SUMMARY
Of The
FINAL ENVIRONMENTAL IMPACT STATEMENT
For The
BOISE NATIONAL FOREST,
PAYETTE NATIONAL FOREST,
And
SAWTOOTH NATIONAL FOREST
FOREST PLAN REVISION

Ada, Adams, Blaine, Boise, Camas, Canyon, Cassia, Custer, Elmore, Gem, Gooding, Idaho, Jerome, Lincoln, Minidoka, Owyhee, Payette, Twin Falls, Valley, and Washington Counties, Idaho; Malheur County, Oregon; and Box Elder County, Utah

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ABSTRACT: This Final Environmental Impact Statement Summary documents the analysis of seven alternatives, which were developed for possible management of the 2.2 million acres administered by the Boise National Forest in Idaho; 2.3 million acres administered by the Payette National Forest in Idaho; and 2.1 million acres administered by the Sawtooth National Forest in Idaho and Utah.

Alternatives developed in detail are identified as 1B, 2, 3, 4, 5, 6, and 7. Alternative 1B (the No Action Alternative) continues management direction from the current Forest Plans as amended by Pacfish and Infish and as adjusted to include the terms of the Biological Opinions for fish species listed as threatened or endangered under the Endangered Species Act. Alternative 2 (modified Proposed Action) provides for a mix of uses and restoration activities. Alternative 3 emphasizes watershed and vegetation restoration to achieve or approach historical range of variation for the biophysical resources. Alternative 4 reduces risks to species viability and ecological integrity by minimizing human-caused disturbance over the short term. Alternative 5 emphasizes production of goods and services within the sustainable limits of the ecosystem. Alternative 6 reduces human-caused risks to the ecological values of Inventoried Roadless Areas and unroaded areas by minimizing management activities and eliminating incompatible uses. Alternative 7 was developed between the Draft and Final EIS to address a number of comments on the Draft EIS that identified key issues and concerns, including listed species protection, watershed and aquatic restoration priority, roadless area conservation, National Fire Plan and Healthy Forests Initiative, and timber commodity production.

The Selected Alternative will guide all natural resource management activities on the Forests; address changed conditions and direction that have occurred since the original plans were released; and meet the objectives of federal laws, regulations, and policies. The Selected Alternative is identified and described in the Records of Decision for this Final EIS.

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THE PROPOSED ACTION

The Forest Service proposes to revise the Land and Resource Management Plans (hereafter referred to as "Forest Plans") for the Sawtooth, Payette, and Boise National Forests. These revisions are proposed to meet legal and regulatory requirements, and to address changes, issues, and concerns that have arisen since the Forest Plans were originally released for the Sawtooth National Forest (1987), Payette National Forest (1988), and the Boise National Forest (1990). The area covered under this revision includes the National Forests in the Southwest Idaho Ecogroup, shown in Figure 1-1.

The Notice of Intent to revise the Boise and Payette Forest Plans, and amend the Sawtooth Forest Plan was published in the Federal Register on April 24, 1998. A revised Notice of Intent to revise all three Forest Plans was published in the Federal Register on May 17, 1999. The Federal Register was also used to announce the release of the Draft and Final Environmental Impact Statements and the Records of Decision.

PURPOSE AND NEED FOR THE PROPOSED ACTION

Purpose of the Proposed Action

The purpose of the Proposed Action is to provide revised Boise, Payette, and Sawtooth Forest Plans that will: (1) guide all natural resource management activities on the Forests, (2) address changed conditions and direction that have occurred since the original plans were released, and (3) meet the objectives of federal laws, regulations, and policies. This purpose will be met by selecting a management strategy that best achieves a combination of the following goals:

- Maintain or restore long-term ecosystem health and integrity.
- Contribute to the economic and social needs of people, cultures, and communities.
- Provide sustainable and predictable levels of products and services from National Forest System lands on the Boise, Payette, and Sawtooth National Forests.
- Emphasize adaptive management over the long term.
- Provide consistent direction at the Forest level that will assist managers in making project decisions at a local level in the context of broader ecological considerations.
- Replace interim direction (Pacfish/Infish and listed fish species Biological Opinions) with an ecosystem-based, long-term Aquatic Conservation Strategy.

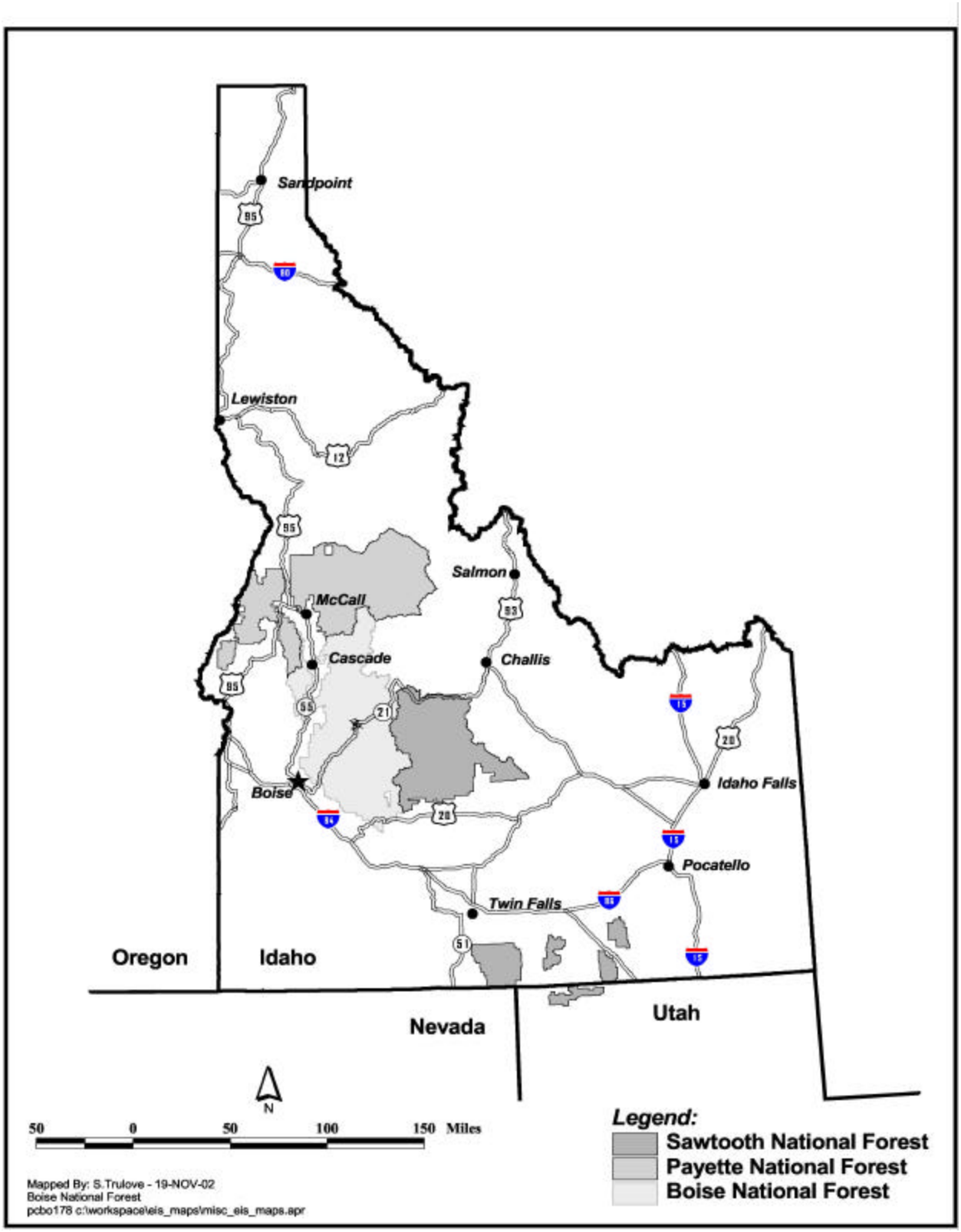
Need for the Proposed Action

The three Ecogroup Forest Supervisors initiated revisions of their respective Forest Plans based on a number of factors, including legal requirements, changed conditions, and Need For Change.

Legal Requirements

Regulations implementing the National Forest Management Act (NFMA) of 1976 require the Regional Forester to revise forest plans and provide the basis for revision. In 1982, instructions to revise forest plans were formulated in the Code of Federal Regulations at 36 CFR 219. The

Figure 1.1. Vicinity Map for the Southwest Idaho Ecogroup



regulations are currently being revised, but will not be finalized before the release of the Revised Forest Plans. The final revised Plans will therefore be subject to direction provided by the 1982 regulations. Specific instructions found at 36 CFR 219.10(g) state:

> "A forest plan shall ordinarily be revised on a 10-year cycle or at least every 15 years. It also may be revised whenever the Forest Supervisor determines that conditions or demands in the area covered by the plan have changed significantly, or when changes in RPA policies, goals, or objectives would have a significant effect on forest level programs."

The Forest Supervisors determined that revision was warranted because it was within the 10 to 15 year time period allotted for revision, and significant changes had occurred in conditions and demands. Legal challenges, described below, also contributed to the decision to initiate the Forest Plan revision process.

In 1994, the Wilderness Society, Idaho Conservation League, Sierra Club, and Idaho Sportsmen's Coalition filed a lawsuit against the Payette National Forest, challenging the Forest Plan's management of timber, roadless areas, fish and wildlife, and other items. As a result of negotiations with the plaintiffs, a settlement agreement was signed in 1995 that stated the Forest Service complete a revised Forest Plan for the Payette National Forest by December 31, 2000. That date was extended to July 31, 2003 due to additional changes and delays, and subsequent negotiations between the Forest and the plaintiffs.

In 1995, the Idaho Sporting Congress filed a complaint against the Boise and Payette National Forests for failing to supplement their Forest Plan EISs to reflect changes caused by large wildfires in 1994. Idaho District Court Judge Winmill upheld the Forest Service on all grounds in his September 25, 1996 decision. In August 1997, a three-judge panel of the Court upheld Judge Winmill's decision due to the fact that the Boise and Payette Forests were already addressing changes needed to the Forest Plans, including changed conditions created by the 1994 fires, through their Forest Plan revision process.

Changed Conditions

National Forests monitor and evaluate management activities to determine how well forest plan management direction has been met and applied. Periodically the Forests document the results in a public report. The Ecogroup Forests completed Forest-wide monitoring reports in 1996 that highlighted changed conditions since the original Forest Plans were released. Some of the more significant changes are summarized below:

- Wildfires have affected an estimated 14 percent of the land base on the Boise National Forest and 13 percent on the Payette National Forest since their original Plans were released. (Since 1996 an additional 6 percent of the Boise Forest, and 19 percent of the Payette Forest have been affected by wildfire, for totals of 20 and 32 percent, respectively, since the original Plans were released.)

- Substantial increases in noxious weeds and tree mortality have occurred in localized areas.

- Impacts to water quality from human-caused sediment have increased in some areas, and the State of Idaho has listed a number of water bodies in the Ecogroup area as Water Quality Limited under Section 303(d) of the Clean Water Act.

- Damage to riparian areas has increased in some areas, primarily as a result of livestock and recreation uses.

- Interim direction from Pacfish and Infish forest plan amendments and terms and conditions resulting from Biological Opinions generated through consultation for species recently listed under the ESA, have required resource mitigation that is beyond original Forest Plan estimates for protection. This, in turn, has affected estimated outputs on the Forests.

- New awareness, approaches, and management policies have emerged to promote the sustainability of ecosystems.

- Improved information gathering and organizing techniques (Geographic Information Systems, LANDSAT imagery, new resource inventories) have expanded our knowledge about the Forests.

- Species listed under the ESA have changed, with additions of chinook salmon, steelhead, and bull trout. Since 1996, additional species have been listed (e.g., Canada lynx, northern Idaho ground squirrel), while other species have been de-listed (peregrine falcon), or are proposed for de-listing (bald eagle). In addition, new plant species are proposed for the Region 4 Sensitive Species List.

Need For Change

In 1997, the Forests documented the need to establish or change Forest Plan management direction or emphasis in the Preliminary Analysis of the Management Situation (AMS) Summary. Four primary sources for determining Need for Change topics were used:

- Results of the three Forest Plan monitoring reports.
- Comparison of the latest regulatory and policy requirements with existing Forest Plan direction.
- Comments from Forest employees who have been implementing the Forest Plans.
- New information, such as research studies and the Interior Columbia Basin Ecosystem Management Project scientific assessments.

