

February 15, 2002

Dear members of the Regional Interagency Executive Committee:

As economists who specialize in natural-resource and economic-development issues in the Pacific Northwest, we are writing to provide input regarding the economics of public forestlands, and to offer our recommendation regarding the management of late-successional and old-growth forests. Specifically, we join together with the group of prominent Northwest scientists who recently recommended protection of all late-successional and old-growth forests in the region covered by the Northwest Forest Plan (Perry, et al., 2001).

From an economic perspective, late-successional and old-growth forests are assets that can be used to satisfy a variety of human wants. Debates about the economics of public lands tend to focus on the commercial benefits of extractive activities such as timber harvesting. While extractive uses provide value that is relatively easy to measure, this focus is too narrow. There are non-extractive and "passive" uses of forests for which markets are either incomplete or nonexistent, but which nonetheless provide significant economic value. Economists are beginning to acknowledge and measure these values, providing a more complete picture of the economics of public forestlands.

The economic benefits of forest protection derive in part from recreational use. Old-growth forests provide uncommon opportunities for recreation. Recreation yields direct benefits to users, and also generates commercial opportunities for outfitters and others who sell goods and services to recreationists. The presence of recreational amenities can also provide benefits indirectly by helping to foster regional economic development. Such amenities provide a "second paycheck" in the form of nonpecuniary compensation, which makes it easier for firms to attract highly qualified workers. There is a growing body of evidence that the protection of a region's environmental amenities can provide an important stimulus to local economic development (Power, 1996a, 1996b). Opportunities for recreation in older forests are particularly important. Areas that are currently protected in our nation's forests and national parks meet some of this recreational demand, but as these protected areas become increasingly congested, the protection of additional public forestlands becomes increasingly important.

In addition to benefits associated with recreation, there is growing recognition that the old-growth ecosystem and the biological diversity it fosters contribute to human well-being by providing "existence value." Late-successional and old-growth forests provide essential habitat for sensitive plant and animal species. As noted in a report of the National Research Council, "(m)uch of the biological diversity of the Pacific Northwest is associated with late-successional and old-growth forests" (NRC 2000). Many Americans consider these older forests and the associated biological diversity to be important national treasures, the loss of which would diminish our well-being. This existence value is measurable in principle, and recent advances have improved its measurement in

practice. Studies finding substantial benefits from the protection of old-growth forests and spotted owl habitat include Rubin, et al. (1991), Hagen, et al. (1992), and Brown, et al. (1994).

Finally, the ecosystem services provided by older forests — including flood control, the protection of water quality, and the maintenance of salmon runs — provide important benefits. As these services are lost or diminished we may seek to mitigate the damage through restoration programs, but such programs are costly and in most cases fail to restore fully the lost ecological services. The value of these services and the difficulty in replacing them should be considered when setting forest policy.

While the evidence suggests that protection of late-successional and old-growth forests would yield substantial benefits, such protection would also impose costs in the form of foregone benefits from timber harvesting. At the national level, these costs could take the form of reductions in timber supply and resulting increases in wood product prices, while at the local level there is the potential for adverse impacts on employment and income in the timber industry. As the result of changes in the timber industry over the last decade, however, these costs are likely to be small. A major transformation has occurred in the wood products industry in Oregon and Washington. There has been a substantial shift away from reliance on federal timber, and an even greater shift away from reliance on large-diameter logs from older forests.

Logging on federal lands once provided a critical source of supply for northwest lumber producers. By 1998, however, logging on federal lands in western Oregon and Washington had declined to just 7.5 percent of total logging as measured by volume (Niemi, et al., 1999). From 1988 to 1998, the number of sawmills in western Oregon that received over two-thirds of their logs from National Forest or BLM lands declined from 31 sawmills to 1 sawmill (ODF 2000, Howard and Ward 1991). Sawmills that did not receive any wood from Forest Service lands increased from 25.2% to 56.3% (30 to 40 sawmills) and those that did not receive any wood from BLM lands increased from 38.7% to 66.2% (ODF 2000, Howard and Ward 1991). A similar transformation occurred in Washington State. From 1990 to 1996, the percentage of sawmills in Washington that received over two-thirds of their logs from federal lands declined from 10 to none. Sawmills that did not receive any wood from the federal lands increased from 47.6% of all sawmills to 74.6% (WDNR 1990, WDNR 1996).

There has also been a dramatic shift away from dependence on larger logs. Between 1990 and 1996, the percentage of logs over 100 years of age processed in sawmills in western Washington dropped from 24.0% to just 3.9% (WDNR 1988, 1996). Many of the newer, more-efficient mills utilize equipment that works best with uniform, smaller-diameter logs. Indeed, the shift towards the use of such logs has been so far-reaching that larger logs have at times sold at a discount relative to smaller logs — something that would have seemed unthinkable ten years ago (Erb, 2001).

In short, sawmills in Oregon and Washington have become less dependent on federal timber, and much less dependent on larger logs from older forests. While elements of this transformation were forced on the industry, it has nonetheless resulted in a fundamental restructuring. This should be kept in mind as your committee considers management alternatives for older forests. The employment, income, and price impacts of protecting our remaining old forests are likely to be very small in percentage terms.

The potential impacts on consumers are further mitigated by the emergence of wood-conserving technologies and production methods. These include the use of engineered wood products (and other materials that are less wood intensive), reductions in wood waste at the job site, increased recycling and reuse of wood fiber, and changes to home designs that result in significant material savings. Such trends can be reinforced by policies that provide incentives for more efficient use of wood fiber.

As older forests have become increasingly scarce, the recreational and passive-use values of these forests have increased relative to the value of extractive use. In light of the economic considerations discussed above, we conclude that there is insufficient economic justification to warrant further logging of the region's late-successional and old-growth forests. We urge you to protect all remaining late-successional and old-growth forests throughout the Pacific Northwest region.

Sincerely yours,

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