

INTRODUCTION

This chapter is the summary of the Analysis of the Management Situation (AMS). The AMS is actually a collection of documents and project record information about the Forest that has been compiled over the past 15-20 years. The Sawtooth National Forest completed an AMS in the 1980s as part of the forest planning process. The original AMS collected and analyzed data designed to display the current management conditions, needs, products, and services of the Forest. In the 1990s, the original AMS was used as baseline information to validate whether management direction in the 1987 Forest Plan was effective in addressing the needs that were identified in the 1980s.

As part of Forest Plan revision for the Southwest Idaho Ecogroup, the three Forests produced a Preliminary AMS (USDA Forest Service 1997). Although this document summarized current physical, biological, social, and economic conditions of the Ecogroup, the focus was not on presenting benchmark information about the Forests, but rather determining any need to change or establish new management direction, following direction in the Region 4 Desk Guide – Bridge to Revision (USDA Forest Service 1993) and NFMA regulations {36 CFR 219.12 (e)(5)}. The revision approach emphasized correcting what needed fixing in the original plans, realizing that some of the original management direction was still working well and could be carried forward intact.

The Preliminary AMS also introduced the ecosystem management framework for revising the Forest Plan, and provided the basis for formulating a Proposed Programmatic Action and management alternatives. Thus, the Preliminary AMS was the beginning of the public scoping process for revision, based on the premise that the type and depth of information presented in the Preliminary AMS would more effectively involve the public early on in the revision process than would a more traditional but limited scoping letter. The Ecogroup wanted the public to use the information in this document, along with the Proposed Programmatic Action, to provide detailed comments for alternative development.

Chapter 2 of this Forest Plan represents a revised AMS summary that is based on the Need For Change topics in the 1997 Preliminary AMS, but also incorporates public comments, changes, and new information since the release of the Preliminary AMS. As such, this AMS is organized into the following sections:

- **Introduction** – Describes the purpose of the AMS and the organization of this chapter.
- **Determining Need For Change** – Describes how the Forest determined the Need For Change topics that generated and set the boundaries for forest plan revision.
- **Need For Change Topics** – Describes the major complex Need For Change topics and how the selected alternative for the revised Forest Plan and Final EIS addresses this Need For Change.
- **Strengthening Current Management Direction** – Describes Need for Change items that were addressed by simply changing or adding new management direction in the Plan.

- **Other Changes or Developments Since the Preliminary AMS** – Describes how the selected alternative for the revised Forest Plan and Final EIS addresses other changes or proposed changes in direction that have occurred since the release of the Preliminary AMS.
- **Continuous Assessment and Planning** – Describes the Forest’s strategy for addressing changes that may occur following forest plan revision.

DETERMINING NEED FOR CHANGE

How Needs for Change Were Identified

In 1997, the Responsible Official documented the need to establish or change Forest Plan management direction (Need For Change) in the *Preliminary Analysis of the Management Situation Summary* (USDA Forest Service 1997). The Responsible Official used four primary sources for determining Need For Change items:

- 1) Results of the three Forest Plan monitoring reports.
- 2) Comparison of the latest regulatory requirements and Agency Policy, Manual and Handbook direction with existing Forest Plan direction.
- 3) New information, such as the *Integrated Scientific Assessment for Ecosystem Management in the Interior Columbia Basin and Portion of the Klamath and Great Basins* (Quigley et al. 1997), the *Federal Wildland Fire Management Policy and Program Review* (USDA Forest Service 1996) *Conservation of Columbia Basin Fish: Final Basinwide Salmon Recovery* (US Dept. of Commerce, NMFS 2000), and the *10-year Comprehensive Strategy, A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment* (USDA Forest Service et al. 2002).
- 4) Comments from Forest employees who have been implementing the Forest Plans.

Upon review of the existing documentation, summarized below, the Responsible Official identified multiple, significant, Need for Change issues.

Forest Plan Monitoring Reports

National Forests monitor and evaluate land management activities to determine how well objectives have been met and how well standards and guidelines have been applied. The Forest completed a Forest-wide monitoring report in 1996 and made it available to the public (USDA Forest Service 1996). The report described changed conditions since the Forest Plan was released and recommended changes where appropriate. Changed conditions in the most recent Forest-wide Monitoring and Evaluation Report included:

- An increased spread of noxious weeds,
- Resource damage, particularly to riparian areas, due to increased recreation use,
- Continued riparian damage in areas with steep granitic and basalt soils,
- Development and application of new approaches in the management of riparian and upland areas to protect and improve fish and wildlife habitats.

Regulatory Requirements and Agency Policy, Manual, and Handbook Direction

The implementing regulations for the NFMA and many other natural resource-related laws have been translated into Forest Service Manual and Handbook direction. This direction is updated periodically as new laws or amendments are created, or as court interpretations of existing laws change. The latest versions of laws, regulations, and Forest Service Manuals and Handbooks were reviewed for all relevant resources to determine whether the Forest Plan followed or addressed the most current direction. New national policies—Roads Policy, Roadless Rule, National Fire Plan, Healthy Forests Initiative, etc.—have also been considered during the revision process.

New Information

Since the Forest Plan was released, new information has come to light that might influence Forest management policies or procedures. Some of this new information is related to changed conditions like those highlighted above. Other sources include broad-scale research assessments—like the Interior Columbia Basin Ecosystem Management Project Scientific Assessment, or the Canada Lynx Conservation Assessment—or changes in regional management direction, such as Interim Strategies of Managing Anadromous Fish-producing Watersheds in Eastern Oregon and Washington, Idaho, and Portions of California (Pacfish) and the Inland Native Fish Strategy (Infish). These new information sources were reviewed to identify what components needed to be incorporated into new or changed Forest Plan management direction.

Internal Comments

Comments were solicited from Forest Service employees who have implemented the Forest Plan during the last planning period. These comments were reviewed to determine what implementation problems have been occurring, how they might relate to specific Forest Plan direction, and what changes could be made to help solve or reduce those problems in the future.

Forest Plan Decisions

The results of the reviews cited above revealed that portions of the existing Forest Plan direction were still appropriate, while other direction needed adjustment in light of changed resource conditions, new or changed regulatory requirements or Agency policy and direction, and new information. The Responsible Official, in consultation with the Revision Team specialists, compared the initial list of Need For Change topics against the six decisions made in forest plans to identify which topics were planning-related versus project-level issues.

The six types of decisions made in forest plans are listed below.

- 1) 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]).
- 2) 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).
- 3) Establishment of management areas and direction applying to future activities in those management areas (36 CFR 219.11[C]).
- 4) Designation of lands not suitable 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)).
- 5) 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]).
- 6) Recommendation to Congress of areas for wilderness classification where 36 CFR 219.17(a) applies.

Management Direction That Needs To Be Changed or Established

Upon review of existing documentation, the Responsible Official made a determination to change or establish new management direction in the following potential Forest Plan revision topics. These topics are described in detail later in this chapter.

- Topic 1 - Biological Diversity
- Topic 2 - Fire and Smoke Management
- Topic 3 - Habitat Fragmentation and Disruption
- Topic 4 - Non-native Plants
- Topic 5 - Rangelands/Grazing Resources
- Topic 6 - Hydrologic, Riparian, and Aquatic Resources
- Topic 7 - Timberland Suitability
- Topic 8 - Management Emphasis Areas

These changes were presented to the public in the 1997 Preliminary AMS, and they have been modified somewhat since then based on external and internal comments and new information. The most recent versions are described below.

NEED FOR CHANGE TOPICS

This section describes the issues or areas where the Responsible Official identified a Need for Change in Forest Plan management direction. The topic descriptions are divided into five parts:

- **Background** - Briefly describes the resource or issue, and current management direction sources.
- **Current Condition** - Summarizes the current condition of the resource or issue, focusing on areas where current management direction is not being met or does not exist.
- **No Action** - This section presents the effects of continuing current management direction (No Action) associated with the Need For Change topics.
- **Need to Establish or Change Management Direction** - Targets the specific area where management direction needs to change or to be developed to address changed conditions.
- **Changes Under the Revised Forest Plan** – Summarizes changes in management direction, monitoring, area adjustments, etc. in the revised Plans that address Need For Change.

Topic 1 - Biological Diversity

Background

Biological diversity is the variety and abundance of life and its processes. It includes all living organisms, the genetic differences among them, and the communities and ecosystems in which they occur. Biological diversity also refers to the compositions, structures, and functions of species and habitats and their interactions. The interactions of biological and physical components operate at multiple scales, from micro-sites to regional landscapes. The goal of conserving biological diversity is to support sustainable development by protecting and using biophysical resources in ways that do not diminish the world's variety of genes and species, or do not destroy important habitats or ecosystems.

The variety of habitats and species on federal and adjacent lands puts land management agencies in a key role for managing and protecting biological diversity. This is especially true for rare and unique ecosystems, and species that are highly valued or are considered to be on the brink of extinction (Salwasser 1989). Consequently, current management direction (ESA, CFR 219.26 and 219.27, FSM 2070, and the Forest Plans) for biological diversity concentrates on numbers of species and diversity of habitats.

In general, prior to human-caused disturbances, major changes in native biodiversity were a result of substantial shifts in climate or geology. However, human influences have substantially affected ecological processes and biodiversity, and will likely continue to do so.

Current Condition

Although the current Forest Plan addresses many of the key indicators of biological diversity, these indicators are largely described and analyzed as separate functional entities. There is little information as to how these indicators interact with one another and with natural processes, particularly at the broad, Forest-wide scale.

The 1987 Forest Plan does not adequately address all biological diversity elements (coarse filter, fine filter, Historical Range of Variability [HRV]) defined within the Ecogroup's Ecosystem Management Framework. The 1987 Plan tends to focus on a species-by-species approach (fine filter) rather than looking at the interactions of whole ecosystems (coarse filter). This revised Forest Plan takes a multi-scale and temporal framework approach that addresses and analyzes fine- and mid-scale indicators (TES species, MIS, rare and unique species and habitats), broad scale indicators (vegetation communities and watersheds), and natural processes (fire, erosion, and hydrology) within an integrated ecosystem management framework.

In order to maintain healthy ecosystems and the multiple values they hold for humans, address the following questions must be addressed:

- What's out there? (composition, structure, diversity, relative abundance)
- Where is it? (distribution, patterns, connectivity)
- Where did it come from? (processes and disturbances, geoclimatic capability, HRV)

The discussion of biological diversity components begins with a broad description (landscape level) of vegetation patterns, and then moves from landscape patterns and processes to structure and dynamics of local ecosystems.

Composition/Structure/Function - Maintenance of compositional, structural, and functional diversity is essential to the continued provision of ecological processes, such as regulation of hydrologic cycles, carbon and nutrient cycling, and soil processes. Current conditions and trends in plant communities indicate that some of these communities have substantially changed from what they were historically (ICBEMP 1997a). For example, substantial increases in agricultural, exotic herbland, and woodlands vegetation groups have resulted in a corresponding decrease in shrublands in areas of the Forest. The 1987 Forest Plan lacks adequate definitions and direction for desired structural stages that provide for landscape diversity. An understanding of where these stages are on the landscape and how they are connected is critical for species habitat management.

Disturbance Processes - Disturbance processes—such as fires, droughts, landslides, floods, insects, and pathogens—are common in nature, and these agents of change and their interactions heavily influence the character of ecosystems. The 1987 Forest Plan generally does not recognize that disturbance processes can be desirable in many cases. The Plan does not consider or recognize the frequency, size, intensity, and severity of disturbance processes in determining vegetative conditions and how management practices have altered them. For example, with the exclusion of fire, stand and shrub densities are often much greater than they were historically, and species composition has changed, increasing the susceptibility of some vegetative communities to large-scale infestations of insects, pathogens, and uncharacteristic wildfires. Desired conditions for stand components for all forest cover types and structural stages need to be designed to meet management goals and objectives that also take into account expected disturbance regimes.

The 1987 Forest Plan does not consider or recognize that the sustainability of soil ecosystem function and process (erosion, long-term soil productivity...) is at risk in areas where redistribution of nutrients has resulted from changes in ground cover (combination of organic material plus plants), composition, pattern, removal of the larger size component of wood, and uncharacteristic fire.