Upon review of the existing documentation, the following eight Need for Change topics for Forest Plan revision were identified:

Topic 1 - Biological Diversity. This topic includes rare and unique species and habitats; Threatened, Endangered, and Sensitive species (aquatic, terrestrial, and botanical); successional stages; snags and coarse woody debris; vegetation composition and structure; landscape linkages; habitat edge; and horizontal and vertical diversity.

Topic 2 - Fire and Smoke Management. This topic includes fire as an ecological process and management tool, wildland/urban interface, smoke management, and air quality.

Topic 3 - Habitat Fragmentation and Disruption. This topic focuses on fragmentation and disruption to habitats caused by human activities—such as road building and improved access, timber harvest, and utility corridors—or through natural processes such as fire, insects, and disease.

Topic 4 - Non-native Plants. This topic addresses management of non-native plants, including noxious weeds and exotics, and their influence on vegetative diversity, fire regimes, and hydrologic function.

Topic 5 - Rangelands/Grazing Resources. This topic includes determination of rangeland capability, rangeland suitability, range management prescriptions for suitable lands, and wildlife and recreation interactions with livestock management.

Topic 6 - Riparian and Aquatic. This topic addresses riparian area and aquatic resource management, including rangeland and recreation influences.

Topic 7 - Timber Suitability. This topic includes identification of lands not suited and suited for timber management.

Topic 8 - Management Emphasis Areas. This topic addresses areas with special management emphasis, including Wild and Scenic Rivers, Wilderness Areas, Inventoried Roadless Areas, Research Natural Areas (RNA), and the Sawtooth National Recreation Area.

The Need for Change topics were used to formulate the Proposed Action, and in some cases were significant issues that were analyzed in the FEIS. Other topics resulted in management direction changes that are found in the revised Forest Plans. More detailed descriptions of the Need for Change Topics can be found in Chapter II of the revised Forest Plans.

Changes from DEIS to FEIS

The Notice of Availability for the Draft Environmental Impact Statement (DEIS) appeared in the Federal Register on November 24, 2000. The comment period on the DEIS, as published in the Notice, ended on March 16, 2001. In response to public request, the Regional Forester extended the comment period to June 15, 2001. The Ecogroup received over 3,600 responses, including transcripts from formal public hearings, letters, electronic-mailings, and faxes on the Draft documents. The responses were analyzed using the content analysis process by a specialized Forest Service unit, the Content Analysis Team. Appendix A of the Final Environmental Impact Statement (FEIS) summarizes who commented, what the comments were, and the Agency's response to those comments.

Refinements to some management prescription categories (MPCs) were made in response to internal concerns, as well as external comments concerning restrictions in MPCs portrayed by the User Guide issued with the DEIS. These concerns were reviewed, and adjustments in the type and intensity of activities allowed in some MPCs were made (see revised Forest Plans,

Management Area Description and Direction section). Also, MPCs were assigned for Inventoried Roadless Area boundaries rather than for the subwatershed boundaries that surround the IRAs, as they were in the DEIS.

Based on comments received, the significant issues section of this Chapter has been reformatted to include information as to how each issue was used in the revision process. While no new significant issues were identified from public comments, additional information and concerns related to the existing issues were received, and they have been incorporated into the issue descriptions and indicators.

Alternative 7 was generated in response to comments on the DEIS (see Appendix A to the FEIS, and the project record). This alternative combines many elements of alternatives (particularly 3, 5, and 6) that were presented in the DEIS. Alternative 7 is an ecosystem-based management alternative that attempts to balance and integrate the wide range of management emphasis by:

- Maintaining the overall unroaded character of Inventoried Roadless Areas,
- Moving toward desired future conditions through restoration for aquatics, riparian, terrestrial, and vegetative conditions,
- Increasing emphasis on treatments within wildland-urban interface watersheds to reduce hazardous fuel conditions, and
- Providing for sustainable levels of goods and services, focusing on the roaded portions of National Forest System lands within the Ecogroup Forests' administrative boundaries.

A detailed description of Alternative 7 can be found in this Summary. In addition to generation of Alternative 7, other alternatives suggested by comments on the DEIS were considered but eliminated from detailed study for reasons discussed in this Summary (see project record for additional information). Finally, a number of changes were made to resource analyses in the FEIS in response to concerns raised in comments on the DEIS.

The Southwest Idaho Ecogroup

The Southwest Idaho Ecogroup is composed of an estimated 6,600,000 acres of National Forest System lands on the Boise, Payette, and Sawtooth National Forests, primarily in southwestern Idaho. The Ecogroup administrative boundaries stretch west to the Oregon border, east to the Salmon-Challis National Forest, north to the Nez Perce National Forest, and south to Box Elder County in Utah.

The geology of the area features steep mountain ranges and deep river canyons, with elevations ranging from 1,600 to 12,000 feet. Temperatures can range from over 100 degrees Fahrenheit in summer to 40 below zero in winter. Annual precipitation can vary from under 10 inches (mostly as rain) in the low canyons to over 70 inches (mostly as snow) in the high mountains. There are an estimated 14,400 stream miles and 62,520 acres of lakes on the Ecogroup. Major rivers in the Ecogroup area include the Snake, Salmon, South Fork Salmon, Middle Fork Salmon, East Fork Salmon, North Fork Payette, Middle Fork Payette, South Fork Payette, North Fork Boise, Middle Fork Boise, South Fork Boise, Weiser, Big Wood, and Raft.

The Ecogroup area of social and economic influence takes in more than 20 counties with a combined population of over 1 million people. The largest communities located near the Ecogroup area are Boise, Nampa, Caldwell, Twin Falls, Mountain Home, Weiser, Burley, Rupert, Jerome, Hailey, Ketchum, Sun Valley, McCall, and Cascade.

There are an estimated 5,000 miles of road and 1,200 miles of trails on the Boise National Forest that provide access to public lands. The Payette has approximately 3,000 miles of road and 2,000 miles of trail. The Sawtooth has an estimated 2,000 miles of road and 1,600 miles of trail.

There are about 1 million acres of designated wilderness in the Ecogroup area, and over 3 million acres of Inventoried Roadless Areas. Nearly 27,000 acres of Research Natural Areas have been established.

The wide variety of ecological conditions in the Ecogroup area provides habitat for over 50 fish species and 300 terrestrial vertebrate species (mammals, birds, reptiles, and amphibians), including deer, elk, moose, bighorn sheep, mountain goat, pronghorn antelope, cougar, and black bear. Habitat occurs for the following fish and wildlife species currently listed under the Endangered Species Act: sockeye salmon, chinook salmon, steelhead, bull trout, bald eagle, gray wolf, Canada lynx, and northern Idaho ground squirrel. Habitat for a number of listed, proposed, or candidate plant species also exists in the Ecogroup area.

DECISIONS TO BE MADE

The revision planning process involves an environmental analysis (an EIS) with three separate Records of Decision, and three revised Forest Plans. The FEIS analyzes a range of alternatives for addressing the six key decisions to be made in Forest Plan revision:

- Establishment of Forest-wide multiple-use goals and objectives, including a description of the desired future condition of the Forest (36 CFR 219.11[b]).

- Establishment of Forest-wide standards and guidelines to fulfill the requirements of 16 USC 1604 (NFMA) applying to future activities (36 CFR 219.13 to 219.27).

- Establishment of management areas and direction applying to future activities in those management areas (36 CFR 219.11[C]).

- Identification of lands not suited for timber production (16 USC 1604[k] and 36 CFR 219.14) and the allowable sale quantity (ASQ) determination for timber that may be sold from the suited timber base during each decade (36 CFR 219.16(a)).

- Establishment of monitoring and evaluation requirements that will provide a basis for a periodic determination of the effects of management practices (36 CFR 219.11[d]).

- Recommendation to Congress of areas for wilderness classification where 36 CFR 219.17(a) applies.

The Responsible Official for this analysis and its decisions is the Regional Forester. Based on the analysis in the DEIS, comments received, and the FEIS, the Responsible Official will select an alternative to revise the three Forest Plans. Documentation and rationale for this selection will be included in the Records of Decision accompanying the FEIS. The alternative selected will include the six key Forest Plan decisions listed above.

The Records of Decision will set a course of action for managing the Ecogroup Forests for the next 10 to 15 years. However, project-level environmental analysis will continue for specific proposals implementing the revised Forest Plans. For example, the Forest Plans contain general direction to close or obliterate roads to help achieve management goals for biophysical resources and to increase management efficiency, but a subsequent site-specific NEPA analysis and decision will have to be made before a proposal can be implemented to close or obliterate any specific road. This process is referred to as "staged decision-making" because a series of decisions are necessary to carry out projects relative to specific needs, priorities, locations, conditions, and stakeholder concerns.

ISSUES

Issue Identification

To identify significant issues for Forest Plan revision, comments were solicited from a number of sources, which fall into three categories:

- Need For Change from the Preliminary AMS Summary, which was derived from Forest monitoring reports, regulatory requirements, employee comments, and new information.

- Consultation with federally recognized tribes and federal representatives, including federal regulatory agencies, Congressional delegations, and Forest Service employees at the Regional, Forest, and District levels.

- Public involvement, including open houses, scoping letters, conversations, and meetings with special interest groups to discuss scoping comments.

The Revision Team compiled comments and concerns from all of these sources, then identified preliminary issues that would: (1) help develop alternatives, (2) influence Forest Plan direction, or (3) be used to track potential effects from the alternatives. The Revision Team presented these preliminary issues to the Responsible Official for review and selection of significant issues to be carried forward into analysis. The comments and concerns, and the process used for identifying issues, are presented in detail in Appendix A to the FEIS, Public Involvement. The significant issues are described below, followed by the issues that were not addressed in detail, and National and Regional issues.

Significant Issues

Significant issues are unresolved issues used in environmental analysis to formulate alternatives, prescribe mitigation measures, or analyze environmental effects. At the forest planning level, mitigation measures are incorporated into management direction (goals, objectives, standards, and guidelines) or management prescriptions that influence the type, amount, and intensity of management actions that may be implemented under the Forest Plan. The Responsible Official selected significant issues for revision based on one or more of the following criteria:

- Would these issues be used to help develop management alternatives or management direction, or would they be used in the allocation of management prescriptions?
- Would the management alternatives, direction, or prescriptions have discernable effects on the issues or their related resources?
- Would effects to the issues be sufficiently different by alternative to provide the Responsible Official with rationale for choosing a preferred or selected alternative?

Significant issues are grouped by resource and are described below using an issue statement and a brief background explanation that includes how the issue was considered in the revision process. More detailed information concerning the issues and indicators can be found in the various resource sections of Chapter 3 of the FEIS.

In the background statements, most issues are described as to how Forest Plan management strategies may affect specific resources or conditions. The term "management strategies" generally refers to Forest Plan management direction (i.e., goals, objectives, standards, and guidelines) and the allocation of management prescriptions (MPCs) that differ by alternative. The MPCs provide a broad range of management emphasis that would allow for a different mix of management activities and intensities to potentially occur under each alternative. The Forest Plans, however, do not authorize the implementation of any management activities.

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.

Background to Issue: The public's desire for clean air and good visibility presents a challenge for fire management within the Ecogroup area. Wildfires can have significant impacts on air quality, especially when they burn in areas with uncharacteristically high fuel loadings. Fire use affects air quality as well; however, the timing, location, and intensity of prescribed and wildland fire use can be controlled to a certain extent.

This issue was used to develop specific management direction and to address potential effects to air quality from the different management strategies of the alternatives.

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.

Background to Issue 1: New information and research have linked accelerated soil erosion, loss of nutrient base, and triggering of floods, landslides, and debris flows uncharacteristic of their normal pattern and frequency, to uncharacteristically large and lethal stand replacing wildfires. This is especially a concern in subwatersheds that have high to extreme uncharacteristic vegetation hazards and high inherent vulnerability ratings. Management strategies that reduce extreme or high vegetation hazards, thus lowering risk to uncharacteristic or lethal wildfires, help reduce the potential for accelerated soil erosion, loss of nutrient base, and triggering of floods, landslides, and debris torrents.

The assumption is—the lower the risk, the lower the fire-related potential for soil erosion and landslides to affect human life or property over the long term. Thus, management strategies that place more subwatersheds that have potential post-wildfire risks to human life and property, high subwatershed vulnerability, and high or extreme uncharacteristic forest vegetation hazard into MPCs that would likely have limited or no vegetation restoration treatments to reduce the risk of uncharacteristically lethal wildfire (1.1, 1.2, 2.0, 2.1, 2.2, 4.1 a, 4.1b) will result in greater negative effects.

