

Colville and Okanogan-Wenatchee National Forests Analysis of the Management Situation

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Introduction

The Analysis of the Management Situation

The regulations to implement the National Forest Management Act require, as part of the planning process, an Analysis of the Management Situation. The purpose of the AMS is to identify the need for change (if any) from the direction in the original Forest Plans (1988 Colville Land and Resource Management Plan [LRMP], 1989 Okanogan LRMP, and 1990 Wenatchee LRMP).

The AMS is also the determination of the ability of the planning area to supply goods and services in response to society's demands. The AMS procedures require the Forests to develop and/or verify benchmarks for setting the evaluation space for alternatives, analyze existing conditions and trends, make projections of future demand, and identify public issues and management concerns in order to determine the need to change current plan direction and to formulate a broad range of reasonable alternatives.

This document, developed in 2011 when the plan revision process for the Colville and Okanogan-Wenatchee forests was combined, continues to evolve as we respond to changes in planning rules, changes in conditions and trends, new public issues, and management concerns, and new direction in law or policy. A recent change was the decision by the regional forester to separate the planning efforts of the Colville and Okanogan-Wenatchee forests. After the separation in 2014, the Colville continued to revise its plan along a different timeline. However, the thought process for this summary remains valid for both forests/plan revision efforts.

This summary of the current management situation provides the basis for revision of the existing Forest Plans.

Revising the Current Forest Plans

The current Forest Plans contain numerous goals and related outputs. The Forest Service has worked to achieve these goals and outputs, and has been successful in achieving them in some areas. In other areas, the Forest Service has not been able to reach goals due to a variety of factors. Analysis indicates the goals need to be reviewed, revised, and reorganized. In addition, the Forest Service also needs to review outputs and develop measurements that accurately measure how well the Forests can reach goals and desired future conditions.

The revised Forest Plans will represent the selected alternative for managing the land and resources of the Colville and Okanogan-Wenatchee National Forests. Documentation of Forest Plan environmental impacts will be contained in the Environmental Impact Statement. The revised Forest Plans are the result of extensive analysis and considerations. The planning process, analysis procedures used, and other alternatives considered in developing the revised Forest Plans will be described or referenced in the EIS. The revised Forest Plans provide general, program-level direction for projects and activities on each of the ranger districts of the two national forests. Activities and projects will be implemented to carry out direction in the Plans. These site-specific projects will be tiered to the EIS as provided for in 40 CFR 1502.20. All must meet certain legal requirements.

Many of the issues and concerns that the current Forest Plans were created to address are still relevant today. Some of the issues and concerns have changed somewhat to reflect current

thinking about an issue. Through public meetings, several management issues were identified as important to the public and the Forest Service for the Forest Plan revision. These issues were identified during an extensive review process by the plan revision interdisciplinary team. The team has reviewed changes in forest conditions, changes in laws and regulations, monitoring reports, and amendments to the current Forest Plans. In addition, the team has participated in public workshops and has reviewed numerous public comments. These comments resulted from individual and public interest group response to the public scoping process in 2011, and the formal 135-day public comment period in 2016.

Topics Not Addressed in the Revised Forest Plans

The rules guiding the plan revision process give latitude to the Forest Service to determine the scope of topics included in the revision. Criteria for including or not including a topic range from the scope of authority available to the Forest Service to the need for change driven by science, changed economic, social, and ecological conditions; and changes in policy.

It is not within the authority of a forest plan to change treaties, laws, rights, and regulations. Revised plans only make decisions that apply to national forest lands. Revised plans will make no decisions regarding management or use of privately owned lands or reserved and outstanding mineral estates.

Earlier plans often paraphrased existing law, regulation, and directives. As a federal land management agency, the Forest Service must follow all applicable laws and regulations. The same situation applies to executive orders and to agency policy, as expressed in the Forest Service directives. This direction does not need to be restated in the revised plan.

The following list is not inclusive, but it does highlight key topics of interest to the public, making it clear what topics will not be addressed in the revised Forest Plans.

Boundaries designated by Congress

It is outside the authority of the Forest to move any boundary established by Congress. Changes to a congressionally designated boundary are not included in this process. Designated Wilderness and the corridor for the Pacific Northwest National Scenic Trail were both designated by Congress.

Roadless Area Conservation Rule (36 CFR Part 294)

The proposed action included management direction for Inventoried Roadless Areas (IRAs) identified in the 2001 Roadless Area Conservation Rule (RACR). The 2001 Roadless Rule was the subject of litigation in multiple jurisdictions. Ultimately, the rule was judicially upheld (2012) and it is in effect, with the exceptions of the states of Idaho and Colorado where separate rules apply. The preferred alternative includes plan direction that retains the undeveloped character of parts of the national forest by including management areas that restrict road construction and timber harvest. This is based on analyses completed to date and public involvement. The decision for the final plan will consider further analyses and public comments. The decision for the final plan will be consistent with the legal status of the RACR at the time the plan is signed.

Travel Management (2005 Travel Management; Designated Routes and Areas for Motor Vehicle Use. 36 CFR Part 212, 251, 261, and 295. Amended in 2008)

Due to the high interest in the travel management process happening on the Forest, it is worth explaining that decisions about specific routes and areas for motor vehicle use are not made in this forest plan. These are site-specific decisions considered in the travel management process. The motor vehicle use map (MVUM) created through the travel management process is a site-specific decision. The forest plan revision will not make changes to this map. A forest plan provides over-arching strategic direction that guides travel management processes and decisions.

Solar and wind generated power

National and regional level assessments of potential for solar and wind power show the Forest does not offer a high potential for either energy source, therefore there is no need to develop specific guidance in the plan.

Recreation Residences

Recreation residence permits were recently re-issued. These were site-specific decisions that would not be changed by the plan revision process.

Federal Trust Responsibility and Tribal Rights and Interests

It is not within the authority of a forest plan to change treaties, laws, rights, and regulations pertaining to reserved rights and privileges.

American Indian Tribes are sovereign nations. They are government entities with which the Forest Service has established and continues to maintain government-to-government relationships. In government-to-government consultation the Forest Service acknowledges the sovereignty of federally recognized American Indian Tribes, and the special government-to-government relationship between the tribes and the United States through Executive Order 13175 (November 6, 2000).

Tribes have reserved rights and privileges for their tribal members on any off-site reservation lands ceded through treaties or executive orders to the U.S. Government. The Forest Service manages some of those off-reservation lands ceded through treaties or executive orders. Therefore, the agency has certain legal responsibilities to American Indian Tribes. The Forest Service is required to manage the lands under their stewardship with full consideration of the federal trust responsibility and tribal rights and interests, particularly reserved rights where they exist. In meeting these responsibilities, the agency consults with the tribes whenever proposed policies or management actions may affect their interests.

Comments from the Public

Considerations for forest plan revision

Following is a summary of comments from the public since 2003 (when the Forest Plan Revision Interdisciplinary Team (planning team) began receiving input regarding changes to the current Colville, Okanogan, and Wenatchee forest plans) through 2011 (when the proposed action was provided to the public as part of the public scoping process).

Analysis of the Management Situation

In the early stages of the plan revision process, the planning team visited communities to engage the public in discussions about which parts of the plan needed changing and which topics to concentrate on in the revision.

To begin discussions, the team identified areas of the plan that needed to be revised from the current Forest Plans. The public then commented on these areas of discussion and presented additional topics to consider. Following are the themes and comments from those meetings. Since those original discussions, the planning team has confirmed that these continue to be areas of concern in the current Forest Plans and therefore have a need for revision.

The following public comments are organized by resource or areas of the current forest plans that are being considered for revision.

1. VEGETATIVE SYSTEMS

- a. The public has indicated that they view the realm of vegetation management as having more facets than merely providing outputs of commodities.
- b. Most comments received were in the areas of timber supply and the matter of properties at risk from wildland fire. The concern for protection of structures and adjacent forests in the wildland urban interface surfaced at public meetings. The public encouraged the Forest Service to accelerate management in interface areas.
- c. Some concern was expressed about the definition of “old growth” and how location and amount of old growth was determined. Members of the public indicated that old growth should be recognized as an “ecosystem condition” and not simply as large trees. Current management direction for old growth does not address forest health issues, provide for the sustainability of wildlife habitats in dry forest types, or address landscape dynamics and desired conditions.
- d. Others commented about the importance of large trees, indicating that the differences between old growth and old and large trees is important and likely controversial.

2. PLANT HABITATS

- a. Invasive Weeds - Comments on noxious weeds emphasized the need to accelerate control measures. This sentiment was echoed in written comments and comments expressed at public meetings.
- b. Threatened and Endangered Plants - Comments encouraged continued protection of threatened and endangered plants. Comments received addressed maintenance and enhancement of rare plant populations on the Forests. Concern was expressed for the impacts that general Forest Service management activities, specifically recreation and grazing, would have on threatened, endangered, and sensitive species, native plants, and biodiversity. Further concerns focused on the impacts of invasive plant species on rare plant populations. Comments about invasive plant species also contained some concern for herbicide effects on non-target plants. Prevention was emphasized as a component of an integrated weed management program.

3. WILDLIFE HABITATS

Analysis of the Management Situation

- a. There was a diversity of comments about the level of emphasis that should be given to wildlife conservation and the maintenance of habitats. The comments ranged from a desire to provide a high level of emphasis to a desire to balance the needs of people and wildlife.
- b. The potential for conflict between access to the national forest and the need to provide secure and well-connected habitats for wildlife species was expressed, as well as the importance of using the best science to guide conservation efforts.

