Committee on Resources Subcommittee on Forests & Forest Health

Statement

U.S. House of Representatives Committee on Resources Subcommittee on Forests and Forest Health Oversight Hearing on "The Once and Future National Forest Timber Sale Program" Testimony by Dr. David Wm. Smith SHELTON H. SHORT, JR., PROFESSOR OF FORESTRY - Retired College of Natural Resources Virginia Polytechnic Institute and State University Blacksburg, VA 24061-0324 July 25, 2000

INTRODUCTION

My comments are intended to provide a very brief overview of the importance of forests, forestry, and forest management, and then to convey the importance of a viable timber sale program in the USDA Forest Service.

UNDERLYING ASSUMPTIONS AND CONSIDERATIONS

1. The forests of the United States (and the world) are integral to the integrity of the biological system that perpetuates life as we know it today.

2. Forests provide a wide array of values and uses for humankind--and they are renewable. When considering wood substitutes, it is imperative that we carefully consider the short and long term environmental implications related to the production, degradation, and eventual recycling of these substitutes.

3. Human beings must be considered as an integral part of the world ecosystem. With a world population of over 6.0 billion people, there is virtually no part of the earth that is not directly or indirectly impacted by human activity. The forests of the world are no exception. The concept of a "natural" forest simply does not exist, and in the United States, has not existed since the recession of the last Ice Age 12,000-14,000 years ago.

4. Because of the very high biological, economic and social importance of the nation's forests, forest management is an essential activity if forests are to be perpetuated and ecologic integrity is to be

maintained. The objectives of forest management are determined individually by landowners whether they be private, public, corporate, tribal or trust, and by society through regulation and policy. Objectives, policy, and regulations are subject to change over time. All forest management activities are based on principles of forest ecology and a land ethic. In other words, whatever we do in our forests we must do in such a way that we do not permanently impair the innate productivity of the land. For an overview and historical synopsis, see Appendix A.

THE FOREST RESOURCE AND THE ISSUE

The United States is fortunate to have 747 million acres (33% of the total land area) of forestland (Forest Service, 1997 RPA estimates). Two-thirds (504 million acres) of which is classed as timberland; defined as "forest capable of producing 20 cubic feet per acre of industrial wood annually and not reserved from timber harvest".

Of the 504 million acres of timberland the U.S. Forest Service has management responsibilities for 97 million acres or 19% of all timberland. Non-industrial private landowners represent 58% of timberland ownership, with forest industry owning 13%, and other public (federal, state and local) land comprising the remaining 10%.

While the U.S. Forest Service has management responsibility for only 19% of the nations timberland, it is important to note that this land base contains 30% of all growing stock volume. Wood harvested from the National Forests has declined dramatically from about 12 billion board feet per year in the late 1980's to 4.6 billion in 1993, 3.3 billion in 1997, and 3.0 billion today. This reduction is due to policy changes within the U.S. Forest Service, not because of a lack of available timber. The annual net timber growth on U.S. Forest Service timberland is 5 to 6 times or more than the most recent annual harvests.

Consumption of all wood based products by the American people exceeds production by an average of 4.8% over the 10-year period from 1985 to 1994. Based on the significant reduction in harvests from U.S. Forest Service lands in the past 5 years, I am confident that consumption exceeds production by at least 6-7% today.

I find these facts to be quite troubling. We are a country that has the ability and the capacity to grow the wood required to meet our consumption needs, yet we are net importers of wood. The United States has the best-educated and trained professional foresters in the world today. These professionals have more experience in science based forest management than professionals from anywhere else in the world. We are the world leaders in the development of new forestry knowledge. Because of close working relationships, cooperative projects and partnerships, the U.S. forestry schools and colleges, the research branch of the U.S. Forest Service, the forest industry, and non-government organizations are the strongest and most advanced forestry research "organization" in the world. Yet, we import wood from other countries where forest management knowledge, concern for environmental issues, concern for workers welfare and concern for other social issues, are much less than in the United States. As a professional forester, I find this situation to be ethically inappropriate. As responsible professional forest managers and lawmakers we must carefully evaluate this issue and take immediate corrective action.

THE U.S. FOREST SERVICE - MISSION

The mission and direction of the U.S. Forest Service would seem to be quite clear and for the most part, is contained in five (5) major pieces of legislation.

1) The 1897 Organic Act gave three purposes to the Forest Reserve

1. to preserve and protect the forest within the reservation,

2. to secure favorable conditions of water flows, and

3. to furnish a continuous supply of timber for the use and necessities of the people of the United States.

2) Sustained Yield Forest Management Act of 1944

3) Multiple-Use Sustained Yield Act of 1960: Directed secretary of agriculture to develop and administer the renewable resources of the national forests for multiple use and sustained yield. Congress directed that the national forests should be managed for outdoor recreation, range, timber, watershed, wildlife and fish purposes. Supplements Act of June 4, 1897, Organic Act, Defines multiple use and sustained yield.