This issue was primarily used to analyze potential affects to soil resources associated with effects from Fire Issue 2, which vary by alternative.

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.

Background to Issue 2: There is a need to reduce potential negative effects to human life, property, and municipal watersheds in subwatersheds that have been identified as a potential post-wildfire risk to human life and property from post-wildfire floods, landslides, and debris flows. These subwatersheds would likely require Burned Area Emergency Response (BAER) if an uncharacteristically lethal wildfire were to occur within them. One of the main objectives in implementing BAER measures is to initiate action promptly for immediate rehabilitation following wildfires to minimize "Threats to Human Life and Property" (Forest Service Handbook 2509.13).

New information and research continues to identify the potential for post-wildfire accelerated soil erosion, flooding and triggering of landslides uncharacteristic of their normal pattern and frequency following large uncharacteristic wildfire. This is especially a concern in subwatersheds that have high to extreme uncharacteristic vegetation hazards and high inherent vulnerability ratings. Management strategies (prescribed fire or mechanical vegetation treatment) that reduce these risks help reduce the post-wildfire threats and associated rehabilitation costs to these subwatersheds. The potential for using these types of strategies can be inferred from the MPCs that have been assigned to these subwatersheds by alternative.

This issue was primarily used to analyze potential affects to soil and water resources associated with effects from Fire Issue 2, which vary by alternative.

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.

Background to Issue 3: Since the development of the existing plans, numerous WQL water bodies have become listed as impaired under the Clean Water Act, and new assessments have been and are being developed to help determine appropriate water quality restoration plans. Watershed restoration is applied at various intensities under the Forest Plan alternatives to improve soil, water, and riparian conditions and help de-list subwatersheds with TMDLs or 303(d) WQL water bodies. There are approximately 50 subwatersheds within TMDL plans and approximately 200 subwatersheds identified as 303(d) WQL water bodies within the Ecogroup area. De-listing of subwatersheds that have TMDLs or 303(d) WQL water bodies should be more likely to occur when management direction is applied that emphasizes the appropriate watershed and aquatic restoration or conservation strategies. The analysis examines how management strategies considered would affect de-listing the TMDLs, 303(d) WQL water bodies by improving soil productivity, water quality, and beneficial uses.

This issue was used to develop alternatives through restoration/conservation strategies to address soil productivity, erosion, landslides/mass movements, sedimentation, water quality, riparian function, and Section 303(d)/TMDL concerns. This issue was also used to develop management direction and to track potential effects of the various alternative management strategies related to the concerns listed above.

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 (ESA), Region 4 sensitive species, species at risk, and Forest Management Indicator Species.

Background to Issue 4: Since the development of the existing plans, several fish species have become listed under ESA, and interim land management strategies protecting anadromous (Pacfish) and resident (Infish) fish species have been amended into existing plans. Subsequent biological opinions (BOs) for bull trout, steelhead, and chinook have also amended the plans. The U.S. Fish and Wildlife Service has also developed draft recovery plans and proposed critical habitat for bull trout. Existing plans do not consistently support these new events and mandates. Long-term watershed and aquatic restoration strategies were never developed as part of interim or BO strategies and, this deficiency is recognized as a significant shortcoming to the conservation and recovery of listed species.

Four species of native fish have been listed as Threatened or Endangered under the ESA. There are also two fish species on the Regional Forester's Sensitive Species List. Improvement of TES and other native fish habitat should occur when management direction is applied that emphasizes the appropriate watershed and aquatic restoration or conservation strategies.

This issue was used in development of alternative restoration/conservation strategies to assist in the recovery or conservation of ESA listed species and Region 4 sensitive species. Strategies were developed through adjustments in MPC allocations in watersheds that have ESA listed species and/or Region 4 sensitive species. The issue was also used in developing management direction and for tracking potential effects of the alternatives to aquatic species and their habitats.

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.

Background to Issue 1: Forest Plan management strategies that do not provide any substantial restrictions on activities such as road construction, timber harvest, livestock grazing, recreation, mining, and fire use could increase habitat alteration and fragmentation, as well as disturbance to species. These impacts, in turn, could negatively affect species viability. Viability is a concern for all terrestrial species, but particularly for Threatened, Endangered, Proposed, or Sensitive species for which habitat and/or populations may be currently in decline.

This issue was used in development of alternative habitat restoration strategies to assist in the recovery or conservation of ESA listed species and Region 4 sensitive species. Adjustments in MPC allocations provided for alternative approaches in achieving habitat and viability needs. This issue was also used in the development of management direction relative to habitat alteration and fragmentation, and for tracking potential effects of the alternatives to terrestrial species and their habitats.

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

Background to Issue 2: Some species of wildlife are sensitive to human activities in close proximity during the breeding, nesting and wintering portions of their life cycles. Human activities, whether intentional or unintentional, can increase stress to some species and may reduce their reproductive success. Wide-ranging carnivores—such as the gray wolf and the wolverine—are habitat generalists that are more susceptible to population disruption than habitat change. Elk are also habitat generalists and are of great social and economic importance in Idaho and Utah. Of particular concern is elk vulnerability during hunting season. Bighorn sheep populations have declined in the Ecogroup area during the last 100-150 years. Although these species have no status under the ESA, the U.S. Fish and Wildlife Service is concerned about their population status and viability. One threat is the risk of disease transmission from domestic sheep to bighorn sheep, where their grazing overlaps and the potential for direct contact exists.

This issue was used in alternative development through rangeland suitability variations to address the risk of disease transmission to bighorn sheep. This issue was also used for developing management direction and tracking potential effects of the alternatives to terrestrial species and their habitats relative to the potential for disruption and disease transmission.

Botanical Resources

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

Background to Issue: Many vascular plant species are endemic to the Ecogroup area, and some of these are considered rare by conservation organizations or federal agencies. Four of these rare endemics are found only on National Forest System lands within the Ecogroup area, and many of the rare endemics have a large portion of their global distribution on National Forest lands. In contrast, several plant species have wide global distributions but are rare within the Ecogroup area. The potential effects of Forest Plan management strategies on the most rare plant species within the Ecogroup area will be assessed.

This issue was used to develop specific management direction to provide protection for botanical resources. It also was used to track potential effects on TEPCS and watch plants from ground-disturbing activities associated with the management strategies of the alternatives.

Vegetation Diversity

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

Background To Issue: Comments received about vegetation were varied with regard to how vegetation should look and function. This analysis focuses on changes in vegetation structure and composition that may occur under the management alternatives. The analysis forms the foundation for how vegetation may function for other resources such as timber, range, wildlife habitat, fire, and scenic environment. Current conditions and effects are described for forested vegetation, including forestlands, riverine riparian areas, snags, and coarse woody debris, and for non-forested vegetation, including shrublands, grasslands, woodlands, and deciduous riparian areas.

This issue was used to develop alternative desired conditions for vegetative diversity, using Historical Range of Variability (HRV) as reference conditions for components such as size class, species composition, density, structure, snags, and coarse woody debris. Desired conditions varied based on MPC emphasis, and MPC allocations provided for alternative approaches in achieving the desired conditions. This issue was also used in the development of management direction and in tracking potential effects of the alternatives to biodiversity components.

Vegetation Hazard

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

Background to Issue: Concerns were expressed internally and externally about the risk of large uncharacteristic disturbances, such as wildfires, that have occurred since the mid-1980s. In many cases, these events affect a host of resources—including fisheries, wildlife habitat, timber, visual quality, and soils—and cost millions of dollars to suppress and mitigate. The long-term

impacts of these disturbances prompted comments about the likelihood of such events occurring in the future, and the potential to reduce the risks. Fire and insect hazard indices are directly related to changes in vegetative conditions including size class and/or density that would vary by the type and amount of vegetation treatment associated with each alternative.

This issue was used in alternative development through identification of areas at risk for large, uncharacteristic wildfire and epidemic insect outbreaks, and alternative MPC allocations to address the risks. This issue was also used to analyze the effectiveness of the alternatives in reducing the risk for large, uncharacteristic wildfire and epidemic insect outbreaks.

Non-native Plants

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

Background To Issue: Non-native plants are species that do not have their origin in a local area, and include exotic plants and noxious weeds. Noxious weed and exotic plant species are spreading rapidly locally, regionally, and nationally. Noxious weeds classified as invaders pose the greatest threat. Infestations can substantially change the biological diversity of an area by affecting the amount and distribution of native plants and animals. They can also have negative impacts on recreation, regeneration, wildlife and livestock forage, soil productivity, fire cycles, nitrogen cycling, riparian and hydrologic function, and water quality. Primary concerns related to Forest noxious weed management are: (1) effectively identifying and managing sources of weed establishment and spread, (2) the need to coordinate weed management across jurisdictional boundaries and adjacent land ownerships, and (3) the ability to implement weed management over the long-term based upon budgets, management direction, priorities, and resource integration. These variables will likely change by alternative.

This issue was used to develop management direction relative to controlling the establishment and spread of non-native plants, and more specifically, noxious weeds. It was also used to analyze how the alternatives address the susceptibility to noxious weed invasion and spread.

Fire Management

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

Background to Issue 1: Forest Service fire personnel expressed concerns about meeting the intent of the changes articulated initially in the 1995 Fire Management Policy and Program Review and subsequently in the National Fire Plan. Issues raised to date have included how past land management activities and decisions have affected the role of fire as an ecosystem process, as well as the potential for large wildfires. Generally the public agrees that there is a need to address the risk of large wildfires. However, there is strong disagreement as to what are the appropriate methods to address this concern. Research has shown that fire plays important ecological roles in ecosystem processes and functions such as landscape dynamics, nutrient

cycling, and germination or regeneration of many graminoid, forb, or shrub species. Some members of the public felt that using fire rather than timber harvest destroyed valuable timber resulting in lost economic opportunities, reduced wildlife habitat, and increased sedimentation. Others felt that use of timber harvest rather than fire resulted in similar resource effects.

This issue was used in alternative development through identification of areas at risk for large, uncharacteristic wildfire and alternative management approaches through MPC allocations to address the risks. The differences in management approach were by MPCs that use fire versus fire/mechanical treatments for vegetation management. This issue was also used to analyze the effectiveness of the alternatives in reducing the risk for large, uncharacteristic wildfire.

Issue Statement for Issue 2: 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).

Background to Issue 2: Concerns regarding interface were raised initially during the 1995 Fire Management Policy and Program Review. The review noted that, while fire protection and prevention in wildland-urban interface were not new problems, fuel build-ups and population growth had increased risks. Resources available to suppress wildfires were often spread thin, jeopardizing property, natural resources, firefighter, and public safety. Property losses and expenditures to suppress wildfires were increasing. These concerns were highlighted during the 2000 fire season when over 8,000,000 acres burned nationally. During this fire season 2.3 times more acres burned than the annual average from 1990 through 1999. During the 2000 fire season, 861 structures were lost to wildfire. In 2001, while the acres burned nationally were similar to the 10-year average, 731 structures burned. These wildfires provided poignant examples of wildfire risks in wildland-urban interface, and they have generated considerable public concern.

The 2000 fire season resulted in the National Fire Plan, which was developed in part to address the increasing concern about the risks and impacts of wildfires on wildland-urban interface. The National Fire Plan provides a strategic framework for addressing these risks, including identifying the roles of federal, tribal, state, and private land managers and owners in risk management. The plan also provides funding for a variety of actions. These actions include fuels reductions designed to increase the chances of suppressing wildfires while they are still small and of low intensity in areas where large wildfires are a concern. Such reduction will in turn increase firefighter and public safety and decrease threats to communities.

This issue was used to develop alternatives through MPC allocations to address treatment to reduce wildfire risks. This issue is closely related to the Vegetation Hazard issue but focuses on wildland-urban interface areas at risk for large, uncharacteristic wildfire. The differences in management approach can be described in terms of MPCs that use fire versus fire/mechanical treatments for vegetation management. This issue was also used for analyzing the effectiveness of the alternatives in reducing the risk for large, uncharacteristic wildfire, and for developing specific management objectives to reduce wildfire risks in wildland-urban interface.

Rangeland Resources

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

Background to Issue: Re-evaluation of rangeland capability and suitability during forest plan revision effects where livestock may be grazed under a specific alternative (i.e. on suited rangelands). The forest plan also defines 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 and decision 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 plan. This 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 plans.

This was considered as one of the factors in Socio-economic Issue 1, which was used to develop alternatives. This issue was also used to develop specific management direction associated with livestock grazing, to indicate influences on (recreation conflicts, risk of disease transmission, noxious weeds, etc.) and changes in suitable rangelands by alternative, and to address the effects of alternative management strategies on the rangeland program.

