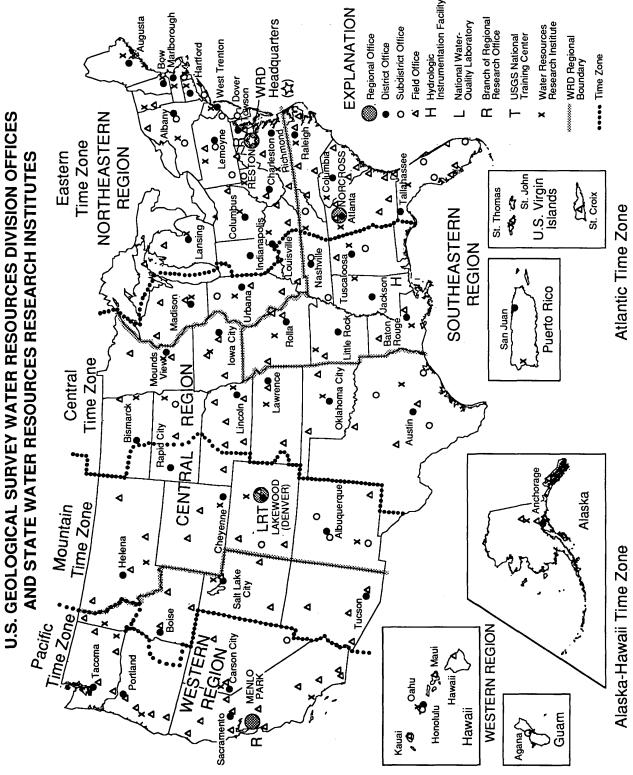
1993 *FISCAL YEAR*

> WATER RESOURCES DIVISION

> > U.S. GEOLOGICAL SURVEY



1

WATER WRD RESOURCES DIVISION INFORMATION GUIDE

This Guide briefly describes the Water Resources Division's mission, program, and organizational structure, and where and how to obtain specific types of hydrologic information. The Guide also contains a listing of addresses, telephone numbers, and office hours for Headquarters, Regional, District, and State offices. For some offices, two addresses are given: the mailing address of the office to which correspondence should be sent and the street address of the office. The map shows the location of the offices.

MISSION AND PROGRAM

The mission of the Water Resources Division, which supports the overall mission of the U.S. Department of the Interior and the U.S. Geological Survey, is to provide the hydrologic information and understanding needed for the best use and management of the Nation's water resources for the benefit of the people of the United States.

To accomplish its mission, the Water Resources Division in cooperation with State and local governments and other Federal agencies:

o Systematically collects data needed for the continuing determination and evaluation of the quantity, quality, and use of the Nation's water resources.

o Conducts analytical and interpretive water-resources appraisals to describe the occurrence, availability, and physical, chemical, and biological characteristics of surface and ground water and their inter-relationship. o Conducts supportive basic and problem-oriented research in hydraulics, hydrology, and related fields of science and engineering to improve the basis for field investigations and measurement techniques and to understand hydrologic systems sufficiently well to predict quantitatively their response to stress, either natural or manmade.

o Disseminates water data and the results of investigations and research through reports, maps, computerized information services, and other forms of public releases.

o Coordinates the activities of Federal agencies in the acquisition of certain water information.

o Provides scientific and technical assistance in hydrologic fields to State, local, and other Federal agencies, to licensees of the Federal Energy Regulatory Commission, and, on behalf of the U.S. Department of State, to international agencies.

