USDA Forest Service
Malheur, Umatilla, and Wallowa-Whitman National Forests

Revised Need for Change

2010

Legal Requirement

The existing Forest plans for the Malheur, Umatilla and Wallowa-Whitman National Forests are 20 years old. The National Forest Management Act of 1976 requires each National Forest to revise its management plan every 10-15 years. Since 1990 economic, social, and ecological conditions have changed; new laws, regulations and policies are in place; and new information based on monitoring and scientific research is available. The Malheur National Forest land management plan was signed on May 25, 1990 and has been amended 67 times. The Umatilla National Forest land management plan was signed on June 11, 1990 and has been amended 34 times. The Wallowa- Whitman National Forest land management plan was signed on April 23, 1990, and has been amended 40 times. It is evident that the Forest Plans need to be revised to evaluate and incorporate these changes as appropriate.

Eliminate Redundancy and Process Requirements

The Forest Service Manual (FSM) and Forest Service Handbook (FSH) provide the National Forests with direction to guide the management of the national forests. This direction is provided at the national, regional, and forest level. It includes standard operating procedures, including process requirements, for many of the administrative and management processes and activities the Forest Service undertakes. The current Forest Plans repeat much of this direction, along with many laws, executive orders, and regulations that must be followed regardless of the Forest Plan. Many required processes and methods included in the current Forest Plans are outdated and need to be removed.

Inconsistent Management Across the Three National Forests

The three national forests of the Blue Mountains have common issues, resources, users, and interested publics; however, each forest plan is different in its approach to management and the allocation of management areas. For instance, the Umatilla and Malheur National Forests put geologic, historic, and botanical areas in one management area called "Special Interest Areas". The Umatilla NF includes administrative sites and facilities in Special Interest Areas; the other two forests have specific management areas for them. Municipal Watersheds are managed under agreements between the Forest Service, the Secretary of Agriculture, and the municipality which benefits by using the water. The Malheur and Umatilla National Forests have management area designations specific to their municipal watersheds, but the Wallowa-Whitman NF includes the municipal watersheds in management allocations which allow for a variety of uses. These differences can result in different interpretations by the public and land managers, resulting at times in inconsistent management of resources and uses across forest boundaries. The three Forests share personnel in many areas, including geology, realty and rights-of-way management, and ecology. They also share specialists on interdisciplinary teams for project development and analysis. Having very similar management plans on the three forests would make sharing personnel much more efficient. It also should provide better service

to users of the three national forests and lead to a more consistent management across the Blue Mountains.

Best Available Science

Interior Columbia Basin Ecosystem Management Project

The Interior Columbia Basin Ecosystem Management Project was based on Presidential direction to develop a scientifically sound, ecosystem based strategy for management of 64 million acres of lands administered by the Forest Service and the Bureau of Land Management within the Columbia River Basin, and portions of the Klamath and Great basins in Oregon. The Project was based on concerns over forest and rangeland health, uncharacteristically intense wildland fires, threats to certain fish and wildlife species, and concerns about local community social and economic well being. In addition, there was little broad-scale scientific knowledge of the ecological, biophysical, social, and economic conditions, trends, risks, and opportunities within the planning area.

The Eastside Ecosystem Management Project Charter was the catalyst for the Interior Columbia Basin Ecosystem Management Project (Project) in January 1994. The Charter, signed by the Chief of the Forest Service and the Director of the Bureau of Land Management, directed the agencies to develop and adopt a scientifically sound, ecosystem-based strategy for managing all FS and BLM administered lands within the Basin. A scientific assessment of the Basin provides a better understanding of the scope and possible broad-scale causes of current resource conditions. The scientific findings formed the basis for an array of management strategies evaluated by the Project.

A Final Environmental Impact Statement (FEIS) and Proposed Decision were published in December 2000. The State Directors and Regional Foresters elected not to prepare a Record of Decision and instead have chosen to complete the Project through use of the "*The Interior Columbia Basin Strategy* "(herein referred to as "Strategy"). The Strategy provides guidance for incorporating the science data and resource information developed by the Project into land and resource management plans and project implementation. The Strategy takes into consideration concerns raised by the public throughout the planning process and the findings of the Science Assessment.