Timberland Resources

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

Background to Issue: Comments received on timber suitability and management revealed a wide range of opinions, including opposing points of view on how and how much timber should be managed. These comments were compiled and used to develop issues that address two primary areas of interest; how much land and which lands are included as suited timberlands; and what is the sustainable level of timber harvest. Concerns related to timber management included costs and values of implementation, supply and demand for timber, and effects on community stability. These concerns are addressed in the Socio-economic Environment section of Chapter 3 in the FEIS.

Timberlands previously identified as not suited for timber production are required by law to be reassessed every 10 years. Other factors that warrant a timber reassessment include changes in land ownership, allocation of some land to specific uses, and new technology available for assessing land status.

This issue was considered as one of the factors in Socio-economic Issue 1, which was used to develop alternatives. This issue was used in developing direction specific to sustainable timber management objectives and mitigation for harvest-related practices. The issue was also used to track effects on suited timberlands and potential yields of timber and other wood products by alternative.

Recreation

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

Background to Issue - Many comments were received related to recreation management and experiences on the Ecogroup Forests. These comments included diverse topics such as motorized and non-motorized travel, trail protection, ski area expansion, recreation residence management, resource protection from recreation activities, and the need to make recreation a Need For Change topic.

MPCs and their related direction (i.e., goals, objectives, standards and guidelines) vary in their potential effect on recreation settings, resources and experiences. For example, management prescriptions and direction for aquatic, riparian, watershed and wildlife resources can result in a variety of effects to recreation facilities, opportunities, and potential development. Recreation facilities and activities can cause impacts, such as sedimentation and wildlife disturbance, that need to be mitigated or eliminated. Potential mitigation ranges from facility modifications and seasonal restrictions to facility decommissioning and removal. Some of these mitigations are mandatory, arising from compliance with the Endangered Species Act, and some depend on a combination of management emphasis and watershed priority. Although mitigation impacts to developed recreation facilities may occur at any location, facilities in watersheds that have been classified as high priority for restoration with an assigned MPC of 3.1 or 3.2, are the most likely to be affected.

Management direction for vegetation restoration and commodity production may also affect recreation opportunities and experiences. The most common vegetation restoration activities would involve timber harvest and/or prescribed fire, to achieve desired vegetative conditions. Timber commodity production would also include timber harvest. All of these actions have the potential to alter recreation settings and experiences. Landscapes classified with a high or extreme uncharacteristic wildfire hazard and are assigned to MPCs 5.1, 5.2 or 6.1 have a greater potential to change recreation settings and result in user conflicts.

This issue was used to develop management direction and prescription allocations, and to track potential effects to recreation resources from different management strategies of the alternatives.

Scenic Environment

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

Background to Issue: The scenic environment is the general appearance of a place or landscape, or the features of a landscape. The visual condition varies by location and is dependent on human developments and natural features such as geology, vegetation, and landforms. The Sawtooth, Payette, and Boise National Forests provide some of the highest quality scenery in the Intermountain West. Enjoyment of these scenic resources is an integral part of many recreation experiences, and scenic attractions have contributed to making these Forests nationally recognized recreation destinations. Although no specific scenic resource

issues were identified during public comment periods, many Forest management activities have the potential for affecting scenic resources. These effects could be significant and may vary considerably by alternative. Therefore, potential effects on scenic resources are analyzed by assessing potential changes in Visual Quality Objective class by alternative.

This issue was used to develop management direction and to analyze potential effects to scenic resources from the different management strategies of the alternatives.

Cultural Resources

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

Background to Issue: Forest management activities have the potential for directly, indirectly, or cumulatively affecting cultural resources through management activities that influence site disturbance or discovery, or that improve or restrict access to sites, or that provide the opportunity and funding for conducting site surveys and recordation. These activities are related to many of the Need for Change topics, and would be implemented under any of the alternatives. Compliance with federal laws governing cultural resources is an important management concern.

This issue was used to develop management direction to reflect changes in law and policy. It was also used to analyze potential affects to cultural resources from the different management strategies of the 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.

Background to Issue: A primary issue for the tribes within the Ecogroup is the availability and protection of treaty and cultural resources, including use and access to traditional places. The issue is the availability of resources in sufficient quantities to support the continued exercise of treaty rights and cultural practices. Adequate availability would allow harvest or utilization of resources in sufficient quantities to satisfy the ceremonial and subsistence needs of tribes, while still providing for the conservation needs of the species. Adequate access would not compromise cultural practices at traditional, cultural, or spiritual places. Resources need to be inventoried for impacts from non-Indian commercial harvest, and watershed conditions need to be assessed in terms of habitat conditions and restoration needs.

This issue was used to develop specific management direction, and to address potential effects to tribal rights and interests from the different management strategies of the alternatives.

Roads

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

Background to Issue: Management of national forest roads is an issue of national concern. Critical issues linked to the forest road systems include public access, resource damage, habitat loss, maintenance capabilities, and economics. Although roads are known to have impacts on

other resources, some level of road development is needed to produce the goods and services that Americans expect from their national forests. The agency's Roads Management Policy highlighted roads as a national emphasis area for Forest management. Internal and external comments revealed two primary concerns about the potential effects of Forest Plan revision on roads: the amount of roads that are available for access and how these roads are maintained.

This issue was used to develop management direction and to analyze potential effects of the alternatives on road availability and maintenance.

Inventoried Roadless Areas

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

Background to Issue 1: Areas that are roadless and undeveloped can be assigned one of three basic management prescriptions by the Forest Plan: (1) development, (2) prescriptions that maintain the undeveloped character, or (3) recommended wilderness. Comments on how to manage the Ecogroup roadless areas were highly polarized between developing the areas to leaving them in an undeveloped or potential wilderness condition.

This issue was used in alternative development, management direction and prescriptions, and analysis of how the Forest Service proposes to manage the current Inventoried Roadless Areas within the Ecogroup area for each alternative.

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

Background to Issue 2: A national issue that has risen to prominence since the DEIS has centered on the condition of much of the nation's National Forests relative to susceptibility for uncharacteristic wildfires. The Forest Service's National Fire Plan was developed in response to this growing issue. Although forest health problems occur within developed and undeveloped areas in National Forests, much of the debate has focused on IRAs where the agency's ability to treat problem areas may be hampered by reduced access and treatment options. Given the large proportion of National Forest System lands comprised by IRAs, concern exists that the overall effectiveness in addressing forest health problems would be greatly limited unless areas within IRAs can also be effectively treated. The ability to address forest health provides involves two elements that in turn affect IRAs: the treatments and access that are available to managers in areas in need of treatment.

This issue was used in development of alternatives through identification of IRA acres at risk for large, uncharacteristic wildfire and development of alternative management approaches through MPC allocation to address the risks. The differences in management approach can be described in terms of MPCs that provide for a full range of vegetation treatments and access in IRAs versus those that limit access and/or treatment options. This issue was also used to analyze how effective the alternatives are in reducing the risk for large, uncharacteristic wildfire within IRAs.

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

Background to Issue 3: A large number of public comments supported the adoption of management direction to protect IRAs that would be consistent with the Roadless Area Conservation Rule. Conversely, other comments were strongly opposed to the adoption of the Roadless Area Conservation Rule.

This issue was used to allocate management prescriptions by alternative and provide management direction for those prescriptions. It was also used to measure consistency with the Roadless Conservation Rule by alternative.

Issue Statement 4: 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.

Background to Issue 4: Public comments indicate that some people believe that allowing motorized uses within recommended wilderness is inconsistent with Forest Service stated management direction to maintain wilderness values, including opportunities for solitude and primitive experiences. Some feel that the noises created by motorized use as well as the use of mechanized equipment itself eliminates these opportunities and is thereby inconsistent with the management direction. Others also feel that allowing any form of mechanical transport including motorized uses, as well as mountain bicycling, creates the potential to establish a pattern of non-conforming use that builds a constituency for mechanized use of these areas, thereby threatening the chances for Wilderness designation. On the other side of this issue, some suggest that areas that are not designated as Wilderness should not be managed as Wilderness, while others voiced concern that there were already too many restrictions regulating motorized use of the Forests.

This issue was used in alternative development to address allowable uses within recommended wilderness areas related to mechanized uses. Alternatives 4 and 6 have a standard that prohibits mechanized use, while the other alternatives do not. The issue was also used to analyze effects from management strategies on mechanized use opportunities in recommended wilderness areas.

Wilderness

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

Background to Issue: No issues directly related to wilderness resources were identified during public comment periods or the Need for Change analysis process. Significant effects to wilderness areas are not expected under any alternative nor are effects expected to differ by alternative. However, compliance with federal laws governing wilderness is an important management concern. As a result, this issue was used solely to track general potential effects to the wilderness resource common to all alternatives.

Wild and Scenic Rivers

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

Background to Issue: There was a need to conduct a new Wild and Scenic River eligibility study in order to incorporate changed conditions and new information since the previous plans were written. These changes included the listing of new species, changed watershed conditions, and new information from the ICBEMP Scientific Assessment. Forest personnel recognized that these changed conditions could influence whether a previously ineligible segment might now be considered potentially eligible, and vise versa. There was also a need to use an updated and consistent protocol for determining eligibility. In addition, suitability studies needed to be completed for the Secesh River, French, Big and Monumental Creeks on the Payette National Forest, and the South Fork Salmon River on the Boise and Payette National Forests. The need to conduct these suitability studies was generated as part of a litigation settlement between American Rivers, Inc. and the Payette National Forest.

Once river segments are determined eligible, they are managed to protect their free-flowing status and any identified Outstanding Remarkable Values. In some instances, this change in designation can restrict management activities. The restrictions vary according to how the river segment is designated: Wild, Scenic, or Recreational. The primary activities that can be affected are vegetation management, rangeland management, recreation development, hydroelectric development, mining, and road construction. In contrast, if the rivers are not determined to be eligible, their values could be affected by these activities in the future.

The Forest Plan Revision Record of Decision may recommend river segments as eligible or suitable for Wild and Scenic designation. While this issue did not drive alternative development, it was used to develop management direction and to analyze potential affects of Wild and Scenic River recommendations. This analysis displays the potential amount of river segments and river corridor area that could be affected by each recommendation, and describes the potential effects those recommendations could have on the river segments and other Forest resources.

Socio-Economic Environment

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

Background to Issue 1: The socio-economic environment is not directly linked to any of the Need For Change topics for Forest Plan revision. However, nearly all Forest management activities have the potential to directly or indirectly affect the socio-economic environment (chiefly counties and communities). These activities are related to, or could be implemented under all alternatives. This analysis addresses county populations, lifestyles, attitudes, beliefs and values, social organization, land-use patterns, civil rights, community employment and income, and present net value.

This issue was used in development of alternatives in relation to economic stability and sustained yield concerns. This issue was also used to address the effects of management alternatives on community stability and lifestyles.

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

Background to Issue 2: The financial efficiency of operating national forests is of great concern to the Forest Service and the public. There have been controversies recently that involve "below-cost" timber sales, "subsidized" grazing, and recreation facilities that are deteriorating due to lack of maintenance or replacement funding. Financial efficiency is measured by comparing estimated revenues or receipts to actual or estimated costs.

This issue was used to analyze the financial efficiency of the alternatives over a 50-year period.

Preliminary Issues Not Addressed in Detail

Biological Diversity

A number of concerns related to biological diversity were identified in the Preliminary AMS Summary. Because biodiversity generally encompasses all of life and its inter-connections, the Forests chose not to address this topic as a separate resource or issue in this EIS; however, information and analysis concerning key components of biodiversity are included in the resource sections of Chapter 3. The Air Quality and Smoke Management and Soil, Water, Riparian, and Aquatic Resources sections address the physical components of air, soil, and water. The Vegetation Diversity section describes biological components of forested and non-forested ecosystems; the Botanical Resources section addresses Threatened, Endangered, Proposed, Candidate, and Sensitive plant species; the Soil, Water, Riparian, and Aquatic Resources section discusses effects to soil and hydrologic processes, water quality, riparian areas, and aquatic habitat and species of concern; the Terrestrial Habitat and Species section describes effects on wildlife habitat species of concern, habitat fragmentation, and disruption; the Vegetation Hazard and Fire Management sections address disturbance processes; and human dimension components of the ecosystem are analyzed in the Socio-economic Environment, Rangeland Resources, Timberland Resources, Recreation, Scenic Environment, Cultural Resources, Inventoried Roadless Areas, Roads, and Wilderness Areas sections. Changes in management direction for these resources have been included in the appropriate sections of the revised Forest Plans.

