

Chapter II Alternatives, Including the Proposed Action

A. Introduction

An alternative is a unique set of goals, objectives, and activity schedules centered around a theme that guides the management of Forest resources from the current condition to a desired future state. Alternatives display different ways of managing the lands and resources of the Forest. As a result, each alternative would generate a different mix of resource outputs, land uses, and environmental effects, thereby responding to the issues in different ways.

The primary goal in formulating alternatives is to "provide an adequate basis for identifying the alternative that comes nearest to maximizing net public benefits while responding effectively to the public issues" (36 CFR 219.12(f)).

Net public benefits are the overall long-term value to the nation of all outputs and positive effects (benefits) less all associated inputs and negative effects (costs) whether they can be quantitatively valued or not.

Net public benefits includes both priced and nonpriced benefits. Priced benefits are those which are sold or could be sold in a market place. These include outputs such as timber, forage, and recreation opportunities. Nonpriced benefits are those for which there is no reasonable market evidence for estimating a dollar value for them. These include outputs such as Threatened and Endangered Species.

Priced benefits are further divided into market and nonmarket outputs. Market outputs are routinely traded in an established market or return dollars to the United States Treasury. These outputs include timber, livestock grazing, commercial harvest of anadromous fish, and developed recreation opportunities.

Nonmarket outputs are generally not sold in an established market and do not return dollars to the United States Treasury. However, these outputs *could* be sold in a market, and can be assigned a dollar value representing what a user would be willing to pay. These outputs include hunting, fishing, and other dispersed recreation opportunities.

A major component of net public benefits is present net value, which is defined as the difference between the discounted value (benefits) of all outputs to which monetary values or established market prices are assigned and the total discounted costs associated with an alternative.

In order to identify the alternative that comes nearest to maximizing net public benefits while responding effectively to the public issues, a broad range of alternatives was developed to explore a variety of ways to respond to the issues, concerns, and opportunities.

Some alternatives would manage the Forest to maximize the production of priced outputs such as timber and forage, while other alternatives would emphasize nonpriced outputs such as Threatened and Endangered Species and scenic quality. One alternative (the No Action Alternative) reflects current management direction. From this broad range of alternatives, the Regional Forester had a basis for identifying the alternative (the Preferred Alternative) which comes nearest to maximizing net public benefits.

The alternatives presented in this Final Environmental Impact Statement contain management direction for the plan period (10-15 years). Management activities, outputs, and environmental effects for several decades beyond the plan period are also discussed. The purpose of these discussions is twofold: (1) To present a long-term analysis, for decision

makers and the public, of the management necessary for each alternative to achieve and maintain a high level of regular periodic outputs of various resources, without impairment to land productivity (16 USC 531), and (2) to provide estimates of the level of long-term outputs for each alternative for program development for the Forest and Rangeland Renewable Resources Planning Act. For the analysis of alternatives for a Resource Planning Act program to link with actual conditions and local issues at the Forest level, a complete estimate of outputs, costs, and effects for five decades is necessary

The projection of effects and attributes of the alternatives beyond the 10 to 15 year plan period, although required by law, does not legally bind the Forest to action beyond the plan period. The Forest Plan will ordinarily be revised every 10 years and must be revised at least every 15 years.

1. Summary of Changes from Draft to Final Environmental Impact Statement

As a result of responding to comments received from the public and interested organizations following the release of the Draft Environmental Impact Statement, the following listing is a summary of changes made to the alternatives for this Final Environmental Impact Statement. These changes are the result of a concerted Forest effort to respond to comments related to alternative development that were received during the Draft Environmental Impact Statement review process.

Major changes to the analysis process have resulted in several new developments. In addition to restructuring the FORest PLANning (FORPLAN) model, several key analytical methods have been updated or changed. A Habitat Effectiveness Index (HEI) model has been used to estimate elk habitat and potential elk population differences between alternatives. This HEI model is based on cover quality, spacing, forage quantity and quality and open road density. As the previous model relied on cover to forage ratios to estimate elk habitat, this has resulted in substantial changes to previous alternative rankings. More information on the details of the analysis approach is included in Appendix B of this FEIS.

Changes to the FORPLAN model structure have resulted in a planning model that includes geographic specificity for seven major watersheds and cover outputs tied to timber stand manipulation. Anadromous and non-anadromous fishery watershed identification is now possible with this expanded model.

Through a review of the analysis process, updating the modeling techniques, and response to public comments, one new alternative (Alternative I - Preferred) has been developed and is included in alternative evaluations for this EIS. In addition, five alternatives have been deleted from this EIS due to lack of interest from public commentators or similarities with other alternative designs (see Alternatives Considered but Eliminated from Detailed Study in this chapter).

Additionally, recalculations of Wildlife-and-Fish-User-Days (WFUDs), fuel treatments, old-growth stands, and energy and mineral production potential have been made for all alternatives.

All alternatives are updated for currency with analytical techniques and data, and thus are comparable. The reader may note that outputs appear slightly different than previously reported (Draft EIS). Differences due to improvements in data and model formulations are reflective of the best information available.

For all alternatives, the baseline 10-year period for economic indicators has been updated to 1980-1989. This period is used to display timber volume sell and harvest levels, value and cost information related to Forest budgets, and potential changes in jobs by alternative. This updates economic indicators to include very recently experienced levels. Also, new economic values and costs have been included which change the present net value (PNV) for all alternatives.

Utilizing the new FORPLAN model structure, several analytical tasks were performed and compared to previous model results for similarities and differences. In particular, a review of manageable understory stands was updated to 1989, where the impacts of insect and disease agents on the health and vigor of Forest stands were reassessed. This analysis has indicated that stands on the Malheur National Forest are somewhat less manageable than previously reported (Draft Environmental Impact Statement, 1987). For greater detail see Appendix B, Description of the Analysis Process.

Discussions of the issues, concerns, and opportunities have been updated to include additional issues identified during the public comment period (Final Environmental Impact Statement, Chapter I, section K). Specifically, a discussion of the road management issue has been added. Also, additional indicators of response for timber management have been included.

2. Overview of this Chapter

There are two main parts to this chapter. First, Section B describes the process used to develop and analyze the alternatives. It includes a summary of the supply and demand situation for goods, services, and outputs of the Forest, the range of possibilities or "decision space" in which alternatives could be developed, and descriptions of the alternatives developed. This analysis process is described in more detail in Appendix B, Description of the Analysis Process.

Second, Section C describes the results of analyzing the alternatives. The alternatives are compared to each other in a variety of ways. This comparison shows how they respond to issues, land uses emphasized, and economic costs and public benefits resulting from each alternative. These comparisons are primarily in tabular format with some narrative. The comparisons of the alternatives are summarized based on the information in the tables and narratives of this chapter as well as the environmental effects described in Chapter IV, Environmental Consequences. The purpose of these comparisons is to provide a basis for selection of an alternative to implement as the Forest Plan. The adopted plan will provide management direction for the Malheur National Forest.

