# America's Forest Research Policy

***Highlights* -- Final Report by the Blue Ribbon Panel**

***Forestry Research Advisory Council***

***August 25, 2004***

# *Two major recommendations*

**1. Improve structure of USDA forest research and its administrative processes to increase efficiency & effectiveness of all elements.**

**2. Increase total funding appropriated to the USDA for forest research, extension, & technical transfer by at least 50% as structural changes are made and results realized on-the-ground.**

# *America's Forest Research Policy*

- **Background**
- **Americans want variety of values from forests**
- **Who owns America's forestlands?**
- **Threats to forest-based values**
- **Research helps us obtain many values desired**
- **Core forest research system is in USDA**
- **Public support of forest research is necessary & desirable**
- **Forest research capacity is declining**

**The NRC Report on Forest Research Capacity and Forest Science Summit, May 2002, raised many useful points….**

**But neither answered the question:**

***Capacity for Whom?***

***For What?***

***And Where?***

*Idea of a Blue Ribbon Panel emerged during the Summit.*

*FRAC Chair appointed the committee in early 2003.*

- **William Bentley, Salmon Brook Associates**
- **George Brown, Alabama A&M University**
- **Jane Difley, Society for the Protection of New Hampshire Forests**
- **Alan Ek, University of Minnesota**
- **Sharon Haines, International Paper**
- **Greg Johnson, Weyerhaeuser**
- **Hal Salwasser, Oregon State University**
- **Gerry Thiede, retired Michigan State Forester**

# Forests Support Our Quality of Life

- **Clean water and clear air**
- **Wildlife and fisheries**
- **Recreation and spiritual renewal**
- **Cultural and natural heritage**
- **Wood and fiber products; housing, paper, chemicals**
- **Jobs and incomes for families; subsistence values for some**
- **Private property ownership by individuals, companies, and non-profits**
- **Carbon storage and climate**
- **And many other goods and services**

# *Ownership of Commercial Forestland*

| *Ownership category* | *Mil ac* | *%* |
|---|---|---|
| Small private ownerships | 290.7 | 58% |
| Forest industry/institution | 65.6 | 14% |
| National Forests | 96.6 | 19% |
| BLM/other fed (incl. Tribal) | 13.1 | 3% |
| State and local public | 37.6 | 7% |
| Total | 503.6 | 100% |

***Key Points – Most Lands are private and most private forestlands are in small ownerships***

# *Past Research Accomplishments:*

- **Sustained-yield forestry**
- **Water and soil protection**
- **Forest operations**
- **Insect and disease management**
- **Protection from catastrophic fire**
- **Reforestation on harsh sites**
- **Maintaining fish and wildlife resources in managed forests**
- **Recreation values in different landscapes**
- **Mine reclamation**

# Forestry research funding concentrated in USDA

- **$266 million appropriated to Forest Service R&DA**
  - $235 million internal; $30 million external
- **$22 million McIntire-Stennis Co-op Forestry Research Program**
  - formula funds; no strategic focus
- **$4 million to RREA for extension, tech transfer**
- **$8 to $15 million in the NRI competitive grants**
  - focused on *Big Science* questions concerned with forests
- **$5.1 million in FS International Forestry, largely research and technology transfer in developing nations**
- **In addition, $279 million in FY2003 in FS State & Private Forestry, partially tech transfer (~10%)**
- **$$$ million more from non-USDA sources**

# *Forest Challenges*

- **Demands for all forest values and resources are rising**
- **Forest land values are threatened by urban sprawl, changing land uses, fragmentation, invasive species, fire, unmanaged recreation**
- **America is the world's largest importer and user of wood and fiber**
- **Industrial, community and environmental interests often clash over forest policies**
- **Forest management purposes diverging by ownership class**
- **US forest issues are <u>not</u> same as National Forest issues**
- **US problems not well addressed by research: e.g., wood yield, SFM certification, urban sprawl, parcelization**