These key biological diversity components represent a range of resources considered under the Ecosystem Management framework of this document, and most resources represent some combination of biophysical and human dimension components. For example, the timber resource manages tree vegetation (biological) to provide goods and jobs (economic) to support local community values and lifestyles (social). The tree vegetation, in turn, depends on productive soils, oxygen, and water (physical) to grow and provide habitat for elk (biological) for people to view or hunt (social and economic). Indeed, most social and economic resources related to forest management are heavily dependent on the biophysical resources for long-term sustainability. In other words, sustainable goods and services are the product of healthy, properly functioning ecosystems. Thus, forest management focuses on maintaining or restoring the biophysical components of ecosystems in order to sustain biological diversity, provide economic opportunities, and support social and cultural values.

Facilities

The Forest Service operates and maintains administrative sites and facilities to manage the three Ecogroup Forests. No comments or issues were received on facilities during public comment periods. The Revision Team reviewed Forest Plan direction for facilities and made minor adjustments to ensure consistency across the Ecogroup; however, much of the direction was working and was therefore carried forward from the existing Plans. Management of these facilities under the different Forest Plan alternatives is not expected to change as a result of the Forest Plan revision process. Options for owning, leasing, acquiring, and disposing of facilities will be considered regardless of which Forest Plan alternative is selected for implementation.

Lands

The Preliminary AMS Summary identified a need to update land acquisition priorities based on changes in management emphasis since the original Plans were released. The updated priorities can be found in the Lands and Special Uses section of Chapter III in the revised Forest Plans.

Minerals

There was a concern raised over certain land allocations that could affect the amount of land available for mineral exploration and development, including oil and gas leasing. Areas such as Wild and Scenic Rivers and recommended wilderness could be withdrawn from mineral entry, and these areas could vary by alternative. However, withdrawal would not occur until after official designation, and there is no way to predict how much area Congress would officially designate, and therefore no way to accurately predict subsequent effects on the minerals programs. Updated management direction for Minerals and Geology Resources can be found in Chapter III of the revised Forest Plans.

Research Natural Areas

All but one of the RNAs proposed in the last round of Forest Planning have been established. The revised Forest Plans propose two small RNAs of around 1,100 acres each. Because of regulations governing RNAs, and because the majority of the RNAs do not have high commodity value or potential, effects to these areas are not expected to be significant or vary substantially by alternative. Updated information on RNAs can be found in Appendix I, and new management direction for RNAs can be found in Chapter III of the revised Forest Plans.

Special Uses

Effects to special uses are not expected to be significant or vary by alternative. The Preliminary AMS Summary identified a need to strengthen special uses criteria in the Plans for making permit decisions, and provided communication and electronic site and utility corridor direction. This and other updated management direction can be found in the Lands and Special Uses section of Chapter III in the revised Forest Plans.

Cave Management

The Preliminary AMS Summary identified a need to include language in the Plans regarding cave management and the protection of cave resources. This language can be found in the Recreation Resources section of Chapter III in the revised Forest Plans. With this protection in place, the Forest Plan alternatives are not expected to have significant effects on cave resources.

Winter Recreation

Public comments expressed concern over the rising level of winter recreation conflicts in a number of areas within the Ecogroup Forests. In most cases, these conflicts are between snowmobilers and skiers in developed ski areas and backcountry areas. Most of these conflicts can only be resolved by site-specific access determinations. Because the Forest Plan revision process analyzes and adjusts management direction at the programmatic level, resolution of these conflicts is beyond the scope of this revision. Site-specific winter access management will be addressed in separate travel management planning processes that will follow this revision. However, Forest-wide direction has been reviewed and updated in the Recreation section in Chapter III of the revised Forest Plans to provide a foundation for subsequent analysis and access management determinations. In some cases, specific management direction has also been included for appropriate management areas.

Travel Management

Travel management and allocation of travel "use" zones are not addressed through this Forest Plan revision process. Travel management and Forest travel maps will be revised in a separate planning process. The Responsible Official elected not to 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 known to exist. Forest Plan direction has been 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).

Predator Control

The Preliminary AMS Summary identified a need to update direction in the revised Plans in response to a shift in predator control responsibilities. This updated direction can be found in the Wildlife Habitat section of Chapter III in the revised Forest Plans. Direction is the same for all action alternatives, and the alternatives would not have any significant effects on predator control.

South Fork Salmon River

The South Fork Salmon River is identified in the original Boise and Payette Forest Plans as an area of special concern and management emphasis because of its important habitat for anadromous fish. Although this drainage is no less important today, the revised Plans do not have separate sections for the South Fork Salmon River for the following reasons: First, many of the South Fork habitat protection and improvement measures prescribed by the original Plans have now been accomplished; second, fish habitat protection in general has increased across the Ecogroup to respond to the recent listing of species; third, taking a more holistic approach, the revised Plans recognize that the South Fork Salmon River is one of several aquatic strongholds that merit special protection methods, and these areas have been afforded a high level of protection and restoration emphasis at the Forest-wide and management area levels.

Management Area Boundaries and Direction

The Preliminary AMS Summary identified a need to define management area boundaries based on ecosystem components that tie to geographic features such as watersheds. This was accomplished during the revision process, and the results are provided in the new management areas of the revised Plans. Most management areas outside of designated areas such as wilderness or RNAs now follow watershed boundaries and can be better integrated into ecosystem-based planning.

National or Regional Issues

The Interior Columbia Basin Strategy

In January of 2003 a Memorandum Of Understanding (MOU) was entered into by and between the:

- USDA Forest Service, Regions 1, 4 and 6
- USDA Research, PNW and Rocky Mountain Stations
- USDI Bureau of Land Management, State Offices of Oregon, Washington, Idaho, and Montana
- USDI Fish and Wildlife Service Region 1 and 6
- Environmental Protection Agency Region 10
- DOC (NOAA) National Marine Service NW Region.

The purpose of this MOU is to cooperatively implement the *The Interior Columbia Basin Strategy* of 2003 to guide the amendment and revision of forest (FS) and resource management (BLM) plans and project implementation on public lands administered by the Forest Service and Bureau of Land Management throughout the Interior Columbia Basin. This strategy incorporates the scientific assessment information in, *An Assessment of Ecosystem Components in the Interior Columbia Basin and Portions of the Klamath and Great Basins,* the analyses supporting or developed as part of the ICBEMP, the *Integrated Scientific Assessment for Ecosystem Management* developed by the Interior Columbia Basin Ecosystem Management Project (ICBEMP) as guidance for implementation, and all reports generated by the ICBEMP project.

The *Implementation Strategy* document was developed around the key science findings and basin-wide issues developed in the ICBEMP FEIS. Key findings contained in this strategy were considered and used in the development of the Proposed Action (Alternative 2) for Forest Plan revision, as well as other action alternative management strategies outlined in the FEIS (Chapter 2), including strategies for:

- Terrestrial Species Habitat
- Aquatic and Riparian Habitat
- Social and Economics
- Tribal Governments
- Coordination with Other Management Efforts
- Adaptive Management

Chapter 3 of this FEIS contains more information under the biological and physical resource sections, as well as the Socio-Economic Environment and Tribal Rights and Interests sections.

2001 Roadless Area Conservation Rule

Effects on Inventoried Roadless Areas are described in the Inventoried Roadless Areas section of Chapter 3 of the FEIS. This section has an Issue and Indicator designed to show potential consistency with the Roadless Area Conservation Rule by alternative. The range of alternatives described in Chapter 2 incorporates the range of alternatives and outcomes considered under the Roadless Area Conservation Final EIS in 2000. A detailed roadless area re-evaluation is presented in Appendix C to the FEIS, and a description of characteristics for the Inventoried Roadless Areas within the Ecogroup Forests is presented in Appendix H.

2001 Road Management Final Rule and Administrative Policy

The final rule and administrative policy is referred to as the "Road Management Policy". The Road Management Policy was published in the Federal Register on January 12, 2001 (Federal Register Vol. 66, No. 9, 2001). It applies to existing and future roads on National Forest System lands. It emphasizes local, science-based decisions designed to maintain a road system that is safe, responsive to public needs, environmentally sound and affordable to manage. It also established official definitions regarding roads management terms.

The policy requires responsible officials to conduct a science-based roads analysis to help make better decisions on all new construction, reconstruction and decommissioning activities made after July 12, 2001. Currently, the August 1999 process entitled, *Roads Analysis: Informing Decision About Managing the National Forest Transportation System*, is the only approved analysis process.

FSM 7712.15 requires that "units that have begun revision or amendment of their forest plans but will not adopt the final revision or final amendment by July 12, 2001, must complete a roads analysis prior to adoption of the final plan or amendment". The Ecogroup Forests completed a Forest-scale Roads Analysis as part of the revision effort (see the Southwest Idaho Ecogroup Roads Analysis contained in the project record). The information generated was used by the Responsible Official to make informed programmatic decisions needed to ensure that the road systems on the forest planning units were safe, responsive to public needs, environmentally sound, and affordable to manage.

Species Viability

Effects on rare plant species are described in the Botanical Resources section of Chapter 3. Effects on wildlife and fish species of concern are disclosed in the Terrestrial Habitat and Species section, and the Soil, Water, Riparian, and Aquatic Resources section, respectively. In addition, the Biological Assessment and Biological Evaluations completed in support of Forest Plan revision contain more detailed assessments for threatened, endangered, proposed, candidate and Forest Service Region 4 sensitive species (see the project record for the Biological Assessments and Biological Evaluations for Botanical, Aquatic, and Terrestrial species).

Management direction has been strengthened to address botanical, aquatic, and terrestrial species viability in the revised Forest Plans. This direction takes a coarse filter and a fine filter approach. Vegetation and watershed restoration goals and objectives are emphasized at the

coarse filter scale to provide diverse, connected, and sustainable habitats across the landscape. At the fine filter scale, standards and guidelines are designed to protect federally threatened, endangered, proposed, and candidate species, or Forest Service Intermountain Region 4 sensitive species.

In order to estimate the effects of each alternative management strategy presented in this FEIS on fish and wildlife populations, certain species present in the planning area were selected as Management Indicator Species (MIS). The reasons for selection of each selected species are described in detail in Appendix F. This appendix also includes the rationale for why species selected as MIS in the original Plans have not been carried into the revised Forest Plans. Chapter IV of the revised Forest Plans contains monitoring elements for population and habitat trends of MIS in cooperation with state and tribal fish and wildlife agencies.

The integration of habitat restoration and maintenance goals and objectives for species discussed above with management standards and guidelines for protection will contribute to the viability of native and desired non-native species on the Forests over the short and long term.

National Fire Plan, Cohesive and Comprehensive Strategies, Healthy Forests Initiative - The Departments of Agriculture (Forest Service) and Interior (NPS, USFWS, BLM) developed the National Fire Plan in 2000 in response to a Presidential request on how best to respond to the severe fire season of that year. The plan is a long-term, multi-faceted strategy designed to manage the impacts of wildland fire to communities and ecosystems, and to reduce wildfire risk. It focuses on improving fire preparedness, restoring and rehabilitating burned areas, reducing hazardous fuels, assisting communities, and research needs.

Protecting People and Sustaining Resources in Fire-Adapted Ecosystems – A Cohesive Strategy – The Forest Service developed this strategy in 2000 to reduce fuel build-up in the West. The strategy establishes a framework to restore and maintain conditions in fire-adapted ecosystems where lower-intensity ground fires were a powerful force in shaping the make-up and structure of vegetative communities. The strategy identified Condition Class categories for these ecosystems, and prioritized areas for hazardous fuel treatments called for in the National Fire Plan. These priority areas include:

- Wildland Urban interface
- Municipal watersheds
- Threatened and endangered species habitat
- Maintenance of low risk Condition Class I areas.

10-Year Comprehensive Strategy Implementation Plan, A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment – Developed during 2001 in collaboration with governors and a broad range of stakeholders, this is a 10-year strategy to comprehensively manage wildfire, hazardous fuels, and ecosystem restoration on federal, state, tribal, and private lands. The strategy was designed to extend the concepts of the National Fire Plan and Cohesive Strategy into a broader and more collaborative effort. In 2002, the Implementation Plan for the 10-year Comprehensive Strategy was released. The plan identifies

22 specific tasks to achieve the four goals of the 10-year strategy; and specific performance measures for achievement. The plan emphasizes a collaborative, community-based approach to address wildfire-related issues, and translates the conceptual framework of the 10-year Comprehensive Strategy into specific actions.