4. THREATENED AND ENDANGERED WILDLIFE

- a. The topic of recovery of grizzly bear populations elicited comments from diverse positions, ranging from those who favor to those who oppose efforts to recover bears. A common concern is how to balance human needs to access the Forest with the needs of the grizzly bear for secure habitats. Using good science to guide grizzly recovery efforts is important.
- b. Some people expressed concerns over conflicts between trying to recover grizzly bears and caribou in the same area.
- c. Some comments expressed concern about the potential conflicts between Canada lynx conservation and access for recreation. Members of the public have shown interest in how timber harvest can be used to manage habitat for lynx. The need to use good science to guide lynx conservation efforts was identified.
- d. Concern about pursuing wolf recovery was expressed. The potential for conflict between access to the Forest and the need to provide secure habitat for federally listed species was identified. The importance of using the best available science to guide conservation efforts was identified.

5. ACCESS SYSTEM

- a. Access to the national forest is one of the more controversial issues in forest planning. Comments indicate there appears to be an increase in conflicting values about motorized versus non-motorized recreation.
- b. Members of the public are concerned about the new travel management policy (finalized November 2005), how it will affect their access opportunities and mode of transportation, the federal threatened and endangered species listing, and access restrictions that protect habitat.
- c. Members of the public have expressed discontent with Forest management, commenting that the Forest does not supply enough recreation access to support the demand for recreation opportunities. They feel that road and trail maintenance has been reduced, making access more difficult.
- d. The management of roads was important to many who provided comments when the Forest Plans were first developed. Many recent comments expressed the desire for improved maintenance on all roads. Most comments, however, reflected diverse opinions about whether existing roads should be kept open and whether new roads should be constructed. Some of those who commented felt that roads should be kept open for access to fires, and that loops to provide emergency exits

should be developed by connecting roads. Others believed that roads increase the risk of human-caused fires by providing access to more areas.

- e. Many felt the road system is oversized and that more miles of roads should be closed or decommissioned for the protection of wildlife and other resources. Others thought that roads do not cause loss of wildlife habitat or other resource damage, and that more roads are needed to accommodate an increased number of users, and provide a higher level of access to the Forest.
- f. Many comments pointed out that an analysis of all roads (including unauthorized and user-built roads that are not assessed in the current roads analyses) should be completed to determine which roads should remain open and which should be closed or decommissioned. (Unauthorized roads are defined as roads on National Forest System lands that are not managed as part of the Forest transportation system, such as unplanned roads, abandoned travel-ways, or roads that were not decommissioned upon the termination of a permit or other authorization [FSM 7700, 36 CFR 212.1]).
- g. The importance of economic diversity in communities was emphasized. This diversity depends on Forest access and the ability to market access through activities and events, such as community snowmobiling and mountain biking events.

6. LIVESTOCK GRAZING

- a. Range permittees have expressed concern that applying stubble height standards uniformly across an allotment may unnecessarily restrict grazing operations.
- b. Some public comments expressed concern for grazing impacts on rare plant resources and their habitats.
- c. Some expressed concerns about impacts of grazing on aquatic and riparian habitats.

7. RECREATION

- a. The public appears to be concerned about “unmanaged recreation”, commenting that resource damage is occurring due to a lack of administrative management or presence. The resource damage referred to includes vegetation destruction, soil compaction and disturbance from vehicle parking, human waste, and garbage littering the ground.
- b. Some user groups have expressed interest in seeing more opportunities to enjoy their activity of choice such as providing more settings for ATV users, more trails designed for mountain bike use, and more non-motorized areas for winter use. Local residents would like to see more settings developed for day use proximate to communities both to benefit residents and tourism.
- c. Some user groups expressed a concern that they would lose access for snowmobiling, horseback riding, and mountain biking.

8. RENEWABLE FOREST PRODUCTS

Analysis of the Management Situation

- a. The public has expressed concerns and ideas about timber supply. Some comments emphasized the need to harvest timber to maintain local economies. Others saw the Forest supplying other outputs, such as recreation, that support local economies as timber outputs have in the past.
- b. The public expressed concerns about harvesting areas burned by wildfire. Some felt harvest was necessary to capture the economic value of the trees and speed recovery, while others saw harvest as unnecessary where natural processes will bring about recovery.
- c. Residents would like access to a supply of firewood.

9. SCENERY

- a. People have commented that they would like to see more salvage logging in scenic areas to better sustain the forest and prevent uncharacteristic fire. They have also expressed a desire for the Forest Service to give more consideration to scenery when harvest activities are conducted within sight of communities. Views from the air have become an increasing concern by the public, as well as background views.
- b. A portion of the public would prefer to see no salvage logging on the Forest.

10. MANAGEMENT AREAS

- a. Members of the public agree that clarifying the locations and descriptions of the current management areas (MA) would be helpful. However, the public expressed concern over using the same MA classifications on all three Forests in the planning area (Colville, Okanogan and Wenatchee). Many remarked that if a consistent MA classification, with fewer MAs, was applied to the three Forests, the unique resource conditions of some areas would not be recognized.

11. WILD AND SCENIC RIVER RECOMMENDATIONS

- a. Some people commented on retaining the current wild and scenic river recommendations, and requested further analysis of additional rivers.

12. WILDERNESS RECOMMENDATIONS

- a. Part of the forest plan revision process is to identify which portions of the roadless inventory should be recommended for wilderness designation. Numerous comments on the subject of roadless areas indicate a wide-ranging mix of sentiments from desiring commodity use and motorized use in inventoried roadless areas to making inventoried roadless areas (IRAs) designated wilderness.
- b. Some people want the roadless areas to stay as they are and not be developed or designated as wilderness because they like the diversity of uses available in a semi-primitive to primitive environment. In terms of recreation, they would like to use mountain bikes, which are restricted from wilderness, and not be restricted to a party size as they are in designated wilderness areas. Some people wish to use motorized tools, which are prohibited in wilderness.
- c. Recreationists that use motorized transportation have expressed a desire for the

primitive quality of the IRAs where they can snowmobile or use their motorcycles in a mostly unmodified landscape that offers challenges.

- d. People favoring wilderness recommendations cite designation as the only permanent form of protection from activities such as road building and mining. They want to protect ecosystem values and unique settings, provide for primitive forms of recreation, and enhance tourism economies.
- e. Some comments ask for more land to be identified as IRAs and suggest that we obliterate roads so the land will meet the criteria of a roadless area.
- f. Some want to obliterate roads that intrude into the IRAs because they dissect the roadless area, or cause a disconnection between two roadless areas. Others are asking for a re-inventory, claiming that previous inventories were incomplete or inadequate.
- g. There have been comments on the inaccuracies of the original mapping.

13. THE EASTSIDE SCREENS, PACFISH, AND INLAND NATIVE FISH STRATEGY (INFISH) INTERIM GUIDANCE

- a. Public comments cover a wide range on the subject of Eastside Screens. Some favor extending the screens or introducing more restrictive standards and guidelines. Others favor minimizing the level of restriction to timber harvest activities.
- b. Public comments suggested that PACFISH and INFISH riparian protections should be incorporated into the revised forest plan.

Eastside Screens - Decision Notice for the Continuation of Interim Management Direction Establishing Riparian, Ecosystem and Wildlife Standards for Timber Sales (May 20, 1994)

PACFish - Interim Strategies for Managing Anadromous Fish-Producing Watersheds in Eastern Oregon and Washington, Idaho, and portions of California (PACFISH, USDA and USDI 1995)

INFish - Inland Native Fish Strategy (INFISH, USDA Forest Service 1994c and 1995)

New Information

In addition to gathering information from the public, the planning team reviewed other new information. This included new science, completed and on-going research, results from monitoring and evaluation of past projects and management, decisions from past forest plan and project level appeal issues, lawsuit issues and decisions, climate change, changed conditions of the land, and forest service policy on ecosystem management at a landscape scale.

Other new information was provided by watershed and forest health assessments and forest-scale roads analysis. Key elements were reviewed from “The Interior Columbia Basin Strategy: 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” (the Strategy, 2000). The Strategy takes into consideration concerns raised by

the public throughout the Interior Columbia Basin planning process and the findings of the Interior Columbia Basin science assessment. Key elements identified in the Strategy include looking at the contribution of the Forest to:

- Sustain, and where necessary and practical, and within available funding, restore the health of forests, rangeland, aquatic, and riparian ecosystems.
- Provide a predictable, sustained flow of economic benefits within the capability of the ecosystems.
- Provide diverse recreational and educational opportunities within the capability of the ecosystems.
- Contribute to the recovery and de-listing of threatened and endangered species and 303(d) listed waters.
- Manage natural resources consistent with treaty and trust responsibilities to American Indian Tribes.

Overview of Challenges to Managing Our National Forests

The plan revision interdisciplinary team reviewed current challenges to managing the national forest while considering what changes were needed to the current Forest Plans. The following challenges were identified as the most critical to sustaining resources on the Colville and Okanogan-Wenatchee National Forests. Although reviewed while the three forests were completing a combined plan revision effort, the challenges identified pertain to the individual forests as well.

The Okanogan-Wenatchee National Forest encompasses about 4 million acres, which accounts for about 9.4 percent of the total land area in Washington State. The Colville National Forest encompasses about 1.1 million acres, or 2.6 percent of the total land area in the state. Combined, these lands account for 12 percent of the total land area in Washington State. These lands provide numerous critical social, ecological, and economic benefits to the state.