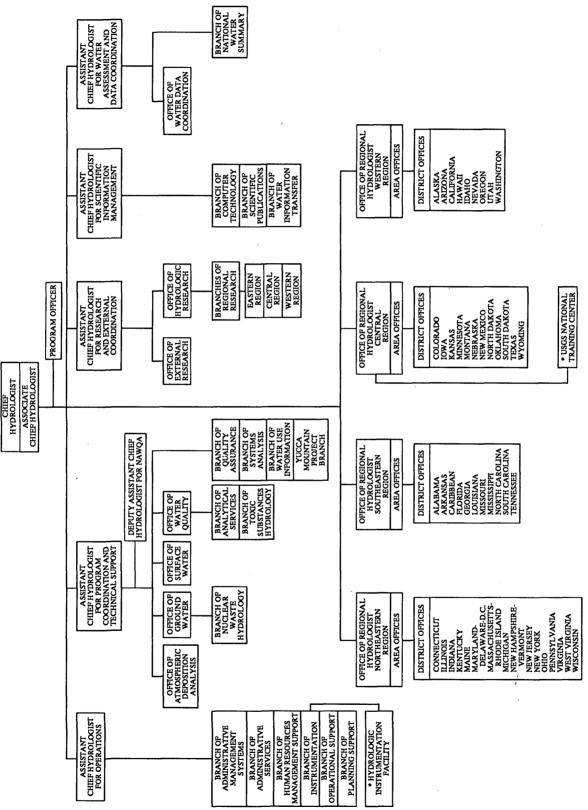
o Acquires, develops, and disseminates information on water-related natural hazards such as droughts, floods, landslides, land subsidence, mudflows, and volcanoes. o Administers the provisions of the Water Resources Research Act of 1984, which include the State Water Resources Research Institutes and the Research Grants programs.

o Supports the provisions of the National Environmental Policy Act of 1969 and manages Geological Survey conduct of natural-resources surveys in response to the Comprehensive Environmental Response, Compensation, and Liability Act (Superfund Act) of 1980.

Authority for carrying out this mission is derived from legislation of 1879, which created the Geological Survey, and legislation of 1888 and 1894, which provided for gaging of streams and determining the Nation's water supply. Congressional appropriations have been made annually since 1894 for gaging streams and performing other functions relating to water resources. In 1964, the Office of Management and Budget broadened the U.S. Geological Survey's mission to include the role of lead agency for the coordination of Federal water information programs. This responsibility was reaffirmed most recently by the Office of Management and Budget Memorandum 9201 on the coordination of water information.

SOURCE OF FUNDS

The Water Resources Division's programs are funded as follows: (1) Federal program, which is specifically identified in annual Geological Survey appropriations; (2) Federal-State Cooperative program, where the Water Resources Division represents national interests, the cooperating agencies represent State and local interests, and the funding is shared 50/50, with the Federal share coming from direct congressional appropriations; (3) Other **ORGANIZATION OF THE WATER RESOURCES DIVISION**

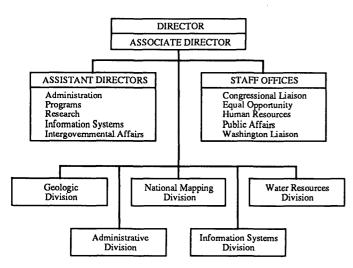


* National facility administered by the office shown

Federal Agencies (OFA) program, which is funded by reimbursements to the Geological Survey by the agencies requesting the work; and (4) State Water Research Institutes and Water Resources Research Grants programs, which are matching grant programs for the 54 State Water Resources Research Institutes and research grantees, with the Federal share coming from direct congressional appropriations.

ORGANIZATION

The Water Resources Division is one of three program Divisions and two support Divisions within the U.S. Geological Survey.



ORGANIZATION OF THE U.S. GEOLOGICAL SURVEY

HEADQUARTERS ORGANIZATION

Headquarters of the Water Resources Division is located at the U.S. Geological Survey's National Center in Reston, Va., and consists of the Office of the Chief Hydrologist, the Offices of the Assistant Chief Hydrologists for Operations, Program Coordination and Technical Support, Research and External Coordination, Scientific Information Management, and Water Assessment and Data Coordination.

The **Chief Hydrologist**, assisted by the **Associate Chief Hydrologist**, has overall responsibility for planning and managing the water-resources programs of the Geological Survey. A Program Officer, who is the Divisions focus for congressional budgets, reports directly to the Chief Hydrologist.

Functions needed to administer the programs of the

Water Resources Division are divided among five Assistant Chief Hydrologists:

Assistant Chief Hydrologist for Operations who advises on the establishment of policy in budgetary, accounting, human resources, program status, and technical matters; provides administrative and technical services to operational offices in support of their programs; manages the Federal-State Cooperative program and Technical Support program budgets; and directs the Federal Data Collection program and instrumentation development efforts, including satellite data relay activities.

