



WASHINGTON, D.C.

FOREST SERVICE RESEARCH AND DEVELOPMENT

STATE FUNDING HISTORY	Enacted FY 2003 (\$)	Enacted FY 2004 (\$)	Pres. Budg. FY 2005 (\$)
			<i>a/</i>
Washington Office Costs (includes headquarters and nat'l support.)	31,965,000	32,269,000	38,320,000
WASHINGTON, D.C. TOTAL	31,965,000	32,269,000	38,320,000

a/ \$6.1 million for Tech Transfer will be allocated to Stations thru a competitive process.

RESEARCH & DEVELOPMENT, a division of the USDA Forest Service (FS R&D), strives to be the "go to" organization for information and solutions to sustain forests and rangelands and the values they provide people. FS R&D has the flexibility to address today's issues effectively and to respond to tomorrow's needs. Among the world's leaders in forest conservation research, scientists contribute to the stewardship of land, real property and society by providing research results that help create jobs and affordable homes, and improve the health of trees, forests and forest ecosystems. Innovative research products permit the Forest Service and other public and private land managers to monitor and manage forest responses to environmental change, contributing significantly to the sustainability of the nation's forests and rangelands and improving human health.

FS R&D operates six research stations, the Forest Products Laboratory, and the International Institute of Tropical Forestry located in Puerto Rico. It employs over 500 scientists and hundreds of technical and support personnel at 67 field sites

throughout the nation. The FY 2005 President's Budget includes \$280,654,000 for Forest and Rangeland Research.

The **Washington Office (WO)** is responsible for providing national R&D (1) **Oversight**, (2) **Strategic Direction**, (3) **Advice**, and (4) **Representation**. Oversight includes leading Deputy Chief level reviews of R&D stations programs and, every 5 years, a peer review of each research project. Strategic direction assists the stations in setting short- and long-term research priorities. WO R&D provides advice to the Chief and other Deputy Chiefs of the FS, the Administration, Congress, interest groups, other Federal Agencies and the general public. Representation includes coordination across the FS, across the Department, with international R&D partners, and with many state and local governments, and NGO partners. In addition, the WO R&D is the home for certain (5) **Special Projects**, which due to their nature, are best housed out of the WO. Funding in the Washington Office includes administrative costs, national

commitments on interagency projects, and funding for national level special projects. These national commitment and special projects funds are generally allocated to the field after the appropriation is passed.

WO R&D OVERSIGHT:

- Washington Office R&D provides oversight for the national Forest Inventory and Analysis (FIA) program – the nation’s forest census. This \$22,000,000 program reports on status and trends in the Nation’s forested resources. FIA data are used by State Foresters, land managers, policy makers, scientists, environmental organizations, and business interests to make informed decisions about forestry issues. Over the past 5 years, the FIA program has increased the currency, consistency, and accessibility of information about the nation’s forested resources. For more information, see the FIA web site at <http://www.fia.fs.fed.us/>. The FIA Annual Business Report is published and made available to our clients and collaborators.
- The Deputy Chief for R&D conducts periodic research station reviews of the station strategic vision, management and business operations, program delivery, customer service, and opportunities for the station now and in the future.
- Technical Assistance Visits (TAVs) are made by WO Staff to Station Research Work Units (RWUs) prior to revision of the RWUs work description to address specific research problems and reach agreement on the unit’s mission.

WO R&D STRATEGIC DIRECTION:

- Under the **Government Performance and Results Act**, WO R&D collaborates with agency

strategic planners to revise the agency strategic plan each 3-5 years.

