INTRODUCTION

Chapter 2 describes the management alternatives considered for Forest Plan revision. This chapter also summarizes and compares the effects of those alternatives on the major issues presented in Chapter 1. Chapter 2 is divided into the following sections:

- **Development of the Reasonable Range of Alternatives** – discusses how the alternatives were developed, and what constitutes a reasonable range of alternatives considered.
- **Alternatives Considered but Eliminated from Detailed Study** – briefly describes alternatives that were considered but not studied in detail for a variety of reasons.
- **Alternatives Considered in Detail** – describes the alternatives that the Revision Team analyzed in depth.
- **Comparison of Alternatives** – summarizes and compares the environmental effects of the alternatives.
- **The Preferred Alternative Identified in the DEIS** – identifies the preferred alternative in the DEIS and describes options for choosing a selected alternative for implementation.

Maps for each Forest showing the alternatives considered in detail are included in the map packet accompanying this document. Each map shows all six alternatives and the Management Prescription Category locations for those alternatives.

DEVELOPMENT OF THE REASONABLE RANGE OF ALTERNATIVES

As described in Chapter 1, public comments received in response to the Notice of Intent resulted in significant issues to the Proposed Action (Alternative 2). Those issues identified in Chapter 1 as important to the development of other alternatives were used to generate a preliminary set of alternatives. These preliminary alternatives were then broken into "Alternatives Considered but Eliminated from Detailed Study" and "Alternatives Considered in Detail"; both set of alternatives are included in the reasonable range of alternatives considered for plan revisions.

All reasonable alternatives to the Proposed Action must meet two conditions:

1) **Fulfill the Purpose and Need for Change.** A reasonable alternative is one that meets the purpose and need for change for revision of these Forest Plans. The Proposed Action is one way to meet the purpose and need; however, based on how one interprets what is necessary to respond to a need for change, other strategies may also meet that need. For example, some respondents felt the best way to address wildfire risk was to allow for more active management to reduce uncharacteristic fuels. Others felt the best approach was to not suppress fires and let "nature" run its course, thus reducing fuels naturally.

2) **Address the Significant Issues.** The range of alternatives must also address the significant issues identified in Chapter 1 as important to alternative development. These are "alternatives to the Proposed Action" based on the underlying dispute or unresolved conflict ("issue") with the Proposed Action identified from comments on the NOI, scoping letters, and DEIS. Alternatives are designed to resolve, or attempt to resolve, one or more of these issues.

Only those alternatives that met the purpose and need for change, and addressed one or more of the significant issues were considered for detailed study. However, not all possible alternatives that met these criteria were carried into detailed study, as the list of options would have been prohibitively large for detailed study. Instead, the Responsible Official identified those alternatives that both met the criteria and created a reasonable range of outputs, direction, costs, management requirements, and effects from which to consider implementation options.

The alternatives considered but eliminated from detailed study are discussed below, followed by those alternatives considered for detailed study.

ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY

Federal agencies are required by the NEPA to rigorously explore and objectively evaluate a reasonable range of alternatives and to briefly discuss the reasons for eliminating any alternatives that were not developed in detail (40 CFR 1502.14).

Below the "preliminary alternatives" considered but eliminated from detailed study are described, including a brief discussion of the reason(s) for elimination from detailed study. Alternatives eliminated from detailed study have been broken into three groups below:

1) Alternatives proposed initially that were refined to better reflect alternative emphasis
2) Alternatives that did not meet purpose and need for change and/or did not address a significant issue identified in Chapter 1 in a way that would drive alternative development
3) Alternatives that were already represented within the range of alternatives considered in detail and therefore were not necessary to carry into detailed study.

Group 1: Alternatives Initially Proposed That Were Refined To Better Reflect Alternative Emphasis

The Original Proposed Action

The original Proposed Action was the alternative that served as the basis for public comment during scoping in the spring of 1998. This alternative was developed by the Forest Service based on experience gained from implementing the initial plans, which included evaluation of

monitoring results. Public comments from scoping and internal review demonstrated a need to refine the Proposed Action to provide for consistent application of management prescriptions across the three National Forests. The primary changes needed in the original Proposed Action are described below.

- Some Management Prescription Category (MPC) 5.1 assignments were changed on the west side of the Payette National Forest to 5.2, to be consistent with the theme of the alternative.

- Some MPC 6.2 assignments on the southern portion of the Sawtooth National Forest were changed to 6.1, to be consistent with the theme of the alternative.

- MPC 7.0, Intermingled Public and Private Lands, was removed. This direction is better addressed at the management area level.

- MPC 3.0 was divided into two prescriptions. This was necessary to resolve what many felt were mutually exclusive objectives of protection and restoration of aquatic, terrestrial, and Hydrologic Resources. The two new prescriptions developed were 3.1 (Passive Restoration and Maintenance of Aquatic, Terrestrial, and Hydrologic Resources and 3.2 (Active Restoration and Maintenance of Aquatic, Terrestrial, and Hydrologic Resources). The new prescriptions 3.1 and 3.2 were applied to the Proposed Action, and to other alternatives considered in detail, where appropriate.

These changes were consistent with the original theme of the Proposed Action shared with the public during scoping and led to a more understandable and implementable alternative.

No Action, Without Direction from Biological Opinions (Alternative 1A)

The original No Action Alternative shared with the public during scoping in the spring of 1998 represented a crosswalk of current Forest Plan direction as amended by Pacfish and Infish. This alternative did not make any adjustments in management direction from the current Forest Plans to account for changes resulting from Biological Opinions for species (chinook, sockeye salmon, steelhead trout, and bull trout) listed as Threatened or Endangered under the Endangered Species Act (ESA).

Following public scoping, the Revision Team and Forest Supervisors re-evaluated the No Action Alternative. In August 1999, the Regional Forester agreed with the Forest Supervisor's recommendation to modify this alternative to include adjustments from the Biological Opinions for the affected management areas. Management prescription assignments were reassigned in some areas to lessen the potential impacts from management actions. The primary reason for this adjustment was that the Biological Opinions established minimum protection standards under the Endangered Species Act, and these standards were designed to guide implementation of the original Forest Plans. To consider a No Action Alternative that is outside of the scope of the Biological Opinions would result in an alternative that is not implementable.

Alternative 6, Refinement In Size Of Unroaded Areas

Preliminary design of Alternative 6 prior to release of the DEIS considered varying minimum acreage size limits for "unroaded" areas, from 1 to 500 acres. Similar to Inventoried Roadless Areas assigned to MPC 4.1a, unroaded areas assigned to MPC 4.1b included management direction eliminating or restricting certain activities, including:

- No new road construction within Inventoried Roadless Areas and unroaded areas on all National Forest System lands;
- No scheduled timber harvest within Inventoried Roadless Areas and unroaded areas on National Forest System lands;
- Elimination of activities that do not contribute to maintaining or enhancing ecological values of unroaded areas.

Unlike Inventoried Roadless Areas (IRAs; areas generally greater than 5000 acres) where both ecological and social values drove direction development, unroaded area size criteria was primarily based on what was needed to address aquatic habitat values. Other social and ecological values were important in these unroaded areas; however, information was lacking to help define a size criterion.

In the 1998 Biological Opinions for Bull Trout and Salmon/Steelhead, land management agencies were required to develop an assessment of road construction and management, including the identification of unroaded and low road density areas and their value to these listed fish species. In 1998 a Road Density Analysis Task (RDAT) Team was created to complete this assessment. This team assessed 3 classes of low density road areas:

1) Congressionally designated wilderness.
2) Rare II and Wilderness Study areas (e.g., IRAs) generally greater than 5000 acres.
3) Other undesignated Low Road Density Areas 1000 acres to 5000 acres.

Thus, the minimum acreage for unroaded areas was increased to 1,000 acres and greater, in blocks at least 0.5 mile in width, in Alternative 6 to more closely align with the size of analysis areas considered by the RDAT team.

The Road Density Analysis Task Team issued its Final Report on January 30, 2002

Group 2: Alternatives That Did Not Meet Purpose and Need For Change and/or Did Not Address A Significant Issue Identified In Chapter 1 In a Way That Would Drive Alternative Development

No New Roads, No Timber Harvest

Some respondents to the NOI proposed that an alternative be considered that included direction for no new road construction and no timber harvest. Alternatives studied in detailed look at varying degrees of eliminating or substantially restricting new road construction and scheduled timber harvest (i.e., harvest from suitable timber lands) compared to the Proposed Action. However, an alternative was not carried into detailed study that completely eliminated new road construction and timber harvest from all National Forest System lands in the Ecogroup area.

Appropriate use of timber harvest and new road construction is needed in order to address a number of Need for Change topics (e.g., Topic 1: Biological Diversity and moving vegetative conditions toward desired conditions; Topic 2: Fire Management and reduction of fuels in wildland-urban interface), and to meet Forest Service multiple-use mandates to provide products and services. In addition, elimination of new road construction and timber harvest was not needed to meet other needs for change (e.g., Topic 6: Riparian and Aquatic resources and recovery of listed fish species). Thus, this alternative was eliminated from detailed study.

No Management Prescription Categories

During public scoping and review of the DEIS, concerns about the use of MPCs were raised, and requests were made to eliminate them. The concern expressed as to why they should be eliminated was that by mapping MPCs, the mandate of multiple use would be violated and opportunities for conflict resolution among competing uses would be reduced. However, this is not the case. As stated in Chapter 3 of the each Forest Plan:

> *"Management prescriptions are defined as, 'Management practices and intensity selected and scheduled for application on a specific area to attain multiple use and other goals and objectives' (36 CFR 219.3). MPCs are broad categories of management prescriptions that indicate the general management emphasis prescribed for a given area. They are based on Forest Service definitions developed at the national level, and represent management emphasis themes, ranging from Wilderness (1.0) to Concentrated Development (8.0). The national MPCs have been customized during Forest Plan revision to better fit the needs and issues of the Forest.*
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> *MPCs were assigned by subwatershed where possible. Although they are intended to show general management emphasis within a subwatershed, they do not necessarily define emphasis for every single acre within that subwatershed. As with most rule sets, there are exceptions within MPCs. For example, some administrative areas—such as Wilderness, Wild and Scenic River corridors, Research Natural Areas, and National Recreation Areas—cut across subwatershed boundaries, and these areas are managed according to the laws or*

policies governing their establishment. Also, there are many distinctive areas that may have different management requirements than the overall MPC emphasis/direction for the subwatershed. Examples include administrative and recreation sites, designated communications sites or utility corridors, mining sites, plantations, Riparian Conservation Areas, and cultural or historic sites.

MPC management emphasis is further defined by Forest-wide and Management Area direction. For instance, almost all MPCs could feature vegetation management to some degree. The type and intensity of vegetation management that may occur in a given MPC area is reflected in its common set of standards and guidelines (described below by MPC), and may be further refined within an individual area to reflect that unique Management Area needs or concerns."

Elimination of MPCs is not needed to address Need for Change topics or issues identified in Chapter 1 that drove alternative development. Therefore, this alternative was considered but eliminated from detailed study.

Travel Management

There were a large number of comments and suggestions related to Travel Management, including comments that the Revision effort should include revising the Forests' Travel Management Plans. However, travel management and allocation of travel "use" zones is not addressed through this forest plan revision process. Travel management and Forest travel maps will be revised in a separate, more localized, planning process.

The Responsible Official elected not to fully address travel management in this revision process due to the broad array of localized issues with travel management that occurs at scales below a Forest Planning unit. Attempting to address specific travel management issues at the scale of this revision effort would not allow for the localized modifications needed to effectively meet resource, social, and economic issues. However, the Responsible Official did believe that a consistent broad-scale framework for conducting localized travel management planning should be developed in forest plan revision.

Forest Plan direction for travel management necessary to address Need for Change topics (e.g., Topic 3: Habitat Fragmentation and Disruption) was developed to provide a framework to address broader-scale issues requiring consistency across the planning unit, State, or Regional scales for different types of allocations (MPCs). However, this framework is common to all action alternatives considered in detailed study (i.e., Forest-wide management direction), including the Proposed Action. This common broad-scale framework in all action alternatives was carried into detailed study and provided what was needed at this scale of analysis to address related needs for change, as well as significant issues. Therefore, alternative localized travel management strategies were not incorporated into revision alternatives considered for detailed study.

Recommend All Inventoried Roadless Areas for Wilderness

Some people that commented on the Proposed Action and alternatives presented in the DEIS stated that the Forest Service should develop an alternative that would maximize protection of roadless areas through federal designation of wilderness.

Alternatives carried into detailed study provide a wide variety of protection to IRA values. MPCs 1.2 (recommended wilderness), 4.1a, 4.1b, and 4.1c all provide protection of IRA undeveloped and/or unroaded character. The Responsible Official did not identify a need to assign all IRAs to MPC 1.2 in order to address needs for change or issues identified in Chapter 1 of the FEIS that drove alternative development. In fact, some needs for change could not be addressed if all IRAs were assigned to a MPC 1.2 (e.g., Riparian and Aquatic restoration). In addition, assigning all IRA acres to a recommended wilderness prescription would not meet the multiple-use mandate of the Forest Service to provide for a sustainable variety of products and services. Therefore, this alternative was considered but dropped from detailed study.

Allow Timber Harvest Within All Inventoried Roadless Areas

Some people commented that timber harvest should be allowed within inventoried roadless areas to address forest health concerns and to provide for higher levels of commodity production. With the exception of Alternatives 4 and 6, all alternatives provided for some level of timber harvest within IRAs. Alternative 5 allows for harvest within most IRAs.

The Responsible Official did not identify a need to assign all IRAs acres to MPCs within the suitable timber base and/or allow timber harvest on all IRA acres in order to address needs for change or issues identified in Chapter 1 of the FEIS that drove alternative development. In fact, some needs for change could not be addressed if timber harvest were allowed on all IRAs acres (e.g., Topic 8: Management of Emphasis areas such as IRAs). In addition, allowing harvest on all IRA acres would not meet the multiple-use mandates of the Forest Service to provide for a variety of products and services, including those associated with undisturbed IRA values. Therefore, this alternative was considered but dropped from detailed study.

No Livestock Grazing or Reduced Livestock Grazing

Adjusting use (i.e., AUMs) authorized under the term grazing permit system is outside the scope of decisions made through Forest Plan revision and therefore is not needed, or appropriate, to address needs for change. Rangeland capability and suitability determinations are re-evaluated in a Forest Plan scale analysis. Rangeland capability is an assessment of the broad-scale physical attributes or characteristics of the landscape that determine whether it is conducive to livestock grazing. Capable rangelands remain the same for all alternatives and establish a foundation for forest plan alternative development and evaluation.

Suitability determinations were made for each alternative. These determinations represent decisions by the Responsible Official on how to address specific resource, social, or economic needs for change, and direction to accomplish this varies by alternative. Suitability is established either to provide prescriptive management direction for future project-level analysis and

subsequent site-specific NEPA decisions, or as a decision to not graze specific designated areas requiring resource protection. Both situations occur in the Forest Plan alternatives. Suitable rangeland acres vary in some alternatives in the FEIS and generally reflect those decisions to not graze specific designated areas (e.g., close areas for aquatic resource protection, reduce disease transmission between domestic sheep and bighorn sheep, or reduce recreation conflicts).

However, the re-evaluation of rangeland capability and suitability during Forest Plan revision only affects where and, to a certain degree, how livestock may be grazed under a specific alternative (i.e., on suited rangelands). **It does not make a decision on, or change, livestock grazing use or capacity levels** under current term grazing permits. Grazing capacities are determined at the allotment level (Rangeland Resources Technical Report #2). The Forest Plans define the desired outcomes and prescriptive measures (i.e., standards and guidelines under each resource section related to grazing) that are then used during the more site-specific AMP analysis process. During the AMP process, alternative grazing practices are considered that are needed to meet the desired outcomes and prescriptive measures found in the Forest Plans, which may or may not result in a reduction in AUMs or Head Months. Each AMP process will tailor a suite of grazing practices for each allotment, as needed, to meet desired outcomes and prescriptive direction found in the revised Forest Plans.

Therefore, an alternative to eliminate or reduce livestock permitted numbers was eliminated from detailed study.

Maximize Recreation

Some revision participants requested that a "recreation emphasis alternative" be included. The alternatives provide for a range of recreation opportunities where recreation uses can be accommodated, given the limitations presented by land and resource capabilities.

Management emphasis and priority are reflected in a number of ways in the revised Forest Plans. From a large-scale perspective, MPCs 4.1a, 4.1b, 4.1c, 4.2, and 4.3 assignments reflect recreation emphasis and priority. From this standpoint, Alternative 6 carries a substantial recreation emphasis in that an estimated 55 percent of Ecogroup Forest lands are assigned to recreation prescriptions. However, we believe that the bulk of recreation use occurs, and will continue to occur, within concentrated corridors in locations proximal to population centers, and in association with significant recreation attractions such as the Sawtooth mountain range, popular lakes, and developed ski areas, rather than across the larger watersheds and subwatersheds at which level management prescriptions were assigned. Localized recreation priorities for these concentrated use areas are also reflected in specific management area direction found in a number of management areas across the Ecogroup Forests.

Total levels of recreation use are not expected to vary substantially by alternative, regardless of the emphasis, as use levels are more a function of population levels and demographics rather than management alternatives or number of available facilities. Recreation uses can occur under all MPCs and the Forest Plans include specific management objectives at both the Forest-wide and Management Area levels for improving and/or increasing recreation opportunities.

Recreation managers have observed that demand for developed camping and picnic sites in popular recreation areas and travel corridors is currently at or above capacity during peak summer weekends and summer holidays. At the same time, other facilities are much less than full during the same periods or prior to Memorial Day and after Labor Day. We recognize that development of new recreation facilities may be warranted in the future, however the Forests currently lack the resources to adequately maintain many of the existing facilities. Although a stated agency priority, the recreation program must compete for funding with other national priorities such as ecological restoration and watershed needs. It is unlikely that the Ecogroup Forests would see the level of increased funding that would be needed to address maintenance backlogs at existing sites, as well as to greatly expand developed recreation facilities. Exacerbating the current situation of inadequately maintained facilities is not desired.

GROUP 3: Alternatives that were already represented within the range of alternatives considered in detail and, therefore, were not necessary to carry into detailed study.

During the comment period for the DEIS, many people submitted comments suggesting that the Responsible Official combine parts of the 6 alternatives to better address issues. These suggestions were reviewed by the interdisciplinary revision team and the Responsible Official in light of the purpose and needs for change, issues identified through public scoping on the Proposed Action, and the themes of alternatives already presented in the DEIS. To the extent the suggestions helped meet the purpose and needs for change and address identified issues at the forest planning scale of this revision effort, they were used in development of the new alternative generated between DEIS and FEIS (refer to the description of Alternative 7 in this chapter).

Some comments simply requested a mixing and matching of components of existing alternatives that would still fall within the range of conditions represented in the current set of alternatives studied in detail. For example:

> The Forest Service should create a new alternative comprised of Alternative 1B for rangeland management, Alternative 5 for sustained yield and perpetuation of range-linked jobs, and Alternative 3 for use of prescribed fire for habitat treatment.

The Responsible Official has the option to mix and match components of different alternatives or remove specific elements, in the alternative selected for implementation. It is not necessary to develop additional alternatives to address all of these interests when the interests are represented within the current range of alternatives considered. Where the Responsible Official determined a new alternative was needed in order to address purpose and needs for change, or issues, or provide for a reasonable range of alternatives, such as with the development of Alternative 7, additional alternatives were developed.

ALTERNATIVES CONSIDERED IN DETAIL

The Revision Team developed and analyzed in detail seven management alternatives for Forest Plan revision. In the descriptions of these alternatives that follow, numbers for Management Prescription Categories, road miles, acres of timber harvest, etc. are all best estimates based on the latest available information. The modeling and analyses conducted for this EIS were designed to indicate relative differences between the alternatives rather than predict absolute amounts of activities, outputs, or effects.

Alternatives are described in terms of their dominant themes, and their descriptions identify the issue(s) considered in alternative development and the approach taken by the alternative to address those issues. It is important to remember that not all alternatives address all issues or resolve all issues, but all action alternatives address the Need for Change topics to various degrees. Alternatives are also described by their mix of management emphasis and prescriptions, particularly as they relate to:

- Long-term Aquatic Conservation Strategy
- Suitable timberlands
- Vegetation restoration
- Undeveloped recreation
- Recommended wilderness
- Eligible Wild and Scenic Rivers

The management prescriptions (MPCs) are described below under Elements Common to All Alternatives. Each alternative has a table showing acres and percents of specific MPC allocations for that alternative.

Elements Common to All Alternatives

The alternatives considered in detail all have elements in common. For instance, they meet the Purpose and Need of this action, and they address the major issues to various degrees. They share the same affected areas within and surrounding the Ecogroup Forest boundaries, and comply with federal and state laws and regulations. In addition, these alternatives are comprised of various combinations of the Management Prescription Categories described below.

Management Prescription Categories

Management Prescription Categories (MPCs) were assigned to National Forest System lands based on category descriptions that the Forest Service developed at the national level. The MPCs represent management emphasis themes, ranging in ascending order from Designated Wilderness (1.1) to Concentrated Development (8.0). Different combinations of MPCs were assigned to alternatives to reflect the overall management themes and relative differences in the management emphasis of those alternatives.

Where possible, the MPCs have been assigned at the subwatershed, or sixth-field hydrologic unit scale. The rationale behind using subwatersheds is described below:

- Subwatersheds can be easily located on a map and on the ground.

- Subwatersheds are small enough to be good ecological indicators; what happens to biophysical resources (water, soil, vegetation, habitat) in one portion of the subwatershed often affects those resources throughout the subwatershed.

- Effects can be aggregated across subwatersheds to show cumulative impacts at the watershed or management area scale. Management areas for revision were largely based on combinations of watersheds, or fifth-field hydrologic units.

- Subwatersheds are effective units for both effects analysis and management considerations.

To summarize, subwatersheds are used to show management emphasis by alternative, through combinations of dominant MPCs, and to provide a solid foundation for effects analysis.

It is important to note, however, that not every acre of every subwatershed may reflect the dominant MPC of that subwatershed. For instance, some subwatershed boundaries are intersected by administrative boundaries that have specific management requirements that may or may not match the overall MPC for that subwatershed. Examples of these administrative areas include designated and recommended wilderness, Wild and Scenic River corridors, Research Natural Areas, National Recreation Areas. In some cases, these areas have been separated out from the subwatershed and/or MPC assignment, and in some cases they have not. But in all cases these areas would be managed according to the laws, regulations, or policies for which they were established. Additionally, Inventoried Roadless Area boundaries have been incorporated into MPC mapping for the FEIS and revised Plans, so that MPCs could be more flexibly and meaningfully assigned by combinations of watershed and roadless area boundaries.

Riparian Conservation Areas (RCAs) or Riparian Habitat Conservation Areas (RHCAs) would receive special management consideration, regardless of the surrounding subwatershed MPC. RCA management direction is described in Chapter III of the revised Forest Plans.

Additionally, there are many smaller administrative units with or without official designation, which may have management requirements that are somewhat different than the overall management emphasis of the MPC for the entire subwatershed. However, these units may still be affected by the MPC for that subwatershed. Examples of these units include developed administrative sites, recreation sites, designated utility corridors or communication sites, plantations, mines, and cultural or historical sites.

For instance, the location or priority of administrative sites could change over time, relative to the management emphasis of the dominant MPC in the area. A campground would be managed as a campground, regardless of the MPC for that subwatershed. However, reconstruction or relocation of sites within that campground could be affected, in terms of timing or intensity, depending on that MPC.

Similarly, a plantation would not necessarily be abandoned because it is suddenly located in a subwatershed with a MPC that discourages timber management. However, the way in which the plantation is managed may change over time as the long-term silvicultural objectives for the area change. For example, the silvicultural objective might change from growth and yield to restoring species composition and size class distribution for a particular vegetation group, or providing habitat for wildlife species of concern.

Mining opportunities are determined to a large extent by the 1872 Mining Act and other legislation. However, the priority and intensity of mine-site or access road reclamation could be influenced by the MPC for the subwatershed where a mine is located.

Special uses are authorized by permit, and thus MPCs may not have much effect on existing uses. However, MPCs could influence whether certain permits in some areas are renewed, or influence the likelihood of allowing certain types of new special uses in those areas.

Most cultural and historic sites are protected, particularly if they are eligible for or listed on the National Register of Historic Places, or if they are identified as traditional use areas for American Indians. MPC assignments would not affect these sites, but they could affect the activities, settings, or access to these sites.

MPCs applied to the alternatives are described below. More detailed descriptions can be found in the Forest Plans, Chapter III, Management Area Description and Direction.

1.1 – Existing Wilderness. This prescription applies to areas designated by Congress as Wilderness. The main management objective is preserving wilderness attributes, including natural appearance, natural integrity, opportunities for solitude, opportunities for primitive recreation, and identified special features. The area is managed to allow natural processes to prevail, with little or no evidence of human development. Current wilderness management plans and approved fire management plans provide specific direction for management activities.

1.2 – Recommended Wilderness. This prescription applies to areas the Forest Service recommends for Wilderness designation. The primary management objective is to maintain wilderness attributes until Congress decides to designate the areas as wilderness or release them to some other form of management. Although these areas do not fall under the authority of the Wilderness Act, they are managed to maintain wilderness attributes where feasible, and to generally allow natural processes to prevail.

2-1 – Wild and Scenic Rivers. This prescription applies to areas that have been Congressionally designated [1] as Wild, Scenic, or Recreational Rivers and their associated land corridors, which extend an average of 0.25 mile from each bank. Wild and Scenic Rivers and their corridors are managed to protect their free-flowing waters, outstandingly remarkable values

[1] Eligible or suitable rivers are provided similar emphasis as designated rivers, but were not assigned to this MPC. Management direction for eligible or suitable rivers, including the MPC guidelines below, is included in the Management Area where the rivers are located, and in Forest-wide direction for Wild and Scenic Rivers.

(ORVs), and their classification status. A "Wild" classification is the most primitive or least developed. These rivers have essentially undeveloped corridors and are generally inaccessible except by trail. "Scenic" river corridors may have some development, and are accessible in places by roads. "Recreational" rivers are readily accessible by roads and often have development within their corridors.

2.2 – Research Natural Areas. This prescription applies to areas that have been administratively established as Research Natural Areas and that provide unique opportunities for research. Existing and proposed Research Natural Areas are managed to protect the unique values for which they were established. Management plans are developed for each area to provide guidance and protection of values.

2.4 – Boise Basin Experimental Forest. The Boise Basin Experimental Forest (8,740 acres) is administered by the USDA Forest Service, Rocky Mountain Research Station, headquartered in Fort Collins, Colorado. This forest was originally established in the 1930s to conduct silvicultural and other related research in the ponderosa pine type. It includes the Bannock Creek Research Natural Area (445 acres), which was set aside to represent mixed conifer vegetation in the management area. The RNA has also been identified as a potential National Natural Landmark. Activities on the Experimental Forest are typically for research purposes. However, other activities may occur if they do not adversely affect past, ongoing, or planned research. The Experimental Forest is withdrawn from mineral entry and closed to livestock grazing. Timberlands within the Experimental Forest are identified as not suited for timber production.

3.1 – Passive Restoration and Maintenance of Aquatic, Terrestrial, and Hydrologic Resources. This prescription is designed to minimize temporary-term risks and avoid short- and long-term risks from management actions to soil/hydrologic conditions and aquatic and terrestrial habitats. The objective of 3.1 is to keep management-related impacts from degrading existing conditions for TEPCS fish, wildlife, and botanical species, or 303(d) impaired water bodies. Low levels of management activities occur, and these activities are expected to have minimal and temporary degrading effects to soils, water quality, riparian areas, and aquatic and terrestrial habitats. Other uses and activities, such as salvage harvest or Wildland Fire Use, may occur and may have some temporary effects, provided they do not retard attainment of short- and long-term objectives for aquatic and terrestrial habitat, or soil/hydrologic resources. Tools associated with this prescription—such as special order restrictions, operating plan adjustments, and prescribed fire—are typically of low intensity and designed to maintain existing conditions, primarily through ecological processes.

3.2 – Active Restoration and Maintenance of Aquatic, Terrestrial and Hydrologic Resources. This prescription is designed to minimize temporary and short-term risks and avoid long-term risks from management actions to soil/hydrologic conditions and aquatic and terrestrial habitats. The objective of this prescription is to actively restore or maintain conditions for TEPCS fish, wildlife, and botanical species, or 303(d) impaired water bodies through a combination of management activities and natural processes. Management activities used to

achieve this objective include watershed restoration, noxious weed treatments, and vegetative treatments that include prescribed fire, wildland fire use, and mechanical. Restoration is focused on those ecosystem components that are functioning at risk, or are outside the range of desired conditions, while maintenance helps to preserve those components that are functioning properly.

4.1a – Undeveloped Recreation: Maintain Inventoried Roadless Areas. This prescription applies to lands where dispersed and undeveloped recreation uses are the primary emphasis. Providing dispersed recreation opportunities in an inventoried roadless area is the primary objective. Both motorized and non-motorized recreation opportunities may be provided. Other resource uses are allowed to the extent that they do not compromise the roadless and undeveloped character of the IRA. The area has a predominantly natural-appearing environment, with slight evidence of the sights and sounds of people. Species habitat and recreational uses are generally compatible, although recreation uses may be adjusted to protect TEPCS species.

4.1b – Undeveloped Recreation: Maintain Undeveloped Character with Allowance for Salvage Harvest. This prescription applies to undeveloped areas where dispersed recreation uses are the primary emphasis. Providing dispersed recreation opportunities in an undeveloped landscape is the predominant objective. Both motorized and non-motorized recreation opportunities may be provided. Salvage harvest is allowed. Other resource uses are allowed to the extent that they do not compromise the undeveloped character of the area. The area has a predominantly natural-appearing environment, with slight evidence of the sights and sounds of people. Species habitat and recreational uses are generally compatible, although recreation uses may be adjusted to protect TEPCS species.

4.1c – Undeveloped Recreation: Maintain Unroaded Character with Allowance for Restoration Activities. This prescription applies to lands where dispersed recreation uses are the primary emphasis. Providing dispersed recreation opportunities in an unroaded landscape is the predominant objective. Both motorized and non-motorized recreation opportunities may be provided. Other resource uses are allowed to the extent that they do not compromise ROS settings. The area has a predominantly natural-appearing environment, with slight evidence of the sights and sounds of people. Species habitat and recreational uses are generally compatible, although recreation uses may be adjusted to protect TEPCS species.

4.2 – Roaded Recreation Emphasis. This prescription applies to lands where dispersed and developed recreation uses are the primary emphasis. A wide range of recreational activities and developments occurs. Facilities are maintained, and both motorized and non-motorized recreation opportunities may be provided. Multiple uses such as timber harvest and grazing are allowed to the extent that they do not compromise recreation resource objectives. Human use and presence are generally obvious. The area has a predominantly natural-appearing environment, with moderate evidence of the sights and sounds of people. Generally, a mix of mechanical and fire activities are used to treat vegetation to achieve desired conditions for recreation settings and developments, and to reduce the risk of uncharacteristic vegetative damage or loss from insects, diseases, and fire.

4.3 – Concentrated Recreation Emphasis. This prescription applies to lands where developed recreation uses are the primary emphasis. These lands are typically characterized by substantial recreation-related infrastructure and capital investment. Facilities are maintained, and both motorized and non-motorized recreation opportunities may be provided. Multiple uses such as timber harvest and grazing are allowed to the extent that they do not compromise recreation resource values. Human use and presence are obvious. The area may have a substantially modified natural environment. Resource modification and utilization practices largely serve specific recreation activities and needs while maintaining vegetation cover and soil productivity. Generally mechanical activities are used to treat vegetation to achieve desired conditions and to reduce the risk of impacts from insects, diseases, and fire on recreation settings and developments.

5.1 – Restoration and Maintenance Emphasis within Forested Landscapes. This prescription applies to lands that are predominantly (greater than 50 percent) forested. Emphasis is on restoring or maintaining vegetation within desired conditions in order to provide a diversity of habitats, reduced risk from disturbance events, and sustainable resources for human use. Commodity production is an outcome of restoring or maintaining the resilience of forested vegetation to disturbance events; achievement of timber growth and yield is not the primary purpose. The full range of treatment activities may be used. Restoration occurs through management activities and ecological processes. Combinations of mechanical and fire treatments are used to restore forested areas while maintaining or improving resources such as soils, water quality, fish and wildlife habitat, and recreation settings. The risk of temporary and short-term degradation to the environment is minimized, but impacts may occur within acceptable limits as resources are managed to achieve long-term goals and objectives.

5.2 – Commodity Production Emphasis within Forested Landscapes. This prescription applies to lands that are predominantly forested. Emphasis is on achieving sustainable resource conditions that support commodity outputs, particularly timber production in forested settings, and forage production in non-forested settings. Management activities are also designed to maintain and restore forest ecosystem health to reduce potential for long-term impacts from uncharacteristic disturbance events. Goods and services are provided within the productive capacity of the land, and may or may not fully meet demand. Mitigation activities are an important element of project design. Forested landscapes range in appearance from near natural to altered where management activities are evident.

6.1 – Restoration and Maintenance Emphasis within Shrubland and Grassland Landscapes. This prescription applies to lands that are predominantly (greater than 50 percent) shrubland and grassland. Emphasis is on restoring and maintaining. vegetation within desired conditions in order to provide a diversity of habitats, reduced risk from disturbance events, and sustainable resources for human use. The full range of treatment activities may be used. Restoration occurs through management activities and ecological processes. Combinations of mechanical and fire treatments are used to restore shrubland and grassland areas while maintaining or improving resources such as soils, water quality, fish and wildlife habitat, and recreation settings. The risks of temporary and short-term degrading effects to the environment are minimized, but impacts may occur within acceptable limits as resources are managed to achieve long-term goals and objectives.

6.2 – Commodity Production Emphasis within Shrubland and Grassland Landscapes. This prescription applies to lands that are predominantly shrubland and grassland. Emphasis is on achieving sustainable resource conditions that support commodity outputs, particularly forage production in non-forested settings, and timber production in forested settings. Management activities are also designed to maintain and restore ecosystem health to reduce potential for long-term impacts from uncharacteristic disturbance events. Suitable grazing lands are managed for forage production and livestock grazing. Goods and services are provided within the productive capacity of the land, and may or may not fully meet demand. Mitigation activities are an important element of project analysis and design. Landscapes range in appearance from near natural to altered where management activities are evident.

8.0 – Concentrated Development. This prescription applies to lands managed for concentrated development and use. Lands within MPC 8.0 are identified as not suited for timber production. Uses and facility development dominate the landscape and often require extensive site alterations. Emphasis is on a high level of commodity production, mitigation of associated resource impacts, and rehabilitation of discontinued or abandoned sites.

Recommended Wilderness and Wild and Scenic Rivers

Any recommendation for Wilderness or Wild and Scenic River designation under any alternative is a preliminary administrative recommendation only. Any recommendation would receive further review and possible modification by the Chief of the Forest Service, the Secretary of Agriculture, and the President of the United States. Congress has reserved any final decisions to designate wilderness to the National Wilderness Preservation System or rivers to the National Wild and Scenic River System.

Alternative 1B (No Action)

This is the No Action Alternative that provides the baseline for the effects analysis in this EIS. "No Action" for this alternative means continuing current management of the Forests, while updating Forest Plan direction from Pacfish/Infish and Biological Opinions for fish species (steelhead trout, bull trout) listed under the Endangered Species Act. Under Alternative 1B, direction and prescriptions are applied from the original Forest Plans, with the following changes: (1) substantial management direction has been added for the protection of listed fish species and their habitats, and (2) management prescriptions have been converted to reflect a system of prescription categories that are now being used nationwide in the Forest Service.

The management direction from Pacfish/Infish and Biological Opinions for listed fish species affords substantial protection to listed fish and their habitats. However, the Pacfish and Infish EAs were specifically designed as interim documents to provide maximum short-term protection for fishery resources until long-term strategies were developed through new national or regional planning efforts or Forest Plan revision. A long-term Aquatic Conservation Strategy (ACS) was developed for the Proposed Action as a result of this Forest Plan revision, and that strategy is applied to all the action alternatives (2-7). This long-term strategy does not apply to Alternative 1B, however.

Under Alternative 1B, it is assumed that management activities are at relatively low levels in watersheds with listed fish species, and activities are primarily related to maintaining quality habitat where it currently exists and reducing risks to habitat and species over the short term. Watershed restoration activities can occur in areas with degraded habitat, but vegetation and other restoration activities may be limited due to potential short-term effects to watershed resources.

In areas outside of watersheds with listed fish species, forested vegetation is managed for growth and yield on suited timberlands, and suited rangelands are managed primarily for livestock forage. Management activities are at moderate to high levels, and are designed to reduce long-term risks of tree mortality from insects, disease, and stand-replacing fire.

Alternative 1B does not attempt to address Need for Change topics described in the Pre-AMS (1997).

Management Prescriptions

Management prescriptions appear in the original Forest Plans, represented by Alternative 1B, but they are typically not the same as the Management Prescription Categories (MPCs) that have since been developed by the Forest Service at the national level, and are being used in Forest Plan revision. Therefore, the Revision Team created a crosswalk to convert the original Plan prescriptions to the new MPCs for purposes of equivalent analysis and effects comparison in the revision EIS. For example, the "General Forest Management" prescription used in the original Forest Plans was converted to a 5.2 MPC in forested areas, and a 6.2 MPC in non-forested areas, because the intent and objectives behind all of these prescriptions seemed to be much the same.

Recommended wilderness in the original plans was converted to a 1.2 MPC. Undeveloped roadless area prescriptions were converted to one of the 4.1 MPCs, depending on how much management activity was expected. Conversely, there were some new MPCs, like 3.1 or 3.2, (restoration and maintenance of aquatic, terrestrial, and watershed resources) which really had no comparable prescription in the original plans, so they are not represented in Table 2-1 below.

Based on MPC conversion, Designated and Recommended Wilderness Areas (1.1, 1.2) comprise an estimated 25 percent of the Ecogroup area. The other major management prescriptions under Alternative 1B are:

5.2 - Commodity Production Emphasis within Forested Landscapes (20 percent),
4.1b – Undeveloped Recreation, Maintain Undeveloped Character, Allow Salvage (18 percent)
5.1 - Restoration and Maintenance Emphasis within Forested Landscapes (14 percent)
6.2 - Commodity Production Emphasis within Shrubland and Grassland Landscapes (11 percent)
4.2 – Roaded Recreation Emphasis (11 percent)

Management prescriptions associated with suited timberlands (4.2, 5.1, 5.2, 6.1, 6.2) comprise an estimated 55 percent of the Ecogroup area. These MPCs represent the most likely areas where localized harvest and road-related activities would occur during the planning period. Volume outputs based on suitability, however, may well be overestimated for this alternative because substantial portions of that volume are predicted to come from Inventoried Roadless Areas, which are now covered by a Roadless Rule that restricts harvest and road-building activities, and from areas that have special direction to protect listed fish species, which would also restrict harvest and road-building activities.

Management prescriptions that emphasize restoration and maintenance of forested and non-forested vegetation (5.1, 6.1) comprise an estimated 14 percent of the Ecogroup area.

Management prescriptions that emphasize undeveloped recreation (4.1a, 4.1b, 4.1c) comprise an estimated 19 percent of the Ecogroup area, and 96 percent of that total is in MPC 4.1b, which would maintain undeveloped character but allow salvage harvest activities.

There are no management prescriptions that emphasize restoration or maintenance of aquatic, terrestrial, and watershed conditions.

Recommended wilderness (MPC 1.2) is allocated to an estimated 10 percent of the Ecogroup area. This number represents those areas that are recommended in the original Forest Plans.

Existing Wilderness Areas, Wild and Scenic Rivers, Research Natural Areas, and National Recreation Areas are managed to protect the values for which they were established.

The Secesh River, South Fork Salmon River, Big Creek, Monumental Creek, and French Creek are not recommended to Congress for National Wild and Scenic River designation. None of the five river segments would be recommended for designation at this time, but they would remain

eligible for future designation. Their free-flowing status and visual quality would be managed and protected under a Wild classification until a suitability study determined they were no longer eligible, or they were recommended to Congress for designation. At present, not all segments meet Wild standards.