Healthy Forests - An Initiative for Wildfire Prevention and Stronger Communities – Released in 2002, this Presidential initiative is designed to facilitate projects that reduce wildfire hazard and risk by making decisions in a more timely and efficient manner. In facilitating fuels reduction projects, the initiative would speed implementation of projects, improving implementation of the National Fire Plan and the 10-Year Comprehensive Strategy. It emphasizes using collaborative processes in identifying projects and priorities. This administrative proposal seeks to:

- Increase the use of Categorical Exclusions for fuel reduction projects,
- Streamline the appeals process within the existing appeals framework, and
- Streamline the Environmental Assessment documentation process.

The Revised Forest Plans - The revised Forest Plans address the wildfire hazard plans, strategies, and initiative described above by:

- Analyzing potential effects from wildfire and hazardous fuel conditions in the Vegetation Hazard and Fire Management sections of Chapter 3 in the FEIS,
- Revising Forest-wide Fire Management direction in Chapter III of the Forest Plan to incorporate national fire and fuel management objectives,
- Identifying National Fire Plan communities and wildland-urban interface areas within each appropriate Management Area in Chapter III of the Forest Plan, and
- Developing specific Management Area direction to prioritize treatment, suppression, prevention, and coordination efforts within and around National Fire Plan communities and wildland-urban interface areas.

DEVELOPMENT OF THE REASONABLE RANGE OF ALTERNATIVES

Public comments received in response to the Notice of Intent resulted in significant issues to the Proposed Action (Alternative 2). Some of those issues 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 sets 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 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 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 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 cannot be implemented.

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 road density 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 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 to 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 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…*
>
> *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 the 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. 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 Already Represented within the Range of Alternatives Considered in Detail

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 a new alternative generated between DEIS and FEIS (see the description of Alternative 7, below).

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 MPCs, road miles, acres of timber harvest, etc. are all best estimates based on the latest available information. The modeling and analyses conducted for this FEIS 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 MPCs, particularly as they relate to:

- Long-term Aquatic Conservation Strategy
- Suitable timberlands
- Vegetation restoration

- Undeveloped recreation
- Recommended wilderness
- Eligible Wild and Scenic Rivers

The 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 MPCs described below.

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 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 are 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, 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 corridor development.

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.

[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.

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) Water Quality Limited 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) Water Quality Limited 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 preserve 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 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, 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 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. The Southwest Idaho Ecogroup Plan revision developed a long-term Aquatic Conservation Strategy (ACS) for the Proposed Action, and that strategy is applied to all the action alternatives (2-7). This long-term strategy does not apply to Alternative 1B.

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 Preliminary AMS Summary.

Management Prescriptions

Management prescriptions appear in the original Forest Plans, represented by Alternative 1B, but they are typically not the same as the 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 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%
4.1b – Undeveloped Recreation, Maintain Undeveloped Character, Allow Salvage - 18%
5.1 - Restoration and Maintenance Emphasis within Forested Landscapes - 14%
6.2 - Commodity Production Emphasis within Shrubland and Grassland Landscapes - 11%
4.2 – Roaded Recreation Emphasis - 11%

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.

See Alternative 1B Map, in the map packet, for MPC spatial distribution for this alternative.

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 AMS Summary that initiated Forest Plan revision for the Southwest Idaho Ecogroup in 1997. 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 Summary 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 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 (e.g., 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. 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 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. 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. 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 Elements Common to All Alternatives section). It is assumed that this type of management would not have a significant effect on the areas' roadless character. Still other prescriptions that have 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 are:

5.1 - Restoration and Maintenance Emphasis within Forested Landscapes - 19%
4.1b - Undeveloped Recreation, Maintain Undeveloped Character, Allow Salvage - 17%
3.2 - Active Restoration and Maintenance of Aquatic, Terrestrial & Hydrologic Resources - 11%
6.1 - Restoration and Maintenance Emphasis within Shrubland and Grassland Landscapes - 8%
5.2 – Commodity Production Emphasis within Forested Landscapes - 6%
4.2 – Roaded Recreation Emphasis – 5%
6.2 - Commodity Production Emphasis within Shrubland and Grassland Landscapes - 4%

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. These rivers represent a total of 247 miles. 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.

See Alternative 2 Map, in the map packet, for MPC spatial distribution for this alternative.

Alternative 3

Alternative 3 maximizes restoration opportunities across the Forests. This alternative draws heavily from the scientific assessments completed as part of the ICBEMP FEIS, 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. 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 are:

5.1 - Restoration and Maintenance Emphasis within Forested Landscapes - 25%
3.2 - Active Restoration and Maintenance of Aquatic, Terrestrial & Hydrologic Resources - 20%
6.1 - Restoration and Maintenance Emphasis within Shrubland and Grassland Landscapes - 10%
4.1c – Undeveloped Recreation, Maintain Undeveloped Character, Allow Restoration - 9%
4.2 – Roaded Recreation Emphasis – 5%

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. These rivers represent a total of 247 miles. 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.

See Alternative 3 Map, in the map packet, for MPC spatial distribution for this alternative.

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 RDAT Team 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. 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 are:

3.2 - Active Restoration and Maintenance of Aquatic, Terrestrial & Hydrologic Resources - 17%
3.1 - Passive Restoration and Maintenance of Aquatic, Terrestrial & Hydrologic Resources -10%
6.1 – Restoration and Maintenance Emphasis within Shrubland and Grassland Landscapes - 6%
4.1c – Undeveloped Recreation, Maintain Undeveloped Character, Allow Restoration - 6%
5.1 - Restoration and Maintenance Emphasis within Forested Landscapes - 5%

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. An estimated total of 247 miles are recommended. 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 classifications are Recreational for Segment 1 and wild for Segment 2. The French Creek classifications are Wild for Segments 1, 2, and 3.

See Alternative 4 Map, in the map packet, for MPC spatial distribution for this alternative.

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 are:

5.2 - Commodity Production Emphasis within Forested Landscapes - 31%
5.1 - Restoration and Maintenance Emphasis within Forested Landscapes - 18%
1.1 – Designated Wilderness - 15%
6.2 - Commodity Production Emphasis within Shrubland and Grassland Landscapes - 11%
4.2 – Roaded Recreation Emphasis – 8%
4.1c - Undeveloped Recreation, Maintain Inventoried Roadless Areas, Allow Restoration - 8%
6.1 – Restoration and Maintenance Emphasis within Shrubland and Grassland Landscapes – 4%

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 22 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.

See Alternative 5 Map, in the map packet, for MPC spatial distribution for this alternative.

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 Summary. 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 RDAT Team assessment. In addition, unroaded areas greater than 1,000 acres discussed in the RDAT Team 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.

Under this alternative, 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. 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, 4.1b). This shift responds to the concern that natural processes 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 3.4 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 are:

4.1a - Undeveloped Recreation, Maintain Inventoried Roadless Areas - 39%
4.1b – Undeveloped Recreation, Maintain Undeveloped Character, Allow Salvage - 14%
5.1 - Restoration and Maintenance Emphasis within Forested Landscapes - 9%
5.2 - Commodity Production Emphasis within Forested Landscapes - 4%
3.2 – Active Restoration and Maintenance of Aquatic, Terrestrial & Watershed Resources - 4%

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. An estimated total of 247 miles are recommended. 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 classifications are Recreational for Segment 1 and wild for Segment 2. The French Creek classifications are Wild for Segments 1, 2, and 3.

See Alternative 6 Map, in the map packet, for MPC spatial distribution for this alternative.

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 (nearly 50 percent of the acres within the Ecogroup fall within IRAs), 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 to providing a high level of protection within IRAs, Alternative 6 also provides a high degree of protection on nearly 1 million acres of unroaded areas 1,000 to 5000 acres (i.e., MPC 4.1b). Adding these million acres to the acres within IRAs, recommended wilderness and designated wilderness results in nearly 77 percent, or 5.1 million acres, of the Ecogroup being managed in an unroaded and/or undeveloped condition. This level of unroaded/undeveloped management does not balance the needs of other interests and uses, such as timber production, fuels and wildfire hazard reduction, active watershed and habitat restoration, developed recreation, and some forms of recreational access.

  Finally, similar to concerns raised about Alternative 3, Alternative 6 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 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 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. 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 (210,000) 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 designed to move vegetative conditions toward their 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 fewer 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 are:

4.1c - Undeveloped Recreation, Maintain Inventoried Roadless Areas, Allow Restoration - 18%
3.2 – Active Restoration and Maintenance of Aquatic, Terrestrial & Watershed Resources - 13%
5.1 - Restoration and Maintenance Emphasis within Forested Landscapes - 12%
5.2 - Commodity Production Emphasis within Forested Landscapes - 10%
3.1 – Passive Restoration and Maintenance of Aquatic, Terrestrial & Watershed Resources - 10%
6.1 - Restoration and Maintenance Emphasis within Shrubland and Grassland Landscapes - 8%

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. These rivers are managed under the 2003 revised Payette and Boise National Forest LRMP management direction and emphasis for the management areas in which they are located.

See Alternative 7 Map, in the EIS map packet, for MPC spatial distribution for this alternative.

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 in the FEIS for background on the issues and resources. See Chapter 3 in the FEIS for a complete description of effects and the scientific basis for these results.

Selected Outcomes and Activities by Alternative

Tables S-1 through S-4 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.

Table S-1. 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 S-2. 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 S-3. 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 S-4. 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

The sections below summarize effects from the alternatives on the issue-related resources, in the same order they are presented in Chapter 3 of the FEIS. See Chapter 3 for a more detailed and comprehensive analysis of the potential direct, indirect, and cumulative effects.

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 one of the resources (Wilderness) does 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.

Issue Indicators: The indicators for this issue are estimated smoke emissions (i.e., PM 2.5) that could result from implementation of alternative management strategies, compared to historical (pre-settlement) emissions by Forest or administrative unit. This includes estimated emissions generated from fire use or wildfire in forested and non-forested vegetative communities.

Effects from Forested Vegetation Emissions: Tons per decade of historical PM 2.5 smoke emissions by Forest were estimated, and the average tons over the first 5 decades estimated for fire use by Forest, and by alternative. The levels for the Payette and Sawtooth included 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. 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, from most to least emissions produced, on the Boise and Payette Forests are the same: 6, 4, 7, 2, 1B, 3, and 5. The Sawtooth exhibits a different most-to-least ranking due to the amount of area in non-forested communities: 7, 2, 4, 3, 6, 1B, and 5.

Effects from Emissions Stored in Hazardous Vegetative Conditions: Emissions produced historically are estimated to be less than the amount stored in hazardous vegetative conditions in forested communities. 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. 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. 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.

Effects from Non-forested Vegetation Emissions – 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; but they are about two times the estimated level on the Sawtooth. 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.

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: There are 82 highly vulnerable subwatersheds in the Ecogroup area with the potential for uncharacteristically lethal wildfire (high or extreme uncharacteristic wildfire hazard). The alternatives have varying amounts of MPCs with management emphasis for restoring uncharacteristic forest vegetation hazard toward the non-lethal forest vegetation conditions that historically occurred. Alternative 5 would have the most potential benefit in reducing uncharacteristic wildfire negative effects by emphasizing vegetation restoration treatments on 88 percent of these 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: 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 (100 percent) of these subwatersheds, thereby reducing the post-wildfire risks to human life, property, and/or municipal watersheds in 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.

Issue Indicators for Issue 3: The indicators for this issue are:

- Potential Effects from Vegetation Treatments, Roads and Fire Use. The amount of suited timberland acres within subbasins, and the percentage of Equivalent Replacement Treatment (ERT) acres relative to threshold of concern (TOC) in subbasins are compared by alternative.
- Potential Effects from Livestock Grazing. The amount of suitable rangeland acres by subbasin, and the percents of MPC acres that would result in less restrictive and more restrictive grazing management strategies in subbasins are compared by alternative.
- Comparison of subwatersheds that have 303(d) WQL water bodies, and MPCs that emphasize the appropriate restoration/conservation strategies to assist in the de-listing of those water bodies.
- Comparison of subwatersheds that have TMDLs assigned, and MPCs that emphasize the appropriate restoration/conservation strategies to meet the intent of the TMDL plans.
- Potential Effects from Motorized Trail Use in Recommended Wilderness Areas.

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 within Ecogroup area subbasins, Alternative 5 (2,801,563 acres) has the greatest potential for impacts from commercial timber harvest and associated road activities. This alternative is followed in descending order by Alternatives 1B (1,750,267 acres), 2 (1,307,149 acres), 3 (1,250,522 acres), 7 (1,001,290 acres), 6 (617,210 acres) and 4 (32,940 acres). 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.

