Sustainable Forest Management Requires Active Forest Management



A Joint Position Statement of the Inland Empire Society of American Foresters and the Montana Society of American Foresters*

Position

To provide the range of values people seek from **forests**, the IESAF and MTSAF advocate an active approach to **forest management** (see bold terms in the **Definitions** section on page 3). The overall health and condition of forests in eastern Washington, northern Idaho, and Montana could be improved using a **sustainable forest management** strategy using a variety of **cultural operations** focused on attaining ecologically sound, economically viable, and socially desirable management objectives. We advocate **active management** of forest resources instead of passive management to achieve land management goals and objectives while maintaining the **sustainability** of forest **ecosystems**. In addition to **active management**, as defined on page 3, we support an **adaptive management** approach to forest **ecosystem management**.

Issue

The range of different strategies to meet forest management goals can be narrowed to two approaches: active or passive management. Some people seem to prefer passive approaches that allow forests to evolve with minimal human intervention. Active approaches involve the application of various **cultural operations** and **forest management** practices for a variety of purposes. For meeting many objectives, **active management** can be more effective, efficient and more timely than passive management. For example, assessment of federal forest resources in this region provides evidence that conditions could be improved, and federal scientists believe active management will

provide what people want from federal forests and protect the long-term ecological integrity of federal forests more effectively than a passive management strategy (Quigley et al. 1998). Nevertheless, some people seem to prefer passive management, as reflected in their use of tactics to eliminate active management projects involving timber harvesting on federal lands.

* Adopted by the Executive Committee of the Inland Empire Society of American Foresters (IESAF) on May 5, 2003, and by the Executive Committee of the Montana Society of American Foresters (MTSAF) on April 15, 2003, and approved by the Department of Forest Policy, Society of American Foresters. This position statement will expire in five years unless revised or extended by the Executive Committees.

Background

Much of the debate about **sustainable forest management** arises from the lack of agreement on appropriate forest land and resource *management objectives*. (Each italicized phrase is briefly discussed below.) Once objectives are set, the operations and practices for attaining them are selected. Debate about **forest management** practices often focuses on *timber harvesting*, and especially clearcutting (SAF 2002a), but may also involve the use of chemicals (SAF 2001a) and fire control and use (SAF 2002b). (See the SAF position statements supporting these practices, **References Cited** section, page 4.) To attain resource management objectives, passive management is simply not an option. From the professional forester's perspective, *active management is preferable to passive management*, and the issue becomes selecting appropriate **cultural operations** and **forest management** practices to attain objectives.

Management Objectives Vary by Ownership Category. The key to effective forest management is setting objectives. On private forests, owners determine the management objectives within the constraints set by state laws and policies regarding reforestation, slash disposal, and water quality protection. On state forests, the same laws and policies must be met and objectives also must be consistent with the goal of sustainably providing revenue for public schools. On federal forests, especially the national forests managed by the U.S. Forest Service, the goal defined in public policy is sustained yield of multiple goods and services determined by comprehensive planning involving the public and in light of environmental impact analysis; specific objectives and activities must be consistent with such plans and also involve the public and analyze environmental impacts (Multiple-Use Sustained-Yield Act of 1960, National Forest Management Act of 1976, and National Environmental Policy Act of 1970).

Timber Harvesting on Federal Lands. The Society of American Foresters supports commercial and non-commercial timber harvesting on federal lands allocated for such

use through land and resource management planning (SAF 2001b). The SAF position states that current harvest levels on federal lands are insufficient to maintain forest health, to meet the goals for hazardous fuel reduction to reduce wildfire risk in the nation's forests and provide economic and community benefits. Furthermore, current laws offer more than enough protection to sustain the full range of forest values on public lands, and timber harvesting is a legitimate use of national forests and BLM public lands, as the multiple-use mandates make clear (SAF 2001b).

Active Management is Preferable to Passive Management. Forest Service scientists concluded in their integrated assessment of resources in the interior Columbia River basin region that when compared with traditional approaches, "active management appears to have the greatest chance of producing the mix of goods and services that people want from ecosystems, as well as maintaining or enhancing long-term ecological integrity" (Quigley et al. 1996). A reserve-based passive management strategy was one alternative approach evaluated by these scientists. Passive management simply would not be as effective as active management in restoring desired conditions on federal lands in the region.