The following table shows acres of MPCs by Forest and for the entire Ecogroup under Alternative 1B. See Alternative 1B Map, in the EIS map packet, for MPC spatial distribution. Acres are rounded off to the nearest thousand.

Table 2-1. Management Prescription Acres for Alternative 1B

No.	Management Prescription Category	Acres Allocated by Forest			Ecogroup Acres
		Boise	Payette	Sawtooth	
1.1	Existing Wilderness*	0	768,000	218,000	986,000
1.2	Recommended Wilderness**	179,000	207,000	266,000	652,000
2.1	Wild and Scenic Rivers (Designated)	0	4,000	0	4,000
2.2	Research Natural Areas	9,000	14,000	3,000	26,000
2.4	Boise Basin Experimental Forest**	8,000	0	0	8,000
3.1	Passive Restoration and Maintenance of Aquatic, Terrestrial, and Hydrologic Resources	0	0	0	0
3.2	Active Restoration and Maintenance of Aquatic, Terrestrial, and Hydrologic Resources	0	0	0	0
4.1a	Undeveloped Recreation – Maintain Inventoried Roadless Areas	0	1,000	0	1,000
4.1b	Undeveloped Recreation – Maintain Undeveloped Character, Allow Salvage	317,000	533,000	350,000	1,200,000
4.1c	Undeveloped Recreation – Maintain Undeveloped Character, Allow Restoration	0	50,000	5,000	55,000
4.2	Roaded Recreation Emphasis	124,000	45,000	531,000	700,000
4.3	Concentrated Recreation	0	0	2,000	2,000
5.1	Restoration and Maintenance Emphasis within Forested Landscapes	672,000	173,000	48,000	893,000
5.2	Commodity Production Emphasis within Forested Landscapes	821,000	456,000	28,000	1,305,000
6.1	Restoration and Maintenance Emphasis within Grassland and Shrubland Landscapes	10,000	8,000	0	18,000
6.2	Commodity Production Emphasis within Shrubland and Grassland Landscapes	62,000	0	660,000	722,000
8.0	Concentrated Development	2,000	33,000	0	35,000

*Only those acres for which an Ecogroup Forest has full administrative authority are shown in this table. Thus, acres are not included for the 64,000 acres of the Frank Church - River of No Return Wilderness within the proclaimed boundaries of the Boise NF but primarily administered by the Salmon/Challis NF, and the 29,000 acres of the Hells Canyon Wilderness within the proclaimed boundaries of the Payette NF but primarily administered by the Wallowa-Whitman NF.

**Acres do not include RNA inclusions.

Alternative 2 (Proposed Action)

Alternative 2 is the Proposed Action that was presented to the public prior to the DEIS in order to generate issues. The main intent of Alternative 2 is to address Need for Change topics that are identified in the *Preliminary Analysis of the Management Situation Summary* (Pre-AMS) (USDA Forest Service 1997) that initiated Forest Plan revision for the Southwest Idaho Ecogroup. As such, the Proposed Action represents a significant departure in management from the No Action Alternative (1B). A basic assumption under the Proposed Action is that management emphasis and direction across the Ecogroup area should be adjusted to address Need for Change topics. The Need for Change topics are described below, along with how the Proposed Action addresses them. For a more complete description of how Need for Change was addressed, see Chapter II of the revised Forest Plans.

Other features of the Proposed Action represent much less of a change or maintain the status quo. For example, recreation uses and opportunities stay much the same, as do rangelands considered suitable for livestock grazing. For a more detailed description and comparison of changes from No Action to Proposed Action, see the Comparison of Alternatives section, later in this chapter, and the effects analyses of the alternatives in Chapter 3

Need For Change Topics

Biodiversity – The Pre-AMS identified many components related to biodiversity, and the over-riding concern related to these components was that biodiversity was changing across the Ecogroup due to past management practices. Intensive management in some areas, and fire exclusion in other areas, have had the overall effect of decreasing diversity of vegetation and habitat conditions, as well as species richness. The Proposed Action adopted an ecosystem management approach to this concern, using both coarse filter and fine filter strategies. At the coarse-filter scale, a wider variety of management prescriptions were used to broaden the scope of management emphasis across the Ecogroup area. At the fine-filter scale, management direction and matrices were developed to help maintain or restore specific ecosystem components—such as large trees, snags, and coarse woody debris—and specific habitat components for species of concern. This management direction was applied to all action alternatives equally. The new management prescriptions (MPCs) were applied to all the action alternatives as well, but in differing amounts and areas to indicate different management emphasis by alternative.

Fire and Smoke Management - The original Forest Plans, represented by Alternative 1B, focused primarily on fire suppression and meeting federal and state air quality requirements for managing smoke from prescribed burning. The Proposed Action retains and expands upon direction for suppression and air quality requirements, but also adds direction for restoring and maintaining the role of fire as an ecological process where desirable. Additionally, the Proposed Action incorporates recent national efforts (the National Fire Plan and Cohesive Strategy) for reducing fire hazard across the landscapes and provides direction to focus fuel reduction activities around specific communities and within wildland-urban interface areas. Coordination and education efforts with adjacent landowners have also been added to Forest-wide and

Management Area direction. For smoke management, the Proposed Action incorporates air quality standards and management strategies. MPC direction gives additional clarification as to how fire may be used, emphasized, or suppressed within the various management prescriptions. This new management direction has been applied to all action alternatives. Variations in assigned MPCs by alternative affect the degree of fire management emphasis.

Terrestrial Habitats - The original Forest Plans typically contain a large amount of information and direction for big-game species, some information and direction for listed, proposed, sensitive, or management indicator species, and very little if any information or direction for other species. For the Proposed Action, Forest-wide wildlife management direction and desired vegetation conditions were designed to provide well-distributed habitats suitable for native and desired non-native species found on the three Forests. Additional direction was provided for species of concern, in response to input from U.S. Fish and Wildlife Service, Idaho Department of Fish and Game, American Indian Tribes, and other interested organizations. This direction applies to all action alternatives. In addition, new management prescriptions (3.1, 3.2, 5.1, and 6.1) were developed and used to emphasize restoration and maintenance of terrestrial habitat, watershed, and vegetation conditions. These MPCs were also applied to all action alternatives, but in differing amounts and areas to indicate different management emphasis by alternative.

Non-native Plants - There is very little direction or strategy for managing non-native plants or noxious weeds in the original Forest Plans, represented by the No Action alternative. The Proposed Action developed direction at both the Forest-wide and Management Area scales to create an Integrated Weed Management approach to reducing non-native plants in priority areas. This direction is applied to all of the action alternatives (2-7).

Rangeland Resources - Rangeland capability and suitability were reassessed for Forest Plan revision (see Rangeland Resources section, Chapter 3). The Proposed Action improves upon the original Forest Plans by adding direction and emphasis to maintain or restore non-forested vegetation that provides forage for livestock, and by adding direction that reduces impacts from grazing on other resources. This direction is applied to all of the action alternatives (2-7).

Riparian and Aquatic - The original plans were amended by Pacfish/Infish and Biological Opinions for listed fish species to provide additional protection for those species and their habitats. These documents provided protection for fish in the short term, but did not provide a long-term aquatic conservation strategy for fish populations and subpopulations, or habitat restoration. Indeed, activities designed for long-term watershed or fish habitat restoration have been at times difficult to implement under this direction due to the short-term impacts that they might produce. For the Proposed Action, Forest-wide and Management Area direction was revised to incorporate soil, water, riparian, and aquatic habitat protection, while additional direction was developed to incorporate a long-term Aquatic Conservation Strategy (ACS) for restoration and maintenance of these resources. This direction was applied to all action alternatives. In addition, new management prescriptions (3.1, 3.2) were developed and used to emphasize restoration and maintenance of aquatic habitat and watershed conditions in priority areas. These prescriptions were applied to all the action alternatives as well, but in differing amounts and areas to indicate different management emphasis by alternative

Timberland Suitability - Timberland capability and suitability were reassessed for Forest Plan revision (see Timberland Resources section, Chapter 3). This assessment applies to action alternatives, however suitability was further refined in the action alternatives through the allocation of MPCs. Specific MPCs (4.2, 5.1, 5.2, 6.1, and 6.2) are collectively considered the suited timber base, although each MPC has a somewhat different emphasis for vegetation management (see MPC descriptions, this chapter). This variety broadens the options for timber-related management objectives and outcomes. "Suited" MPCs are applied to all action alternatives, but by differing amounts and locations.

Management Emphasis Areas – Existing Wilderness Areas, Wild and Scenic Rivers, Research Natural Areas, and National Recreation Areas are managed to protect the values for which they were established. Recommended wilderness is carried forward from the original Forest Plans. Although these areas do not change from the No Action Alternative, the Proposed Action does add specific Forest Plan management direction to provide for their protection. This direction is applied equally for all action alternatives.

In the original Forest Plans, Inventoried Roadless Areas were generally assigned management prescriptions that either allowed vegetation management and road construction to occur, or restricted both of these activities. A wider variety of prescriptions was developed for the Proposed Action, and these prescriptions were applied to different degrees across all action alternatives and cross-walked where appropriate to the No Action Alternative. Some MPCs would prohibit timber harvest and limit road development to meet specific legal obligations. Other MPCs would allow a low level of vegetation management to occur to meet objectives such as habitat improvement, fuels hazard reduction, or salvage, but road building would be restricted (see MPC descriptions in Chapter 2). It is assumed that this type of management would not have a significant effect on the areas' roadless character. Still other prescriptions associated with suited timberlands would allow activities that would likely alter the roadless or undeveloped character of Inventoried Roadless Areas over time. MPCs were applied in differing amounts and areas to provide different management emphasis by alternative.

Management Prescriptions

Designated and Recommended Wilderness Areas comprise about 25 percent of the Ecogroup area, the same proportion as in the No Action Alternative. The other major management prescriptions under Alternative 2 (see Table 2-2, below) are:

5.1 - Restoration and Maintenance Emphasis within Forested Landscapes (19 percent),
4.1b - Undeveloped Recreation, Maintain Undeveloped Character, Allow Salvage (17 percent)
3.2 - Active Restoration and Maintenance of Aquatic, Terrestrial and Hydrologic Resources (11 percent)
6.1 - Restoration and Maintenance Emphasis within Shrubland and Grassland Landscapes (8 percent)
5.2 – Commodity Production Emphasis within Forested Landscapes (6 percent)

Management prescriptions associated with suited timberlands (4.2, 5.1, 5.2, 6.1, 6.2) comprise an estimated 41 percent of the Ecogroup area. These MPCs represent the most likely areas where localized harvest and road-related activities would occur during the planning period.

Management prescriptions that emphasize restoration and maintenance of forested and non-forested vegetation (5.1, 6.1) comprise an estimated 27 percent of the Ecogroup area.

Management prescriptions that emphasize undeveloped recreation (4.1a, 4.1b, 4.1c) comprise an estimated 21 percent of the Ecogroup area, although less than 1 percent of that total is in MPC 4.1a, which would prohibit vegetation management activities.

Management prescriptions that emphasize restoration or maintenance of aquatic, terrestrial, and watershed conditions comprise an estimated 12 percent of the Ecogroup area.

Recommended wilderness (MPC 1.2) is allocated to an estimated 10 percent of the Ecogroup area, the same as in the original Forest Plans.

The Secesh River, South Fork Salmon River, Big Creek, Monumental Creek, and French Creek are recommended for inclusion in the National Wild and Scenic Rivers System. The total recommended number of miles for all five rivers is 247. The Secesh River recommended classifications are Recreational for Segments 1 and 3, and Wild for Segment 2. The South Fork Salmon River, Big Creek, and Monumental Creek recommended classifications are Recreational for Segment 1 and wild for Segment 2. The French Creek recommended classifications are Wild for Segments 1, 2, and 3.

The following table shows acres of MPCs by Forest and for the entire Ecogroup under this alternative. See Alternative 2 Map, in the EIS map packet, for MPC spatial distribution. Acres are rounded to the nearest thousand.

Table 2-2. Management Prescription Acres for Alternative 2

No.	Management Prescription Category	Acres Allocated by Forest			Ecogroup Acres
		Boise	Payette	Sawtooth	
1.1	Existing Wilderness*	0	768,000	218,000	986,000
1.2	Recommended Wilderness**	184,000	207,000	264,000	655,000
2.1	Wild and Scenic Rivers	0	4,000	0	4,000
2.2	Research Natural Areas	9,000	14,000	3,000	26,000
2.4	Boise Basin Experimental Forest**	8,000	0	0	8,000
3.1	Passive Restoration and Maintenance of Aquatic, Terrestrial, & Hydrologic Resources	12,000	56,000	22,000	90,000
3.2	Active Restoration and Maintenance of Aquatic, Terrestrial, & Hydrologic Resources	323,000	124,000	273,000	720,000
4.1a	Undeveloped Recreation – Maintain Inventoried Roadless Areas	0	4,000	0	4,000
4.1b	Undeveloped Recreation – Maintain Undeveloped Character, Allow Salvage	320,000	465,000	320,000	1,105,000

No.	Management Prescription Category	Acres Allocated by Forest			Ecogroup Acres
		Boise	Payette	Sawtooth	
4.1c	Undeveloped Recreation – Maintain Undeveloped Character, Allow Restoration	41,000	106,000	141,000	288,000
4.2	Roaded Recreation Emphasis	133,000	20,000	173,000	326,000
4.3	Concentrated Recreation	0	0	2,000	2,000
5.1	Restoration and Maintenance Emphasis within Forested Landscapes	835,000	308,000	141,000	1,284,000
5.2	Commodity Production Emphasis within Forested Landscapes	194,000	178,000	0	372,000
6.1	Restoration and Maintenance Emphasis within Shrubland and Grassland Landscapes	38,000	37,000	425,000	500,000
6.2	Commodity Production Emphasis within Shrubland and Grassland Landscapes	108,000	0	129,000	237,000
8.0	Concentrated Development	0	0	0	0

*Only those acres for which an Ecogroup Forest has full administrative authority are shown in this table. Thus, acres are not included for the 64,000 acres of the Frank Church - River of No Return Wilderness within the proclaimed boundaries of the Boise NF but primarily administered by the Salmon/Challis NF, and the 29,000 acres of the Hells Canyon Wilderness within the proclaimed boundaries of the Payette NF but primarily administered by the Wallowa-Whitman Forest.
**Acres do not include RNA inclusions.

Alternative 3

Alternative 3 was identified as the preferred alternative in the DEIS and maximizes restoration opportunities across the Forests. This alternative draws heavily from the scientific assessments completed as part of the Interior Columbia Basin Ecosystem Management Project (ICBEMP) Final EIS, and was developed in response to comments that Alternative 2 did not go far enough in addressing restoration of vegetation, soil, water, riparian, and aquatic resources. A number of key issues were considered in development of this alternative, including the need to address the risks of uncharacteristic lethal wildfire, both within and outside of IRAs, and the associated effects on soil-hydrologic function, listed species habitat, and water quality. Other issues concerned the need to actively restore degraded soil, water, and riparian conditions, aquatic and terrestrial species habitats, and vegetative diversity across the landscape.

Alternative 3 uses the same ecosystem management principles as the Proposed Action, but provides more emphasis for watershed and vegetation restoration to achieve or approach Historical Range of Variability (HRV) for biophysical resources. An underlying assumption behind this alternative, as with the ICBEMP, is that biophysical resources functioning within their HRV will be able to provide for diverse and sustainable ecological conditions and processes, which will in turn provide for social and economic benefits over the long term. Management emphasis is on restoring resources with low or decreasing resiliency and integrity, and maintaining resources that are currently functioning properly. This alternative emphasizes active restoration and is not short-term risk adverse. Some temporary or short-term effects to resources are accepted in order to produce long-term benefits, particularly for terrestrial and aquatic habitats, and watershed resources.

Issues Used to Develop this Alternative

Soil, Water, Riparian and Aquatic (SWRA) Issues 3 and 4: Compared to the Proposed Action, Alternative 3 provides more emphasis on the conservation and restoration of soil, water, riparian and aquatic (SWRA) resources by increasing the number of acres in MPCs 3.1 and 3.2 by more than 700,000 acres across the Ecogroup area.

In addition, greater emphasis is placed on the importance of protecting landslide-prone areas. Unlike the Proposed Action, Alternative 3 assumes all high-risk landslide-prone areas within suited timberland MPCs will be managed as if they were in MPC 3.2 (refer to Appendix B, Modeling assumptions for Landslide Prone Areas). Low and Moderate landslide-prone areas are assumed to have increased emphasis for restoration compared to the Proposed Action.

Finally, Alternative 3 increases the number of acres in MPCs with more restrictions on grazing practices by nearly 75,000 acres compared to the Proposed Action. It is assumed that more acres in MPCs with greater restrictions on grazing practices will reduce the potential for temporary and short-term impacts to SWRA resources.

Terrestrial Wildlife Habitat Issue 1: Compared to the Proposed Action, Alternative 3 provides more emphasis and maintenance of terrestrial wildlife habitat through reassignment of commodity emphasis MPCs (5.2, 6.2) to active vegetation and habitat restoration emphasis MPCs (3.2, 5.1, 6.1). There is an increase of over 1 million acres in MPCs 3.2, 5.1 and 6.1 compared to the Proposed Action across the Ecogroup area.

Terrestrial Wildlife Habitat Issue 2: Compared to the Proposed Action, which does not directly address disease transmission from domestic sheep to bighorn sheep, Alternative 3 removes over 80,000 acres from the suitable rangelands on the Payette and Sawtooth National Forests that have been identified as areas where bighorn are at risk for disease transmission.

Vegetation Diversity Issue: Compared to the Proposed Action, Alternative 3 reassigns over 1 million acres from MPCs (5.2 and 6.2) that promote commodity production, to active restoration MPCs designed to move vegetative conditions toward their HRV. It is assumed that ecosystems operating within their HRV have evolved within the influences of disturbances such as insects, disease, and fire, and are therefore more likely to be resilient and diverse due to these influences.

Vegetation Hazard Issue: Compared to the Proposed Action, Alternative 3 substantially increases acres in active vegetative restoration emphasis MPCs (3.2, 5.1, 6.1) both inside and outside of Inventoried Roadless Areas. Similar to the assumption under the Vegetative Diversity Issue, it is assumed that ecosystems operating within their HRV have evolved within the influences of disturbances, such as insects, disease, and fire, and are therefore more likely to be resilient to uncharacteristic disturbance events.

Fire Management Issue 1: Compared to the Proposed Action, Alternative 3 reassigns nearly 1 million acres from fire only MPCs (1.2, 3.1, 4.1a, and 4.1b) to MPCs that allow a mix of fire and mechanical treatments. This shift responds to the concern that in watersheds with uncharacteristically high and extreme levels of fuels, both mechanical and fire treatment options will be needed to effectively (in time and area scales) reduce fuels in a manner that is safe and minimizes impacts to air quality and other biophysical resources.

Fire Management Issue 2: Compared to the Proposed Action, Alternative 3 increases the percent of total interface subwatershed area in MPCs that allow both fire and mechanical options for fuel reduction from 79 to 93 percent in the Ecogroup. The assumption is the greater the area in MPCs that allow both fire and mechanical treatments, as opposed to just fire, the greater the opportunity is to reduce hazardous vegetative conditions.

Inventoried Roadless Areas Issue 2: Compared to the Proposed Action, Alternative 3 reassigns a substantial number of acres having high or extreme ratings to uncharacteristic wildfire or resistance to control within IRAs from MPCs that limit both treatments and access, to MPCs that allow either "treatments available, but access limited" or "treatments and access available". Conversely, Alternative 3 decreases the number of acres in MPCs where "treatments and access are limited" from nearly 660,000 acres under the Proposed Action to less than 300,000 acres. The assumption is that the greater the area in IRAs that do not limit treatments and/or access, the greater the opportunity to reduce wildfire hazards.

Management Prescriptions

Designated and Recommended Wilderness Areas comprise about 25 percent of the Ecogroup, the same proportion as in Alternatives 1B and 2. The other major management prescriptions under Alternative 3 (see Table 2-3, below) are:

5.1 - Restoration and Maintenance Emphasis within Forested Landscapes (25 percent),
3.2 - Active Restoration and Maintenance of Aquatic, Terrestrial and Hydrologic Resources (20 percent)
6.1 - Restoration and Maintenance Emphasis within Shrubland and Grassland Landscapes (10 percent)
4.1c – Undeveloped Recreation, Maintain Undeveloped Character, Allow Restoration (9 percent)

Management prescriptions associated with suited timberlands (4.2, 5.1, 5.2, 6.1, 6.2) comprise an estimated 42 percent of the Ecogroup area. These MPCs represent the most likely areas where localized harvest and road-related activities would occur during the planning period. Timber management emphasizes forested vegetation restoration rather than growth and yield objectives, and there are no acres allocated to MPC 5.2.

Management prescriptions that emphasize restoration and maintenance of forested and non-forested vegetation (5.1, 6.1) comprise an estimated 35 percent of the Ecogroup area.

Management prescriptions that emphasize undeveloped recreation (4.1a, 4.1b, 4.1c) comprise an estimated 9 percent of the Ecogroup area, and 97 percent of that total is in MPC 4.1c, which would allow vegetation restoration activities.

Management prescriptions that emphasize restoration or maintenance of aquatic, terrestrial, and watershed conditions comprise an estimated 23 percent of the Ecogroup area, and 86 percent of that total is in MPC 3.2, which emphasizes active restoration.

Recommended wilderness (MPC 1.1) is allocated to an estimated 10 percent of the Ecogroup area, the same as in the original Forest Plans.

The Secesh River, South Fork Salmon River, Big Creek, Monumental Creek, and French Creek are recommended for inclusion in the National Wild and Scenic Rivers System. The total recommended number of miles for all five rivers is 247. The Secesh River recommended classifications are Recreational for Segments 1 and 3, and Wild for Segment 2. The South Fork Salmon River, Big Creek, and Monumental Creek recommended classifications are Recreational for Segment 1 and wild for Segment 2. The French Creek recommended classifications are Wild for Segments 1, 2, and 3.

The following table shows acres of MPCs by Forest and for the entire Ecogroup under this alternative. See Alternative 3 Map, in the EIS map packet, for MPC spatial distribution. Acres are rounded off to the nearest thousand.

Table 2-3. Management Prescription Acres for Alternative 3

No.	Management Prescription Category	Acres Allocated by Forest			Ecogroup Acres
		Boise	Payette	Sawtooth	
1.1	Existing Wilderness*	0	768,000	218,000	986,000
1.2	Recommended Wilderness**	184,000	207,000	264,000	655,000
2.1	Wild and Scenic Rivers	0	4,000	0	4,000
2.2	Research Natural Areas	9,000	14,000	3,000	26,000
2.4	Boise Basin Experimental Forest**	8,000	0	0	8,000
3.1	Passive Restoration and Maintenance of Aquatic, Terrestrial, & Hydrologic Resources	26,000	103,000	70,000	199,000
3.2	Active Restoration and Maintenance of Aquatic, Terrestrial, & Hydrologic Resources	513,000	470,000	351,000	1,334,000
4.1a	Undeveloped Recreation – Maintain Inventoried Roadless Areas	0	21,000	0	21,000
4.1b	Undeveloped Recreation – Maintain Undeveloped Character, Allow Salvage	0	0	0	0
4.1c	Undeveloped Recreation – Maintain Undeveloped Character, Allow Restoration	208,000	103,000	263,000	574,000
4.2	Roaded Recreation Emphasis	132,000	25,000	194,000	351,000
4.3	Concentrated Recreation	0	0	2,000	2,000
5.1	Restoration and Maintenance Emphasis within Forested Landscapes	975,000	521,000	172,000	1,668,000
5.2	Commodity Production Emphasis within Forested Landscapes	0	0	0	0
6.1	Restoration and Maintenance Emphasis within Shrubland and Grassland Landscapes	66,000	55,000	543,000	664,000
6.2	Commodity Production Emphasis within Shrubland and Grassland Landscapes	84,000	0	31,000	115,000
8.0	Concentrated Development	0	0	0	0

*Only those acres for which an Ecogroup Forest has full administrative authority are shown in this table. Thus, acres are not included for the 64,000 acres of the Frank Church - River of No Return Wilderness within the proclaimed boundaries of the Boise NF but primarily administered by the Salmon/Challis NF, and the 29,000 acres of the Hells Canyon Wilderness within the proclaimed boundaries of the Payette NF but primarily administered by the Wallowa-Whitman Forest.

**Acres do not include RNA inclusions.

Alternative 4

Alternative 4 was developed to address issues that fire should be allowed to play its natural role in the environment and that ecological processes should dominate the landscape. Under Alternative 4, management actions are reduced to minimal levels, and biophysical conditions are primarily influenced by ecological processes. This alternative was designed to reduce short-term risks to species viability and ecological integrity by minimizing human-caused disturbance over the planning period. The overall management emphasis in Alternative 4 is to maintain conditions as they are in the short term, allowing ecological processes to determine conditions over the long term. Vegetation management activities are at very low levels throughout the Ecogroup area, and are primarily related to fire use or mechanical treatments for objectives other than growth and yield. This alternative addresses issues concerning the effects of past and current management activities on fragmentation of terrestrial species habitat, and species disruption from human activities. The full range of recreation experiences is available, but the emphasis is on primitive or semi-primitive settings and opportunities. This alternative maximizes wilderness potential, as most Inventoried Roadless Areas are recommended for wilderness designation, and mechanical transport is prohibited in recommended wilderness areas.

Need For Change topics are addressed by this alternative through changes in management direction, and active restoration opportunities exist, but the primary emphasis for addressing many topics is through a passive approach in many areas.

Issues Used to Develop this Alternative

SWRA Issues 4: Compared to the Proposed Action, Alternative 4 reassigns more than 1.8 million acres within Inventoried Roadless Areas from MPCs that allow full or low levels of development to MPC 1.2, Recommended Wilderness. This reassignment addresses concerns about the importance of retaining large blocks of undisturbed areas (i.e., Inventoried Roadless Areas) for ESA listed and native fish, as discussed in 1998 Biological Opinions for Bull Trout and Salmon/Steelhead and the Road Density Analysis Teams (RDAT) assessment.

In addition, greater emphasis is placed on the importance of protecting RCAs and landslide-prone areas. Unlike the Proposed Action, Alternative 4 assumes that all RCAs and moderate- and high-risk landslide-prone areas within suited timberland MPCs, as well as MPCs 4.1c, 2.4, 3.2, 4.3, and 8.0, will be managed as if they were MPC 3.1 (see Appendix B, Modeling Assumptions for Landslide Prone Areas). Low-risk landslide-prone areas are assumed to have increased emphasis for watershed and aquatic restoration compared to the Proposed Action.

Finally, Alternative 4 increases the number of acres in MPCs with more restrictions on grazing practices by more than 500,000 acres compared to the Proposed Action. It is assumed that MPCs with greater restrictions on grazing practices will reduce the potential for temporary and short-term impacts to SWRA resources.

Terrestrial Wildlife Habitat Issue 1: Compared to the Proposed Action, Alternative 4 reassigns more than 1.8 million acres within Inventoried Roadless Areas from MPCs that allow full or low levels of development to MPC 1.2, Recommended Wilderness. This reassignment addresses concerns about the importance of retaining large blocks of undisturbed habitat with little or no road-related fragmentation for species such as gray wolf and lynx.

Terrestrial Wildlife Habitat Issue 2: Compared to the Proposed Action, Alternative 4 addresses habitat disruption and vulnerability by minimizing human activity through reassigning nearly all acres within IRAs to MPCs that allow little to no development (MPCs 1.2 and 4.1a) and eliminating MPCs 5.2 and 6.2, which have the greatest potential to result in road- and habitat- related disturbance.

Compared to the Proposed Action, which does not directly address disease transmission from domestic sheep to bighorn sheep, Alternative 4 removes over 80,000 acres from the suitable rangelands on the Payette and Sawtooth National Forests that have been identified as areas where bighorn are at risk for disease transmission.

Vegetation Diversity Issue: Compared to the Proposed Action, Alternative 4 reassigns acres from MPCs (5.2 and 6.2) that promote commodity production, to active restoration MPCs designed to move vegetative conditions toward their HRV. It is assumed that ecosystems operating within their HRV have evolved with the influences of disturbances, such as insects, disease, and fire, and are therefore more likely to be resilient and diverse due to these influences.

Fire Management Issue 1: Compared to the Proposed Action, Alternative 4 reassigns nearly 1.4 million acres from MPCs that allow both fire and mechanical treatments, to fire-only MPCs (1.2, 3.1, 4.1a, and 4.1b). This shift responds to the concern that "natural" processes (i.e., fire) should be the primary treatment option for responding to this Need for Change. Essentially, respondents believe mechanical treatments cannot be used to mimic natural processes.

Inventoried Roadless Areas Issue 1: Compared to the Proposed Action, Alternative 4 reassigns more than 1.8 million acres within Inventoried Roadless Areas from MPCs that allow full or low levels of development to MPC 1.2, Recommended Wilderness. This reassignment provides the greatest assurance that acres within IRAs will retain characteristics important for future consideration of Congressional wilderness designation.

Of the estimated 3.24 million IRA acres within the Ecogroup area, no acres remain in MPCs that allow full development and only 15 percent (approximately 475,000 acres) remain in MPCs that allow for potential low levels of development (MPCs 3.1, 3.2, 4.1b, and 4.1c).

Inventoried Roadless Areas Issue 4: Alternative 4 addresses the issue of mechanized use within recommended wilderness areas by including a standard prohibiting the use of mechanized equipment within recommended wilderness. This standard is not applied to the Proposed Action.

Management Prescriptions

Designated and recommended Wilderness Areas comprise an estimated 53 percent of the Ecogroup, more than twice as much as in any other alternative. The other major management prescriptions under Alternative 4 (see Table 2-4, below) are:

3.2 - Active Restoration and Maintenance of Aquatic, Terrestrial and Hydrologic Resources (17 percent)
3.1 - Passive Restoration and Maintenance of Aquatic, Terrestrial and Hydrologic Resources (10 percent).

Management prescriptions associated with suited timberlands (4.2, 5.1, 5.2, 6.1, 6.2) comprise less than 13 percent of the Ecogroup area. These MPCs represent the most likely areas where localized harvest and road-related activities would occur during the planning period.

Management prescriptions that emphasize restoration and maintenance of forested and non-forested vegetation (5.1, 6.1) comprise a little over 10 percent of the Ecogroup area. There are no lands with growth and yield (5.2, 6.2) prescriptions.

Management prescriptions that emphasize undeveloped recreation (4.1a, 4.1b, 4.1c) comprise an estimated 7 percent of the Ecogroup area, and 85 percent of that total is in MPC 4.1c, which would allow vegetation restoration activities.

Management prescriptions that emphasize restoration or maintenance of aquatic, terrestrial, and watershed conditions comprise an estimated 27 percent of the Ecogroup area, and 38 percent of that total is in MPC 3.1, which emphasizes passive restoration.

Recommended wilderness (MPC 1.2) is allocated to an estimated 38 percent of the Ecogroup area, by far the highest amount of all alternatives.

The Secesh River, South Fork Salmon River, Big Creek, Monumental Creek, and French Creek are recommended for inclusion in the National Wild and Scenic Rivers System. The total recommended number of miles for all five rivers is 247. The Secesh River recommended classifications are Recreational for Segments 1 and 3, and Wild for Segment 2. The South Fork Salmon River, Big Creek, and Monumental Creek recommended classifications are Recreational for Segment 1 and wild for Segment 2. The French Creek recommended classifications are Wild for Segments 1, 2, and 3.

The following table shows acres of MPCs by Forest and for the entire Ecogroup under this alternative. See Alternative 4 Map, in the EIS map packet, for MPC spatial distribution. Acres are rounded off to the nearest thousand.

Table 2-4. Management Prescription Acres for Alternative 4

No.	Management Prescription Category	Acres Allocated by Forest			Ecogroup Acres
		Boise	Payette	Sawtooth	
1.1	Existing Wilderness*	0	768,000	218,000	986,000
1.2	Recommended Wilderness**	737,000	879,000	927,000	2,543,000
2.1	Wild and Scenic Rivers	0	4,000	0	4,000
2.2	Research Natural Areas	9,000	14,000	3,000	26,000
2.4	Boise Basin Experimental Forest**	8,000	0	0	8,000
3.1	Passive Restoration and Maintenance of Aquatic, Terrestrial, & Hydrologic Resources	290,000	184,000	201,000	675,000
3.2	Active Restoration and Maintenance of Aquatic, Terrestrial, & Hydrologic Resources	530,000	426,000	148,000	1,104,000
4.1a	Undeveloped Recreation – Maintain Inventoried Roadless Areas	65,000	0	0	65,000
4.1b	Undeveloped Recreation – Maintain Undeveloped Character, Allow Salvage	0	0	0	0
4.1c	Undeveloped Recreation – Maintain Undeveloped Character, Allow Restoration	64,000	0	306,000	370,000
4.2	Roaded Recreation Emphasis	74,000	27,000	41,000	142,000
4.3	Concentrated Recreation	0	0	1,000	1,000
5.1	Restoration and Maintenance Emphasis within Forested Landscapes	310,000	0	0	310,000
5.2	Commodity Production Emphasis within Forested Landscapes	0	0	0	0
6.1	Restoration and Maintenance Emphasis within Shrubland and Grassland Landscapes	117,000	0	266,000	383,000
6.2	Commodity Production Emphasis within Shrubland and Grassland Landscapes	0	0	0	0
8.0	Concentrated Development	0	0	0	0

*Only those acres for which an Ecogroup Forest has full administrative authority are shown in this table. Thus, acres are not included for the 64,000 acres of the Frank Church - River of No Return Wilderness within the proclaimed boundaries of the Boise NF but primarily administered by the Salmon/Challis NF, and the 29,000 acres of the Hells Canyon Wilderness within the proclaimed boundaries of the Payette NF but primarily administered by the Wallowa-Whitman Forest.
**Acres do not include RNA inclusions.

Alternative 5

Alternative 5 was developed in response to issues that higher levels of commodity could be produced within sustainable limits than those provided in Alternative 2, the Proposed Action. Alternative 5 emphasizes production of goods and services within sustainable limits of the ecosystem. Forested vegetation is managed primarily for growth and yield on suited timberlands; suited rangelands are managed primarily for livestock forage. The high level of management activities produce short-term risks to the environment, but are designed to reduce the long-term risks of tree mortality and other negative impacts from uncharacteristic disturbance events. The full range of recreation experiences is available, but the emphasis is on roaded modified or roaded natural settings and opportunities.

Need For Change topics are addressed by this alternative through changes in management direction, and active restoration opportunities exist, but the primary emphasis is providing timber and range outputs through active management on suited and suitable lands.

Issues Used to Develop this Alternative

Fire Management Issue 1: Compared to the Proposed Action, Alternative 5 reassigns more than 1.6 million acres from fire only MPCs (1.2, 3.1, 4.1a, and 4.1b) to MPCs that allow a mix of fire and mechanical treatments. This shift responds to the concern that in watersheds with uncharacteristically high and extreme levels of fuels, both mechanical and fire treatment options will be needed to effectively (in time and area) reduce fuels in a manner that is safe, minimizes impacts to air quality and to biophysical resources.

Fire Management Issue 2: Compared to the Proposed Action that leaves 21 percent of the total interface areas with MPCs that allow fire-only treatments, Alternative 5 assigns 100 percent of interface areas to MPCs that allow both fire and mechanical options for fuel reduction. The assumption is the greater the percent of area in MPCs that allow both fire and mechanical treatments compared to those MPCs that allow only fire treatments; the greater the opportunity is to reduce hazardous vegetative conditions.

Inventoried Roadless Areas Issue 2: Compared to the Proposed Action, Alternative 5 reassigns a substantial number of acres having high or extreme ratings to uncharacteristic wildfire or resistance to control within IRAs from MPCs that limit vegetation and/or access to MPCs where both "treatments and access available"; a net increase of over 600,000 acres. It substantially decreases the number of acres in MPCs where both "treatments and access are limited" from the nearly 660,000 acres under the Proposed Action to less than 100,000 acres in Alternative 5. The assumption is that the greater the percentage of acres in IRAs that do not limit treatments and/or access, the greater the opportunity to reduce wildfire hazards

Socio-Economic Environment Issue 1: To promote jobs and income related to timber resources, Alternative 5 increases suited timberland acres from 1.3 million under the Proposed Action to nearly 2.8 million acres; increases ASQ from 802.5 million board feet to 2,896 million board feet; and increases the number of acres in forest commodity emphasis MPC 5.2 from an estimated 372,300 acres to 2,061,500 acres.

To promote jobs and income related to livestock grazing, Alternative 5 does not eliminate any acres from the suitable rangelands, and reduces MPCs with more restrictions on grazing practices from nearly 142,000 acres under the Proposed Action to 34,900 acres.

Management Prescriptions

The major management prescriptions in Alternative 5 (see Table 2-5, below) are:

5.2 - Commodity Production Emphasis within Forested Landscapes (31 percent)
5.1 - Restoration and Maintenance Emphasis within Shrubland and Grassland Landscapes (18 percent)
1.1 – Designated Wilderness (15 percent)
6.2 - Commodity Production Emphasis within Shrubland and Grassland Landscapes (11 percent).

Management prescriptions associated with suited timberlands (4.2, 5.1, 5.2, 6.1, 6.2) comprise an estimated 71 percent of the Ecogroup area, by far the highest of any alternative. These MPCs represent the most likely areas where localized harvest and road-related activities would occur during the planning period.

Management prescriptions that emphasize restoration and maintenance of forested and non-forested vegetation (5.1, 6.1) comprise 21 percent of the Ecogroup area. Prescriptions that emphasize commodity production (5.2, 6.2) comprise 59 percent of the suited timberlands. The desired condition for large tree size class is the lowest in Alternative 5 because of the amount of area assigned to MPC 5.2. To allow for more economical harvest practices and outputs, the desired condition for MPC 5.2 is one half the low end of HRV, but not less than 20 percent.

Management prescriptions that emphasize undeveloped recreation (4.1a, 4.1b, 4.1c) comprise an estimated 12 percent of the Ecogroup area, and 72 percent of that total is in MPC 4.1c, which would allow vegetation restoration activities. These undeveloped areas are primarily comprised of lands that were recommended as wilderness in other alternatives.

There are no areas recommended for wilderness under Alternative 5.

The Secesh River, South Fork Salmon River, Big Creek, Monumental Creek, and French Creek are not recommended to Congress for National Wild and Scenic River designation. The rivers are managed under the 2002 revised Boise and Payette National Forest LRMP management direction and emphasis for the management areas in which the rivers are located.

The following table shows acres of MPCs by Forest and for the entire Ecogroup under this alternative. See Alternative 5 Map, in the EIS map packet, for MPC spatial distribution. Acres are rounded to the nearest thousand.

Table 2-5. Management Prescription Acres for Alternative 5

No.	Management Prescription Category	Acres Allocated by Forest			Ecogroup Acres
		Boise	Payette	Sawtooth	
1.1	Existing Wilderness*	0	768,000	218,000	986,000
1.2	Recommended Wilderness	0	0	0	0
2.1	Wild and Scenic Rivers	0	4,000	0	4,000
2.2	Research Natural Areas	9,000	14,000	3,000	26,000
2.4	Boise Basin Experimental Forest**	8,000	0	0	8,000
3.1	Passive Restoration and Maintenance of Aquatic, Terrestrial, & Hydrologic Resources	0	0	0	0
3.2	Active Restoration and Maintenance of Aquatic, Terrestrial, & Hydrologic Resources	53,000	32,000	0	85,000
4.1a	Undeveloped Recreation – Maintain Inventoried Roadless Areas	0	220,000	0	220,000
4.1b	Undeveloped Recreation – Maintain Undeveloped Character, Allow Salvage	0	0	0	0
4.1c	Undeveloped Recreation – Maintain Undeveloped Character, Allow Restoration	210,000	39,000	312,000	561,000
4.2	Roaded Recreation Emphasis	109,000	27,000	404,000	540,000
4.3	Concentrated Recreation	0	0	2,000	2,000
5.1	Restoration and Maintenance Emphasis within Forested Landscapes	645,000	354,000	164,000	1,163,000
5.2	Commodity Production Emphasis within Forested Landscapes	965,000	748,000	347,000	2,060,000
6.1	Restoration and Maintenance Emphasis within Shrubland and Grassland Landscapes	12,000	33,000	189,000	234,000
6.2	Commodity Production Emphasis within Shrubland and Grassland Landscapes	191,000	34,000	473,000	698,000
8.0	Concentrated Development	0	27,000	0	27,000

*Only those acres for which an Ecogroup Forest has full administrative authority are shown in this table. Thus, acres are not included for the 64,000 acres of the Frank Church - River of No Return Wilderness within the proclaimed boundaries of the Boise NF but primarily administered by the Salmon/Challis NF, and the 29,000 acres of the Hells Canyon Wilderness within the proclaimed boundaries of the Payette NF but primarily administered by the Wallowa-Whitman Forest.