The key to providing continued public benefits includes providing recreation access, facilities, and services, providing renewable and non-renewable forest products, and providing roads, services, and accommodations to support local economies. It also lies in the protection of clean water sources, aquatic and terrestrial habitat for species of fish, plants, and wildlife, and preservation of heritage resources. It includes providing quiet, natural places for personal renewal while emphasizing planning and restoration of forest ecosystems to make them more resilient to changing climates.

Major challenges facing Forest managers include population growth, urbanization, appropriate recreational use, access, climate change, drought, disease, tree mortality, fire, invasive non-native species, and protection of natural resources. Descriptions of these challenges follow.

CLIMATE CHANGE

Projected climate changes, based on current knowledge, information and data presents

significant challenges in predicting trajectories. The current state of knowledge and modeling results in a high level of uncertainty in accurately predicting localized climate change influences and results. Nor do we have the knowledge on how systems and species could potentially react to these changes. This high degree of uncertainty suggests viewing desired conditions as a 'working hypothesis' based on the best available information at this time and subject to constant review as a result of monitoring at scales that can detect relevant changes. Another significant part of the challenge presented by climate change is in creating sustainable landscapes for fish, plant and wildlife species recovery. Following are a few climate change factors to consider.

- Climate is already a significant stressor in the Columbia Basin and eastern Cascade Range and if predictions are correct, the amount of wildfire could double by the 2040s. This will be particularly true in the central Cascade Range.
- Possible consequences of global climate change include: 1) changes in growing seasons and arable areas, 2) changes in species composition and distribution, 3) changes in growth rates, 4) potential extinction or extirpation of species, 5) increased carbon turnover at higher latitudes and elevation, 6) increased forest fires, 7) changes in forest health, and, 8) changes in hydrologic patterns and functions.
- Rapid climate changes will result in plants and systems whose response will not be able to keep up with or adjust to the changes. Vegetation communities as we know them will change. Exotic and invasive species are likely to be more prevalent as new niches open up because native vegetation cannot keep up with climate changes. Processes, interactions, and functions within vegetation communities will change.
- The degree of change cannot be predicted due to the current ability of models and data to predict climate scenarios at a Forest scale. Societal preferences and priorities may not allow a response until a crisis occurs and ecosystems have already crossed thresholds, resulting in either very expensive recovery or no recovery at all.

The above climate change considerations will influence the land management direction that is developed and analyzed in the alternatives for forest plan revision. Climate change will be considered in the analysis and disclosure of the effects of each alternative. The following are a few ways that climate change considerations may influence the content of the plan.

- Desired conditions for vegetative and aquatic systems will account for possible effects of climate change as well as for the uncertainty associated with our current knowledge.
- Analysis of species sustainability will consider effects of climate change to habitats and possible changes in fire effects as a risk factor that may influence plan components adopted to assure sustainability.
- Identification of appropriate and implementable plan objectives to move toward desired conditions will need to consider climate change.
- Standards or guidelines for vegetation management practices may include provisions that consider the effects of climate change on desired species composition.

- The forest monitoring plan may include monitoring of the potential effects of climate change on forest resources.

ECOSYSTEM SUSTAINABILITY

Our Forests are becoming more valued for large areas of naturally functioning ecosystems. However, climate change, increasing pollution, spreading invasive plant and animal species, and human activities threaten to destabilize these same ecosystems. Demand for natural resources, whether for recreation or commodity contributes additional pressure to ecosystem sustainability. Affected, for example, are water quality and soil productivity, fish and wildlife habitat, and our overall enjoyment of national forests. Fragmentation of wildlife habitat resulting from growth patterns on lands adjacent to national forests, management activities, and increased use of national forest system lands is affecting our ability to manage for federally protected species, such as the northern spotted owl, Canada lynx, and grizzly bear.

INSECTS AND DISEASE

In the past ten or more years, there have been extensive outbreaks of native insects resulting in widespread tree mortality over large landscapes. The most notable have been mountain pine beetle in lodgepole pine and whitebark pine, and western spruce budworm (a defoliator), in true firs (e.g., grand fir) and Douglas-fir.

The information on the scale of these outbreaks is largely based on aerial surveys dating back many decades. Causes of the outbreaks include overstocked forests; species composition changes; climate change influencing insect, pathogen, and host response, and simplification of ecosystems.

Native forest pathogens such as root diseases and dwarf mistletoes cause slow changes in the forest structure and composition. When present, root diseases cause substantial growth loss of tree host species. While native and important in creating stand diversity and structure, impacts from root diseases have increased as late seral tree species are retained on site and stands are denser than they were historically. Dwarf mistletoes, an obligate parasitic plant, which are generally host specific, are more prevalent in multistoried stands of the same tree species. Dwarf mistletoes, especially in Douglas-fir, ponderosa pine and larch, cause growth loss and stunt trees.

Two non-native introduced insects and a disease impact the forest tree species. White pine blister rust, a pathogen specific to five-needle pines, in the early 1900s reduced the amount of western white pine in the ecosystem, continues to cause difficulty in regenerating western white pine and is causing dieback and mortality of the limited populations of whitebark pine. The introduced balsam woolly adelgid continues to increase slowly across northeast Washington contributing to mortality primarily in subalpine fir, grand fir, and Pacific silver fir. Periodic outbreaks of the larch casebearer, an introduced defoliator of larch, are controlled by introduced parasites.

Commerce and human movement increase the potential for introducing exotic insects and pathogens, such as gypsy moth. Where favorable conditions exist (both host and climate), these exotic species could become established and alter natural ecosystems.

FIRE MANAGEMENT

Fire is an essential disturbance process within dynamic and resilient ecosystems. However, of significant concern on the Colville and Okanogan-Wenatchee Forests is the recent history of uncharacteristic fire that is more severe, dangerous, and difficult and costly to suppress.

Uncharacteristic fire may also have other consequences, such as erosion, reduction of soil productivity, flooding, spread of invasive plant species, reduction in water quality, fish habitat and habitat for federally listed aquatic and terrestrial species, and destruction of the Forest's infrastructure and adjacent property values. Uncharacteristic fires are associated with increasingly high levels of dead and downed fuel, overstocked forests, drought, disease, and insect outbreaks. Adding to the complexity and danger of fire suppression is new construction of homes in the wildland interface areas adjacent to national forest lands.

To reduce the possibility of uncharacteristic wildfire, managers must look for ways to create resilient ecosystems through active management and restoration projects while juggling budgetary, environmental, social, and political constraints. The goal is to reduce the threat of uncharacteristic wildfires and restore fire to its natural role, thereby reducing the cost of fire suppression, ensuring public and firefighter safety, and protecting social and environmental resources.

Climate change predictions for Washington indicate the potential doubling of area burned by wildfires by 2040 and a potential tripling of fire acres by 2080. It is uncertain how Congress and state agencies might respond to the funding of fire-fighting resources in the future.

Nevertheless, fire-fighting resources are expected to be significantly strained, a situation that may be exacerbated by climate change. It is likely that more unplanned fires will be managed instead of being suppressed due to limited firefighting resources. Risk management, firefighting resource availability, firefighter safety and desired conditions will drive fire decisions, but the result will still be more acres burned.

RECREATION

Recreational use of the Forest is projected to increase due to population growth, more retirees seeking outdoor exercise, and increased participation in specific activities such as snowmobiling. Residents are also seeking rural, healthful, outdoor-oriented lifestyles in communities surrounding the Forest. In most cases infrastructure supporting day use, such as trails and picnic areas, are lacking near communities. Changing demographics is generating the need to provide appropriate infrastructure, such as facilities for large group use. Some activities that have greatly increased in popularity since the current plans were completed, such as mountain biking and ATV use, would benefit from enhancing opportunities on the Forest. Some activities lack an equitable distribution of settings across the planning area. Prior planning did little to consider the needs of winter recreationists.

As development of private land continues, the Forest Service anticipates a greater dependence on the national forest for activities and experiences that are becoming increasingly rare elsewhere. In many locations, resource impacts and crowding associated with recreational use are on an increasing trend, with damage to riparian areas and illegal trail development being of particular concern.

Analysis of the Management Situation

Ongoing maintenance of deteriorating and costly recreational infrastructure is a challenge with limited resources. In particular, roads, trails, bridges, docks, water systems, septic systems, and buildings are high cost items to maintain and efficiencies need to be realized.

The Omnibus Public Land Management Act created the Pacific Northwest National Scenic Trail in 2009. Portions of the trail are substandard or do not fall on existing system trails.

Improving the trail infrastructure including access points such as trailheads will continue over the life of this plan.

Climate change will likely affect recreational infrastructure and opportunities in a number of ways. Winter sports may be affected by the snowline shifting to higher elevations. Summer recreational uses will likely have a longer season of use. Flood events are predicted to increase, which in turn affects the resilience of our access systems such as roads, trails, bridges, and developed recreation facilities. The rising temperature predicted in streams will change opportunities for fishing. A potential rise in insects and disease infestations could increase hazard trees, the incidence of downed logs across roads and trails, and the likelihood of forest fires affecting recreational access.

A final challenge is maintaining relevancy of the national forest to the full cross-section of the population. Even though recreational use is expected to increase over the life of the land management plan, there are sectors of the population that seldom visit public lands or their use is projected to decrease. Maintaining recreation infrastructure and providing opportunities for a broad cross-section of the public will contribute to a future constituency.

ACCESS SYSTEM

Issues surrounding access to the national forest are complex. Limited budgets, maintenance backlogs, safety improvements, resource protection, road construction or reconstruction, providing access, and decommissioning of roads are just a few of the challenges transportation planners face.

The Colville National Forest administers over 4,000 miles of system roads and the Okanogan-Wenatchee National Forest administers over 8,000 miles of system roads. The cost of maintaining this extensive road network while providing recreation access, habitat effectiveness for wildlife, and restoring habitat for fish presents challenging resource trade-offs.

