

Funding Natural Resources Research

A summary of Ideas from the NAUFRP Summit: Defining Strategic Directions and Rebuilding Capacity – January 4-6, 2006 – NCTC – Shepherdstown, WV

Over the past several years federal funding for forestry and natural resources research has been essentially static. Programs such as the Cooperative Forestry Research Program (McIntire-Stennis) have come under pressure due to their formula nature and new funding mechanisms have emerged such as the Cooperative Ecosystem Studies Units. At the same time, the forest products industry has changed considerably and fewer firms with robust research departments exist today. These issues, and many others, dictate that current approaches to funding science in the natural resources arena need a fresh look and new ideas for strengthening natural resources science and research.

Criteria for a Funding Model – There are several criteria that must be satisfied by an overall funding model for natural resource science and research. Within a model for funding we need elements of the following:

- Research *relevant to customer/client/sponsor needs*;
- *Alliances/partnerships between research providers*;
- Funding focused on *alliances/partnerships across disciplines*;
- Funding focused on a balance of *long-term research* and *short-term research*;
- Funding focused on *a new science of integration*;
- Funding including both *base and competitive* research components sufficiently supported to enhance forestry and natural resources science;
- Funding focused on *research-outreach combinations*;
- *Applied and fundamental research* funding;
- A funding model that ensures that we are *competitive for the resources available*.

Devising a funding model that recognizes a variety of organizational participants and that meets these criteria is a very complex task.

Components of a Funding Model – While there are many potential components of a funding model, some that might be considered are the following:

- Including greater participation of *private landowners and the philanthropic donor community* in the funding picture;
- Considering *more governmental agencies* at more governance levels as part of the research funding picture;
- Building *multiple organization consortia* (centers) at regional or topical scales to achieve greater integration across organizations, disciplines, and research-outreach;
- Finding ways to *combine inventory information from multiple sources* so that there is a strong base for understanding forest resources;
- Developing a *strong competitive grants program* specifically targeted at forestry and natural resources;

- Modifying the formula for the *McIntire-Stennis Program* to ensure base support for research infrastructure, while developing competitive and cross institutional components;
- Formulating a new model for *Forest Service research* built on cooperative partnerships, defined organization niches, and shared infrastructure (more akin to the NIH model);
- Developing more and regular *means for setting the research agenda by bringing diverse parties together, such as in the NAUFRP summit, to establish annual and long-range research agenda.*

Particular Challenges in Funding Natural Resources Research – For the past several years, funding of natural resources research has either not been particularly high on the *national agenda* or there have been *too few champions* for the need for increased funding. In addition, natural resources research is *highly fragmented* across funding and suppliers at the national scale, thus making a comprehensive view of the enterprise and what it is producing difficult to formulate. This is compounded by *a lack of understanding about forestry and its dimensions* by many segments of society. Further compounding the problem is a lack of funding for coordinated and comprehensive base monitoring that is necessary for understanding the state of the forest. At a technical level, it has been difficult to *measure a return on investment* in research across agencies and ownerships. And, at an organizational level, many potential research sponsors and suppliers have never been *brought together* to help formulate and advance a research strategy and agenda for more than one or two components of the total research enterprise. All of this suggests a need to *reassess organizational roles and impacts* to be most effective with any significant change in the funding model. A pertinent question is, how might forestry and natural resources research be funded if we were to start from scratch? That is, if we could start over with forest-based research investments, what would be the optimum design for the funding program?

Recommendations – Several recommendations have been derived from these outputs from the Summit.

- Greater participation of private landowners and the philanthropic donor community should be brought into the science enterprise.
- Greater participation of agencies at different governance levels should be brought into the science enterprise.
- The legal and practical feasibility of developing multi-organization “centers” for research and outreach should be explored and, if found feasible, such centers focusing on regions or themes should be developed.
- An investigation of the feasibility of bringing myriad pieces of inventory information together in one framework should be undertaken.
- A strong competitive grants program for forestry and natural resources, separate from the NRI, or clearly focused within NRI, should be developed.
- The McIntire-Stennis Program should be increased by 25% to accommodate both a reduction in formula funding of approximately 25% and establishment of a competitive program of approximately \$10 million within the program. This

could be phased in over a three year period to ensure continuity of existing efforts. These competitive funds could be used to fund individual programs and/or part of the programmatic and administrative costs of the “centers” noted above.

- Regular regional research agenda setting meetings should be instituted to coordinate the annual and long-term requests for funding and program development by research suppliers.