Soils Functions and Processes - The physical, chemical, and biological properties of soils regulate biological productivity, hydrologic response, site stability, and ecosystem resiliency. Management direction for soils in the 1987 Forest Plan is based only on a prevention and mitigation strategy. Scientific information on soils processes, functions, and patterns related to vegetation and biological diversity is not identified in the 1987 Plan.

Snags, Down Logs, and Coarse Woody Debris – Snags, down logs, and coarse woody debris are critical elements of ecosystems that function to maintain soil productivity, provide terrestrial and aquatic habitat, and contribute to other critical ecological processes. Direction needs to be developed and refined for the Forest to ensure an adequate diversity of size and decay class of snags, down logs, and coarse woody debris. Also, Forest Plan direction does not consider the effects of management activities on these ecosystem elements.

Threatened and Endangered Species - Federally listed threatened and endangered wildlife species on the Forest include the gray wolf, bald eagle, and Canada lynx. The peregrine falcon has only recently been de-listed. Listed fish species include sockeye salmon, Chinook salmon, steelhead trout, and bull trout. Potential habitat exists for one listed plant species, Ute ladies'-tresses, although no populations have been found on the Forest. Current Forest Plan management direction for these species is essentially to follow recovery plans developed by the appropriate regulatory agencies, with the ultimate objective of de-listing the species once stable viable populations are established and maintained.

Sensitive Species - Species are designated "sensitive" by the Regional Forester because their populations or habitats are limited (narrowly endemic) or trending downward, or because little information is available on their population or habitat trends. The primary purpose of the sensitive species program is to conserve or improve habitat conditions for these species to prevent them from becoming federally listed. Currently, a number of species are designated sensitive and have some probability of occurring on the Forest. Current management direction is to follow conservation assessments and plans developed at the Regional or Forest level. However, because the Forest Plan was developed before the sensitive species program began, there is little direction in the 1987 Plan regarding sensitive species. Similarly, conservation assessments and plans do not exist for a majority of sensitive species.

Management Indicator Species (MIS) - NFMA regulations direct National Forests to identify MIS whose populations and habitat conditions indicate potential impacts from human activities, including Forest management. By monitoring and assessing habitat conditions of indicator species, managers can estimate effects on other species with similar habitat needs. MIS in the 1987 Forest Plan were selected because their habitat requirements encompass a diverse range of conditions. However, monitoring and management experience with MIS since the Plan was developed have indicated that some species may not be the best indicators for the habitats they

are supposed to represent. For instance, adult Chinook salmon may not be the best indicator for on-Forest habitat because their populations are affected by many off-Forest activities and conditions. Groups of species that use similar habitats may also be more useful as management indicators than individual species.

No Action

Implementation of the current Forest Plan over the next ten years would result in a continued focus on a species-by-species approach, using short time frames rather than dealing with issues at larger spatial and temporal scales.

Ecosystem health would continue to change. Some forest species—such as Douglas-fir and whitebark pine—would become more susceptible to insect and pathogen infestations. Old, single-story structured ponderosa pine would continue to decrease. Sagebrush and grassland community types could continue to decline due to exotic plants and animals and other factors. Riparian area health would likely improve slowly over time under PACFISH/INFISH direction.

Snags, down logs, and coarse woody debris guidelines in the current Plan would continue to be inadequate for maintaining functional and structural diversity. Current direction would have an unknown effect on maintaining long-term soil productivity and the diversity of plants, wildlife, and fish habitats.

Under current Forest Plan direction, habitat fragmentation would likely continue and connectivity across the landscape would decline.

Because the current Forest Plan has little or no direction for sensitive species, there is a possibility that Sensitive wildlife, fish, and plant species would decline and/or become listed under the ESA.

Under current Forest Plan direction, the Forest would continue to use narrow, single cover type definitions of old growth, without considering the amount, distribution, and importance of all structural stages on a Forest-wide scale in Forest management.

Need to Establish or Change Management Direction

There is a need to develop vegetation management direction that provides for short and long-term biological, physical, economic and social sustainability. The 1987 Forest Plan lacks adequate direction for potentially needed restoration, management, and maintenance of plant communities, including vegetative structure, species composition, distribution, and patterns, and how they are influenced by soil and disturbance processes in relationship to historical and current conditions. Land management practices alter the landscape dynamics, generating a greater need to integrate management direction for all resources including a concern for providing sufficient habitat to maintain viable species populations within the context of overall multiple use objectives.

Specific needs for change are:

- To provide management direction for maintenance and restoration of habitats for species of concern (TEPC, Sensitive, MIS, proposed, candidate, at risk, rare and unique species).
- To develop management direction that minimizes habitat fragmentation, and restores or maintains landscape linkages and habitat edge.
- To develop snag, down log, and coarse woody debris guidelines that help maintain ecosystem structure and function.
- To provide management direction that addresses important soil processes (erosion rates, mass stability, infiltration, nutrient cycling) as they relate to desired conditions and the management of other resources.
- To develop management direction that describes desired structural stages, composition and density for each vegetation group or type.
- To establish management practices and standards and guidelines that address appropriate stocking levels, stand structure, and species composition that incorporates the extent and frequency of all types of disturbances.

Changes Under the Revised Forest Plan

Changes to habitat conditions in terms of composition/structure/function were analyzed for the Interior Columbia River Basin (Wisdom et al. 2000). Changes to habitat within the planning unit were evaluated in a similar manner and compared to the basin-wide findings. Based on this evaluation, habitats with the greatest change have been identified, and implications for species that use them were analyzed. Management direction including goals, objectives, standards and guidelines for habitats most changed should result in improved conditions for maintaining and restoring biological diversity under the proposed plan. Additionally, new Management Indicator Species (MIS) better reflect those habitats that are of a concern, basin-wide and locally.

The development of desired conditions for vegetation components, based on the Historical Range of Variability, is the most significant change in management direction related to vegetation management. The lack of adequate definitions and direction for desired vegetation components in the 1987 Forest Plan made it difficult to maintain the compositional, structural, and functional diversity across the landscape, and to sustain ecological processes and manage species habitat.

As many of the vegetation components are identified as being outside of historical ranges or properly functioning condition, the revised Forest Plan provides management direction to maintain or restore plant community attributes (species composition, size class, canopy closure, snags and coarse woody debris) through the goals, objectives, standards and guidelines. Maintaining or restoring vegetation components to desired conditions, and the ecological

processes that supported those vegetation components, will support efforts to achieve overall biological diversity necessary to sustain individual species of concern and minimize the risks of uncharacteristic disturbances, while providing economic, social, and cultural opportunities for Forest users

Topic 2 - Fire and Smoke Management

Background

The 1897 Organic Act states that forests shall be protected against destruction by fire. Subsequent laws describing land management practices often used the phrase “protect from” to describe fire management. Early Forest Service policy interpreted protection as suppression, and for several decades fire management focused on suppression efforts. In the 1970s, emphasis began to shift from full suppression to responses that more appropriately reflected values that were at risk. In addition, information regarding the role and function of fire in ecosystems began to increase. However, wildfires in the past 15 years (particularly the 1994 and 2000 fire seasons) prompted the Departments of Interior and Agriculture to review fire policy and programs. This review resulted in an update of the Forest Service Manual, which includes direction that Forest Plans will be evaluated to ensure fire management considerations are incorporated. This direction includes the use of fire to achieve management objectives and consideration of the impacts of excluding fire.

The Federal Clean Air Act is a legal mandate to protect human health and welfare from air pollution. National Ambient Air Quality Standards are defined in the Act as levels of pollutant whereby detrimental effects on human health and welfare may result. Particulate matter emissions are produced from Forest Service activities such as prescribed fire, mining, and road construction and use. Another provision of the Clean Air Act that affects Forest Service activities is the Prevention of Significant Deterioration provisions. The premise behind these provisions is to prevent areas that currently have very clean air from becoming polluted. The 1977 amendments to the Clean Air Act established Class I areas that were to have specific Air Quality Related Values, including visibility identified for these areas. One such Class I area, the Sawtooth Wilderness, was recognized as being within the Forest’s area of influence.

Current Condition

Average wildfire occurrence per year (lightning and human-caused) has not changed since the 1987 Plan was released, compared to the 20-year period before its release. However, the average number of acres burned per year by wildfire has risen steeply. Since 1989, over 68,000 acres have been burned from wildfire. This is 1.6 times more than the preceding two decades combined. Quigley and Arbelbide found that acres burned within the Columbia River Basin during the 1980s exceeded those of the 1950s. They related the change to increased fuel loadings, both in amount and extent, from previous conditions (Quigley and Arbelbide 1997a, b, c, d).

Historically, fuel loadings were lower in many areas of the Forest, and areas with high loadings were smaller and more isolated. Currently, fuel loadings have increased, and areas with moderate to high fuels are larger and more contiguous. In addition, resources available to fight fire are sometimes limited, particularly when multiple fires are burning within the Forest and

across the country. These factors, in combination with certain weather conditions, can lead to large fires. However, Quigley and Arbelbide noted that, even though acres burned by wildfire have been increasing over the past few decades, the amount of area burned is still below historical levels (Quigley and Arbelbide a, b, c, d).

Data used to prepare the UCRB Draft EIS (ICBEMP 1997a) indicated that, in some cases, fire regimes within the Forest area have changed from historical conditions. The ICBEMP Integrated Scientific Assessment (ICBEMP 1996b) related these changes to the disruption of historical disturbance processes, combined with altered vegetative structure and composition.

Historically, wildfires throughout the Forest ranged from ground fire to stand replacing, depending on the vegetative community. Currently, some wildfires create more homogeneous landscapes than those that typically occurred within historical fire regimes. Because of the nature of this uncharacteristic fire, species composition, vegetative structure, and associated habitats have been simplified in some areas. Investments have also been lost.

In other cases, however, some recent wildfires may have been more similar to historical. They burned through vegetative types that historically burned infrequently. The effects across the landscape from this kind of fire varied, depending on weather, fuel loadings, and the vegetative communities through which the fire burned. In some places, the same fire might have been a ground fire, and in other places stand replacing. These kinds of fires created a variety and diversity of vegetative communities and landscape mosaics.

Fire suppression costs have risen dramatically since the 1970s. Nationally, suppression costs have increased an average of \$17.4 million per year since 1977. Suppression costs within the Ecogroup are following this upward trend.

The 1987 Forest Plan does not address the role of fire as an ecosystem process or tool for maintaining or restoring ecosystem health. In the past few years, prescribed burning as a management tool has received national attention, emphasis, and funding. The ability to accomplish national fire management objectives, priorities for ecosystem management, and achievement of desired fuel loadings, may be limited by missing, vague, or conflicting Forest Plan direction.

In addition, updated Forest Service Manual direction requires Fire Management Plans for all areas subject to wildland fire. These plans are dependent on Forest Plan direction. In order to develop the needed Fire Management Plans, the Forest Plans must provide clear and integrated desired conditions, goals, and objectives for fire management.

Population growth within and around Forest boundaries has led to increases in wildland/urban interface. Much of this growth has taken place at lower elevations within or adjacent to dry forest or rangelands. In some of these areas, the risk of uncharacteristic wildfire is high. Often, small communities, isolated subdivisions, or owners of concentrated recreation facilities do not have the resources to address fire risk (protection or prevention) or to assist in the control of wildfires. The growth of the wildland/urban interface increases the risk of wildfire spreading from private to federal lands, and vice versa.

Wildfires alter watershed conditions and subsequently increase the risk of floods and landslides, compared to unburned watersheds. In the wildland/urban interface, threats to life, property, and municipal watersheds from such events are much greater than in non-interface areas. The social and economic costs of mitigating these risks can be high.

Vegetation treatments that can reduce wildfire risks in wildland/urban interface areas may conflict with existing Forest Plan direction for various resources. In addition, planning and implementing treatments in or adjacent to wildland/urban interface areas depends on collaboration between the Forest Service, private landholders, local, county, and state governments, and other federal land management agencies. All parties must understand the risks associated with wildland/urban interface and their role in reducing those risks. Because of the complexity of the issues, goals and objectives for wildland/urban interface should be addressed during forest planning to clearly articulate management priorities, rather than on a project-by-project basis.