Assistant Chief Hydrologist for Program Coordination and Technical Support who advises on the planning and development of integrated national programs of hydrologic investigations; provides technical advice and support to the Division, including direction of qualityassurance efforts for scientific and data-collection activities; provides for the acquisition of information on the Nation's use of water; oversees the development of new approaches and methodologies; provides oversight for hydrologic training programs; and provides policy direction and guidance to the Offices of Atmospheric Deposition Analysis, Ground Water, Surface Water, Water Quality, and Office of the Deputy Assistant Chief Hydrologist for National Water Quality Assessment.

Assistant Chief Hydrologist for Research and External Coordination who advises on the planning and development of national research programs, both in-house and those required by the provisions of the Water Resources Research Act of 1984 (P.L. 98-242); directs the international aspects of research and investigative programs; and provides direction and guidance to the Offices of External Research and Hydrologic Research.

Assistant Chief Hydrologist for Scientific Information Management who advises on the development of policy and programs related to the production and dissemination of scientific and general-interest publications; the development of methods and procedures for processing, storing, retrieving, and disseminating water data, collected by the Division's field organization, in managing the computerized Distributed Information System and the National Water Data Storage and Retrieval System (WATSTORE); the management and operation of programs such as the National Water Data Exchange (NAWDEX) and the Water Resources Scientific Information Center (WRSIC) that assist users in determining the availability of water data and related information from the Federal Government, programs that assist in both information and technology transfer; and programs that are related

December 1992

÷ .

to compliance with the National Environmental Policy Act (NEPA) and Superfund surveys.

Assistant Chief Hydrologist for Water Assessment and Data Coordination who advises on the development and planning of activities to characterize water-resources conditions, trends, and variability at the national level to provide overviews of specific water issues; advises on policies and programs to promote interagency information coordination activities under Office of Management and Budget Memorandum 92-01 facilitates the development of long-range plans and the review of proposed legislation; and provides policy direction and guidance to the Office of Water Data Coordination and the National Water Summary program.

FIELD ORGANIZATION

Region. General direction of the Division's field program is through four Regional Hydrologists, each of whom is located at a regional center—Reston, Va. (Northeastern Region); Norcross, Ga. (Southeastern Region); Lakewood (Denver), Colo. (Central Region); and Menlo Park, Calif. (Western Region).

Each region consists of several States, and each Regional Hydrologist, with authority from the Chief Hydrologist, is responsible for the water-resources programs and projects conducted by the District offices within the region. The Regional Hydrologist also represents the Chief Hydrologist in negotiations and dealings with other organizations and committees on matters of concern to the Division. Regional Hydrologists are assisted by Area Hydrologists who are responsible for coordinating management activities among several Districts in each area as shown on the map and organization chart on page 5.

District. Field operations are conducted through 48 District offices, each headed by a District Chief. These offices generally are located in State capitals, and their jurisdictional boundaries correspond to State boundaries. Each District typically has one or more subdistrict and field offices that report to the District Chief. There are three multi-State Districts—New Hampshire-Vermont, Massachusetts-Rhode Island, and Maryland-Delaware-D.C.—that have offices that coordinate programs within each State and report to the District office. Each District Chief is responsible for the planning, programming, and implementation of water-resources investigations within the District.