Some challenges are central to managing forest access on system roads that were originally constructed for fire protection and timber harvest and other resource extraction. These typically narrow and steep roads, not designed for general passenger car use, provide few if any turnouts and are not necessarily compatible with an increasing need for recreation access.

Posing an additional challenge is demand for convenient access to our Forest. Traditional points of access are being lost as private lands are developed adjacent to national forest lands, often resulting in development of unauthorized roads and trails. Increased housing density in areas adjoining National Forest System lands adds to the potential for encroachment, trespass, and unauthorized use and occupation. Increased development activities on private lands in the vicinity of National Forest System boundaries can complicate resource planning on National Forest System lands and make land use planning and administration more expensive.

Additional private landowners adjacent to national forests means more neighbors with whom the Forest Service needs to coordinate in arranging access for fire management and recreation, managing ecosystems jointly across the landscape, and other management activities. This is a challenge when residential developments and private individuals are reluctant partners.

RENEWABLE FOREST PRODUCTS

The Colville and Okanogan-Wenatchee National Forests are experiencing a growing demand for energy sources, minerals, water, and renewable forest products such as huckleberries and mushrooms, material for floral arrangements, native plants and seed, medicinal plants, sawtimber, and firewood. Managers must effectively communicate with an increasing diversity of people with varying knowledge of national forest management objectives in order to encourage responsible stewardship of the national forest.

Our success in achieving desired conditions depends on recognizing these challenges, some of which may be beyond our management capability, such as uncertainties around climate change, unforeseen environmental disturbances, and budgetary fluctuations. These challenges may mean it will take longer and more work to achieve the desired conditions. Annual Forest budget proposals are based on activities and actions needed to achieve desired conditions. Congress allocates the Forest Service budgets on an annual basis, which may, or may not be, sufficient to implement proposed annual activities. Funding distribution between programs and the intensity or level of activities in those programs is a reflection of the forest plan and the will of Congress. The final determining factor in carrying out the intent of the forest plan is the level of funding, which dictates the rate of implementation of the Plan.

Summary of the Analysis of the Management Situation – Highlights of the Major Revision Issues

Following is a summary describing major revision issues of the Colville and Okanogan-Wenatchee National Forests, the current management situation, and the need to change the current Forest Plans.

This summary highlights the following major revision issues:

Landscape Character and Dynamics

- Aquatic and Riparian Systems
- Plant Habitats
- Vegetative Systems
- Wildlife Habitats

Social Systems

- Access System
- Livestock Grazing
- Recreation

Analysis of the Management Situation

Renewable Forest Products
Scenery

Management Areas

Administrative and Recreation Sites
Backcountry
Backcountry Motorized
Experimental Forest
Focused Restoration
General Restoration
National Scenic Area
Nationally Designated Trails
Research Natural Areas
Riparian Management Areas
Scenic Byways
Snoqualmie Pass Adaptive Management Area
Special Interest Areas
Kettle Crest Recreation Area
Wild and Scenic Rivers (eligible)
Wilderness – Congressionally Designated
Wilderness – Recommended
Wilderness Study Area

Monitoring

Updating monitoring design to meet current regulatory direction (2012 planning rule)

Landscape Character and Dynamics

Aquatic and Riparian Systems

The current Colville, Wenatchee and Okanogan Land and Resource Management Plans were amended to include additional direction to maintain the quality of aquatic and riparian habitats. The Aquatic Conservation Strategy (ACS), as part of the Northwest Forest Plan (NWFP; USDA 1994) was applied to the Wenatchee and a portion of the Okanogan National Forests. The Pacific Salmon Fisheries Strategy (PACFISH; USDA 1994) was added to the portion of the Okanogan that supports anadromous fisheries. The remainder of the Okanogan Forest and the Colville National Forest were amended by the Inland Native Fish Strategy (INFISH; USDA 1995), which provided similar direction for native non-anadromous fisheries.

This piecemeal approach to amendments has provided a set of direction with differing terminology that is confusing and complex to implement. Plan revision provides an opportunity to consolidate the direction into one place (the forest plan) providing an over-arching aquatic and riparian conservation strategy that can maintain and restore healthy watersheds throughout the Forest.

When the 1988 Colville forest plan was finalized, there were no fish species listed as threatened or endangered under the Endangered Species Act (ESA). Since completion of the Forest Plan, bull trout were listed as threatened under the Endangered Species Act.

Forest plan revision gives the Colville National Forest the ability to include management direction for new ESA listed species and other fish species of concern. Those other species of concern may include the following.

- Westslope cutthroat trout
- Interior redband trout (Colville and Okanogan National Forests only)

During forest plan revision the planning rule provisions were revised several times. Although a new planning rule was released in 2012, the Colville NF, which started plan revision under the 2000 planning rule in 2003, decided to complete plan revision under the 1982 planning rule. The plan is being revised under the transition provisions of the 2012 Planning rule (36 CFR 219), which state that the responsible official may complete and approve the plan revision in conformance with the provisions of the prior planning regulation, including the transition provisions of the reinstated 2000 rule (36 CFR part 299, published at 36 CFR parts 200 to 299, revised as of July 1, 2010).

Because the forests had completed most of the existing condition analysis prior to publication of the 2012 planning rule, and initiated scoping under the 1982 planning rule, the responsible official decided to continue plan revision under the transition language. The provisions of the 1982 planning rule being used are applicable to the development, amendment, and revision of land management plans (36 CFR 219.35). The 1982 rule procedures require integration of natural resource planning for national forests and grasslands, by including requirements for integrated management of timber, range, fish and wildlife, water, wilderness, and recreation resources, with resource protection activities such as fire management, and the use of other resources such as minerals.

To meet the sustainability requirements of the 2000 planning rule, the Colville and Okanogan-Wenatchee NFs, participated in a Region 6 pilot effort to develop a process to address the contribution of National Forest System lands to the “sustainability of aquatic species”. The result of the regional pilot process is a paper titled, *Process for Evaluating the Contribution of National Forest System Lands to Aquatic Ecological Sustainability* (Reiss et al. 2008). Reiss et al. (2008) developed the Aquatic Ecological Condition model to evaluate the status of local populations of focal species and their habitat at the HUC12 or sub-watershed scale. The results are then aggregated to produce an ecological sustainability or viability outcome for each focal species at the subbasin (HUC 8) scale.

The process developed by Reiss et al. (2008) relies on the use of “focal species” to assess current aquatic species status and later to assess the potential effects of alternatives on species viability. There are many aquatic native and non-native species that inhabit streams and rivers on the Colville NF. It is not possible to analyze viability for all the aquatic species present in subbasins within Colville NF lands. The focal species serve as surrogates for other aquatic vertebrate and invertebrate species. For the Colville plan revision, the term surrogate is used in place of focal to be consistent with the 1982 planning rule.

The three surrogate species for the Colville will be carried forward as both surrogate and management indicator species (referred to as MIS/surrogate species) because the bull trout are a

threatened species, the three species have special habitat needs that may be influenced significantly by planned management programs; the interior redband and westslope cutthroat are species of concern and game fish; and because population changes could be indicators of the effects of management activities on other species, biological communities, or on water quality.

A bull trout recovery plan has been completed for Washington that includes all of the Colville and Okanogan-Wenatchee NFs. The direction in the current Forest Plans calls for consistency with any new recovery plans for listed species. In the revised Forest Plans, it may be necessary to provide additional direction that complements the recovery plans. The recovery plans identify priority areas where fish habitat needs to be protected or restored to recover the listed species.

The Upper Columbia Recovery Plan highlights the importance of habitat for bull trout on national forest lands to meet recovery objectives. These priority areas identified in the recovery plans can be used to help determine the key watershed network in the forest plans. Besides protecting currently healthy habitat, typical habitat restoration activities include fixing culverts that are fish passage barriers, reducing sediment from forest roads, improving the health of riparian habitat and increasing habitat complexity.

The recovery plans have identified limiting factors and threats, short and long term habitat objectives in general, priority assessment units (similar to watersheds) for protection and restoration, general actions needed for restoration, and in the case of the Upper Columbia River, an implementation schedule of specific actions.

The current Forest Plans, as amended by the NWFP, PACFISH and INFISH, do not integrate restoration of terrestrial and aquatic ecosystems or facilitate integrated management of aquatic resources with upslope terrestrial vegetation and hazardous fuels reduction and recreation management. Roads directly affect aquatic habitat and fish by disrupting hydrologic function, increasing sediment delivery to streams and blocking aquatic species access to habitat. Recreation, especially dispersed recreation, can degrade aquatic and riparian habitat. Unrestricted dispersed recreation has resulted in accelerated soil and bank erosion, loss of large wood in stream channels and floodplains and harassment of spawning fish.

Increasingly recognized is the need for management of vegetation and aquatic habitat to be viewed in an integrated fashion with the primary management constraint being the conservation and restoration of natural processes that create diverse and resilient ecosystems. This suggests a different paradigm for land management, moving from fish and wildlife being constraints to vegetation management to integrated management of the ecosystem. The revised Forest Plans will recognize the dynamic nature of aquatic environments and the role of disturbance in creating and maintaining habitat over time.

Plant Habitats

The revised Forest Plans need to provide management direction for preventing introduction and spread of invasive plants and treating and restoring infested sites.