**Acres do not include RNA inclusions.

Alternative 6

Alternative 6 was developed in response to issues concerning the Roadless Rule and protection of unroaded areas of 1,000 acres or greater. Alternative 6 is designed to reduce the risks of human-caused impacts to the ecological values of Inventoried Roadless Areas and unroaded areas (1,000 acres and greater) by minimizing management activities and eliminating incompatible uses within those areas. This alternative was developed as a conservative approach to meeting the intent of the President's Roadless Initiative in 1999, which later became the Roadless Area Conservation Rule in 2001.

Outside Inventoried Roadless Areas and unroaded areas, Alternative 6 was designed to emulate the Proposed Action (Alternative 2), which addresses Need for Change topics from the Pre-AMS. Outside roadless and unroaded areas (1,000 acres and greater), this alternative addresses Need for Change items by providing for a combination of uses and restoration activities. Resources with low resiliency and integrity are restored within a range of desired conditions to reduce risks associated with disturbance events. Resources resilient or resistant to disturbance receive custodial maintenance or no treatment over the short term. The full range of recreation experiences is available, but the emphasis is on primitive or semi-primitive settings and opportunities within roadless, wilderness, and recommended wilderness areas. Mechanical transport is prohibited in recommended wilderness areas.

Outside roadless and unroaded areas, this alternative addresses Need for Change similar to the Proposed Action. Resources with low resiliency and integrity are restored within a range of desired conditions to reduce risks associated with disturbance events. Resources resilient or resistant to disturbance receive custodial maintenance or no treatment over the short term.

Issues Used to Develop this Alternative

SWRA Issue 4: Compared to the Proposed Action, Alternative 6 reassigns all acres within Inventoried Roadless Areas from MPCs that allow full or low levels of development to MPCs that retain undeveloped and unroaded character (MPCs 1.2, 2.1-Wild, 2.2, and 4.1a). This reassignment fully addresses concerns pertaining to importance of retaining the remaining large blocks of undisturbed areas (i.e., IRAs) for ESA listed fish, as well as other native fish, as discussed in 1998 Biological Opinions for Bull Trout and Salmon/Steelhead and the Road Density Analysis Team (RDAT) assessment.

In addition, unroaded areas greater than 1,000 acres discussed in the RDAT assessment as having value to ESA listed fish species and other native species were assigned to MPC 4.1b. This assignment reduces the potential for development, and generally prohibits new road construction.

In addition, greater emphasis is placed on the importance of protecting RCAs and landslide-prone areas. Unlike the Proposed Action, Alternative 6 assumes all RCAs and high-risk landslide-prone areas within suited timberland MPCs, as well as MPCs 4.1c, 2.4, 3.2, 4.3 and 8.0, will be managed as if they were MPC 3.1 (see Appendix B, Modeling Assumptions for Landslide Prone Areas). Moderate landslide-prone areas are also assumed to have increased emphasis for watershed and aquatic resource restoration compared to the Proposed Action.

Finally, Alternative 6 increases the number of acres in MPCs with more restrictions on grazing practices by more than 220,000 acres compared to the Proposed Action. It is assumed that more acres in MPCs with greater restrictions on grazing practices will reduce the potential for temporary and short-term impacts to SWRA resources.

Terrestrial Wildlife Habitat Issue 1: Compared to the Proposed Action, Alternative 6 reassigns all acres within Inventoried Roadless Areas from MPCs that allow full or low levels of development to MPCs that retain undeveloped character. In addition, Alternative 6 minimizes development on unroaded areas greater than 1,000 acres. These MPC reassignments address concerns about the importance of retaining large blocks of undisturbed habitat with little or no road-related fragmentation for species such as gray wolf and lynx.

Terrestrial Wildlife Habitat Issue 2: Compared to the Proposed Action, Alternative 6 addresses habitat disruption and vulnerability by minimizing human activity through reassigning all acres within IRAs to MPCs (MPC 1.2 and 4.1a) that allow little or no development, minimizing development on unroaded areas greater than 1,000 acres, and reducing acres of MPCs 5.2 and 6.2 by nearly 290,000 acres. It is assumed that MPCs 5.2 and 6.2 have the greatest potential to result in road-related habitat disturbance.

Compared to the Proposed Action, which does not directly address disease transmission from domestic sheep to bighorn sheep, Alternative 6 removes over 80,000 acres from the suitable rangeland on the Payette and Sawtooth National Forests that have been identified as areas where bighorn sheep are at risk for disease transmission.

Vegetation Diversity Issue: Compared to the Proposed Action, Alternative 6 reassigns acres from MPCs (5.2 and 6.2) that promote commodity production, to active restoration MPCs designed to move vegetative conditions toward their HRV. It is assumed that ecosystems operating within their HRV have evolved with the influences of disturbances, such as insects, disease, and fire, and are therefore more likely to be resilient and diverse due to these influences.

Fire Management Issue 1: Compared to the Proposed Action, Alternative 6 reassigns nearly 2.3 million acres from MPCs that allow both fire and mechanical treatments to fire-only MPCs (1.2, 3.1, 4.1a, and 4.1b). This shift responds to the concern that "natural" processes (i.e., fire) should be the primary treatment option for responding to this Need for Change, especially within IRAs. Essentially, some respondents believe mechanical treatments cannot be used to mimic natural processes.

Inventoried Roadless Areas Issue 1: Unlike the Proposed Action, Alternative 6 assigns all acres (an estimated 3.24 million acres) within Inventoried Roadless Areas to MPCs that retain undeveloped and unroaded character. This reassignment provides the greatest assurance that these acres within IRAs will retain their roadless characteristics over the planning period.

Inventoried Roadless Areas Issue 4: Alternative 4 addresses the issue of mechanized use within recommended wilderness areas by including a standard prohibiting the use of mechanized equipment within recommended wilderness. This standard is not applied to the Proposed Action.

Management Prescriptions

Designated and Recommended Wilderness Areas comprise an estimated 25 percent of Ecogroup area. The other major management prescriptions under Alternative 6 (see Table 2-6, below) are:

4.1a - Undeveloped Recreation, Maintain Inventoried Roadless Areas (39 percent)
4.1b – Undeveloped Recreation, Maintain Undeveloped Character, Allow Salvage (14 percent)
5.1 - Restoration and Maintenance Emphasis within Forested Landscapes (9 percent)

Management prescriptions associated with suited timberlands (4.2, 5.1, 5.2, 6.1, 6.2) comprise 17 percent of the Ecogroup area. These MPCs represent the most likely areas where localized harvest and road-related activities would occur during the planning period.

Management prescriptions that emphasize restoration and maintenance of forested and non-forested vegetation (5.1, 6.1) comprise about 11 percent of the Ecogroup area Prescriptions that emphasize commodity production (5.2, 6.2) comprise about 5 percent of the area.

Management prescriptions that emphasize undeveloped recreation (4.1a, 4.1b, 4.1c) comprise an estimated 53 percent of the Ecogroup area, and 73 percent of that total is in MPC 4.1a, which emphasizes maintaining Inventoried Roadless Areas in an unroaded, undeveloped condition.

Management prescriptions that emphasize restoration or maintenance of aquatic, terrestrial, and watershed conditions comprise an estimated 4 percent of the Ecogroup area.

Recommended wilderness (MPC 1.2) is allocated to an estimated 10 percent of the Ecogroup area, the same as in the original Forest Plans.

The Secesh River, South Fork Salmon River, Big Creek, Monumental Creek, and French Creek are recommended for inclusion in the National Wild and Scenic Rivers System. The total recommended number of miles for all five rivers is 247. The Secesh River recommended classifications are Recreational for Segments 1 and 3, and Wild for Segment 2. The South Fork Salmon River, Big Creek, and Monumental Creek recommended classifications are Recreational for Segment 1 and wild for Segment 2. The French Creek recommended classifications are Wild for Segments 1, 2, and 3.

The following table shows acres of MPCs by Forest and for the entire Ecogroup under this alternative. See Alternative 6 Map, in the EIS map packet, for MPC spatial distribution. Acres are rounded off to the nearest thousand.

Table 2-6. Management Prescription Acres for Alternative 6

No.	Management Prescription Category	Acres Allocated by Forest			Ecogroup Acres
		Boise	Payette	Sawtooth	
1.1	Existing Wilderness*	0	768,000	218,000	986,000
1.2	Recommended Wilderness**	184,000	207,000	264,000	655,000
2.1	Wild and Scenic Rivers	0	4,000	0	4,000
2.2	Research Natural Areas	9,000	14,000	3,000	26,000
2.4	Boise Basin Experimental Forest**	8,000	0	0	8,000
3.1	Passive Restoration and Maintenance of Aquatic, Terrestrial, & Hydrologic Resources	7,000	15,000	9,000	31,000
3.2	Active Restoration and Maintenance of Aquatic, Terrestrial, & Hydrologic Resources	86,000	61,000	87,000	234,000
4.1a	Undeveloped Recreation – Maintain Inventoried Roadless Areas	917,000	690,000	962,000	2,569,000
4.1b	Undeveloped Recreation – Maintain Undeveloped Character, Allow Salvage	431,000	178,000	303,000	912,000
4.1c	Undeveloped Recreation – Maintain Undeveloped Character, Allow Restoration	0	3,000	41,000	44,000
4.2	Roaded Recreation Emphasis	38,000	17,000	47,000	102,000
4.3	Concentrated Recreation	0	0	1,000	1,000
5.1	Restoration and Maintenance Emphasis within Forested Landscapes	380,000	179,000	30,000	589,000
5.2	Commodity Production Emphasis within Forested Landscapes	105,000	130,000	0	235,000
6.1	Restoration and Maintenance Emphasis within Shrubland and Grassland Landscapes	2,000	25,000	100,000	127,000
6.2	Commodity Production Emphasis within Shrubland and Grassland Landscapes	38,000	0	46,000	84,000
8.0	Concentrated Development	0	0	0	0

*Only those acres for which an Ecogroup Forest has full administrative authority are shown in this table. Thus, acres are not included for the 64,000 acres of the Frank Church - River of No Return Wilderness within the proclaimed boundaries of the Boise NF but primarily administered by the Salmon/Challis NF, and the 29,000 acres of the Hells Canyon Wilderness within the proclaimed boundaries of the Payette NF but primarily administered by the Wallowa-Whitman Forest.

**Acres do not include RNA inclusions.

Alternative 7

Alternative 7 was developed between the Draft and Final EIS to address comments from a number of competing interests that favored, as well as disliked, various components of alternatives presented in the DEIS. Their comments included:

- Alternative 3 has a strong emphasis for restoration of terrestrial and aquatic habitat, but it does not provide adequate protection for Inventoried Roadless Areas. This alternative also unnecessarily restricts opportunities to support commodity interests for timber and rangelands, especially in already developed areas outside Inventoried Roadless Areas.

- Alternative 5 provides for commodity interests and hazardous fuel reductions, especially within interface areas, but does not balance this with the interest and need to restore aquatic and terrestrial habitat and vegetative diversity, nor does it provide a high level of protection to Inventoried Roadless Areas.

- Alternative 6 provides a high level of protection for Inventoried Roadless Areas, but does not balance this with the need to reduce fuel hazards, especially within interface areas. It also provides little opportunity for active restoration of terrestrial and aquatic habitats where degraded conditions require management intervention in order to be restored. In addition, providing a high degree of protection on nearly 1 million acres of unroaded areas 1,000 acres and greater, in addition to Inventoried Roadless Areas and designated wilderness that covers nearly 50 percent of the Ecogroup, does not balance the needs for commodity and motorized recreation interests. Finally, similar to concerns raised about Alternative 3, this alternative also unnecessarily restricts opportunities to support commodity interests for timber and rangelands, especially in developed areas outside Inventoried Roadless Areas.

To address these concerns, adjustments were made in how the Responsible Official responded to the issues that drove alternative development.

Issues Used to Develop this Alternative

SWRA Issues 3 and 4: Compared to the proposed action, Alternative 7 provides more emphasis on the conservation and restoration of soil, water, riparian and aquatic SWRA resources by increasing the number of acres across the Ecogroup in MPCs 3.1 and 3.2 by more than 680,000 acres. This is similar to the acre increase found in Alternative 3.

In addition, greater emphasis is placed on the importance of protecting RCAs and high-risk landslide-prone areas than the proposed action and Alternatives 3 or 5, but less than was provided in Alternative 6. Alternative 7 assumes all RCAs and high-risk landslide-prone areas within suited timberland MPCs will be managed as if they were MPC 3.2; and MPCs 2.4, 4.1c, 3.2, 4.3 will be managed as if they were MPC 3.1 (see Appendix B, Modeling Assumptions for Landslide-Prone Areas). Moderate landslide-prone areas are also assumed to have increased emphasis for restoration compared to the Proposed Action or Alternative 5. This emphasis on moderate landslide-prone areas is similar to the emphasis under Alternative 3.

Finally, the number of acres (an estimated 210,000 acres) in MPCs with more restrictions on grazing practices is similar to that provided under Alternative 3, which is more than provided under the proposed action or Alternative 5, but substantially less than provided in Alternative 6.

Terrestrial Wildlife Habitat Issue 1: Alternative 7 assigns most acres within Inventoried Roadless Areas to MPCs that allow low levels of development that would maintain the unroaded character. Compared to Alternative 6 MPC assignments, Alternative 7 minimizes the potential for development in much less of the unroaded areas greater than 1,000 acres; however, Alternative 7 does address this issue better than Alternative 5.

Terrestrial Wildlife Habitat Issue 2: Alternative 7 reduces the potential for habitat disruption and vulnerability by minimizing human activity through reassigning most acres within Inventoried Roadless Areas to MPCs that allow low development compared to the proposed action or Alternatives 3 or 5. However, more acres are assigned to MPC 5.2 outside Inventoried Roadless Areas than the proposed action, Alternative 3, or Alternative 6.

Alternative 7, like Alternatives 3 and 6, directly addresses disease transmission from domestic sheep to bighorn sheep by removing nearly 66,000 acres from suitable rangelands on the Sawtooth National Forest that have been identified as areas where bighorn sheep are at risk for disease transmission.

Vegetation Diversity Issue: Alternative 7 reassigns nearly 650,000 acres from MPCs (5.2 and 6.2) that promote commodity production, to MPCs that promote desired vegetative conditions believed to be within the HRV. This is more acres than for the proposed action or Alternatives 3 or 6, but less than assigned under Alternative 5. It is assumed that ecosystems operating within their HRV have evolved within the influences of disturbances, such as insects, disease, and fire, and are therefore more likely to be resilient and diverse because of these influences.

Vegetation Hazard Issue: Alternative 7 substantially increases acres in active vegetative restoration emphasis MPCs (3.2, 5.1, 6.1) compared to Alternatives 5 or 6, though the amount is less than in the proposed action or Alternative 3. It is assumed that ecosystems operating within their HRV have evolved within the influences of disturbances, such as insects, disease, and fire, and are therefore more likely to be resilient and diverse because of these influences

Fire Management Issue 1: Alternative 7 assigns less acres to fire-only MPCs (1.2, 3.1, 4.1a, 4.1b) compared to the proposed action or Alternative 6, but more acres than assigned in Alternatives 3 or 5. Alternative 7 attempts to balance the concerns of competing interests who believe either that fire should be allowed play its natural role, or that both mechanical and fire treatment options will be needed to effectively (in time and area) reduce fuels in a manner that is safe and minimizes impacts to air quality and other biophysical resources.

Fire Management Issue 2: Alternative 7 increases the percent of total interface subwatersheds with MPCs that allow both fire and mechanical options for fuel reduction over that found in the proposed action or Alternative 6, but reduces the percent compared to Alternatives 3 or 5; only

11 percent of the acres fall within fire-only MPCs. The assumption is the greater the percent of area in MPCs that allow both fire and mechanical treatments compared to those MPCs that allow only fire treatments; the greater the opportunity is to reduce hazardous vegetative conditions.

Inventoried Roadless Areas Issue 1: Alternative 7 substantially reduces the number of acres within Inventoried Roadless Areas assigned to MPCs that allow full development compared to the proposed action, Alternative 3, or Alternative 5. Total roadless acres on each Forest that have full development MPCs (2.4, 4.2, 4.3, 5.1, 5.2, 6.1, 6.2, 8.0) range from 1 to 9 percent. However, unlike Alternative 6—where all acres within Inventoried Roadless Areas have MPCs that retain undeveloped or unroaded character—Alternative 7 roadless acres have MPCs that allow low levels of development (MPCs 3.1, 3.2, 4.1b, 4.1c). Except 3.2, these MPCs prohibit or severely restrict new road construction. Although these MPCs do not remove all potential for development from vegetation treatments, they do provide a high level of protection for IRAs.

Inventoried Roadless Areas Issue 2: In Inventoried Roadless Areas having high or extreme ratings to uncharacteristic wildfire or resistance to control, Alternative 7 reduces the total acres of MPCs where both "treatments and access are limited" from the acres in the Proposed Action or Alternative 6. Generally, Alternative 7 provides for opportunities to reduce fuel hazards within Inventoried Roadless Areas where access is already available or not needed.

Socio-economic Environment Issue 1: To promote jobs and income related to timber resources, Alternative 7 assigned many high timber productivity areas outside IRAs to MPC 5.2. Though total suited timberlands are less than in the proposed action, Alternative 3, or Alternative 5, there are substantially more acres (up to 650,000) in MPC 5.2 that either the Proposed Action or Alternatives 3 and 6. Similarly, ASQ for Alternative 7 is more than for the Proposed Action, Alternative 3, or Alternative 6, but less than for Alternative 5.

To promote jobs and income related to livestock grazing, Alternative 7 attempts to balance competing interests by reducing the number of acres in MPCs with more restrictions on grazing practices compared to the Alternatives 3 or 6, but increasing them above the numbers for the proposed action or Alternative 5.

Management Prescriptions

Designated and Recommended Wilderness Areas comprise an estimated 25 percent of Ecogroup area. The other major management prescriptions under Alternative 7 (see Table 2-7, below) are:

4.1c - Undeveloped Recreation, Maintain Inventoried Roadless Areas, Allow Restoration (18 percent)
3.2 – Active Restoration and Maintenance of Aquatic, Terrestrial and Watershed Resources (13 percent)
5.1 - Restoration and Maintenance Emphasis within Forested Landscapes (12 percent)
5.2 - Commodity Production Emphasis within Forested Landscapes (10 percent)
3.1 – Passive Restoration and Maintenance of Aquatic, Terrestrial and Watershed Resources (10 percent)

Management prescriptions associated with suited timberlands (4.2, 5.1, 5.2, 6.1, 6.2) comprise 33 percent of the Ecogroup area. These MPCs represent the most likely areas where localized harvest and road-related activities would occur during the planning period.

Management prescriptions that emphasize restoration and maintenance of forested and non-forested vegetation (5.1, 6.1) comprise about 20 percent of the Ecogroup area Prescriptions that emphasize commodity production (5.2, 6.2) comprise about 10 percent of the area.

Management prescriptions that emphasize undeveloped recreation (4.1a, 4.1b, 4.1c) comprise an estimated 19 percent of the Ecogroup area, and 93 percent of that total is in MPC 4.1c, which would allow low levels of vegetation management activities.

Management prescriptions that emphasize restoration or maintenance of aquatic, terrestrial, and watershed conditions comprise an estimated 23 percent of the Ecogroup area, and these areas are fairly well distributed between active and passive management emphasis.

Recommended wilderness (MPC 1.2) is allocated to an estimated 10 percent of the Ecogroup area, the same as in the original Forest Plans.

The Secesh River and South Fork Salmon River are recommended for inclusion in the National Wild and Scenic Rivers System. The total recommended number of miles for both rivers is 138. The Secesh River recommended classifications are Recreational for Segments 1 and 3, and Wild for Segment 2. The South Fork Salmon River recommended classifications are Recreational for Segment 1 and Wild for Segment 2. Big Creek, Monumental Creek, and French Creek are not suitable for recommendation into the National Wild and Scenic Rivers System. They are managed under the 2002 revised Payette and Boise National Forest LRMP management direction and emphasis for the management areas in which they are located.

The following table shows acres of MPCs by Forest and for the entire Ecogroup under this alternative. See Alternative 7 Map, in the EIS map packet, for MPC spatial distribution. Acres are rounded off to the nearest thousand.

Table 2-7. Management Prescription Acres for Alternative 7

No.	Management Prescription Category	Acres Allocated by Forest			Ecogroup Acres
		Boise	Payette	Sawtooth	
1.1	Existing Wilderness*	0	768,000	218,000	986,000
1.2	Recommended Wilderness**	184,000	207,000	264,000	655,000
2.1	Wild and Scenic Rivers	0	4,000	0	4,000
2.2	Research Natural Areas	9,000	14,000	3,000	26,000
2.4	Boise Basin Experimental Forest**	8,000	0	0	8,000
3.1	Passive Restoration and Maintenance of Aquatic, Terrestrial, & Hydrologic Resources	126,000	401,000	119,000	646,000
3.2	Active Restoration and Maintenance of Aquatic, Terrestrial, & Hydrologic Resources	284,000	197,000	367,000	848,000
4.1a	Undeveloped Recreation – Maintain Inventoried Roadless Areas	28,000	56,000	0	84,000
4.1b	Undeveloped Recreation – Maintain Undeveloped Character, Allow Salvage	0	0	0	0
4.1c	Undeveloped Recreation – Maintain Undeveloped Character, Allow Restoration	567,000	135,000	483,000	1,185,000
4.2	Roaded Recreation Emphasis	31,000	18,000	162,000	211,000
4.3	Concentrated Recreation	0	0	2,000	2,000
5.1	Restoration and Maintenance Emphasis within Forested Landscapes	504,000	193,000	79,000	776,000
5.2	Commodity Production Emphasis within Forested Landscapes	400,000	247,000	0	647,000
6.1	Restoration and Maintenance Emphasis within Shrubland and Grassland Landscapes	64,000	50,000	415,000	529,000
6.2	Commodity Production Emphasis within Shrubland and Grassland Landscapes	0	0	0	0
8.0	Concentrated Development	0	0	0	0

*Only those acres for which an Ecogroup Forest has full administrative authority are shown in this table. Thus, acres are not included for the 64,000 acres of the Frank Church - River of No Return Wilderness within the proclaimed boundaries of the Boise NF but primarily administered by the Salmon/Challis NF, and the 29,000 acres of the Hells Canyon Wilderness within the proclaimed boundaries of the Payette NF but primarily administered by the Wallowa-Whitman Forest.

**Acres do not include RNA inclusions.

COMPARISON OF ALTERNATIVES

This section compares the alternatives described in detail in this chapter. Comparisons are made for management outcomes and activities, as well as for effects on issues and resources. See Chapters 1 and 3 for background on the issues and resources. See Chapter 3 for a complete description of effects and the scientific basis for these results.

Selected Outcomes and Activities by Alternative

Tables 2-8 through 2-11 compare selected (primarily vegetation management and road-related) activities and outcomes of the alternatives for the Boise, Payette, and Sawtooth National Forests, and for all three Ecogroup Forests combined. Numbers shown are annual estimates for the next decade. No outputs or activities are listed for mineral cases (locatable, leasable, common variety), land adjustments, special use permits, communication sites, or administrative facilities because these resources are determined on a case-by-case basis, depending on demand and need, and they would not vary by alternative. Similarly, Recreation Visitor Days and developed recreation sites are not expected to vary measurably by alternative. Capable rangeland and tentatively suited timberland acres are also not displayed because they do not vary by alternative. These acres are shown, however, in the Rangeland and Timberland Resources sections that appear later in this chapter.

Table 2-8. Summary of Selected Annual Estimated Outcomes and Activities by Alternative, Boise National Forest

Outcome or Activity	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Acres reserve tree clear cut	2,140	700	0	0	920	0	410
Acres reserve tree regeneration	1,570	0	0	0	620	0	850
Acres shelterwood	550	0	0	0	1,540	0	640
Acres irregular shelterwood	570	0	0	0	0	0	120
Acres selection cut	380	80	0	80	2,760	0	2,430
Acres commercial thinning	3,400	12,860	18,160	2,680	8,740	4,740	7,220
Total acres harvested	8,610	13,640	18,160	2,760	14,580	4,740	11,670
ASQ Volume (MMBF)	72.0	51.2	38.1	0.4	130.0	25.0	45.0
TSPQ Volume (MMBF)	72.3	70.0	61.3	16.0	130.0	27.6	66.3
Acres planted/site preparation	4,490	0	0	0	3,080	0	1,800
Acres precommercial thinning	330	720	810	0	1,010	440	590
Acres of fire use	9,090	16,870	12,700	28,280	4,970	27,440	14,150
Miles road construction	9.7	12.8	13.5	2.0	15.5	4.6	11.3
Miles road improvement	45.1	60.2	68.1	9.2	74.5	21.5	55.2
Miles road decommissioning	25.8	69.1	98.3	20.3	43.8	18.5	49.5
PNV at current budget level over 50 years (in millions $$)	$2,077	$1,399	$1,506	$40	$2,400	$201	$1,583

Table 2-9. Summary of Selected Annual Estimated Outcomes and Activities by Alternative, Payette National Forest

Outcome or Activity	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Acres reserve tree clear cut	380	90	130	0	830	0	200
Acres reserve tree regeneration	1,210	0	0	0	920	70	450
Acres shelterwood	980	0	0	0	930	0	550
Acres irregular shelterwood	30	0	0	0	0	0	0
Acres selection cut	480	530	20	0	1,200	690	1,720
Acres commercial thinning	1,910	5,800	9,970	2,060	3,580	1,960	2,870
Total acres harvested	4,990	6,420	10,120	2,060	7,460	2,720	5,790
ASQ Volume (MMBF)	60.0	19.3	23.8	0	111.3	16.1	32.5
TSPQ Volume (MMBF)	61.9	36.3	48.2	9.4	112.6	18.0	40.3
Acres planted/site preparation	2,340	330	0	0	2,370	70	760
Acres precommercial thinning	270	150	50	0	480	140	60
Acres of fire use	14,490	17,480	14,780	27,940	11,400	25,180	16,720
Miles road construction	11.4	13.0	15.0	2.9	16.7	0.4	12.0
Miles road improvement	40.4	46.4	55.6	10.2	58.5	13.2	42.7
Miles road decommissioning	14.0	30.1	59.1	15.5	22.4	9.8	22.7
PNV at current budget level over 50 years (in millions $$)	$1,988	$1,261	$1,713	$219	$2,556	$473	$1,684

Table 2-10. Summary of Selected Annual Estimated Outcomes and Activities by Alternative, Sawtooth National Forest

Outcome or Activity	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Acres reserve tree clear cut	500	190	0	0	0	0	480
Acres reserve tree regeneration	0	0	0	0	100	0	0
Acres shelterwood	0	0	0	0	0	0	0
Acres irregular shelterwood	0	0	0	0	320	0	0
Acres selection cut	20	40	20	0	0	40	0
Acres commercial thinning	240	2,220	2,620	530	800	230	1,790
Total acres harvested	760	2,450	2,640	530	1,220	270	2,270
ASQ Volume (MMBF)	15.8	9.8	6.1	0	48.3	0.4	11.7
TSPQ Volume (MMBF)	16.4	18.1	18.3	4.5	50.5	1.1	29.4
Acres planted/site preparation	560	0	0	0	220	0	0
Acres precommercial thinning	0	10	10	0	0	0	0
Acres of fire use	14,050	20,000	18,890	18,640	16,100	18,450	20,900
Miles road construction	0.7	0.8	0.8	0.2	1.6	0.1	0.5
Miles road improvement	2.6	4.8	5.1	1.3	5.5	0.6	4.6
Miles road decommissioning	2.2	10.4	11.3	2.6	4.3	1.1	5.8
PNV at current budget level over 50 years (in millions $$)	$187	$125	$137	-$98	$300	-$132	$225

Table 2-11. Summary of Selected Annual Estimated Outcomes and Activities by Alternative, All Three Ecogroup Forests Combined

Outcome or Activity	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Acres reserve tree clear cut	3,020	980	130	0	1,750	0	1,090
Acres reserve tree regen cut	2,780	0	0	0	1,640	70	1,300
Acres shelterwood	1,530	0	0	0	2,470	0	1,190
Acres irregular shelterwood	600	0	0	0	320	0	120
Acres selection cut	880	650	40	80	3,960	730	4,150
Acres commercial thinning	5,550	20,880	30,750	5,270	13,120	6,930	11,880
Total acres harvested	14,360	22,510	30,920	5,350	23,260	7,730	20,720
ASQ Volume (MMBF)	147.8	80.3	68.1	0.4	289.6	41.5	89.2
TSPQ Volume (MMBF)	150.6	124.4	127.8	29.9	293.1	46.7	136.0
Acres planted/site preparation	7,390	330	0	0	5,670	70	2,560
Acres precommercial thinning	600	880	870	0	1,490	580	650
Acres of fire use	38,430	54,350	46,370	74,860	32,470	71,070	51,770
Miles road construction	21.8	26.6	29.3	5.1	33.8	5.1	23.8
Miles road improvement	88.1	111.4	128.8	20.7	138.5	35.3	102.5
Miles road decommissioning	42.0	109.6	168.7	38.4	70.5	29.4	78.0
PNV at current budget level over 50 years (in millions $$)	$4,253	$2,786	$3,356	$162	$5,257	$542	$3,492

Comparison of Alternative Effects on Resource Issue and Indicators

This section summarizes effects from the alternatives on the issue-related resources, in the same order they are presented in Chapter 3. Please refer to Chapter 3 for a more comprehensive analysis of the potential direct, indirect, and cumulative effects of the alternatives.

The summaries are generally presented in three parts: (1) an issue statement, (2) indicators for each issue that were used to measure effects, and (3) a summary of the primary effects analysis that was completed for Chapter 3 by issue and indicator. Several resources have more than one issue, and two of the resources (Cultural Resources, Wilderness) do not have any indicators.

Air Quality and Smoke Management

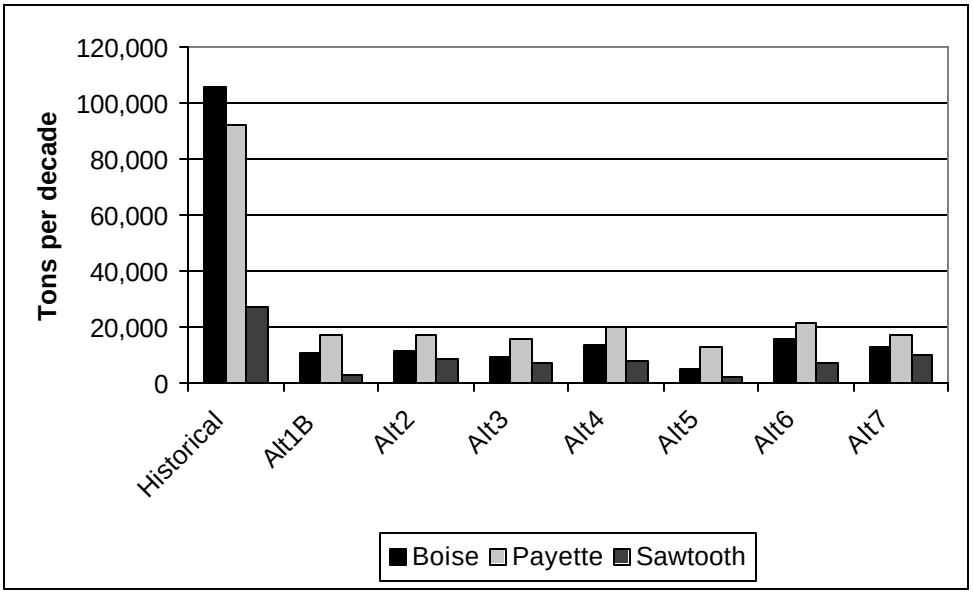
Issue Statement: Forest Plan management strategies may affect air quality based on the amount of smoke produced by fire use and wildfire.

Indicators: Estimated smoke emissions were used as an indicator of effects to air quality by comparing emissions for alternatives to historical (pre-settlement) emissions by Forest or Administrative Unit. This includes emissions generated from fire use or wildfire in forested and non-forested vegetative communities. The comparison units were derived from estimates of PM 10. PM 2.5 emissions were derived from the PM 10 estimates assuming approximately 85 percent of the coarse particulate matter (10) is made up of fine particulate matter (2.5) (Reinhardt et al. 1997).

Effects: Figure 2-1 displays the estimated tons per decade of historical PM 2.5 smoke emissions by Forest, and the average over the first 5 decades estimated for fire use by Forest, and by alternative. The levels for the Payette and Sawtooth include decadal projections of emissions from the Frank Church – River of No Return and Sawtooth Wildernesses based on their current Management Plans. Overall for the Ecogroup, no alternative produced even a quarter of the emissions that may have occurred historically (Figure 2-1). The closest was Alternative 6, which based on acres treated, burned about 20 percent of the historical acreage.

For all three Forests, Alternative 5 produced the least emissions. Alternative 6 produced the most on the Boise and Payette, and Alternative 7 produced the highest levels on the Sawtooth. The order of Alternatives on the Boise and Payette are the same. The Sawtooth exhibits a much different ranking due to the amount of area in non-forested communities (see Non-forested Vegetation results, below).

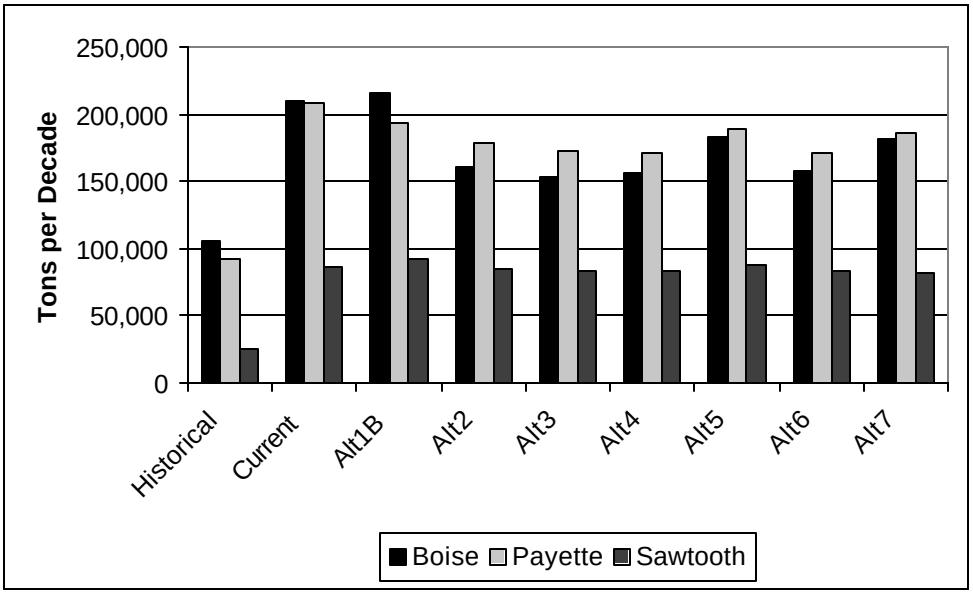
Figure 2-1. Average Estimated PM 2.5 Fire Emissions per Decade Historically and for Fire Use, by Alternative by Forest



Emissions produced historically are estimated to be less than the amount stored in hazardous vegetative conditions in forested communities (Figure 2-2). Currently, vegetative conditions are such that uncharacteristic wildfires could produce more than twice the PM 2.5 emissions produced historically. The uncharacteristic conditions on the Boise have the potential to produce smoke emissions that are about 2 times greater than historical levels (Figure 2-2). Potential emissions on the Payette and Sawtooth are about 2.3 and 2.7 times greater than historical, respectively.

Over the first five decades, all alternatives except 1B on all three Forests reduced the potential wildfire emissions from current levels (Figure 2-2). Reducing hazardous vegetative conditions was a modeling goal of all alternatives except 1B to represent National Fire Plan objectives. On the Boise, Alternative 3, followed by 4 and 6, reduced potential emissions the most compared to the current condition. For the Payette, Alternatives 4, 6, and 3 were the lowest compared to the current condition. On the Sawtooth, Alternative 7 produced the lowest potential wildfire emissions followed by 4. Alternatives 3 and 6, which were next lowest, were the same.

Figure 2-2. Potential PM 2.5 Emissions Stored in Hazardous Vegetative Conditions in Forested Vegetation for Alternatives by Forest

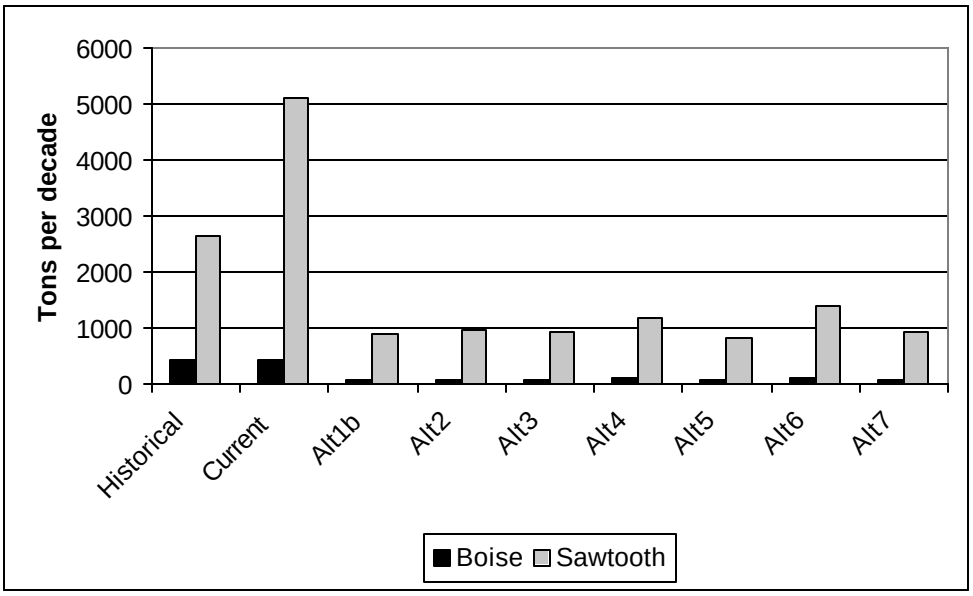


Non-forested Vegetation – Background and uncharacteristic wildfire were both represented in the VDDT modeling for the non-forested vegetation. There were not enough acres on the Payette to model so only the Boise and Sawtooth were included. Like the modeling done for the forested communities, the VDDT model was used to show how different combinations of vegetative treatments influence vegetative conditions, including hazard, and the potential affects these changes have on wildfire events. Based on recent historic (since 1950) wildfire data,

probabilities were developed and interjected to represent background and large-scale wildfires. These events were used for alternative comparison only; they do not represent a "best guess" of when future wildfires will occur. Rather they were used to display how changes in vegetative conditions produced by the different alternatives may influence wildfires.

Current potential emissions for the Boise are about the same as the estimated historical level; they are about two times the estimated level on the Sawtooth (Figure 2-3). Alternative 5 followed by 7 had the lowest modeled wildfire emissions over the 5-decade time period. Alternatives 4 and 6 were the highest. Alternatives 5, followed by 7, reduced the number of acres in the most hazardous vegetative conditions, while Alternatives 4 and 6 retained the most. acres in hazardous vegetative conditions.

Figure 2-3. Potential PM 2.5 Non-forested Wildfire Emissions from Background and Failed Fire Suppression for Alternatives by Forest



Soil, Water, Riparian, and Aquatic Resources

Issue Statement 1: Forest Plan management strategies may affect the loss of soil-hydrologic function and long-term soil productivity from uncharacteristically lethal wildfire within highly vulnerable subwatersheds.

Indicators for Issue 1: Alternative MPCs were overlaid on subwatersheds having both high or extreme uncharacteristic forest vegetation hazard and high vulnerability to compare how the alternatives may potentially affect the risk of uncharacteristically lethal wildfire in these areas.

