C. ENVIRONMENTAL IMPACT ANALYSIS

This section of the EIR examines and describes the potential environmental impacts associated with the construction and operation of the proposed Bolsa Chica Water Line and Wastewater Service project. The environmental impact analysis has been divided into subsections addressing individual environmental topics. Each of the subsections is divided into two major parts: (1) "Environmental Baseline and Regulatory Setting," which describes existing conditions in the project area and briefly describes relevant policies and regulations; and (2) "Environmental Impacts and Mitigation Measures," which describes the potential impacts of the project and proposes mitigation measures to reduce or avoid significant adverse impacts. The environmental analyses for the individual topics addressed in this EIR are presented in the following subsections:

- C.1 Air Quality
- C.2 Noise
- C.3 Traffic and Circulation
- C.4 Environmental Contamination
- C.5 Geology and Soils
- C.6 Hydrology and Water Quality
- C.7 Cultural Resources
- C.8 Biological Resources
- C.9 Land Use and Recreation
- C.10 Public Services and Utilities

The "Environmental Baseline and Regulatory Setting" sections for each environmental topic describe existing conditions in the project area that may be subject to change as a result of the implementation of the Proposed Project. Also presented are brief descriptions of various existing public policies, regulations, programs, and standards relevant to the environmental topic. Often, these existing policies and regulations serve to reduce or avoid potential environmental impacts.

The "Environmental Impacts and Mitigation Measures" sections for each environmental topic describe the anticipated environmental impacts that could result from the construction and operation of the Proposed Project. The potential environmental impacts are evaluated based on significance criteria presented at the beginning of the impact analysis for each environmental topic. In most cases, the significance criteria serve as a general guide or gauge for assessing impact significance rather than absolute thresholds for defining significance. In determining the significance of impacts, the ability of existing regulations and other public agency requirements to reduce potential impacts is taken into consideration. If an adverse impact if considered potentially significant despite existing regulations and requirements, mitigation measures are proposed to reduce or avoid the impact, where feasible. Mitigation measures are only required for significant adverse impacts.

A significant impact is defined in the California Environmental Quality Act (CEQA) as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project." The *CEQA Guidelines* and various responsible agencies provide guidance for determining

the significance of impacts; however, the determination of impact significance for each project is based on the judgment of the Lead Agency. Similarly, the establishment of any criteria used to evaluate the significance of impacts is the responsibility of the Lead Agency. Criteria used to determine the significance of the Proposed Project's impacts are presented in the sections addressing individual environmental issue areas (Sections C.1 through C.10).

In the environmental impact analysis, impacts are classified as either "less than significant," "significant but mitigable," or "significant and unavoidable." These classifications are based on the significance criteria presented for each environmental topic and take into consideration mitigation measures proposed to reduce the significance of impacts. The following classification system is used to describe the potential effects of the proposed project:

- **Class I: Significant Unavoidable Impact.** Class I impacts are significant adverse effects that cannot be mitigated below a level of significance through the application of feasible mitigation measures. Class I impacts are considered significant and unavoidable.
- **Class II: Significant but Mitigable Impact.** A Class II impact is a significant adverse effect that can be reduced to a less-than-significant level through the implementation of mitigation measures presented in the EIR.
- **Class III: Less-than-Significant Impact.** A Class III impact is a minor change or effect on the environment that does not meet or exceed the criteria established to gauge significance. Less-than-significant impacts do not require mitigation.
- **Class IV: Beneficial Impact.** Class IV impacts represent beneficial effects that would result from project implementation.

The determination of whether or not a potential impact is significant is the key consideration in the environmental impact analysis. It is the intent of CEQA to focus on the significant adverse effects of a project, and it is the potential for a project to result in such impacts that triggers the requirement to prepare an EIR. For impacts that are determined <u>not</u> to be significant, the EIR need only provide sufficient information to indicate why the impacts are not considered significant. For significant impacts, adequate information and analysis must be provided to characterize each impact and provide the public and decision-makers with an understanding of the nature and severity of the impact. The level of detail and analysis needed to adequately characterize significant impacts varies depending on the nature of the impact. Certain types of impacts require quantitative analysis in order to determine impact significance, characterize adverse effects, and formulate appropriate mitigation measures. Other types of impacts require more qualitative analysis with the determination of impact significance based on professional judgment or guidance provided by responsible agencies.

An evaluation of the impacts of project alternatives is presented in Section D. A discussion of cumulative impacts for each environmental topic is provided in Section F.