4) Forest and Rangeland Renewable Resources Act of 1974. Calls for long-range planning by the Forest Service to ensure that the United States has an adequate supply of forest resources in the future, while maintaining the quality of the environment. The two major requirements are that the Forest Service periodically submits to Congress a renewable resources assessment (every 10 years for all forest, range, and related lands in United States) and a long-rage renewable resource program (updating every 5 years and always planning at least 45 years ahead).

5) National Forest Management Act of 1976. Amended the RPA (1974) planning process as well as requiring full public participation in the development and revision of land management plans for the National Forest System. Provides comprehensive new authorities for the management, sale, and harvesting of national forest timber; provides statutory protection for national forest created from the public domain; and provides direction for bidding on national forest timber, road building associated with timber harvesting, reforestation, salvage sales, and the handling of receipts from timber sales activities.

In addition, the Endangered Species Act of 1973 has overriding implications for forest management decisions on public lands.

When looking at the major objectives that are appropriate for U.S. Forest Service land (timber, wildlife, range, outdoor recreation, watershed, fish and wilderness) it is apparent that in many cases the objectives are quite compatible with each other and readily achievable given sufficient planning and implementation that utilizes appropriate technology. Forest management, like any other form of management, requires clear objectives, the knowledge base to achieve the objectives and the organization that supports the process (leadership, personnel, operating funds, facilities, supplies and equipment). It appears that the US Forest Service has a serious management problem. What has been legally mandated by the Congress appears to be at odds with what certain segments of the public want. The Forest Service seems to be operating in a fashion that would indicate they are unclear about their mission.

I believe many of the problems associated with the National Forest System stem from the fact that the Forest Service has lost its purpose or because of social and political pressure, it is simply unable to achieve its mission. The National Forest System was successful in the past because Forest Service managers, Administrations, Congress and the American people agreed on the purposes of these lands. Currently, there is no apparent consensus amongst Congress, the Administration, the American people, or even within the Agency itself. This lack of consensus is one of the fundamental reasons the Forest Service is the target of an unprecedented level of criticism; criticism that comes from all sides of the issues. There is little purpose in developing a new set of planning regulations, forest plans, road policies, strategic plans, or watershed plans when there is no clear and workable mission that guides management on Forest Service land.

The purposes of the national forests and public lands are no longer clear. In the last 20 years, changing public values, federal environmental laws, court decisions, executive orders, and regulations have increasingly emphasized the importance of protecting ecological processes on the public lands and national forests. These incremental changes have come without a corresponding change in the basic land management statutes. Congress has the constitutional responsibility to set policy for the national forests and public lands and should act decisively to establish clear priorities for their management. Once a clear mission has been mandated by law and the formulated objectives for management have been found to be congruent with the mission, the Agency must be allowed to implement the management objectives, and in doing so, be in full compliance with established environmental standards. Although the legislative intent and organizational goals must be clear, there is also a need for flexible, local implementation that meets local and regional economic and social needs. This was the original management philosophy of the Forest Service. I believe it is still an appropriate goal.

FUTURE FOREST SERVICE TIMBER SALES

The Forest Service uses timber harvest to achieve a broad array of goals. Forest Service Chief, Michael Dombeck, has stated, "today, national forest timber sales are designed to incorporate multiple objectives, including insect and disease prevention and control, wildlife habitat management, fuels treatment, and reconstruction or construction of roads needed to long-term access." The timber program is critically important for meeting the broad objectives the American people have for their forests. More specifically, Chief Dombeck is absolutely correct when he sites the timber program's role in fuels treatment. Forests at high risk of wildfire can be mechanically treated through the timber program in preparation for prescribed burns or other restoration activities. As you know these activities are critically important in the wildland-urban interface.

The Cerro Grande fire that struck 235 homes in Los Alamos, demonstrated the importance of the timber program as a stewardship tool. Fire has historically played a role in many ecosystems; however, in the late 1800's increased settlement and human demand led to fire suppression, resulting in increased fuel loads throughout many of our national forests. Stewardship activities like thinning forests through the timber sale program can alter conditions and reduce fire hazard, preventing or greatly reducing tragedies like the Los Alamos fire. According to the Forest Service, a significant acreage of national forestlands is at moderate to high risk of catastrophic wildfire. Stewardship of our national forests requires silvicultural treatments like thinning, which should be a major emphasis in the Forest Service's future timber sale program. The Forest Service has made a commitment to stewardship timber harvesting. In fact, the Forest Service now spends more than double what it spent in 1993 on stewardship activities. I support this trend and hope it continues.

Madame Chairman, this hearing is supposed to be about the future of the Forest Service's timber sale program. A wise endeavor; however, we must also consider what the Forest Service timber sale program should not be in the future. The timber sale program should not produce 12 billion board feet of timber. It is arguable if that level was ever sustainable, and even if it was, it probably is not socially acceptable.

Timber sales do have a meaningful place in the future of the Forest Service. Chief Dombeck has repeatedly stated that 54 million acres of national forests are at risk of catastrophic wildfire, and that 24 million acres

are at risk of excessive mortality over the next 15 years due to insect and disease outbreaks that are often related to advancing age and the age-class structure of the stands in question. Over 2.7 million acres have burnt so far this season. We have a serious problem on our hands.

