

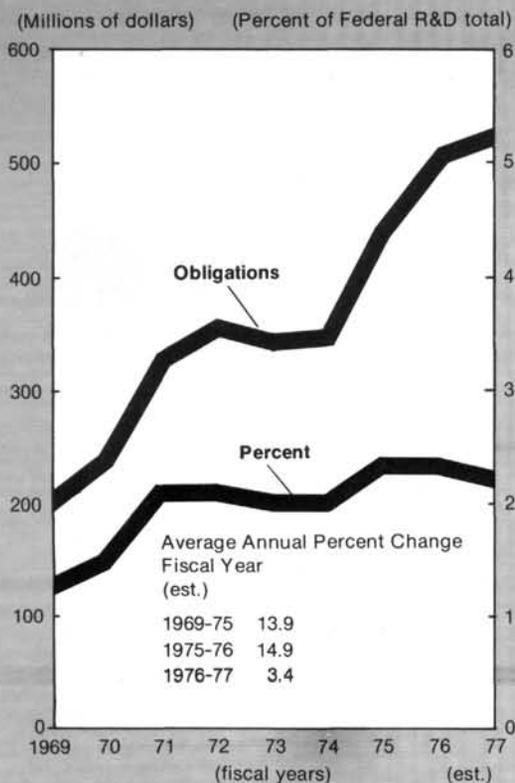


THIRD CLASS
Bulk Rate

Federal R&D Support for Natural Resources Shows Substantial Growth

- Funding for R&D programs in the natural resources area has increased two and one-half times during the 1969-77 period, more than twice as fast as funding for all Federal R&D programs. In this timespan the share of natural resources in the Federal R&D program total has risen from 1.3 percent to an estimated 2.2 percent.
- Natural resources R&D programs are devoted to research on mineral, water, forest, fishery, wildlife, and other resources, and to development of means to manage and utilize these resources for greatest economic and social benefit.

Federal R&D Obligations for Natural Resources Programs: FY 1969-77



- In recent years R&D programs in the **mineral** area have become predominant; they now represent one-third of the natural resources total. These programs chiefly cover work by the Bureau of Mines (Interior) on mining technology and metallurgy, and surveys and research by the Geological Survey (Interior) on mineral and land resources, including development of better methods and instruments for exploration and for understanding of geologic processes. These programs have grown considerably in the last few years in response to energy needs.
- Within the **water** area chief attention is currently focused on water resources investigations by the Office of Water Resources Research and Technology (Interior) to provide a data base for planning and use, and on research by the Geological Survey and the Bureau of Reclamation (Interior) into water-related problems. Watershed management research of the Forest Service (USDA) is also included here.
- **Land** research chiefly includes timber management and forest insect and disease research on the part of the Forest Service and land-use analysis by the Geological Survey. Cooperative

forestry research sponsored by the Cooperative State Research Service (USDA) and forest resource evaluation by the Forest Service are also part of the land total.

- Under **recreation** are found research programs of the Fish and Wildlife Service (Interior) and the Forest Service, covering wildlife and fisheries resources and habitat preservation, as well as research by the National Park Service (Interior) to gather archeological and historic data on remains threatened by Federal programs.
- The chief program within the **multi-resource** area covers the activities of the NASA earth resources satellites, which gather information on crops, water resources, mining, land management, and other resource areas. This program has received increased emphasis in recent years. The two next largest multiresource programs are research on soil, water, and air by the Agricultural Research Service (USDA) and the Sea Grant program sponsored by the National Oceanic and Atmospheric Administration (Commerce), which provides grants to public and private organizations to seek solutions to marine resources problems.

Trends in Federal natural resources R&D programs by major area
[Dollars in millions]

	1969	1975	1976	1977
Natural resources, total	\$201.0	\$438.8	\$504.4	\$521.4
Percent distribution				
Mineral	20.9	33.4	36.9	32.7
Water	32.3	14.5	13.0	13.0
Land	12.1	13.5	12.2	12.7
Recreation	12.7	8.1	7.6	7.6
Multiresource	22.0	30.5	30.3	34.0