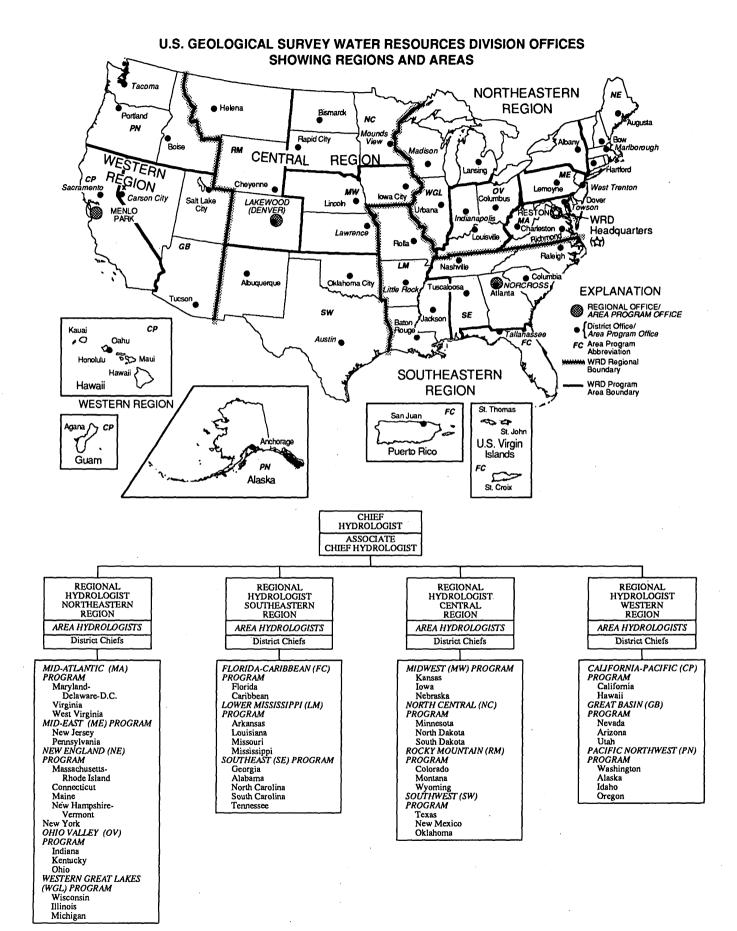
SUPPORT FUNCTIONS

Support functions, such as data processing, processing of publications, and employee training programs, are centered at the national Headquarters and the regional centers. Analytical services for water-quality determinations are provided by a National Water-Quality Laboratory System that consists of a large, highly automated laboratory in Arvada (Denver area), Colo., and by cooperator and contract laboratories at various locations, all working through the Branch of Analytical Services at Arvada. The Branch of Instrumentation at Headquarters is responsible for all aspects of instrumentation in support of the Division's programs; the Satellite Data Relay Project is located at Headquarters, and all other instrumentation services are centered at the Hydrologic Instrumentation Facility at the John C. Stennis Space Center, Miss. A training program in all aspects of the Division's activities is conducted at the Geological Survey National Training Center in Lakewood; this center, administered by the Water Resources Division, also serves the needs of the other Geological Survey Divisions.

PROGRAMS AND ACTIVITIES

The Water Resources Division conducts three major types of activities: data collection and dissemination, interpretive water-resources studies, and research. This classification is helpful for budgetary and discussion purposes, but, in fact, most programs are interrelated. For example, data collection is a major component of all interpretive studies and most research projects; conversely, the results derived from research activities provide the foundation for selective data collection and interpretive studies.

Current programs and activities of the Water Resources Division are discussed briefly in the following paragraphs, and the reader is directed to where more specific information can be obtained. Note that the referral addresses and telephone numbers for most of the activities discussed are listed on page 13 and following pages. Requests for general information on water resources of an area or the Nation and on activities of the Water Resources Division, and information on published reports, can be addressed to the *Hydrologic Information Unit*, U.S. Geological Survey, 419 National Center, Reston, VA 22092. Questions about policy and programs of the Water Resources Division may be addressed to the *Chief Hydrologist* or to the *Regional Hydrologist* of the area in question.



December 1992

Water Resources Division Information Guide 5

Acid Rain Program. Strong acids in precipitation, both rain and snow, and acidic dry atmospheric deposition are thought to be responsible for the acidification of a number of sensitive lakes in the northeastern United States and southeastern Canada over the last 30 years, and for damage to other resources as well. The Geological Survey, in cooperation with other Federal agencies and many State agencies, is participating in a coordinated nationwide program to monitor the chemical composition of precipitation and of selected streams and lakes that are now or may be affected by acid rain. As part of this same program, the Survey also is conducting research in selected watersheds to gain a better understanding of the hydrologic and geochemical processes that determine whether or not acid rain will ultimately affect the quality of water coming from the watershed. In addition to developing a basic understanding of the effects of atmospheric deposition on water quality, the program is intended to document the beneficial effects of reduced emissions of acid rain precursors required under The Clean Air Act Amendments of 1990. Further information can be obtained from the Office of Atmospheric Deposition Analysis.