The spread of invasive plants has many undesirable consequences. Invasive plants displace native plants, reduce forage for wildlife and livestock, degrade habitat for threatened, endangered, and sensitive species. They increase soil erosion and reduce water quality, reduce soil productivity, and change the intensity and frequency of fires. Currently, invasive plants are spreading at a rate of 8 to 12 percent per year. Invasive plants can spread between National Forest System lands and neighboring areas, affecting all land ownerships.

Amendments to the current plans, most recently the 2005 Pacific Northwest Region Invasive Plant Program Preventing and Managing Invasive Plants Record of Decision, have updated forest plan management of invasive plants. That management direction is intended to decrease the rate of spread of invasive plants, while minimizing adverse effects to land management programs, human health, and the environment. Early detection and rapid response is emphasized to increase the effectiveness and reduce potential for detrimental impacts of invasive plant treatments. The revised Forest Plans should carry forward the intent of that direction.

The revised plans need to discuss two groups of plant species: federally listed threatened and endangered plant species (TE) that occur (documented) or may occur (suspected), and USDA Forest Service Region 6 sensitive plant species (S) that occur in the planning area. Threatened and endangered species are those formally listed by the USDI Fish and Wildlife Service under the Federal Endangered Species Act. Sensitive species include those vascular and non-vascular plant taxa and fungi from the R6 Regional Forester Sensitive Species List. Habitat for many threatened, endangered and sensitive (TES) plant species include unique habitats that may be rare or represent a small portion of a particular landscape. In forested landscapes these unique habitats are ecosystems such as meadows, wetlands (marsh, bog, fen, carr, swamp, spring, and seep), riparian vegetation, alpine fellfields, rock outcrops, cliffs, or talus that are suitable TES plant habitat.

The Colville National Forest does not currently have any federally threatened, endangered, or proposed threatened plant species.

The Colville Forest has 41 R6 documented sensitive plant species including vascular and non-vascular plant taxa and fungi. These taxa occur from high elevation alpine tundra to warm, low elevation forests as well as moist meadows, wetlands, and riparian areas.

Vegetative Systems

The current Forest Plans attempted to balance the needs of ecosystem management with the provision of goods and services. However, over the past decade, changes in ecological conditions and social values have added to the challenges of maintaining this balance. Climate change may be contributing to increased numbers of uncharacteristic wildfires and spread of insect infestations and disease. Subdivisions and houses established immediately adjacent to the Forests are increasing the costs to the agency for fire suppression. These changes are affecting the Forests' ability to provide healthy plant and wildlife habitat, clean water, forest products, and settings for recreation.

Potential increases in wildfires, disease, and pests stemming from climate change and other factors will alter the structure and composition of forest and rangeland vegetation. However, while fire is an essential element of a resilient ecosystem, uncharacteristic fire increases erosion, reduces soil productivity, spreads invasive species, reduces water quality, aquatic and wildlife habitat, and destroys recreation settings.

Fire tends to grab the headlines especially when it threatens homes and structures. However, in the past ten years insect impacted acres have exceeded fire acres. The following graphs compare fire acres with the two largest insect factors: western spruce budworm (WSBW) and mountain pine beetle in lodgepole pine (MPB-LPP).

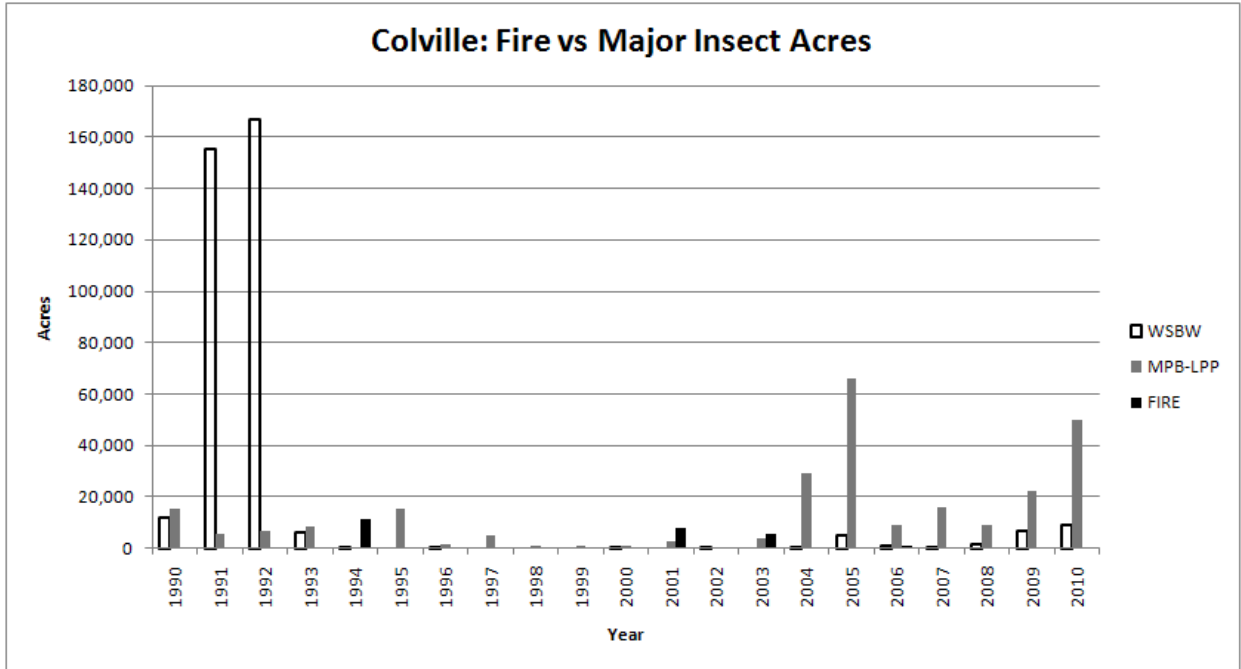


Figure 1. Comparison of fire acres with western spruce budworm (WSBW) and mountain pine beetle in lodgepole pine (MPB-LPP)

Wildlife Habitats

The Colville National Forest provides a wide-array of habitats for a diversity of wildlife species. The species addressed in forest planning include federally listed species, surrogate species (including Management Indicator Species and R6 Sensitive Species), endemic species, and other species of management interest.

Since the completion of the current Forest Plans, new wildlife species have been listed (Canada lynx, yellow-billed cuckoo) and proposed for listing (wolverine), and others delisted (peregrine falcon, bald eagle, gray wolf) from the federal Endangered Species Act (ESA). Considerable new science has developed since the current Forest Plans were completed concerning the viability of a wide-array of wildlife species. In addition, methods for assessing species viability have evolved, and choosing which species to assess that best represent other species has changed considerably.

The woodland caribou was federally listed as an endangered species under the ESA in 1984. The population was estimated between 27 and 46 animals during annual counts occurring from 2002 to 2012 (WDFW 2012). The caribou recovery area is 1,477 square miles in size and comprised of lands managed by the Colville National Forest, Idaho Panhandle National Forest, Idaho Department of Lands, and British Columbia. About 47 percent of the recovery area is in the United States, and 53 percent in British Columbia. The caribou recovery area is divided into 17 caribou management units, 4 of which occur on the Colville National Forest.

The Selkirk Grizzly Bear Recovery Area is located in northeastern Washington and includes parts of Washington, Idaho, and British Columbia. The Selkirk Recovery Area was included in

the original overall grizzly bear recovery plan for the United States.

In 2000, the Canada lynx was listed as a threatened species under the ESA, and in 2005 core, secondary, and periphery areas were identified to emphasize their importance for the recovery of lynx (USFWS 2005). On the Colville National Forest, the Kettle-Wedge area is identified as a Core Area for lynx, the Selkirk Mountains as Secondary Area, and the Okanogan Highlands (west of the Kettle Mountains) as Peripheral Area (USFWS 2005, ILBT 2013). No critical habitat was identified for Canada lynx on the Colville National Forest (USFWS 2009).

The yellow-billed cuckoo is listed as a threatened species under the ESA throughout much of the western United States. The last confirmed breeding records in the Washington are from the 1930s. Yellow-billed cuckoos are now extremely rare in Washington, with only 12 observed between 1950 and 2000 (WDFW 2012). Wolverine have been proposed for listing under the ESA. The wolverine is one of the rarest and least-known mammals in North America. Wolverine have been documented to occur in northeastern Washington, both historically and more recently (Aubry et al. 2007).

Wolverine have been proposed for listing under the ESA. The wolverine is one of the rarest and least-known mammals in North America. Wolverine have been documented to occur in northeastern Washington, both historically and more recently (Aubry et al. 2007). In addition, potential habitat has been identified in northeastern Washington and in adjacent Canadian provinces (Aubry et al. 2007, LoFroth and Krebs 2007). Wolverine habitat has been described as being primarily at high elevation and isolated from human activity (Carroll et al. 2001, Rowland et al. 2003, Aubry et al. 2007).

Several wildlife species have also been added to the Region 6 Sensitive Species list including the white-headed woodpecker, wolverine, several amphibian and bat species, and some invertebrates.

The management of deer and elk habitats on national forest lands remains an important issue for many members of the public. New science suggests that providing for thermal cover was over-emphasized in the current plans. The new plans will still address thermal cover but will also address the importance of providing for habitat effectiveness on key deer and elk habitats.

The health of native pollinator populations has been impacted over recent decades by a variety of factors including the loss of habitat, diminished quantity and quality of food sources, exposure to pesticides, and increased adverse effects of pathogens and parasites (USDA 2015). As a result, on June 20, 2014, President Obama issued a memorandum directing the heads of executive departments of agencies to create a Federal strategy to provide the health of pollinators. The new plan will address Best Management Practices for management of pollinators relevant to the Colville National Forest.