There is a need to follow the Strategy and incorporate the findings of the Science Assessment developed by the Project into the forest plans in the Blue Mountains as appropriate.

Need for more protection of terrestrial plant and animal species and their habitats

The ICBEMP Science Assessment found that some specific habitats for wildlife species have declined substantially in geographic extent from historical to current. These are called "source" habitats (see *Source Habitats for Terrestrial Vertebrates,* Wisdom et al for the definition of source habitats). Management plans need to address ways to maintain and secure terrestrial habitats that are comparable to those classified by the science findings as "source" habitats that have declined substantially in geographic extent from the historical to the current period and habitats that have old-forest characteristics. Management direction needs to incorporate opportunities to re-pattern these habitats when and where necessary, and, where they can be sustained, maintain and guide expansion of the geographic extent and connectivity of source habitats that have declined. Direction needs to address restoration of the important vegetation characteristics of these habitats (such as species composition, vegetation structure, snags or coarse woody debris), which various terrestrial species need to survive and reproduce.

Additionally, the National Forest Management Act clearly directs the National Forests to maintain viable populations of native and desirable non-native wildlife species. The 1982 NFMA implementing regulations (36 CFR 219) state in Section 219.19:

> "Fish and wildlife habitat shall be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area. For planning purposes, a viable population shall be regarded as one which has the estimated numbers and distribution of reproductive individuals to insure its continued existence is well distributed in the planning area. In order to insure that viable populations will be maintained, habitat must be provided to support, at least, a minimum number of reproductive individuals and that habitat must be well distributed so that those individuals can interact with others in the planning area."

As part of the need to maintain viable populations of native wildlife species, there is a need to manage the risk to bighorn sheep from diseases contracted through contact with domestic sheep permitted to graze on National Forest System Lands. Extensive scientific literature supports the relationship between disease in bighorn sheep populations and contact with domestic sheep although the mechanisms of disease transmission are not fully understood. Field observations have associated bighorn sheep respiratory disease events when observed near domestic sheep, which has led to numerous independent research efforts. The results of this research provide strong evidence that bighorn sheep have a high probability of contracting fatal pneumonia following contact with domestic sheep. While there clearly are gaps in the knowledge base on the causal factors and mechanisms of bighorn sheep die-offs and disease transmission between the species, the majority of literature supports the potential for disease transmission between the species, documents bighorn die-offs near domestic sheep, and supports the management option of keeping these species separate to prevent disease transmission. Further, there is no peer reviewed literature that suggests bighorn sheep can be grazed with domestic sheep without concern for disease transmission between the species. Scientists from both sides of the issue also recommend that the species be kept separate until the disease transmission science is better understood (USDA 2010). Current forest plans do not address the concerns relating to bighorn sheep viability due to the potential for disease transmission from domestic sheep.

Need to for more protection of watersheds and aquatic habitats

Maintaining and restoring the health of watersheds, riparian, and aquatic resources is necessary to sustain aquatic and terrestrial species and provide water of sufficient quality and quantity to support beneficial uses (ICBEMP). There is a need to develop networks of properly functioning watersheds that support populations of fish and other aquatic and riparian-dependent organisms across the National Forests. Existing direction (PACFISH, INFISH) has led to improved and proactive management of aquatic resources. This direction appears to be maintaining and restoring aquatic and riparian habitat conditions at the watershed and larger scales (ARCS). However, the existing direction does not incorporate new science and or address issues identified since implementation began, including the recognition that ecosystems constantly change through time. They are not steady state, and periodic disturbance is necessary to maintain the long-term productivity and integrity of an ecosystem (Lugo et al. 1999). Based on recognition of ecosystem dynamics, a new strategy is needed that focuses on maintaining or restoring ecological processes and resilience as opposed to attempting to maintain a desired set of static conditions through time (Dale et al. 2000).

