

Affected Environment, Impacts, and Mitigation Measures

3.0 INTRODUCTION

This section introduces the key principles followed in preparing this Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR), discusses differences between California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) baselines, describes the duty to mitigate significant environmental impacts and the structure of the resource sections included in the remainder of Section 3, and discusses the terminology used in the environmental impact analysis.

3.0.1 Key Principles Guiding Preparation of this Draft Environmental Impact Statement/Environmental Impact Report

3.0.1.1 Emphasis on Significant Environmental Effects

This Draft EIS/EIR focuses on the significant environmental effects of the Species Conservation Habitat Project (SCH Project or Project) alternatives and their relevance to the decision-making process. NEPA requires the lead Federal agency to rely on a “scientific and analytical basis for the comparison of alternatives” (40 Code of Federal Regulations [CFR] 1502.16) in making its decisions. Commonly, when preparing a joint document, the lead Federal agency will adopt the CEQA significance thresholds as its scientific basis, unless otherwise noted.

“Environmental impacts,” as defined by CEQA, include physical effects on the environment. In this document, the term is used synonymously with the term “environmental effects” under NEPA. The CEQA Guidelines (section 15360) define the “environment” as follows: “The physical conditions which exist within the area which will be affected by a proposed project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.”

This definition does not include strictly economic impacts (e.g., changes in property values) or social impacts (e.g., a particular group of persons moving into an area). The CEQA Guidelines (section 15131[a]) state that “economic or social effects of a project shall not be treated as significant effects on the environment.” However, economic or social effects are relevant to physical effects in two situations. In the first, according to section 15131(a) of the CEQA Guidelines, “An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes...to physical changes caused in turn by the economic or social changes.” In other words, if an economic or social impact leads to a physical impact, this ultimate physical impact must be evaluated in the EIR. In the second instance, according to section 15131(b) of the CEQA Guidelines: “Economic or social effects of a project may be used to determine the significance of physical changes caused by the project.” For example, the closure and demolition of a fully occupied commercial building could be considered more significant than the demolition of a similar vacant building, even though the physical effects are the same.

1 **3.0.1.2 Forecasting**

2 In this Draft EIS/EIR, the lead agencies have made their best efforts to predict and evaluate the
3 reasonable, foreseeable, direct, indirect, and cumulative environmental impacts of the proposed Project
4 alternatives. NEPA and CEQA do not require the lead agencies to engage in speculation about impacts
5 that are not reasonably foreseeable (CEQA Guidelines sections 15144 and 15145). In these instances,
6 CEQA does not require a worst-case analysis. Similarly, NEPA does not require a worst-case analysis
7 when confronted with incomplete or unavailable information (40 CFR section 1502.22).

8 **3.0.1.3 Reliance on Environmental Thresholds and Substantial Evidence**

9 The identification of impacts as “significant” or “less than significant” is one of the important functions of
10 an EIS/EIR. While impacts determined to be “less than significant” need only be acknowledged as such,
11 an EIR must identify mitigation measures for any impact identified as “significant.” In preparing this
12 document, the lead agencies have based their conclusions about the significance of environmental impacts
13 on identifiable thresholds and have supported these conclusions with substantial scientific evidence.

14 The criteria for determining the significance of environmental impacts in this analysis are described in
15 each resource section in Section 3. The “threshold of significance” for a given environmental effect is the
16 level at which the lead agencies find a potential effect of the proposed Project alternatives to be
17 significant. “Threshold of significance” can be defined as an “identifiable quantitative, qualitative or
18 performance level of a particular environmental effect, non-compliance with which means the effect will
19 normally be determined to be significant by the agency and compliance with which means the effect
20 normally will be determined to be less than significant (CEQA Guidelines, section 15064.7(a)).

21 **3.0.1.4 Disagreement among Experts**

22 It is possible that evidence that might raise disagreements will be presented during the public review of
23 the Draft EIS/EIR. Such disagreements will be noted and will be considered by the decision makers
24 during the public hearing process. However, to be adequate under CEQA and NEPA, the EIS/EIR need
25 not resolve all such disagreements. In rendering a decision on a project where a disagreement exists
26 among experts, the decision makers are not obligated to select the most conservative, environmentally
27 protective, or liberal viewpoint. Decision makers might give more weight to the views of one expert than
28 to those of another and need not resolve a dispute among experts. In their proceedings, the decision
29 makers must consider the comments received and address any objections, but need not follow said
30 comments or objections so long as the decision makers state the basis for their decision supported by
31 substantial evidence.