The 1987 Forest Plan provides flexibility in incorporating changes in the federal, state, and local air quality requirements, as directed in the Clean Air Act. The Forest Plan gives strong direction to meet or exceed these requirements. However, there have been several subsequent changes and additions to these requirements that have not been incorporated into the Forest Plan. The 1987 Forest Plan did not consider the potential air quality conflicts associated with increasing fire use to restore fires as an ecosystem process. Increases in smoke emissions from fire use, coupled with the potential environmental consequences, were not analyzed for the current Forest Plan. In addition, the trade-offs between smoke produced from fire use and wildfire were not evaluated.

No Action

Suppression actions would continue to be the primary focus of fire management to protect life, property, and resources. Preventative activities to reduce the risks and costs of fire may vary, even though national emphasis on these types of treatments has been increasing. Within Region 4 and the Forest, acres treated with prescribed fire have increased since the Plan was developed, and this increase is projected to continue. However, the ability to fully achieve the objectives of risk and cost reduction may be limited because fire management goals and objectives currently conflict with the goals and objectives for some other resources. These conflicts may reduce opportunities to treat areas at an appropriate scale.

Under the 1987 Plan, information about the role of fire as an ecosystem process and opportunities to restore that process to ecosystems would be limited. Prescribed fire would continue to be planned and implemented on a project-by-project basis rather than at a programmatic level, which would be more effective and efficient. The 1987 Plan may have to be amended to reflect new manual direction that resulted from recent changes in national fire management policy and related program reviews conducted by the Departments of Interior and Agriculture.

From 1989 through 1998, an average of 50 fires per year occurred, 58 percent of them from lightning. Under the right weather conditions, large fires would continue to burn in areas without fuel treatments and where vegetation has not been altered to a structure and composition that is more resistant to fires spread and intensity. Where uncharacteristic fires occur, vegetative

communities would become more homogeneous. Burned Area Emergency Response (BAER) activities like grass seeding would further increase vegetative homogeneity (see Non-native Plants). Landscape mosaics of structural stages would be simplified, particularly if uncharacteristic fires occur adjacent or within areas burned in the last 10 years. This trend may reduce biological and wildlife habitat diversity, long-term soil productivity, and nutrient cycling.

Suppression costs would continue to increase, particularly on lands within or next to the wildland/urban interface. Additional costs may be incurred to reduce post-wildfire threats to life and property from floods, debris flows, and landslides. Investments such as plantations, bridges, and campgrounds may be at risk.

The approach for conducting air quality analysis on the effects of prescribed fire may not be consistent or appropriate, as the 1987 Forest Plan does not adequately provide direction. Without specific and consistent direction, the Forest may not adequately protect Air Quality Related Values, including visibility, as required by the Clean Air Act, for the Class I wilderness areas: Sawtooth and Hells Canyon. This would increase the risk of potential legal action against the Forests from state and federal regulatory agencies.

Need to Establish or Change Management Direction

There is a need to integrate fire management goals and objectives into Forest-wide desired conditions. In addition, there is a need to develop resource-specific fire-related goals and objectives. The 1987 Forest Plan does not adequately address fire starts, especially fires that escape initial attack and, under certain circumstances, cross multiple management areas and become landscape-scale in size. The Plan does not provide adequate goals and objectives for evaluating and comparing appropriate suppression response alternatives to factors such as social-political implications, economics, environmental considerations, public and firefighter safety, and values at risk. The role of fire as an ecological process was not considered during the development and analysis of the 1987 Forest Plan. The use of fire as a management tool was described for some resources; however, fire over large areas (landscapes) was not considered, and the potential impacts on timber, wildlife, watershed, and other resources were not analyzed.

There is a need to address National Fire Plan communities and wildland/urban interface in the Forest Plan. Interface was not considered when the 1987 Forest Plan was developed. Since the Plan was released, increasing wildfires in wildland/urban interface areas--both on the Forest and nationally--have made the interface issue a significant social and economic concern.

There is a need to incorporate consistent air quality and smoke management direction, desired conditions, and monitoring plans into the Forest Plan based on new air quality requirements at federal, state and local levels, including new Forest Service direction.

There is also a need for the Forest Plan to address the recent emphasis on increased prescribed fire to improve ecosystem health and reduce the risk of large uncharacteristic fire, and the impacts that emphasis may have on air quality.

Changes Under the Revised Forest Plan

Under the revised Forest Plan, fire use is considered and integrated into Forest-wide desired conditions and goals where appropriate.

Management area goals consider the juxtaposition of adjacent areas and, where possible, are consistent in order to reduce conflicts when wildland fires cross management area boundaries.

Management area characterizations and goals highlight management area priorities in order to assist in selection of appropriate suppression alternatives. In addition, the allowable range of Appropriate Management Responses (including wildland fire use) is identified for each management area, considering the effects on resources and social-economic factors.

Fire's role as an ecosystem process is integrated into desired conditions and goals at the Forest-wide and management area level. Potential impacts from fire use have been evaluated. Fire use is limited in areas where it could have undesirable effects on resources.

National Fire Plan communities and wildland-urban interface areas are identified by management area, and objectives have been developed to prioritize fuels reduction treatments in these areas.

Topic 3 - Habitat Fragmentation and Disruption**Background**

Fragmentation is the separation or isolation of similar types of habitat, either by natural events or human activities. Fragmentation is essentially the opposite of connectivity. Connectivity is the arrangement of habitats that allows organisms and ecological processes to move across the landscape. In landscapes with high connectivity, patches of similar habitats are either close together or linked by corridors of appropriate vegetation, stream channels, and waterways.

Habitat connectivity is a fundamental concept needed in considering species viability and sustaining biodiversity. Connectivity is needed to ensure genetic interaction and species recruitment following random catastrophic events. The NFMA regulations direct that "fish and wildlife habitat shall be managed to maintain viable populations of existing native and desired non-native vertebrate species." The NFMA further defines a viable population as "one which has the estimated numbers and distribution of reproductive individuals to insure its continued existence is well distributed (36 CFR 219.19)." Historically, fire, insects, and disease were the disturbance processes that modified habitat connectivity and caused disruption to species and habitats. Currently, management practices--including roads, trails, utility corridors, and vegetation management--are causing fragmentation of their habitats.

Some species of wildlife and fish 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 these species and reduce their reproductive success. Mitigation measures that restrict human activities in close proximity to the species during these life cycle periods can reduce stress at these critical times [36 CFR 219.19(a)4, and 36 CFR 219.21(d)(g)].

Current Condition

The ICBEMP Integrated Scientific Assessment (ICBEMP 1996b, Wisdom et al. 2000) identified roads as a major impact on many physical and biological processes. Road access increases human-related conflicts with wildlife and aquatic species by fragmenting habitats and increasing disruption. Increasing human access was also identified as a major impact on large predators, big-game populations, and many fish populations (Quigley and Arbelbide 1997c, Wisdom et al. 2000). Impacts include increased disruption, displacement, vulnerability to mortality, and migration barriers. The higher the road density, the lower the proportion of subwatersheds that support strong populations of key fish species.

One of the mitigation measures for Threatened and Endangered species is restricting access during the breeding and rearing stages. In addition, access management is currently being used on the Forest to help achieve harvest goals for elk and, in some cases, other species.

The 1987 Plan does not address road-related effects from a multi-resource approach, or consider effects on both plants and animals. Current direction is focused on harvestable species of big game. For instance, road closures affect not only hunting pressure and big game populations, but also recreation opportunities, watershed restoration, fish habitat, livestock grazing management, fire suppression, soil productivity, minerals access, and so on. Current monitoring strategies often measure effectiveness for one issue or concern, but not for others.

Increases in habitat fragmentation within and between blocks of habitat have isolated some plant, wildlife, and fish populations, reducing their ability to move across the landscape. For some species, habitat fragmentation has reduced genetic interchange and increased population isolation.

Connectivity is important in aquatic, as well as forested, ecosystems. Disruptions affect the connectivity of riparian areas and the linkages between aquatic and forested ecosystems. Where road crossings and concentrated human activity exist in aquatic ecosystems, some level of connectivity has been lost compared to what existed historically. Aquatic systems can be affected by dams, culverts, changes in stream channel or water quality, and de-watering, all of which create migration barriers.

No Action

Under 1987 Plan direction, road construction levels and usages are likely to be affected by Pacfish, Infish, Biological Opinions, and new roads-related regulations. Any effects to habitat fragmentation would be addressed at the project level, if fragmentation were raised as an issue. Disruption would also be assessed for site-specific projects where there is a wildlife-related issue. State and federal agencies (Idaho and Utah Fish and Game Departments, U.S. Fish and Wildlife Service, National Marine Fisheries Service) would likely be involved in developing alternatives or mitigation when there are specific concerns about terrestrial or aquatic populations.

Need to Establish or Change Management Direction

There is a need to develop integrated and consistent Forest Plan direction to provide connectivity of fish, plant, and wildlife habitat. The 1987 Forest Plan has inadequate and ineffective direction concerning habitat fragmentation from roads, trails, timber harvest, fire, culverts, utility corridors, and other sources.

There is also a need to manage disruption in order to reduce species avoidance behavior, displacement, and mortality, and impacts to cover, nutrient cycling, hydrologic function, sex/age ratios in harvestable species, and species viability. These impacts have biological, physical, economic, and social implications.

There is a need to apply uniform management strategies that improve habitat connectivity and decrease the adverse affects of roads, trails, dispersed use, and access.

Changes Under the Revised Forest Plan

Habitats that have changed from historic times were evaluated against conditions within the Forest. The evaluation found that some habitats/species have become isolated due to fragmentation within the Forest, mostly because of past Forest Service activities. Management direction is provided to reduce the extent of fragmentation for habitats within Forest Service jurisdiction.

Fragmentation has also occurred where Forest Service activities have been a minor contributor, but major problems have occurred for the habitat over a large area. Some activities on other ownerships have caused problems for some habitat/species. The remaining isolated Forest habitats are important to the persistence of species still using them. Management direction is provided to maintain, or if possible improve, these remaining habitats, although historical conditions likely can never be achieved.

Species and habitats they use have been identified where disruption is a concern during important life stages. Direction is given to eliminate or reduce the disruption that is a known problem for some species.

Topic 4 - Non-native Plants**Background**

Non-native plants are species that do not have their origin in a local geographic area. They have not evolved with the local environment, including native plants, animals and disturbances. Non-native plants include exotics and noxious weeds. Exotic plants are species that have been introduced to an area, usually from a different continent. Some non-native plants have been intentionally introduced for restoration purposes such as road stabilization, range improvements, and Burned Area Emergency Response (BAER). Noxious weeds are plant species designated by law that can have detrimental effects on agriculture, commerce, or public health. They spread aggressively and are difficult to manage. These species are generally new or not common to the United States.

Some exotic and noxious weed species thrive in areas so well that they tend to out-compete native species. Their success is often due to the lack of natural control agents in their new environment, prolific seed production, physiological advantages, and a propensity to establish in early to mid-successional vegetation communities. These plants can spread quickly and affect the amount and distribution of native plant species, as well as the animals that have evolved to rely on the native plants. This can result in a substantial change in the overall biological diversity of the affected area.

Non-native plant introduction, both intentional and unintentional, is a national, regional, and Forest concern. The National Forest Management Act addresses this concern, as do the Forest Service Manual and the Forest Plan. However, none of these documents describes a specific, aggressive strategy for identifying and controlling non-native plants, or restoring ecosystems to native plant populations and distributions.

Forest Service direction is to “control the establishment, spread, or invasion of non-indigenous plant species in otherwise healthy native vegetative ecosystems” (FSM 2080.1). Also, direction requires that Integrated Weed Management (IWM) determine the factors that are favoring the establishment and spread of noxious weeds, and then design prescriptions that reduce the risks, in accordance with the 1987 Farm Bill amendment of the 1974 Noxious Weed Act. The first priority of IWM is to prevent the introduction of new populations.

Current Condition

The ICBEMP Draft EIS (ICBEMP 1997a) and the ICBEMP Integrated Scientific Assessment (ICBEMP 1996b) have identified that non-native plant species are spreading rapidly throughout the Upper Columbia River Basin, which includes the Sawtooth National Forest.