Effects for Issue 1: Table 2-12 displays the number of highly vulnerable subwatersheds in the Ecogroup area with the potential for uncharacteristically lethal wildfire (high or extreme uncharacteristic wildfire hazard), and the number and percentage of these subwatersheds, by alternative, with MPCs with management emphasis for restoring uncharacteristic forest vegetation hazard toward the non-lethal forest vegetation conditions that historically occurred.

Table 2-12. Highly Vulnerable Subwatersheds With Uncharacteristic Lethal High and Extreme Fire Hazard and the Most Management Emphasis for Reducing that Hazard, by Alternative

Area	Highly Vulnerable Subwatersheds with High or Extreme Uncharacteristic Lethal Fire Hazard	Subwatersheds With Management Emphasis for Reducing Hazard						
		Alt 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Ecogroup Total	82	51	50	58	28	72	9	55
Percent With Mgt. Emphasis For Hazard Reduction		62%	61%	71%	34%	88%	11%	67%

Alternative 5 would have the most benefit in reducing uncharacteristic wildfire negative effects by emphasizing vegetation restoration treatments on 88 percent of the 82 highly vulnerable, high-risk subwatersheds. This restoration would help reduce the size, severity, and intensity of uncharacteristic wildfires, and associated risks and impacts to soil, water, and riparian resources. Alternatives 3, 7, 1B, and 2 would emphasize long-term risk reduction on well over half (71, 67, 62, and 61 percent, respectively) the subwatersheds with uncharacteristically lethal wildfire hazard. Alternatives 4 and 6 would emphasize vegetation restoration treatment on a much smaller percentage (34 and 11 percent, respectively) of the subwatersheds.

Issue Statement 2: Forest Plan management strategies may affect the number of subwatersheds considered at risk to post-wildfire floods and debris flows with potential effects to human life and property following uncharacteristically lethal wildfire.

Indicators for Issue 2: MPCs were overlaid on subwatersheds having a combination of high to extreme uncharacteristic vegetation hazards, high inherent vulnerability ratings, and potential risk to human life, property, and/or municipal supply watersheds from post-wildfire floods, landslides, and debris flows to compare how the alternatives may potentially affect the risk of uncharacteristically lethal wildfire in these areas.

Effects for Issue 2: Table 2-13 displays the effects of the alternatives on the highly vulnerable subwatersheds identified with post-wildfire floods and debris flows with potential effects to human life, property, and/or municipal supply watersheds.

Table 2-13. Highly Vulnerable Subwatersheds Considered at Risk to Post-wildfire Floods and Debris Flows That Have Management Emphasis for Reducing Post-wildfire Watershed Risks, by Alternative

Indicator	Alt 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Total highly vulnerable subwatersheds in Ecogroup with high or extreme risk of uncharacteristic lethal wildfire and post-wildfire watershed risks	27	27	27	27	27	27	27
Number of these subwatersheds with MPCs that would emphasize vegetation restoration treatments to reduce risks	21	22	23	14	27	5	23
Percent of subwatersheds with MPC treatment emphasis compared to total Ecogroup subwatersheds at risk	78%	81%	85%	52%	100%	19%	85%

Within the Ecogroup area, there are 27 highly vulnerable subwatersheds identified with the potential for post-wildfire floods and debris flows that could affect human life, property, and/or municipal supply watersheds. Alternative 5 has MPCs that would emphasize vegetation restoration on all of these subwatersheds, thereby reducing the post-wildfire risks to human life, property, and/or municipal watersheds in all these subwatersheds. Alternatives, 7, 3, 2, and 1B have MPCs that would emphasize vegetation treatments on a relatively high amount of these subwatersheds (85, 85, 81, and 78 percent, respectively). Alternative 4 has MPCs that would emphasize vegetation restoration treatments in a moderate amount (52 percent) of these subwatersheds. Alternative 6 has MPCs that would emphasize vegetation restoration treatments on a small amount (19 percent) of these subwatersheds, resulting in a fairly large number of subwatersheds that would remain at risk to post-wildfire floods and debris flows. Under Alternative 6, over 80 percent of the subwatersheds at risk would continue to pose a threat to human life, property, and/or municipal watersheds from uncharacteristically lethal wildfire.

Issue Statement 3: Forest Plan management strategies may have potential effects on soil productivity, accelerated soil erosion and sedimentation, water quality, riparian function, Total Maximum Daily Load (TMDL) water bodies, and listed Section 303(d) Water Quality Limited (WQL) water bodies.

Indicators for Issue 3: The following indicators are used to compare potential effects to soil, watershed, and riparian conditions from selected management activities that may occur at different amounts and intensities, based on the MPCs assigned by alternative.

Effects from Vegetation Treatments, Roads, and Fire Use. Potential effects to soil, water, and riparian resources are analyzed through relative comparison by alternative of: (1) acres of MPCs that have suited timberlands by subbasin, and (2) the Equivalent Replacement Treatment (ERT) acres that are greater or less than identified thresholds of concern (TOC).

Effects from Livestock Grazing. Potential effects to soil, water, and riparian resources are analyzed through relative comparison by alternative of: (1) the amount of suitable rangeland acres by subbasin, and (2) the acres of MPCs that would result in less restrictive and more restrictive grazing management by subbasin.

Effects from Watershed Restoration. The following indicators are used to compare the potential beneficial effects of watershed restoration or conservation strategies in improving soil, water, and riparian conditions to fully support beneficial uses and assist in the de-listing of TMDLs and 303(d) WQL water bodies.

- Comparison of subwatersheds identified as a high WARS priority or ACS that have 303(d) water quality limited water bodies, and MPCs that emphasize the appropriate restoration/conservation strategies to assist in attaining full support of beneficial uses, thereby assisting in the de-listing of those water bodies.

- Comparison of subwatersheds identified as a high WARS priority or ACS priority subwatersheds that have TMDLs assigned, and MPCs that emphasize the appropriate restoration/conservation strategies to meet the intent of the TMDL plans.

Effects from Motorized Trail Use. This indicator compares potential effects from motorized trail use in recommended wilderness areas by alternative. Alternatives 4 and 6 prohibit motorized use in these areas, but the other alternatives would allow current motorized use to continue.

Issue 3 Effects from Vegetation Treatments, Roads, and Fire Use – This issue is addressed in two parts, below: (1) suited timberland acres, and (2) ERT Acres Compared to Subbasin TOCs.

Suited Timberland Acres – Based on suited timberland acres assigned by MPC, Alternative 5 has the greatest potential for impacts from commercial timber harvest and associated road activities. This alternative is followed in descending order by Alternatives 1B, 2, 3, 7, 6 and 4 (Table 2-14). Suited acres vary considerably by alternative, from an estimated 2,801,563 in Alternative 5 to only 32,940 in Alternative 4. Alternatives that have more acres available for commercial harvest and associated road activities have a higher potential for temporary and short-term impacts to soil productivity, watershed condition, water quality and aquatic habitat. Alternative 5 proposes a substantial increase above the current condition, represented by Alternative 1B. All other

alternatives are substantially below Alternative 1B. Alternative 7 has roughly 750,000 fewer acres suited timber acres compared to Alternative 1B. Much of this difference occurs within the South Fork Salmon, Upper Salmon, and South Fork Payette subbasins. Acres of suited timberland acres by subbasin are provided in Chapter 3.

Table 2-14. Acres of Suited Timber Base within Ecogroup Subbasins, by Alternative

All Subbasins	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Totals	1,750,267	1,307,149	1,250,522	32,940	2,801,563	617,210	1,001,290

ERT Acres Compared to Subbasin TOCs - Most alternatives have ERT acres substantially below the TOC for each subbasin after both 20 and 50 years. Only the Hells Canyon, Upper Middle Fork Salmon, Upper Salmon and Goose Creek subbasins have ERT acres above the 100 percent TOC in select alternatives (Table 2-15).

Table 2-15. Percent of ERT Acres Relative to the Threshold of Concern (100) within Subbasins for the Ecogroup, by Alternative, After 20 and 50 Years

Subbasins Name	Alt. 1B		Alt. 2		Alt. 3		Alt. 4		Alt. 5		Alt. 6		Alt. 7	
	20 yrs.	50 yrs.	20 yrs.	50 yrs.	20 yrs.	50 yrs.	20 yrs.	50 yrs.	20 yrs.	50 yrs.	20 yrs.	50 yrs.	20 yrs.	50 yrs.
Northern Great Salt Lake	35	30	6	10	0	0	4	40	25	20	30	20	36	33
Curlew Valley	51	42	18	11	6	4	11	38	52	45	38	19	53	41
Lake Walcott	1	4	2	2	2	1	1	28	9	6	8	6	7	11
Raft	21	25	8	11	3	11	18	28	44	29	31	21	27	32
Goose	59	42	20	29	10	6	25	46	78	46	59	30	107	92
Upper Snake-Rock	23	22	16	10	11	6	34	49	23	15	39	19	28	49
Salmon Falls Creek	3	2	83	40	75	40	13	13	4	17	42	38	57	36
Big Wood	9	7	55	36	38	31	16	27	20	19	24	18	66	45
Camas Creek	9	13	11	14	8	7	9	26	15	16	19	18	30	28
Little Wood	6	7	34	32	30	30	13	27	20	21	25	21	53	44
C J Strike Reservoir	10	17	4	11	33	33	5	12	12	13	10	20	6	10
North and M. Fork Boise	38	37	21	28	19	23	18	24	26	31	20	24	34	36
Boise-Mores	36	38	18	31	18	22	18	26	33	37	16	26	26	40
South Fork Boise River	34	24	22	23	18	18	15	23	21	23	19	20	43	36
Lower Boise	68	56	19	29	16	25	36	31	58	48	31	32	24	29
South Fork Payette	64	56	35	34	33	31	31	28	49	47	40	33	62	51
Middle Fork Payette	93	77	41	38	39	34	38	32	76	67	47	37	68	63
Payette	63	58	64	43	48	38	30	22	52	48	46	34	72	58
North Fork Payette	63	57	69	47	46	35	38	26	56	45	50	33	79	56
Weiser River	35	36	25	22	22	18	22	20	30	34	31	26	37	38
Brownlee Reservoir	44	40	27	23	16	15	24	20	32	33	30	25	39	35
Hells Canyon	107	105	45	37	36	26	48	29	90	84	136	67	39	31
Upper Salmon	42	26	119	70	86	49	67	51	43	33	62	39	125	75
Upper Middle Fork Salmon	112	83	61	46	55	37	50	31	61	51	61	38	90	66
Lower Middle Fork Salmon	40	39	36	27	28	16	31	15	48	36	32	21	51	39

Subbasins Name	Alt. 1B		Alt. 2		Alt. 3		Alt. 4		Alt. 5		Alt. 6		Alt. 7	
	20 yrs.	50 yrs.	20 yrs.	50 yrs.	20 yrs.	50 yrs.	20 yrs.	50 yrs.	20 yrs.	50 yrs.	20 yrs.	50 yrs.	20 yrs.	50 yrs.
Middle Salmon-Chamberlain	61	45	33	30	23	18	32	23	57	44	82	46	46	36
South Fork Salmon	72	56	66	43	44	33	35	25	63	50	52	33	78	53
Lower Salmon	77	52	62	42	34	30	51	31	64	52	91	52	52	41
Little Salmon	58	45	43	30	32	20	29	18	50	38	42	25	44	33

The shaded boxes in Table SW-15 indicate alternatives and subbasins where the TOC could be exceeded based on MPC modeling assumptions. Actual treatment acres would depend on site-specific proposals, analysis, consultation, and mitigation, which would no doubt modify the numbers presented below. Because modeled ERT values exceed the threshold of concern (100 percent), the potential effects to soil, water, and riparian resources could be relatively high in the short term for Hells Canyon in Alternatives 1B and 6, Upper Middle Fork Salmon in Alternative 1B, Upper Salmon in Alternatives 2 and 7, and Goose Creek in Alternative 7.

Issue 3 Effects From Livestock Grazing - This issue is addressed in two parts, below: (1) suitable rangeland acres, and (2) Less Restrictive vs. More Restrictive Grazing Management.

Suitable Rangeland Acres – The percents of suitable rangeland acres are somewhat less under Alternatives 2, 3, 4, 6 and 7 across the Ecogroup area, as compared to the current forest plans, represented by Alternative 1B (Table 2-16). Alternative 5 is similar to Alternative 1B. For all alternatives, suitable rangeland acres are less than 20 percent of the total subbasin within 15 of the 29 subbasins. The Goose Creek, Little Wood River, Northern Great Salt Lake, Salmon Falls Creek, Raft River, and Upper Snake-Rock subbasins have the highest percentages of suitable rangelands for all alternatives.

Table 2-16. Percent of Suited Rangeland within Ecogroup Subbasins, by Alternative

Subbasin	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Big Wood River	20%	20%	20%	19%	20%	4%	20%
Boise-Mores	27%	26%	26%	26%	27%	26%	26%
Brownlee Reservoir	27%	27%	19%	19%	27%	19%	27%
C J Strike Reservoir	9%	9%	9%	9%	9%	9%	9%
Camas Creek	20%	20%	20%	19%	20%	4%	20%
Curlew Valley	6%	6%	6%	6%	6%	6%	6%
Goose Creek	67%	67%	47%	47%	67%	47%	47%
Hells Canyon	12%	12%	4%	4%	12%	0%	2%
Lake Walcott	17%	16%	16%	16%	17%	16%	16%
Little Salmon River	19%	19%	19%	19%	19%	19%	19%
Little Wood River	37%	37%	37%	37%	37%	37%	37%
Lower Boise	7%	7%	7%	7%	7%	7%	7%
Lower Middle Fork Salmon	0%	0%	0%	0%	0%	0%	0%
Lower Salmon	19%	19%	19%	19%	19%	19%	19%
Middle Fork Payette	24%	20%	20%	20%	24%	20%	20%
Middle Salmon-Chamberlain	1%	1%	1%	1%	1%	1%	1%

Subbasin	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Upper Snake-Rock	76%	76%	44%	44%	76%	38%	44%
North Fork Payette	11%	11%	11%	11%	11%	11%	11%
North and M. Fork Boise	22%	21%	21%	21%	22%	21%	21%
Northern Great Salt Lake	65%	65%	65%	65%	65%	65%	65%
Payette	32%	32%	32%	32%	32%	32%	32%
Raft River	38%	38%	38%	38%	38%	38%	38%
Salmon Falls Creek	80%	80%	80%	80%	80%	80%	80%
South Fork Boise River	22%	22%	22%	22%	22%	22%	22%
South Fork Payette	7%	4%	4%	4%	7%	4%	4%
South Fork Salmon	2%	2%	2%	2%	2%	2%	2%
Upper Middle Fork Salmon	1%	5%	5%	1%	5%	5%	1%
Upper Salmon	8%	8%	8%	8%	8%	8%	8%
Weiser River	32%	32%	32%	32%	32%	32%	32%

Less Restrictive vs. More Restrictive Grazing Management - Those alternatives and subbasins with less restrictive MPCs for grazing management have a greater potential for temporary and short-term impacts to the soil and water quality matrix pathways. In particular, the Brownlee Reservoir, Boise-Mores, Middle Fork Payette, North Fork and Middle Fork Boise, Payette, South Fork Boise, Weiser, Little Salmon, Lower Salmon, Raft River, Goose Creek, Upper Snake-Rock, Salmon Falls Creek, and Camas Creek subbasins could have more grazing impacts due to a higher percentage of the suited rangeland acres having less restrictive MPCs (Table 2-17).

Table 2-17. Percent of Less and More Restrictive Grazing Strategies within Ecogroup Subbasins, by Alternative

Subbasins	Alt. 1B		Alt. 2		Alt. 3		Alt. 4		Alt. 5		Alt. 6		Alt. 7	
	L	M	L	M	L	M	L	M	L	M	L	M	L	M
Big Wood River	90	10	76	24	76	24	34	76	100	0	35	65	80	20
Boise-Mores	100	0	95	5	87	13	90	10	96	4	96	4	95	5
Brownlee Reservoir	100	0	100	0	99	1	0	100	100	0	100	0	98	2
C J Strike Reservoir	100	0	100	0	100	0	100	0	100	0	100	0	100	0
Camas Creek	100	0	100	0	100	0	61	39	100	0	100	0	100	0
Curlew Valley	100	0	100	0	100	0	23	77	100	0	100	0	23	67
Goose Creek	100	0	94	6	93	7	40	60	100	0	93	7	88	12
Hells Canyon	100	0	99	1	98	2	97	3	100	0	55	45	98	2
Lake Walcott	100	0	100	0	100	0	100	0	100	0	100	0	100	0
Little Salmon River	97	3	88	12	49	51	18	82	84	16	89	11	58	42
Little Wood River	45	55	43	57	43	57	8	92	100	0	46	54	43	57
Lower Boise	100	0	100	0	100	0	100	0	100	0	100	0	100	0
Lower M. Fork Salmon	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lower Salmon	97	3	74	26	17	83	0	100	97	3	94	6	11	89
Middle Fork Payette	100	0	94	6	94	6	51	49	100	0	100	0	100	0
M. Salmon-Chamberlain	39	61	100	0	93	7	0	100	100	0	100	0	54	46
Upper Snake-Rock	100	0	100	0	100	0	92	8	100	0	100	0	100	0
North Fork Payette	79	21	78	22	48	52	8	82	100	0	78	22	52	48
N. and M. Fork Boise	83	17	82	18	68	32	13	87	93	7	88	12	78	22

Subbasins	Alt. 1B		Alt. 2		Alt. 3		Alt. 4		Alt. 5		Alt. 6		Alt. 7	
	L	M	L	M	L	M	L	M	L	M	L	M	L	M
N. Great Salt Lake	100	0	100	0	100	0	100	0	100	0	100	0	56	44
Payette	100	0	100	0	100	0	51	49	100	0	100	0	100	0
Raft River	100	0	100	0	100	0	49	51	100	0	96	4	78	22
Salmon Falls Creek	100	0	100	0	100	0	92	8	100	0	100	0	100	0
S. Fork Boise River	100	0	95	5	89	11	29	71	100	0	99	1	94	6
South Fork Payette	76	24	94	6	93	7	27	73	100	0	94	6	89	11
South Fork Salmon	79	21	40	60	1	99	0	100	85	15	62	38	8	92
Upper M. Fork Salmon	88	12	18	82	0	100	0	100	100	0	53	47	0	100
Upper Salmon	78	22	10	90	1	99	16	84	100	0	42	58	1	99
Weiser River	79	21	100	0	100	0	0	100	100	0	100	0	52	48

L = Less restrictive grazing management strategies; M = More restrictive grazing management strategies

Issue 3 Effects From Appropriate Restoration for 303(d) WQL Water Bodies - Alternative 3 has MPCs that emphasize the most appropriate restoration and conservation in 45 percent of the high priority subwatersheds identified by the WARS (Table 2-18). The Alternative 3 percentage is followed in descending order by Alternatives 7, 2, 6, 4, 1B, and 5.

Table 2-18. Percent of Subwatersheds with High Priority 303(d) Water Quality Limited Water Bodies Receiving Most Appropriate Restoration or Conservation Emphasis or Identified as an ACS Priority Subwatershed, by Alternative

303(d) Water Quality Limited Water Bodies	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Ecogroup Total	12%	42%	45%	27%	7%	30%	43%

Regardless of the restoration/conservation MPCs and how they were applied, all subwatersheds with listed 303(d) water bodies would receive special emphasis to improve watershed conditions through Forest-wide and Management Area direction in the revised Forest Plans, which applies to all action alternatives. This emphasis, coupled with Forest-wide, Management Area, and MPC standards and guidelines designed to protect SWRA resources, should make great strides in improving water quality conditions. Potential impacts from roads, degraded riparian conditions, poor habitat access, and unstable stream channels should decrease as restoration is implemented. Restoration would assist in de-listing these water bodies and achieving measures needed for these watersheds to fully support their beneficial uses.

Issue 3 Effects From Appropriate Restoration for TMDLs - Currently there are six subbasins partially or wholly within the Ecogroup with TMDLs approved or waiting approval by the Environmental Protection Agency. Alternative 3 has MPCs that emphasize the most appropriate restoration or conservation in 32 percent of the high priority subwatersheds identified by the WARS for the Ecogroup area (Table 2-19). The Alternative 3 percentage is followed in descending order by Alternatives 7 (25 percent), 2 and 4 (21 percent), 6 (19 percent), and 1B and 5 (7 percent).

Table 2-19. Percent of High Priority TMDL Subwatersheds Receiving Appropriate Restoration or Conservation Emphasis or Identified as an ACS Priority Subwatershed within Subbasins Within the Ecogroup, by Alternative

Total Maximum Daily Loads	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Ecogroup Total	7%	21%	32%	21%	7%	19%	25%

Regardless of the restoration/conservation MPCs and how they were applied, all subbasins with a TMDL assigned would receive special emphasis to implement the TMDL plans through Forest-wide and Management Area direction in the revised Forest Plans, which applies to all action alternatives. This emphasis, coupled with Forest-wide, Management Area, and MPC standards and guidelines designed to protect SWRA resources, should make great strides in improving water quality conditions. Potential impacts from roads, degraded riparian conditions, poor habitat access, and unstable stream channels should decrease as restoration is implemented. Restoration would assist in achieving the measures identified in the TMDLs and moving these watersheds to fully support their beneficial uses.

Issue 3 Effects From Motorized Trail Use - Trails currently open to motorized use would be prohibited within recommended wildernesses under Alternatives 4 and 6. Under Alternative 4, an estimated 1,316 miles of motorized trail could be affected. The South Fork Salmon and South Fork Boise subbasins both have over 200 miles of motorized trails in recommended wilderness areas. The Big Wood, Little Salmon, Middle Fork Payette, South Fork Payette, and Upper Salmon subbasins have between 80-120 miles of motorized trails. The Brownlee Reservoir, Lower Salmon, North and Middle Fork Boise, North Fork Payette, and Weiser subbasins have between 40-70 miles. Nine other subbasins have minor amounts of motorized trails in recommended wilderness under Alternative 4. Under Alternative 6, an estimated 216 miles of motorized trail in recommended wilderness could be affected. The South Fork Salmon, Upper Salmon, and the South Fork Payette subbasins have between 40-70 miles of motorized trails. Five other subbasins have minor amounts of motorized trails.

Where these trails are within RCAs in the subbasins noted above, reduced motorized use is likely to reduce sediment delivery and improve streambank stability. These effects would assist in improving soil-hydrologic function, water quality, and riparian functions and ecological processes. Similar benefits would likely occur, although to a slighter extent, in subbasins with lesser amounts of prohibited motorized trail use.

All current motorized trails would remain open under Alternatives 1B, 2, 3, 5, and 7. Effects to aquatic species and SWRA resources would be similar under these Alternatives. Trail use would not be concentrated, but localized impacts to riparian vegetation and stream channels near crossings would be anticipated. Management direction would help to minimize most potential impacts under all alternatives. However, impacts to riparian vegetation and streambanks from authorized and unauthorized ATV use may still occur from increased trail use.

Issue Statement 4: Forest Plan management strategies may have potential effects on aquatic habitat and species, including species that are listed or proposed for listing under the Endangered Species Act, Region 4 sensitive species, species at risk, and Forest Management Indicator Species.

Indicators for Issue 4: The following indicators are used to measure potential impacts to aquatic habitat conditions from selected management activities that may occur at different amounts and intensities, based on the MPCs assigned by alternative.

Potential Effects from Vegetation Treatments, Roads, and Fire Use. This indicator compares the amount of suited timberland acres by subbasin, and the percentage of ERT acres with thresholds of concern (TOC) in subbasins for selected fish species by alternative. Those alternatives and subbasins with a higher amount of suited acres and ERT acres that exceed the TOCs would have greater potential for temporary and short-term impacts to matrix pathways.

Potential Effects from Livestock Grazing. This indicator compares the percent of suitable rangeland acres, and the percent of each subbasin with MPCs that allow less restrictive and more restrictive grazing management strategies, by alternative. Those alternatives and subbasins with a higher amount of suitable rangeland acres and MPCs with less restrictive grazing strategies would have a greater potential for temporary and short-term impacts to matrix pathways.

Potential Effects From Wildfire Vs. Treatments to Reduce Wildfire Hazard. Potential effects to listed, sensitive, and special concern fish species were analyzed by comparing the MPCs that have a high emphasis and more tools available to treat subwatersheds with high and extreme risks from uncharacteristic wildfire, to MPCs that have a limited emphasis and fewer tools available. This information was overlaid with the population status (e.g. strong, depressed, and isolated populations) of cutthroat, bull, and steelhead trout, Wood River sculpin, and chinook salmon to examine risks to those populations of treating vs. not treating vegetation. Specifically, the following scenarios were analyzed:

- Potential impacts and benefits from management treatments in subwatersheds with uncharacteristic wildfire risks and depressed/isolated fish populations were assessed by subbasin. Under this condition, the risk of uncharacteristic wildfire in short term is greater than the risk of mechanical and prescribed fire to treat vegetation in some situation where depressed or isolated local fish populations are present.

- Potential effects from the lack of management treatments in subwatersheds with uncharacteristic wildfire risks and depressed/isolated populations were assessed by subbasin. Under this condition, the risks from uncharacteristic wildfires would remain high, potentially putting some depressed or isolated local fish populations at greater risk.

- Potential effects from management treatments in subwatersheds with uncharacteristic wildfire risks and stronghold fish populations were assessed by subbasin. Under this condition, the risks of mechanical and prescribed fire treatments are greater than the risk of uncharacteristic wildfire where strong populations are present.

Potential Effects from Aquatic Restoration. This indicator is used to compare the potential beneficial effects of applying the appropriate active or passive watershed and aquatic habitat restoration or conservation strategies in improving aquatic habitat conditions and the status of TES, MIS, and fish species of special concern. It is also used to compare the potential negative effects from the delays in restoration to TES, MIS, and fish species of special concern in high-risk subwatersheds. Specifically, the following scenarios were analyzed:

- Comparison of subwatersheds identified as a high WARS priority or ACS and MPCs that emphasize the appropriate restoration/conservation strategies. Those alternatives and subwatersheds with the appropriate or "good match" active restoration or passive restoration/conversation would have greater potential for improvement of fish habitat and populations over the long term.

- Comparison of subwatersheds identified as a high WARS priority or ACS that have stronghold and depressed populations for sockeye and chinook salmon, and steelhead trout, and MPCs that emphasize the appropriate or "good match" active restoration or passive restoration/conservation of habitat and interconnectivity.

- Comparison of subwatersheds identified as a high WARS priority or ACS that have stronghold, depressed, and isolated local populations for native westslope and Yellowstone cutthroat and bull trout, and MPCs that emphasize the appropriate or "good match" active restoration or passive restoration/conservation of habitat and interconnectivity.

- Comparison of subwatersheds identified as a high WARS priority or ACS that have stronghold, depressed, and isolated local populations for Wood River sculpin, and MPCs that emphasize the appropriate or "good match" active restoration or passive restoration/conservation of habitat and interconnectivity.

- Comparison of subwatersheds that have strong fish populations (chinook, steelhead, etc.) in high-risk (low Geomorphic Integrity and Water Quality Integrity) subwatersheds, with high or moderate priority for active restoration (WARS), but having a low MPC emphasis for active restoration.

Potential Effects from Motorized Trail Use. This indicator compares the potential effects from motorized trail use in recommended wilderness areas. Alternatives 4 and 6 prohibit motorized use in these areas, but the other alternatives would allow current motorized use to continue.

Effects are presented by fish species, below.

Effects to Sockeye Salmon:
Effects from Suited Timberland Acres – Based on suited acres assigned by MPCs within the Sockeye Salmon ESU, Alternatives 5 (178, 545 acres) and 1B (113,446 acres) have the greatest potential for impacts from commercial timber harvest and associated road activities. These

alternatives have a higher potential for temporary and short-term impacts to identified matrix pathways (water quality, habitat condition, etc.) and to sockeye salmon. The remaining alternatives have no more than 1,018 suited acres (less than 1 percent of the subbasin) within the Sockeye ESU, which means they have a very low potential for timber and road-related impacts.

Effects from ERT Acres Compared to Subbasin TOCs - Alternatives that would have the highest ERT percentages over the short term (20 years) in the ESU subbasin are, in descending order: 7, 2, 3, 4, 6, 5 and 1B, and Alternatives 2 and 7 could exceed the 100 percent TOC. Over the long term (50 years), the highest percentages would occur, in descending order, for Alternatives 7, 2, 4, 3, 6, 5, and 1B; however no alternative would exceed the subbasin TOC.

Effects from Suitable Rangeland Acres - Suitable rangeland acres are the same for all alternatives, 41,367 acres, or 8 percent of the Ecogroup area in the ESU subbasin.

Effects from Less Restrictive Vs. More Restrictive Grazing Management – For the ESU subbasin, Alternatives 3 and 7 has the highest (99) percent of More Restrictive MPCs, followed in descending order by Alternatives 2, 4, 6, 1B, and 5.

Effects from Wildfire Vs. Treatments to Reduce Wildfire Hazard - There are no subwatersheds identified at high risk from uncharacteristic wildfires in the Ecogroup portion of the Upper Salmon subbasin. Migratory corridors along the Salmon River are also not at high risk because only a few subwatersheds, far upstream of the Salmon River, are at high risk.

Effects from Aquatic Restoration - Alternatives 3, 2, 7, and 6 have MPCs that emphasize the most appropriate restoration and conservation in 85, 78, 73, and 58 percent of the high priority subwatersheds, respectively, identified by the WARS for the ESU subbasin. Alternatives 1B, 4, and 5 have MPCs that emphasize the appropriate restoration and conservation in only 18, 18, and 13 percent of the high priority subwatersheds, respectively,

Effects from Aquatic Restoration in Subwatersheds with Strong and Depressed Populations - There are no stronghold sockeye subpopulations in the Upper Salmon subbasin, so there would be no potential effects to this indicator under any alternative. Four subwatersheds in the Upper Salmon subbasin are occupied for spawning and rearing by depressed sockeye subpopulations. Alternatives 2, 3, 6 and 7 have MPCs that emphasize the appropriate restoration recommended by the WARS in all the subwatersheds containing depressed sockeye subpopulations.

Effects from Motorized Trail Use - The affected area would have the least potential impacts from motorized trail use under Alternatives 4 and 6, which prohibit this use. Motorized trails would be open under the remaining alternatives, and effects to aquatic species would be similar. Trail use would not be concentrated, but localized impacts to riparian vegetation and stream channels near crossings would be anticipated.

Effects to Spring/Summer Chinook Salmon:

Effects from Suited Timberland Acres – Based on suited timberland acres assigned by MPCs, Alternatives 5 (932,119 acres) and 1B (496,731) have the greatest potential for impacts from commercial timber harvest and associated road activities. Alternatives 3 (135,885 acres), 2,

(108,445 acres), and 7 (98,642 acres) would have a moderate potential, and Alternative 6 (51, 443 acres) would have a low potential for impacts. Alternative 4 (0 acres) would have no potential for impacts from timber harvest and associated road activities.

Effects from ERT Acres Compared to Subbasin TOCs – No exceedence of TOC would occur in five out of eight ESU subbasins. Hells Canyon subbasin could exceed the 100 percent TOC in Alternative 1B (20 and 50 years), and Alternative 6 (20 years). Hells Canyon lands managed by the Ecogroup comprise only 3 percent of the subbasin; therefore, any impacts would be localized and pose little risk to chinook. Upper Middle Fork Salmon subbasin could exceed the TOC in Alternative 1B after 20 years. Upper Salmon subbasin could exceed TOC in Alternative 2 after 20 years, and in Alternative 7 after 20 years. Potential effects to chinook salmon and critical habitat could be high in the short term in these subbasins under these alternatives.

Effects from Suitable Rangeland Acres – Suitable rangeland acres are slightly less under Alternatives 3, 4, 6 and 7 in the spring/summer chinook ESU from the current forest plans, represented by Alternative 1B. Alternatives 2 and 5 are the same as 1B, or 6 percent suitable rangeland acres across the ESU. Potential impacts to the ESU from grazing would generally be very low at these levels.

Effects from Less Restrictive vs. More Restrictive Grazing Management - For the entire ESU, Alternative 4 has the highest (88) percent of More Restrictive MPCs, followed in descending order by Alternatives 3, 7, 2, 6, 1B, and 5.

Effects from Wildfire vs. Managing Wildfire Hazard in Subwatersheds with Depressed Populations – Based on MPC emphasis, treatments to reduce uncharacteristic wildfire risks could occur in 75 percent of all subwatersheds with depressed chinook populations in the ESU under Alternative 5. Alternative 5 would be followed in descending order by Alternatives 3 (53 percent), 7 and 1B (45 percent), 2 (38 percent), 6 (13 percent), and 4 (5 percent).

Effects from Wildfire vs. Managing Wildfire Hazard in Subwatersheds with Strong Populations - Based on MPC emphasis, treatments to reduce uncharacteristic wildfire risks would occur in all (100 percent) of the chinook strongholds in the ESU under Alternative 7. Alternatives 1B, 2, 3, and 5 would have MPCs that would emphasize treatments in two thirds of the strongholds. Alternative 6 would emphasize treatment in one third of the strongholds, and Alternative 4 would not emphasize treatment in any strongholds.

Effects from Aquatic Restoration - Alternatives 2, 3, 7, and 6 have MPCs that emphasize the appropriate restoration or conservation in 71, 70, 68, and 58 percent, respectively, of the high priority subwatersheds identified by the WARS. Alternatives 4, 1B, and 5 have MPCs that emphasize the appropriate restoration and conservation in 47, 44, and 34 percent, respectively, of the high priority subwatersheds.

Effects from Aquatic Restoration in Subwatersheds with Strong and Depressed Populations – For chinook strongholds, Alternative 3 has MPCs that emphasize the appropriate restoration or conservation recommended by the WARS in the highest percent (90) of subwatersheds, followed in descending order by Alternatives 2 (80 percent), 6 and 7 (70 percent), 4 (50 percent), 1B (40

percent), and 5 (0 percent). Alternative 2 has the highest percentage (71) of subwatersheds with depressed chinook populations and MPCs that emphasize the appropriate restoration or conservation strategies, followed in descending order by Alternatives 3 and 7 (69 percent), 6 (59 percent), 4 (47 percent), 1B (43 percent), and 5 (37 percent).

Effects from Motorized Trail Use – Effects are the same as described for Sockeye Salmon above.

Effects to Fall Chinook Salmon:

Effects from Suited Timberland Acres – Based on suited acres assigned by MPCs, Alternative 5 (71,873 acres) would have the greatest potential for impacts from commercial timber harvest and road-related activities, followed in descending order by Alternatives 3 (15,650 acres), 1B (14,885 acres), 7 (8,529 acres), 2 (4,040 acres), 6 (3,705 acres), and 4 (0 acres).

Effects from ERT Acres Compared to Subbasin TOCs – No exceedence of TOC would occur in five of the seven alternatives. Hells Canyon subbasin could exceed the 100 percent TOC in Alternative 1B (20 and 50 years), and Alternative 6 (20 years). Hells Canyon lands managed by the Ecogroup comprise only 3 percent of the subbasin; therefore, any impacts would be localized and pose little risk to chinook.

Effects from Suitable Rangeland Acres – Suitable rangeland acres are slightly less under Alternatives 3, 4, 6 and 7 in the fall chinook ESU from the current forest plans, represented by Alternative 1B. Alternatives 2 and 5 are the same as 1B, or 18 percent suitable rangeland acres across the ESU. Potential impacts to the ESU would generally be low at these levels.

Effects from Less Restrictive vs. More Restrictive Grazing Management - For the entire ESU, Alternative 4 has the highest (93) percent of More Restrictive MPCs, followed in descending order by Alternatives 7 (83 percent), 3 (77 percent), 2 (24 percent), 6 (5 percent), 1B and 5 (3 percent).

Effects from Wildfire vs. Managing Wildfire Hazard in Subwatersheds with Depressed Populations – Based on MPC emphasis, treatments to reduce uncharacteristic wildfire risks could occur in 100 percent of all subwatersheds with depressed chinook populations in the ESU under Alternatives 2, 3, 4, 5, and 7. Alternatives 1B and 6 have MPCs that would not emphasize treatment in any (0 percent) of the subwatersheds.

Effects from Wildfire vs. Managing Wildfire Hazard in Subwatersheds with Strong Populations - There are no stronghold fall chinook subpopulations within lands administered by the Ecogroup.

Effects from Aquatic Restoration - Alternative 2 has MPCs that emphasize the appropriate restoration or conservation in 56 percent of the high priority subwatersheds identified by the WARS for the entire ESU. Alternatives 1B, 3, 4, 6, and 7 would have the appropriate emphasis in 33 percent of the high priority subwatersheds. Alternative 5 would not emphasize restoration in any of the subwatersheds.

Effects from Aquatic Restoration in Subwatersheds with Strong and Depressed Populations – There are no stronghold fall chinook subpopulations within lands administered by the Ecogroup. No alternative would emphasize restoration in any of the subwatersheds with depressed populations of fall chinook.

Effects from Motorized Trail Use - Effects are the same as described for Sockeye Salmon above.

Effects to Steelhead:
Effects from Suited Timberland Acres – Effects to steelhead are the same as those described for spring/summer chinook salmon.

Effects from ERT Acres Compared to Subbasin TOCs - Effects to steelhead are the same as those described for spring/summer chinook salmon.

Effects from Suitable Rangeland Acres – Effects to steelhead are the same as those described for spring/summer chinook salmon.

Effects from Less Restrictive vs. More Restrictive Grazing Management - Effects to steelhead are the same as those described for spring/summer chinook salmon.

Effects from Wildfire vs. Managing Wildfire Hazard in Subwatersheds with Depressed Populations – Based on MPC emphasis, treatments to reduce uncharacteristic wildfire risks could occur in 75 percent of all subwatersheds with depressed steelhead populations in the ESU under Alternative 5. Alternative 5 would be followed in descending order by Alternatives 3 (49 percent), 7 and 1B (47 percent), 2 (40 percent), 6 (13 percent), and 4 (4 percent).

Effects from Wildfire vs. Managing Wildfire Hazard in Subwatersheds with Strong Populations - Based on MPC emphasis, treatments to reduce uncharacteristic wildfire risks would occur in all (100 percent) of the steelhead strongholds in the ESU under Alternatives 3 and 5. Alternatives 2 and 6 would have MPCs that would emphasize treatments in one third of the strongholds. Alternatives 1B, 4, and 7 would not emphasize treatments in any strongholds.

Effects from Aquatic Restoration – Effects to steelhead trout are the same as those described for spring/summer chinook salmon.

Effects from Aquatic Restoration in Subwatersheds with Strong and Depressed Populations – For steelhead strongholds, Alternative 3 has MPCs that emphasize the appropriate restoration or conservation recommended by the WARS in the highest percent (100) of subwatersheds, followed in descending order by Alternatives 2 and 6 (75 percent), 1B, 4, and 7 (50 percent), and 5 (0 percent). Alternative 2 has the highest percentage (71) of subwatersheds with depressed populations and MPCs that emphasize the appropriate restoration or conservation strategies, followed in descending order by Alternatives 3 and 7 (69 percent), 6 (59 percent), 4 (47 percent), 1B (43 percent), and 5 (35 percent).

Effects from Motorized Trail Use - Effects are the same as described for Sockeye Salmon above.

Effects to Bull Trout:
Effects from Suited Timberland Acres – Based on suited acres assigned by MPCs, Alternative 5 (2,510,948 acres) would have the greatest potential for impacts from commercial timber harvest and road-related activities, followed in descending order by Alternatives 1B (1,545,630 acres), 2 (1,178,797 acres), 3 (1,093,122 acres), 7 (895,813 acres), 6 (590,296 acres), and 4 (9,115 acres).

Effects from ERT Acres Compared to Subbasin TOCs - No exceedence of TOC would occur in two out of the four recovery units (Brownlee and Southwest Idaho). Hells Canyon recovery unit could exceed the 100 percent TOC in Alternative 1B (20 and 50 years), and Alternative 6 (20 years). Hells Canyon lands managed by the Ecogroup comprise only 3 percent of the unit; therefore, any impacts would be localized and pose little risk to bull trout. In the Salmon River recovery unit, Upper Middle Fork Salmon subbasin could exceed the TOC in Alternative 1B after 20 years. The Upper Salmon subbasin could exceed TOC in Alternative 2 after 20 years, and in Alternative 7 after 20 years. Potential effects to bull trout and critical habitat could be high in the short term in these subbasins under these alternatives.