Recreational activities associated with wildlife include hunting and wildlife viewing. These activities result in important contributions to local economies. The Forests continue to cooperate with the Washington Department of Fish and Wildlife to provide and enhance hunting opportunities.

Changes in Law, Policy and Regulatory Direction

The Colville National Forest is currently meeting the conditions set forth by the USFWS for management of grizzly bears in the Selkirk Cabinet/Yaak Grizzly Bear Recovery Area. There

may be a need to revise management direction from the 1988 Colville forest plan to reflect current conditions for managing this grizzly bear population.

In 2000, the Canada lynx was listed as a Threatened species, and in 2005 core, secondary, and periphery areas were identified to emphasize their importance for the recovery of lynx (USFWS 2005). To date, no recovery plan for Canada lynx has been completed. Current management direction is provided through the Canada Lynx Interagency Agreement that relies on the science summarized in the Canada Lynx Conservation Assessment and Strategy (ILBT 2013). This agreement was intended to remain until it is replaced by management direction given in revised Forest Plans. There is a need to revise the Forest Plan to incorporate the emphasis areas identified by US Fish and Wildlife Service (USFWS 2005) and to replace the interim policy given in the Interagency Agreement.

The woodland caribou was federally listed as an endangered species in 1984. In the mid-1990s, to advance recovery, an interagency effort was initiated to augment caribou populations in the Selkirk Mountains of Washington. A caribou habitat management area was included in the 1988 Colville forest plan. New science has identified winter recreation activities as an important issue in relation to caribou recovery; this issue was not addressed in the 1988 forest plan. A recreation strategy has been developed that can be used to guide how recreation is addressed in the revised forest plan (USFS 2003).

A terrestrial species assessment was completed in order to identify plan components that would be important for the viability of species. The assessment followed Region 6 process and included an evaluation of over 700 species resulting in 209 being identified as species of concern. These species were then grouped into 28 habitat groups and 26 surrogate species representative of each group were formally assessed for their viability. The results of these assessments were used to develop key components of the proposed action. Some of the key findings from this assessment include the following:

- Riparian habitats are important for a wide-variety of the surrogate species assessed. A strategy that protects and restores riparian habitat, including addressing the negative effects of roads, is needed.
- Late-successional and old forest habitats are generally below their historical range of variability. In some forest types, such as the dry and mesic forests, active restoration of old-forest habitat is needed to restore important habitat structures (e.g., large trees) and to reduce risk of habitat loss due to uncharacteristically severe wildfires.
- Restoring habitat effectiveness, by reducing the negative effects of roads, is important for several surrogate wildlife species.
- Restoring the connectivity of wildlife habitats is an important strategy for addressing the effects of climate change on wildlife populations. Restoring habitat connectivity, especially within riparian habitats, is important and needs to address the negative effects of roads.
- The availability of large and old trees and large snag habitat is generally lacking in many forest types because of past management practices and altered disturbance regimes.

Social Systems

Access System

Access refers to the national forest road and trail system, and the bridges and docks that are a part of the system, which are managed by the Forest to provide access on the national forest.

There are approximately 4,000 miles of system roads on the Colville National Forest. The Forest has approximately 500 miles of summer-use trails and approximately 40 miles of cross country ski trails. The Forest manages a special use permit for the 49 Degrees North Mountain Resort where the public enjoys downhill skiing, cross country skiing and a Nordic trail system. The Forest offers a groomed winter over-snow vehicle trail system located almost exclusively on existing forest system roads. Winter trails are limited on the Colville National Forest due to lynx habitat in the higher elevations (no additional groomed routes are allowed in designated lynx habitat) and inconsistent snow conditions in the lower foothills and valleys.

Livestock Grazing

The Multiple Use Sustained-Yield Act of 1960 mandates that national forests are administered for a variety of uses including livestock grazing.

Livestock grazing is authorized through a permit system that allocates forage for grazing. The permits authorize the number of livestock by forage quantity and availability along with condition of an allotment area, including a desirable rangeland resource condition based on species composition and resource concerns. Allotment management plans provide site-specific details for management of the resource and identify mitigation measures needed to reduce identified impacts in order to meet or move toward management objectives.

Ranchers often supplement the forage base on private lands with range allotments on national forest land. Habitat and forage tend to be more suitable for cattle grazing than sheep on national forest lands.

Although livestock grazing on National Forest System lands has decreased since the early 1900s, the ranching industry remains an important part of the local community culture and economy. Local ranchers graze cattle on the rangelands and forested ranges of the national forests during late spring, summer, and early fall. Public land grazing is often an integral component of overall ranch operations.

Livestock grazing is a locally important industry in northeastern Washington. In 1994, the Colville, Okanogan, and Wenatchee National Forests provided approximately 90 percent (about 98,000 AUMs) of the total grazed forage in Washington's national forests. In 2002, this percentage was up to 93 percent (almost 80,000 AUMs) (Ridlington 2004). Even though the total contribution has declined in terms of AUMs, the three Forests remain contributors toward meeting the Washington demand for grazed forage.

Recreation

The Colville National Forest is the backyard for the communities of northeastern Washington as well as the greater Spokane area. Through National Visitor Use Monitoring (NVUM) we know how much recreational use each Forest receives and how many people participate in the various recreational activities.

The Forest, situated in the Okanogan Highlands, is characterized by heavily forested mountains with steep sidewalls and broad, rounded summits shaped by continental ice sheets. A number of small lakes afford water-based recreation opportunities, as do the Kettle and Pend Oreille Rivers. The Forest features scattered rustic camping opportunities in small campgrounds and dispersed sites. One downhill ski area is easily accessed from Spokane. Several scenic byways transect the Forest, drawing increased use, including international use. Historic features, such as old homesteads and mines contribute to a sense of place. Portions of the forest landscape are fragmented due to settlement patterns and checkerboard private lands reflecting the establishment of railroads in the 1800s—this in turn affects recreational access.

Opportunities for trail-based recreation are scattered across the Forest. A large OHV single-track and ATV trail system connects Batey-Bould to the Little Pend Oreille Lakes OHV system. The Forest has designated extensive road systems as open to "mixed use" where street legal traffic can mix with ATVs and motorcycles. A few, relatively short 4x4 trails are scattered across the Forest. The largest non-motorized trail systems lie along the Kettle Crest (which attracts stock users, mountain bikers, and hikers), and near Sullivan Lake, including the Salmo-Priest Wilderness and nearby unroaded areas. A number of extensive snowmobile trail systems and several small Nordic trail systems are groomed.

Through National Visitor Use Monitoring (NVUM) we know how much recreational use each Forest receives and how many people participate in the various recreational activities. The 2009 NVUM survey (the 2014 report has not been completed) showed that 362,000 people visited the Forest of which 1,000 represent visits to designated wilderness. Half the visitors are local (live within 50 miles of where they recreate) and the other half traveled farther.

The Spokane area (including Kootenai County in Idaho) is on a growth trend and the Colville National Forest can expect increased visitation as these areas continue to grow. While Spokane is a major metropolitan area, the population base is a much smaller scale than the greater Puget Sound area. Hence, the Colville National Forest does not share the recreational pressure and the issues of crowding that occurs on national forests closer to Seattle; therefore, the Forest generally has capacity to support increasing use for most activities.

The six top primary activities engaged in by visitors sampled in 2009 included—

- downhill skiing (23.3 percent totaling 84,346 visits)
- viewing natural features (12.0 percent totaling 43,440 visits)
- gathering forest products (8.6 percent totaling 31,132 visits)
- developed camping (8.5 percent totaling 30,770 visits)
- hiking and walking (7.8 percent totaling 28,236 visits)
- and snowmobiling (7.2 percent totaling 26,064 visits)

Other important recreational activities include (in descending order of popularity as a primary activity) relaxing, fishing, motorized trail use, motorized water activities, cross-country skiing, hunting, OHV use, non-motorized water activities, and bicycling. Other recreational activities sampled represent less than one percent of the use for any given primary activity.

Renewable Forest Products

Forest products are those that are collected from the national forest for commercial, personal, Native American tribal, educational, and/or scientific purposes. This section refers to two categories of forest products; those referred to as special forest products as defined by FSH 2409.18-80, 2008; and those considered merchantable wood products.

Examples of special forest products can include but are not limited to bark, berries, boughs, bryophytes, bulbs, burls, Christmas trees, cones, ferns, firewood, forbs, fungi (including mushrooms), grasses, mosses, nuts, pine straw, roots, sedges, seeds, transplants, tree sap, wildflowers, fence material, mine props, posts and poles, shingle and shake bolts, and rails. Examples of merchantable wood products can include, but are not limited to saw timber, pulpwood, non-saw log material removed in log form, biomass, and other wood fiber products.

Authorization for the removal of renewable forest products are generally covered under a permit system (both charge and free use), commercial contracts (e.g. timber sale contracts), or stewardship and service contracts (e.g. biomass removal of thinning slash or fuels treatment residue).

Special Forest Products

Harvesting of special forest products (SFPs) is widespread throughout the United States. People from diverse income levels, age groups, and cultural backgrounds harvest SFPs for household subsistence, maintaining cultural and family traditions, obtaining spiritual fulfillment, maintaining physical and emotional well-being, scientific learning, and earning income. Many SFPs serve as raw materials for industries ranging from large-scale floral greens suppliers and pharmaceutical companies to microenterprises centered round basket making, woodcarving, medicinal plant harvesting and processing, and a variety of other activities.

