

### 3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL ANALYSIS

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#### Introduction

This chapter discusses the terminology used in this document and the NEPA and CEQA requirements related to the alternatives analysis. The sections following Section 3.0 contain a discussion of the possible effects of the Proposed Action and alternatives for the specific environmental issue (or resource) areas identified by the USACE and LAHD. Sections 3.1 through 3.13 discuss both environmental issues found to be potentially significant and those found not to be significant. This section analyzes construction impacts associated with the Proposed Action. Potential direct, indirect, permanent, and temporary impacts are evaluated in this section. Section 3.14 presents an analysis of environmental impacts of connected actions.

To assist the reader in comparing information about the various environmental issues, Sections 3.1 through 3.13 each present the following information for their specific resource area:

- Environmental Setting (the environmental setting or baseline for this Draft EIS/EIR is the physical condition that existed in November 2004 [when the review and comment period of the NOI/NOP ended for this project])
- Significance Criteria (i.e., the criteria against which the significance of impacts is judged)
- Impact Assessment Methodology
- Impacts and Mitigation Measures of the proposed Project and Alternatives
- Mitigation Monitoring
- Significant Unavoidable Impacts

Cumulative impacts are assessed in Chapter 6 (Cumulative Impacts). Significant impacts for the Proposed Action and alternatives for each environmental resource area are summarized in Chapter 2 of this Draft SEIS/SEIR. A comparison of the results of impact analyses is presented in Section 2.7, where the alternatives are compared in order to determine the environmentally superior alternative. The CEQA and NEPA Baselines and their application to analysis of potential impacts of the alternatives of the Proposed Action are explained in detail in Section 1.8.5 of this Draft SEIS/SEIR. Impact terminology is defined below.

- Direct Impacts: Any alteration, disturbance, or destruction of environmental resources that would result from project-related activities is considered a *direct impact*. Examples include encroaching into shallow water habitat, and losing individual species and/or their habitats.
- Indirect Impacts: *Indirect impacts* are secondary to, or immediately derived from, a direct impact. Examples include occurrences of elevated noise and dust levels, increased human activity, decreased water quality.

- **Permanent:** All impacts that result in the irreversible removal of environmental resources are considered *permanent*. Examples include placing the dredge material at the fill site, which would be supporting sensitive resources.
- **Temporary:** Any impacts considered to have reversible effects on environmental resources can be viewed as *temporary*. Examples include the generation of fugitive dust during construction.
- **Cumulative:** Federal regulations implementing NEPA (40 C.F.R. 1500-1508) require that the cumulative impacts of a proposed action be assessed. NEPA defines a *cumulative impact* as an "impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions"(40 C.F.R. 1508.7).

CEQA Guidelines require a discussion of significant environmental impacts that would result from project-related actions in combination with closely related past, present, and probable future projects located in the immediate vicinity (CEQA Guidelines, 15130 [b][1][A]). These cumulative impacts are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines 15355).

## Terminology Used in This Environmental Analysis

In evaluating the potential impacts of the Proposed Action and the alternatives, the level of impact significance is determined by applying thresholds of significance (significance criteria) presented for each resource evaluation area. The following terms are used to describe each impact:

- **No Impact:** A designation of no impact is given when no adverse changes in the environment are expected.
- **Less Than Significant Impact:** A less-than-significant impact would be identified when the Proposed Action or alternatives would cause no substantial adverse change in the environment, i.e., the impact would not reach the threshold of significance.
- **Significant Mitigated Impact:** A significant (but mitigable, or avoidable) impact would create a substantial or potentially substantial adverse change in any of the physical conditions within the area affected by the Proposed Action or alternatives. Such an impact would exceed the applicable significance threshold established by NEPA and CEQA, but would be reduced to a less-than-significant level by application of a mitigation measure.
- **Significant Unavoidable Impact:** As required by Section 15126.2(b) of the CEQA Guidelines, this is used when a residual impact that would cause a substantial adverse effect on the environment – which may or may not be reduced somewhat – could not be reduced to a less-than-significant level through any feasible mitigation measure(s).

- *Beneficial Effect:* The Proposed Action or alternatives would create a positive change in any of the physical conditions in the affected resource area.
- *Mitigation:* This refers to measures that would be implemented to avoid or lessen potentially significant impacts. Mitigation includes:
  - Avoiding the impact altogether by not taking a certain action or parts of an action;
  - Minimizing the impact by limiting the degree or magnitude of the action and its implementation;
  - Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
  - Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and
  - Compensating for the impact by replacing or providing substitute resources or environments.
  - The mitigation measures would be proposed as a condition of project approval and would be monitored to ensure compliance and implementation.
- *Residual Impacts:* This is the level of impact after the implementation of mitigation measures.

## Requirements to Evaluate Alternatives

CEQ Regulations (40 C.F.R. §1502.14[a]) and CEQA Guidelines 15126.6 require that an EIS and an EIR describe a range of reasonable alternatives to the Proposed Action, or to the location of the Proposed Action, that could feasibly attain most of the basic objectives of the Proposed Action but would avoid or substantially lessen any significant environmental impacts. The EIR should compare merits of the alternatives and determine an environmentally superior alternative. Section 2.5 of this Draft SEIS/SEIR sets forth viable alternatives to the Proposed Action and evaluates their suitability, as required by CEQ Regulations and CEQA Guidelines. Section 1.8.7 of this Draft SEIS/SEIR describes the detailed requirements to evaluate alternatives.

The information presented in this Draft SEIS/SEIR specific to impacts to the aquatic environment would be used by the USACE as part of any proposed permit action subject to jurisdiction of the USACE, pursuant to the following: Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act, and Section 103 of the Marine Protection, Research and Sanctuaries Act. In particular, USACE regulations (33 C.F.R. Part 325) require compliance with USEPA's 404(b)(1) Guidelines codified at 40 C.F.R. Part 230. Section 1.8.7 of this Draft SEIS/SEIR describes the requirements of the 404(b)(1) evaluation.