ERT Acres Compared to Subbasin TOCs - After both 20 and 50 years, most alternatives would have ERT acres substantially below the TOC for each of the 29 subbasins within the Ecogroup area,. Only the Hells Canyon, Upper Middle Fork Salmon, Upper Salmon and Goose Creek subbasins would have ERT acres above the 100 percent TOC in selected alternatives. Actual treatment acres would depend on site-specific proposals, analysis, consultation, and mitigation, which would no doubt modify the modeled results. Relatively speaking, though, 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, because modeled ERT values exceed the threshold of concern (100 percent).

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 slightly less under Alternatives 2, 3, 4, 6 and 7 across the Ecogroup area, as compared to the current forest plans, represented by Alternative 1B. 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.

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.

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 Watershed and Aquatic Restoration Strategy (WARS) developed for Forest Plan revision. Alternative 3 is followed in descending order by Alternatives 7 (43 percent), 2 (42 percent), 6 (30 percent), 4 (27 percent), 1B (12 percent), and 5 (7 percent). 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. Alternative 3 is followed in descending order by Alternatives 7 (25 percent), 2 and 4 (21 percent), 6 (19 percent), and 1B and 5 (7 percent). 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, prohibited motorized use is likely to reduce sediment delivery and improve stream bank 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 stream banks 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.

Issue Indicators for Issue 4: The indicators for this issue are:

- Potential Effects from Vegetation Treatments, Roads, and Fire Use. The amount of suited timberland acres within subbasins, and the percentage of ERT acres relative to thresholds of concern (TOC) in subbasins for selected fish species are compared by alternative.
- Potential Effects from Livestock Grazing. The amount of suitable rangeland acres by subbasin, and the percents of MPC acres that would result in less restrictive and more restrictive grazing management strategies in subbasins for selected fish species are compared.

- Potential Effects from Wildfire vs. Treatments to Reduce Wildfire Hazard. Potential effects to listed, sensitive, and special concern fish species were analyzed by comparing amount of area in MPCs that have a high emphasis and more tools available to treat subwatersheds with high and extreme risks to uncharacteristic wildfire to those with fewer tools available. This information is overlaid with fish species population status to examine risk to populations of treating vs. not treating vegetation.
- Potential Effects from Aquatic Restoration.
- Potential Effects from Motorized Trail Use in Recommended Wilderness Areas.

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 Evolutionary Significant Unit (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 – Within the ESU subbasin, suitable rangeland acres are the same for all alternatives, 41,367 acres, or 8 percent of the Ecogroup area.

Effects from Less Restrictive Vs. More Restrictive Grazing Management – For the ESU subbasin, Alternatives 3 and 7 have 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 in recommended wilderness. 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 Depressed Population Subwatersheds – 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 Strong Population Subwatersheds - 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 Depressed Population Subwatersheds – 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 Strong Population Subwatersheds - 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 Depressed Population Subwatersheds – 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 Strong Population Subwatersheds - 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 5 is the same as 1B, or 13 percent suitable rangeland 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 Depressed Population Subwatersheds – 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 Strong Population Subwatersheds - 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 Depressed Population Subwatersheds – 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 Strong Population Subwatersheds - 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 Depressed Population Subwatersheds – 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 Strong Population Subwatersheds - 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 Depressed Population Subwatersheds – 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 Strong Population Subwatersheds - 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.

Indicators for Issue 1: Effects to most species in this analysis are measured by changes to habitat components (size class, density, composition, snags, coarse woody debris) and trends.

Effects to 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 to 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 to 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 to 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 to 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 to the peregrine from habitat changes for prey species within the Ecogroup area would likely be insignificant.

Effects to 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 to 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 to 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 to 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 to 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 to 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 to 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 to 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 to 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 to 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 to 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 to 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 to 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 to 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 to Canada lynx, above.

Effects to 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 to 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 Ecological Reporting Unit (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 to 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 developed by USDI Fish and Wildlife Service in 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 to 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 to 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 to 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 to 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 to 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 to 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 effects to 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.

General Effects: 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.

Effects to Macfarlane's Four-o'clock (*Mirabilis macfarlanei*): This species is not known to occur within the Ecogroup area, and potential habitat for this species 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 this species 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.

Effects to Ute Ladies'-tresses Orchid (*Spiranthes diluvialis*) and Water Howellia *(Howellia aquatilis*): These species are not known to occur within the Ecogroup area, but potential habitat for them 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, 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 habitat may be minimal.

Effects to Spalding's Catchfly (*Silene spaldingii*): This species is not known to occur within the Ecogroup area, and potential habitat for this species 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 this species, 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.

Effects to Slick Spot Peppergrass *(Lepidium papilliferum*) - No occupied habitat for this species has been located on National Forest System lands, but potential habitat may exist on the Mountain Home Ranger District, Boise National Forest. The MPCs that would allow the type and intensity of management activities that could potentially threaten habitat or populations of this species are 5.1, 5.2, and 6.2. Alternative 5 poses the greatest potential impacts based on the high proportion of the potential habitat area assigned to MPCs 6.2 and 5.2. Alternative 5 would be followed in descending order of potential effects by Alternatives 2, 3, 1B, 6, 4, and 7.

Effects to Christ's Indian Paintbrush *(Castilleja christii)*: 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 population (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.

Effects to Slender Moonwort (*Botrychium lineare*): 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.

Effects to Sensitive, Proposed 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 S-5). Alternative 1B closely follows, then Alternative 3, due to the short-term risks associated with these alternatives. The alternative that appears to have the least potential impact to the 86 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). 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 increased susceptibility to uncharacteristic wildfire events.

Table S-5. Summary of Potential Impacts of Alternatives for Identified Habitat Groups

Habitat Group	Alternatives with the MOST Potential Impacts	Alternatives with INTERMEDIATE Potential Impacts	Alternatives with the LEAST Potential Impacts
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.

Indicators for Forested Vegetation: Indicators for potential effects on forested vegetation are:

- Size class changes toward desired and historical size classes by Forest and Potential Vegetation Group (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

Effects to Forested Vegetation Size Class, Canopy Closure, and Species Composition: In order to summarize information about these three components of forested vegetation, all three components are examined together, for each decade. Individual rankings were reviewed and then considered as to which alternatives best meet their desired condition (DC) and come within the mean of HRV. These would be the alternatives that are designed with the right mix of MPCs to meet the DCs, and have a lesser degree of risk in terms of meeting HRVs. Alternatives that best meet the DC are also identified, regardless of HRV, because some alternatives were not designed solely to meet HRV, but to consider social and economic concerns as well. These alternatives generally fall within the full range of HRV, but do not meet the mean of the range.

In this synthesis of indicators, PVGs that comprise less than 5 percent of the total Forest are not included in the rankings, to better understand the landscape level effects across a Forest, by alternative. PVGs that comprise less than 5 percent of the total Forest acres include 1, 3, and 4 on the Payette, 5 and 11 on the Boise, and 1, 2, and 3 on the Sawtooth National Forest. This analysis does not mean to imply that these PVGs are not important ecologically, despite the small amount of acreage they incorporate. However, they do not play a large role in landscape level change compared across the different alternatives.

Fifth Decade - This is the decade that probably holds the most weight, in terms of how an alternative would affect the forested vegetation landscape. This is the decade where substantive differences between the alternatives are first detected, and it is not so far out on a time-scale that model reliability goes down appreciably. Overall on the Payette National Forest, the best alternative for meeting both the DC and the HRV would be Alternative 3, followed by Alternatives 4 and 7. Alternative 2 comes next, and Alternatives 1B, 5, and 6 are all ranked last. For only meeting the DC, since all alternatives are not designed to be within the mean of HRV, Alternative 3 would rank first, followed by Alternative 7. Alternatives 4 and 5 would be third, Alternative 2 would be fourth, and lastly would be Alternatives 1B and 6. Collectively, Alternative 3 is the best overall alternative for vegetation diversity on the Payette National Forest; Alternative 7 would be second, and Alternative 4 would be third.

Overall on the Boise National Forest for meeting both the DC and HRV, Alternative 3 would rank first, followed by Alternative 4, then Alternatives 2 and 7. Alternatives 5 and 6 would be next, and 1B would be last. For meeting only the DC, Alternative 3 would be first, then Alternative 7, followed by Alternatives 4, 2, and 5, and Alternatives 1B and 6. Collectively, Alternatives 3, 4, and 7 would be the best overall alternatives on the Boise National Forest.

Overall on the Sawtooth National Forest, Alternative 3 would be the best for meeting both the DC and the HRV (it is ranked highly in all components), followed by Alternative 7, then Alternative 4, then Alternatives 5 and 6. Alternatives 1B and 2 would be ranked last. For meeting only the DC, Alternative 7 would be the best, followed by Alternative 3, then Alternative 6, then Alternative 5, and then Alternatives 1B, 2, and 4. Collectively, Alternatives 3 and 7 would be the best overall alternatives on the Sawtooth National Forest.

Tenth Decade - On the Payette National Forest, Alternative 4 would be the best for meeting both the DC and the HRV, followed by Alternative 2, then Alternative 3. For meeting only the DC, Alternative 4 would be the best alternative, followed by Alternative 2, then Alternatives 3 and 7. Overall at the end of ten decades, Alternative 4 would be the best alternative for meeting vegetation diversity needs.

On the Boise National Forest, Alternative 3 would be the best for meeting both the DC and the HRV, followed by Alternative 4, then Alternatives 6 and 7. For meeting only the DC, Alternative 7 would be the best, followed by Alternatives 3, 6, and 7. Overall at the end of ten decades, Alternatives 3 and 7 appear to be the best.

For the Sawtooth National Forest, Alternative 6 would be the best for meeting both the DC and the HRV, followed by Alternatives 4 and 7. For meeting only the DC, Alternative 6 would also be the best, followed by Alternative 7, then Alternative 4. Overall at the end of ten decades, Alternative 6 would be the best alternative, followed by Alternatives 4 and 7.

Fifteenth Decade - Model results are considered much less reliable in this decade, but it is interesting to note if any alternatives continue on a particular trend. Many of the constraints in the model are released this far out in the projection.

For the Payette National Forest, Alternative 2 would be the best for meeting the DC and HRV, followed by Alternative 4, then Alternatives 3 and 7. For meeting the DC only, Alternative 2 would be the best, followed by Alternatives 4 and 7, then Alternative 2. Overall, Alternative 2 would be the best Alternative.

On the Boise National Forest, Alternative 3 would be the best for meeting the DC and HRV, followed by Alternative 4. For meeting the DC only, Alternatives 3 and 4 would be the best, followed by Alternatives 6 and 7. Overall, Alternatives 3 and 4 would be the best. The trend of consistently seeing Alternative 3 as a good alternative continues.

For the Sawtooth National Forest, Alternative 7 would be the best for meeting the DC and HRV, followed by Alternatives 2, 4, and 6. For meeting the DC only, Alternative 7 would be the best, followed by Alternatives 2, 4, and 6. Overall, Alternative 7 appears to be the best after fifteen decades. The trend of consistently seeing Alternative 7 as a good alternative continues.

The ranking of alternatives is due to a variety of factors including specific desired conditions, inherent vegetative development, management prescription categories, management objectives, and budgets. All these interact to determine the amount of vegetative management and/or disturbances that occurs. There are different DCs between alternatives. For example, not as

many large trees are needed to meet the DCs for Alternatives 1B and 5. In some PVGs, the current conditions are so far from the DCs, that it would take more than five decades to grow enough trees into the large size class to meet the DC. For Alternatives 1B and 5, less acreage in the large tree size class is desired, hence it may be easier to meet the DCs in a shorter time period.

Those landscapes operating within or close to historical conditions are expected to be more resistant and resilient to endemic levels of insects, disease, and fire, and to produce characteristic responses. That does not mean that epidemic insect outbreaks or lethal fire won't occur, but rather that these disturbance agents would operate and function within ecosystems in an expected or predictable manner. In turn, ecosystem elements, processes, and functions that revolve around vegetation would operate as expected. The timing of disturbances will also affect the trend an alternative takes.

Different alternatives display differences in the numbers of PVGs or forested acres that are within DC. What differs between them are the relative amounts by which the alternatives meet their desired conditions (numbers of PVGs and/or amount of acres of forested vegetation) and the rates at which the alternatives may achieve desired conditions. In the case of the Sawtooth Wilderness, the small total size of the area makes it difficult to implement management that is compatible with the wilderness desired condition.