Coordination of Water Information Programs. The U.S. Department of the Interior, through the U.S. Geological Survey, Office of Water Data Coordination (OWDC), is responsible for operating a Water Information Coordination Program (WICP) that coordinates the water-information activities of all agencies of the Federal Government. An important goal of WICP is to ensure effective management of Federal resources to meet requirements for waterresources information. Numerous Federal and non-Federal agencies and organizations participate in the program. Federal interests are represented by about 30 Federal agencies while non-Federal interests are represented by state agencies, national and regional associations, and professional and technical societies. The Office of Management and Budget (OMB) issued Memorandum 92-01 on December 10, 1991, to replace OMB Circular A-67 and to strengthen the coordination process. OWDC works closely with a large number of agencies and organizations to facilitate water-resources information acquisition and exchange activities nationwide. More detailed information on these activities may be obtained from the Office of Water Data Coordination.

District Programs. These programs incorporate the Federal, Other Federal Agency, and Federal-State Cooperative programs. Specific information can be obtained

from the appropriate District Chief or Regional Hydrologist.

Environmental Affairs Program. This program supports the development and implementation of environmental policy and guidance within the U.S. Geological Survey pursuant to the National Environmental Policy Act (NEPA) of 1969 and regulations of the Council on Environmental Quality; assists in monitoring Geological Survey activities to ensure quality control of environmental assessment documents and compliance with NEPA; assists in the management of NEPA-related analyses within the Geological Survey, including the coordination of contributions to Environmental Impact Statements (EIS) at the request of other agencies; and provides Geological Survey review and comments on EIS and other environmental documents. EAP also manages Geological Survey conduct of Superfund-related natural-resources surveys by providing technical support to the Department of the Interior and coordinates USGS support on the National Ocean Pollution Protection Act. Further information can be obtained from the Environmental Affairs Program office, Branch of Water Information Transfer.

Federal-State Cooperative Program. The Federal-State Cooperative program (50:50 matching) is a unique partnership for water-resources investigations between the Geological Survey and State and local agencies. Although State and local cooperating agencies provide at least onehalf of the funds, the Geological Survey conducts most of the work. This program is the foundation for much of the planning, development, and management of the Nation's water resources. In addition, it serves as an early warning ' system for the detection of emerging water problems. The Cooperative program is active in all 50 States, Puerto Rico, and several territories, and, in 1991, there were jointfunding agreements with more than 1,000 State and local agencies. As part of this program, each of the Water Resources Division's District offices collects hydrologic data and conducts interpretive areal water-resources appraisals. Additional information on the Federal-State Cooperative program can be obtained from the Assistant Chief Hydrologist for Operations, from the Regional Hydrologist, from the Area Hydrologist, or from the District Chief of the State of interest.

Global Change Hydrology Program. The Global Change Hydrology program, established in 1990, is an interdisciplinary program aimed at improving the accuracy

of predictions of the effects of hydrologic systems on the climate and, conversely, improving the quality of predictions of the effects of changes in the climate on hydrologic systems. The purpose of the program is to develop data, understanding, and predictive capabilities associated with (1) the effects of climate change on hydrologic systems; (2) the sensitivity of water resources to climate change; (3) the effects of greenhouse gases on the earth and the atmosphere; and (4) the effects of nutrients on water resources, including the oceans, in the global warming scenario. This program is part of a USGS response to the need for improved earth science information regarding global climate change, and is an integral part of the research plan of the U.S. Global Change Research program developed by the interagency Committee on Earth and Environmental Sciences of the Federal Coordinating Council on Science, Engineering, and Technology, under the Office of Science and Technology Policy.

National Research Program (NRP). This program, established in the late 1950's, encompasses a broad spectrum of scientific investigations. The sciences of hydrology, mathematics, chemistry, physics, ecology, biology, geology, and engineering are used to gain a fundamental understanding of the processes that affect the availability, movement, and quality of the Nation's water resources. The knowledge gained and the methods developed contribute directly to the WRD operational programs. Results of the investigations conducted by the NRP are applicable not only to the solution of current water problems, but also to future issues, anticipated or unanticipated, that may affect the Nation's water resources. For technical administration, the NRP is subdivided into six disciplines: ecology; geomorphology and sediment transport; groundwater chemistry; ground-water hydrology; surface-water chemistry; and surface-water hydrology. Most research is conducted in the Branches of Regional Research at centers in Reston, Va.; Lakewood, Colo.; and Menlo Park, Calif.; and at a few project offices in other sections of the country. A Chief, Branch of Regional Research, operating under the Office of Hydrologic Research, administers the research projects in the regional centers. Annual reports containing a summary of the problem, objective, approach, and progress for each NRP project are published (see section "Scientific Publications Program" for availability of these reports). Additional information about the NRP can be obtained from the Office of Hydrologic Research.