WO R&D ADVICE:

- **Greenhouse Gas Accounting Rules and Guidelines for Forest Systems.** As part of the Climate Change Initiative, the President directed USDA to develop accounting rules and guidelines for crediting forestry and agriculture sequestration projects, in consultation with DOE and EPA. The Forest Service is the lead agency in developing greenhouse gas accounting rules and guidelines for forest systems. This effort is being led by a team of scientists from FS R&D and involves National Forest System, State & Private Forestry, federal and state agencies, universities, and other groups. The rules and guidelines will be based on solid scientific and technical work to be credible and will be used extensively as a basis for crediting forestry activities under a voluntary reporting program administered by the U.S. Department of Energy.
- FS R&D is a full partner in producing the **Strategic Plan for the U.S. Climate Change Science Program.** FS R&D staff participated, and continue to lead, in creating the science and technology development and implementation program to mitigate climate change through environmentally- and economically-sound means.
- FS R&D sponsored the **“USDA Symposium on Natural Resource Management to Offset Greenhouse Gas Emissions”** (Raleigh, NC, Nov. 2002). Contributions are peer-reviewed and will be published as a special edition of *Environmental Management*. Results were presented from forest, agriculture, rangeland, wetland, and urban systems. Symposium sponsors were USDA, Forest Service,

Agricultural Research Service, Natural Resources Conservation Service, Economic Research Service, Farm Service Agency, and Cooperative States Research Education and Extension Service. Results are being applied to improve management on public and private forest lands and as a basis for policy development and implementation.

- FS R&D was represented on the writing team for revision of the rule that directs how the agency will conduct science based Forest Planning
- **Forest Structure and Wildfire.** WO R&D has worked closely with a team of authors from several Research Stations to produce a paper titled "Science Basis for Changing Forest Structure to Modify Wildfire Behavior and Severity." This paper reviews and synthesizes the literature pertaining to the topic giving guidance to those who are formulating policy or planning projects that involve manipulating forest stands to bring about changes in wildfire outcomes. The paper has been peer reviewed and will be published as a General Technical Report by the Rocky Mountain Station.
- FS R&D will chair the USDA Biobased Products and Bioenergy Coordination Council's strategic planning meeting scheduled for April 2004 and is actively involved in providing direction for the biomass R&D grant program and the program for preferred Federal purchasing of biobased products, both of which are required by Section 9 of the 2002 Farm Bill.
- **Homeland Security.** Forest Service R&D is leading a five-agency consortium developing an "Incident Command Information Tool (ICIT) for Protecting Drinking Water Sources." This tool will enable Incident Commanders to protect the public from terror attacks on drinking water sources. Supporting partners are National

Forest System, State and Private Forestry, Environmental Protection Agency and the Technical Support Working Group. Cooperating partners are Federal Emergency Management Agency, and Defense Threat Reduction Agency.

WO R&D REPRESENTATION:

- National Invasives Species Council
- IUFRO leadership assignments
- IEA leadership assignments
- North American Forestry Commission leadership assignments (R&D Deputy Chief served as Chair of the UNEP-FAO North American Forestry Commission.)
- Council on Environmental Quality (CEQ) assignments (i.e., Geographic Information Committee)
- Served on the White House OSTP Bio Informatic committee and the Committee on Natural Disturbances
- Non-governmental organization (NGO) committees
- Participated on the USDA Committee of Environmental Effects of Transgenic Plants.
- Active member of the "Biobased Products and Bioenergy Coordination Council" of USDA.
- Active member of the "Physical Structures and Systems Interagency Working Group" of the President's Office of Science and Technology Policy (OSTP).
- Hold leadership posts on or are members of: Society of American Foresters; Forest Products Society; Society of Wood Science and Technology; Ecological Society of America; Wildlife Society; Fisheries Society; Soil Science Society of America; Agronomy Science Society of America.