Definitions

Active management is attaining desired forest objectives and future conditions using cultural operations and forest management practices. These may include timber harvesting, tree planting, thinning, fertilization, grazing, weed control, and other activities for improving wildlife habitat and watersheds, such as erosion control, and also fire suppression, restoration-based fuel treatment, and prescribed fire. Active management also involves road and trail maintenance, including and construction, reconstruction, or deconstruction, as well as activities and practices for improving recreation areas and trails, including road closures to manage access. (Lacking a standard definition, the IESAF and MTSAF created this one.)

The definitions below are from *The Dictionary of Forestry* (Helms 1998).

Adaptive management – a dynamic approach to **forest management** in which the effects of treatments and decisions are continually monitored and used, along with research results, to modify management on a continuing basis to ensure that objectives are being met.

Cultural operations – the manipulation of vegetation to meet objectives of controlling stand composition or structure, such as site improvement, forest tree improvement, increased regeneration, increased growth, or measures to control insects and disease.

Ecosystem – a spatially explicit, relatively homogeneous unit of the earth that

includes all interacting organisms and components of the abiotic environment within its boundaries.

Ecosystem management – management guided by explicit goals, executed by policies, protocols, and practices, and made adaptable (see **adaptive management**) by monitoring and research based on the best understanding of ecological interactions and processes necessary to sustain **ecosystem** composition, structure, and function over the long term. (A National Research Council [2000] committee of forest scientists used the term synonymously with **sustainable forest management**.)

Forest – an **ecosystem** characterized by a more or less dense and extensive tree cover, often consisting of stands varying in characteristics such as species composition, structure, age class, and associated processes, and commonly including meadows, streams, fish, and wildlife.

Forestry – the profession embracing the science, art, and practice of creating, managing, using, and conserving forests and associated resources for human benefit and in a sustainable manner to meet goals, needs, and values.

Forest management – the practical application of biological, physical, quantitative, managerial, economic, social, and policy principles to the regeneration, management, utilization, and conservation of **forests** to meet specified goals and objectives while maintaining the productivity of the forest. *Note*: forest management includes management for aesthetics, fish, recreation, urban values, water, wilderness, wildlife, wood products, and other forest resource values.

Sustainability – the capacity of **forests** ranging from stands to ecoregions to maintain their health, productivity, diversity, and overall integrity, in the long run, in the context of human activity and use.

Sustainable forest management (sustainable forestry) (SFM) – this evolving concept has several definitions: 1. the practice of meeting the forest resource needs and values of the present without compromising the similar capability of future generations – note sustainable **forest management** involves practicing a land stewardship ethic that integrates the reforestation, managing, growing, nurturing, and harvesting of trees for useful products with the conservation of soil, air and water quality, wildlife and fish habitat. 2. the stewardship and use of forests and forest lands in a way, and a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality, and potential to fulfill, now and in the future, relevant ecological, economic, and social functions at local, national, and global levels, and that does not cause damage to other **ecosystems** – note criteria for sustainable forestry include (a) conservation of biological diversity, (b) maintenance of productive capacity of forest ecosystems, (c) maintenance of forest ecosystem health and vitality, (d) conservation and maintenance of soil and water resources, (e) maintenance of forest contributions to global carbon cycles, (f) maintenance and enhancement of long-term multiple socioeconomic benefits to meet the needs of societies, and (g) a legal, institutional, and economic framework for forest

conservation and sustainable management.

References Cited

Helms, J.A., editor. 1998. *The Dictionary of Forestry*. Society of American Foresters, Bethesda, MD. National Research Council. 2000. *Environmental Issues in Pacific Northwest Forest Management*. National Academy Press, Washington, DC.

- Quigley, T.M., R.W. Haynes, and R.T. Graham, tech. eds. 1996. *Integrated Scientific Assessment for Ecosystem Management in the Interior Columbia Basin*, PNW-GTR-382, USDA Forest Service, Pacific Northwest Research Station, Portland, OR.
- Quigley, T.M., R.W. Haynes, W.J. Hann, D.C. Lee, R.S. Holthausen, and R.A. Gravenmeier. 1998. Using an ecoregion assessment for integrated policy analysis. *Journal of Forestry* 96(10):33-38.
- SAF (Society of American Foresters). 2001a. Herbicide use in forest management. Position statement [online]:
 - http://www.safnet.org/policyandpress/psst/herbicide.cfm.
- SAF (Society of American Foresters). 2001b. Timber harvesting on federal lands: an essential tool for sustainable forest management. Position statement [online]: http://www.safnet.org/policyandpress/psst/timber.cfm>.
 - SAF (Society of American Foresters). 2002a. Clearcutting. Position statement [online]:

http://www.safnet.org/policyandpress/psst/clearcut1202.cfm. SAF

(Society of American Foresters). 2002b. Wildfire management.