The Monitoring and Evaluation Report for the Sawtooth National Forest (USDA Forest Service 1996) describes a growing concern with the spread and effects of non-native plants. Specifically, the expansion of non-native plants within the Forest is out-pacing containment and control efforts. There are many new infestations along highways and road systems--both on National Forest System lands and on adjacent jurisdictions--that pose significant risk of further expansion.

Non-native plants are being introduced unintentionally (e.g., seeds from vehicle tires or livestock, bird, and big-game droppings), and intentionally (e.g., restoration and rehabilitation seeding). Roads provide the primary corridors of access for non-native plants to establish new populations.

The 1987 Forest Plan does not address non-native plants from a multi-functional approach (recreation, timber, special uses). Current direction only addresses the treatment of noxious weed infestations, rather than taking an approach that considers prevention, containment, and control. While an IWM approach is incorporated in national Forest Service direction, it is not addressed in the Forest Plan.

Currently there is no management direction or Desired Future Condition for designing or implementing BAER treatment strategies to assist in evaluating the trade-offs between the short-term needs of post-fire rehabilitation and the long-term compatibility with ecosystem

management. Due to the emergency nature and critical time requirements to plan and implement BAER activities, sufficient consideration may not be given to the long-term desired conditions for ecosystems. This may lead to improper BAER treatment strategies, rehabilitation measures, and inaccurate estimates for funding requests.

Seeded non-native plants have an impact on the establishment and growth of native vegetation in fire rehabilitation areas. Certain species have been purposely introduced to provide forage and cover in arid regions where vegetation has been removed. As a result, sites with monocultures or a few selected species have developed. In general, there is little likelihood that these introduced species will encroach into undisturbed areas. However, these conditions have affected fire regimes and wildlife habitat.

Fire regimes have been altered in some ecosystems due to exotic species. For instance, cheatgrass has taken over many dry shrubland types, increasing soil erosion and fire frequency. Such changes can have long-term impacts on ecosystem processes, composition, and structure.

No Action

The current exponential spread of non-native plants would be expected to continue. Spotted knapweed, yellow starthistle, rush skeletonweed, and leafy spurge would become much more prevalent on the landscape, with impacts on agriculture, wildlife habitat, recreation, and community interests. These species would spread in areas where roads access the Forest and vegetative communities are susceptible to invasion.

Management direction would continue to emphasize containing and controlling new or established populations. Effectiveness would be minimal due to limited economic ability to treat the invaded areas. Cheatgrass and other exotics would increase, particularly in the sagebrush and dry forest communities where large uncharacteristic wildfires occur. In lower to mid-elevation areas where watershed and fire rehabilitation have occurred, homogeneous stands of non-native grasses would continue to dominate the landscape. BAER activities would continue to be based on the immediate short-term risks and would not be balanced with potential effects on long-term ecosystem conditions and needs.

Need to Establish or Change Management Direction

There is a need to modify current management direction to adequately address non-native plants and their effects on ecosystem structure, composition, and function. Non-native plants have greatly increased from historical conditions, and they have contributed to changes in fire regimes.

There is a need to establish a containment/control strategy that recognizes the difficulty and expense of controlling large and firmly established populations of non-native plants. This strategy needs to consider both jurisdictional boundaries and all functional resource areas.

There is a need to incorporate non-native plant management direction and DFCs for implementing post-fire BAER activities and non-structural range improvement projects. There is also a need to review seeding and revegetation practices associated with erosion control, fire rehabilitation, non-structural range improvement, and watershed restoration to ensure compatibility with the desired conditions and priorities established for management activities.

Changes Under the Revised Forest Plan

The revised Forest Plan establishes Forest-wide standards and guidelines that assist in preventing the establishment of new infestations and the transport of weed seed to other locations. This direction is primarily associated with road-related, fire suppression, and Forest-authorized activities. The revised Plan also gives direction for restoration to reduce the potential for exotic invasion of disturbed sites. It also identifies areas of high susceptibility to invasion and provides precautionary measures when planning and implementing site-specific management activities. Finally, the revised Plan provides Integrated Weed Management goals and objectives at the Management Area level for specific species and sites of concern.

Topic 5 - Rangeland/Grazing Resources

Background

The NFMA regulations require that Forest Plans determine potential capability and suitability for producing grazing animal forage and provide habitat for management indicator species (36 CFR 219.20). Range capability is defined as lands that have the potential to be grazed, given the physical constraints of grazing (distance from water, slope, access, etc.). Capability criteria (constraints) are used to determine a Forest's estimated acreage capable of producing forage. Rangeland capability is not a decision to graze and is only determined at the Forest Plan level.

Suitability can only be addressed once capability is determined. Suitability identifies areas within the capable land base where grazing is appropriate within the context of land management considerations such as economics, environmental consequences, rangeland conditions, and other uses or values of the area. Typically, suitability decisions are made at the forest plan level, but can be done at the project or allotment level. Suitability issues are usually broad in scope and extend across a larger landscape than a single allotment. The Forest Plan revision EIS analysis should also clearly identify areas where grazing is not appropriate. The Forest Plan revision process will be used to evaluate different grazing suitability alternatives and will review range management prescriptions as directed in 36 CFR 219.20.

Current Condition

The extent to which the demand for livestock forage is being met has not been determined. However, actual average livestock use levels (AUMs/year) are lower than originally anticipated in the Forest Plan. Actual use levels for 2002 were only at 62 percent for sheep and 78 percent for cattle percent on the Sawtooth National Forest. Some probable contributing factors to this downward trend are:

- Protection of threatened and endangered species habitat,
- Increased livestock operator costs due to mitigation measures identified to protect habitat,
- Limited agency funding to implement capital improvements,

- Voluntary and involuntary reductions for resource protection, and
- Permit waivers back to the government that are not re-issued due to resource concerns.

Capability and Suitability – Current rangeland capability determinations do not make a clear distinction between cattle and sheep use.

Allotment stocking and capacity determinations have been corrected or contested on a recurring basis. There is a concern that some sites within existing allotments are not meeting resource objectives related to soil productivity, erosion, hydrologic function, vegetation, and aquatic and terrestrial habitat.

The 1987 Plan direction does not meet requirements outlined in Forest Service national direction, specifically regarding the determination of rangeland capability and suitability. The capability and suitability assessments in the original Forest Plan Final EIS need to be updated to include direction and research findings that have occurred since the release of the Plan. Updates to the capability and suitability assessments need to include the following considerations:

- Wildlife - There is inconsistent or insufficient management direction for some wildlife wintering areas that are also used by livestock. The combined use by livestock and wildlife may exceed desired use levels on vegetation [36 CFR 219.20(b)].

Bighorn sheep populations have declined on the Forest. Although these species have no status under the Endangered Species Act, the USDI Fish and Wildlife Service is concerned about their population status and threats to their local viability (Quigley and Arbelbide 1997c). One threat may be the potential for disease transmission from livestock. The 1987 Forest Plan lacks management direction for this situation [36 CFR 219.20(b)].

- Noxious Weeds – Livestock, particularly sheep, can be used to control noxious weed infestations in some circumstances. However, there are some situations when the impacts of livestock use may outweigh the benefits gained. One such situation is the Sawtooth NRA where seed from heavy spotted knapweed infestations is transported and spread in the fall through livestock feces, fleeces, and hooves.
- Recreation - Within the last 10 to 15 years, recreation use has increased above the projections made in the 1987 Forest Plan. Reports of user conflicts between livestock and recreationists have also increased. No direction or monitoring process exists in the 1987 Plan to address this concern.
- Range Management Direction - New information regarding the proper functioning condition of rangelands susceptibility to drought, and the identification of areas susceptible to soil erosion and recovery need to be reviewed when determining allotment stocking, grazing capacities, and grazing management strategies. See Topic 6— Hydrologic, Riparian, and Aquatic Resources—for more discussion about range management and its relationship to riparian resources.

No Action

Site-specific development of grazing capacity determinations and capability would continue to occur on an allotment-by-allotment basis. Where existing suitable rangelands are in unsatisfactory condition, recovery would be slow or may not occur due to the limited economic resources to implement recovery strategies.

Management during drought conditions would be dealt with through the administration of utilization standards on an allotment-by-allotment basis. Range deterioration is possible where grazing management is inflexible, where stocking remains high, where long grazing durations and high intensities occur, and where compliance with grazing standards is difficult to administer due to limited economic resources.

Conflicts between livestock and competing uses, such as recreation and wildlife, would continue in some locations. Resolution would occur at a slow rate due to lack of direction and limited funding, time, and personnel.

Containment of spotted knapweed in the Sawtooth NRA would continue through the use of herbicides on existing populations, which would primarily focus on reducing densities. Sheep would likely continue to spread seed to new areas in the fall.

Need to Establish or Change Management Direction

There is a need to establish grazing capacity determination guidelines for the Forest that adequately reflect site conditions and give direction for assessing allotments on a site-specific basis. The guidelines need to distinguish between sheep and cattle use.

Management direction is needed to reduce or eliminate potential conflicts between livestock and wildlife that use common areas. These conflicts include the risk of disease transmission between domestic sheep and bighorn sheep, and the risk of reduced forage availability in wildlife wintering areas.

User conflicts between recreationists and livestock in localized areas need to be validated so that a determination can be made whether management area direction needs to be changed.

There is a need to consider rangeland suitability that addresses such issues as bighorn sheep disease transmission, noxious weeds, recreation conflicts, and the economics of reinstating management on vacant allotments.

Changes Under the Revised Forest Plan

The revised Forest Plan establishes Forest-wide standards and guidelines for rangeland resources that assist in: (1) restoring and maintaining riparian and upland vegetation, (2) achieving watershed condition indicators, (3) providing for the physiological needs of plants, and (4) protecting threatened and endangered species.

Suitable rangeland decisions and direction under the revised Forest Plan prevents grazing in developed recreation sites, administrative sites, and research natural areas; reduces the risk of disease transmission to bighorn sheep; and closes vacant allotments that contribute low management value and have other resource considerations.

The revised Forest Plan also provides direction at the Management Area level for specific concerns, such as areas with high susceptibility to surface erosion, habitats for terrestrial and aquatic species at risk, vegetation cover types functioning at risk, key watershed areas for improving livestock grazing management, and other important resource values that need to be considered when conducting site-specific planning.

Topic 6 – Hydrologic, Riparian, and Aquatic Resources

Background

Aquatic ecosystems are watersheds, water bodies, riparian areas, and wetlands, as well as the species (fish, wildlife, plant, amphibian, invertebrate...) they contain. Riparian refers to areas with distinctive soil and vegetation between a stream or other body of water and an adjacent upland. Riparian areas include wetlands and the portions of floodplains and valley bottoms that support riparian vegetation (ICBEMP 1997a).

The Forest manages significant aquatic habitat for both anadromous and resident fish populations, including Chinook salmon, steelhead trout, redband trout, westslope cutthroat trout, and bull trout. Sockeye salmon and Yellowstone cutthroat trout occur on the Sawtooth National Forest. The Wood River sculpin is endemic only to the Wood River drainage on the Sawtooth National Forest. The Forest has over 7,500 miles of perennial and intermittent streams, and 7,600 acres of lakes and reservoirs, supporting an estimated 29 native and non-native fish species. Important fish habitat is found in major portions of the Boise, Salmon, Payette, and Wood River drainages. These areas are also important to species dependent on fish as a food source (bald eagles, otters...), as well as some rare plant species.

Current Condition

In 1992, Snake River sockeye salmon were listed as “endangered” under the Endangered Species Act (ESA), as amended. In 1992 and 1997, Snake River Chinook salmon and steelhead trout, respectively, were listed as threatened under the ESA. In 1998, bull trout populations within the Forest were also listed as threatened. The bald eagle, a threatened species, is dependent on riparian and aquatic habitats. Any proposed federal action that may adversely affect these species or their habitats must be consulted on with the USDI Fish and Wildlife Service or the National Marine Fisheries Service (NMFS) prior to implementing the project. Programmatic planning, such as Forest Plan revision, must follow the same requirements.