Effects from Suitable Rangeland Acres – Suitable rangeland acres are slightly less under Alternatives 2, 3, 4, 6 and 7 in all recovery units from the current forest plans, represented by Alternative 1B. Alternative and 5 is the same as 1B, or 13 percent suitable range land acres across all recovery units. Potential impacts to the units would generally be low at these levels.

Effects from Less Restrictive vs. More Restrictive Grazing Management - For all recovery units, Alternative 4 has the highest (69) percent of More Restrictive MPCs, followed in descending order by Alternatives 3 (24 percent), 7 (23 percent), 2 (14 percent), 1B (10 percent), 6 (9 percent), and 5 (3 percent).

Effects from Wildfire vs. Managing Wildfire Hazard in Subwatersheds with Depressed Populations – Based on MPC emphasis, treatments to reduce uncharacteristic wildfire risks could occur in 80 percent of subwatersheds with depressed populations across all recovery units under Alternative 5. Alternative 5 is followed in descending order by Alternatives 3 (62 percent), 7 (58 percent), 1B (54 percent), 2 (50 percent), 4 (22 percent), and 6 (16 percent).

Effects from Wildfire vs. Managing Wildfire Hazard in Subwatersheds with Strong Populations - Based on MPC emphasis, treatments to reduce uncharacteristic wildfire risks would occur in all (100 percent) of the strongholds in the ESU under Alternatives 3, 5, and 7. Alternative 4 would have MPCs that would emphasize treatments in one third of the strongholds, while Alternatives 1B, 2, and 6 would not emphasize treatments in any strongholds.

Effects from Aquatic Restoration - Alternative 3 has MPCs that emphasize the appropriate restoration or conservation in 61 percent of the high priority subwatersheds identified by the WARS across all recovery units. Alternatives 2 and 7 follow with 59 percent of the high priority subwatersheds, then Alternative 6 with 50 percent, Alternative 4 with 48 percent, Alternative 1B with 37 percent, and Alternative 5 with 29 percent of the high priority subwatersheds.

Effects from Aquatic Restoration in Subwatersheds with Strong and Depressed Populations – For strongholds, Alternative 7 has MPCs that emphasize the appropriate restoration or conservation recommended by the WARS in the highest percent (65) of subwatersheds across all recovery units, followed in descending order by Alternatives 2 (62 percent), 3 and 4 (59 percent), 6 (53 percent), 1B (41 percent), and 5 (35 percent). Alternative 2 has the highest percentage (63) of subwatersheds with depressed populations and MPCs that emphasize the appropriate restoration or conservation strategies. Alternative 2 is followed in descending order by Alternatives 3 (62 percent), 7 (60 percent), 6 (51 percent), 4 (50 percent), 1B (39 percent), and 5 (30 percent).

Effects from Motorized Trail Use - Effects are the same as described for Sockeye Salmon above.

Effects to Native Westslope Cutthroat Trout:
Effects from Suited Timberland Acres – Based on suited timberland acres assigned by MPCs, Alternative 5 (926,154 acres) would have the greatest potential for impacts from commercial timber harvest and road-related activities across all westslope subbasins in the Ecogroup area, followed in descending order by Alternatives 1B (496,164 acres), 3 (135,885 acres), 2 (108,445 acres), 7 (98,078 acres), 6 (51,443 acres), and 4 (0 acres).

Effects from ERT Acres Compared to Subbasin TOCs - No exceedence of TOC would occur in five of the seven westslope subbasins. Upper Middle Fork Salmon subbasin could exceed the TOC in Alternative 1B after 20 years. Upper Salmon subbasin could exceed TOC in Alternative 2 after 20 years, and in Alternative 7 after 20 years. Potential effects to chinook salmon and critical habitat could be high in the short term in these subbasins under these alternatives.

Effects from Suitable Rangeland Acres – Suitable rangeland acres for Alternatives 1B, 4, and 7 comprise an estimated 4 percent of all the westslope subbasins. For Alternatives 2, 3, 5, and 6 they comprise an estimated 5 percent of all the subbasins. Potential impacts to the subbasins from grazing would generally be very low at these levels.

Effects from Less Restrictive vs. More Restrictive Grazing Management - For all the westslope subbasins combined, Alternative 4 has the highest (88) percent of More Restrictive MPCs, followed in descending order by Alternatives 3 (83 percent), 7 (77 percent), 2 (53 percent), 6 (34 percent), 1B (15 percent), and 5 (7 percent).

Effects from Wildfire vs. Managing Wildfire Hazard in Subwatersheds with Depressed Populations – Based on MPC emphasis, treatments to reduce uncharacteristic wildfire risks could occur in 69 percent of subwatersheds with depressed populations across all subbasins under Alternative 5. Alternative 5 is followed in descending order by Alternatives 1B (46 percent), 3 and 7 (40 percent), 2 (34 percent), 6 (17 percent), and 4 (3 percent).

Effects from Wildfire vs. Managing Wildfire Hazard in Subwatersheds with Strong Populations - There are currently no stronghold subwatersheds with westslope cutthroat populations that are at high risk from uncharacteristic wildfires within the Ecogroup, so there would be no potential effects to this indicator under any alternative.

Effects from Aquatic Restoration - Alternative 2 has MPCs that emphasize the appropriate restoration or conservation in 71 percent of the high priority subwatersheds identified by the WARS across all westslope subbasins. Alternative 3 follows with 70 percent of the high priority subwatersheds, then Alternative 7 with 68 percent, Alternative 6 with 59 percent, Alternative 4 with 48 percent, Alternative 1B with 43 percent, and Alternative 5 with 34 percent.

Effects from Aquatic Restoration in Subwatersheds with Strong and Depressed Populations – All alternatives would have MPCs that emphasize the appropriate restoration or conservation recommended by the WARS in two of the three stronghold subwatersheds that occur within the Ecogroup area. Alternative 2 has the highest percentage (70) of subwatersheds with depressed populations and MPCs that emphasize the appropriate restoration or conservation strategies, followed in descending order by Alternatives 3 (69 percent), 7 (68 percent), 6 (57 percent), 4 (45 percent), 1B (40 percent), and 5 (34 percent).

Effects from Motorized Trail Use - Effects are the same as described for Sockeye Salmon above.

Effects to Native Wood River Sculpin:

Effects from Suited Timberland Acres – Based on suited timberland acres assigned by MPCs, Alternative 5 (193,146 acres) would have the greatest potential for impacts from commercial timber harvest and road-related activities across in the Wood River sculpin subbasins in the Ecogroup area, followed in descending order by Alternatives 1B (126,998 acres), 3 (82,880 acres), 2 (53,034 acres), 7 (42,689 acres), 6 (6,989 acres), and 4 (451 acres).

Effects from ERT Acres Compared to Subbasin TOCs - No exceedence of TOC would occur in any of the Wood River sculpin subbasins after 20 or 50 years. Potential effects from ERT acres would be relatively low in all subbasins.

Effects from Suitable Rangeland Acres – Suitable rangeland acres are the same for all alternatives (23 percent of all subbasins), with the exception of Alternative 6, which is only 11 percent. Suitable rangeland acres range from 20 to 37 percent in many of subbasins and thus have a higher potential for grazing impacts than the acres for the listed species analyzed above.

Effects from Less Restrictive vs. More Restrictive Grazing Management - For all the westslope subbasins combined, Alternative 4 has the highest (73) percent of More Restrictive MPCs, followed in descending order by Alternatives 2 and 3 (29 percent), 7 (26 percent), 6 (21 percent), 1B (20 percent), and 5 (0 percent).

Effects from Wildfire vs. Managing Wildfire Hazard in Subwatersheds with Depressed Populations – Based on MPC emphasis, treatments to reduce uncharacteristic wildfire risks could occur in 100 percent of subwatersheds with depressed populations in two Wood River sculpin subbasins under Alternative 5. Alternative 5 would be followed in descending order by Alternatives 3 and 7 (57 percent), 2 (50 percent), 1B (36 percent), 6 (14 percent), and 4 (7 percent).

Effects from Wildfire vs. Managing Wildfire Hazard in Subwatersheds with Strong Populations - There are currently no subwatersheds with strong sculpin populations within the Ecogroup, so there would be no potential effects to this indicator under any alternative.

Effects from Aquatic Restoration - No alternative has MPCs that emphasize the appropriate restoration or conservation strategy to high priority subwatersheds identified by the WARS in subbasins that contain Wood River sculpin.

Effects from Aquatic Restoration in Subwatersheds with Strong and Depressed Populations – There are currently no subwatersheds with strong sculpin populations within the Ecogroup, so there would be no potential effects to this indicator under any alternative. No alternative has MPCs that emphasize the appropriate restoration or conservation strategy to high priority subwatersheds identified by the WARS in subbasins that contain Wood River sculpin.

Effects from Motorized Trail Use - Effects are the same as described for Sockeye Salmon above.

Effects to Native Yellowstone Cutthroat Trout:
Effects from Suited Timberland Acres – Based on suited timberland acres assigned by MPCs, Alternative 5 (69,915 acres) would have the greatest potential for impacts from commercial timber harvest and road-related activities across all Yellowstone cutthroat subbasins in the Ecogroup area, followed in descending order by Alternatives 1B (54,185 acres), 2 (51,914 acres), 3 (51,696 acres), 7 (45,345 acres), 4 (15,259 acres), and 6 (12,226 acres).

Effects from ERT Acres Compared to Subbasin TOCs - No exceedence of TOC would occur in two of the three Yellowstone cutthroat subbasins. The Goose Creek subbasin could exceed TOC in Alternative 7 after 20 years. Potential effects to Yellowstone cutthroat and critical habitat could be high in the short term in this subbasin under this alternative.

Effects from Suitable Rangeland Acres – Suitable rangeland acres for Alternatives 1B, 2, and 5 comprise an estimated 57 percent of all the Yellowstone cutthroat subbasins. For Alternatives 3, 4, and 7 they comprise an estimated 43 percent of all the subbasins, and suitable acres comprise an estimated 42 percent of the subbasins under Alternative 6. Potential impacts from grazing could be relatively high at these levels, compared to the fish species analyzed above.

Effects from Less Restrictive vs. More Restrictive Grazing Management - For all the Yellowstone cutthroat subbasins combined, Alternative 4 has the highest (46) percent of More Restrictive MPCs, followed in descending order by Alternatives 7 (10 percent), 2 and 6 (3 percent), 3 (2 percent), and 1B and 5 (0 percent).

Effects from Wildfire vs. Managing Wildfire Hazard in Subwatersheds with Depressed Populations – All alternatives, with the exception of Alternative 6, have the potential to aggressively treat all subwatersheds where depressed Yellowstone cutthroat populations occur within the Ecogroup. Alternatives 6 potentially could treat 29 percent of the subwatersheds with depressed Yellowstone cutthroat populations.

Effects from Wildfire vs. Managing Wildfire Hazard in Subwatersheds with Strong Populations - All alternatives, with the exception of Alternative 6, have the potential to aggressively treat all subwatersheds where strong Yellowstone cutthroat populations occur within the Ecogroup. Alternative 6 has MPCs that would not emphasize treatment in any of the subwatersheds.

Effects from Aquatic Restoration - Alternative 7 has MPCs that emphasize the appropriate restoration or conservation in 17 percent of the high priority subwatersheds identified by the WARS across all Yellowstone cutthroat subbasins. Alternative 4 follows with 9 percent of the high priority subwatersheds, then Alternatives 2, 3, and 6 with 4 percent, and then Alternatives 1B and 5 with 0 percent.

Effects from Aquatic Restoration in Subwatersheds with Strong and Depressed Populations – For subwatersheds with strong populations, Alternative 7 has the highest percentage (27) with MPCs that emphasize the appropriate restoration or conservation strategies, followed in descending order by Alternatives 4 (18 percent), 2, 3, and 6 (9 percent), and 1B and 5 (0 percent). Alternative 7 has the highest percentage (67) of subwatersheds with depressed populations and MPCs that emphasize the appropriate restoration or conservation strategies, followed in descending order by Alternatives 2, 3, and 6 (17 percent), and then 1B, 4, and 5 (0 percent).

Effects from Motorized Trail Use - Effects are the same as described for Sockeye Salmon above.

Terrestrial Wildlife Habitat and Species

Issue Statement 1: Forest Plan management strategies may affect habitat for terrestrial wildlife species, including species that are listed or proposed for listing under the Endangered Species Act, Region 4 sensitive species, species of special interest, species at risk, and Forest Management Indicator Species.

Indicator for Issue 1: Effects to most species in this analysis are measured by changes to habitat and habitat trends.

Effects on Bald Eagle Habitat: Bald eagle nesting, perching, roosting, and wintering sites tend to be in riparian areas near large bodies of water. Riparian area protection would be provided by management direction under all alternatives. This direction would include a general reduction in vegetation-disturbance activities from past levels, along with goals to maintain or restore large trees where possible for other resource needs, such as shade, bank stabilization, and pool habitat recruitment. These large trees would also provide nesting, perching, and roosting habitat for bald eagles over the short and long term, in both existing and potential eagle territories. Improved riparian and aquatic resource management direction under all alternatives should also help maintain or restore fish populations for bald eagles over the short and long term.

Effects on Northern Idaho Ground Squirrel Habitat: All alternatives would follow the direction and intent of the conservation strategy or recovery plan. All action alternatives have Forest-wide and management area direction to restore ground squirrel habitat over the short and long term. Based on MPC allocations, the alternatives that would have the most effective prescriptions to help restore and maintain ground squirrel habitat are, in descending order, Alternatives 3, 4, 7, 5, 6, 2, and 1B.

Effects on Canada Lynx Habitat: All alternatives would need to meet the intent of the standards specified in the 2000 Lynx Conservation Assessment and Strategy developed to help recover this species. Alternative 4 would have the best mix of management prescriptions to maintain lynx habitat over the long term, followed in order by Alternatives 6, 3, 7, 2, 5, and 1B. Overall, MPCs 3.2 and 5.1 would likely provide the best mix of emphasis and tools for actively restoring or maintaining lynx and snowshoe hare foraging habitat over the short term. Overall, Alternative 3 would provide these MPCs across the largest extent of the Ecogroup area, followed in descending order by Alternatives 2, 7, 5, 4, 1B, and 6.

Effects on Yellow-billed Cuckoo Habitat: The key component for yellow-billed cuckoo habitat is extensive riparian cottonwood forest areas. Riparian area protection within RCAs/RHCAs would be provided by management direction under all alternatives. This direction would likely result in a general reduction in vegetation-disturbance activities from past levels, and include goals and objectives to maintain or restore cottonwood riparian systems where possible for resource needs, such as shade, bank stabilization, and pool habitat.

Effects on Peregrine Falcon Habitat: Most potential management activities would do little if anything to affect nesting habitat, which consists typically of cliffs in natural environments. Open stands created through fire or vegetation management would likely increase foraging areas

for peregrines, a positive effect for this species. Alternatives 5, 1B, 2, 7, and 3 would actively create more openings over the short term than Alternatives 6 and 4. At the present stage of recovery, however, effects on the peregrine from habitat changes for prey species within the Ecogroup area would likely be insignificant.

Effects on White-Headed Woodpecker Habitat: This species habitat would benefit from increasing the extent of large ponderosa pine and reducing tree densities. Alternatives that have a restoration and fire use emphasis, such as Alternative 3, benefit this species, because thinning and non-lethal fire use reduces tree densities. Over the next five decades, the most white-headed woodpecker habitat occurs under Alternative 3, followed by Alternatives 4, 2, 6, 7, 5, and 1B.

Effects on Fisher Habitat: Key components for fisher habitat are forested riparian areas, mature to old forests (PVGs 3, 4, 6, 7, 8, 9, 10, and 11) with moderate moisture conditions, and snags and coarse woody debris. All alternatives show an improving trend in habitat for this species. Over the next five decades, the most fisher habitat would occur under Alternative 4, followed in descending order by Alternatives 6 and 3, 2, 5, 7, and 1B.

Effects on Boreal Owl Habitat: Boreal owls inhabit mid- to higher-elevation forests that are capable of growing large-diameter trees. Snags and down logs are also necessary habitat attributes. All alternatives show an improving trend in habitat for this species after the first decade. Over the next five decades, the most boreal owl habitat would occur under Alternative 4, followed in descending order by Alternatives 6, 2, 7, 5, 3, and 1B.

Effects on Great Gray Owl Habitat: The habitat components considered most important for this species are: a) mature or older open forest habitat to provide suitable nesting sites; and b) suitable foraging habitat that includes non-stocked and seedling forests, meadows, and open riparian habitats adjacent to forested vegetation in PVGs 9, 10, and 11. All alternatives show an improving trend in habitat for this species after the first decade. Over the next five decades, the most great gray owl habitat would occur under Alternative 4, followed in descending order by Alternatives 6, 7, 2, 3, 5, and 1B.

Effects on Flammulated Owl Habitat: Flammulated owls use lower-elevation forested areas that contain large ponderosa pine, Douglas-fir, and aspen trees of moderate densities, along with large snags for nesting. Over the next five decades, the most flammulated owl habitat would occur under Alternative 3, and Alternatives 2, 4, 6, and 7 would have similar but somewhat lesser amounts than 3. Alternatives 1B and 5 display the slowest rate of improvement, with 1B showing a decrease in habitat after the third decade.

Effects on Northern Three-toed Woodpecker Habitat: These woodpeckers take advantage of areas with extensive tree mortality and can be thought of as opportunists when these conditions occur. All alternatives show an improving trend in habitat for this species after the first decade. Over the next five decades, the most northern three-toed woodpecker habitat would occur under Alternative 4, followed in descending order by Alternatives 6 and 3, 7, 2, and 5 and 1B.

Effects on Northern Goshawk Habitat: Goshawks use all forest types within the Ecogroup area, and they select nesting sites that usually have larger trees available compared to surrounding areas, and an abundant prey base. All alternatives show an improving long-term trend in habitat for this species as a result of increasing the amount of large tree structure. Differences in the amounts of habitat over the next five decades for all alternatives are minor.

Effects on Columbia Sharp-tailed Grouse Habitat: In the past some mountain shrub communities were converted and seeded to non-native grasses to increase forage for livestock. Due to the importance of these habitats to sharp-tailed grouse and other species, these types of actions would no longer occur due to revised management direction under the action alternatives. The continued emphasis of Alternative 1B on production of livestock forage could result in additional areas being converted to non-native grasses and the maintenance of non-native seedings in areas already converted.

Effects on Mountain Quail Habitat: It is estimated that very little if any development or management activities would occur in mountain quail habitat under any alternative. Riparian areas would be protected from overgrazing and other management-related disturbances under all alternatives through Forest Plan RCA/RHCA direction. Therefore, all alternatives would have little or no adverse impacts on mountain quail habitat, and would likely improve habitat conditions over the short and long term.

Effects on Harlequin Duck Habitat: Riparian area protection for RCAs/RHCAs provided by Forest Plan direction would maintain or restore riparian habitat conditions under all alternatives. Therefore, all alternatives would have a beneficial effect on this species, and provide for continued migration to and from nesting areas.

Effects on Spotted Bat: Spotted bats roost in crevices of high cliffs and forage in sagebrush shrub and low-elevation forest. No potential management actions under any alternative would modify high cliff roosting areas for this species. The action alternatives have revised management direction to maintain or restore native shrublands to desired conditions. The emphasis of Alternative 1B on production of livestock forage would not emphasize maintenance or restoration of native shrublands.

Effects on Spotted Frog Habitat: Habitat conditions are expected to improve under all alternatives. The Forest Service will follow legal direction (Executive Order 11190) that mandates that wetlands not be destroyed or negatively affected. For all alternatives, riparian area management direction provides additional protection to habitat for this species.

Effects on Common Loon Habitat: No alternative would influence the birds ability to pass through the area to their nesting and wintering areas elsewhere. Riparian area protection provided by Forest-wide direction would maintain or restore riparian habitat conditions under all alternatives. Therefore, all alternatives would have a beneficial effect on this species, and provide for continued migration opportunities.

Effects on Snowshoe Hare Habitat: Snowshoe hares inhabit boreal forest (high elevation) and dense riparian willow areas, and are important to management because they are the primary winter prey for Canada lynx. See effects on lynx habitat, above.

Effects on Sage Grouse Habitat: The desired conditions for sagebrush provided in the revised Forest Plans for the action alternatives should contribute to habitat maintenance or improvement for this sagebrush-obligate species. The revised Plans also provide Management Area direction to address situations where wildfire has created a concern for this species. Because of the emphasis on production of livestock forage, sagebrush communities may continue to decline under Alternative 1B.

Effects on Pileated Woodpecker Habitat: This species uses mature forests with moderate to high tree densities and canopy closures, and well-developed understories with snags and down wood for nesting and feeding sites. Over the next five decades, habitat extent decreases with all alternatives after the third decade, then increases after the fourth decade. Alternative 1B has a lower management requirement for the extent of desired large tree structure than the other alternatives; thus this alternative produces the least amount of habitat. The reduction in habitat for the third decade is likely a result of the conversion of multi-storied stands to single-storied stands. This reduction is not a concern in the Ecogroup area because it is estimated that extent of source habitat for this species in ERU 13 has increased from historic times by 21 percent.

Issue Statement 2: Forest Plan alternatives and direction may affect disruption, vulnerability, and disease risk to terrestrial wildlife species.

Indicator 1 for Issue 2: The risk of human-related disruption to wide-ranging carnivores and other species.

Effects on Gray Wolf: Wolves are most vulnerable to disturbance when denning and rearing pups. Forest-wide management direction has been designed to allow wolf pairs to establish dens and packs on the Forest if they choose to do so, under the protection of the Experimental/Non-essential population rule (USDI Fish and Wildlife Service 1994). Activities that disrupt wolves during denning and pup rearing are prohibited during the spring denning and rearing period under all alternatives until six breeding pairs are obtained.

Wolf interaction with humans is perhaps most influenced by human accessibility to remote habitats. Under all alternatives, the amount of roads across the Ecogroup is expected to decrease over the short term (10-15 years), although small amounts of new road construction would also occur. Based on proposed vegetation management opportunities, Alternative 3 reduces roads the most, followed by Alternatives 2, 7, 4, 5, 1B, and 6.

Another way to assess inaccessibility is to calculate the amount of acres that would be generally regarded as roadless under each alternative. Alternative 6 has the most areas without roads, followed by Alternatives 4, 7, 1B, 2, 3, and 5. For all alternatives, areas without roads represent a substantial percentage of the Ecogroup area; however, Alternative 6 would have four times as much roadless area as Alternative 5.

Effects on Bald Eagle: Forest-wide direction has been specifically developed to protect bald eagle nesting and wintering areas from disturbance on National Forest System lands under all action alternatives. This direction would help reduce disturbance to bald eagles during critical periods and therefore have beneficial effects to eagle populations over the short and long term.

Effects on Peregrine Falcon: All alternatives prohibit activities within occupied peregrine nesting zones that adversely affect use and productivity of nest sites during the nesting period. Potential management activities under all alternatives would do little if anything to disturb nesting habitat, which consists typically of cliffs in natural environments.

Effects on Wolverine: Specific habitat needs are not as important to this species as reducing human disturbance, particularly in natal den sites during the denning period. Management direction proposed under the action alternatives prohibits activities within occupied wolverine denning areas that disturb or harass wolverines during denning periods, generally from February 1 to May 15. For reducing road-related disturbance, Alternative 6 provides the largest amount of area without roads, followed by Alternatives 4, 7, 1B, 2, 3, and 5. Alternative 3 would reduce the greatest amount of existing roads, followed by Alternatives 2, 7, 4, 5, 1B, and 6.

Effects on Spotted and Townsend's Big-eared Bats: Forest-wide direction under the action alternatives has been added for surveying and protecting bat hibernacula. If bats were detected, actions would be taken to protect these sites from disturbance. Alternative 1B does not address identification or protection of bat hibernacula and therefore could pose a greater risk to spotted and Townsend's big-eared bats.

Indicator 2 for Issue 2: Road densities related to road construction and decommissioning, and roadless areas.

Effects on Rocky Mountain Elk and Population Objectives: Access management in selected locations to restrict motorized travel during the hunting season is occurring on all three Forests to help meet state elk objectives. Access management is currently conducted through agreements with state agencies, and these are expected to continue.

It is assumed that alternatives with the least road development or that maintain the current access management, would provide the security to allow elk to stay at current population levels within game management units. As discussed under the Gray Wolf and Wolverine above, all alternatives show an overall reduction in road miles over the short term. The most reduction occurs under Alternative 3, followed by Alternatives 2, 7, 4, 5, 1B, and 6. Additionally, Alternative 6 provides the most areas without roads, followed by Alternatives 4, 7, 1B, 2, 3, and 5. These roadless areas would provide large undisturbed security areas for elk, and make hunting elk in those areas more challenging.

Indicator 3 for Issue 2: Acres of suitable domestic sheep range within bighorn sheep habitat.

Effects on Bighorn Sheep: Alternatives that reduce suitability for domestic sheep grazing in the disease risk areas would be most beneficial to bighorn sheep. Alternatives 3, 4, and 6 reduce domestic sheep suitability in two areas totaling 81,835 acres (see *Rangeland Resources* section, Acres Deducted Due to Bighorn Sheep Habitat), and Alternative 7 would reduce suitability in one area (66,506 acres). Alternative 1B and 5 would not reduce any acres of suitability.

Botanical Resources

Issue Statement: Forest Plan management strategies may affect Threatened, Endangered, Proposed, Candidate, Sensitive (TEPCS) and watch plant species populations and habitats.

Indicators: The indicators used to measure potential adverse effects on TEPCS plants and their habitats include the following activities or conditions that would occur to some extent under all management alternatives: (1) fire (wildfire and prescribed burning), (2) livestock grazing (herbivory, trampling, and associated impacts), (3) recreation, (4) mechanical treatments associated with vegetation management, and (5) noxious weed establishment and spread.

Effects: All potential effects from the indicators would be largely reduced by site-specific inventory, analysis, and mitigation, as well as by improved Forest Plan management direction and monitoring programs. Therefore, it is unlikely that proposed activities under any alternative would adversely affect Threatened, Endangered, Proposed or Candidate species, or contribute to the listing of Sensitive or watch species. However, potential impacts to species' habitats do vary by alternative and are summarized below for the different categories of species analyzed.

T**hreatened Species** - *Mirabilis macfarlanei* (Macfarlane's four-o'clock)**:** This species is not known to occur within the Ecogroup area, and potential habitat for *Mirabilis macfarlanei* exists only along the Snake River on the Payette National Forest. The potential for moderate to high impacts to all grassland species exists for all alternatives. Alternative 5 poses the highest risk to the potential habitat for *M. macfarlanei,* due to a high proportion of the potential habitat area assigned to MPCs 5.2 and 6.1. Alternative 4 would have the least potential impact to its potential habitat, and Alternatives 6 and 7 would have low potential. The remaining alternatives would have moderate potential impacts to the potential habitat of this species.

T**hreatened Species** - *Spiranthes diluvialis* (Ute ladies'-tresses orchid)**:** This species is not known to occur within the Ecogroup area, but potential habitat for *Spiranthes diluvialis* exists on all three National Forests. For all alternatives, there is potential for moderate to high levels of impact to potential habitat of this species, with Alternative 5 posing the highest risk and Alternative 6 the lowest risk. However, *S. diluvialis* habitat occurs in riparian areas within RCAs/RHCAs. Within these areas, management emphasis for any Proposed Action is to achieve riparian and aquatic objectives. Therefore, only those actions that would benefit riparian resources over the long term are permitted, and impacts to *S. diluvialis* habitat may be minimal.

Threatened Species - *Silene spaldingii* (Spalding's catchfly)**:** This species is not known to occur within the Ecogroup area, and potential habitat for *Silene spaldingii* only exists along the Snake River and in Salmon River canyon grasslands on the Payette National Forest. While all alternatives pose moderate to high level impacts to the potential habitat of *S. spaldingii,* Alternative 5 poses the greatest potential impacts based on the high proportion of the potential habitat area assigned to MPCs 5.2, 5.1, 6.1, and 6.2. These MPCs have high potential risks from noxious weed and exotic species invasion, mechanical effects, and livestock use.

Candidate Species - *Castilleja christii* (Christ's Indian paintbrush): Only one population is known globally, and it occurs on the Sawtooth National Forest. Off-road vehicles are currently the greatest threat to this species, followed by trampling from hikers and cattle and incidental cattle grazing. Of the total population, 23 percent (90 acres) occurs in the Mount Harrison Research Natural Area, which falls under MPC 2.2. The management emphasis for RNAs does not change by alternative. Timber harvesting, road building, grazing, and mining are restricted under this MPC, thus reducing the overall potential impacts to this portion of the population. The remaining portion (77 percent), however, may be adversely affected by management activities that vary by alternative. Alternatives 1B and 5 would pose the greatest potential impacts to this population due to MPCs 4.1, 4.2, and 6.2. Alternatives 2, 3, and 7 would pose moderate potential impacts, and Alternatives 4 and 6 would pose the least potential impacts.

Candidate Species - *Botrychium lineare* (Slender moonwort): Only one population is known within the Ecogroup area, and it occurs on the Sawtooth National Forest. Alternative 1B poses the highest potential impacts to this population, followed in descending order by Alternatives 5, 2, 3, 6, 7, and 4. Potential effects to potential habitat for this species vary somewhat by habitat type, but generally speaking, Alternatives 1B and 5 have the highest potential for impacts.

Sensitive and Watch Species - Alternative 5 has the most potential for overall impacts to the 86 TEPC, current or proposed sensitive or watch plant species. It was rated as one of the highest alternatives for effects for 7 of 8 habitat groups (Table 2-20). Alternatives 1B and 3 closely followed this, due to the short-term risks associated with these alternatives. The alternative which appears to have the least potential impact to the 86 TEPC, current or proposed sensitive, or watch species is Alternative 4, which rated as one of the lowest alternatives for effects in 8 of the 8 habitat groups. Alternative 6 closely followed this (7 of 8 habitat groups). As stated above in the discussion, many of the impacts in Alternatives 3 or 7 are considered short-term risks, to improve habitat conditions in the long-term through restoration and maintenance of vegetative communities. Conversely, Alternative 6 and 4 were rated as lower in immediate short-term impacts, but the longer-term outlook is less predictable, particularly regarding uncharacteristic wildfire effects, and increased susceptibility to disturbance events. Alternatives 1B and 2 were generally considered as intermediate in effects across all habitat groups.

Table 2-20. Summary of Potential Impacts of Alternatives for Identified Habitat Groups

Habitat Group	Alternative with the MOST Potential Impact	Alternatives with INTERMEDIATE Potential Impact	Alternative with the LEAST Potential Impact
Alpine	5, 1B	2, 7, 3	6, 4
Subalpine Forest/Non-forest	5, 3	2, 1B, 7	6, 4
Montane Forest	5, 1B	2, 3 = 7	6, 4
Woodland	1B = 5	2, 3, 7	4, 6
Shrubland	5, 1B	3, 2, 7	6, 4
Grassland	5, 1B	3, 2, 6	7, 4
Riparian	5, 3	2, 7, 1B	4, 6
Rock	5, 1B	2, 3, 6	7, 4

Vegetation Diversity

Issue Statement: Forest Plan management strategies may affect vegetative biodiversity by changing size class, species composition, density, snags, and coarse woody debris.

The analysis of this issue is divided into three separate sections: (1) forested vegetation, (2) non-forested vegetation, and (3) riparian vegetation.

Forested Vegetation

Indicators: Indicators for potential effects on forested vegetation are:

- Size class changes toward desired and historical size classes by Forest and PVG
- Canopy closure changes toward desired and historical canopy closures by Forest and PVG -
- Species composition changes toward desired condition and historical seral status by Forest and PVG
- Summary of all the components from desired and historic conditions by Forest
- Percentage of large trees by alternative in the second and fifth decades

Non-forested Vegetation

Indicators: Indicators for potential effects on non-forested vegetation are:

- Acres of big sagebrush (three subspecies) and low sagebrush in low, medium, or high canopy cover classes, as compared to the desired conditions for each alternative and historical estimates
- Acres of climax aspen in a range of size and canopy cover classes, as compared to the desired conditions for each alternative and historical estimates
- Acres of pinyon-juniper in a range of size and canopy cover classes, as compared to the desired conditions for each alternative and historical estimates
- Acres of grassland cover types in moderate or high risk condition that occur within low, medium, or high vegetative restoration Management Prescription Categories (MPCs)

Riparian Vegetation

Indicators: Indicators for potential effects on riparian vegetation are:

- Percentage of large trees by alternative with in the second and fifth decades for forested (riverine) riparian areas
- Overall synthesis of forested PVGs for meeting desired conditions and historical conditions
- Acres of deciduous riparian cover types in moderate or high risk condition that occur within low, medium, or high vegetative restoration MPCs

Forested Vegetation

Effects to Size Class: Each alternative at different time periods is compared with the desired conditions for size class for that particular alternative, to determine how far away the predicted condition is from desired conditions for a particular alternative. For the Boise Forest, Table 2-21 shows size class deviations from desired conditions by alternative and PVG. By decade 5, Alternatives 1B, 2, 3, 6, and 7 have four PVGs each that are within the desired conditions. Alternatives 4 and 5 have three PVGs within the DC. PVGs 6 and 7 are within desired conditions for all alternatives. No PVGs are within the DC currently. Alternatives 2, 3, and 6

have 4 PVGs each within HRV after the fifth decade. These alternatives are followed by Alternative 4 with three PVGs, Alternative 1B and 7 with two PVGs, and Alternative 5 with one PVG within the HRV for large tree size class after the fifth decade. Currently, there are no PVGs within the HRV.

Table 2-21. Differences Between Modeled Outcomes on the Boise National Forest for Size Class in the Fifth Decade with the Desired Conditions, Expressed as a Percent of Acres

PVG	Size Classes	Alt 1B	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
PVG 1	G/F/S/S	+0.3%	-0.8%	-0.9%	+0.3%	0%	-0.3%	-4.7%
	Large	-10.4%	-31.2%	-53.2%	-53.5%	+12.7%	-43.1%	-31.2%
PVG 2	G/F/S/S	-0.3%	-0.4%	-1.2%	-0.6%	-5.1%	-0.9%	-2.2%
	Large	-25.1%	-50.0%	-60.0%	-59.8%	-10.0%	-56.0%	-28.6%
PVG 3	G/F/S/S	-7.9%	-6.0%	-0.7%	+1.1%	-6.7%	+1.4%	-7.0%
	Large	+1.7%	+10.6%	+0.6%	+0.7%	+8.4%	-3.7%	+11.0%
PVG 4	G/F/S/S	+9.4%	+2.5%	+1.8%	+7.0%	+12.0%	+1.3%	-0.7%
	Large	+2.4%	+10.5%	+6.5%	-8.9%	+6.1%	-2.4%	+2.6%
PVG 5	G/F/S/S	-4.1%	-0.3%	-0.5%	-0.2%	-7.7%	-0.7%	-0.3%
	Large	-29.3%	-42.8%	-49.6%	-35.1%	-11.6%	-40.4%	-15.3%
PVG 6	G/F/S/S	-5.2%	+0.5%	+0.1%	+3.6%	-5.5%	+3.3%	-0.7%
	Large	-6.0%	+6.7%	-4.4%	-6.8%	+5.8%	+1.6%	+5.5%
PVG 7	G/F/S/S	-0.6%	-0.6%	-0.5%	-0.3%	-5.5%	-0.4%	-0.8%
	Large	+4.4%	+0.8%	+2.0%	+0.4%	0%	+2.7%	+0.2%
PVG 8/9	G/F/S/S	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Large	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PVG 10	G/F/S/S	+2.1%	-1.1%	+1.8%	+2.9%	-0.5%	-0.5%	-1.1%
	*Medium	+8.6%	+15.4%	+15.4%	+17.7%	+14.4%	+18.4%	+8.4%
PVG 11	G/F/S/S	-1.1%	-1.0%	-0.6%	+0.4%	-1.0%	-0.7%	-0.9%
	Large	-0.9%	-7.1%	-13.2%	-13.0%	-6.1%	-13.1%	-13.3%

*PVG 10 is medium tree size class because trees in this PVG typically do not grow to large class size.

Table 2-22 shows size class deviations from desired conditions by alternative and PVG outside of designated wilderness on the Payette Forest. By decade 5, Alternatives 2, 3, 4, and 5 have three PVGs each that are within the desired conditions. PVG 7 is within desired conditions for the most alternatives (5), followed by PVG 6 (4). Alternatives 1B and 7 have two PVGs each that are within the desired conditions, followed by Alternative 6 with only one PVG. No PVGs are within desired conditions currently. Alternatives 2, 3, and 4 have three PVGs each within HRV after the fifth decade, followed by Alternatives 1B, 5, and 7 with two PVGs within HRV. Alternative 6 has one PVG within the HRV for large tree size class after the fifth decade. For Alternatives 3 and 4, the DC and the mean of HRV are the same for the large tree size class. No PVGs are within the HRV currently.

Table 2-22. Differences Between Modeled Outcomes on the Payette National Forest for Size Class in the Fifth Decade with the Desired Conditions, Expressed as a Percent of Acres

PVG	Size Classes	Alt 1B	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
1	G/F/S/S	- 0.2%	- 0.7%	-0.9%	-1.0%	-1.8%	-1.0%	-4.7%
	Large	+ 2.5%	-18.7%	-40.7%	-40.7%	+26.4%	-30.6%	-20.8%
2	G/F/S/S	- 1.2%	- 1.0%	-1.3%	-1.7%	-2.8%	-1.7%	-2.4%
	Large	-24.8%	-40.9%	-53.9%	-57.5%	-10.0%	-55.8%	-23.7%
3	G/F/S/S	-11.0%	-10.0%	-7.0%	-2.0%	-12.0%	-5.0%	-8.0%
	Large	+29.2%	+19.7%	+11.5%	+4.4%	+20.5%	-7.0%	+1.2%
4	G/F/S/S	- 0.3%	- 0.5%	-0.2%	+1.2%	-0.6%	0%	-0.9%
	Large	- 7.2%	- 0.5%	-5.7%	-13.5%	+19.1%	-13.0%	-13.0%
5	G/F/S/S	- 4.1%	- 0.1%	-0.3%	-3.0%	-7.2%	-3.0%	-0.3%
	Large	-32.2%	-30.3%	-37.3%	-43.5%	+2.9%	-46.7%	-17.6%
6	G/F/S/S	-15.2%	- 4.8%	-3.2%	+1.8%	-8.1%	+0.8%	-4.2%
	Large	+11.6%	+15.3%	+3.2%	+1.7%	+19.7%	-2.5%	+8.2%
7	G/F/S/S	- 0.6%	- 0.6%	-4.6%	0%	-2.4%	-0.5%	-5.0%
	Large	+13.7%	+ 9.2%	+5.5%	+6.2%	+6.8%	+10.3%	+5.7%
8/9	G/F/S/S	- 4.4%	- 1.4%	-0.4%	+1.4%	-7.3%	+0.5%	-10.9%
	Large	+15.6%	+15.7%	+15.9%	+15.3%	+13.9%	+15.2%	+14.3%
10	G/F/S/S	+ 2.4%	- 1.1%	-13.0%	+1.0%	-0.5%	-0.5%	-1.2%
	*Medium	+22.6%	+14.0%	+20.0%	+21.8%	+18.6%	+16.2%	+18.2%
11	G/F/S/S	+11.3%	- 0.8%	-0.6%	+1.3%	-0.8%	-0.5%	-0.8%
	Large	- 1.2%	- 8.2%	-14.2%	-14.2%	-7.1%	-13.3%	-13.1%

*PVG 10 is medium tree size class, as trees do not typically grow to a large class size.

Table 2-23 shows size class deviations from desired conditions by alternative and PVG for the Sawtooth National Forest outside of designated wilderness. By decade 5, Alternatives 1B, 3, 5, 6, and 7 have two PVGs each that are within the DC. Alternative 2 has one PVG within the DC and Alternative 4 has none. Currently, Alternatives 3, 4, and 7 have 2 PVGs each that are within the DC; however the mix of PVGs within DCs has changed. Alternatives 1B and 3 have three PVGs each within HRV after the fifth decade, followed by Alternatives 2 and 5 with two PVGs, Alternatives 4 and 6 with one PVG, and Alternative 7 with no PVGs within the HRV for large tree size class after the fifth decade. Currently, there are two PVGs within the HRV.

