

Introduction

PURPOSE AND CONTENT

Chapter 3 describes the physical, biological, social, and economic resources of the environment that may be affected by the alternatives presented in Chapter 2, as well as the effects that the alternatives may have on those resources. Affected environment and environmental effects have been combined into one chapter to give the reader a more concise and connected depiction of what the resources are and what may happen to them under the different alternatives. The environmental effects analysis forms the scientific and analytic basis for the comparison of alternatives that appears at the end of Chapter 2.

CHAPTER ORGANIZATION

The remainder of Chapter 3 is organized by resource, focusing on those resources that are related to major issues described in Chapter 1. Each resource section is organized and presented in the format described below. The first three elements of this format define the affected environment, and the last three elements define the environmental consequences.

Affected Environment

Issues and Indicators – This section is divided into three parts for each issue: (1) a brief issue statement, (2) a background section that describes the origin and various aspects of the issue in detail, and (3) the indicators used to measure effects from the alternatives on the issue.

Scope of the Analysis – Briefly describes the geographic area or areas affected for the resource-related issues. Areas may differ for direct, indirect, and cumulative effects. Affected areas may also vary in size depending on the resource, issue, or anticipated activities. This section also describes the time frame over which effects were assessed.

Current Conditions – Describes the current conditions of the resources related to the issues and indicators. This section may also include history, development, past disturbances, natural events, and interactions that have helped shape the current conditions.

Environmental Consequences

Effects Common to All Alternatives – Describes the general type of effects that may occur to the resource from implementation of the alternatives, including any mitigating effects from Resource Protection Methods.

Direct and Indirect Effects – Analyzes the amount and intensity of direct and indirect effects by alternative on the resource-related issues and indicators. Direct effects are caused by an action and occur at the same time and place as that action. Indirect effects are caused by an

action but occur later in time or farther removed in distance. This section also looks at the relationship of temporary (0-3 years), short-term (3-10 years), and long-term (>10 years) effects.

Cumulative Effects – Analyzes the cumulative effects to the resource that may result from the incremental impacts of the alternatives when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes the other actions.

ANALYSIS CALCULATIONS

In the modeling and analysis included throughout Chapter 3, the numbers for Management Prescriptions, road miles, acres of timber harvest, etc. are all best estimates based on the latest available information. The modeling and analysis conducted for this EIS are intended and designed to indicate relative differences between the alternatives, rather than to predict absolute amounts of activities, outputs, or effects.

MANAGEMENT PRESCRIPTION BASED ANALYSIS

The Forest Plan and the EIS alternatives do not authorize implementation of management activities described in the effects analyses. The Forest Plan sets the stage for what future management actions are needed to achieve desired outcomes (desired conditions, goals, and objectives), and it provides the sideboards (standards and guidelines) under which future activities will operate in order to manage risks to biophysical resources and the social and economic environments.

To actually implement site-specific projects, project-level planning, environmental analysis, and decisions must occur. For instance, the Forest Plan may contain direction to close or obliterate roads in order to benefit biophysical resources and to increase management efficiency, but a site-specific analysis and decision must be made for each proposal that involves any specific road closures or obliteration. This process is referred to as “staged decision-making” because a second stage of decisions are necessary to carry out projects as site-specific needs, priorities, locations, conditions, and public concerns become evident.

Each EIS alternative provides a different mix of management prescriptions (MPs). The mix of MPs provides an indication of the management goals (i.e., desired outcomes) that subsequent site-specific projects would strive to meet or move toward. Thus, the mix of MPs allocated under each alternative is often used in the EIS effects analyses as a means to differentiate between and compare alternatives. The MP-based effects analyses compare potential effects from various management activities that could occur under various combinations of MPs represented by the alternatives. These effects are modeled based on assumptions about the type, amount, and intensity of management activities that would be allowed or emphasized under each MP. As stated above, the modeled effects in the EIS are designed to show relative differences in alternatives—not to accurately predict the amount or location of management activities that would occur during the planning period should that alternative be selected for implementation.