In 1995, the Forest Plan was amended by management direction in the *Interim Strategies of Managing Anadromous Fish-producing Watersheds in Eastern Oregon and Washington, Idaho, and Portions of California*, or Pacfish (USDA Forest Service and USDI BLM 1995), the *Inland Native Fish Strategy*, or Infish (USDA Forest Service 1995) and the Biological Opinions (BOs) for chinook salmon, steelhead, and bull trout (US Dept of Commerce NMFS 1995, US Dept of

Commerce NMFS 1998, USDI FWS 1998). These strategies include the identification of interim Riparian Management Objectives (RMOs), standards and guidelines, and watershed analysis requirements. These interim strategies are in effect until long-term management direction is developed through geographically specific environmental analyses or Forest Plan revisions.

The effectiveness of the Pacfish/Infish standards and guidelines has not been determined for the Forest. Project-level analysis since 1995 has revealed that, in some areas, existing Forest Plan direction exceeds or is more restrictive than Pacfish/Infish direction. In other areas, Pacfish/Infish and the chinook salmon, steelhead, and bull trout BO RMOs are not appropriate for the watersheds being analyzed. For example, RMOs cannot be met because certain habitat features (large woody debris, pool frequency) are not available naturally in the amounts the RMOs specify. In addition, Pacfish/Infish RMOs do not cover all riparian-related parameters (sedimentation, water chemistry, vegetation composition, and natural disturbance processes).

Pacfish/Infish and the BOs amended the Forest Plan to address soil, water, riparian, and aquatic (SWRA) issues. However, 1990 Forest Plan direction for other resources now sometimes conflicts with this direction. For instance, protective measures and objectives for range, recreation, and mining are not always intensive or extensive enough to sufficiently protect or restore riparian values. During the Forest Plan revision process, this direction needs to be rewritten to be consistent.

Some inland native fish species (such as bull trout and cutthroat trout) are declining. The decline of these fish is primarily due to habitat degradation and fragmentation, blockage of migration corridors, poor water quality, past fisheries management practices, fishing, and introduction of exotic fish species.

Although impacts to fisheries from livestock grazing, water diversions, timber harvesting, mining, and recreation continue on the Forest, substantial progress has been made regarding fish habitat protection. Future land management by the Forest will continue to play an important role in recovery of declining fish populations. Emphasis will be on restoring depleted habitat as well as maintaining and protecting those populations that are currently considered stable. Also, non-consumptive instream uses of water flows (including fish habitat and channel maintenance) will need to be considered in light of other water rights claims and conflicting appropriation.

The 1987 Forest Plan does not adequately or consistently define SWRA Desired Conditions. Existing parameters for defining appropriate SWRA conditions are inconsistent and do not adequately reflect the condition of SWRA resources. The Plan also does not include management direction to emphasize management activities to assist in the de-listing of 303(d) water quality limited water bodies.

The 1987 Forest Plan lacks adequate and consistent direction for intermittent streams and landslide-prone areas. Identification and direction for these areas could result in a substantial change in the long-term supply of goods and services from other resources, as these areas could comprise as much as 25 percent of the land base within the Forest.

Since 1990, the Regional Forester has designated several species as sensitive. Because the sensitive species program was being developed when the Forest Plan was finalized, the Plan contains little or no management direction concerning these species.

In 1998, the Idaho Department of Environmental Quality submitted a list of water quality limited water bodies that were not fully meeting their designated beneficial uses under Section 303(d) of the Clean Water Act. In early 2000, the Environmental Protection Agency approved this list. This list affects several dozen subwatersheds within the Forest area. A priority list has been compiled for developing a Total Maximum Daily Load limits for pollutants in these water bodies that may establish new standards and guidelines, criteria for water quality parameters, and watershed restoration measures. Also, there have been subsequent changes and additions to the State water quality rules and regulations based on supporting beneficial uses that need to be incorporated into the Plan.

In December of 2000, the Conservation of Columbia Basin Fish: The Final Basin-wide Salmon Recovery Strategy (US Dept of Commerce, NMFS 2000) was released. This strategy, also called the “All H Paper”, was developed by NMFS in consultation with eight federal agencies (Corps of Engineers, Bonneville Power Administration, Bureau of Indian Affairs, Bureau of Land Management, Bureau of Reclamation, Environmental Protection Agency, Fish and Wildlife Service, and the Forest Service). The All H Paper focuses on four elements for salmon recovery—hydropower, fish hatcheries, harvest, and habitat. Habitat is the key element addressed by forest plan revision. For habitat on federal land, the salmon recovery strategy strongly emphasizes the following management objectives:

- 1) Protect existing high quality habitat.
- 2) Restore degraded habitats on a priority basis and connect them to other functioning habitats.
- 3) Prevent further degradation of tributary and estuary habitat and water quality.

Currently, three of the Management Indicator Species (MIS) for the Forest are anadromous species; fish that spend part of their life in the ocean and part in freshwater streams or lakes. Because anadromous fish are influenced primarily by off-Forest activities, adult population numbers of these fish are not good indicators of effects from Forest management activities. Better indicators may be habitat conditions or seasonal levels of selected life stages.

The three Forest Monitoring Reports for the Ecogroup were not consistent in their analysis methods and indicators for water quality and aquatics. These inconsistencies led to the development of the *Monitoring and Evaluation Strategy - Southwest Idaho Ecogroup Version 1.2* (USDA Forest Service 1997). This strategy should be incorporated into Forest Plan revision.

No Action

Under 1987 Forest Plan direction, SWRA management would continue to be inconsistent across the Ecogroup Forests. Forest Plan amendments resulting from Pacfish, Infish and associated Biological Opinions would continue to be implemented. The “major weakness” of the short-

term Aquatic Conservation Strategy (ACS) currently being implemented would continue. As stated in the 1998 Biological Opinion for listed salmon and steelhead in the Upper Columbia and Snake River Basins, page 57:

“In spite of additional recommendations, a major weakness in PACFISH has been, and still is, the lack of a comprehensive aquatic conservation strategy for listed anadromous fish. PACFISH was intended to maintain or improve the environmental baseline while a long-term strategy is being developed. Given the degraded baseline conditions were part of the rationale for listing salmon and steelhead, maintenance of baseline conditions cannot suffice as a long-term strategy. Indefinite extension of PACFISH, delays the recovery of salmon and steelhead, and increases the risk that key population segments will be irretrievably lost. PACFISH maintains a fragmented network of habitats and degraded habitat conditions, where they presently exist, because it lacks a comprehensive restoration and management strategy for watersheds with anadromous fish.”

The 1987 Forest Plan direction, as amended, does not adequately emphasize habitat restoration, population viability, or biodiversity. The 1987 Plan direction does not address habitat connectivity, a major need identified in the ICBEMP project for native fish recovery. Because direction is inconsistent and insufficient at present, this direction may not have the desired beneficial effects on declining fish populations.

The 1987 Plan desired conditions and monitoring strategies would not provide accurate monitoring data or analyses. Forest Plan direction would not emphasize an accelerated rate of recovery to assist in de-listing of water quality limited water bodies. Attaining full support of beneficial uses for these streams may be delayed.

Need to Establish or Change Management Direction

There is a need to develop a long-term ACS that includes a comprehensive restoration and management strategy for watersheds that includes protective and conservation direction, as well as restoration essential to the recovery of listed native inland and anadromous fish. In addition, the long-term ACS needs to include restoration and management strategies needed to restore water quality limited water bodies and their related beneficial uses.

The long-term ACS needs to provide consistent and appropriate SWRA restoration or conservation strategies across the planning area. Existing SWRA management direction is inconsistent among the Forest Plans, is often vague or too general, and does not fully incorporate new SWRA management emphasis on protection and restoration. In addition, there is a need to provide direction for the management of intermittent streams and landslide-prone areas that are not adequately addressed in the existing Forest Plans.

The long-term ACS needs to include appropriate Riparian Management Objectives (RMOs) and desired conditions that reflect the inherent diversity and capability of the Forest's SWRA resources. Interim RMOs identified in Pacfish and Infish are not applicable for all streams within the Forest; neither are the more restrictive water temperature RMOs for bull trout added to the State Water Quality Standards, and the proposed RMOs for steelhead trout identified in the 1998 programmatic biological assessment. Some streams, for example, are inherently incapable

of meeting these RMOs. Other critical RMOs--such as riparian vegetation, soils and soil processes, sediment, and water quality--are not included in Pacfish and Infish. These missing RMOs need to be developed for the Forest Plan. The RMOs must be designed to fully support the designated beneficial uses for water bodies, as identified by State Water Quality Standards.

There is a need to establish fish Management Indicator Species or management indicators that more accurately reflect the effects of Forest management activities.

There is a need to establish a consistent monitoring strategy by incorporating *Monitoring and Evaluation Strategy - Southwest Idaho Ecogroup Version 1.2* into the Forest Plan.

Changes Under the Revised Forest Plan

The revised Forest Plan provides a long-term comprehensive ACS that includes the following eight components (see Appendix B):

1. Goals to Maintain and Restore SWRA Resources
2. Watershed Condition Indicators for SWRA Resources
3. Delineation of Riparian Conservation Areas (RCAs)
4. Objectives, Standards, and Guidelines for Management of SWRA Resources, including RCAs
5. Determination of Priority Subwatersheds within Subbasins
6. Multi-Scale Analyses of Subbasins and Subwatersheds
7. Determination of the Appropriate Type of Subwatershed Restoration and Prioritization
8. Monitoring and Adaptive Management Provisions

Bull trout were selected as the aquatic MIS for the Forest in the revised Forest Plan. Reasons for selecting bull trout as an MIS are as follows:

- Bull Trout have a low tolerance to habitat and watershed disturbances.
- Bull trout are present throughout most of the Ecogroup area.
- Bull trout represent a wide range of aquatic habitat needs for other aquatic species.
- Local populations of bull trout generally do not extend beyond the Ecogroup area.
- Bull trout have not been stocked.
- There is a fair amount of information on bull trout collected within the Ecogroup.

The *Monitoring and Evaluation Strategy - Southwest Idaho Ecogroup Version 1.2* has been incorporated into the revised Forest Plan, therefore monitoring of watershed and aquatic systems across the Ecogroup will be more consistent.

Topic 7 - Timberland Suitability

Background

The National Forest Management Act (NFMA) and its implementing regulations include requirements to identify those lands that are suited for timber production. Suited lands include forested lands outside of withdrawn areas such as designated wilderness areas, lands where reforestation can be assured, and lands where timber management activities can take place

without causing irreversible resource damage to soil productivity or watershed conditions. Lands identified as not suited for timber production are required to be reassessed at least once every 10 years to determine if they should be reclassified as suited.

A complete reassessment of suited lands has been completed to account for changes in land status that may have occurred, such as land exchanges and acquisitions, Pacfish/Infish and BO direction, and other Forest Plan amendments. The reassessment has benefited from the availability of analytical tools -- including Landsat Imagery and Geographic Information Systems (GIS) data--that were not available during the development of the 1987 Forest Plan.

The suitability assessment includes the identification of tentatively suited timberlands (capable and available forest lands that are physically suited for timber management) and suited timberlands (the tentatively suited lands considered appropriate for timber management). The suited timberlands are then evaluated to determine the range of timber harvest levels for the revision alternatives. Timber harvest levels are expressed as Allowable Sale Quantity (ASQ) and Long Term Sustained Yield Capacity (LTSYC). The ASQ represents the average annual maximum volume that a Forest may sell during each decade. The LTSYC represents the maximum level of sustainable timber production that suited lands are capable of producing.

Current Condition

Changes in ownership and policies since the Forest Plan was released have created a need to reassess the suitability of timberlands for timber production. Land exchanges are undertaken for a number of reasons, including improved efficiency in land management or increased protection of habitat or resources. These exchanges are accomplished on an equal value basis, and may result in either a net increase or decrease in timberland area. The lands that are received in land exchanges need to be assessed to determine their timberland suitability status.

The Forest Plan has been amended by interim direction developed through the Pacfish and Infish environmental assessments and BOs. This direction is designed to protect and restore habitat for anadromous and inland fish species. This direction reclassified lands located within Riparian Habitat Conservation Areas (RHCAs), including landslide-prone areas, as being not suited for timber production. These lands thus are not included when determining the allowable sale quantity. These areas are still identified as tentatively suited but have been reclassified as not appropriate for timber production.

Timber harvest may occur in RHCAs where appropriate as a tool designed to achieve desired vegetation characteristics, if management does not retard attainment of RMOs and avoids adverse effects to threatened or endangered fish. The 1987 Plan has not been reconciled to reflect the change in suited land area and the resultant change in ASQ and LTSYC.