Table 2-23. Differences Between Modeled Outcomes on the Sawtooth National Forest for Size Class in the Fifth Decade with the Desired Conditions, Expressed as a Percent of Acres

PVG	Size Classes	Alt 1B	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
1	G/F/S/S	+0.5%	-2.0%	-2.0%	-1.0%	-2.0%	-1.0%	-2.0%
	Large	-14.0%	-35.0%	-57.1%	-57.0%	+10.0%	-47.1%	-54.2%
2	G/F/S/S	-1.4%	-2.8%	-3.0%	-1.4%	-8.0%	-1.0%	-5.9%
	Large	-3.0%	-50.0%	-60.0%	-57.5%	-10.0%	-59.2%	-49.0%
3	G/F/S/S	-1.6%	-5.2%	-0.4%	+5.7%	-3.0%	+0.9%	-8.0%
	Large	+10.3%	+7.1%	-0.7%	-6.8%	+4.6%	-20.0%	-3.1%
4	G/F/S/S	-1.8%	+1.2%	-0.2%	+15.9%	-2.7%	-0.2%	-0.7%
	Large	+25.5%	+9.6%	+8.2%	-7.1%	+19.1%	+2.0%	+1.6%
5	G/F/S/S	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Large	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	G/F/S/S	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Large	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7	G/F/S/S	-6.3%	-0.6%	0%	+1.3%	-5.3%	-0.4%	-0.8%
	Large	+16.7%	+17.8%	+16.8%	+15.6%	+17.1%	+13.3%	+15.5%
8/9	G/F/S/S	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Large	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10	G/F/S/S	-6.3%	-1.1%	-0.7%	+10.3%	-0.5%	-0.5%	-1.1%
	*Medium	+11.6%	+8.3%	+13.4%	+9.8%	+2.2%	+10.2%	+9.7%
11	G/F/S/S	-1.4%	-0.8%	-0.6%	-0.3%	+1.5%	-0.4%	-0.8%
	Large	-0.6%	-3.7%	-9.7%	-9.7%	-9.2%	-8.8%	-8.7%

*PVG 10 is medium tree size class because trees in this PVG typically do not grow to large class size.

Effects to Canopy Closure: Each alternative at different time periods is compared with the desired conditions for canopy closure for that particular alternative, to determine how far away the predicted condition is from desired conditions for a particular alternative. Table 2-24 shows canopy closure deviations from desired conditions by alternative and PVG for the Boise Forest. By decade 5, Alternatives 2, 4, 5, 6, and 7 have three PVGs each that are within the desired conditions. PVG 7 is within desired conditions for all alternatives. Alternatives 1B and 3 have two PVGs each that meet the DC. In the current condition, there are 6 alternatives with one PVG each within a DC. Alternative 4 has 4 PVGs within HRV after the fifth decade, followed by Alternative 3 with three PVGs, Alternatives 2, 6, and 7 with two PVGs each, and Alternatives 1B and 5 have no PVGs within the HRV for large tree canopy closure class after the fifth decade. In the current condition, there are no PVGs within the HRV.

Table 2-24. Differences Between Modeled Outcomes on the Boise National Forest for Canopy Closure Class in the Fifth Decade with the Desired Conditions, Expressed as a Percent of Acres

PVG	Size/Canopy Closure Classes	Alt 1B	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
1	Large Low	-31.6%	-31.2%	-53.2%	-53.5%	-14.0%	-43.1%	-31.2%
	Large Mod.	+21.2%	0%	0%	0%	+26.8%	0%	0%
	Large High	0%	0%	0%	0%	0%	0%	0%
2	Large Low	-7.1%	-46.7%	-54.9%	-54.2%	+1.0%	-57.3%	-11.1%
	Large Mod.	-40.5%	-5.0%	-5.3%	-9.8%	-15.0%	-3.0%	-18.4%
	Large High	+22.6%	+0.7%	+0.2%	+4.2%	+4.0%	+4.4%	+1.0%
3	Large Low	0%	-0.2%	-0.3%	-0.3%	0%	-3.5%	-0.1%
	Large Mod.	-13.3%	-2.4%	-9.1%	-8.0%	-4.5%	-7.3%	-7.7%
	Large High	+15.0%	+13.3%	+10.1%	+9.1%	+12.9%	+7.1%	+18.7%
4	Large Low	+0.5%	-0.1%	-0.1%	-0.1%	0%	-0.3%	-0.1%
	Large Mod.	-8.4%	-5.7%	-5.0%	-11.7%	-10.3%	-15.1%	-3.6%
	Large High	+10.3%	+16.3%	+11.7%	+2.8%	+16.3%	+13.0%	+6.3%
5	Large Low	-5.6%	-19.0%	-22.8%	-11.0%	-2.8%	-21.5%	-3.2%
	Large Mod.	-33.2%	-0.8%	-26.8%	-24.1%	-9.0%	-21.8%	-12.6%
	Large High	+9.5%	0%	0%	0%	+0.2%	+2.8%	+0.4%
6	Large Low	0%	0%	0%	0%	0%	0%	0%
	Large Mod.	-19.0%	-2.1%	-5.0%	-9.4%	-9.8%	-6.5%	-4.0%
	Large High	+13.1%	+8.8%	+0.6%	+2.6%	+15.6%	+8.1%	+9.5%
7	Large Low	+2.4%	-0.1%	-0.1%	-0.1%	-1.7%	-0.1%	-0.1%
	Large Mod.	+1.9%	+0.8%	+2.1%	+0.4%	+1.7%	+2.7%	+0.3%
	Large High	0%	0%	0%	0%	0%	0%	0%
8/9	Large Low	NA	NA	NA	NA	NA	NA	NA
	Large Mod.	NA	NA	NA	NA	NA	NA	NA
	Large High	NA	NA	NA	NA	NA	NA	NA
10*	Medium Low	0%	+1.4%	0%	0%	0%	+0.7%	0%
	Medium Mod.	+7.0%	-0.9%	-0.9%	-1.3%	+6.7%	-3.4%	-0.8%
	Medium High	+1.6%	+14.9%	+16.3%	+19.0%	+7.7%	+21.1%	+9.3%
11	Large Low	-0.6%	-1.0%	-2.0%	-2.0%	-5.7%	-2.0%	-24.0%
	Large Mod.	-0.3%	-6.1%	-11.2%	-11.0%	-0.4%	-11.1%	-11.3%
	Large High	0%	0%	0%	0%	0%	0%	0%

*PVG 10 is medium tree size class because trees in this PVG typically do not grow to large class size.

Table 2-25 shows canopy closure deviations from desired conditions by alternative and PVG for areas outside of designated Wilderness on the Payette Forest. By decade 5, Alternative 5 has three PVGs each that are within the desired conditions. PVG 7 is within desired conditions for the most alternatives, followed by PVG 11. Alternatives 1B, 3, and 7 have two PVGs each that are within the desired conditions, followed by Alternatives 2 and 4 with only one PVG. Alternative 6 has no PVGs that meet the DC. Currently, only Alternative 1B has one PVG

within the DC. Alternatives 2, 3, and 7 have three PVGs each within HRV after the fifth decade, followed by Alternatives 4 and 6 with two PVGs each within HRV. Alternatives 1B and 5 have no PVGs within the HRV for large tree canopy closure class after the fifth decade. Currently, no PVGs are within the HRV.

Table 2-25. Differences Between Modeled Outcomes on the Payette National Forest for Canopy Closure Class in the Fifth Decade with the Desired Conditions, Expressed as a Percent of Acres

PVG	Size/Canopy Closure Classes	Alt 1B	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
1	Large Low	-10.4%	-18.7%	-40.7%	-40.7%	-1.3%	-30.6%	-20.8%
	Large Mod.	+36.6%	0%	0%	0%	+27.7%	0%	0%
	Large High	0%	0%	0%	0%	0%	0%	0%
2	Large Low	- 7.0%	-37.4%	-48.7%	-52.0%	+1.0%	-50.9%	-12.2%
	Large Mod.	-33.0%	- 8.2%	+38.1%	-11.1%	-14.3%	-10.4%	+15.4%
	Large High	+15.2%	+ 3.8%	+1.8%	+5.6%	+3.3%	+5.5%	+4.1%
3	Large Low	0%	- 0.4%	-6.0%	-4.7%	0%	-4.8%	-7.0%
	Large Mod.	- 1.7%	- 2.0%	+35.0%	-5.2%	-1.4%	-18.1%	-44.0%
	Large High	+30.9%	+22.1%	+52.5%	+14.4%	+21.6%	+15.9%	+52.2%
4	Large Low	+ 0.7%	- 0.1%	-0.1%	-0.1%	0%	-0.3%	-0.6%
	Large Mod.	- 9.1%	-11.2%	-9.1%	-21.8%	-8.5%	-21.5%	-16.9%
	Large High	+ 1.2%	+10.8%	+34.1%	+8.4%	+17.6%	+8.8%	+4.5%
5	Large Low	- 8.8%	-17.1%	-16.0%	-19.7%	-1.0%	-27.9%	-9.4%
	Large Mod.	-28.6%	-13.7%	-21.3%	-23.9%	-1.5%	-18.8%	-10.5%
	Large High	+ 5.2%	+ 0.4%	0%	0%	+5.4%	0%	+2.3%
6	Large Low	0%	0%	0%	0%	0%	0%	0%
	Large Mod.	- 2.7%	- 2.1%	-3.6%	-11.5%	-3.0%	-15.4%	-1.5%
	Large High	+14.2%	+17.4%	+0.7%	+13.2%	+22.7%	+12.8%	+9.7%
7	Large Low	- 0.2%	- 0.1%	-0.1%	-0.1%	-0.4%	-0.1%	-0.1%
	Large Mod.	+13.9%	+ 9.3%	+5.6%	+6.3%	+7.1%	+10.4%	+5.8%
	Large High	0%	0%	0%	0%	0%	0%	0%
8/9	Large Low	0%	0%	0%	0%	0%	0%	0%
	Large Mod.	- 0.3%	- 1.8%	-0.7%	-8.0%	+0.8%	-8.6%	-2.1%
	Large High	+15.9%	+17.4%	+16.5%	+31.2%	+13.1%	+23.8%	+16.4%
10*	Medium Low	0%	0%	0%	0%	0%	0%	+0.5%
	Medium Mod.	+ 4.0%	- 0.9%	+4.0%	-6.5%	+7.4%	-6.5%	-2.4%
	Medium High	+18.5%	+15.0%	+18.3%	+30.3%	+11.2%	+22.7%	+20.0%
11	Large Low	- 0.5%	- 1.0%	-0.2%	-2.0%	-6.7%	-0.2%	-1.1%
	Large Mod.	- 0.7%	- 7.2%	-14.1%	-12.2%	-0.4%	-13.2%	-12.0%
	Large High	0%	0%	0%	0%	0%	0%	0%

*PVG 10 is medium tree size class because trees in this PVG typically do not grow to large class size.

Table 2-26 shows canopy closure deviations from desired conditions by alternative and PVG for areas on the Sawtooth Forest outside of designated wilderness. By the end of decade 5, Alternative 4 has three PVGs each that are within the desired conditions, followed by

Alternatives 3 and 7 with two PVGs each, and Alternatives 1B, 2, 5, and 6 with one PVG each. PVG 11 is within desired conditions for 6 of the 7 alternatives. The current condition has 7 alternatives with 1 PVG each within the DC. Alternatives 2 and 3 have four PVGs each within HRV after the fifth decade, followed by Alternatives 4 and 6 with three PVGs, Alternatives 5 and 7 with two PVGs each, and Alternative 1B with one PVG within the HRV for large tree canopy closure after the fifth decade. In the current condition, only PVG 10 is within the HRV.

Table 2-26. Differences Between Modeled Outcomes on the Sawtooth National Forest for Canopy Closure Class in the Fifth Decade with the Desired Conditions, Expressed as a Percent of Acres

PVG	Size/Canopy Closure Classes	Alt 1B	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
1	Large Low	-29.9%	-35.0%	-57.1%	-57.0%	-15.8%	-47.1%	-54.2%
	Large Mod.	+15.9%	0%	0%	0%	+25.8%	0%	0%
	Large High	0%	0%	0%	0%	0%	0%	0%
2	Large Low	-5.6%	-44.9%	-52.3%	-51.7%	+12.8%	-53.5%	-34.7%
	Large Mod.	-23.9%	-7.8%	-7.7%	-9.2%	-22.6%	-12.0%	-14.7%
	Large High	+26.5%	+1.8%	0%	+3.3%	0%	+6.3%	+0.4%
3	Large Low	0%	-0.3%	-0.5%	-1.3%	0%	-7.0%	-0.3%
	Large Mod.	-10.7%	-2.3%	-8.3%	-10.1%	-8.5%	-14.2%	-14.5%
	Large High	+21.0%	+9.7%	+8.1%	+4.5%	+13.1%	+1.2%	+11.7%
4	Large Low	0%	-0.1%	-0.1%	-0.1%	0%	-0.1%	-0.1%
	Large Mod.	-2.2%	-5.8%	-8.5%	-11.2%	-9.7%	-13.2%	-5.6%
	Large High	+27.7%	+15.5%	+16.8%	+4.2%	+28.8%	+15.2%	+7.3%
5	Large Low	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Large Mod.	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Large High	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	Large Low	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Large Mod.	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Large High	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7	Large Low	-0.7%	-0.1%	-0.1%	-0.1%	-6.0%	-0.1%	-0.1%
	Large Mod.	+27.4%	+17.8%	+16.8%	+15.7%	+23.1%	+13.3%	+15.6%
	Large High	0%	0%	0%	0%	0%	0%	0%
8/9	Large Low	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Large Mod.	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Large High	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*	Medium Low	0%	0%	+1.8%	+0.6%	0%	+1.4%	0%
	Medium Mod.	+4.9%	-7.6%	-1.4%	-7.7%	-0.5%	-7.7%	-2.5%
	Medium High	+6.7%	+12.9%	+13.0%	+16.8%	-6.4%	+16.5%	+12.2%
11	Large Low	-0.5%	-0.1%	-0.1%	-0.1%	-8.8%	-0.1%	-0.7%
	Large Mod.	-0.2%	-7.1%	-9.6%	-8.6%	-0.4%	-8.7%	-8.0%
	Large High	0%	0%	0%	0%	0%	0%	0%

*PVG 10 is medium tree size class because trees in this PVG typically do not grow to large class size.

Effects to Species Composition: The desired condition is the estimated historical ranges for species composition. In order to estimate probable future seral stages to represent species composition, the acreages that went into the different modeling pathways (See Appendix B) are used as a measure of how much of a PVG is following successional processes vs. how much is being managed or is subject to disturbances.

Table 2-27 shows the projected seral status for each alternative for the Boise Forest. Those in bold faced are within the desired/historical conditions. Alternative 6 on the Boise increases the seral status deviations from the current condition. Alternative 1B on the Boise does not change the deviations from the current condition, while the other alternatives reduce them. Alternatives 3 and 4 have the most PVGS with seral status closest to DC/HRV, followed by Alternatives 2, 5, and 7. PVGs 1 and 5 are within desired/historical seral status in the most alternatives (5), followed by PVG 4, which is within DC/HRV in four alternatives.

Table 2-27. Projected Seral Status (Species Composition) for Each Alternative on the Boise National Forest[1]

PVG	Alt 1B	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
1	Mixed	**Seral**	**Seral**	**Seral**	Mixed	**Seral**	**Seral**
2	Mixed-climax	Seral-mixed	Seral-mixed	Seral-mixed	Seral-mixed	Seral-mixed	Mixed
3	Mixed-climax	Mixed-climax	Mixed-climax	Mixed-climax	Mixed-climax	Mixed-climax	Mixed-climax
4	**Mixed**	Mixed-climax	**Mixed**	**Mixed**	Mixed-climax	Mixed-climax	**Mixed**
5	Mixed	**Seral-mixed**	**Seral-mixed**	**Seral-mixed**	**Seral-mixed**	Mixed	**Seral-mixed**
6	**Mixed**	Mixed-climax	Mixed-climax	Mixed-climax	**Mixed**	Mixed-climax	Mixed-climax
7	Mixed	Mixed-climax	Mixed-climax	Mixed-climax	Mixed-climax	Climax	Mixed-climax
8/9[2]	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11	Mixed	Mixed-climax	Mixed	Mixed	Mixed	Mixed-climax	Mixed-climax

[1]PVG 10 not considered because historical condition would be primarily all one species (lodgepole pine).
[2]PVGs 7/8/9 are modeled together on Boise due to small total acreage of PVGs 8 and 9.

Table 2-28 shows the projected seral status for each alternative. Those in bold face are within the desired/historical conditions. Alternative 1B on the Payette increases the seral status deviations from the current condition, while the other alternatives reduce them. Alternative 4 has the most PVGs with seral status closest to DC/HRV, followed by Alternative 3, then Alternatives 2 and 6, and lastly Alternatives 5 and 7. The Wilderness is equivalent to Alternative 3, although with a different mix of PVGs reaching desired/historical seral status. PVGs 8/9 are within desired/historical seral status in all alternatives and the Wilderness, followed by PVGs 1 and 5 that are within the DC/HRV for 6 alternatives (including the Wilderness).

Table 2-28. Projected Seral Status (Species Composition) for Each Alternative on the Payette National Forest[1]

PVG	Alt 1B	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Wilderness
1	Mixed	**Seral**	**Seral**	**Seral**	Mixed	**Seral**	**Seral**	**Seral**
2	Mixed-climax	Seral-mixed	**Seral**	**Seral**	Seral-mixed	**Seral**	Seral-mixed	Seral-mixed
3	Mixed-climax	Mixed-climax	Climax	Mixed-climax	Mixed-climax	Mixed-climax	Climax	Mixed-climax
4	Mixed-climax	Mixed-climax	Mixed-climax	Mixed-climax	Mixed-climax	Mixed-climax	**Mixed**	Mixed-climax
5	Mixed	**Seral-mixed**	**Seral-mixed**	**Seral-mixed**	**Seral-mixed**	**Seral-mixed**	Mixed	**Seral-mixed**
6	Mixed-climax	Mixed-climax	Mixed-climax	Mixed-climax	Mixed-climax	Mixed-climax	Mixed-climax	**Mixed**
7	Mixed-climax	Mixed-climax	Mixed-climax	Mixed-climax	Mixed-climax	Climax	Mixed-climax	Mixed-climax
8/9[2]	**Climax**	**Climax**	**Climax**	**Climax**	**Climax**	**Climax**	**Climax**	**Climax**
11	Mixed	Mixed-climax	Mixed-climax	Mixed	Mixed	Mixed-climax	Mixed-climax	Mixed-climax

[1]PVG 10 not considered because historical condition would be primarily all one species (lodgepole pine).
[2]PVGs 8/9 are modeled together on Payette due to small amount of acreage in each.

Table 2-29 shows the projected seral status for each alternative. Those in bold face are within the desired/historical conditions. The Sawtooth Wilderness is also greater than the current condition seral status deviations. All alternatives reduce the deviations in seral status. Alternatives 4 and 6 have the most PVGs with seral status closest to DC/HRV, followed by Alternatives 2, 3, 5, 7, and 1B. PVG 1 is within desired/historical seral status in the most alternatives (5), followed by PVG 2 with 4 alternatives bringing them within the DC/HRV.

Table 2-29. Projected Seral Status (Species Composition) for Each Alternative on the Sawtooth National Forest[1]

PVG	Alt 1B	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Wilderness
1	Mixed	**Seral**	**Seral**	**Seral**	Seral-mixed	**Seral**	**Seral**	Climax
2	Mixed	**Seral**	**Seral**	**Seral**	**Seral**	Seral-mixed	Seral-mixed	Climax
3	Mixed-climax	Mixed-climax	Mixed-climax	**Mixed**	Mixed-climax	**Mixed**	Mixed-climax	Mixed-climax
4	Mixed-climax	Mixed-climax	Mixed-climax	**Mixed**	Mixed-climax	Mixed-climax	**Mixed**	Mixed-climax
5[2]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6[2]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7	Climax	Mixed-climax	Mixed-climax	Climax	Mixed-climax	Mixed-climax	Mixed-climax	Climax
8/9[2]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11	Mixed-climax	Mixed-climax	Mixed-climax	Mixed-climax	Mixed	Mixed	Mixed-climax	Climax

[1]PVG 10 not considered because historical condition would be primarily all one species (lodgepole pine).
[2]PVGs 5, 6, and 8/9 were not assessed on the Sawtooth as they do not occur or are of insignificant acreages.

Effects to Coarse Woody Debris: In this analysis, each alternative is evaluated as to its capacity to produce large- and medium-sized trees as the recruitment pool of snags and coarse woody debris. The alternatives differ by their capacity to produce large and medium size trees, given the mix of MPCs and the activities in those MPCs for each alternative. The second, fifth, and tenth decades are examined to see how the recruitment pool of snags and coarse woody debris differs by alternative.

Table 2-30. Percentage of Total Forested Acres of Large Trees by Alternative in Second Decade

National Forest	Current	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Wilderness
Payette	14.6	13.7	16.9	17.0	16.6	13.9	15.1	15.5	15.6
Boise	10.7	9.5	13.3	14.5	14.3	13.3	12.9	11.7	N/A
Sawtooth	12.9	13.2	14.1	18.2	16.5	16.0	14.6	13.7	4.4

Table 2-31. Percentage of Total Forested Acres of Large Trees by Alternatives in Fifth Decade

National Forest	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Wilderness
Payette	28.1	33.5	33.4	31.8	27.7	29.5	31.4	27.5
Boise	21.8	24.6	25.5	23.6	20.1	23.4	24.1	N/A
Sawtooth	23.2	26.1	27.4	23.5	24.6	23.5	24.6	10.3

Table 2-32. Percentage of Total Forested Acres of Large Trees by Alternative in Tenth Decade

National Forest	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Wilderness
Payette	44.9	51.4	55.3	53.7	42.3	51.4	46.2	54.8
Boise	36.7	46.2	50.2	51.6	40.2	50.5	38.5	N/A
Sawtooth	34.5	37.4	42.2	42.1	43.1	37.9	30.2	44.8

Considering all the above factors, across the Ecogroup area, Alternatives 3 and 4 would likely provide the most snags and coarse wood in the medium and large size classes. Alternative 3 dominates more in the earlier decades, and further out Alternative 4 becomes the dominant alternative for the future recruitment pool. A variety of decay classes should also prevail under these alternatives over the long term with improvements in ecosystem processes and functions.

Non-forested Vegetation

Effects to Sagebrush Canopy Cover: It appears that Alternative 7 is the best alternative for meeting its desired condition for all vegetation types and in the shortest amount of time on the Boise National Forest. Alternative 2 closely follows. The remaining alternatives would be ranked in the following manner for meeting the desired conditions for the most vegetation types

in the shortest amount of time: Alternative 1B, 3, and 5 all group together, followed by Alternatives 4 and 6. For falling the closest to HRV, Alternative 4 does the best in the earlier decades (thus meeting its DC also). However, it is not sustainable as canopy covers continue to increase until a large wildfire event occurs, thus increasing the amount in the low canopy cover class. Alternative 3 is the overall best for meeting HRV, which is what this alternative is designed to do, followed by Alternative 7. It should be noted that the variations between alternatives, when considering HRV, were usually quite small.

For the Sawtooth National Forest, it appears Alternative 7 is the best alternative for meeting the DC for the most vegetation types in the shortest timeframes. Alternative 7 is followed in order by Alternatives 2, 6, 3, 5, 1B, and 4.

Effects to Climax Aspen: The current condition of climax aspen has only 3.9 percent of acres in the medium/large size class, and all of these acres are in the <70 percent canopy cover class. Therefore, current condition reflects a paucity of acres in the medium/large size class, particularly in the >70 percent class. All alternatives show significant increases of acres in this class. Alternative 1B puts the most amount of acres into this class (50 percent), followed in order by Alternatives 6, 5, 4, 2, 3, and 7. All alternatives exceed the 30 percent amount of this size class considered to be appropriate for the HRV. The HRV analysis shows that Alternatives 7, 3, 2, and 4 best meet the HRV for climax aspen, and they are the alternatives that put lesser amounts of aspen in this class. Alternative 7 meets the DC in all decades beyond the third,except for the fifteenth. Alternative 3 and 4 meet the DC for decades three through fifteen; Alternative 2 meets it for decades three through fifteen, except for the fifth. Conversely, Alternatives 1B and 5 do not meet the DCs. These alternatives have DCs that require lesser amounts in this class to meet other alternative objectives. Alternative 6 meets the DC for decades three through fifteen, but has a DC that requires more acres in this class.

Effects to Grasslands: MPCs are grouped according to the types of activities expected to occur, similar to groupings used in VDDT modeling for other non-forested vegetation types (See Appendix B). They are categorized into low, medium, or high groups, based on their perceived ability to maintain or restore vegetative conditions in grasslands. The high group would be expected to maintain current vegetative conditions and restore areas where needed over the long term. The medium group would have the best ability to restore vegetative conditions where needed, but could have short-term negative effects. The low group is not especially strong in either maintenance or restoration, although some restoration will occur. Conversely, there could be some continued degradation, particularly in localized areas. The acreage of MPCs groups in the selected management areas is displayed by alternative in Table 2-33.

Table 2-33. Grassland Vegetative Response by MPC Groupings (Acres)

MPC Groupings	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt.5	Alt. 6	Alt. 7
High (1.1, 1.2, 2.2, 4.1a, 4.1b)	168,769	159,035	22,615	209,669	4,202	587,595	31,718
Medium (2.1, 2.4, 3.1, 3.2, 4.1c, 5.1, 8.0)	160,656	389,721	766,908	665,246	157,529	184,582	542,012
Low (4.2, 4.3, 5.2, 6.1, 6.2)	694,069	474,717	233,962	148,571	861,577	251,308	449,756

Overall, Alternative 6, and to a lesser degree, Alternative 4, are expected to maintain grassland vegetation conditions, provided that they are currently in a state to maintain. At the very least, these alternatives would see the least amount of continuing degradation. However, where areas are in need of restoration, the time frames for restoration could be very long. Alternative 3, then Alternative 4, followed by Alternative 7 would have the best potential for restoring vegetation conditions where necessary in grassland ecosystems. Alternative 5, then 1B, would have the least likelihood of maintaining or restoring grassland ecosystems, and could have increased potential for additional degradation, based on the numbers of acres in the low MPC group. Considering both the high and medium groups together, Alternative 4 would have the most potential beneficial effects, followed in descending order by Alternatives 3, 6, 7, 2 1B, and 5.

Forested Riparian Vegetation

The alternatives differ by their capacity to produce large size trees, given the mix of MPCs and the activities in those PVGs for each alternative. Therefore, each alternative is evaluated as to its capacity to produce large trees, hence large woody debris, and to maintain or restore forested riparian vegetation. Although this analysis cannot be applied directly to forested RCAs/RHCAs, it is the closest approximation of what would happen in these areas. Generally, management in the RCAs/RHCAs would be more restrictive than in the uplands. As discussed for the forested PVGs, the best overall alternatives after five decades would be Alternatives 3 and 7 on the Payette National Forest. For the Boise National Forest, Alternatives 2, 3, and 7 are best, and on the Sawtooth National Forest, Alternatives 3 and 7 ranked the highest after 5 decades. As shown in the analysis, Alternative 4 elevates its rank in the later decades. This ranking applies to all three components; size class, canopy closure class, and species composition.

Deciduous Riparian Vegetation

Groupings of MPCs are based on the potential to maintain or restore vegetative conditions. MPC groups were formed, primarily based on livestock grazing, noxious weeds, recreation, roads, mechanical treatments, and fire use, more or less in that order. This approach is based on a combination of effects that would occur directly in riparian areas, or those that would occur in the uplands and influence riparian areas. This analysis is done for the entire Ecogroup area since the relationships between uplands and riparian zones, and between riparian zones with each other, reflects connectivity regardless of boundaries. This connectivity is displayed by such attributes as watershed geomorphic integrity, habitat patches, and plant dispersal. This analysis would also apply to the forested vegetation in the Ecogroup, since it covers the entire Ecogroup area. Table 2-34 displays the numbers of acres in each MPC group by alternative.

Table 2-34. Riparian Area Vegetative Response by MPC Groupings (millions of acres)

Non-forested Riparian MPC Groupings	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt.5	Alt. 6	Alt. 7
High (1.1, 1.2, 2.2)	1.67	1.67	1.67	3.55	1.02	1.67	1.67
Medium (2.1, 2.4, 3.1, 3.2, 4.1a, 4.1b, 4.1c)	1.27	2.22	2.14	2.23	0.87	3.79	2.78
Low (4.2, 4.3, 5.1, 5.2, 6.1, 6.2, 8.0)	3.68	2.72	2.80	0.83	4.73	1.14	2.16

The high MPC groupings would be most effective where riparian conditions should be maintained. In general, that would be the condition of many riparian areas in these MPCs. The medium MPC groups are most effective where conditions need maintenance and/or restoration. Natural recovery of native riparian vegetation may be extremely slow, even with reductions in livestock grazing, because of deterioration in the physical conditions of streams during the last 150 years, dominance of exotic annuals within the riparian area, and loss of native seed sources. All alternatives except 4 and 5 have equivalent amounts in the high MPC group. Alternative 4, followed by Alternative 6, would have the highest probability to maintain riparian vegetation where it is most likely to need maintenance, and to restore riparian vegetation that would be in need of restoration. These alternatives are followed by Alternative 7, then Alternatives 2 and 3, Alternative 1B, and lastly Alternative 5. Alternative 5 also has the greatest acreage of MPCs that could add to some further degradation due to activities in the uplands, although there are protective measures provided by RCA/RHCA management direction.

Vegetation Hazard

Issue Statement: Forest Plan management strategies may affect the amount of vegetation at risk to uncharacteristic wildfire and insect epidemic disturbances.

Indicators: The indicators used to measure vegetation at risk to uncharacteristic disturbance are: 1) Insect Hazard Index, and 2) Fire Hazard Index. These indicators provide a relative measure of the potential for insect epidemics and uncharacteristic wildfires. These indices are directly related to changes in vegetative conditions, including size class and density that will vary by the type and amount of vegetation treatment associated with each alternative.

Effects from Insect Hazard: Insect hazard for the Ecogroup area increases over time for each alternative, from the current average index rating of 1.38 to a range of 1.65 (Alternative 7) to 1.76 (Alternative 4) at the end of five decades. The increase in hazard is primarily due to an increase in the average tree size class, or in other words, because of the greater percentage of area occupied by large size trees (Table 2-35).

Table 2-35. Average Insect Hazard Indices by Alternative and Forest After Five Decades

Area	Current Hazard Index	Average Hazard Index After 5 Decades						
		Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt 7
Boise NF	1.41	1.71	1.66	1.70	1.72	1.68	1.72	1.65
Payette NF	1.36	1.78	1.76	1.77	1.79	1.73	1.77	1.78
Sawtooth NF	1.38	2.05	1.87	1.96	1.89	2.01	1.99	1.76
Ecogroup Total	**1.38**	**1.82**	**1.75**	**1.79**	**1.78**	**1.77**	**1.80**	**1.72**

Current conditions show an estimated 49 percent of the Ecogroup area's forest vegetation in a moderate or high insect hazard condition. The area in a moderate or high insect hazard increases over time in each alternative. The percentage of area in this condition ranges from an estimated 53 percent (Alternatives 2 and 7, Boise National Forest) to an estimated 77 percent (Alternative 1B, Sawtooth National Forest) in the fifth decade. The ranking of alternatives by percent of area in the moderate and high insect hazard rating varies for each Forest (Table 2-36).

Table 2-36. Percent of Forest Vegetation in High and Moderate Insect Hazard by Alternative and Forest After Five Decades

Area	Current Percentage	Percent Rated at High and Moderate Hazard After 5 Decades						
		Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt 7
Boise NF	51	61	54	56	57	58	56	55
Payette NF	48	67	65	66	65	64	64	66
Sawtooth NF	46	79	72	76	73	77	77	67
Ecogroup Total	**49**	**67**	**63**	**64**	**64**	**64**	**64**	**62**

Effects from Uncharacteristic Wildfire Hazard: Uncharacteristic wildfire hazard for forested vegetation declined after five decades from the current index for all alternatives except Alternative 1B on all three Forests, and Alternative 5 on the Sawtooth and Payette Forests (Table 2-37).

Table 2-37. Forest-wide Uncharacteristic Wildfire Hazard Indexes for the Current Condition and the Fifth Decade for Alternatives by Forest

Forest	Current Index	Index for Fifth Decade						
		Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Boise	0.65	0.81	0.45	0.41	0.38	0.57	0.41	0.57
Payette	0.50	0.62	0.43	0.38	0.38	0.50	0.38	0.49
Sawtooth	0.36	0.46	0.36	0.35	0.30	0.42	0.35	0.31

Non-forested vegetation was not analyzed on the Payette Forest, as there were not enough acres to represent in the modeling. For the Boise and Sawtooth, uncharacteristic wildfire hazard for non-forested vegetation was greater after five decades than current hazard for all alternatives.

Table 2-38. Non-forested Vegetation Uncharacteristic Wildfire Hazard Index for the Current Condition and the Fifth Decade for Alternatives by Forest

Forest	Current Index	Index for Fifth Decade						
		Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Boise	0.11	0.19	0.20	0.18	0.23	0.17	0.24	0.19
Sawtooth	0.12	0.18	0.18	0.18	0.21	0.16	0.24	0.18

Non-native Plants

Issue Statement: Forest Plan management strategies have the potential to influence non-native plant establishment, spread, detection, and control.

Indicators: The following indicators were used to measure the effects of noxious weeds as a surrogate for non-native plants on the three Forests, by alternative:

- Estimated total acres of high susceptibility to noxious weed invasion within MPCs that have a high exposure to invasion risk, moderate to high detection, and high ability to treat
- Estimated total acres of high susceptibility to noxious weed invasion within MPCs that have low to moderate exposure to invasion risk, low detection, and low to moderate ability to treat
- Estimated total noxious weed acres by Forest during the short term
- Effects within fire regimes/PVGs that have most departed from historical conditions.

Effects: Alternatives 4 and 6 show the least potential for short-term weed exposure and spread. However, due to new infestation expansion without detection, difficult treatment logistics, the proximity of existing weed infestations, and the potential for more extensive and hotter wildfires, the potential for long-term expansion and invasion is very high. The containment and control aspects of integrated weed management will likely be greater under Alternatives 5 and 1B. These alternatives also have higher short-term risks from the levels of commodity production and its associated disturbance. However, treatment of new infestations is likely to be more effective due to improved detection, monitoring, and logistics of treatment. The population densities of weed infestations are expected to be less under Alternatives 1B, 2, 3, 5, and 7 due to larger treatment programs, thereby reducing seed production potential (Table 2-39).

Table 2-39. Acres Susceptible to Invasion in Various Exposure Risk, Detection, and Treatment Groupings of MPCs

MPC Grouping	Forest	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Low to moderate risk, low detection, low ability to treat	Boise	120,263	124,554	35,029	300,168	9,503	574,995	45,626
	Payette	302,549	309,524	251,278	384,975	219,041	396,851	303,468
	Sawtooth	63,288	58,702	20,014	123,253	9,726	268,379	24,262
	Total	**486,100**	**492,780**	**306,321**	**808,396**	**238,270**	**1,240,225**	**373,356**
High risk, moderate to high detection, high ability to treat	Boise	818,417	814,126	903,651	638,512	929,177	363,685	893,054
	Payette	178,930	171,955	230,200	96,504	262,432	84,628	178,011
	Sawtooth	298,972	303,558	342,246	239,007	352,534	93,880	337,998
	Total	**1,296,319**	**1,289,639**	**1,476,097**	**974,023**	**1,544,143**	**542,193**	**1,409,063**

Table 2-40 represents the combined estimated rate of spread within the Ecogroup area for five key noxious weed species after ten years. Overall, the alternatives are most influenced by the spread of knapweeds and rush skeletonweed. Alternatives 1B, 3, 5, and 7 would likely have the largest rates of spread, which is primarily due to the higher risks of seed dispersal associated with activities and practices.

Table 2-40. Ten-Year Acreage Estimate of Key Weed Species Spread in the Ecogroup Area

Alternative	Weed Infestation Acres After Ten Years
Alternative 1B	96,051 – 243,387
Alternative 2	92,035 -- 221,510
Alternative 3	96,051 – 243,387
Alternative 4	66,765 – 171,886
Alternative 5	96,051 – 243,387
Alternative 6	66,765 – 171,886
Alternative 7	96,051 -- 243,387

Fire Regime Departure - The risk of exotic plant infestations occurring within wildfire areas will be a concern under all the alternatives, and this risk is taken partially into consideration in determining areas of high susceptibility. Where stands are replaced with an early successional stage with large proportions of exposed soil, there is an increased potential for exotic plant invasion. Forested PVGs 1, 2, 4, and 5 present the greatest risk, as these groups typically occur adjacent to or in conjunction with areas of high susceptibility to key noxious weed species invasion, and have fire regimes that are currently most departed from historical conditions. These PVGs occur more frequently on the Boise and Payette National Forests. Therefore, this analysis is confined to those two Forests. For the Boise National Forest, Alternatives 2, 3, 4, 6 and 7 reduce the overall hazard below the current condition in the long term. Because of more hazardous desired conditions, Alternatives 1B and 5 would increase the overall hazard above the current levels in the long term. For the Payette, overall hazard increases for all alternatives. This is different from the Boise because the Forest starts out with a far less hazardous condition, particularly in PVG 5. Alternatives 1B and 5 produce the greatest hazard for weed establishment and expansion in these departed regime areas over the long term.

Fire Management

Issue 1 Statement: Forest Plan management strategies may affect the restoration and maintenance of the ecological role of fire on the Forests.

Indicator for Issue 1: The percentage of acres treated using fire compared to estimated historical acres burned, by Forest.

Effects: Estimated percentages of acres treated within historical fire regimes are displayed in Table 2-41 by Forest and by alternative. For the Ecogroup, the percent of acres treated with fire use over the next five decades is highest in Alternative 4, followed by Alternatives 6, 3, 7, 2, 1B, and 5 (Table 2-41).

Table 2-41. Percent of the Historical Forested Fire Regimes Treated with Fire Use Averaged Over the First Five Decades, by Alternative and by Forest

Fire Regime	Forest	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Non-lethal	Boise	27	100	110	165	30	142	79
	Payette	49	92	95	159	35	128	76
	Sawtooth	3	145	147	171	77	169	152
Mixed 1	Boise	7	12	9	36	0	34	10
	Payette	19	23	29	43	5	49	26
	Sawtooth	5	16	15	43	0	61	15
Mixed 2	Boise	26	16	12	13	7	14	25
	Payette	24	16	11	11	12	9	20
	Sawtooth	5	16	12	16	3	15	21
Lethal	Boise	11	20	14	13	6	19	23
	Payette	6	6	4	9	2	11	7
	Sawtooth	0	29	22	28	0	18	23

Estimated percentages of non-forested acres treated are shown in Table 2-42. Results do not show as much difference by alternative as forested percentages, but the trends are somewhat reversed, with Alternative 5 treating the highest percentage, and Alternative 4 treating the lowest.

Table 2-42. Percent of the Total Non-forested Acres Treated with Fire Use During the First Five Decades by Alternative and by Forest

Forest	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Boise	105	103	107	84	113	83	99
Sawtooth	99	93	93	80	103	70	92

Issue 2 Statement: Forest Plan management strategies may affect the amount of vegetation at risk to wildfire, and at what rate hazardous conditions are reduced in areas where there are threats to life and private property (wildland-urban interface).

