
38 approximately the same and their effects would be similar. The reader is directed to the Final  
39 EIR/EIS for discussion of these effects.

#### 40 **4.2.4.2 Cumulative Effects Analysis**

41 The cumulative effects analysis approach for this Supplemental EIR/EIS is the same as presented in  
42 the Final EIR/EIS. Consideration has been given to additional past, present, and reasonably  
43 foreseeable projects that could contribute to cumulative impacts when combined with those of the

1 proposed project. Please refer to each resource chapter for specific revisions associated with  
2 consideration of the proposed project in the cumulative effects analyses.

### 3 **4.2.4.3 Mitigation Approaches**

4 Specific, feasible measures are proposed when necessary to avoid, reduce, minimize, or compensate  
5 for adverse environmental effects of the proposed project. Mitigation is also presented to meet  
6 CEQA's specific requirement that, whenever possible, agency decision makers adopt feasible  
7 mitigation available to avoid or substantially lessen a project's significant impacts. Although NEPA  
8 does not impose a similar substantive mitigation obligation on federal agencies, this practice is  
9 consistent with NEPA's intent that mitigation be discussed in sufficient detail to ensure that  
10 environmental consequences have been fairly evaluated. The mitigation approaches presented in  
11 this Supplemental EIR/EIS are consistent with those disclosed in the Final EIR/EIS, including the use  
12 of project environmental commitments and habitat restoration and enhancement Environmental  
13 Commitments to reduce effects of constructing and operating conveyance facilities.

## 14 **4.3 References Cited**

15 California Department of Water Resources and U.S. Bureau of Reclamation. 2016. *Final*  
16 *Environmental Impact Report/Environmental Impact Statement for the Bay Delta Conservation*  
17 *Plan/California WaterFix*. Prepared by ICF International, Sacramento, CA. December.