

NCASI TECHNICAL STUDIES OF ENVIRONMENTAL ISSUES AFFECTING FIBER SUPPLIES

ALAN A. LUCIER

NCASI FORESTRY PROGRAMS HELP PROVIDE A SOUND TECHNICAL BASIS FOR INDUSTRY PARTICIPATION IN REGULATORY PROCESSES.

THE FORESTRY PROGRAMS OF THE NATIONAL COUNCIL of the Paper Industry for Air and Stream Improvement (NCASI) are addressing industry information needs related to critical threats to fiber supplies in the United States. In our view, these threats fall into two broad categories: excessive regulation of private forestry and inadequate public support for sustainable forestry. The following sections explain the nature of these threats in some detail.

EXCESSIVE REGULATION

The greatest near-term threat to fiber supplies is excessive federal regulation of private forestry under the Clean Water Act and Endangered Species Act. Federal agencies seem intent on expanding their authority over private forestry at the expense of landowners and state forestry agencies. In many cases, federal agencies are using dubious scientific arguments to justify their actions.

The U.S. Environmental Protection Agency (EPA) is currently engaged in an effort to greatly expand its authority to regulate forest management under the Clean Water Act. The most important part of this effort is EPA's proposal to reclassify forestry activities as point sources potentially subject to permitting requirements of the National Pollution Discharge Elimination System. EPA justifies this effort by claiming that forestry activities are significant causes of water quality impairment and that the states have not developed adequate control mechanisms.

Studies by NCASI and others provide clear evidence that forestry is a minor source of water quality problems at the national scale and that all states with significant amounts of timber harvest have nonpoint source control programs for forestry activities. State nonpoint source control programs are based on implementation of Best Management Practices (BMPs) that have been proven ef-

fective by extensive research. The forestry community has made considerable progress in its efforts to promote and document the implementation of BMPs. A recent NCASI Special Report (No. 99-06) provides a useful summary of technical information relevant to this issue.

Federal regulation of private forestry under the Endangered Species Act (ESA) is handled by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service. Unfortunately, agency actions under the ESA often lack a sound scientific foundation.

Through NCASI, the industry has developed an efficient process for addressing technical information needs affecting the listing and management of individual species under the ESA. Key steps in the process include:

- Identifying key species and information needs
- Organizing needed studies to fill information gaps
- Communicating the results to federal agencies and other stakeholders

Through this process, the industry has significantly strengthened the scientific basis for managing important species such as the spotted owl, black bear, northern goshawk, and others. Scientific progress has often led to reductions in regulatory burdens associated with particular species. Unfortunately, the overall regulatory burden imposed by the ESA is increasing because the number of protected species is growing rapidly.

SUSTAINABLE FORESTRY

In addition to near-term regulatory issues, the industry faces the long-term challenge of regaining public support for a vision of sustainable forestry that integrates economic and environmental values. Without public support for sustainable forestry, it may be impossible to restrain

excessive regulation of forest management and sustain adequate wood supplies for a growing U.S. industry in the 21st century.

The industry's commitment to regaining public support for sustainable forestry is being realized through AF&PA's Sustainable Forestry InitiativeSM and related programs. NCASI has an important role in addressing technical questions about the compatibility of economics and ecology in sustainable forestry. Key topics are outlined in the following subsections.

Biodiversity in managed forests

A fundamental challenge to the concept of sustainable forestry is the popular notion that managed forests have little value as wildlife habitat. Studies by NCASI and others have shown that wildlife populations in managed forests are generally larger and more diverse than expected. Comparisons of managed and unmanaged areas often reveal differences in wildlife communities, but the differences are often surprising. A significant number of species, including some considered rare or declining, are more abundant in managed forests. Species that are missing or greatly reduced in managed forests are relatively few in number. Opportunities to accommodate both wildlife and timber production may be much greater than previously thought. NCASI's biodiversity research has moved beyond comparisons of managed and unmanaged areas into studies of wildlife responses to alternative management regimes and conservation measures.

Intensive management

A key element of industry's vision of a sustainable forestry is greater use of technology to increase wood supplies from lands well-suited to intensive management. Increases in supplies from intensively managed areas are needed to offset reductions in supplies from areas where timber production has been prohibited or de-emphasized. A clear and urgent challenge is to determine how productivity can be increased on select areas while keeping measures of environmental quality within acceptable ranges. NCASI is investigating effects of intensive management practices on water quality, wildlife habitat, and long-term soil productivity. A critical objective is retaining access to key technologies such as fertilization, chemical weed control, and genetic engineering.

Forest monitoring

Good information on forest conditions and trends is prerequisite to meaningful public discourse on forest and environmental policies. Primary responsibility for large-scale forest monitoring in the United States lies with the U.S. Forest Service and its Forest Inventory and Analysis Program (FIA). The forest industry and others are trying to strengthen FIA because the quality and timeliness of FIA data are inadequate to meet current needs. NCASI is

participating in assessments of FIA technical issues and seeking solutions through cooperative research with the Forest Service and others. Current strategic priorities for FIA include:

- Implement the Annual Forest Inventory System in FIA units throughout the United States
- Evaluate options for using remote sensing technologies to improve FIA data quality and cost effectiveness

Interactions of sustainable forestry with other issues

There are many significant interactions of sustainable forestry with other ecological issues. Analyses of these interactions often reveal opportunities for sustainable forestry to be part of solutions to large-scale problems in ecology and environmental management. Current research topics for NCASI include:

- Economic options for enhancing carbon sequestration in forests and forest products
- Beneficial use of mill residuals as soil amendments in managed forests
- Planting commercial forests on marginal cropland for cost-effective restoration of wetland functions in the lower Mississippi Valley

CONCLUSION

Regulatory threats to fiber supplies are unlikely to diminish over the next decade. Environmental activists seem unwilling to abandon their tactic of constantly proposing new restrictions on forest management. When agencies express interest in new restrictions, industry has little choice but to insist that regulatory proposals be subjected to careful analysis. NCASI is a valuable technical resource for the industry in regulatory processes affecting forest management and fiber supplies.

Regaining public support for timber production in the context of sustainable forestry is a complex task. Concerns about effects of timber production on wildlife and water quality will increase as the intensity of management increases. NCASI research is helping the industry respond to public concerns and retain management options. NCASI is also helping the industry explain how sustainable forestry can be part of solutions to large-scale environmental concerns such as climate change and wetland restoration. TJ

Lucier is senior vice president of NCASI, P.O. Box 13318, Research Triangle Park, NC 27709-3318. Address correspondence by email to alucier@ncasi.org.