

CHAPTER 4

Affected Environment and Environmental Consequences

The Affected Environment section for each resource describes existing conditions in the study area and includes background on the resource, definition of the study area, issues of environmental concern, and a characterization of the study area. The Environmental Consequences section provides information on the standards of significance, Western's EPMS, a description of impacts for each alternative and mitigation measures, if appropriate. The chapter concludes with discussion on cumulative impacts, unavoidable/adverse impacts, short-term use versus long-term productivity, irreversible/irretrievable commitment of resources, and growth-inducing impacts.

Issues identified through public involvement, including scoping, are an integral part of the environmental analysis. These scoping issues determine the depth and breadth of environmental analysis required for the Proposed Action and alternatives. Not all resources are treated with the same level of detail in the Draft EIS. Resources susceptible to impacts from the construction or operation of a transmission line are given full evaluation, while resource impacts that do not exist or can be easily avoided by facility location or structure placement are addressed in less detail.

Environmental resource areas for the Draft EIS include:

- Air Quality
- Biological Resources
- Cultural Resources
- Electric and Magnetic Fields
- Environmental Justice
- Floodplains
- Geology
- Health and Safety
- Land Use
- Noise
- Paleontological Resources
- Socioeconomics
- Soils
- Visual Resources
- Water Resources
- Wetlands

The Environmental Consequences section for each resource analyzes and explains the changes that can be expected from implementing the Proposed Action and alternatives,

including the No Action Alternative. This section forms the scientific and analytic basis for the Draft EIS (Chapter 40 of the *Code of Federal Regulations* [40 CFR] Part 1502.14). It consolidates the discussions on those elements described in the Purpose and Need, public participation, and alternative development and comparison sections of the Draft EIS (40 CFR Part 1502.16). SNR uses standard construction practices and has adopted EPMS to minimize impacts to the environment. Table 3-4 is a list of the EPMS appropriate to this EIS. They are an integral part of SNR's construction specifications.

Environmental impacts can be positive (beneficial) or negative (adverse) as a result of the action (direct) or as a secondary result (indirect), and can be permanent, long-lasting (long-term), or temporary (short-term). Impacts can vary in degree or magnitude from no change, or only slightly detectable change, to a total change in the environmental condition or system. This assessment identifies impacts, evaluates the standards of significance, evaluates applicable EPMS, and recommends mitigation measures if EPMS were insufficient.

To determine the levels or magnitude of potential impacts to the environment, standards of significance have been developed for each resource. They include the following guidelines:

- **Resource Sensitivity**—the probable response of a particular resource to project-related activities.
- **Resource Quantity**—the amount of the resource potentially affected. The impacted resources are quantified to determine the significance of the impact.
- **Resource Quality**—the present condition of the potentially affected resource.
- **Duration of Impact**—the period of time over which the resource would be affected, measured as short-term (up to five years or as defined by the resource section) or long-term (life of the project and beyond). The anticipated duration of some impacts define their significance.

Each alternative has been divided into segments and MPs. Various combinations of segments define the Proposed Action and alternatives, while MPs, and occasionally structure numbers, serve to locate precise points within the segments. See Figures 3-1 through 3-8 for segment locations and MP information.