Forest Plan revision direction is replacing the interim direction contained in Pacfish and Infish. This will, as currently proposed, modify the standards for determining the width of RHCAs, rename RHCAs to Riparian Conservation Areas (RCAs), and extend the direction for reclassifying suited lands within RCAs for all watersheds, not just those watersheds with current or potential listed fish populations. This change is likely to result in the reclassification of additional areas from suited to not suited for timber production.

No Action

Although suited acres increase, volume outcomes for the No Action Alternative show a decrease from the original Forest Plan because of the following:

- The Pacfish/Infish and BO amendments of the Forest Plan changed the classification of suited lands in Riparian Habitat Conservation Areas (RHCAs), resulting in fewer acres classified as suited timberlands and less area that can be managed with the objective of timber production.
- Pacfish and Infish and BO amendments to the Plan have identified RHCAs with separate standards and guidelines. This change has generally reduced the availability of timber volume from RHCAs.
- Budget levels for timber management not associated with salvage opportunities are anticipated to remain static or show a slight decrease.
- Large-scale salvage efforts associated with insect epidemics have been completed. Although additional salvage opportunities could result from future mortality, the amount and timing of mortality in the next planning period is unpredictable.

Table II-1 displays compares suited timberland acres, ASQ, and Total Sale Program Quantity (TSPQ) of the 1987 Forest Plan with the No Action Alternative for the revised Forest Plan.

Table II-1. Comparison of Suited Acres, ASQ, and TSPQ from 1987 Forest Plan to 2003 FEIS No Action Alternative (1B)

Year - Alternative	Suited Timber Land (Acres)	Allowable Sale Quantity (MMBF)	Total Sale Program Quantity (MMBF)
1987 Forest Plan Selected Alternative	99,000	10.1	19.9
2003 FEIS No Action Alternative (1B)	390,100	15.7	16.4

Need to Establish or Change Management Direction

There is a need to reassess National Forest Lands to determine which lands are suited for timber management, as required by the NFMA. Specifically, there is a need to assess changes in the suited land base. These changes include reclassification of some lands previously identified as not suited, and changes in National Forest System lands resulting from land exchanges or acquisitions. The reassessment of suited lands is needed to determine changes in the LTSYC and the ASQ.

Changes Under the Revised Forest Plan

Suited timberlands for the Revised Forest Plan are identified through the allocation of management prescription categories. Tentatively suited forest land within areas allocated to management prescriptions that include timber production objectives are classified as suited, or in

other words are appropriate for timber production. The 1987 Forest Plan identified suited timberlands as the forest lands selected for timber production during the 150-year planning horizon. The 1987 Forest Plan identified these areas through a modeling effort that optimized timber production and present net worth. Table II-2 displays differences in suited timberland acreage, ASQ, TSPQ, and LTSYC between the 1987 Forest Plan, as amended (Alternative 1B in the FEIS for revision) and the revised Forest Plan (Alternative 7 in the FEIS for revision).

Table II-2. Comparison of Suited Acres, ASQ, TSPQ, and LTSYC for FEIS Alternative 1B vs. Alternative 7

Plan - Alternative	Suited Timber Land (Acres)	Allowable Sale Quantity (MMBF)	Total Sale Program Quantity (MMBF)	Long-Term Sustained Yield Capacity (MCCF)
1987 Plan, as amended ¹ (FEIS Alternative 1B)	390,100	15.7	16.4	48.0
2003 Revised Forest Plan (FEIS Alternative 7)	141,500	11.7	29.4	23.7

¹1987 Forest Plan direction, including the interim direction in Pacfish and Infish and associated Biological Opinions (BOs) for chinook salmon, steelhead, and bull trout (US Dept of Commerce NMFS 1995, US Dept of Commerce NMFS 1998, USDI FWS 1998) that amended the 1987 Forest Plan.

Topic 8 - Management Emphasis Areas

The Sawtooth National Forest includes many outstanding natural areas with various combinations of biophysical resources and social interests. When these areas receive formal recognition from Congress or the Forest Service, they are given an appropriate emphasis in management direction in the Forest Plans. This direction is designed to protect the qualities that earned these areas their designation. Management emphasis areas with a Need For Change include Wild and Scenic Rivers, Inventoried Roadless Areas, and Management Areas.

Wild and Scenic Rivers

Background

The Wild and Scenic Rivers Act (Public Law 90-542, 1968), establishes objectives, goals, and procedures for Wild, Scenic, and Recreational River designation.

Agency policy related to the Wild and Scenic Rivers Act in land management planning requires that rivers identified as potential Wild and Scenic Rivers (WSRs) be evaluated as to their eligibility, with the findings documented in the Forest Plan. An eligible river or river segment must be free flowing and possess at least one feature that is judged to be outstandingly remarkable. Additionally, it is recommended, but not required, to complete the WSR suitability

studies during the Forest Plan revision process. To be found suitable, the benefits of designating the river should outweigh the disadvantages. If a recommendation is deferred on those rivers identified as eligible where the Forest Service has primary responsibility, the Forest Plan must also provide interim management direction for protection of the outstanding features.

Current Condition

The Sawtooth National Forest completed an eligibility study as part of the Forest Planning process in 1988. As a result of that process, the Forest identified five segments from three drainages as eligible for inclusion in National Wild and Scenic River System. See Appendix D for names and locations of eligible segments.

The Bureau of Land Management is the lead agency conducting suitability studies on two of the eligible rivers on the Sawtooth National Forest, as agreed upon in a 1991 Memorandum of Understanding between the Idaho Department of Water Resources, the Bureau of Land Management, and the Forest Service. Interim management direction has not been completed for the three segments on the Sawtooth.

No Action

Management direction for the designated Wild and Scenic Rivers would not change. These areas would continue to be affected primarily by natural processes and human recreation. Management activities would not affect the Outstandingly Remarkable Values of eligible or suitable river segments or their free-flowing status.

Need to Establish or Change Management Direction

There is a need to reevaluate the previous eligibility studies based on the need to improve upon earlier inventories and apply a consistent inventory and assessment approach across the Ecogroup. Specifically, the process for determining Outstandingly Remarkable Values needs to be refined and expanded. Reevaluation also needs to incorporate new information and changed conditions since the last eligibility studies were completed, such as new species listings and large uncharacteristic events. Any rivers found eligible during the re-evaluation process will undergo suitability studies if site-specific projects may affect the ORVs or classification. Suitability studies may also be completed as budgets allow.

Changes Under the Revised Forest Plan

The Forest Plan revision process focused on changed condition, such as listing of new species on the Threatened and Endangered species list or changed condition of the river area, and new information such as adding botanical and ecological to the outstandingly remarkable value categories. This resulted in portions or all of 33 rivers found eligible for inclusion in the national system. The eligible river segments and their classifications can be found in Appendix D of the Forest Plan. Management direction for interim management of these segments can be found in the Wild and Scenic Rivers section of Chapter III of this Forest Plan, and in the Management Areas in which the river segments appear.

Suitability studies were not completed as part of the Sawtooth National Forest planning process in 1988, nor were they completed as part of this Forest Plan revision process. See Appendix D for more information on the Wild and Scenic River eligibility studies.

Inventoried Roadless Areas

Background

“Roadless Areas” refer to areas that are without constructed and maintained roads, and that are substantially undeveloped. The Forest has many inventoried roadless areas, which have varying degrees of wilderness characteristics. Wilderness is specifically defined in the Wilderness Act of 1964 (Public Law 88-577); one requirement is a roadless, undeveloped condition.

NFMA regulations direct that, “Unless otherwise provided by law, roadless areas within the National Forest System shall be evaluated and considered for recommendation as potential wilderness areas during the forest planning process.” The Forest Service does not have the authority to designate wilderness areas, but rather evaluates and considers roadless areas for recommendation as potential wilderness areas. Formal designation of wilderness areas occurs through Congressional action, and one wilderness area has been established within the Forest boundaries.

Current Condition

The Sawtooth National Forest currently has about 1.2 million acres in inventoried roadless areas. The 1987 Forest Plan assigned management prescriptions to each roadless area. These prescriptions range from recommended wilderness, where activities are consistent with preserving wilderness attributes, to general forest management, where activities may include road construction, timber harvest, range improvement, recreation development, and habitat improvement projects. Depending on the size and intensity of these projects, land may be considered developed and subsequently removed from a roadless area, resulting in a change in roadless area size and boundaries. Wilderness evaluation was documented in Appendix C of the 1987 Forest Plan EIS.

Table II-3. Roadless Areas Recommended for Wilderness in the Revised Forest Plan

Recommended Wilderness Area	Acres
White Cloud/Boulder (contiguous with Salmon-Challis NF)	190,350
Pioneer Mountains (contiguous with Salmon-Challis NF)	61,911
Hanson Lakes (contiguous with Boise NF)	18,445
Total	270,706

The 1987 Forest Plan recommended 270,706 acres of inventoried roadless areas for Wilderness designation (see Table II-3). These areas were assigned management area prescriptions to help preserve wilderness characteristics until Congress decides whether to officially designate them as Wilderness.

No Action

Roadless areas would continue under current management prescriptions. Effects to these areas could vary considerably, depending on those prescriptions. Areas with prescriptions for recommended wilderness or semi-primitive recreation emphasis would likely retain their current

wilderness characteristics and roadless boundaries. However, areas with a general forest management prescription could receive new or additional development that would reduce both wilderness characteristics and the overall size of their roadless area that could be potentially considered for wilderness designation in the future.

Need to Establish or Change Management Direction

Roadless areas need to be re-evaluated for wilderness capability, availability, and need. After the evaluation of roadless areas is completed, the need to establish or change management direction for recommended wilderness will be identified. No programmatic changes were identified from monitoring and evaluation.

Changes Under the Revised Forest Plan

The Forest has re-inventoried its roadless areas since the release of the Preliminary Analysis of the Management Situation (AMS) Summary. During the re-inventory process, changes were made to the roadless area boundaries based on project-level decisions, improved mapping, and decommissioning of classified roads. Any areas within the roadless areas that had been developed by projects were removed from the inventory. The Forest was also examined, using Geographic Information System (GIS) technology, to identify roadless areas that may have been missed in past inventories. Changes in the roadless areas are shown on the maps in Appendix C of the Forest Plan Draft EIS.

A subsequent evaluation of the re-inventoried roadless areas was also completed and the results are documented in Appendix C of the Forest Plan Final EIS. This evaluation reviewed the roadless areas for their potential as Wilderness using capability, availability, and need criteria.

- Based on the roadless area evaluation, the revised Forest Plan carried forward Wilderness recommendations from the original Forest Plan. However, the boundary for the Boulder/White Clouds was adjusted slightly to eliminate the potential conflict over a popular mountain bike trail.

Revised acres for recommended Wilderness are shown in Table II-4. Changes in management direction for recommended Wilderness are in Chapter III of the revised Forest Plan, in the Wilderness section. Management emphasis disposition for all roadless areas is found in Appendix C of the Forest Plan Draft EIS. In addition, a roadless characteristic analysis was completed for the Final EIS, the results of which can be found in Appendix H to the EIS.

Table II-4. Roadless Areas Recommended for Wilderness in the 1987 Forest Plan

Recommended Wilderness Area	Acres
White Cloud/Boulder (contiguous with Salmon-Challis NF)	184,400
Pioneer Mountains (contiguous with Salmon-Challis NF)	61,000
Hanson Lakes (contiguous with Boise NF)	18,500
Total	263,900

Management Area Boundaries

Background

A management area is an identifiable unit of land that has specific land management emphasis and prescriptions. A management prescription is a composite of multiple-use direction applicable to all or part of the management area. The prescription generally includes goals, objective, standards and guidelines, and probable management practices. The boundaries of management areas should be linked to the ecosystem hierarchy and the desired conditions of the area.

Current Condition

Management area boundaries on the Sawtooth National Forest do not tie to geographic features such as watersheds. Instead, boundaries were established based on contiguous areas of the Forest where a common prescription would be applied. In other words, each management prescription is a management area. What this has done, in effect, is scatter certain management areas, such as General Forest or Scenic Travel Route, into numerous non-contiguous areas across the Forest. The management areas range in size from 5 to 1,200 acres.