The good news is that we know how to fix it. Norm Johnson, chair of the committee of Scientist stated "In the past the forest industry needed the national forests; now the national forests need the industry to achieve ecological objectives." With an investment from Congress and the will to do the right thing on the ground, we can solve this problem through a combination of prescribed burning, timber harvesting and other management techniques. For example, in Oregon's Sumpter Valley, the Forest Service treated a stand of beetle infested Ponderosa Pine through mechanical thinning. This silvicultural treatment reduced tree mortality by 90 percent. There are many other examples that can be sited--we know that we can treat these forests and reduce the risk.

We must further experiment with stewardship contracting, which combine traditional timber harvests with service contracts using assets in our forests to fund necessary management, all while working with local communities to ensure that people believe in the work we are doing.

We must also ensure that we continue to invest in the Madison Forest Products Laboratory, a laboratory that has consistently produced innovation in using forest products. The lab must continue this innovation by finding new uses and developing new markets for small diameter material from the national forests. If we don't have markets for these 54 million acres of problems, there is little hope in achieving the management necessary to treat these acres and still be responsible with the taxpayer's money.

MANAGEMENT IS ESSENTIAL

Changes in forests, such as structure, species composition, function, spatial distribution, floral and faunal diversity and age diversity can occur by:

1) natural events (ice, insects/disease, tornado, wildfire, volcanic, etc.),

2) uncontrolled anthropogenic events (air and water pollution, wildfire, chemical spills, wars, social and economic hard times, etc), or

3) forest management (controlled anthropogenic events).

In reality a combination of all three will certainly occur since we have virtually no control over the first and only limited control of the second.

The bottom line is that active forest management, with clearly defined objectives, and a set of silvicultural procedures that have been formulated, based on specific stand and site conditions, can be a very effective and efficient means of perpetuating our forests and ensuring their ecological integrity. Forest management when applied using our very best science based knowledge and professional experience, will certainly maximize uses and enhance values for society, and be ecologically and biologically sound. A strong and viable timber sale program is essential on U.S. Forest Service lands and now is the time to change this need into reality.

APPENDIX A: OVERVIEW AND HISTORICAL SYNOPSIS

The forests of the United States are essential to the social, economic and biological well being of the country. They are extremely diverse, consisting of more than 600 tree species, about 145 forest cover types, and are well distributed across the lower 48 states, Alaska and Hawaii. These tree species and forest cover types occur on hundreds of geologic formations and soil types, at elevations from slightly below sea level to over 10,000 feet, receive from less than 20 to over 100 inches of rainfall annually, and are subject to a wide array of natural (ice, snow, tornado, seismic, volcanic wildfire, etc) and anthropogenic (polluted air and water, spills, human and vehicular traffic, harvesting etc) disturbances. Our forests are dynamic and resilient biologic systems--the only thing that is constant in a forest is change.

Many caring and well-meaning citizens have perceptions of forests (prior to European colonization, a little over 400 years ago) as being "natural" forests, untouched by human activity and made up of climax, old-growth stands and forests. There is a belief among many that, if left alone, protected, and preserved, they will once again develop into this perceived "natural" state. This return to the "natural" state simple cannot occur. Human activity has resulted in irreversible ecologic changes to the earth. Tree species have evolved for millions of years; however, the forests of this country, as we know them today, have been in place less than 12,000 to 14,000 years. Based on the most recent anthropological studies, they have been under significant human influence, (man caused fire) for their entire

existence. Accounts from historical documents of early U.S. explorers (starting in the late 1500's) published in Tom Bonnicksen's (2000) recent book "America's Ancient Forests-From the Ice Age to the Age of Discovery" clearly depict forest conditions that reflect significant human disturbances. Forest conditions that ranged from thickets of new regeneration, to maturing forests, to majestic old-growth stands that were well scattered across the landscape-- stands and forests significantly altered by native Americans. These stands and forests ranged from single species, singled aged to multiple species and multiple aged stands...forests that had been subjected to significant human influence.

During the period of early colonization's (1600 to the mid 1800's) forests near settlements and along transportation routes were cleared for cropland and to provide local

building materials and fuel. Forests were considered to be inexhaustible. With the beginning of the industrial revolution (1850) record amounts of land were cleared for cropland to produce food and to provide the building materials to build a country; by 1920 most eastern forests had been cut and land clearing for agriculture had leveled off throughout the country. Also by 1920 there was a real awareness by some government leaders and conservationists that the timber resources had limits and that there was need for management based on new knowledge from scientific studies and observations. By the late 1960's it became apparent to many Americans the tremendous value of the nation's forests. There was a developing awareness of all of the uses and values that forests are capable of producing. On federal lands, especially on National Forests, there developed intense discussions of management objectives with clear lines of differing opinions about the priority, combination of management objectives, and how this management was to be achieved.

By the mid 1980's the U.S. Forest Service was mired in controversy over the development of National Forest Plans. Common ground for developing management objectives was very difficult to achieve and often impossible to implement -- a critical situation that exists today, and one that I am gravely concerned about.

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