

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.0.1 INTRODUCTION

This chapter presents an analysis of each resource topic that was identified through preliminary environmental analysis and the public scoping process as likely to be affected by the Proposed Action. Each section describes the affected environment as it relates to that specific resource topic; the direct and indirect effects that could result from implementation of the Proposed Action or its alternatives; and mitigation measures that would avoid, reduce, or compensate for the significant adverse effects of the Proposed Action or an alternative (cumulative effects are addressed in **Chapter 4.0**). The subsections below summarize the approach to the impact analysis, including key assumptions and data used in the analysis, to assist the reader in better understanding the analyses contained in this Draft Environmental Impact Statement (Draft EIS).

3.0.2 SCOPE OF THE EIS

In accordance with the National Environmental Policy Act (NEPA), this Draft EIS provides an evaluation of potential effects on the human environment, which includes an analysis of the natural and physical environment and the relationship of people with that environment (40 CFR § 1508.14). Council on Environmental Quality (CEQ) regulations (40 CFR § 1508.27) provide guidance with respect to the NEPA requirements to evaluate a Proposed Action's effects on the following: public health and safety; historical and cultural resources; parklands; prime farmlands; wetlands; wild and scenic rivers; ecologically critical areas; and endangered or threatened species or their habitat.

Based on the input received during the EIS scoping process, as described in **Chapter 1.0, Introduction and Statement of Purpose and Need**, this EIS addresses the following resource topics or categories of effects in detail:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Climate Change
- Cultural Resources
- Environmental Justice, Population, and Housing
- Geology, Soils, and Minerals
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Public Services
- Transportation and Traffic
- Utilities and Service Systems

3.0.3 SECTION CONTENTS AND DEFINITION OF TERMS

Each resource topic considered in this section of the EIS is addressed under six primary subsections: **Introduction; Affected Environment; Regulatory Framework – Applicable Laws, Regulations, Plans,**

and Policies; Significance Thresholds and Analysis Methodology; Environmental Consequences and Mitigation Measures; and Residual Significant Impacts. An overview of the information included in these subsections is provided below.

3.0.3.1 Introduction

The introduction section describes the topic analyzed and the contents of the analysis. It also provides a list of the sources used to prepare the section.

3.0.3.2 Affected Environment

This section describes the existing conditions in the area of the Proposed Action and the alternatives for each resource topic. The section provides a description of the applicable physical setting of the project site and its surroundings (e.g., existing land uses, existing soil conditions, existing traffic conditions). As stated in **Chapter 2.0, Proposed Action and Alternatives**, if DA permits are issued, development under the Proposed Action is expected to begin in 2013 and full buildout is anticipated between 2025 and 2040, depending on the market conditions. For certain resource topics, such as traffic, the EIS also presents future No Project¹ conditions in 2025 as the affected environment or the baseline conditions relative to which the effects of the Proposed Action and its alternatives are evaluated.

3.0.3.3 Regulatory Framework – Applicable Laws, Regulations, Plans, and Policies

This section presents relevant federal, state, and local laws, regulations, plans, and policies. Only those laws, regulations, and policies that are pertinent to the impact analysis are included.

3.0.3.4 Significance Thresholds and Analysis Methodology

Significance Thresholds

For each resource topic included in this section, the Draft EIS identifies significance criteria used by the U.S. Army Corps of Engineers (USACE) to evaluate the significance of the effects. Although CEQ regulations (40 CFR § 1508.27) provide guidance as to the requirement to evaluate impacts in an EIS, CEQ guidance generally does not specify the significance criteria to be used to evaluate the significance of the specific effects of the proposed action.

In evaluating the significance of a project's effects, NEPA requires a consideration of both context and intensity (40 CFR § 1508.27). "Context" means that the significance must be analyzed in several contexts, such as the human environment, affected region, affected interests, and the local setting. "Intensity" refers to the severity of the impact. Impacts must be evaluated that may be both beneficial and adverse.

¹ No Project conditions refers to no development at all on the project site as opposed to the No Action alternative which involves the development of the project site with a large-scale community without triggering the need for a DA permit from the USACE.

Analysis Methodology

This section summarizes the methodology used to evaluate direct and indirect effects. Impacts are evaluated quantitatively where possible and qualitatively where quantification is not feasible. Depending on the resource topic, some impacts are evaluated relative to future No Project conditions that would exist at the time of project buildout, whereas others are evaluated relative to existing conditions.

3.0.3.5 Environmental Consequences and Mitigation Measures

This section presents the environmental effects from the construction and operation of the Proposed Action and its alternatives. All impacts are numbered (for instance, Impact AES-1 refers to the first impact under **Aesthetics**) and shown in bold type. Mitigation measures are numbered to correspond to the impact. Impacts and mitigation measures are numbered consecutively within each topic.

The following terms, as defined below, are used in this Draft EIS to describe the types of effects that could result from the implementation of the Proposed Action or an alternative.

- **Direct Effect.** An effect that is caused by the action and occurs at the same time and place.
- **Indirect Effect.** An effect that is caused by the action and occurs later in time or in a different location than the action, but is still reasonably foreseeable.
- **Less than Significant Effect.** An effect that is adverse but that does not exceed any significance thresholds, as defined for each resource topic.
- **Significant Effect.** An effect that is adverse and would result in an exceedance of a significance threshold.
- **Residual Effect.** The effect that is expected to remain even after feasible mitigation measures have been implemented to reduce a significant effect.
- **Cumulative Effect.** An effect resulting from the incremental impact of the action when added to the effects from other past, present, and reasonably foreseeable future actions.
- **No Effect.** No change in conditions as a result of the implementation of the action.

3.0.3.6 Residual Significant Impacts

This section discusses any potentially significant impacts that cannot be fully mitigated and would remain significant even after mitigation.