No Action

Management Area boundaries have been modified to conform with the proposed management area boundaries of all other alternatives. This was necessary for completion of effects analysis and comparison of alternatives. However, management area direction for lands within the current management areas has not changed under the no action alternative.

Need to Establish or Change Management Direction

There is a need to define management area boundaries where feasible along watershed boundaries in order to more effectively manage and track cumulative effects to resources within those definable areas.

Changes Under the Revised Forest Plan

New management area boundaries have been established and are described in the Management Area Description and Direction section in Chapter III.

STRENGTHENING CURRENT MANAGEMENT DIRECTION

This section describes changes that are needed to clarify current management direction or to create direction that supports and is consistent with Forest Service or other national direction that has been changed or created since the release of the Forest Plan. These changes are different from the major Need For Change topics above in that they could be made without detailed analysis or alternative development in the Draft or Final EIS. However, they represent important Need For Change in specific Forest Plan direction that is being tracked through the revision process.

Ecosystem Management

Need to Establish or Change Management Direction

In 1992 the Forest Service adopted ecosystem management (EM) as an operating philosophy (Overbay 1992). EM has been described as “scientifically based land and resource management that integrates ecological capabilities with social values and economic relations to produce, restore, or sustain ecosystem integrity and desired conditions, uses, products, values, and services over the long term” (ICBEMP 1997a). An EM approach shifts management emphasis from traditional, single resource or species focus to a focus on ecosystems and land scapes. EM also strongly considers the interactions between humans and ecosystems. A framework built around EM principles and elements needs to be incorporated into the revised Forest Plan.

Changes Under the Revised Forest Plan

For Forest Plan revision, the Sawtooth National Forest has adopted an EM conceptual framework. This framework borrows from and builds on: 1) already existing Forest Plan (USDA Forest Service 1987), 2) The Forest Service Region 4 *Desk Guide - Bridge to Revision* (USDA Forest Service 1993), and 3) *A Framework for Ecosystem Management in the Interior Columbia Basin* (ICBEMP 1996a). The intent of the framework is to integrate ecosystem elements with human needs to strengthen the essential link between economic prosperity, social continuity, and ecosystem processes and functions. The use of the EM framework will help ensure ecosystem sustainability and resilience over time and space.

Treaty Rights and the Federal Trust Responsibilities

Need to Establish or Change Management Direction

As far back as 1855, the federal government signed treaties with Indian Nations that inhabited or used what is now the *Sawtooth National Forest*, including the Nez Perce, Shoshone-Bannock, and Shoshone-Paiute Nations. These intergovernmental treaties reserved rights for traditional uses such as hunting, fishing, and gathering forest products on unoccupied public lands. Treaties are laws that pre-date the establishment of National Forest System lands; thus, rights reserved by treaties take precedence over many federal laws. However, the current Forest Plan does not contain specific language concerning treaty rights and the federal government’s obligation to protect those rights. As a result, Forest managers and decision makers lack sufficient direction to coordinate resource management activities with treaty rights. The Forest Plan needs to include this language to meet the federal government’s trust responsibilities, to foster a better understanding of tribal concerns, to enhance relationships, and to develop shared goals in land management.

Changes Under the Revised Forest Plan

New Forest-wide management direction is located in the Treaty Rights and Interests section in Chapter III of this Forest Plan. This direction addresses the protection of treaty rights and the need for the Forest to consult local tribes regarding any management activities that would affect those rights.

Heritage Program

Need to Establish or Change Management Direction

The 1987 Forest Plan needs to be revised to incorporate new management direction into the Heritage Program's goals, objectives, and guidelines. Specific direction that has been enacted since the Plan was released include:

- 1992 amendments to the National Historic Preservation Act that include 1) the development of educational and interpretive programs for public outreach and involvement (Section 110), 2) increased protection for historic properties on federal lands or lands where federal jurisdiction exists (Sections 106 and 301), and 3) consultation with appropriate Indian tribes for the management of traditional religious and cultural properties (Section 101).
- The Native American Graves Protection and Repatriation Act of 1990 and its 1995 implementing regulations that require the Forest Service to consult with Indian tribes when Native American human remains and certain cultural objects are identified in the agency's archaeological collections or are discovered during the course of federal actions.
- 1996 Executive Order #13007 that requires federal agencies to protect and make accessible Indian sacred sites on public lands for Indian religious practitioners. This includes consultation with Indian tribes for the identification of sacred sites, and for when federal actions or policies may restrict access to or use of a ceremonial site, or may adversely affect the physical integrity of the site.

The revised Forest Plan should also acknowledge the agency's 1992 change from a "Cultural Resources Program" focused primarily on compliance, to a "Heritage Program" that emphasizes a balance between protection of historic properties and public outreach for the enjoyment of American history.

Changes Under the Revised Forest Plan

New Forest-wide management direction has been added to the Heritage Resources section of Chapter III in the revised Forest Plan. This direction addresses compliance with cultural resource protection and consultation as well as the expansion of the Heritage Program to emphasize more interpretation, education, and outreach activities.

Forest Land Acquisition Priorities

Need to Establish or Change Management Direction

Currently, the Forest Plan emphasizes consolidating ownership patterns when exchanging or acquiring land in order to increase efficiency in land management. In the past few years, national and local emphasis in land exchange or acquisition has shifted to other priorities, including the protection of habitat for threatened or endangered species. The revised Forest Plan needs to reflect this shift in emphasis to clarify our current policy.

Changes Under the Revised Forest Plan

New Forest-wide management direction is located in the Lands and Special Uses section of Chapter III in the revised Forest Plan. Guidelines have been established that prioritize land acquisitions based on criteria such as protection of threatened and endangered species habitat, cultural resources and historical properties, public access, and sensitive environmental areas, as well as land management efficiency.

Special Uses**Need to Establish or Change Management Direction**

Currently, direction in the Forest Plan for some Special Uses merely refers to direction in the Forest Service Manual or Handbooks. However, the direction in the Manual or Handbooks either does not exist or refers back to the Forest Plan. This endless loop of non-direction means that some Special Use decisions are based on subjective interpretations rather than objective information or criteria. The Forest Plan needs to provide that objective information and criteria for making decisions on some Special Use permits.

The 1987 Forest Plan is inconsistent in its treatment of current and historic communication and electronic sites. These sites need to be recognized in the Plan as “designated” sites, except as provided for in FSH 2709.11. The Forest Plan also needs to address emerging needs for communication, transportation, and utility corridors. These corridors need to be recognized as acceptable locations for future linear communication uses such as cellular phones.

Changes Under the Revised Forest Plan

New Forest-wide management direction has been added to the Lands and Special Uses section in Chapter III to consistently address special uses, including communication and electronic sites.

Scenic Byway Designations**Need to Establish or Change Management Direction**

After the current Forest Plans were developed, State Scenic Travel Routes became National Forest Scenic Byways, with minor differences in management goals and prescriptions. The Chief of the Forest Service designates National Forest Scenic Byways for their exceptional scenic, historic, cultural, recreational, and natural resources. National Forest Scenic Byways in Idaho are designated with concurrence from the State. Three National Forest Scenic Byways on the Sawtooth National Forest converge in Stanley Idaho and are the Sawtooth, Ponderosa, and Salmon River Scenic Byways. The 1987 Forest Plan has no recognition of, or management direction for, Scenic Byways. Management direction needs to be established for Scenic Byways in the Forest Plan.

Changes Under the Revised Forest Plan

Forest-wide management direction has been added to the Recreation Resources section of Chapter III. Additional information has been added to the Management Areas where the byways occur. The established Visual Quality Objectives also reflect Scenic Byway status.

Winter Recreation Areas

Need to Establish or Change Management Direction

Recreation managers are observing a rising level of winter recreation conflicts in a number of areas within the Ecogroup. In most cases, these conflicts are terrain use conflicts between snowmobilers and skiers and are occurring in developed ski areas as well as backcountry areas. However, most of these conflicts will only be fully resolved by site-specific access determinations. In that this Forest Plan revision process analyzes and adjusts management direction at the programmatic level, full resolution of these conflicts is beyond the scope of this revision process. However, programmatic management direction related to winter recreation management is being reviewed and adjusted as part of the Forest Plan revision process. Site-specific winter access management will be addressed in separate travel management planning processes, which will follow this revision.

Changes Under the Revised Forest Plan

Forest-wide direction has been added to the Recreation Resources section in Chapter III to provide a foundation for subsequent analysis and access management determinations. In some cases, specific management direction has been included for the appropriate Management Areas as well.

Predator Control

Need to Establish or Change Management Direction

Some livestock are lost to predators each year on National Forest System lands. The Forest, in cooperation with state and federal wildlife agencies, was previously responsible for determining control measures on Forest System lands. The current Forest Plan gives some guidance on these control measures. Since the Plan was released, however, the responsibility for predator control activities and NEPA compliance has shifted to the jurisdiction of Wildlife Services, formerly called the Animal Damage Control (ADC) agency. There is a need in the Forest Plan to clarify the role of the Forest Service related to predator control activities on the Forests.

Changes Under the Revised Forest Plan

An objective has been added to the Wildlife Resources section in the Forest-wide Management Direction of Chapter III that alerts the Forest to “Coordinate animal damage management with the Animal and Plant Health Inspection Service (APHIS), in compliance with USDA Wildlife Services’ most current direction for southern Idaho.”

Management Area Direction

Need to Establish or Change Management Direction

Management goals and objectives and standards and guidelines need to be reviewed and updated to provide consistent, implementable direction designed to achieve Management Area desired conditions. Improvements should include the correction of conflicting direction, such as mutually exclusive goals and objectives that are occasionally found in the 1987 Forest Plan. Standards and guidelines should also be revised to incorporate new information that helps to achieve goals, objectives, and desired conditions.

Changes Under the Revised Forest Plan

New Management Area direction has been added to the Management Areas found in Chapter III of the revised Forest Plan. Improvements were made to correct conflicting direction and to incorporate new information that should help the Forest achieve its goals, objectives, and desired conditions.

OTHER CHANGES OR DEVELOPMENTS SINCE THE PRELIMINARY ANALYSIS OF THE MANAGEMENT SITUATION

Interior Columbia Basin Ecosystem Management Project

Need to Establish or Change Management Direction

The Sawtooth National Forest is within the area of land covered by the Interior Columbia Basin Ecosystem Management Project (ICBEMP). The Project, which was initiated as a joint effort between the Bureau of Land Management and the Forest Service in January 1994, addressed landscape health issues facing the Interior Columbia Basin. These issues included threats from wildfire and non-native plants, and protection and restoration of fish and wildlife habitat.

The ICBEMP issued an Integrated Scientific Assessment in 1996 that described the current condition of the Interior Columbia Basin. The information base of this package provides context at a broad, multiple-state scale and was used by the Revision Team, in addition to more localized information, to identify current habitat conditions and trends (ICBEMP 1996b). The Upper Columbia River Basin (UCRB) Draft EIS was issued for comment in June 1997 (ICBEMP 1997a), a Supplemental Draft EIS was released for comment in March of 2000 (ICBEMP 2000a), and the Final EIS was released in December 15, 2000 (ICBEMP 2000d). Based on comments received on the FEIS—including concerns that the direction was too broad in scale to make decisions at the local level, and did not consider the USFS Roadless Area Conservation Rule (USDA Forest Service 2000) and National Fire Plan (USDA Forest Service 2000)—no Record of Decision for the Project was released.

On February 19, 2003, the Project was completed with the signing of a Memorandum of Understanding (MOU) between the Forest Service, Bureau of Land Management, National Marine Fisheries Service, US Fish and Wildlife Service, Environmental Protection Agency, and the Forest Service's Forest and Range Experiment Stations, to cooperatively implement the "*A Strategy For Applying The Knowledge Gained By The Interior Columbia Basin Ecosystem Management Project To The Revision Of Forest And Resource Management Plans And Project Implementation*" (USDA Forest Service et al. 2003).

The purpose of this MOU is to cooperatively implement the "*The Interior Columbia Basin Strategy*" 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*" (Quigley and Arbelbide

1997), the analyses supporting or developed as part of the ICBEMP, the “*Integrated Scientific Assessment for Ecosystem Management*” (Quigley et al. 1996) developed by the Interior Columbia Basin Ecosystem Management Project (ICBEMP) as guidance for implementation, and all reports generated by the ICBEMP project.

