Introduction

Forests have enormous untapped potential to address major issues facing our country, including national energy security, climate change, declining ecological services such as wild fire, global competitiveness of forest-based industries, air and water quality, wildlife habitat, and wetlands, and the sustainability of rural communities. The United States Department of Agriculture (USDA) must pioneer new and improved forest research, development and technology transfer to economically and sustainably produce forest services and products to meet the needs of people while improving forest health and condition, helping private forest landowners, and contributing to expansion of a biomass-based economy.

Recommendations

FRAC recommends the following actions to increase the value and effectiveness of USDA’s forest research portfolio:

Building Capacity

- Create a competitive interdisciplinary graduate and post-graduate training program that develops cohorts of students trained to address complex forest issues. We recommend an allocation of $3 million per year that could support ten institutional awards nationwide.

Research Initiatives

- Complete a large-scale genome sequencing project for the major US commodity conifer, Pinus taeda (Loblolly pine), over a period of five years.
- Develop a national forestry research program in the emerging technologies of nanotechnology and biorefining. These technologies are critical to enhancing the global competitiveness and energy security of the United States.

Efficiency and Effectiveness

- Develop a joint, annual review of Forest Service Research & Development and Cooperative State Research, Education, and Extension Service (CSREES) programs. The purpose of this review would be to develop a coherent forest research portfolio that most efficiently addresses America’s forest research priorities.
- Competitive grants for forestry research are dispersed among several National Research Initiative Competitive Grants Program (NRI) areas, resulting in a fragmented and under-funded portfolio. Create a separate NRI panel that coordinates projects that relate to forestry and forest ecosystems, including forest products (equivalent to $30 million). The description of NRI programs should explicitly identify forest resources as it does for agriculture, along with “sustaining the quality and productivity of the natural resources” as now stated.
- Streamline USDA management of forest bioenergy and biobased products research by designating one authoritative USDA program manager.
- Establish a joint task force drawing from USFS, CSREES, and partners to develop new models for effective and timely delivery of research information to stakeholders of forestry research.

The members of the Forest Research Advisory Council (FRAC) are: Gregory Johnson (Chair) Weyerhaeuser Company; Jeb Barzen, International Crane Foundation; Steven Brink, USDA Forest Service; Richard Brinker, Auburn University; David Canavera, MeadWestvaco; Malcolm Guidry, Consulting Arborist; John M. Hagan, Manomet Center for Conservation Sciences; Alan Lucier, National Council for Air and Stream Improvement; James Rakestraw, International Paper; David Reed, Michigan Tech University; Charles Reid, University of Arizona; Terry Sarigumba, The Timber Company (retired); C.T. Smith, Texas A&M; Frank Stewart, Forest Landowners; Barbara C. Weber, USDA Forest Service; Theodore Wegner, USDA Forest Products Laboratory; Bruce Wiersma, University of Maine; and Claire Williams, Duke University.

The Forestry Research Advisory Council to the Secretary of Agriculture met in Washington DC, August 25, 2004 and in St. Louis November 4, 2004. This report presents the Council’s recommendations from these meetings.