Estimating the contribution of special forest products to the regional economy is difficult owing to the lack of broad-based systems for tracking the combined value of the hundreds of products that make up the various SFP industries. A 1995 estimate showed the wild mushroom industry in 1992 contributed \$41.2 million and the floral greens industry in 1994 contributed \$106.8 million to just the Pacific Northwest economy. Aside from economic value, many SFPs have cultural heritage, spiritual, and social value.

Firewood, Christmas trees, and mushrooms are among the most sought after SFPs on the Forests as well as other items ranging from boughs to plants. Public interest in special forest products continues to grow with population increase adjacent to the Forests, changes in social values, and changes in the economic value of individual products such as mushrooms. Nationally, the Forest Service has updated the agency guidance for SFP with the 2001 National Strategy for Special Forest Products and updates to the Forest Service directives system.

Merchantable wood products

Merchantable wood products are tracked using the amount of product sold per year. Over the last ten years, the Forests have sold, on average, the amount shown in tables 1 and 2. The current Forest Plans predicted higher amounts would be sold. Resource concerns, funding levels, and market factors all affected attainment of the predicted amounts calculated in the late 1980s. The

tables summarize the average annual timber volume production in million board feet, or MMBF (one board foot is represented by a board that is one foot long, one foot wide, and one inch thick).

Table 1. Colville current level of average annual timber sale quantity

Average amount sold over last 10 years (MMBF) 2000-2010	Average amount sold over 4 year period (MMBF) 2007-2010	Average amount sold over last 3 years (CCF) 2012-2014
30.9	42.9	47,237 ¹

CCF = hundred cubic feet; Source: USDA FS 2014

Table 2. Okanogan-Wenatchee current level of average annual timber sale quantity

Average amount sold over last 10 years (MMBF) 2000-2010	Average amount sold over last 4 years (MMBF) 2007-2010
51.5	48.8

While the U.S. demand for timber remains relatively high and is expected to increase in the future (USDA FS 2000), timber harvests from 1990 to 2002 in Washington have declined by 39 percent (Washington State Department of Natural Resources 2004). United States lumber markets have relied increasingly on foreign imports, such as from Canada, to help offset declining timber harvests in the state. Softwood lumber imports into the Seattle Customs District from 1992 to 2002 have increased by 11 percent (Warren 2004), while inflation adjusted wholesale prices for Douglas-fir 2x4s have dropped by 33 percent (Warren 2004).

Almost two-thirds, or 15 million acres, of all Washington forestlands are publicly owned with the Forest Service managing 9.2 million of these acres. Due largely to a change in management emphasis, commercial timber harvests on Washington’s national forests have declined by 84 percent during the last decade (Washington State Department of Natural Resources 2004). In 2002, the Forest Service accounted for about two percent of the state’s total harvest. Harvests from all eastern Washington national forest lands produced 63,979 thousand board feet (MBF) in 2002. The Colville, Okanogan, and Wenatchee National Forests accounted for 87 percent, or 55,555 MBF of this total; down from 236,627 MBF harvested in 1990. This downward trend had stabilized in 1998 through the mid-2000s.

Annual timber volume harvested from the Colville NF, excluding fuelwood, has declined from an average of almost 100 million board feet per year during the first five years of the 1988 plan to about 44 million board feet. Harvest on all other ownerships has also declined during the same period.

The recent economic downturn affected housing markets, which directly influences timber markets. Long-term impacts to national forest timber harvests of the economic downturn are unclear. Timber outputs from the Forests provide economic benefits to eastern Washington communities by contributing to the wood processing industry. However, many of the lumber mills adjacent to the Colville and Okanogan-Wenatchee NFs have closed. The economic outlook for the local wood processing industry is increasingly more uncertain with an international

¹ Sawtimber only

market place affecting demand and pricing of national forest wood products. Further reductions in the wood processing infrastructure affect attainment of Forest ecological goals.

Biomass is an emerging wood product. The state of Washington is currently evaluating the availability of forest biomass on a statewide basis. This includes identifying current uses, current infrastructure that utilizes the material, and an estimation of how much material may be available into the future. It is not known at this time if there might be funding or tax incentives to develop biomass utilization.

In establishing resilient ecosystems under ecological restoration principles, timber harvest will be used as a tool of active management to achieve desired conditions. The amount of timber harvested will depend on desired conditions that include landscape levels of specific structural elements (young, mid, mature, and old forest), species composition, spatial patterning (clumps, gaps, complex patches), and ecological process (ex: fire, insects and disease, competition, connectivity, biological legacies).

There is a restoration based need to harvest timber and treat forest stands on a larger number of acres than we receive funding for each year. The actual timber outputs vary considerably based on appropriated budgets, timber markets, and proximity to milling infrastructure.

Scenery

Viewing natural features is one of the primary activities that draw visitors to the national forest. The Forests are known for many outstanding scenic features including breathtaking lakes and rivers, picturesque mountain ranges and geological features, spectacular displays of flowers in the spring and summer, and colorful foliage in the fall. Cultural landscapes are also important such as viewing old homesteads, mining operations, and Civilian Conservation Corps craftsmanship. Roads, trails, waterways, and vista points are the primary avenues for viewing scenery.

Managing the scenic character of the national forest is integral to all Forest activities. In some locations, scenic character has been degraded by past practices and rehabilitation is needed. In other locations, enhancements such as interpretive facilities can improve the experiential setting.

The last Forest planning effort utilized the visual management system (VMS) and used visual quality objectives (VQO's) to depict Forest Plan standards for scenery management. Since then the new scenery management system has been developed incorporating new concepts that has changed the way we can manage the valued scenic area. We are directed to use this new system in Forest planning in the Forest Service Manual.

The scenery management system (SMS) is a systematic approach to inventory, analyze, and monitor the scenic resources. The system is used in the context of ecosystem management to determine the relative value and importance of scenery, assist in establishing overall resource objectives, and ensure high-quality scenery for future generations. The Colville, Okanogan, and Wenatchee National Forests will use Landscape Aesthetics - A Handbook for Scenery Management (Dept. of Agriculture Handbook #701) to inventory scenic resources for the forest plan revision. Landscape character, scenic integrity, and scenic sustainability are the three basic building blocks of SMS. Understanding the valued attributes of the landscape and their condition from a social and ecologic perspective is the framework to all SMS application.

Management Areas

Management areas are broadly described areas where general management intent is similar. The purpose of management areas is to provide consistent guidance for similar portions of National Forest System lands when implementing or continuing management activities. Forest-wide plan direction applies within management areas. Some management areas, such as riparian management areas, overlap or overlay other management areas.

New proposals for administrative and recreation sites, backcountry and backcountry motorized, focused and general restoration, scenic byways, recreation areas, wild and scenic rivers, wilderness recommendations, and national trail designations create new management areas. Realigned management areas will clean up the mismatch of land allocations along administrative boundaries. Some management areas in the current Forest Plans no longer represent current ecological and social conditions across the Forests.

Congress designates some management areas (such as wilderness and national scenic trails) and those boundaries cannot be changed in a plan revision process. Other management areas, such as existing Research Natural Areas are functioning well and there is no need to recommend a change in the boundary or allocation.

Management areas in the revised forest plan will be linked to physical, biological, and social conditions on the ground. These land allocations need to be applied across the landscape to achieve desired conditions that take into account management practices and intensities.

The public has shown great interest in where timber harvest, road building, and summer off-highway vehicle use and winter motorized use may be authorized.

In defining management areas there is a need to:

- Manage for habitat including managing for road densities to protect key watersheds.
- Clarify management direction for administrative and recreation sites to recognize that these are not habitat.
- Make administrative and recreation sites a specific management area. These are unique areas that do not fit within another management area, as they currently exist in the existing forest plan.
- Recognize there is a national interest in continuing to manage for unroaded landscapes because they contribute to habitat conditions of species that depend on unroaded habitat.
- Provide roaded landscapes in areas with important plant and wildlife habitats (including grizzly bear and lynx habitats) or key watersheds that were not already allocated to other management areas.
- Provide healthy habitat conditions for aquatic, plant, and wildlife species by limiting the size of the road system and defining a road density limit that manages activities and human uses.
- Provide areas that generally contribute to the roaded natural recreation opportunity spectrum.
- Provide for and manage unroaded landscapes that include the 2001 Inventoried Roadless Areas and the potential wilderness areas identified in the plan revision wilderness

evaluation process.

- Provide areas that contribute habitat conditions for species that benefit from an unroaded landscape.
- Provide for areas where a high quality, semi-primitive recreational experience for both summer and winter use may be found.
- Provide areas for visitors who engage in non-motorized recreational activities that are not authorized in wilderness (a semi-primitive recreation setting).

Administrative and Recreation Sites

This management direction applies to those sites listed as administrative or developed recreation sites in the Forest corporate database (INFRA²). Administrative sites listed in INFRA can include, but are not limited to, district offices and compounds, remote work centers, warehouse sites, seed orchards and administrative residence sites. Developed recreation sites listed in INFRA can include, but are not limited to, campgrounds, picnic areas, trailheads, Sno-parks, alpine ski areas, recreation residence tracts, interpretive sites, and boating sites. Special use permit areas can include water improvements and other utilities. These management areas are generally small in scale and occur as a place or feature on the landscape. Exceptions may be areas such as mountain resorts and recreation residence tracts which can cover substantial acreage in comparison to other developed recreation sites.

Backcountry and Backcountry Motorized

The only difference between these two management areas is suitability for non-motorized and motorized recreation. Backcountry emphasizes non-motorized recreation opportunities and can include foot, horse, and mechanized (e.g., mountain bikes) modes of travel. Backcountry motorized emphasizes summer and winter motorized recreation opportunities and can include OHVs, motorcycles, jeeps, and over-snow vehicles.