Indicator for Issue 2: MPCs assigned to wildland-urban interface subwatersheds for each alternative and how they address the risk of wildfire (uncharacteristic and those that may result from high resistance-to-control) in forested vegetation, by Forest

Effects: Alternative 5 on all three Forests would provide the greatest opportunity to alter hazardous vegetative conditions in interface subwatersheds in the short term, and to maintain them in the long term, because all interface subwatershed areas are in MPCs that allow fire and mechanical to treat vegetation (Table 2-43). The majority of interface subwatershed area in Alternatives 3 and 7, followed by 1B and 2, are also in MPCs that use both tools. Alternatives 4 and 6 have the least amount of area in MPCs that provide fire and mechanical tools. In these alternatives the majority of interface subwatershed area occurs in MPCs where fire is the only management tool. In this case, more time would be required to alter vegetative conditions, and therefore the short-term risks of wildfire would remain high. Over the long term, hazard may be reduced in areas where fire is a viable vegetation management tool, given appropriate conditions. However, where hazardous conditions exist, burning that reduces the hazard would likely be conducted under a tight prescription staged over a number of years. In some areas, conditions may be such that fire alone would not be a viable management option. In these areas, wildfire hazard would continue to increase.

Table 2-43. Percent of Total Interface Subwatershed Area in MPCs that Allow Fire Only Versus Fire/Mechanical Vegetation Management

Forest	Treatments Allowed	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Boise	Fire Only	11	12	2	29	0	63	1
	Fire/Mechanical Mix	89	88	98	71	100	37	99
Payette	Fire Only	39	40	11	68	0	62	22
	Fire/Mechanical Mix	61	60	89	32	100	38	78
Sawtooth	Fire Only	27	26	11	75	0	80	18
	Fire/Mechanical Mix	73	74	89	25	100	20	82
Total for Ecogroup	Fire Only	21	21	7	52	0	69	11
	Fire/Mechanical Mix	79	79	93	48	100	31	89

Rangeland Resources

Issue Statement: Forest Plan management strategies may affect rangeland resources, including lands considered suitable for livestock grazing and the level of livestock grazing authorized under permit for the Forests.

Indicator 1: Estimated suitable rangeland acres by Forest.

Effects: Suitable rangeland acres for each Forest change due to different factors. On the Boise Forest, Alternatives 2, 3, 4, 6, and 7 have minor reductions (8 percent) in suitable lands over time as vacant allotments are closed (Table 2-44). There would be no allotment closures under Alternatives 5 and 1B. Minor deductions (1.4 percent) would also occur under Alternatives 1, 4, and 7 due to allotment adjustments made to protect anadromous fish habitat. On the Payette Forest, Alternatives 3, 4, and 6 have minor reductions (6.7 percent) in suitable lands due to withdrawals of domestic sheep from bighorn sheep habitat to reduce the risk of disease transmission. Alternatives 5, 2, 7, and 1B have no reductions. On the Sawtooth, reductions would occur from various sources, depending on the alternative. Alternatives 4 and 6 have the most reductions (13.7 percent), followed by Alternative 7 (13.2 percent), Alternative 3 (12.6 percent), and Alternative 2 (0.2 percent). Alternatives 5 and 1B have no reductions.

Table 2-44. Rangeland Suitability Acres by Alternative and Forest

Forest	Criteria	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Boise	Capable Acres	398,400	398,400	398,400	398,400	398,400	398,400	398,400
	- Vacant allotment acres	0	32,041	32,041	32,041	0	32,041	32,041
	- Anadromous	5,575	0	0	5,575	0	0	5,575
	- Total deductions	0	32,041	32,041	37,616	0	32,041	37,616
	Total Suitable Acres	**398,400**	**366,359**	**366,359**	**360,784**	**398,400**	**366,359**	**360,784**
Payette	Capable Acres	227,080	227,080	227,080	227,080	227,080	227,080	227,080
	- Bighorn habitat acres	0	0	15,329	15,329	0	15,329	0
	- Total deductions	0	0	15,329	15,329	0	15,329	0
	Total Suitable Acres	**227,080**	**227,080**	**211,751**	**211,751**	**227,080**	**211,751**	**227,080**
Sawtooth	Capable Acres	535,010	535,010	535,010	535,010	535,010	535,010	535,010
	- Rec. conflict acres	0	1,253	1,253	1,253	0	1,253	1,253
	- Bighorn habitat acres	0	0	66,506	66,506	0	66,506	66,506
	- Noxious weed acres	0	0	0	5,711	0	5,711	3,213
	- Total deductions	0	1,253	67,759	73,470	0	73,470	70,972
	Total Suitable Acres	**535,010**	**533,757**	**467,251**	**461,540**	**535,010**	**461,540**	**464,038**

Indicator 2: Estimated suitable rangeland acreage that occurs within Less Restrictive and More Restrictive Management Prescription Categories.

Effects: Alternative variations directly affect the number of allotments where more or less restrictive management is implemented. Indirect effects translate into possible changes to livestock herd management, increased range improvement costs, allotment management costs,

changes in seasons of use, and numbers of livestock. The greatest potential changes are associated with Alternative 4 (Table 2-45). Alternative 6 reflects the next greatest change, although it is significantly less than Alternative 4. Alternatives 1B and 5 are relatively comparable in their outcomes and produce the least amount of potential change over time.

Table 2-45. Suitable Rangeland Acres with Less Restrictive and More Restrictive MPCs

Forest	MPC Grouping	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Boise	More restrictive	26,000	40,020	62,180	232,180	11,250	113,380	32,430
	Less restrictive	372,390	326,340	304,180	128,600	387,140	252,980	328,360
Payette	More restrictive	11,360	19,120	59,630	206,120	16,560	79,590	62,080
	Less restrictive	215,720	207,960	152,120	5,640	210,520	132,160	165,000
Sawtooth	More restrictive	36,950	82,850	94,680	255,560	7,090	271,580	116,370
	Less restrictive	498,060	450,910	372,570	205,980	527,920	189,960	347,670
Ecogroup Totals	More restrictive	74,310	141,990	216,490	**693,860**	34,900	364,550	210,880
	Less restrictive	**1,086,170**	**985,210**	**828,870**	340,220	**1,125,580**	**575,100**	**841,030**

*Bold lettering indicates if largest proportions of acreage occur in More Restrictive or Less Restrictive category.

Timberland Resources

Issue Statement: Forest Plan management strategies may affect the amount of suited timberlands and sustainable timber managed by the Forests.

Indicators: The amount of suited timberlands, Allowable Sale Quantity (ASQ), and Total Sale Program Quantity (TSPQ) by alternative. All numbers are for the first planning period decade.

Effects on Suited Timberlands: Alternative 5 has the most suited timberland acres, followed in descending order by Alternatives 1B, 2, 3, 7, 6, and 4 (Table 2-46).

Table 2-46. Suited Timberland Acres by Alternative

Forest	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Boise	922,000	746,000	649,400	9,300	1,309,800	330,300	527,500
Payette	438,100	358,600	373,900	0	895,100	240,000	330,000
Sawtooth	390,100	201,500	227,000	23,100	595,300	45,130	141,500
Totals	**1,750,200**	**1,306,100**	**1,250,300**	**32,400**	**2,800,200**	**615,430**	**999,000**

Effects on ASQ: Alternative 5 has the highest level of ASQ, followed in descending order by Alternatives 1B, 7, 2, 3, 6, and 4 (Table 2-47).

Table 2-47. ASQ by Alternative (in Millions of Board Feet)

Forest	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Boise	720.0	511.5	381.3	3.8	1,300.0	250.1	450.0
Payette	600.0	193.0	238.2	0.0	1,113.0	161.1	325.0
Sawtooth	157.9	98.0	61.4	0.0	483.0	3.8	117.0
Totals	**1,477.9**	**802.5**	**680.9**	**3.8**	**2,896.0**	**415.0**	**892.0**

Effects on TSPQ: Alternative 5 has the highest level of TSPQ, followed by Alternatives 1B, 2, 3, 6, and 4 (Table 2-48).

Table 2-48. TSPQ by Alternative (in Millions of Board Feet)

Forest	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Boise	723.0	704.4	613.3	160.0	1,300.0	275.7	662.7
Payette	618.7	362.9	481.7	93.9	1,126.2	180.0	402.7
Sawtooth	164.3	180.8	183.2	44.6	505.0	10.9	294.3
Totals	1,506.0	1,244.1	1,278.2	298.5	2,931.2	466.6	1,359.7

Recreation

Issue Statement: Forest Plan management strategies may affect recreation resources, experiences, and opportunities.

Indicators: The following indicators are used to measure the effects of management activities on recreation resources, experiences, and opportunities on the three Forests by alternative:

1) Estimated changes in acres of each Recreation Opportunity Spectrum (ROS) class.
2) Acres having high or extreme ratings for either uncharacteristic wildfire hazard or resistance to control that are assigned a 5.1 or 6.1 MPC.
3) Number of developed recreation sites located within high priority subwatersheds assigned to MPC 3.2.
4) Total acres of MPCs 3.1 and 3.2 within high priority restoration subwatersheds.
5) Projected total miles of Forest Classified Roads in 2015.
6) Projected miles of unclassified roads decommissioned by 2015.

Effects on Indicator 1: Management activities associated with each alternative would have varying effects on recreation opportunities by influencing the settings. The potential for change in summer and winter recreation opportunities and experiences is reflected in the estimated changes in ROS classes associated with each alternative (Tables 2-49 and 2-50).

Table 2-49. Estimated Acres of Summer ROS Class Change by Alternative for Each Forest by 2018[1]

ROS Class[2]	Summer ROS Acres						
	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Boise National Forest							
P	0	0	0	+66,000	0	+11,000	0
SPNM	-56,000	-60,000	-66,000	+44,000	-66,000	+4,000	-56,000
SPM	+42,000	+40,000	+37,000	-110,000	+37,000	-15,000	+42,000
RN	0	0	0	0	0	0	0
RM	+14,000	+19,000	+28,000	0	+29,000	0	+14,000
R	0	0	0	0	0	0	0
Payette National Forest							
P	0	0	0	+79,000	0	+17,000	0
SPNM	-3,000	0	-5,000	+140,000	-6,000	+11,000	0
SPM	-3,000	0	-4,000	-219,000	-5,000	-28,000	0
RN	0	0	0	0	0	0	0
RM	+6,000	0	+10,000	0	+12,000	0	0
R	0	0	0	0	0	0	0
Sawtooth National Forest							
P	0	0	0	+46,000	0	+13,000	0
SPNM	-1,000	0	-2,000	+584,000	0	+42,000	0
SPM	-17,000	0	-19,000	-630,000	0	-55,000	0
RN	+2,000	0	+2,000	0	0	0	0
RM	+12,000	0	+15,000	0	0	0	0
R	+4,000	0	+4,000	0	0	0	0

[1]Acreages are rounded to the nearest 1,000 acres. Positive values represent increases in acreages; negative values represent decreases. Forest changes totals may not equal 0 due to rounding.
[2]ROS Class Abbreviations: P = Primitive; SPNM = Semi-Primitive Non-Motorized; SPM = Semi-Primitive Motorized; RN = Roaded Natural; RM = Roaded Modified; R = Rural.

Table 2-50. Estimated Acres of Winter ROS Class Change by Alternative for Each Forest by 2018[1]

ROS Class[2]	Winter ROS Acres						
	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Boise National Forest							
P	0	0	0	+66,000	0	+11,000	0
SPNM	0	-2,000	-4,000	+492,000	-5,000	+141,000	0
SPM	0	-9,000	-24,000	-558,000	-26,000	-152,000	0
RN	0	0	0	0	0	0	0
RM	0	+10,000	+28,000	0	+30,000	0	0
R	0	0	0	0	0	0	0
Payette National Forest							
P	-8,000	-8,000	-8,000	+70,000	-8,000	+13,000	-8,000
SPNM	+6,000	+8,000	+5,000	+316,000	+5,000	+165,000	+8,000
SPM	-7,000	0	-12,000	-386,000	-14,000	-178,000	0
RN	0	0	0	0	0	0	0
RM	+9,000	0	+14,000	0	+17,000	0	0
R	0	0	0	0	0	0	0
Sawtooth National Forest							
P	-61,000	0	-61,000	+37,000	0	+24,000	0
SPNM	+67,000	0	+66,000	+658,000	0	+187,000	0
SPM	-5,000	0	-10,000	-695,000	0	-211,000	0
RN	-2,000	0	-2,000	0	0	0	0
RM	-2,000	0	+4,000	0	0	0	0
R	+2,000	0	+2,000	0	0	0	0

[1]Acreages are rounded to the nearest 1,000 acres. Positive values represent increases in acreages; negative values represent decreases. Forest changes totals may not equal 0 due to rounding.
[2]ROS Class Abbreviations: P = Primitive; SPNM = Semi-Primitive Non-Motorized; SPM = Semi-Primitive Motorized; RN = Roaded Natural; RM = Roaded Modified; R = Rural.

The most dramatic shifts in ROS occur in Alternatives 4 for all three Forests, because motorized use is prohibited in Recommended Wilderness areas under this alternative, which has by far more Recommended Wilderness than any other alternative. ROS shifts associated with development are relatively small but are considerably larger on the Boise and Payette National Forests than on the Sawtooth National Forest. This is consistent with the fact that a good portion of the Sawtooth National Forest is within the Sawtooth National Recreation Area (SNRA), in which development is limited by legislation. Overall, Alternative 7 would have the fewest changes in ROS classes from current conditions.

Effects on Indicator 2: Treatments to reduce the risk of uncharacteristic wildfire or to reduce fuel loadings could include mechanical harvest and thinning, fire use, or some combination of the above. Recreation opportunities and experiences would likely be temporarily unavailable within and adjacent to the treatment areas during mechanical or prescribed fire treatments. The treatments would most likely occur in areas assigned to MPC 5.1 or 6.1 that currently have either high or extreme ratings for uncharacteristic wildfire hazard or resistance to control (Table 2-51).

Table 2-51. Approximate Acres Having High or Extreme Ratings for Uncharacteristic Wildfire Hazard or Resistance to Control Assigned with MPCs 5.1 or 6.1*

National Forest	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Boise	559,000	769,000	931,000	380,000	473,000	329,000	434,000
Payette	118,000	227,000	391,000	0	232,000	135,000	177,000
Sawtooth	17,000	343,000	489,000	190,000	253,000	70,000	314,000

* Acreages have been rounded to the nearest 1,000 acres.

For all three Forests, Alternative 3 would likely result in the highest potential levels of recreation use disturbance and displacement due to vegetation restoration and fuels reduction activities. On the Boise, Alternative 2 also presents a high level of potential displacement, while all the other alternatives present relatively moderate levels. Alternative 6 results in the lowest level on the Boise. On the Payette, Alternative 4 presents no areas assigned to MPC 5.1 or 6.1 that currently have either high or extreme ratings for uncharacteristic wildfire hazard or resistance to control, giving it the lowest potential for recreation use disturbance and displacement. All of the remaining alternatives result in moderate levels between Alternatives 3 and 4. On the Sawtooth, Alternative 1B results in the lowest level while Alternative 6 is higher but still relatively low. All the remaining alternatives on the Sawtooth result in moderate levels of potential disturbance and displacement between Alternative 6 and Alternative 3.

Effects on Indicator 3: Aquatic, Riparian, and Watershed management direction in the Forest Plans could have potential effects on developed recreation facilities, including reconstruction, relocation, closure, or decommissioning. This direction would be used to guide the development of new facilities and to mitigate impacts originating from existing facilities. Developed recreation facilities within high priority watersheds assigned to MPC 3.2 would be the most likely affected. The number of these facilities is shown by Forest and alternative in Table 2-52.

Table 2-52. Developed Recreation Sites within Subwatersheds Having High Priority for Active Restoration and Assigned to MPC 3.2

National Forest	Alternative						
	1B	2	3	4	5	6	7
Boise	0	25	39	19	2	21	22
Payette	0	11	15	5	2	11	14
Sawtooth	0	59	59	7	0	52	58

Alternative 3 has the most developed recreation sites in MPC 3.2, followed in descending order Alternatives 2, 7, 6, 4, 5, and 1B.

Effects on Indicator 4: Management direction for soil, watershed, riparian, aquatic, and wildlife resources can potentially result in a variety of effects to dispersed recreation opportunities and experiences, including use restrictions, or site hardening, relocation, or closure. Although potential mitigation impacts to dispersed recreation activities may occur at any location, subwatersheds identified as high priorities for restoration, with an assigned MPC of 3.1

or 3.2 are the most likely to be affected. Comparing the total acres of MPCs 3.1 and 3.2 within high priority restoration subwatersheds can be used to show relative differences between alternatives in the potential for changes to dispersed recreation opportunities and experiences as a result of aquatic restoration activities (Table 2-53).

Table 2-53. Total Acres of High Priority Restoration Subwatersheds Assigned to MPCs 3.1 or 3.2*

Forest	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Boise	0	243,000	316,000	224,000	22,000	72,000	271,000
Payette	0	174,000	448,000	191,000	32,000	71,000	483,000
Sawtooth	0	252,000	314,000	146,000	0	85,000	333,000

* Acreages have been rounded to the nearest 1,000 acres.

Alternative 3 has the most area in MPC 3.2, followed in descending order Alternatives 7, 2, 4, 6, 5, and 1B. The results of this analysis could be somewhat misleading in the case of Alternative 1B on all three Forests and Alternative 5 on the Sawtooth, which have no acres in these MPCs. This does not necessarily mean that recreation activities would never be restricted or altered under these alternatives.

Effects on Indicators 5 and 6: One of the major roles of the transportation network on National Forests is to provide access for recreational use of the Forests. Recreation opportunities are greatly influenced by the type and levels of recreation access. As a result, changes to the transportation network can also have substantial effects on recreation opportunities and experiences. A sense of the overall relative size of the road networks under each alternative can be gained from the estimates in Tables 2-54 and 2-55. These tables display the projected miles of classified roads in 2015 and the estimated miles of unclassified roads decommissioned by 2015 respectively.

Table 2-54. Projected Miles of Classified Roads in 2015

National Forest	Current Miles	Estimated Road Miles by Alternative						
		Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Boise	5,496	5,285	5,144	4,928	5,197	5,252	5,364	5,206
Payette	3,197	3,326	3,271	3,328	3,195	3,339	3,182	3,294
Sawtooth	2,019	2,024	2,013	2,008	2,018	2,030	2,019	2,016

Because the level of anticipated decommissioning exceeds the level of anticipated new road construction on the Boise, the total miles of classified roads on the Forest would decrease under all alternatives. Alternative 3 would be likely to result in the highest level of reductions of classified road access, and Alternative 6 would result in the least amount of change from the current classified road access levels. All the other alternatives would vary slightly in their classified road access reductions between those two alternatives.

On the Payette, classified road access would likely be the greatest under Alternative 5, although Alternatives 1B, 2, 3, and 7 would also be likely to expand access to varied extents. Alternatives 4 and 6 would be likely to result in relatively low levels of change in overall miles from the current system with relatively slight reductions in classified road access.

The scale of change is somewhat less for the Sawtooth than for the Boise and Payette due to its smaller road system and lower level of timber sale (i.e., new road construction) opportunities. Relatively little change to the classified road system would be expected for the Sawtooth under any alternative. The classified road system would be expected to expand slightly under Alternatives 5 and 1B, with 5 showing the greatest increase. Conversely, it would be reduced the most under Alternative 3. Smaller reductions would be likely to occur under Alternatives 2, 4, and 7. Levels of new construction and decommissioning are expected to be about the same under Alternative 6, keeping the projected road system about the same as its current level.

Table 2-55. Estimated Miles of Unclassified Roads Decommissioned by 2015

National Forest	Decommissioned Unclassified Road Miles by Alternative						
	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Boise	62	104	122	60	74	29	74
Payette	194	224	370	117	220	83	200
Sawtooth	37	80	118	21	47	13	68

Alternative 3 is likely to have the greatest effect on recreational access on unclassified roads on all three Forests. The differences between Alternative 3 and the other alternatives are more pronounced on the Payette and Sawtooth. Unclassified road decommissioning is expected to be highest under that alternative. On the Boise and Payette, Alternatives 1B, 2, 4, 5, and 7 all would have moderate levels of decommissioning. Alternative 6 would result in the lowest potential decommissioning levels on the Boise and Payette. On the Sawtooth, Alternatives 1B, 2, 5, and 7 all would likely result in moderate levels of decommissioning, while Alternatives 4 and 6 result in relatively low levels of decommissioning. Alternative 6 would likely result in the lowest level of unclassified road decommissioning on all three Forests and would therefore be likely to have the lowest impacts on recreational access on unclassified roads.

Scenic Environment

Issue Statement: Forest Plan management strategies may affect the scenic environment.

Indicators: The following indicators are used to measure effects of management activities on the scenic environment on the three Forests by alternative:

1) Acres of each Visual Quality Objective class.
2) Acres of change in Visual Quality Objective class from current levels.
3) Levels of landscape-changing management activities.
4) Uncharacteristic wildfire hazard index for forested vegetation
5) Insect hazard index for forested vegetation.

Effects on Indicators 1 and 2: Each of the alternatives has the potential to maintain, alter, or enhance the scenic character of the Forest landscapes to varying degrees. Projects implemented on each Forest under any alternative would require a site-specific assessment of their potential impacts on the scenic environment. The Visual Management System, which is used to develop VQOs, is based on the concept that a natural-appearing landscape character is preferred. As such, VQOs reflect the threshold of the greatest acceptable deviation from a natural appearance. The acreage totals for each VQO were estimated for each alternative considering the assigned management emphasis and are displayed in Table 2-50. The potential for change in the scenic environment is reflected in the proportion of the VQO classes associated with each alternative. The anticipated VQOs for each action alternative can also be compared with those of Alternative 1B to reflect the extent to which each varies from the current VQOs. These figures are also displayed in Table 2-56.

Table 2-56. Anticipated Acres* of VQO and Acres of Change by Alternative
(*Measured in thousands of acres)

Alt.	Preservation		Retention		Partial Retention		Modification		Maximum Modification	
	Acres	Ac. of Change From Existing	Acres	Ac. of Change From Existing	Acres	Ac. of Change From Existing	Acres	Ac. of Change From Existing	Acres	Ac. of Change From Existing
Boise National Forest										
1B	200	0	599	0	1,059	0	258	0	87	0
2	200	0	280	-319	1,104	45	501	243	118	31
3	200	0	280	-319	1,104	45	501	243	118	31
4	746	546	254	-345	893	-166	232	-26	78	-9
5	21	-179	264	-335	1,203	144	590	332	125	38
6	200	0	281	-318	1,363	304	282	24	77	-10
7	200	0	239	-360	1,105	46	541	283	118	31
Payette National Forest										
1B	1,013	0	112	0	568	0	607	0	0	0
2	1,028	15	316	204	514	-54	442	-165	0	0
3	1,028	15	316	204	514	-54	442	-165	0	0
4	1,668	655	93	-19	243	-325	296	-311	0	0
5	802	-211	390	278	628	60	480	-127	0	0
6	1,013	0	339	227	690	122	258	-349	0	0
7	1,013	0	338	226	670	102	279	-328	0	0
Sawtooth National Forest										
1B	492	0	271	0	596	0	555	0	197	0
2	492	0	271	0	596	0	555	0	197	0
3	492	0	271	0	596	0	555	0	197	0
4	1,147	655	142	-129	293	-303	347	-208	182	-15
5	218	-274	372	101	720	124	604	49	197	0
6	492	0	271	0	989	393	214	-341	145	-52
7	492	0	271	0	596	0	555	0	197	0

Some effects relationships are consistent across the Ecogroup area. Alternative 4 has the greatest shift towards preservation of all the alternatives because of its elevated levels of recommended wilderness. Alternative 4 also shows a large net decrease in acres of modification or maximum modification on all three Forests. Alternative 6 has a large shift of VQO acres from modification to partial retention. This shift is a reflection of the development limiting management direction in Alternative 6. Management direction under Alternative 6 requires that Inventoried Roadless Areas remain undeveloped and allow very limited potential development in unroaded areas. On the Boise and Sawtooth, Alternative 5 would allow the highest level of human-caused change to occur to the scenic environment, while maintaining the lowest levels of preservation VQOs on all three Forests.

Effects on Indicator 3: Some of the alternatives present considerable differences in the amounts and types of activities that could occur across the landscape. Some activities would have relatively minor potential to cause noticeable change in the landscape, while others are likely to cause very noticeable changes. Groupings of similar activities for tracking such potential changes by alternatives were made in order to simplify and capture those activities that have the most potential for affecting change on the landscape (Tables 2-57, 2-58, 2-59).

Table 2-57. Activities by Alternative - Boise National Forest
(Annual averages of acres or miles for the first two decades)

Activity Group	Activity Acres or Miles						
	Alt 1B	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Acres of even-aged harvest	3,790	350	0	0	4,070	20	1,580
Acres of intermediate treatment	6,440	10,595	13,240	4,155	9,500	4,325	8,870
Acres of fire use	6,995	10,880	8,800	16,135	2,780	16,325	9,610
Miles of road construction	10.8	18.3	9.8	3.0	13.6	2.5	10.2
Miles of road reconstruction	50.3	57.9	48.5	13.8	64.9	18.1	49.5
Miles of road decommissioning	31.8	53.4	62.9	30.6	38.1	14.9	38.2

Table 2-58. Activities by Alternative - Payette National Forest
(Annual averages of acres or for the first two decades)

Activity Group	Activity Acres or Miles						
	Alt 1B	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Acres of even-aged harvest	2,010	55	65	0	2,720	35	950
Acres of intermediate treatment	4,685	5,275	6,865	1,510	4,625	2,590	4,740
Acres of fire use	6,995	8,490	7,135	13,370	3,825	12,340	8,100
Miles of road construction	13.8	10.2	10.6	2.2	15.4	0.5	11.5
Miles of road reconstruction	48.4	36.4	38.7	7.5	54.5	14.7	40.6
Miles of road decommissioning	18.8	21.8	35.9	11.4	21.4	8.1	19.4

Table 2-59. Activities by Alternative - Sawtooth National Forest
(Annual averages of acres or miles for the first two decades)

Activity Group	Activity Acres or Miles						
	Alt 1B	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Acres of even-aged harvest	660	195	0	0	740	0	480
Acres of intermediate treatment	430	1,570	2,365	410	625	270	1,500
Acres of fire use	700	5,470	4,140	3,765	785	4,755	5,940
Miles of road construction	0.9	0.7	0.8	0.2	1.5	0.2	0.7
Miles of road reconstruction	3.3	3.5	4.6	1.0	5.0	0.6	3.4
Miles of road decommissioning	3.4	7.3	10.7	1.9	4.3	1.2	6.2

Overall ranking of the alternatives relative to potential impacts to scenic resources is complicated by the fact that the potential effects are not the same for each activity group. The visual effects of intermediate treatments cannot be considered on an equal basis with even-aged regeneration harvests and road construction. The visual effects of even-aged regeneration harvests and road construction are likely to be obvious and long term. Intermediate treatments are likely to be subtler in appearance and more short term in duration. Similarly, the effects of the fire use treatments would generally be much shorter in duration than those of even-aged regeneration harvests and road construction and cannot be considered on an equal basis for potential effects. The alternatives presenting the highest levels of potential visual effects are likely to be the ones that present the highest levels of even-aged regeneration harvest and road construction.

Boise National Forest - With the highest levels of even-aged regeneration harvest, road construction, and road reconstruction, Alternative 5 would likely have the greatest long-term changes to the landscape on the Boise National Forest. Alternative 1B would have almost as high a level of long-term landscape changes as Alternative 5. Alternative 7 would probably result in fewer long-term impacts than Alternatives 5 and 1B although it would have substantially more impacts than any of the remaining alternatives.

Payette National Forest - Alternative 4 would have the least amount of even-aged regeneration harvest over the next two decades, followed in ascending order by Alternatives 6, 2, 3, 7, 1B, and 5. Alternative 4 would also have the least amount of intermediate treatments, followed in ascending order by Alternatives 6, 5, 1B, 7, 2, and 3. Alternative 5 would have the least amount of fire use acres, followed in ascending order by Alternatives 1B, 3, 7, 2, 6, and 4. Alternative 6 would have the least amount of road construction, followed in ascending order by Alternatives 4, 2, 3, 7, 1B, and 5. Alternative 4 would have the least amount of road reconstruction activities, followed in ascending order by Alternatives 6, 2, 3, 7, 1B, and 5.

Sawtooth National Forest - Alternatives 3, 4, and 6 would have the least amount (none) of even-aged regeneration harvest over the next two decades, followed in ascending order by Alternatives 2, 7, 1B, and 5. Alternative 6 would have the least amount of intermediate treatments, followed in ascending order by Alternatives 4, 1B, 5, 7, 2, and 3. Alternative 1B would have the least amount of fire use acres, followed in ascending order by Alternatives 5, 4, 3, 6, 2, and 7. Alternatives 4 and 6 would have the least amount of road construction, followed in ascending order by Alternatives 2 and 7, 3, 1B, and 5. Alternative 6 would have the least amount of road reconstruction activities, followed in ascending order by Alternatives 4, 1B, 7, 2, 3, and 5.

Effects on Indicator 4: Uncharacteristic wildfire events affect scenic quality in the short and long term depending on the severity, intensity and scale of the event. The *Vegetation Hazard* section utilizes an uncharacteristic wildfire hazard index to compare alternatives. These indices are comparative values that represent a relative measure of the hazards that contribute to the rise in uncharacteristic wildfire. A higher value indicates a more hazardous condition compared to a lower value. Table 2-60 displays the current index and the indices calculated at the fifth decade in forested areas outside of designated wilderness.

Table 2-60. Uncharacteristic Wildfire Hazard Indices for the Current Condition and the Fifth Decade by Alternative

Forest	Current Index	Index for Fifth Decade						
		Alt. 1B	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Boise	0.65	0.81	0.45	0.41	0.38	0.57	0.41	0.57
Payette	0.50	0.62	0.43	0.38	0.38	0.50	0.38	0.49
Sawtooth	0.36	0.46	0.36	0.35	0.30	0.42	0.35	0.31

Alternative 1B is higher than all other alternatives on each Forest because it is the only alternative that did not include reduction of uncharacteristic wildfire hazard as one of the modeling goals for emulating the National Fire Plan objectives. For the Boise and Payette Forests, Alternative 1B followed by Alternatives 5 and 7 would have the greatest risk for large-scale landscape changes due to uncharacteristic wildfire. Alternative 4 followed by 3 and 6 are the lowest, with Alternative 2 occupying a middle position. For the Sawtooth Forest, Alternative 1B is the highest followed by Alternative 5. Alternative 5 is the only other alterative with a higher index rating than the current condition. Alternatives 4 and 7 are the lowest, with Alternatives 2, 3, and 6 occupying the middle range.

Effects on Indicator 5: Insect hazard is defined as a relative measure of predisposing conditions for damage caused by insects. Damage from insects means that tree mortality can be expected to be higher than normal. The actual impact to visual resources is highly variable and dependent on a wide range of variables such as visual sensitivity of the area observed, as well as the magnitude, scale, and intensity of mortality from insect hazard. The *Vegetation Hazard* section utilizes an insect hazard index that displays the relative hazard by alternatives. These indices are comparative values that represent a relative measure of the hazards that contribute to the rise in insect activity. A higher value indicates a more hazardous condition compared to a lower value. Table 2-61 displays the current index and the indices calculated at the fifth decade.

Table 2-61. Average Insect Hazard Indices by Alternative and Forest After Five Decades

Forest	Current Index	Index for Fifth Decade						
		Alt. 1B	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Boise	1.41	1.71	1.66	1.70	1.72	1.68	1.72	1.65
Payette	1.36	1.78	1.76	1.77	1.79	1.73	1.77	1.78
Sawtooth	1.38	2.05	1.87	1.96	1.89	2.01	1.99	1.76

Table 2-61 shows that on each Forest the hazard index calculated for the fifth decade indicates an increased hazard for insect infestation in all alternatives compared with the current condition. On the Boise Forest, Alternatives 4 and 6 have the highest ratings, while Alternatives 2 and 7 are the lowest. On the Payette Forest, Alternatives 1B, 4, and 7 have the highest ratings, while Alternative 5 is the lowest. On the Sawtooth Forest, Alternative 1B ranks the highest and Alternative 7 is the lowest. Variations between alternatives are still relatively small and it is expected that there would be little visual difference between alternatives related to insect mortality.

Cultural Resources

Issue Statement: Forest Plan management strategies may affect cultural resources.

Indicator - The following indicator will be used to measure the potential risk to cultural resources from management activities: *Acres of vegetation treatments in the first two decades.*

Effects: Vegetation treatments represent a substantial portion of the risk of effects to cultural resources associated with management activities that would occur under every alternative. These treatments include a combination of management-ignited fire and wildland fire use, as well as all scheduled mechanical vegetation treatments such as thinnings, selection harvests, shelterwood harvests, and clearcuts. The level of risk varies in proportion to the combined levels of these management activities anticipated under each alternative (Table 2-62).

Table 2-62. Acres of Vegetation Treatments in the First Two Decades*

National Forest	Acres						
	Alt 1B	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Boise	345,000	444,000	436,000	406,000	227,000	413,000	401,000
Payette	269,000	276,000	281,000	288,000	207,000	299,000	272,000
Sawtooth	36,000	145,000	127,000	83,000	48,000	100,000	158,000
Ecogroup Totals	650,000	865,000	844,000	777,000	482,000	812,000	831,000

* Acreages are rounded to the nearest 1,000.

Alternative 2 probably presents the highest risk to cultural resources on the Boise, because it represents the highest total level of vegetation treatment over the next two decades. However, levels under Alternatives 2, 6, 4, and 7 are also relatively high. Alternative 1B presents a relatively moderate level of risk, while Alternative 5 probably presents the lowest level of risk. On the Payette, the differences between the alternatives are relatively smaller than they are on the Boise. Alternative 6 likely presents the highest level of risk and Alternative 5 presents the lowest level. All of the other alternatives present risks almost as high as Alternative 6. Treatment levels are substantially lower on the Sawtooth than either the Boise or Payette. Alternative 7 likely presents the highest level of risk and Alternative 1B presents the lowest level. Alternative 2 presents almost as high a level of risk as Alternative 7. Alternatives 3, 6, and 4 present relatively moderate levels while risks under Alternative 5 would likely be only slightly higher than Alternative 1B.

For all alternatives, the Heritage Program provides support to all resource projects, as required under Section 106 of the National Historic Preservation Act (NHPA). This program includes inventory, analysis, protection, stabilization, and public interpretation of cultural resources under all alternatives. The levels of these individual activities and projects vary to some degree by alternative, but the general neutralizing or positive effects of mitigation, protection, and education on cultural resources remain the same for all alternatives.

Tribal Rights and Interests

Issue Statement: Forest Plan management strategies may affect the availability of resources, and the use of traditional places important to American Indian rights and interests.

Indicators: The indicators used to describe effects on the issue are: (1) changes in access to traditional cultural properties, (2) the relationship of species viability to tribal harvest ability, and (3) trends in watershed conditions.

Effects to Access: Under all alternatives, the road transportation system would be reduced compared to current conditions. Although the amounts and locations of decommissioned roads vary somewhat by alternative, the percentage of decommissioned roads is small for all alternatives over the short term when compared to the entire road system. Also, it is assumed that most decommissioned roads would not be integral to the transportation system, but would rather be local spurs to harvest units or mines that are no longer needed for production and are causing impacts to other resources. The main arterial and collector system would remain under all alternatives, providing access to essentially all areas of the Forests that can now be reached by car or truck.

Effects to Species Viability: Although effects differ by alternative, no alternative would result in significant adverse effects to species viability. For chinook salmon and steelhead trout, for example, restoration and protection of habitat under all alternatives would contribute positive effects to species viability over the short and long term, although cumulative off-Forest effects from hydro-electric dams, harvest, and hatchery introduced fish would still pose serious threats. Short-term or temporary impacts from restoration activities would be mitigated by Forest Plan direction, Best Management Practices (BMPs), and other resource protection methods.

Effects to Harvest Ability: Habitat should be present under all alternatives in sufficient amounts and in distribution to provide for viable populations of traditional plants, fish, and wildlife. Managing vegetation toward or within HRV should provide diverse and sustainable habitat conditions for plant and animal species similar to those that existed for traditional tribal hunting and gathering. However, competition for those species has increased substantially with increased human population in the area. Management direction has been developed to address the gathering of plants in general, and for cultural and traditional purposes in particular.

Effects to Watershed Conditions: Although the amount of watershed restoration activities would vary somewhat by alternative, the overall direct, indirect, and cumulative effects to watershed conditions from these activities would be positive over the short and long term. Improved watershed conditions, in turn, would provide good water quality and sustainable aquatic habitat for species such as chinook salmon and steelhead trout, which are of great concern to the tribes.

Roads

Issue Statement: Forest Plan management strategies may affect the road transportation system and how these roads are maintained.

Indicators: The following indicators are used to measure the effects of management strategies on Forest Development Roads on the three Forests by alternative.

1) Projected total miles of Forest Classified Roads in 2015.
2) Estimated miles of unclassified roads decommissioned by 2015.
3) Percentage of anticipated 2015 Forest Classified Roads maintained to standard based on experienced budget averages.

Effects on Indicator 1, Total Miles of Classified Roads: All alternatives are projected to reduce the overall amount of classified roads on the Boise Forest. Only Alternatives 4 and 6 would reduce classified roads on the Payette, although the other alternatives would only add minor amounts. Alternatives 1B and 5 would increase classified road miles slightly on the Sawtooth Forest, and all other alternatives would have very minor reductions (Table 2-63).

Table 2-63. Projected Miles of Classified Roads in 2015

National Forest	Current Miles	Estimated Road Miles by Alternative						
		Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Boise	5,496	5,285	5,144	4,928	5,197	5,252	5,364	5,206
Payette	3,197	3,326	3,271	3,328	3,195	3,339	3,182	3,294
Sawtooth	2,019	2,024	2,013	2,008	2,018	2,030	2,019	2,016

Effects on Indicator 2, Estimated Miles of Decommissioned Roads: For all three Forests, decommissioning of unclassified roads is likely to be the most aggressive under Alternative 3, which would likely result in the highest level of unclassified road decommissioning. Alternative 2 would follow Alternative 3. This is consistent with the emphasis on restoration activities and the levels of assignments of restoration prescriptions in Alternative 2. Alternatives 5, 7, and 1B present relatively moderate levels of decommissioning for the three Forests. Alternative 4 also presents moderate level on the Boise but is relatively lower on the Payette and Sawtooth. Alternative 6 offers the lowest levels of decommissioning for all three Forests (Table 2-64).

Table 2-64. Estimated Miles of Unclassified Roads Decommissioned by 2015

National Forest	Decommissioned Unclassified Road Miles by Alternative						
	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Boise	62	104	122	60	74	29	74
Payette	194	224	370	117	220	83	200
Sawtooth	37	80	118	21	47	13	68

Effects on Indicator 3, Road Maintenance Capability: Based on each alternative's relative levels of mechanical vegetation treatments, Alternatives 3 and 5 would probably provide greater road maintenance contributions from commercial users. Alternatives 2, 7, and 1B would provide similar levels, while Alternatives 4 and 6 would provide the lowest levels. Road maintenance cooperator contributions would probably vary little by alternative and would also be relatively small. Table 2-65 represents the anticipated level of road maintenance to operational maintenance level standards that would be accomplished by the Forest Service alone, given road maintenance accomplishment levels comparable to those of 2000, 2001, and 2002.

Table 2-65. Percentage of Anticipated 2015 Road System Maintained to Standard Based on Road Maintenance Accomplishment Levels in 2000, 2001, and 2002

National Forest	% Roads Maintained to Standard by Alternative						
	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Boise	20.3%	20.8%	21.7%	20.6%	20.4%	20.0%	20.6%
Payette	19.1%	19.4%	19.6%	19.9%	19.0%	20.0%	19.3%
Sawtooth	20.6%	20.7%	20.7%	20.6%	20.5%	20.6%	20.6%

Inventoried Roadless Areas

Issue 1 Statement: Forest Plan management strategies may affect the capability for development or wilderness potential of existing Inventoried Roadless Areas.

Issue 1 Indicators: The following indicators are used to measure the potential effects of management alternatives on roadless areas of the three Forests by alternative:

- Acres of IRAs assigned to management prescriptions (MPCs 2.4, 4.2, 4.3, 5.1, 5.2, 6.1, 6.2, or 8.0) that allow a full range of development opportunities
- Acres of IRAs assigned to management prescriptions (MPCs 3.1, 3.2, 4.1b, 4.1c) that have the potential for low levels of development
- Acres of IRAs assigned to management prescriptions (MPCs 2.1-Wild, 2.2, 4.1a) that maintain their undeveloped roadless character
- Acres of IRAs assigned to a management prescription (MPC 1.2) that recommends the area for wilderness designation

Effects to Issue 1, IRA Development Potential: For the three Ecogroup Forests, Alternative 5 has the most acres assigned to full range of development prescriptions, followed in descending order by Alternatives 1B, 3, 2, 7, 4, and 6. Alternative 7 has the most acres assigned to low levels of development prescriptions, followed in descending order by Alternatives 2, 3, 1B, 5, 4, and 6. Alternative 6 has the most acres assigned to prescriptions that maintain undeveloped character, followed in descending order by Alternatives 5, 7, 4, 3, 2, and 1B. Alternative 4 recommends the most acres for Wilderness designation by far, Alternatives 2, 3, 6, 7, and 1B all recommend similar amounts, and Alternative 5 does not recommend any acres (Table 2-66).

