Chapter 4
Environmental Analysis

Introduction

Sections 4.1 through 4.20 of this chapter ~~provide descriptions of existing site conditions pertaining to each of the environmental topics listed below; they~~ discuss the potential significant environmental effects resulting from project implementation, and include descriptions of existing site conditions, criteria for determining the significance of potential environmental impacts, analyses of the type and magnitude of environmental impacts, and feasible mitigation measures (MM~~), where necessary or recommended,~~) that would reduce or avoid significant environmental impacts.

Potential Environmental Impacts

The following resource areas are analyzed in this chapter.

- 4.1, Aesthetics and Visual Resources
- 4.2, Agriculture and Forestry Resources
- 4.3, Air Quality and Health Risk
- 4.4, Biological Resources
- 4.5, Cultural Resources
- 4.6, Energy
- 4.7, Geology and Soils
- 4.8, Greenhouse Gas Emissions and Climate Change
- 4.9, Hazards and Hazardous Materials
- 4.10, Hydrology and Water Quality
- 4.11, Land Use and Planning
- 4.12, Mineral Resources
- 4.13, Noise and Vibration
- 4.14, Population and Housing
- 4.15, Public Services
- 4.16, Recreation
- 4.17, Transportation and Circulation
- 4.18, Tribal Cultural Resources
- 4.19, Utilities and Service Systems
- 4.20, Wildfire

Format of the Environmental Analysis

Each of the 20 environmental topic sections of this chapter includes the following subsections.

Overview

This subsection briefly describes the criteria considered in the particular resource section, summarizes the resources used to compile the information presented for the environmental analysis, and also summarizes the environmental effects of the project and any feasible mitigation measures.

Existing Conditions

According to Section 15125 of the ~~State~~ CEQA Guidelines, an EIR must include a description of the existing physical environmental conditions in the vicinity of a project to provide the "baseline condition" against which project-related impacts are compared. Normally, the baseline condition is the physical condition that exists when the NOP is published; however, a different baseline may be used in specific cases where it is deemed appropriate. Unless otherwise indicated, the environmental setting described in each of the resource sections will be that which existed on the date the NOP was published~~.~~ (March 8, 2021).

Applicable Laws and Regulations

This subsection provides a summary of regulations, plans, policies, and laws at the federal, state, and~~/or~~ local levels that are relevant to the project as they relate to the particular environmental resource area under discussion. Compliance with these applicable laws and regulations is mandatory unless noted otherwise within the analysis. Therefore, as it relates to the *Project Impact Analysis* below, compliance is assumed because it is required by law~~. In such cases, the underlying law or regulation requires certain actions prescribed by the regulating authority, the result of which would be an assurance that the resulting impact, if any, would be considered acceptable and "less than significant" under CEQA. Additional mitigation would therefore generally not be required.~~, and mitigation would generally not be required when an existing law or regulation would ensure that a significant impact would not occur.

Project Impact Analysis

This subsection describes the methodology used for the analysis of the potential environmental impacts of the project; identifies the criteria for determining the significance of potential impacts; and states a conclusion as to whether the environmental impacts would be considered~~; (a)~~ significant and unavoidable, ~~(b)~~ less than significant with mitigation incorporated, or ~~(c)~~less than significant (see definitions below). Each topic analyzed is divided into specific issues, based on potential impacts, and is separated ~~into discussions of~~by construction and operation impacts wherever relevant. The discussion of potential impacts is based on the applicable threshold~~s~~ of significance (see below) for each issue. Where potential impacts are~~ determined to be~~ significant, mitigation measures are identified, as feasible, to minimize, rectify, reduce, eliminate, or compensate for the significant impacts with the goal of reaching a less-than-significant impact determination.

Methodology

Each methodology subsection describes the means used to analyze potential impacts on a particular resource, discussing the steps followed and listing any studies relied ~~up~~on for arriving at conclusions as to significance.

Thresholds of Significance

Thresholds of significance are criteria used to assess whether potential environmental effects are significant. The significance criteria used in this analysis are primarily based on the recommendations provided in Appendix G of the ~~State~~ CEQA Guidelines and the County of San Diego Guidelines for Determining Significance. The thresholds of significance define the type, amount, and/or extent of impact that would be considered a significant adverse change in the environment. For some environmental topics, such as air quality and noise, the thresholds are quantitative, while those for other topics, such as visual quality, they are qualitative. The thresholds of significance are intended to assist the reader in understanding how an impact is determined to be significant.

Project Impacts and Mitigation

The analysis of environmental impacts considers both the construction and operation of the project. As required by Section 15126.2(a) of the ~~State~~ CEQA Guidelines, direct, indirect, short-term, long-term, onsite, and/or offsite impacts are addressed, as appropriate, for the environmental issue being analyzed. This Final EIR utilizes the following terms to describe the level of significance of impacts identified during the course of the environmental analysis.

No Impact: This term is used when the project's construction and/or operation would have no adverse effect on a resource.

Less than Significant: This term is used to refer to impacts resulting from implementation of the project that are not likely to exceed the defined thresholds of significance, ~~or~~and potentially significant impacts that are reduced to a level that does not exceed the defined thresholds of significance after implementation of mitigation measures. In the latter case, the determination may also be stated as "less than significant with mitigation incorporated."

Significant: This term is often used to refer to impacts resulting from implementation of the project that exceed the defined thresholds of significance and can be applied before identification of any mitigation measures. A "significant effect" is defined by Section 15382 of the ~~State~~ CEQA Guidelines as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment [but] may be considered in determining whether the physical change is significant." For impacts that exceed a threshold of significance, mitigation measures that ~~would~~ avoid or reduce the potential impact are identified, which may cause the impact to be reclassified as less than significant~~,~~ if it is sufficiently reduced, or the impact may remain significant, in which case it is referred to as a significant and unavoidable impact (or unavoidable significant impact).

Significant and Unavoidable: This term is used to refer to significant impacts resulting from implementation of the project that cannot be eliminated or reduced to below standards of significance through implementation of feasible mitigation measures.

Mitigation Measures. Section 15126.4 of the ~~State~~ CEQA Guidelines requires an EIR to "describe feasible measures which could minimize significant adverse impacts." Mitigation includes avoiding an impact altogether, minimizing impacts, rectifying impacts, reducing or eliminating impacts over time, or compensating for impacts by replacing or providing substitute resources. ~~The State~~Section 15364 of the CEQA Guidelines ~~define feasibility~~defines feasible as "capable of being accomplished in a successful manner within a reasonable period of time taking into account economic, legal, social, technological, or other considerations." This subsection lists the mitigation measures that could reduce the severity of impacts identified in the *Project Impact Analysis* subsection. Mitigation measures are the specific environmental requirements for construction or operation of the project that will be included in the Mitigation Monitoring and Reporting Program ~~(MMRP)~~ and adopted as conditions of approval of the project.