Aquatic and Riparian Conservation Strategy

The Aquatic and Riparian Conservation Strategy (ARCS) is a Regional strategy designed to maintain and restore the ecological health of watersheds and aquatic and riparian ecosystems on National Forest System (NFS) lands in the Pacific Northwest Region (Region). Its goal is to develop networks of properly functioning watersheds that support populations of fish and other aquatic and riparian-dependent organisms across the Region. The ARCS focuses on maintenance and restoration of the dynamic ecological processes responsible for creating and sustaining habitats over broad landscapes, as opposed to individual project or small watershed scales (USDA and USDI 1994a and 1994b).

The ARCS is a refinement of earlier strategies, including: the Aquatic Conservation Strategy (ACS) (USDA and USDI 1994a and 1994b), Interim Strategies for Managing Anadromous Fish-Producing Watersheds in Eastern Oregon and Washington, Idaho, and portions of California (PACFISH, USDA and USDI 1995), and the Inland Native Fish Strategy (INFISH, USDA Forest Service 1994c and 1995). Two independent assessments were completed to evaluate the utility and effectiveness of these earlier strategies (Reeves 2006, Heller and McCammon 2004). Both concluded that the basic approaches and associated management direction are sound, generally understood and implemented by Forest personnel, and have significantly changed the way aquatic resources are managed on NFS lands in the Pacific Northwest. Specifically, they found that the strategies have led to improved and proactive management of aquatic resources and these changes appear to be maintaining and restoring aquatic and riparian habitat conditions at the watershed and larger scales. Scientific studies completed after these strategies were initiated (Naiman and Bilby 2000, Spence et al. 1996) continue to support their general framework and assumptions. In particular, this science reinforces previous understanding regarding the ecological importance of smaller, headwater streams and the need to protect streamside forests (Burnett and Miller 2007, National Research Council 2002). Evaluations of the strategies, as described above, indicate the need for and utility of a single, unified aquatic conservation strategy that incorporates new science (e.g., Hobbs and Huenneke 1992, Reeves et al. 1995) and addresses issues and clarifications identified during more than a decade of field-level implementation. Those issues include better recognition that disturbance is integral to the resiliency of ecosystems and consideration of scale effects (spatial and temporal) on ecosystem processes.

Need to address management of fuels and fire risk

Currently forested areas on the three national forests are dominated by dense, multi-layered conifer stands with tree species not well suited for the area (Countryman 2008, ICBEMP). This put forest stands at high risk for uncharacteristic damage from wildland fire, insects, and disease. (Countryman and Justice 2009, Countryman 2010) Current forest plans assume that ecological conditions are healthy and will remain so and that disturbances (such as fire, insects and disease) will not substantially affect planned actions, desired conditions, or outputs. Current direction does not adequately address the multiple factors that have created the existing uncharacteristic conditions nor do they adequately address the varied nature of the landscape. They also do not address the need for management strategies that consider the unique qualities of various landscapes. The revised forest plans need to establish a more integrated strategy that recognizes multiple risk factors and addresses variability in conditions and site potentials. The revised forest plans also need to address management of fire risk, particularly in the wildland urban interface. Climate change (see below) is a driving factor in the need to address the risk posed by uncharacteristic fuel buildups and the risk of large wildfires (Peterson and McKenzie, 2008).