32 **3.0.2 CEQA and NEPA Baselines**

33 **3.0.2.1 CEQA Baseline**

34 Section 15125 of the CEQA Guidelines requires EIRs to include a description of the physical
35 environmental conditions in the vicinity of a proposed Project that exists at the time of the Notice of
36 Preparation. The conditions existing at the time that the Notice of Preparation was circulated for review
37 are described in Sections 3.1 through 3.21. These environmental conditions constitute the baseline
38 physical conditions against which the CEQA lead agency determines if an impact is significant.

39 **3.0.2.2 NEPA Baseline**

40 In analyzing a proposed project in a joint CEQA/NEPA format, the United States Army Corps of
41 Engineers (Corps) must distinguish the scientific and analytical basis for its decisions separately from the
42 CEQA lead agency decision. Fundamental to this analysis is establishing the NEPA baseline. For the

1 SCH Project, the NEPA baseline for determining the significance of impacts is the set of conditions
2 defined by examining the full range of construction and operational activities the applicant (the Natural
3 Resources Agency) could implement and is likely to implement absent a permit from the Corps. The
4 NEPA baseline also includes other actions that would affect inflows into the Salton Sea and facilities
5 construction required as part of the Imperial Irrigation District Water Conservation and Transfer Project.
6 These are described under the No Action Alternative. The determination is based on direct statements and
7 empirical data from the applicant, as well as on the judgment and experience of the Corps. Unlike the
8 CEQA baseline, which is defined by conditions at a point in time, the NEPA baseline is not bound by
9 statute to a “flat” or “no-growth” scenario. The significance of impacts associated with implementation of
10 the proposed Project or alternative is defined by comparison to impacts that would occur under NEPA
11 baseline conditions (i.e., the increment).

12 For most impacts, no meaningful difference exists they are compared to the CEQA and NEPA baselines,
13 particularly when impacts would cease when construction ended, because no substantive differences
14 would exist between the current conditions and those that would occur several years into the future. For
15 other resources, such as hydrology, biological resources, air quality (fugitive dust emissions), and
16 aesthetics, a meaningful difference exists between current conditions and those that would occur in the
17 future as the Salton Sea recedes and water quality deteriorates.

18 **3.0.3 Duty to Mitigate**

19 Under the Council on Environmental Quality regulations, 40 CFR 1502.14 requires lead agencies to
20 consider appropriate mitigation measures, and 1505.3 requires that any mitigation measures adopted as
21 part of the Record of Decision shall be implemented.

22 According to CEQA Guidelines, section 15126.4(a), each significant impact identified in an EIR must
23 include a discussion of feasible mitigation measures that would avoid or substantially reduce the
24 significant environmental effect. To reduce significant effects, mitigation measures must avoid, minimize,
25 rectify, reduce, eliminate, or compensate for a given impact of the proposed Project.

26 CEQA Guidelines, section 15041, grants a lead agency the authority to require feasible changes in the
27 project that would substantially lessen or avoid a significant effect on the environment. Public agencies,
28 however, do not have unlimited authority to impose mitigation. Where another law grants an agency
29 discretionary power, CEQA supplements those discretionary powers by authorizing the agency to use the
30 powers to mitigate or avoid significant effects on the environment when it is feasible to do so with respect
31 to projects subject to the powers of the agency (CEQA Guidelines, section 15040).

32 **3.0.4 Structure of Resource Sections**

33 The remainder of Section 3 describes the environmental resources that could be affected by the SCH
34 Project; the potential impacts on those resources that would occur if the SCH Project were not
35 implemented (i.e., the No Action Alternative), as well as the impacts of the six Project alternatives;
36 mitigation measures that would reduce the severity of significant Project impacts, and the significance of
37 the residual impacts that would remain after the application of such mitigation measures. The resources
38 include those that are typically evaluated under both NEPA and CEQA, as well as those that are generally
39 required for NEPA documents, such as Indian Trust Assets, Environmental Justice, and Socioeconomics.