# *The Need for Action:*

- **Increasing demand and global competition**
- **Reduced forest management on public lands**
- **No management on most small private woodlands**
- **Few large owners have research/technical services**
- **Ownership and fragmentation changing America's forest environment**
  - **not understood by scientists or practitioners**
- **Poor use of science to guide management**
- **Public forest policies increasingly reflect ideology**

# *Need for Focus:*

- **Design research programs to meet diverse user needs**
- **Invest research $$ in highest priorities for desired forest outcomes, recognizing different forest purposes**
- **Deliver research and technology results to practitioners and policymakers to solve complex problems, add value to enterprises**
- **Build research capacity to address most pressing current and future forest management challenges**

# *Another Need for Action:*

**Current public investment in forest-related research, education, and extension are:**

- **➔Insufficient to attract adequate diversity**
- **➔Insufficient to attract the talent needed**

# *The Capacity Problem:*

- **Research not widely perceived as part of the solution to complex forest environmental or economic challenges**
- **Thus, stable to declining real spending on federal forest research**
- **Aging scientific workforce with many retirements not being replaced**
- **Leading to a critical reduction in research capacity within and among Forestry subject areas and supporting disciplines**
- **Fragmented budget and accountability among agencies**
- **No Shared Vision**

# *Applied Forest Research and Extension must be integrated*

Applied research should begin with dialogue between owners & managers of forests and extension & research specialists.

***Better Questions lead to Better Answers***

# *What is lacking? Focus!*

- **Forest Service currently focused on National Forest System threats**
- **Forestry schools not funded to focus on problems of diverse private forest owners**
- **USDA has increasingly diffuse role -- too few leaders spread too thin**
- **Earmarks are becoming a bigger % of USDA forestry research budget -- symptom of drift, lack of attention to enabling legislation and its avowed purpose**
- **Congress has not seriously reviewed forestry research and extension since late 1970s**

# *Balance, Reform, and Funding*

- **Refocusing USDA investment in forest research requires new designs, investments, and delivery mechanisms**
- **Effective solutions to real problems will also lay the groundwork for developing a shared national vision and voice**
- **Recommend that Congress and the two agencies consider major changes in the existing agencies and programs**

# *Blue Ribbon Panel's 2 Recommendations regarding USDA forest research and extension*

- **Improve the structure of USDA forest research and its administrative processes to increase efficiency and effectiveness of all elements**
- **Increase total funding to USDA for forest research, extension, and technical transfer by at least 50% as the structural changes are made and results realized on-the-ground.**

# *Improve Structure and Process*

- **System needs uniform processes for budgeting and accountability**
  - ***FS research and development and technology transfer, CSREES forest research and extension activities, and research and extension programs in the 50 states and the territories receiving forestry funding from USDA Applied research be integrated with extension, outreach, technical transfer efforts***
- **Reach for a vision**

# *Vision*

**USDA and its agencies and partners are "go to" place for information and solutions for productive management, protection, and sustainability of the nations forests:**

- **Resources and flexibility to address today's issues effectively, both broad and local, and to respond to tomorrow's needs**
- **Effective translation and communications capability – rapidly transforming scientific discovery to usable knowledge**

# *Increase total USDA funding for forest research by at least 50%*

- America underinvesting in knowledge about forests.
- Flat funding in real $ → declining funds in effective $
- Salaries for top scientists rising in real terms; same is true for equipment.
- Forest research system has fewer science FTEs
- Unable to compete for top women, minorities, other talent needs
- Forest research investments yield high returns
  - Often risks are low; results spread over millions of acres
  - Some topics (e.g., control of invasives or biotechnology) have high risks, but payoffs are enormous
  - Risks are lower with broad strategies of inquiry

**In early report drafts, we recommended that the Congress hold hearings on America's forest research system.**

**This remains an important idea.**

**Beyond that step, however, we hope the content and spirit of this report will help the system improve and set in place key benchmarks for progress.**