Position statement [online]:

http://www.safnet.org/policyandpress/psst/fire0902.cfm.

What do scientists say about active management?*

"The alternative to *active management* is reduced productivity, many dead trees, and fuel conditions favorable to severe and potentially destructive wildfires. ... [however] public policies tend to inhibit *active management* of national forests."

- O'Laughlin, J., and P.S. Cook. 2003. Inventory-based forest health indicators: implications
 - for national forest management. Journal of Forestry 101(2):11-17.

"If we continue the current passive management approach, forest health conditions can be expected to deteriorate, and forests will continue to be subject to high-severity wildfires, with concomitant damage to watersheds, fish and wildlife habitat, homes and communities. Therefore *active management* within a forest sustainability context is needed."

 Fitzgerald, S.A. 2002. Fire in Oregon's Forests: Risks, Effects, and Treatment Options: A Synthesis of Current Issues and Scientific Literature. Oregon Forest Resources Institute, Portland, OR.

"Rather than fighting fire as an implacable enemy, we should *actively manage* it in order to enjoy a healthy and sustainable wildland forest."

 Arno, S.F., and S. Allison-Bunnell. 2002. Flames in Our Forests: Disaster or Renewal?
Island Press, Washington, DC.

"Simply installing fuel breaks around our cities and rural developments and forsaking the wildlands would be an abdication of our responsibility to future generations. Attention cannot be narrowly focused on a ring around the developed areas. ... Restoration-based forest health treatments are proving to be so beneficial *in contrast to no action* that we must move forward rapidly and at large scales."

• Covington, W.W. 2003. Testimony, *Oversight Hearing on the Crisis on the National Forests: Containing the Threat of Wildland Fire on the Environment and Communities*. Committee on Resources, Subcommittee on Forests and Forest Health, U.S. House of Representatives, March 7, Washington, DC.

"The absence of *active forest management* caused by overbearing regulatory expenses, coupled with continued absence of fire on the landscape, will and has led to overstocked, unhealthy stands in many forest types in California."

• Dicus, C.A., and K. Delfino. 2003. *A Comparison of California Forest Practice Rules and Two Forest Certification Systems*. California Polytechnic State Univ., San Luis Obispo, CA.

"Today, because society has virtually halted fire from playing its ecological role in the renewal of our eastern forests, *forest management* practices are the primary means of sustaining important young forest habitats and associated wildlife. ... [P]rivate forest landowners control most of the forestland in the east (70%) and these owners typically do not consider economic benefit from

* These published statements are not a formal of the adopted joint IESAF/MTSAF positionstatement. The statements were used by the national SAF Committee on Forest Policy to consider a national position statement, and are included herein for information purposes.

the sale of forest products as an important reason for forest ownership. Therefore, *proactive management* and the establishment of temporary openings and thick young

forest habitats will probably not significantly increase on these lands. The bottom line is that the ongoing declines of many species of wildlife that depend on young forest habitats are likely to continue unless we increase the amount of habitat for these important components of biological diversity, by increasing the amount of *even-age management* practiced on our forest landscapes."

 Dessecker, D. 2002. Forest management and the conservation of forest wildlife. RGS Voice, Ruffed Grouse Society, Coraopolis, MD [online]: http://www.ruffedgrousesociety.org/
Version1/RGSVoice.htm#ForMgmtConservForWildl>.

ABOUT THE SOCIETY

The Society of American Foresters, with about 17,000 members, is the national organization that represents all segments of the forestry profession in the United States. It includes public and private practitioners, researchers, administrators, educators, and forestry students. The Society was established in 1900 by Gifford Pinchot and six other pioneer foresters.

The mission of the Society of American Foresters is to advance the science, education, technology, and practice of forestry; to enhance the competency of its members; to establish professional excellence; and to use the knowledge, skills, and conservation ethic of the profession to ensure the continued health and use of forest ecosystems and the present and future availability of forest resources to benefit society.

The Society is the accreditation authority for professional forestry education in the United States. The Society publishes the *Journal of Forestry*; the quarterlies, *Forest Science*, *Southern Journal of Applied Forestry*, *Northern Journal of Applied Forestry*, and *Western Journal of Applied Forestry*; *The Forestry Source* and the annual *Proceedings* of the Society of American Foresters national convention.

