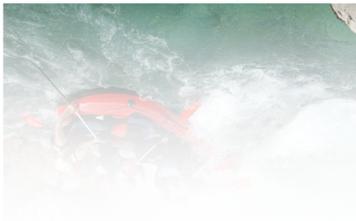


Part C: Required Supplementary Stewardship Information (Unaudited)



Required Supplementary Stewardship Information

The stewardship objective of Federal financial reporting includes accountability for Stewardship Investments.

RESEARCH AND DEVELOPMENT—FOREST AND RANGELAND RESEARCH

Fiscal year (FY) 2013 Net Cost of Operations: \$309 million. Of the \$309 million—

- \$284 million was an investment of Research and Development (R&D) funding
- \$25 million was an investment of National Fire Plan funding and Joint Fire Science Program funding.

Forest Service R&D has an integrated portfolio that supports achievement of the agency's strategic goals. The Forest Service R&D structure has two components: Priority Research Areas and Strategic Program Areas (SPAs).

The Priority Research Areas address urgent needs in seven areas: Forest Disturbances, Forest Inventory and Analysis, Watershed Management and Restoration, Bioenergy and Biobased Products, Urban Natural Resources Stewardship, Nanotechnology, and Localized Needs Research.

The SPAs are the long-term programs from which Priority Research Areas are funded. The following are the SPAs.

Wildland Fire and Fuels

Wildland Fire and Fuels R&D provides managers with the knowledge and tools to reduce negative impacts, while enhancing the beneficial effects, of wildland fire as a natural process. This knowledge and these tools are critical to understanding the human process of fire and fuels management on society and the environment.

Research focuses on understanding and modeling fundamental fire processes; interactions of fire with ecosystems; and the environmental, social, and economic aspects of fire, as well as evaluating the integrated management strategies and disturbance interactions at multiple scales and the application of fire research to address management problems.

Invasive Species

Invasive Species R&D provides the scientific information, methods, and technology to reduce or eliminate the introduction, spread, and impact of invasive species and to restore or improve the functionality of ecosystems affected by invasive species.

Research focuses on nonnative plants, animals, fish, insects, diseases, invertebrates, and other species whose introduction is likely to cause economic or environmental harm to an ecosystem.



Forest Service

**Required Supplementary Stewardship Information—Unaudited
For the Years Ended September 30, 2013 and 2012**

Water, Air, and Soil

Water, Air, and Soil R&D enables the sustainable management of these essential resources by providing clear air and safe drinking water, by protecting lives and property from wildlife fire and smoke, and by adapting to climate variability and change.

The program features ecosystem services with a high level of integration between water, air, and soil research, such as the effects of climate variability and change on water budgets or carbon sequestration metrics from an ecosystem perspective.

Wildlife and Fish

Wildlife and Fish R&D relies upon interdisciplinary research to inform policy initiatives affecting wildlife and fish habitat on private and public lands and the recovery of threatened or endangered species. Scientists investigate the complex interactions among species; ecosystem dynamics and processes; land use and management; and any emerging broadscale threats, including global climate change, loss of open space, invasive species, and disease.

Resource Management and Use

Resource Management and Use R&D provides the science and technology base to sustainably manage and use forest resources and forest fiber-based products.

Research focuses on the plant sciences, soil sciences, social sciences, silviculture, productivity, forest and range ecology management, harvesting and operations, forest and biomass products and utilization, economics, urban forestry, and climate change.

Outdoor Recreation

Outdoor Recreation R&D promotes human and ecological sustainability by researching environmental management, activities, and experiences that connect people with the natural world.

Research in outdoor recreation is interdisciplinary, focusing on nature-based recreation and the changing trends in American society; connections between recreation visitors, communities, and the environment; human benefits and consequences of recreation and nature contact; the effectiveness of recreation management and decisionmaking; and sustaining ecosystems affected by recreational use.



Forest Service



Forest Service

**Required Supplementary Stewardship Information—Unaudited
For the Years Ended September 30, 2013 and 2012**

Inventory and Monitoring

Inventory and Monitoring R&D provides the resource data, analysis, and tools that monitor vulnerable forest ecosystems for rapid change from threats of fire, insects, disease, natural processes, or management actions. From their research, scientists determine the status and trend of the health of the Nation’s forests and grasslands and the potential impact from climate change.

Their research integrates the development and use of science, technology, and remotely sensed data to better understand the incidences of forest fragmentation over time from changes in land use or from insects, disease, fire, and extreme weather events.

Research Categories

Each of the seven SPAs has stewardship investments in the following three categories: basic research, applied research, and development.

Basic research is the systematic study directed toward new or improved knowledge and understanding. Applied research is the systematic study intended to gain knowledge or understanding necessary to meet a specific need. Development is the systematic application of knowledge or understanding, directed toward the production of useful materials, devices, systems, or methods. The following tables report net cost of R&D operations by these categories and by the FY 2013 stewardship investment.

TABLE 1. COST OF R&D STEWARDSHIP INVESTMENTS BY TYPE OF RESEARCH (IN MILLIONS)

R&D Stewardship Investments	FY 2013	FY 2012	FY 2011	FY 2010	FY 2009
Net Cost of Operations	\$309	\$319	\$327	\$338	\$323
Basic Research	77	80	91	94	87
Applied Research	192	207	220	227	220
Development	40	32	16	17	16

TABLE 2. NUMBER OF R&D STEWARDSHIP INVESTMENTS BY TYPE OF INVESTMENT

Types of R&D Stewardship Investments	FY 2013	FY 2012	FY 2011	FY 2010	FY 2009
New interagency agreements and contracts	44	32	32	38	57
Continued interagency agreements and contracts	2	12	12	12	12
Articles published in journals	3,014	3,049	3,083	1,790	2,294
Articles published in all other publications	446	650	1,178	1,481	886
Patent(s) granted	2	8	3	2	3