40 The level of detail for each resource is commensurate with the types of impacts expected to occur. For
41 example, no Indian Trust Assets are present in the area that would be affected by the SCH Project, so the
42 discussion of this resource is brief. More extensive discussions are provided for biological resources
43 because of the relative complexity and importance of the resources affected. Sections addressing
44 resources that are considered in detail are organized as follows:

- 1 • **Introduction.** This section includes a description of the types of issues to be addressed in the
2 subsequent analysis. It also includes a description of the study area for that resource. The study area is
3 the geographical area within which Project-related impacts could occur. For some resources, such as
4 noise, impacts are highly localized and the study area includes only those locations close to or within
5 the footprint of construction activities. Impacts on other resources, such as socioeconomics and air
6 quality, would affect a broader region, and the description of the affected environment for these
7 resources is necessarily broader, as well. The introduction also includes a table that summarizes the
8 significance of impacts for each alternative when compared to both existing conditions and the No
9 Action Alternative, along with mitigation measures, as appropriate.
- 10 • **Regulatory Requirements.** This section provides an overview of Federal, state, and local regulations
11 that are related to the impact analysis for each resource.
- 12 • **Affected Environment.** This section describes the conditions within the study area as they existed at
13 the time that the Notice of Intent and Notice of Preparation were issued (Summer 2010). The most
14 current information was used, which in some cases, may not correspond exactly to that date.
- 15 • **Impact Analysis Methodology.** The methods by which impacts were evaluated are described.
- 16 • **Impact Significance Criteria.** Criteria against which the significance of Project impacts was
17 evaluated are provided for each resource that could be affected by the Project. The threshold of
18 significance for a given environmental impact is the level at which the Corps or the Natural
19 Resources Agency finds a potential effect of the proposed Project or alternative to be significant. The
20 significance criteria are largely based on CEQA Guidelines, Appendix G and have been modified
21 where appropriate to address impacts specific to the SCH Project and to meet Federal requirements.
22 Significance criteria also have been developed for those resources that are not included in CEQA
23 Guidelines, Appendix G (Environmental Justice and Socioeconomics). The Corps has adopted the
24 CEQA thresholds for purposes of this Draft EIS/EIR to achieve its NEPA responsibilities, unless
25 otherwise noted in particular sections of the document.
- 26 • **Application of Significance Criteria.** This section describes how each of the significance criteria
27 described in the preceding section is or is not applicable to the SCH Project. Those that are not
28 applicable (e.g., those related to impacts on forest lands) are not considered further.
- 29 • **No Action Alternative.** The description of the impacts resulting from the No Action Alternative is
30 based on the No Action Alternative-CEQA Conditions provided in the *Salton Sea Ecosystem*
31 *Restoration Program Final Programmatic Environmental Impact Report* (California Department of
32 Water Resources and California Department of Fish and Game 2007). This alternative is intended to
33 reflect those conditions that currently occur plus changes that are reasonably expected to occur in the
34 foreseeable future if none of the Project alternatives is implemented, based on current plans and
35 consistent with available infrastructure and community services. The No Action Alternative is the
36 same as No Federal Action. It is a description of what would occur if the Corps did not issue a permit
37 or otherwise approve the SCH Project. Because the Project is a water-dependent activity, the lead
38 agencies agree that no portion of the Project could be implemented without the issuance of a Corps
39 permit. Therefore, the No Action Alternative is also the NEPA baseline.
- 40 • **Alternatives 1 through 6.** The environmental impacts that would result from implementing each of
41 the six Project alternatives are described. Each section describes impacts that would be significant,
42 less than significant, and beneficial (where appropriate). Impacts from construction, operations, and
43 maintenance are addressed, as are direct, indirect, permanent, and temporary impacts. Each impact is
44 given an alphanumeric number. Impacts are compared to both the existing conditions and the No
45 Action Alternative. Mitigation measures are provided for each significant impact where feasible and
46 also are given an alphanumeric number. The discussion of mitigation measures is followed by a

1 description of the significance of the residual impacts that would occur after the implementation of
2 the mitigation measures.

- 3 • **References.** A list of the references and personal communications that are cited in each section is
4 included at the end of the section.

5 **3.0.5 Terminology Used in the Environmental Impact Analysis**

6 As stated above, this document is a joint EIS/EIR, prepared under the direction of the Corps as the
7 Federal lead agency and the Natural Resources Agency as the state lead agency. Both agencies have
8 obligations to disclose all impacts facilitated by approval of the Project.