Effects to Forested Vegetation Snags and 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 S-6. 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 S-7. 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 S-8. 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.

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

- Acres of big sagebrush 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 MPCs

Effects to Non-forested Vegetation, 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 Non-forested Vegetation, Pinyon-Juniper: One thing to note is that Alternatives 5 and 1B appear to be the best alternatives for meeting the DCs for pinyon-juniper. However, the DCs for these alternatives required less acreage in the larger size classes than the DCs for other alternatives. Pinyon-juniper was modeled alone (when canopy cover is greater than 10 percent),

and together with mountain big sagebrush or Wyoming big sagebrush that contained pinyon-juniper, but with less than 10 percent canopy cover of the pinyon-juniper. It was assumed that these were stands in the process of conversion to pinyon-juniper. The alternatives that appeared to minimize the conversion of either one of the sagebrush types to pinyon-juniper (or maximized the conversion back to sagebrush from pinyon-juniper) were ranked in the following order: 7, 3, 4, 2, 5, 1B, and 6. Although Alternative 7 was the best alternative for minimizing conversion, it was not the best alternative for moving the pinyon-juniper to its DC. There is almost an inherent conflict in the DC; it is difficult to increase size classes of juniper at the same time that it is being thinned through various treatments to allow for more sagebrush, grasses, and forbs. This modeling points out the importance of the habitat types at the project level and the need to design treatments that are appropriate for the habitat type. If the habitat type is pinyon-juniper, then having a more even distribution of tree size classes may be more appropriate. If the habitat type is sagebrush and it is early enough in the conversion process, then trying to get more sagebrush into the system, at the expense of pinyon-juniper, may be the appropriate course of action.

Effects to Non-forested Vegetation, 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 Non-forested Vegetation, 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. 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 S-9.

Table S-9. 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.

Indicators for Riparian Vegetation: 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

Effects to 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.

Effects to 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 S-10 displays the numbers of acres in each MPC group by alternative.

Table S-10. 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 some further degradation due to activities in the uplands, although protective measures are 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.

Issue Indicators: The indicators for this issue are:

- Insect hazard index for forested vegetation
- Uncharacteristic wildfire hazard index for forested and non-forested vegetation

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 1.72 in Alternative 7, 1.75 in Alternative 2, 1.77 in Alternative 5, 1.78 in Alternative 4, 1.79 in Alternative 3, 1,80 in Alternative 6, and 1.82 in Alternative 1B. 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-sized trees.

Current conditions show an estimated 49 percent of the Ecogroup area's forest vegetation in a moderate or high insect hazard condition. Across the Ecogroup area, the area in a moderate or high insect hazard increases over time in each alternative, to 62 percent in Alternative 7, 63 percent in Alternative 2, 64 percent in Alternatives 3, 4, 5, and 6, and 67 percent in Alternative 1B, No Action.

Effects from Uncharacteristic Wildfire Hazard, Forested Vegetation: Uncharacteristic wildfire hazard for forested vegetation declined after five decades from the current index for all alternatives except the No Action Alternative (1B) on all three Forests, and Alternative 5 on the Sawtooth and Payette Forests (Table S-11). The most substantial declines were in Alternative 4, followed in order by Alternatives 3 and 6, 2, 7, 5, and 1B.

Table S-11. 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

Effects from Uncharacteristic Wildfire Hazard, Non-forested Vegetation: 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. However, all increases were relatively minor. Hazard increases from a current index of 0.11 on the Boise Forest to 0.17 in Alternative 5, 0.18 in Alternative 3, 0.19 in Alternatives 1B and 7, 0.20 in Alternative 2, 0.23 in Alternative 4, and 0.24 in Alternative 6. For the Sawtooth, the hazard increases from a current index of 0.12 to 0.16 in Alternative 5, 0.18 in Alternatives 1B, 2, 3, and 7, 0.21 in Alternative 4, and 0.24 in Alternative 6.

Non-native Plants

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

Indicators: The indicators for this issue are:

- 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.

Estimated Acres of High Susceptibility to Noxious Weed Invasion: 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 S-12).

Table S-12. 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**

Estimated Noxious Weed Acres in the Short Term: The combined estimated acres were estimated for five key noxious weed species within the Ecogroup area 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 acreage (96,051 – 243-387 acres) after ten years, due primarily to the higher risks of seed dispersal associated with activities and practices. Alternative 2 follows closely with an estimated 92,035 – 221,510 acres. Alternatives 4 and 6 would have an estimated 66,765 – 171,886 acres.

Effects from 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 for Issue 1: 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 S-13).

Table S-13. 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 do not show as much difference by alternative as forested percentages, but the trends are somewhat reversed, with Alternative 5 treating the highest percentage on the Boise (113 percent) and Sawtooth (103 percent) Forests, and Alternative 6 treating the lowest (83 percent and 70 percent, respectively). Thus, all alternatives would treat a fairly high percentage of the non-forested vegetation, and would use fire liberally as a restoration and maintenance tool.

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 for Issue 2: 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 S-14). 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 S-14. 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 form of livestock grazing management authorized under permit for the Forests.

Indicator 1: Estimated suitable rangeland acres by Forest.

Effects for Indicator 1: 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 S-15). 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 S-15. 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 for Indicator 2: 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 S-16). Alternative 6 reflects the next greatest change, although it is significantly less than Alternative 4. Alternatives 2, 3, and 7 have dominantly less restrictive MPCs, but have significant amounts in the more restrictive category. Alternatives 1B and 5 are relatively comparable in their outcomes and would produce the least amount of potential change over time.

Table S-16. 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 amount of acres occurs 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 S-17).

Table S-17. 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 S-18).

Table S-18. 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 S19).

Table S-19. 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 S-20 and S-21).

Table S-20. 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 S-21. 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 lies 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 S-22).

Table S-22. 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 likely be the

most affected. For the Ecogroup area, Alternative 3 has the most developed recreation sites (113) in MPC 3.2, followed in descending order Alternatives 2 (95), 7 (94), 6 (84), 4 (28), 5 (4), and 1B (0). By Forest, the Sawtooth would have the most sites (59) potentially affected, followed by the Boise with 39, and the Payette with only 15.

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 S-23).

Table S-23. 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 by 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 because other factors may influence individual situations.

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 affect 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 S-30 and S-31 in the Roads section, below. These tables display the projected miles of classified roads in 2015 and the estimated miles of unclassified roads decommissioned by 2015 respectively.

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 likely 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.

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: 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 Tables S-24, S-25, and S-26. 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 Tables S-24, S-25, and S-26.

Table S-24. Anticipated Acres* of VQO and Acres of Change for the Boise National Forest, by Alternative

Alt.	Preservation		Retention		Partial Retention		Modification		Maximum Modification	
	Acres	Acre Change From Existing	Acres	Acre Change From Existing	Acres	Acre Change From Existing	Acres	Acre Change From Existing	Acres	Acre Change From Existing
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

*Measured in thousands of acres

Table S-25. Anticipated Acres* of VQO and Acres of Change for the Payette National Forest, by Alternative

Alt.	Preservation		Retention		Partial Retention		Modification		Maximum Modification	
	Acres	Acre Change From Existing	Acres	Acre Change From Existing	Acres	Acre Change From Existing	Acres	Acre Change From Existing	Acres	Acre Change From Existing
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

*Measured in thousands of acres

Table S-26. Anticipated Acres* of VQO and Acres of Change for the Sawtooth National Forest, by Alternative

Alt.	Preservation		Retention		Partial Retention		Modification		Maximum Modification	
	Acres	Acre Change From Existing	Acres	Acre Change From Existing	Acres	Acre Change From Existing	Acres	Acre Change From Existing	Acres	Acre Change From Existing
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

*Measured in thousands of acres

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 management direction under Alternative 6 that requires that Inventoried Roadless Areas remain undeveloped and allows 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 S-27, S-28, S-29).

Table S-27. 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 S-28. 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 S-29. 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, above, 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. See Table S-11, Uncharacteristic Wildfire Hazard Indices, in the Vegetation Hazard section for the current index and the indices calculated at the fifth decade.

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. See the Insect Hazard Indices table in the Vegetation Hazard section for the current index and the indices calculated at the fifth decade.

The Vegetation Hazard analysis 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.

Alternative 2 probably presents the highest risk to cultural resources on the Boise, because it represents the highest total level (444,000 acres) of vegetation treatment over the next two decades. However, levels under Alternatives 2, 6, 4, and 7 are also relatively high (over 400,000 acres). Alternative 1B presents a relatively moderate level of risk (345,000 acres), while Alternative 5 probably presents the lowest level of risk (227,000 acres). Because Alternative 5 is known to have a high level of scheduled mechanical treatments, it is easy to see that potential fire treatment acres have the dominant influence in this analysis.

On the Payette, the differences between the alternatives are relatively smaller than they are on the Boise. Alternative 6 likely presents the highest level (299,000 acres) of risk and Alternative 5 presents the lowest level (207,000 acres). 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 (158,000) of risk and Alternative 1B presents the lowest level (36,000 acres). Alternative 2 presents almost as high a level (145,000 acres) 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 (48,000 acres) 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 S-30).

Table S-30. 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 S-31).

Table S-31. 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. However, the differences between alternatives would be minimal. Given maintenance accomplishment levels comparable to those of 2000-2002, anticipated level of road maintenance to operational level standards that would be accomplished by the Forest Service alone would range from 20 to 21.7 percent on the Boise National Forest, from 19 to 20 percent on the Payette National Forest, and from 20.5 to 20.7 percent on the Sawtooth National Forest.

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 area 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 S-32).

Table S-32. 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%
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%

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 MPCs 2.4, 4.2, 4.3, 5.1, 5.2, 6.1, 6.2, or 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 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 MPCs 1.2, 2.1, 2.2, 3.1, and 4.1a that would limit both the range of treatments and 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 S-33 and S-34.

Table S-33. 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. Figures are rounded to the nearest 1,000 acres. Totals by alternative may differ slightly due to rounding.

Table S-34. 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. Figures 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 indicators 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 S-35.

Table S-35. 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	184,000	188,900	188,900	805,000	6,100	1,108,500	216,500
Payette	221,800	224,900	242,500	883,000	227,200	908,500	277,500
Sawtooth	267,500	265,800	266,000	929,000	1,900	1,225,100	265,800
IRA Acres Assigned to Management Prescriptions That Are Not Consistent with the RACR							
Boise	924,500	919,600	919,600	303,600	1,102,400	0	892,000
Payette	686,600	683,500	666,000	25,500	681,200	0	631,000
Sawtooth	957,600	959,300	959,100	296,200	1,223,200	0	959,300

* Actual Forest totals by alternative are rounded to the nearest 100 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 Boise and Sawtooth and is also the second closest alternative on the Payette. Alternative 5 is the least consistent on the Payette and Sawtooth, while Alternative 1B is the least consistent on the Boise. 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 S-36.

Table S-36. 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	All	0	0	0
Miles of Groomed **X-Country Ski** Trails	All	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: The numbers in Table S-37 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 S-37. 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 of the FEIS 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 S-38 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 S-38. 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%
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 (Table S-39).

Table S-39. 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

Alternative 4 results in the most total job and income reductions over the long term, and Alternative 5 has the least reductions. 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 are very similar in effects. Alternative 1B represents the current condition for each time period.

Recreation-Linked Outputs - Under all alternatives, recreation use and recreation-linked jobs and earnings, would increase over time, with no differences among alternatives. The job increases would be from 2,695 in 2000, to 2,847 in 2005, to 2,696 in 2010. The income increases would be from $42,168,000 million in 2000, to $52,271,000 million in 2005, to $59,450,000 in 2010.

Timber-Linked Outputs – All alternatives result in increases in jobs and incomes by 2005, and then level off by 2010 (Table S-40). The largest increases are seen under Alternative 1B, followed in descending order by Alternatives 5, 3, 7, 2, 6 and 4.

Table S-40. 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.

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 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 S-41, S-43). 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 change in 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 S-42 and S-44 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 S-41. 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 S-42. 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 S-43. 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 S-44. 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 than one indicate that revenues exceed costs, and ratios less than 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 S-45 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 S-45. 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

Payette National Forest - Table S-46 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 S-46. 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 S-47 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 S-47. 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	$225
Revenue/Cost Ratio	1.76	1.51	1.56	0.56	2.15	0.41	1.88

Southwest Idaho Ecogroup - Table S-48 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 $162 million and $542 million, respectively.

Table S-48. 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 for this Forest Plan revision.