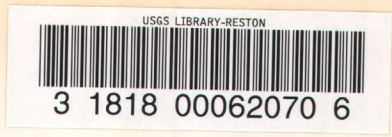


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WATER FACT SHEET

U.S. GEOLOGICAL SURVEY, DEPARTMENT OF THE INTERIOR

STATE WATER RESOURCES RESEARCH INSTITUTES AND RESEARCH GRANTS PROGRAMS—GROUND-WATER PERSPECTIVE

BACKGROUND

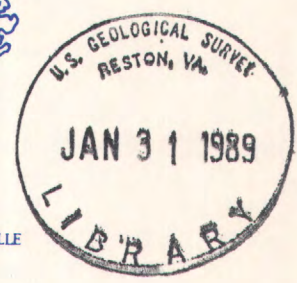
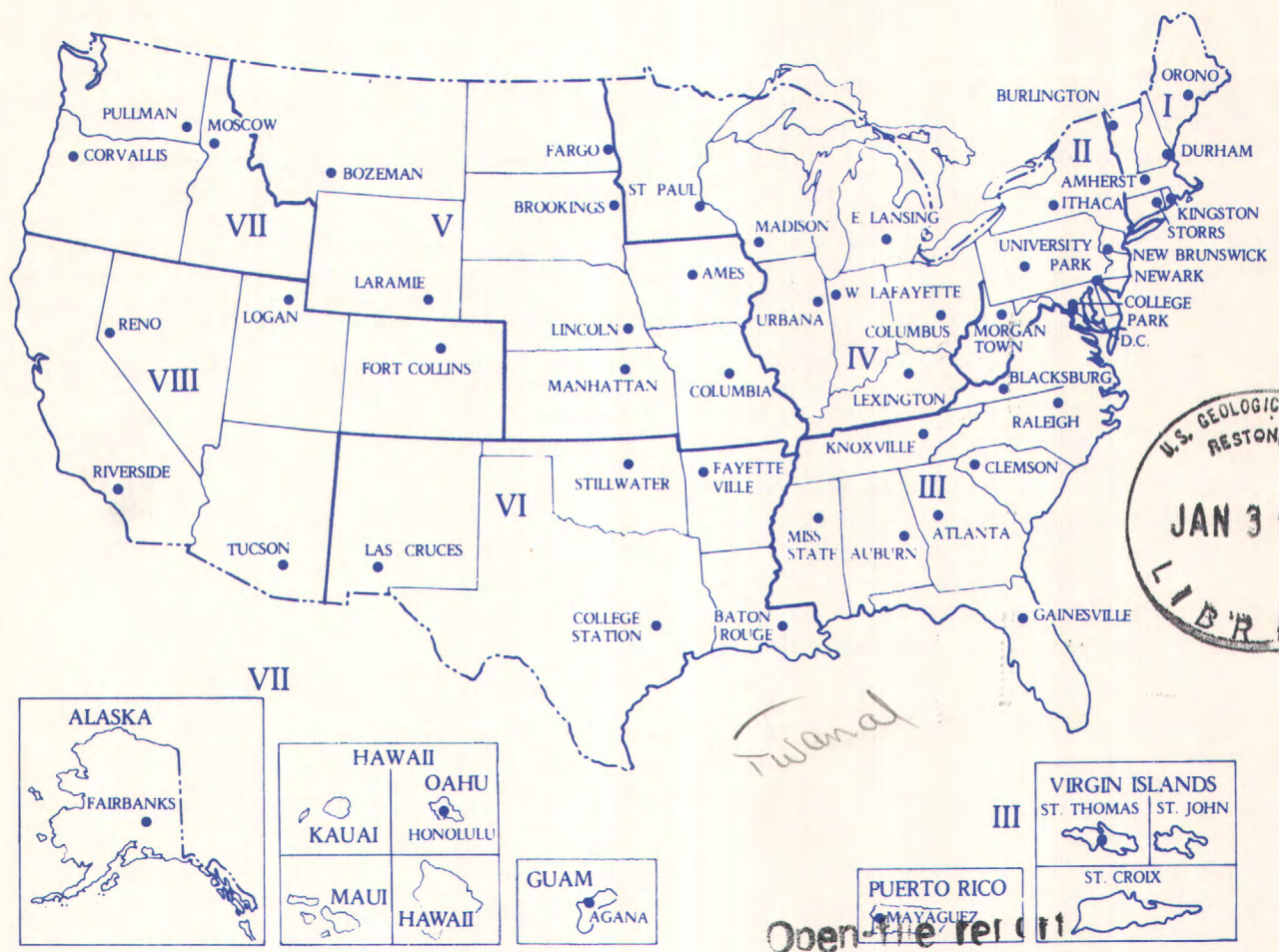
The Water Resources Research Act of 1984 directs the Secretary of the Interior to administer two programs related to water-resources research—the State Water Resources Research Institute Program and the Water Resources Research Grants Program. Both programs are concerned with research, technology development, and information transfer that will assist responsible agencies to solve important water-resources and related land-use problems. The U.S. Geological Survey is responsible for administering these programs.