Changes Under the Revised Forest Plan

Key science findings and basin-wide issues developed in the ICBEMP Final Environmental Impact Statement (FEIS) were considered and used in the development of the revised forest plan. These key findings relate to:

- Landscape Dynamics
- Terrestrial Species Habitat
- Aquatic and Riparian Habitat
- Social-Economics
- Tribal Governments
- Coordination with other management efforts
- Adaptive Management

The revised Forest Plan tiers from this information, forming a link between the broad-scale ICBEMP assessment and project-specific assessments and proposed actions.

2001 Road Management Final Rule and Administrative Policy

Need to Establish or Change Management Direction

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. 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 road 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” (USDA Forest Service 1999) 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 Forest completed a Forest-scale Roads Analysis as part of the revision effort (refer to the SWIE 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 system on a forest planning unit was safe, responsive to public needs, environmentally sound, and affordable to manage.

Changes Under the Revised Forest Plan

Transportation system management will be consistent with direction provided by the Roads Management Policy. The following objectives and standard were incorporated into Forest-wide direction, Facilities and Roads section, in Chapter III.

Objective - Analyze road system needs and associated resource effects in accordance with the established agency policy direction for roads analysis.

Objective - Coordinate transportation systems, management, and decommissioning with other federal, state and county agencies, tribal governments, permittees, contractors, cost-share cooperators, and the public to develop a shared transportation system serving the needs of all parties to the extent possible.

Objective - Identify roads and facilities that are not needed for land and resource management, and evaluate for disposal or decommissioning.

Standard - In support of road management decisions, use an interdisciplinary science-based roads analysis process such as Roads Analysis: Informing Decisions About Managing the National Forest Transportation System (USDA Forest Service 1999).

Lynx Listing**Need to Establish or Change Management Direction**

On March 21, 2000, the USDI Fish and Wildlife Service (USFWS) listed the Canada lynx in the contiguous United States as Threatened under the Endangered Species Act. The lynx is found predominantly on federal lands, especially in the West. The USFWS concluded that one threat to lynx in the contiguous United States is the lack of guidance to conserve the species in current Federal land management plans. The Forest Service has signed a Lynx Conservation Agreement that would affect forest plans within lynx habitat.

Changes Under the Revised Forest Plan

Conservation measures in the Agreement have been incorporated into Forest-wide management direction in Chapter III. The TEPC Species section has the following direction specifically related to lynx: Objectives 12, 13, 14, 28, 29, 30, 31, and 32; and Standards 14, 15, 16, and 34.

In addition, vegetation desired conditions for size class, density, snag, and coarse woody debris components should help protect or improve lynx foraging and denning habitats Forest-wide (see Appendix A).

2001 Roadless Area Conservation Rule**Need to Establish or Change Management Direction**

In October 1999, President Clinton announced a roadless area initiative, which led to the release of the Forest Service Roadless Area Conservation Draft EIS (USDA Forest Service 2000). The Forest Service Roadless Area Conservation Final EIS (USDA Forest Service 2000) was published in November 2000, and the Record of Decision on the Roadless Rule came out on

January 12, 2001. However, before the Forest Service could implement the rule, the United States District Court for the District of Idaho issued a preliminary injunction of the rule nationwide.

On May 4, 2001 Agriculture Secretary Ann M. Veneman announced her decision to move forward with an open and fair process to address reasonable concerns raised about the rule so implementation, following resolution of the injunction, would occur in a responsible, common sense manner. The Forest Service then conducted an Advanced Notice of Proposed Rulemaking to solicit public comments on the Roadless Rule to help the Forest Service determine the next appropriate steps regarding roadless area protection and management. Over 700,000 responses were received. The respondents provided information on a much wider range of concerns and issues than just the rule.

The agency's goal is to provide a long-term protection and management policy for inventoried roadless areas using a responsible and balanced approach that fairly addresses concerns raised by affected local communities, tribes, and states. Recently the Forest Service agreed to participate in a public dialogue sponsored by the Forest Roads Working Group, which is composed of representatives from several non-government organizations. The group is interested in forging agreement and developing workable solutions related to roadless area management.

In the meantime, the Chief of the Forest Service has issued interim directives concerning management within roadless areas until long-term protections are in place or legal actions are concluded. The direction issued by Chief Bosworth on June 7, 2001 reserves to himself final approval of proposed road building and timber harvest in roadless areas, with limited exceptions (Bosworth 2001). To date, Chief Bosworth has not approved any projects in roadless areas on the Sawtooth National Forest. The Forest Service is committed to protecting and managing roadless areas as an important component of the National Forest System.

The current Forest Plan has management prescriptions for some roadless areas that would maintain their roadless character, but other areas are available for road building, timber harvest, and other development.

Changes Under the Revised Revised Plan

The revised Forest Plan has applied management prescription categories (MPCs) and associated standards to IRAs that would limit the types and amounts of development that could occur.

Under MPC 1.2, for IRAs that are Recommended Wilderness, management actions must be designed and implemented in a manner that maintains wilderness values, as defined in the Wilderness Act. Mechanical vegetation treatments, including salvage harvest, are prohibited. Road construction or reconstruction may only occur where needed to provide access related to reserved or outstanding rights, or to respond to statute or treaty.

Under MPC 4.1a, management actions must be designed and implemented in a manner that does not adversely compromise the area's roadless and undeveloped character in the temporary, short term, and long term. Road construction or reconstruction may only occur where needed to provide access related to reserved or outstanding rights, or to respond to statute or treaty.

Under MPC 4.1c, management actions must be designed and implemented in a manner that would be consistent with the Management Area ROS objectives in the temporary, short term, and long term. Within IRAs, road construction or reconstruction may only occur where needed to provide access related to reserved or outstanding rights, or to respond to statute or treaty.

Under MPC 3.1, management actions may only degrade aquatic, terrestrial, and watershed resource conditions in the temporary time period (up to 3 years), and must be designed to avoid resource degradation in the short term (3-15 years) and long term (greater than 15 years). Mechanical vegetative treatments may only occur where: (a) the responsible official determines that wildland fire use or prescribed fire would result in unreasonable risk to public safety and structures, investments, or undesirable resource affects; and (b) they maintain or restore water quality needed to fully support beneficial uses and habitat for native and desired non-native fish species; or (c) they maintain or restore habitat for native and desired non-native wildlife and plant species. Road construction or reconstruction may only occur where needed to: (a) provide access related to reserved or outstanding rights, or (b) respond to statute or treaty, or (c) address immediate response situations where, if the action is not taken, unacceptable impacts to hydrologic, aquatic, riparian or terrestrial resources, or health and safety, would result.

Under MPC 3.2, management actions may only degrade aquatic, terrestrial, and watershed resource conditions in the temporary or short-term time periods, and must be designed to avoid resource degradation in the long term (greater than 15 years). Mechanical vegetative treatments may only occur where: (a) they maintain or restore water quality needed to fully support beneficial uses and habitat for native and desired non-native fish species; or (b) they maintain or restore habitat for native and desired non-native wildlife and plant species, or (c) reduce risk of impacts from wildland fire to human life, structures, and investments. Road construction or reconstruction may only occur where needed to: (a) provide access related to reserved or outstanding rights, or (b) respond to statute or treaty, (c) support aquatic, terrestrial, and watershed restoration activities, or (d) address immediate response situations where, if the action is not taken, unacceptable impacts to hydrologic, aquatic, riparian or terrestrial resources, or health and safety, would result.

An estimated 121,00 acres of IRA were assigned suited timberland MPCs (4.2, 5.1, 5.2, 6.1, 6.2). However, only 21,000 of those acres, or less than 2 percent of the total IRA acres, assigned to suited MPCs are forested. No scheduled commercial timber harvests or new road construction are planned for these roadless areas.

National Fire Plan, Cohesive and Comprehensive Strategies, Healthy Forests Initiative

Need to Establish or Change Management Direction

National Fire Plan (USDA Forest Service 2000) - 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 identifying research needs.

Protecting People and Sustaining Resources in Fire-Adapted Ecosystems - Cohesive Strategy (USDA Forest Service 2000) – The Forest Service developed this strategy in 2000 to address the need to reduce the identified 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 supply watersheds
- Threatened and endangered species habitat
- Maintenance of low risk Condition Class 1 areas

10-Year Comprehensive Strategy Implementation Plan, A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment (USDA Forest Service et al. 2002) – Developed in 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, an 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 (Bush 2002) – 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. The administrative proposal would:

- Seek to increase the use of Categorical Exclusions for fuel reduction projects,
- Seek to streamline the appeals process within the existing appeals framework, and
- Seek to streamline the Environmental Assessment documentation process.

The current Forest Plan does not have any specific information or direction to address the national policy changes in wildfire and fuels hazard reduction described above.

Changes Under the Revised Forest Plan

The revised Forest Plan addresses 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; specifically FMGO04, FMGO06, FMOB01, FMOB02, FMOB04, FMOB05, FMOB06, and FMOB07,
- 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.

Planning Regulations and Committee of Scientists Report

The Forest Service issued a proposed planning rule in October 1999 that would change the Forest Service regulations for implementing the National Forest Management Act (NFMA). This proposed change was based upon decades of experience implementing the existing regulations as well as the March 15, 1999 Committee of Scientists Report. The report, *Sustaining the People's Land – Recommendations for Stewardship of the National Forests and Grasslands into the Next Century* (Committee of Scientists 1999), highlighted needed changes in four areas:

- Sustainability
- Collaboration (public involvement, partnerships)
- Role of Scientists
- Living Documents

The proposed rule change is in the process of being finalized. When the rule is final, it could result in changes in the planning process used to revise future Forest Plans. The type and extent of changes will not be known until changes in the planning regulations are made final. However, forest plan revision efforts already initiated, including this one, are not be required to follow the new planning regulations.

CONTINUOUS ASSESSMENT AND PLANNING

The first round of planning in the 1980s required that each Forest build a plan from scratch. This effort required big budgets, many employees, and took a long time. It literally became an all-consuming task for the Forest Service. As the time came to revise these first generation plans, planning philosophy evolved to fit the task at hand and available budget and work force.

It is important to remember the Forest is proposing changes to a Plan that has already been developed and implemented. Therefore, there are years of experience with what direction is working and what needs to be changed. In revising the Forest Plan, the Forest focused on those areas that must be reviewed in accordance with federal regulations, and on critical issues identified through new information, monitoring, and public concerns.

The regulations focus the revision process; “The Forest Supervisor shall determine the major public issues, management concerns, and resource use and development opportunities to be addressed in the planning process” [36 CFR 219.12(b)]. Throughout the revision process, only those portions of the Plan that were identified as needing change were addressed. Budget considerations were also used to validate that alternatives developed were appropriate for detailed consideration.

In June 1990, the Forest Service, in coordination with The Conservation Foundation and Department of Forestry and Natural Resources at Purdue University, published recommendations on how to improve the planning process. After reviewing the Land Management Planning Critique, Region 4 of the Forest Service adopted a more adaptive planning process, called “Continuous Assessment and Planning” or CAP. There are three primary goals of this process:

- Work more collaboratively with customers and interested publics to achieve shared land management expectations.
- Use the revision effort to create an adaptive Forest Plan that will meet current management needs but is readily amended with new information.
- Effectively and efficiently utilize information and analysis across scales to improve land management.

Through this process, issues that were better addressed at a later time or at a different scale were deferred. This has allowed the Forest to focus on the most compelling needs for change in Plan direction, or in some cases, make changes where needed prior to the year 2000.

The Forest has already forged a strong beginning for the CAP process by adopting ecosystem management, responding to monitoring results and public concerns, changing management areas and direction, making the Forest Plan more flexible, and incorporating new and valuable information from a wide variety of sources. This CAP process will continue to be used throughout the next planning period to:

- Fine-tune Forest Plan direction and effectiveness with amendments as needed to address new information or changed conditions, or adapt direction to better address site-specific situations,
- Evaluate Forest-wide effectiveness and validation monitoring, reporting results, and make any necessary changes to plans, and
- Address broad-scale issues that were not covered in detail during Forest Plan revision, such as travel management planning.