SPECIAL PROJECTS:

- The 2005 Update of the 2000 RPA Assessment of Forest and Range Lands will be completed in 2005. This report, which is mandated by the Renewable Resources Planning Act of 1974, reviews resource conditions with emphases on water, wildlife, outdoor recreation, timber, range, and minerals. The RPA Assessment supports the USDA Forest Service Strategic Plan by providing context for renewable resource conditions in the United States. The Report will be published in 2005 with a draft copy available at the following URL address: <http://www.fs.fed.us/pl/rpa/list.htm>.
- Forestry research findings will continue to be transferred to urban school populations by means of "The Urban Tree House," and through development and publication of classroom instructional journals such as the "*Natural Inquirer*." In FY 2003, approximately 240,000 copies of the Wildland Fire Edition of the "*Natural Inquirer*" were distributed to classrooms nationwide in cooperation with the BLM and National Interagency Fire Center.
- The FS R&D **Patents Program** (Madison, WI) protects the Government's interest in new technologies by patenting new Forest Service inventions and licensing patents to private firms.
- The **National Urban Tree House**, is a locally based partnership conservation program in Washington, DC (Anacostia), Atlanta, Milwaukee, and Salt Lake City. During the summer of 2003 a coordinated conservation education program will be conducted at all four sites to determine how well students comprehend basic ecological principles as a result of attending programs at the Urban Tree House. The results of these evaluations will be used to identify changes needed to enhance program effectiveness.
- **Social Geography Workshop.** FS R&D, in cooperation with George Mason University (GMU), is planning a workshop on social geography research needs relevant to natural resources management. Principle participants will be researchers from federal natural resource agencies with additional contributors from non-federal public agencies, non-profit groups, and universities. The workshop will foster collaborative relationships between participants and will produce a published document describing current research and future opportunities in social geography. The workshop will be conducted in the fall of 2003 on the GMU campus.
- FS R&D has been assisting with planning and organization of the **Workshop on Options to Provide for Diversity of Plant and Animal Communities in Land and Resource Management Planning.** The revision of the planning rule directs how the agency will conduct Forest Planning.
- FS R&D joined with the National Forest System and State and Private Forestry to develop a **National Invasive Species Strategy** to "reduce, minimize, or eliminate the potential for introduction, establishment, spread, and impact of invasive species across all landscapes and ownerships." Invasive species include plants, insects, and pathogens, and are a leading threat to maintenance of ecosystem productivity and biodiversity. Emphasis will be on science based prevention, early detection and rapid response, control and management, and rehabilitation and restoration, in collaboration with numerous government and nongovernment partners. The strategy will be a primary component for implementation of the Healthy Forest Restoration

Act provisions related to invasive species.

SIGNIFICANT RESEARCH PRODUCTS:

- FS R&D produced **A STRATEGIC ASSESSMENT OF FOREST BIOMASS AND FUEL REDUCTION TREATMENTS IN WESTERN STATES**. This assessment characterizes, at a regional scale, forest biomass that can potentially be removed to implement the fuel reduction and ecosystem restoration objectives of the National Fire Plan for the western U.S. The assessment area covers forests on both public and private ownerships in the region and describes all standing tree volume including stems, limbs, and tops. Analysis of treatment areas and potential removals is included. Additionally, the operational systems necessary to effect the treatments as well as potential erosion impacts, utilization opportunities and market implications were examined. The report is available at the following address: http://www.fs.fed.us/research/pdf/western_final.pdf
- The 2003 *National Report on Sustainable Forests* has been completed. The Forest Service was the lead agency in an interagency

effort to produce a national report on sustainable forests. The work was coordinated by the multi-stakeholder Roundtable on Sustainable Forests (www.sustainableforests.net). The Report will be published in the spring of 2004 with a draft copy available at the following URL address: <http://fs.fed.us/research/sustain/data.htm>.

SOME CLIENTS/COLLARBORATORS:

America's Outdoors (with BLM and NPS)
American Forest and Paper Association
International Energy Agency
Canadian Forest Service
Canadian Food Inspection Agency
FAO North American Forestry Commission
George Mason Univesity
International Association of Fish and Wildlife
National Council for Air and Stream Improvement
National Association of State Foresters
NatureServe
Soil Science Society of America
Society of American Foresters
UNEP MAB Program