The Water Resources Research Institutes and Research Grants programs bring together the expertise and resources of the academic community, government agencies, and the private

sector in addressing water problems of importance to the States, regions, and the Nation. The programs also serve to train future professionals in the hydrologic sciences, and to make known and apply the findings of the research. Ground-water projects of the Institutes and Grants programs are primarily concerned with the identification of sources of pollutants, their movement and fate in ground water, and techniques for alleviating contamination.

STATE WATER INSTITUTES

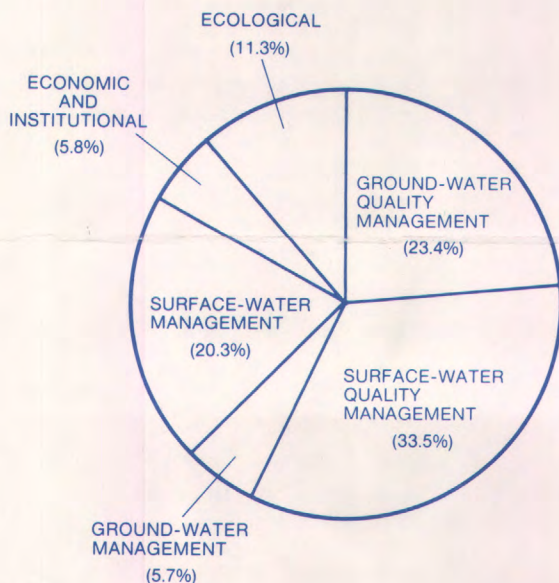
Fifty-four Institutes are located at colleges and universities in the 50 States, the District of Columbia, Guam, Puerto Rico, and the U.S. Virgin Islands. The Institutes are funded for



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(Geological Survey
(U.S.))

research, information transfer, training, and management of programs that aid in the solution of critical State water problems. In fiscal year 1988, each Institute is receiving \$105,000 of Federal funds (a total of \$5,670,000); each Federal dollar is matched with one and one-half non-Federal dollars, principally from universities and State governments.

The Institutes are organized into eight regional associations for the identification of common problems and coordination of research (see map). Major problems are identified through consultations with officials representing a broad range of leading water-related agencies and interests in each State, with the private sector, and with interested citizens. Research programs are then developed to address these problems. Water-quality-management problems account for more than 56 percent of the research expenditures for all Institutes (see chart).



In 1987, the institutes allocated about \$976,000 (23 percent) of the research portion of their Federal grants to 60 projects

directly related to ground-water-quality problems (see chart). The problems most commonly identified nationwide are:

- Seepage of contaminants into ground water from point sources, such as industrial waste dumps, septic tanks, leaking underground storage tanks, disposal lagoons, and mining operations;
- Effects of contaminants from nonpoint sources, such as storm runoff from urban areas and from fertilized farmlands;
- Intrusion of salty water or other water of impaired quality into freshwater aquifers and wells; and
- Leaching and accumulation of natural salts in the soil owing to irrigation practices.

WATER-RESEARCH GRANTS

Under this program, research grants are made to qualified educational institutions, foundations, private firms, citizens, or agencies of local or State governments for research on a variety of water-related issues deemed to be in the national interest. Research proposals are solicited each year and a process of scientific peer review and panels is used to select proposals for funding. The grants are made on a dollar-for-dollar matching basis. For fiscal year 1987, 274 research-grant proposals were received. Of these, 34 were funded for a total of \$4,361,000; 15 of the projects, which accounted for \$1,922,000 of the grants, were related to ground-water quality.

In fiscal year 1988, priority areas of research for the Water Research Grants Program are ground-water quality, water-quality management, institutional change in water-resources management, and climate variability and the hydrologic cycle. Examples of ground-water-related project objectives are:

- To determine best sampling strategies for ground-water-quality management (University of California), and
- To determine the feasibility of removing chlorinated organic compounds from ground water by the use of microorganisms attached to an artificial substrate (BioTrol, Inc.).

For more information about projects and research conducted under the State Water Resources Research Institutes and Research Grants programs, contact:

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