Table 2-66. IRA Disposition Acres and Percent of Forest IRAs by Alternative*

Indicator	Alternative	Boise NF IRAs		Payette NF IRAs		Sawtooth NF IRAs	
		Acres	%	Acres	%	Acres	%
Areas assigned to management prescriptions that allow a **full range of development** opportunities	1B	506,000	54%	212,000	21%	631,000	49%
	2	335,000	36%	65,000	6%	390,000	30%
	3	375,000	40%	142,000	14%	472,000	36%
	4	95,000	10%	0	0%	55,000	4%
	5	725,000	77%	678,000	68%	976,000	75%
	6	0	0%	0	0%	0	0%
	7	4,000	<1%	23,000	2%	121,000	9%
Areas assigned to management prescriptions that have the potential for **low levels of development**	1B	269,000	29%	563,000	56%	386,000	30%
	2	436,000	46%	707,000	71%	630,000	48%
	3	396,000	42%	611,000	61%	547,000	42%
	4	170,000	18%	51,000	5%	254,000	20%
	5	212,000	22%	95,000	10%	322,000	25%
	6	0	0%	0	0%	0	0%
	7	740,000	79%	696,000	69%	899,000	69%

Indicator	Alternative	Boise NF IRAs		Payette NF IRAs		Sawtooth NF IRAs	
		Acres	%	Acres	%	Acres	%
Areas assigned to management prescriptions that **maintain undeveloped character**	1B	5,000	1%	16,000	2%	2,000	<1%
	2	5,000	1%	19,000	2%	2,000	<1%
	3	5,000	1%	37,000	4%	2,000	<1%
	4	70,000	7%	16,000	2%	2,000	<1%
	5	5,000	1%	228,000	23%	2,000	<1%
	6	776,000	82%	791,000	79%	1,022,000	79%
	7	32,000	3%	72,000	7%	2,000	<1%
Areas **recommended for wilderness** designation	1B	161,000	17%	210,000	21%	279,000	21%
	2	166,000	18%	211,000	21%	277,000	21%
	3	166,000	18%	211,000	21%	277,000	21%
	4	607,000	64%	935,000	93%	987,000	76%
	5	0	0%	0	0%	0	0%
	6	166,000	18%	211,000	21%	277,000	21%
	7	166,000	18%	211,000	21%	277,000	21%

* Forest data is compiled on a lead Forest basis and does not include IRA portions located on the Salmon-Challis and Nez Perce National Forests. Forest totals by alternative may differ slightly from actual totals due to rounding.

Issue 2 Statement: Forest Plan management strategies for existing Inventoried Roadless Areas may affect the capability to treat forest health problems.

Issue 2 Indicators: The following indicators will be used to measure the potential effects of IRA management strategies to affect capabilities to address forest health problems by alternative.

- *Acres within IRAs having high or extreme uncharacteristic wildfire hazard ratings, high or extreme ratings for resistance to control, or high insect hazard ratings assigned to prescriptions (MPCs 2.4, 4.2, 4.3, 5.1, 5.2, 6.1, 6.2, and 8.0) that would allow both a full range of treatments and access capabilities*
- *Acres within IRAs having high or extreme uncharacteristic wildfire hazard ratings, high or extreme ratings for resistance to control, or high insect hazard ratings assigned to prescriptions (MPCs 3.2, 4.1b, and 4.1c) that would limit access capabilities but allow a wide range of treatments*
- *Acres within IRAs having high or extreme uncharacteristic wildfire hazard ratings, high or extreme ratings for resistance to control, or high insect hazard ratings assigned to prescriptions (MPCs 1.2, 2.1, 2.2, 3.1, and 4.1a) that would limit both the range of treatments available as well as access capabilities*

Effects to Issue 2, Forest Health Treatment Capability: Uncharacteristic wildfire and insect infestation are two of the most prominent forest health problems within the Ecogroup area. To assess the threat of uncharacteristic wildfire, analyses included in this Forest Plan revision process classified all areas within the Ecogroup relative to both uncharacteristic wildfire hazard

and resistance to fire control. An estimated 45 percent of the acres within Ecogroup IRAs have been identified as having high or extreme ratings for uncharacteristic wildfire hazard, while an estimated 12 percent of the IRA acreage has been identified as having high ratings for insect hazard. Acres are displayed by alternative and Forest in Tables 2-67 and 2-68.

Table 2-67. IRA Acres of MPCs Assigned to Areas within IRAs Having High or Extreme Ratings for Uncharacteristic Wildfire Hazard or Resistance to Control by Alternative*

Forest	Forest Health Capability	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Boise	Treatments and Access Limited	188,000	192,000	43,000	430,000	2,000	551,000	44,000
	Treatments Available; Access Limited	0	74,000	214,000	47,000	59,000	0	503,000
	Treatments and Access Available	362,000	284,000	294,000	73,000	490,000	0	4,000
Payette	Treatments and Access Limited	307,000	317,000	175,000	437,000	91,000	437,000	301,000
	Treatments Available; Access Limited	30,000	102,000	203,000	0	29,000	0	113,000
	Treatments and Access Available	100,000	17,000	58,000	0	317,000	0	23,000
Sawtooth	Treatments and Access Limited	167,000	153,000	74,000	316,000	0	473,000	74,000
	Treatments Available; Access Limited	0	43,000	99,000	116,000	38,000	0	331,000
	Treatments and Access Available	306,000	277,000	301,000	41,000	435,000	0	69,000

* Forest data is compiled on a lead Forest basis and does not include IRA portions located on the Salmon-Challis and Nez Perce National Forests. Actual Forest figures by alternative are rounded to the nearest 1,000 acres. Totals by alternative may differ slightly due to rounding.

Table 2-68. IRA Acres of MPCs Assigned to Areas Within IRAs Having High Ratings for Insect Hazard by Alternative*

Forest	Forest Health Capabilities	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Boise	Treatments and Access Limited	12,000	12,000	12,000	144,000	1,000	161,000	54,000
	Treatments Available; Access Limited	25,000	109,000	105,000	15,000	11,000	0	107,000
	Treatments and Access Available	124,000	40,000	44,000	2,000	149,000	0	0
Payette	Treatments and Access Limited	12,000	21,000	39,000	105,000	13,000	105,000	66,000
	Treatments Available; Access Limited	65,000	77,000	55,000	0	20,000	0	37,000
	Treatments and Access Available	28,000	8,000	12,000	0	72,000	0	2,000
Sawtooth	Treatments and Access Limited	12,000	16,000	16,000	84,000	1,000	110,000	16,000
	Treatments Available; Access Limited	23,000	42,000	35,000	22,000	14,000	0	64,000
	Treatments and Access Available	75,000	52,000	59,000	4,000	94,000	0	30,000

* Forest data is compiled on a lead Forest basis and does not include IRA portions located on the Salmon-Challis and Nez Perce National Forests. Actual Forest totals by alternative are rounded to the nearest 1,000 acres. Totals by alternative may differ slightly due to rounding.

Generally, Alternative 6 would provide the highest level of limitations on treatment types and access within IRAs for all three Forests. Alternative 4 would provide the second highest level of limitations on management activities within IRAs. This is largely because MPCs 1.2 and 4.1a, which allow little or no mechanical treatments and no road building, are the predominant management prescriptions under those alternatives. All of the other alternatives offer a substantially wider range of treatment and access opportunities (Tables 2-59 and 2-60).

Areas where treatments and access opportunities are both available are the greatest under Alternative 5 for all three Forests. Alternative 1B ranks second in providing management strategies with the fewest treatment and access limitations. This would be expected since commodity production and active vegetation management themes are prominent under these alternatives. Generally, Alternatives 3 and 2 provide relatively high levels of areas where both treatments and access are available due to their emphasis on restoration activities. However, this is not the case under Alternative 7, on the Payette, which ranks higher than Alternative 2 for treatments and access availability to treat uncharacteristic wildfire conditions.

Issue 3 Statement: Forest Plan management strategies for Inventoried Roadless Areas may or may not be consistent with the direction established under the Roadless Area Conservation Rule.

Issue 3 Indicators: The following indicator will be used to measure each alternative's consistency with the Roadless Area Conservation Rule:

- *Acres of IRAs assigned to management prescriptions (MPCs 1.2, 2.2, and 4.1a) that are consistent with direction established by the Roadless Area Conservation Rule*
- *Acres of IRAs assigned to management prescriptions (MPCs 2.4, 3.1, 3.2, 4.1b, 4.1c, 4.2, 4.3, 5.1, 5.2, 6.1, 6.2, or 8.0) that are not consistent with direction established by the Roadless Area Conservation Rule*

Effects to Issue 3, Roadless Area Conservation Rule (RACR) Consistency: Each alternative's level of consistency with the RACR can be analyzed based on the assigned MPCs. Some MPCs (1.2, 2.1, 2.2, and 4.1a) are consistent with management direction prescribed for IRAs under the current version of the RACR. Acres within IRAs assigned to these management prescriptions are compiled and displayed in Table 2-69.

Table 2-69. Roadless Area Conservation Rule Consistency*

Forest	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
IRA Acres Assigned to Management Prescriptions That Are Consistent with the RACR							
Boise	166,000	171,000	171,000	677,000	5,000	942,000	198,000
Payette	226,000	229,000	248,000	950,000	228,000	1,001,000	283,000
Sawtooth	281,000	280,000	280,000	990,000	2,000	1,299,000	280,000
IRA Acres Assigned to Management Prescriptions That Are Not Consistent with the RACR							
Boise	776,000	771,000	771,000	265,000	937,000	0	743,000
Payette	775,000	772,000	754,000	51,000	773,000	0	719,000
Sawtooth	1,018,000	1,020,000	1,019,000	310,000	1,297,000	0	1,020,000

* Forest data is compiled on a lead Forest basis and does not include IRA portions located on the Salmon-Challis and Nez Perce National Forests. Actual Forest totals by alternative are rounded to the nearest 1,000 acres. Totals by alternative may differ slightly due to rounding.

Alternative 6 is the only Alternative that is fully consistent with the RACR for all three Forests. All other alternatives are inconsistent with the RACR to some extent. Although not fully consistent, Alternative 4 is close to being consistent on the Payette and Sawtooth and is also the second closest alternative on the Boise. Alternative 5 is the least consistent on the Boise and Sawtooth, while Alternative 1B is the least consistent on the Payette. Values for all three Forests under Alternatives 1B, 2, 3, and 7 are relatively similar, ranging only from about 166,000 acres to 283,000 acres being consistent with the RACR.

Issue 4 Statement – Management strategies for recommended wilderness may affect recreation opportunities and experiences within recommended wilderness areas as well as the potential for wilderness designation of those areas.

Issue 4 Indicators - In that travel regulations for cross-country and trail use can differ, separate indicators are used to measure effects by alternative on mechanized use opportunities in recommended wilderness areas. The following indicators are used to contrast the relative levels of both motorized and mechanized use opportunities offered by the alternatives for cross-country travel experiences.

- *Acres Open to Summer Cross-Country Motorized Uses.*
- *Acres Open to Summer Cross-Country Mechanized Uses.*
- *Acres Open to Winter Cross-Country Motorized Uses.*

The following indicators are used to contrast the relative levels of both motorized and mechanized use opportunities offered by the alternatives for on-trail experiences.

- *Miles of Summer Trail Open to Motorized Uses.*
- *Miles of Summer Trail Open to Mechanized Uses.*

The following indicators are used to contrast the relative levels of groomed snowmobile and cross-country ski trails under each of the alternatives.

- *Miles of Groomed Snowmobile Trails.*
- *Miles of Groomed Cross-Country Ski Trails.*

Effects to Issue 4, Mechanized Use in Recommended Wilderness – Estimates for anticipated mechanized use opportunities by alternative are included in Table 2-70.

Table 2-70. Opportunities for the Use of Mechanical Transport within Recommended Wilderness Areas Under Revised Forest Plan Direction[1]

Indicator	Alternatives[2]	Boise NF[1]	Payette NF[1]	Sawtooth NF[1]
Acres Open to **Summer** Cross-Country **Motorized** Uses[3]	1B	900	200	0
	2, 3, & 7	200	200	0
	4 & 6	0	0	0
Acres Open to **Summer** Cross-Country **Mechanized** Uses[3]	1B	179,000	207,300	265,600
	2, 3, & 7	183,900	207,300	263,900
	4 & 6	0	0	0
Acres Open to **Winter** Cross-Country **Motorized** Uses[3]	1B	177,400	92,900	221,900
	2, 3, & 7	182,300	92,900	220,200
	4 & 6	0	0	0
Miles of **Summer** Trail Open to **Motorized** Uses	1B	59	84	74
	2, 3, & 7	62	84	70
	4 & 6	0	0	0
Miles of **Summer** Trail Open to **Mechanized** Uses	1B	91	197	243
	2, 3, & 7	98	197	239
	4 & 6	0	0	0
Miles of Groomed **Snowmobile** Trails	1B	0	0	0
	2, 3, & 7	0	0	0
	4 & 6	0	0	0
Miles of Groomed **Cross-Country Ski** Trails	1B	0	0	0
	2, 3, & 7	0	0	0
	4 & 6	0	0	0

[1] Data is compiled on an administrative unit basis and does not include portions of recommended wilderness on the Salmon-Challis National Forests.

[2] There is no recommended wilderness in Alternative 5. As a result, it does not appear in the above data.

[3] Area estimates are rounded to the nearest 100 acres.

Because mechanized transport within recommended wilderness is prohibited under Alternatives 4 and 6, the results for those alternatives would be the same. This effect is larger in scale under Alternative 4 than 6 due to the greater area of Recommended Wilderness in Alternative 4. Alternatives 4 and 6 discontinue non-conforming uses and increase opportunities for solitude and primitive recreation experiences within these areas. The results for Alternative 1B differ from those of Alternatives 2, 3, and 7 only because of small recommended wilderness boundary differences between those alternatives.

Wilderness

Issue Statement: Forest Plan management strategies may affect Wilderness resources.

Effects: No significant issues related directly to wilderness resources were identified during public scoping or the DEIS public comment period. Because direction for wilderness management of the three wilderness areas is detailed in law, regulation, agency policy, and in specific management plans, management in the revision alternatives would not differ. The relative amount of activities and uses may, in some cases, vary somewhat by alternative. However, they are likely to be present to some extent in all alternatives. Significant effects to wilderness areas are not expected under any alternative nor are effects expected to differ by alternative.

Wild and Scenic Rivers

Issue Statement: Eligible rivers and their corridors may affect the Forest's ability to implement management activities.

Indicators: The primary indicator used to display effects by alternative is the amount of eligible river segments by classification that could affect, or be affected by, management activities. These segments are measured in both miles of river and acres of river corridor. Effects to and from management activities are also described in general terms in Chapter 3.

Effects: The numbers in Table 2-71 represent the maximum miles and acres of river segments identified at this time that could become eligible or suitable for Wild and Scenic River designation by alternative.

Table 2-71. Eligible Wild and Scenic River Miles and Acres by Alternative

Classification	Miles/Acres	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Wild	River Miles	0	119	119	119	0	70	15
	Corridor Acres	0	37,421	37,421	37,421	0	22,294	4,111
Scenic	River Miles	0	0	0	0	0	0	0
	Corridor Acres	0	0	0	0	0	0	0
Recreational	River Miles	0	128	128	128	0	177	123
	Corridor Acres*	0	37,124	37,124	37,124	0	52,251	35,595

*Recreational corridors have much more private and state lands within them than Wild corridors. Private and state land acreage has been subtracted from the total river corridor area.

The types and amounts of management activities within an eligible or suitable river corridor depend on whether it is classified as a Wild, Scenic, or Recreational river. These management constraints are detailed in Chapter 3 by classification and resource area. Each river segment determined eligible for Wild and Scenic River designation will be managed to maintain its eligibility and classification until a detailed suitability study is done. The determination of which segments are eligible or suitable will be made in the Record of Decision for this EIS.

Socio-Economic Environment

Issue Statement 1: Forest Plan management strategies may have social and economic effects on local counties and communities.

Indicators: Indicators for this issue include county populations, community employment and income, lifestyles, attitudes, beliefs and values, social organization, land-use patterns, and civil rights.

County Populations: See Table 2-72 below for estimates of historic, current, and projected populations for selected counties in the Ecogroup's Zone of Influence. All county populations are predicted to increase, with the greatest increases generally occurring in urban or urban-adjacent counties.

Table 2-72. Historic and Projected Populations of Ecogroup Counties: 1985-2020

County	1985	1990	1995	2000	2010	2020	1990-2000 Change	2000-10 Projected Change	2010-20 Projected Change
Ada	189,811	207,505	252,251	300,904	358,495	416,167	45%	19%	16%
Adams	3,372	3,265	3,850	3,476	3,973	4,449	6%	14%	12%
Blaine	12,159	13,767	16,528	18,991	23,337	27,543	38%	23%	18%
Boise	3,285	3,552	4,669	6,670	7,902	8,971	88%	18%	14%
Camas	795	737	831	991	1,212	1,422	34%	22%	17%
Canyon	87,815	90,639	109,123	131,441	155,288	178,676	45%	18%	15%
Cassia	20,315	19,607	21,187	21,416	25,025	28,703	9%	17%	15%
Custer	5,118	4,155	4,255	4,342	5,325	6,294	5%	23%	18%
Elmore	21,764	21,232	23,547	29,130	34,504	40,284	37%	18%	17%
Gem	11,789	11,940	13,871	15,181	17,267	19,246	27%	14%	11%
Gooding	12,246	11,664	12,908	14,155	16,305	18,289	21%	15%	12%
Idaho	14,386	13,818	14,860	15,511	17,082	18,777	12%	10%	10%
Lincoln	3,508	3,345	3,716	4,044	4,660	5,230	21%	15%	12%
Power	7,233	7,073	8,129	7,538	8,678	9,823	7%	15%	13%
Twin Falls	54,185	53,797	59,383	64,284	71,543	78,748	19%	11%	10%
Valley	6,525	6,150	7,848	7,651	9,621	11,426	24%	26%	19%
Washington	8,662	8,595	9,606	9,977	11,280	12,504	16%	13%	11%
State of Idaho	**977,617**	**996,553**	**1,149,284**	**1,293,953**	**1,506,581**	**1,717,847**	**23%**	**16%**	**14%**

Lifestyles: The ICBEMP identified 12 rural-based lifestyles in the Columbia Basin. Although these 12 "lifestyle segments" are diverse, ranging from small-town, blue-collar families to retirement town seniors, they seem to share a common characteristic—an attraction to the natural setting of their communities. As noted earlier in this discussion, rural county commissioners cite the "natural beauty" of their area, as well as the wildlife and recreational opportunities. Many express a desire to continue a "multiple-use" way of life, while recognizing that economic diversity and economic development are necessary.

More urban areas, including the Treasure Valley, note dramatic growth, with newcomers originating from within and outside Idaho. In these areas, an increasing share of the economy is tied not to resource-related employment, but to the burgeoning high-tech industry.

Attitudes, Beliefs, and Values: The environment and public lands are of great interest to many Westerners, including those in Idaho and the Ecogroup Forests. However, while there may be widespread interest in environmental and public land issues, there is often little agreement on how to resolve these issues, or what the outcome should be. While some believe National Forest timber harvest provides high-paying employment and sustainable family incomes, others argue that timber harvest creates environmental degradation, and that economic and population growth in the Northwest is and should be tied to natural landscapes and environmental features. Others see many environmental issues tied to what is perhaps a more fundamental issue: whether or not state and county officials should dictate the uses of public lands within a state.

With changing demographics and economies in many parts of the Ecogroup zone of influence, county commissioners and mayors articulate the shifts and challenges their communities face. At the same time, many are proud of their counties, communities and surroundings, and want to retain viable communities for the future. Many cite a commitment of community members to help each other. Many also express a desire to continue a "multiple-use" way of life, while recognizing that economic diversity and economic development are necessary.

Social Organization: According to ICBEMP studies, some counties may show low or moderate economic and socio-economic resilience, while small communities within these counties have moderately high or high community resilience.

At the same time, counties and communities note the effect of recent growth and change, citing less free exchange of ideas, and less time with neighbors and friends (and more time at meetings). In some urban-adjacent areas, such as Boise County or the Fairfield area, small towns have become "bedroom communities," providing more affordable housing for urban workers, or providing increased services for part-time residents and visitors.

Also noted was a "ripple effect" in communities of recent economic and social changes. For example, in Fairfield, the 1980 closure of a local sawmill directly or indirectly affected the railroad, the dairy industry, and an increase in the size and specialization of farms. In many counties, declining 25 percent funds (see Chapter 3) have resulted in fewer funds available for schools and roads, especially since an alternative source of funding, property tax, is subject to an annual three percent cap on increases.

Several commissioners feel that there are changes in the way public-land decisions are made, believing that local land managers have less authority and management discretion than they have had in the past, and that decisions are now made or strongly influenced by upper levels of the Forest Service, and/or regulatory agencies, environmental groups, and the courts.

Land Use Patterns: The ICBEMP noted that within the Interior Columbia River Basin (including the Ecogroup), the region followed the national trend, with the bulk of recent growth occurring in the urban centers. Within Idaho, urban and urban-adjacent counties have and are

expected to grow faster than rural areas, with Ada, Blaine, Boise, Canyon, Gem and Valley Counties exhibiting the greatest rate of growth from 1985 to 1995. In 10 of the counties, more than 50 percent of the land is owned by the federal government, and in seven of 17 counties, more than 70 percent of the land is in federal ownership.

Civil Rights: Although Idaho and the Ecogroup remain largely white and Anglo-Saxon, the state is becoming more racially diverse. Hispanics comprise 6.8 percent of the state's population, but the Hispanic population increased by about 50 percent from 1990 to 1996. Canyon County, which lies within the Ecogroup socio-economic overview area, includes 25 percent of Idaho's Hispanic population. Although few data are available, there is a sense that the state's Hispanics use and relate to National Forests in ways that are similar to Idaho's predominantly white population.

Community Employment and Income: Differences across Forest Service management alternatives are reflected in differences in Forest outputs. Three broad output types are considered: range, recreation, and timber.

Range-Linked Outputs - All action alternatives result in small grazing reductions, and corresponding reductions in jobs and earnings. Alternative 4 results in the most total job and income reductions over the long term, and Alternative 5 has the least reductions (Table 2-73). Alternatives 6 and 7 result in steeper job and income losses in the short term (2005), but some recovery would occur by 2010. Alternatives 2 and 3 would be very similar in effects. Alternative 1B represents the current condition for each time period.

Table 2-73. Ecogroup Area Community Range-linked Jobs and Income by Alternative

Alternative	Jobs/Income	2000 (Current)	2005	2010
1B	Change in Jobs	286	270	279
	Change in Income	$7,640,000	$7,234,000	$7,434,000
2	Change in Jobs	286	-10	-20
	Change in Income	$7,640,000	-$211,000	-$447,000
3	Change in Jobs	286	-8	-22
	Change in Income	$7,640,000	-$170,000	-$471,000
4	Change in Jobs	286	-11	-33
	Change in Income	$7,640,000	-$248,000	-$733,000
5	Change in Jobs	286	-9	-8
	Change in Income	$7,640,000	-$181,000	-$154,000
6	Change in Jobs	286	-20	-20
	Change in Income	$7,640,000	-$519,000	-$426,000
7	Change in Jobs	286	-22	-22
	Change in Income	$7,640,000	-$544,000	-$446,000

Recreation-Linked Outputs - Under all alternatives, recreation use and recreation-linked jobs and earnings, would increase over time, with no differences among alternatives (Table 2-74).

Table 2-74. Ecogroup Area Community Recreation-linked Jobs and Income by Alternative

Alternative	Jobs/Income	2000 (Current)	2005	2010
1B	Jobs	2,695	2,847	2,696
	Income	$42,168,000	$52,271,000	$59,450,000
2	Jobs	2,695	2,847	2,696
	Income	$42,168,000	$52,271,000	$59,450,000
3	Jobs	2,695	2,847	2,696
	Income	$42,168,000	$52,271,000	$59,450,000
4	Jobs	2,695	2,847	2,696
	Income	$42,168,000	$52,271,000	$59,450,000
5	Jobs	2,695	2,847	2,696
	Income	$42,168,000	$52,271,000	$59,450,000
6	Jobs	2,695	2,847	2,696
	Income	$42,168,000	$52,271,000	$59,450,000
7	Jobs	2,695	2,847	2,696
	Income	$42,168,000	$52,271,000	$59,450,000

Timber-Linked Outputs – All alternatives result in increases in jobs and incomes by 2005, and then level off by 2010 (Table 2-75). The largest increases are seen under Alternative 1B, followed in descending order by Alternatives 5, 3, 7, 2, 6 and 4.

Table 2-75. Ecogroup Area Community Timber-linked Jobs and Income by Alternative

Alternative	Jobs/Income	2000 (Current)	2005	2010
1B	Change in Jobs	284	+1,000	+1,000
	Change in Income	$10,942,000	$40,796,000	$40,796,000
2	Change in Jobs	284	+605	+605
	Change in Income	$10,942,000	$21,882,000	$21,882,000
3	Change in Jobs	284	+763	+763
	Change in Income	$10,942,000	$27,927,000	$27,927,000
4	Change in Jobs	284	+12	+12
	Change in Income	$10,942,000	$395,000	$395,000
5	Change in Jobs	284	+1,059	+1,059
	Change in Income	$10,942,000	$38,499,000	$38,499,000
6	Change in Jobs	284	+18	+18
	Change in Income	$10,942,000	$717,000	$717,000
7	Change in Jobs	284	+764	+764
	Change in Income	$10,942,000	$27,864,000	$27,864,000

Overall, Alternative 5 has positive effects on timber-linked jobs and earnings; Alternative 1B has no effect over current levels. Alternatives 2 and 3 have similar and moderate negative effects, while Alternatives 4 and 6 significantly reduce timber-linked jobs and earnings under all scenarios. Communities hardest hit by timber-linked losses would generally be those that are currently most dependent on National Forest timber resources—Emmett, Cascade, and New Meadows.

Effects for timber would be mirrored in the total range, recreation, and timber jobs and income results shown in Table 2-60, because timber-linked figures would have the most influence on the overall changes by alternative. The range, recreation, and timber job and income figures in Table 2-60 represent less than 10 percent of the total jobs and income for the 15 communities that were analyzed.

Total Forest-Linked Outputs - Combining the impacts of the Forest Plan alternatives on all forest outputs presents an overall picture of how Forest management will affect the seventeen communities. Communities in southwest Idaho vary considerably in their resource dependency. For example, McCall-Donnelly has 672 jobs (Table SO-31) linked to Forest Service outputs. This constitutes about 14 percent of all employment in the McCall-Donnelly area. In contrast Stanley has only 216 jobs linked to Forest Service outputs, but this constitutes 75 percent of all employment in the Stanley area. Other communities that are very dependent on Forest Service outputs are Crouch-Garden Valley (37 percent), New Meadows (26 percent), Challis (24 percent), Fairfield (20 percent) and Cascade (20 percent).

The alternative that has the largest employment impact in the region is Alternative 5 (Tables SO-31 and SO-35). This alternative has a total impact in 2005 of 1,050 jobs and an impact in 2010 of 1,049 jobs. The two communities most strongly affected by this alternative are Emmett, with a 139.8 percent change in employment, and New Meadows, with 141.5 percent employment linked to Forest Service outputs. Note that the impact of Forest Service outputs vary considerably for any given community across the range of Forest Service management alternatives. For example, Emmett has an increase of 171 jobs in Alternative 5, and has a much larger increase of 458 jobs in Alternative 1B.

Tables 2-76 through 2-79 show the corresponding picture in terms of earnings impacts. The largest change in earnings in any of the alternatives is an increase of $21.983 million in Emmett in Alternative 1B. Much of this new $22 million payroll would be associated with the new sawmill that is projected to locate in Emmett by 2005. Another major change is shown in McCall-Donnelly where a $10.477 million increase in earnings occurs in Alternative 5. The alternative that has the largest overall impact on earnings is Alternative 1B, which generates a $40.796 million increase in earnings throughout seventeen Southeast Idaho communities.

Table 2-76. Jobs Indicated by All Forest Outputs by Alternative: 2005

Communities	Current Situation		Change In Total Jobs**						
	Total Jobs	All FS Output Linked Jobs	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Cascade	961	189	98	173	187	-2	203	2	174
Challis	1,278	300	0	-1	-1	-1	0	-1	-1
Council	1,164	131	100	44	96	-8	110	-2	77
Crouch-Garden V.	690	256	24	20	29	-1	33	1	20
Emmett	5,654	122	458	98	115	-0	171	4	121
Fairfield	701	139	4	4	18	2	83	0	16
Gooding	3,615	140	0	-3	-2	-2	-3	-5	-5
Hailey-Bellevue	5,074	0	0	0	0	0	0	0	0
Idaho City	801	53	46	23	37	-1	54	0	48
Ketchum-Sun V.	12,219	0	0	0	0	0	0	0	0
McCall-Donnelly	4,811	672	107	74	66	15	125	1	97
New Meadows	711	185	153	158	204	1	262	5	193
Oakley Valley	449	14	0	0	0	0	0	0	0
Raft River Valley	668	62	0	-0	-0	-1	0	-7	-7
Riggins	696	123	10	5	7	-1	12	-1	8
Stanley	288	216	0	0	0	0	0	0	0
Weiser	4,566	128	0	0	0	0	0	0	0
TOTAL	**44,368**	**3,401**	**1,000**	**595**	**755**	**1**	**1,050**	**-2**	**742**

All job numbers are rounded to the nearest whole number.

Table 2-77. Earnings Indicated by All Forest Outputs by Alternative: 2005

Communities	Current Situation		Change in Total Earnings ($1,000)						
	Total Earnings ($1,000)	All FS Output Linked Earnings	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Cascade	21,700	3,688	2,927	5,180	5,614	-56	6,086	54	5,232
Challis	34,661	4,698	0	-15	-15	-15	0	-15	-15
Council	31,796	3,888	4,614	2,123	4,464	-287	5,163	45	3,664
Crouch-Garden V.	14,929	2,773	267	217	316	-9	364	9	219
Emmett	118,349	3,048	21,983	4,739	5,563	54	8,198	228	5,896
Fairfield	15,733	1,228	105	105	527	70	2,492	0	491
Gooding	97,995	3,366	0	-68	-48	-48	-68	-101	-105
Hailey-Bellevue	155,270	5,208	0	0	0	0	0	0	0
Idaho City	16,204	938	1,156	576	932	-27	1352	11	1,209
Ketchum-Sun V.	348,552	13,564	0	0	0	0	0	0	0
McCall-Donnelly	102,309	12,135	3,426	2,380	2,106	474	4,018	33	3,102
New Meadows	26,380	5,662	6,111	6,346	8,166	70	10,477	197	7,737
Oakley Valley	14,135	432	0	0	0	-15	0	-26	-27
Raft River Valley	25,297	2,129	0	-15	-5	-47	0	-226	-236
Riggins	14,918	1,835	207	104	136	-18	238	-13	153
Stanley	5,246	3,993	0	0	0	0	0	0	0
Weiser	86,665	1,863	0	-8	-8	-8	-7	-9	-9
TOTAL	**1,130,140**	**70,447**	**40,796**	**21,664**	**27,749**	**139**	**38,311**	**188**	**27,311**

Note: All earnings numbers are expressed in thousands of dollars and rounded to the nearest thousand.

Table 2-78. Jobs Indicated by All Forest Outputs by Alternative: 2010

Communities	Current Situation		Change In Total Jobs**						
	Total Jobs	All FS Output Linked Jobs	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Cascade	1,038	203	98	173	187	-2	203	2	174
Challis	1,350	302	0	-1	-1	-1	0	-1	-1
Council	1,230	137	100	42	93	-10	108	-4	74
Crouch-Garden V.	751	258	24	20	29	-1	33	1	20
Emmett	5,952	126	458	98	115	-1	170	4	121
Fairfield	757	139	4	4	18	2	83	0	16
Gooding	3,875	144	0	-9	-10	-17	1	-6	-6
Hailey-Bellevue	5,533	169	0	0	0	0	0	0	0
Idaho City	882	55	46	23	37	-1	54	0	48
Ketchum-Sun V.	13,665	503	0	0	0	0	0	0	0
McCall-Donnelly	5,253	731	107	74	66	15	125	1	97
New Meadows	741	191	153	158	203	1	261	4	193
Oakley Valley	474	13	0	0	-0	-1	0	-0	-0
Raft River Valley	721	62	0	-1	-0	-3	1	0	0
Riggins	742	134	10	4	6	-2	11	-2	7
Stanley	318	230	0	0	0	0	0	0	0
Weiser	4,811	137	0	-2	-2	-2	-2	-2	-2
TOTAL	**48,093**	**3,532**	**1,000**	**583**	**739**	**-22**	**1,049**	**-4**	**740**

All job numbers are rounded to the nearest whole number.

Table 2-79. Earnings Indicated by All Forest Outputs by Alternative: 2010

Communities	Current Situation		Change in Total Earnings ($1,000)						
	Total Earnings ($1,000)	All FS Output Linked Earnings	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Cascade	24,828	4,087	2,927	5,180	5,614	-56	6,086	54	5,232
Challis	37,790	5,090	0	-33	-33	-33	0	-33	-35
Council	34,696	4,001	4,614	2,081	4,406	-345	5,120	-13	3,603
Crouch-Garden V.	16,952	3,126	267	217	316	-9	364	9	219
Emmett	129,606	3,113	21,983	4,736	5,551	40	8,192	219	5,887
Fairfield	17,316	1,348	105	105	527	70	2,492	0	491
Gooding	108,305	3,542	0	-205	-215	-363	20	-142	-148
Hailey-Bellevue	177,156	5,942	0	0	0	0	0	0	0
Idaho City	18,602	1,014	1,156	576	932	-27	1,352	11	1,209
Ketchum-Sun V.	408,713	15,905	0	0	0	0	0	0	0
McCall-Donnelly	116,730	13,904	3,426	2,379	2,105	472	4,016	31	3,100
New Meadows	28,267	5,744	6,111	6,337	8,158	62	10,468	188	7,728
Oakley Valley	15,394	423	0	0	-5	-21	0	-10	-11
Raft River Valley	27,196	2,131	0	-20	-15	-88	19	9	10
Riggins	16,509	2,033	207	83	115	-39	217	-34	131
Stanley	5,977	4,399	0	0	0	0	0	0	0
Weiser	95,180	2,026	0	-34	-35	-35	-33	-37	-38
TOTAL	**1,279,216**	**77,827**	**40,796**	**21,401**	**27,420**	**-373**	**38,313**	**254**	**27,381**

Note: All earnings numbers are expressed in thousands of dollars and rounded to the nearest thousand.

Issue Statement 2: Forest Plan management strategies may affect the financial efficiency of operating the three National Forests in the Ecogroup.

Indicators for Issue 2: Present Net Value (PNV) and revenue/cost ratio for the Boise, Payette, and Sawtooth National Forests over a 50-year time period.

Effects: The analysis below compares the financial efficiency of the seven alternatives over a 50-year period for each of the Ecogroup Forests, and for all of the Forests combined. Displayed under the four different scenarios are revenues, costs, PNV, and the revenue/cost ratio. PNV is defined as the value of discounted revenues minus discounted costs. Revenue/cost ratios are discounted revenues divided by discounted costs. Ratios greater the one indicate that revenues exceed costs, and ratios less that one indicate that costs exceed the revenues. It is important to note that this type of analysis does not account for non-market benefits, opportunity costs, individual values, or other values, benefits, and costs that are not easily quantifiable. This is not to imply that such values are not significant or important, but to recognize that non-market values are difficult to represent with appropriate dollar figures.

Boise National Forest - Table 2-80 shows the results of the financial analysis by alternative for the Boise National Forest. All alternatives have a positive PNV and revenue/cost ratio. The alternatives 5 and 1B with the highest levels of commodity production have the highest PNV and revenue/cost ratio. Alternatives 4 and 6 have the lowest PNVs.

Table 2-80. PNV (in Millions of Dollars) by Alternative for the Boise National Forest

Indicator	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Revenue	$2,843	$2,058	$2,165	$597	$3,233	$745	$2,325
Costs	-$766	-$658	-$659	-$557	-$832	-$545	-$742
Present Net Value	$2,077	$1,399	$1,506	$40	$2,400	$201	$1,583
Revenue/Cost Ratio	3.71	3.13	3.28	1.07	3.88	1.37	3.13

*****These costs do not consider re-payment of funds to the Idaho Department of parks and Recreation due to trail conversion. Re-payment amounts have not been fully estimated at this time.

Payette National Forest - Table 2-81 shows the results of the financial analysis for each alternative for the Payette National Forest. All Alternatives have a positive PNV revenue/cost ratio. The alternatives (5 and 1B) with higher levels of commodity production have the highest PNV and revenue/cost ratio. Alternatives 4 and 6 have the lowest PNVs and ratios.

Table 2-81. PNV (in Millions of Dollars) by Alternative for the Payette National Forest

Indicator	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Revenue	$2,487	$1,674	$2,132	$586	$3,097	$849	$2,164
Costs	-$498	-$413	-$419	-$367	-$540	-$377	-$480
Present Net Value	$1,988	$1,261	$1,713	$219	$2,556	$473	$1,684
Revenue/Cost Ratio	4.99	4.06	5.08	1.60	5.73	2.26	4.51

Sawtooth National Forest - Table 2-82 shows the results of the financial analysis for each alternative for the Sawtooth National Forest. Alternatives 1B, 2, 3, 5, and 7 have a positive PNV and revenue/cost ratio. The alternatives (5 and 1B) with the highest levels of commodity production have the highest PNV and revenue/cost ratio. Alternatives 6 and 4 have the lowest PNVs and benefit cost ratios.

Table 2-82. PNV (in Millions of Dollars) by Alternative for the Sawtooth National Forest

Indicator	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Revenue	$433	$368	$382	$126	$560	$90	$481
Costs	-$246	-$244	-$245	-$224	-$260	-$222	-$256
Present Net Value	$188	$125	$137	-$98	$300	-$132	$481
Revenue/Cost Ratio	1.76	1.51	1.56	0.56	2.15	0.41	1.88

Southwest Idaho Ecogroup - Table 2-83 shows the results of the financial analysis for each alternative Ecogroup-wide. All alternatives have a positive PNV and a revenue/cost ratio of more than one. The alternatives featuring higher levels of commodity production have the highest PNV and revenue/cost ratio. Alternatives 5 and 1B have the highest PNVs at $5,257 million and $4,253 million, respectively, at the current budget levels. Alternatives 4 and 6 have the lowest PNVs at $162million and $542 million, respectively.

Table 2-83. PNV (in Millions of Dollars) by Alternative for the Ecogroup Forests

Indicator	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Revenues	$5,763	$4,100	$4,680	$1,309	$6,889	$1,685	$4,970
Costs	-$1,510	-$1,315	-$1,324	-$1,147	-$1,633	-$1,143	-$1,478
Present Net Value	$4,253	$2,786	$3,356	$162	$5,257	$542	$3,492
Revenue/Cost Ratio	3.82	3.12	3.53	1.14	4.22	1.47	3.36

*****These costs do not consider re-payment of funds to the Idaho Department of Parks and Recreation due to trail conversion. Re-payment amounts have not been fully estimated at this time.

THE PREFERRED ALTERNATIVE IDENTIFIED IN THE DEIS

The Preferred Alternative identified in the DEIS was Alternative 3. This alternative is described in detail under the *Alternatives Considered in Detail* section in this Chapter.

The Responsible Official's selected alternative for implementation could be this alternative, one of the other alternatives considered in detail, or it could be a different combination of the alternatives considered in detail. The final decision will be documented in the Records of Decision.