9 Under NEPA and CEQA, the terms "effects" and "impacts" are used synonymously (40 CFR section
10 1508.8). Direct impacts are those caused by the Project itself, and that occur at the same time and place.
11 Examples of direct impacts are dust, noise, and traffic that would result from Project construction.
12 Indirect impacts are those caused by the Project and are later in time or farther removed in distance, but
13 are still reasonably foreseeable. Direct and indirect impacts can be either temporary or permanent. The
14 Corps has slightly refined this terminology for use in its NEPA analyses, basing its impact analysis on the
15 area subject to a Corps permit, which may or may not be different than that of the entire project. For
16 example, the Corps' Standard Operating Procedures (2009), a national policy guidance document, defines
17 direct impacts "as those that happen in direct response to the permitted activity" while "indirect
18 impacts...are those removed in time and/or distance in relation to the permitted activity." For this
19 EIS/EIR, the impact areas are the same under NEPA and CEQA because no aspects of the SCH Project
20 would be implemented in the absence of a Corps permit.

21 Regardless of the definitional differences, under both NEPA and CEQA, the Corps and Natural Resources
22 Agency must identify and analyze all impacts resulting from a proposed project and its alternatives,
23 whether direct or indirect, and identify feasible, reasonable, and practical mitigation measures to avoid or
24 minimize those identified impacts. (See 40 CFR section 1502.16; CCR Title 14, sections 15126.2 and
25 15126.4.) All impacts, whether classified as direct or indirect, must be analyzed at the same level and
26 mitigation must be identified. To satisfy both the Corps and Natural Resources Agency's informational
27 and analytical needs in one document, this EIS/EIR utilizes the following terms in analyzing the
28 potentially significant impacts resulting from the Project:

- 29 • **No Impact.** A designation of no impact is given when no adverse changes in the environment are
30 expected as a result of the Project.
- 31 • **Less-than-Significant Impact.** A Project impact is considered less than significant when it does not
32 reach the impact threshold established in the significance criteria and, therefore, would not cause a
33 substantial change in the physical environment. As a result, no mitigation is required or necessary.
- 34 • **Significant Impact.** A Project impact is considered significant if it would result in a substantial
35 adverse change in the physical environment. Impact significance criteria (defined above) are
36 identified for each resource, and Project impacts are evaluated in the context of these criteria.
- 37 • **Significant Unavoidable Impact.** A Project impact is considered significant and unavoidable if it
38 would result in a substantial adverse change in the physical environment that cannot be
39 feasibly/reasonably avoided or mitigated to a less-than-significant level if the selected project is
40 approved and implemented. Under CEQA, a Statement of Overriding Considerations must be adopted
41 if a proposed project results in one or more significant unavoidable impacts. NEPA has no similar
42 "overriding considerations" requirement.
- 43 • **Beneficial Impact.** This impact is identified where the Project alternatives would create a positive
44 change in environmental conditions.

- 1 • **Mitigation Measure.** Mitigation measures must be feasible, practical, reasonable, and roughly
2 proportional to the impacts of a proposed project. The mitigation also must avoid, minimize, rectify
3 and/or restore, reduce, or compensate for identified significant impacts to the physical environment.
4 Mitigation includes:
- 5 • Avoiding the impact altogether by not taking a certain action or parts of an action;
 - 6 • Minimizing the impact by limiting the degree or magnitude of the action and its
7 implementation;
 - 8 • Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
 - 9 • Reducing or eliminating the impact over time by preservation and maintenance operations
10 during the life of the action; and
 - 11 • Compensating for the impact by replacing or providing substitute resources or environments.
- 12 • **Residual Impact.** The level of impact that would occur after the implementation of mitigation
13 measures.
- 14 • **Cumulative Impacts.** Under CEQA, "cumulative impacts refer to two or more individual effects
15 which, when considered together, are considerable or which compound or increase other
16 environmental impacts" (CCR Title 14, section 15355). CEQA requires that cumulative impacts be
17 discussed when the "project's incremental effect is cumulatively considerable" (CCR Title 14, section
18 15130(a)). NEPA regulations define "cumulative impact" as "the impact on the environment which
19 results from the incremental impact of the action when added to other past, present, and reasonably
20 foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes
21 such other actions" (40 CFR section 1508.7). NEPA states that "cumulative impacts can result from
22 individually minor but collectively significant actions taking place over a period of time" (40 CFR
23 section 1508.7). In this EIS/EIR, cumulative impacts resulting from the Project alternatives are
24 addressed separately in Section 4.0, Cumulative Impacts.

25 3.0.6 References

26 U.S. Army Corps of Engineers (Corps). 2009. Standard Operating Procedures for the Regulatory
27 Program. July 1.

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