Backcountry and backcountry motorized are spatially defined by the upper reaches of watersheds in the 2001 Inventoried Roadless Areas, the potential wilderness areas identified in the plan revision wilderness evaluation process, wildlife habitats that include grizzly bear and deer/elk winter range, and threatened, endangered, and sensitive plant communities.

Experimental Forest

There are no experimental forests on the Colville National Forest.

Focused Restoration

Management area emphasis would focus on the restoration of ecological integrity and ecosystem function at the landscape scale using both active management (mechanical treatment and prescribed fire) and passive management (natural processes, including disturbances and succession) to restore natural processes and improve resiliency, while emphasizing important fish and wildlife habitats. Spatially, these areas include the key watersheds, and grizzly bear and caribou recovery areas not included in Backcountry and Backcountry Motorized Management

² The Forest Service corporate infrastructure database application used to manage information on national resources such as buildings, trails, roads, wilderness areas, and water systems.

Areas. The active management focus in key watersheds would promote riparian goals. The road density desired condition is no greater than 1.0 mi/mi² in this management area (road density desired condition varies by alternative).

General Restoration

Management area emphasis would focus on enhancing ecological integrity and ecosystem function at the landscape scale using active management (mechanical treatment and prescribed fire) to restore natural processes and improve resiliency. The road density desired condition is no greater than 2.0 mi/mi² in this management area (road density desired condition varies by alternative).

National Scenic Area

National Scenic Areas are statutorily designated areas that contain outstanding scenic characteristics, recreational values, and geological, ecological, and cultural resources. There are no national scenic areas on the Colville National Forest.

Nationally Designated Trails

These are national scenic trails designated by Congress or recreation trails designated by the Forest Service. National scenic trails are 100 miles or longer, and are continuous, non-motorized routes that provide for the conservation and enjoyment of their nationally significant scenic, historic, natural, or cultural qualities. National recreation trails contribute to the variety of outdoor recreation opportunities on the Forest. Congress recently established the new Pacific Northwest National Scenic Trail, which crosses east and west on the Forest. There is a need to provide management direction for that trail within the bounds previously established by Congress, agency directives, and policy for national scenic trails. Otherwise, there is no need to make changes to the current direction.

Table 3. Colville National Forest National Scenic Trails

Trail type	Trail name	Number of miles managed by Forest
National Scenic Trail	Pacific Northwest National Scenic Trail	140
	Kettle Crest	33
National Recreation Trail	Pass Creek-Grassy Top	7.8
	Shedroof Divide	21.8
	Sullivan Lake (Lakeshore Trail)	4.3

Research Natural Areas

Research Natural Areas (RNA), whether established or proposed, are a part of a national network of ecological areas designated in perpetuity for research and education and/or to maintain biological diversity on National Forest System lands. They are established to provide study and protection of a full range of habitat types and remain in a relatively unaltered condition for non-manipulative research, observation, and study.

There is no need to propose changes to the Research Natural Areas management area.

Table 4. Colville National Forest Research Natural Areas

Research Natural Area	Administrative Location (Ranger District)
Bunchgrass Meadows	Sullivan Lake
Fire Mountain	Republic
Hall Ponds	Republic
Halliday Fen	Sullivan Lake
Maitlen Creek	Sullivan Lake
Round Top Mountain	Sullivan Lake
Salmo	Sullivan Lake

Riparian Management Areas

Riparian management areas are designated in the current Forest Plans. The revised forest plan would carry forward this approach with some changes in widths and more information on desired conditions for riparian areas. The Colville Forest Plan includes riparian direction from the Inland Native Fish Strategy (INFISH, USDA Forest Service 1994c and 1995). This approach has improved riparian management and appears to be maintaining and restoring riparian habitat conditions at the watershed and larger scales. The changes proposed are a refinement of these strategies and replaces the interim strategies.

Scenic Byways

Three types of federally designated scenic byways are found on the Colville National Forest: All American Roads and National Scenic Byways (designated by the Secretary of Transportation); and National Forest Scenic Byways (designated by the Forest Service). The state of Washington also designated many of these byways as state scenic byways. Some roads have multiple designations.

A one-half mile distance zone on either side of the byway centerline defines the scenic byway management area. Management direction applies only to portions of the byway within National Forest System boundaries.

There is no need to propose changes to the Scenic Byways management area.

Table 5. Colville National Forest Scenic Byways

Scenic byway name	Scenic byway type	Administrative location (Ranger District)
International Selkirk Loop	All American Road	Sullivan Lake
North Pend Oreille Scenic Byway	National Scenic Byway	Sullivan Lake
Sherman Pass Scenic Byway	National Forest Scenic Byway	Three Rivers, Republic

Special Interest Areas

Special Interest Areas (SIAs) are management areas with outstanding special characteristics or

unique values. These may be scenic, geological, botanical, zoological, paleontological, historical, or recreational values. SIAs are intended to highlight areas of interest to the public and may have roads and trails to allow public use. Some SIAs, to protect the feature, may limit access to trails rather than roads.

There are no established SIAs on the Colville. While several SIAs have been recommended, there is a need to evaluate these for appropriate outstanding characteristics or unique values to align with handbook definition and reflect the true function of the SIAs. There is also a need to look for additional areas with outstanding characteristics or unique values.

Wild and Scenic Rivers

Congress designates wild and scenic rivers as part of the Wild and Scenic Rivers System under the authority of the Wild and Scenic Rivers Act, as amended (1968). Currently, there are no congressionally designated rivers on the Colville National Forest. Past planning efforts have identified rivers that could be recommended to Congress for designation and these are grouped into eligible or suitable rivers. Eligible rivers are free flowing and have one or more outstandingly remarkable values of regional or national significance. Suitable rivers are those eligible rivers where protection of the outstandingly remarkable values is more important than other resource benefits and congressional designation is determined to be the best option for protecting the values of the river. Eligible or suitable rivers are managed to preserve their eligibility. The river corridor is generally one-quarter mile from either side of the riverbank. However, protection of outstandingly remarkable values may require encompassing a larger area.

Sections of rivers, not the whole river, are designated as eligible or suitable. The Colville NF has two eligible rivers, Kettle River and South Salmo River, identified in the 1988 forest plan.

Table 6. Colville National Forest Eligible Wild and Scenic Rivers

River Name	Outstandingly Remarkable Values	Recommended Classification	Length in Miles	Eligible or Suitable Status
South Fork Salmo River	Fishery Ecological	Wild	5	Eligible
Kettle River	Recreation Scenery	Recreational	3	Eligible

The Forest will not be making recommendations for additions to the Wild and Scenic River System. The plan will carry forward previously identified eligible rivers, determine the eligibility of rivers previously identified in appeal resolution on the 1988 Colville forest plan and those rivers suggested by public input.

The direction in the Forest Service Handbook (FSH 1909.12, chapter 80) allows the Forest to decide the level of analysis to conduct during plan revision. Studies to determine suitability (whether eligible rivers should actually be recommended for inclusion in the Wild, Scenic and Recreational River System) involve a detailed and expensive process. The Forest has concluded that analysis for eligibility is within the capacity of the plan revision process. Additional studies will not be conducted to determine suitability and recommendation of rivers for addition to the

Wild and Scenic River System.

Wilderness – Congressionally Designated

On the Colville National Forest there is one Congressionally Designated Wilderness. The Salmo-Priest, located on the Sullivan Lake Ranger District, is comprised of 29,000 acres managed by the Colville, and 12,000 acres managed by the Idaho Panhandle National Forest.

Wilderness provides diverse settings and a wide variety of primitive recreational opportunities offering outstanding opportunities for solitude. The undeveloped and remote landscapes contribute to the preservation of intact ecosystems and the recovery of listed species such as the Canada lynx and grizzly bear. They contain an array of ecological, geological, scientific, educational, scenic, and historical values that are managed within the context of wilderness.

Most portions of the wildernesses are in a stable or improving trend relative to protecting wilderness character. However, there are a number of challenges to management.

- Natural processes have been disrupted by activities such as fire suppression, fish stocking, non-native plant diseases, and the spread of weeds.
- In some locations, inappropriate or prohibited uses are occurring such as snowmobile trespass across wilderness boundaries.

Wilderness - Recommended

By law, all National Forest System lands must be evaluated for possible wilderness recommendation during the plan revision process. Wilderness characteristics are protected until Congress either designates the area as part of the National Wilderness Preservation System or releases the area from consideration.

Currently the Salmo-Priest Wilderness covers about three percent of the Colville National Forest and evaluation showed a need for additional wilderness opportunities on the Forest. There may be possible areas available to fill this need.

Wilderness Study Area

There are no wilderness study areas on the Colville National Forest.

Benchmark Analysis

Benchmark analyses are one of the required components of the 1982 Planning Rule Procedures pertaining to the Analysis of the Management Situation. Benchmark analyses define the range within which alternatives are to be developed and analyzed by identifying the maximums and minimums that each alternative should fall within. Selection of benchmarks depends primarily on the revision topics to be addressed during plan revision.

All Forests in the Pacific Northwest Region developed benchmarks during development of their original plans. Benchmarks were established for timber resources, as well as for other resource areas such as livestock grazing, recreation, wildlife, wilderness, and other key resources. They were evaluated for their physical and biological production potential, and monetary benchmarks were run for those resources having an established market value.

Analysis of the Management Situation

During the need for change evaluation for revising the current Forest Plans, all benchmarks previously developed were reviewed, validated, and found to still be appropriate and reasonable. The range of expected alternatives developed during revision should fall within the maximums and minimums established by the original benchmarks.