Need to address resiliency in the face of climate change

The National Forests have been directed to include discussion of the need to address climate change in revised forest plans (USDA 2010). This is a factor beyond the scope of Federal land managers to control; nonetheless, Federal land managers have responsibility to address and be responsive to climate-related impacts. Average temperatures in the Blue Mountains, consisting of Oregon Climate Division 8 and Washington Climate Division 10, have increased by 1.3° F since 1900, but 1.1°F since 1970. Temperature changes have been relatively uniform across the region (Mote 2003). These changes are similar in magnitude to observed global average and Pacific Northwest temperatures over the same time periods. Seasonal and monthly changes in temperature may be more important in determining potential climate effects than annual changes alone. In northeast Oregon, average temperatures have increased in every month except November and December, compared to the period 1941-1970, with the largest monthly changes occurring from January through March. Similar results in the Northwest have been reported by Mote et al. (2003) and Hamlet and Lettenmaier (2007). Precipitation over the Pacific Northwest and the Blue Mountains has been more variable. Data for most sites within the Pacific Northwest shows small to moderate increases in temperature over the 20th century (Mote et al. 2003). Averaged annual precipitation in the Blue Mountains (Oregon Climate Division 8) increased between 1935 and 1975 (+14.6 percent) and declined from 1975 to the present (-10.1 percent), showing a small, but insignificant increase (+3 percent) over the period 1935-2005. Higher winter and spring temperatures and lower winter rainfall have resulted in lower April 1st Snow Water Equivalent (SWE) at every SNOTEL station in the Blue Mountains. Declines relative to the 1941-1970 average vary from as little as 3% to more than 70%, and average 30%. Currently, more than 70% of annual streamflow in the major rivers of the Blue Mountains occurs as snowmelt between about mid-February and July 1st, depending on elevation (Gecy, 2010). Climate change scenarios predict an increase in disturbance events, including large flood events, wildfires, and forest pathogen outbreaks. (Bisson, 2008). Climate changes can affect organisms and their habitats in many ways. In fact, climate change likely impacts all life on Earth, from individual organisms to populations, species, communities, and ecosystems. It may alter behavior, population size, species distributions, plant and animal communities, and ecosystem function and stability. How strongly different species will be affected differs, depending on differences in their ecology and life history. Species with small population sizes, restricted ranges, specialized habitat requirements and limited ability to move to different habitat will be most at risk. Similarly, different habitats and ecosystems will be impacted differently, with those in coastal, high-latitude, and high-altitude regions most vulnerable. (Raphael, 2008; Ruggiero, McKelvey, Squires and Block, 2008). Current forest plans do not address strategies for creating resilient ecosystems resiliency in response to climate change.

Need to recognize the interdependency of social and economic components with national forest management

The current forest plans do not adequately consider the relationship between the national forests and the people who live, work, and play in them. National forests provide a variety of recreation opportunities, work opportunities, and opportunities to exercise cultural and spiritual traditions. Local communities provide infrastructure that contributes to the ability of the national forests to restore and maintain ecological systems. The forest plans need to recognize this relationship and improve integration of land and resource management with local community and tribal economic development strategies and capabilities.

The amount of timber volume harvested from the Blue Mountains national forests has declined dramatically, from highs of almost 600 million board feet annually during the early 1990s to less than 50 million board feet per year now. Fifty million board feet is the average annual harvest,

excluding firewood, between 2004 and 2007. Harvest on all other ownerships has also declined by about 30 percent over the same period, resulting in an overall decline of about 70 percent in local log supply. During the same 20-year period, wood products processing has also changed. There was a decrease in sawmill production of almost 60 percent. Manufactured board processing decreased by approximately 30 percent, and there was a reduction in plywood and veneer processing of about 10 percent, while pulp processing remained about the same. The decreasing production capacity, labor saving technological changes, and decreases in logging have resulted in declines in associated employment. In 1990, wood products employment in sawmills; veneer and plywood; reconstituted wood, pulp and paper; and logging included about 6,300 jobs. Since then, employment has declined, and wood products related employment totaled about 3,500 jobs in 2006. The greatest overall employment decline was in the sawmill sector, where about 2,300 jobs were lost (Ginspoon, Housely and BiglerCole 2010).

Although some economic diversification has taken place, especially in the retail and health and business services sectors, economic growth in the Blue Mountains region has been slower than that of Oregon and Washington and the Nation overall. Wood products manufacturing remains an important part of local economies in Grant, Umatilla, and Union counties in Oregon and Asotin County in Washington. There is expanding use and interest in biomass for bio-fuels.

Timber harvest continues to be an important tool for managing vegetation to achieve desired conditions, including those for wildlife and fuels. Without the local timber products industry, the capability of the Forest Service to affordably manage vegetation would be reduced.

Although substantial changes were made to the direction in existing forest plans in 1995 (PacFish, InFish, Eastside Screens), objectives for timber harvest and the allowable sale quantity (ASQ) were not adjusted.