National Water Data Exchange (NAWDEX). The National Water Data Exchange is an interagency program to facilitate the exchange of water data and to promote the improvement of water-data handling procedures. The participants in the NAWDEX program are those Federal, State, local governmental, interstate, academic, and private organizations that collect, store, and use water data. The National Water Data Exchange is managed by a Program Office, which is administered by the Water Resources Division. Information on sites for which water data are available, the types of data available, and the organizations that store the data is available from NAWDEX. Assistance in identifying, locating, and acquiring data is provided by the NAWDEX Program Office at Reston, Va., by NAWDEX Assistance Centers at the Water Resources Division District offices listed in this Guide, and by the offices of other NAWDEX member organizations. A directory of assistance centers, and more detailed information about services, can be obtained from the NAWDEX Program Office, Branch of Water Information Transfer.

National Water-Quality Assessment Program (NAWQA). In 1991, following a 5-year pilot effort to test and refine assessment concepts, the Congress appropriated funds to the U.S. Geological Survey to begin a multiyear transition to a fully operational NAWQA program. The goals of the program are to (1) describe the status and trends in the quality of a large representative part of the Nation's ground- and surface-water resources, and (2) develop an understanding of the natural and human factors affecting the quality of these resources.

This information, obtained on a continuing basis, will provide sound nationally consistent water-quality information on which water resources decisionmaking at all governmental levels can be based. To meet its goals, the program will integrate water-quality information at local, regional, and national scales. Investigations of surface- and ground-water resources of major regional hydrologic systems will be conducted on a rotating basis for 60 key areas located throughout the Nation. In 1991, assessment activities began in 20 areas. Twenty additional areas are planned for assessment activities in 1994 and in 1997.

A wide range of major water-quality issues will be addressed by the NAWQA program. One concern, which will be addressed on a national level during the early years of the program, is the relation of pesticides in the Nation's water resources to agricultural management practices, climate, geology, and types of soil. Information on the principal factors affecting ground- and surface-water contamination by pesticides will be useful to land and water-resource policy makers and managers. Additional Information on the NAWQA program can be obtained from the Office of the Deputy Assistant Chief Hydrologist for the National Water-Quality Assessment Program.

National Water Information Clearinghouse (NWIC). The NWIC is a new and emerging program designed to manage and coordinate the exchange of water resources information with Federal, State, and local governmental agencies, academia, industry, and the general public. Clearinghouse activities include outreach and training; information/data dissemination, including water-data indexing and literature abstracting; educational programs; and data-systems modernization. Two Clearinghouse pilot centers will be operational in 1992. One center in Reston, Va., will focus on developing linkages with Federal agencies and the technical and general user communities in the Washington, D.C., metropolitan area. The Sacramento, Calif., center will focus on developing computerized interfaces with State and local agencies and creating an automated tracking system for Clearinghouse requests. A nationwide toll-free number, 1-800-H2O-9000 (1-800-426-9000) has been established to promote easy access to the Clearinghouse. Further information can be obtained from the National Water Information Clearinghouse office, Branch of Water Information Transfer.

National Water Information System (NWIS). As explained in the section "Water-Data Program," all data collected through that program are stored in WATSTORE, and the data are available on request. These data can be retrieved in machine-readable form or as computer-printed tables or graphs, statistical analyses, and digital plots. Local assistance in the acquisition of service or products from WATSTORE can be obtained from the District offices listed in this Guide. The National Water Information System Program is modernizing the water data management and processing systems of the Water Resources Division. The new system, National Water Information System II, will integrate all the current water data systems, including WATSTORE, NAWDEX (page 13), and files maintained at each District Office. The NWIS-II hydrologic data management and processing system will be implemented in two phases in 1993 to replace WATSTORE. The first release, which will be distributed to WRD Districts beginning in April 1993, will

provide for processing and storage of water quality, ground water, and biological data. The second release in October 1993, will provide for processing and storage of water use and all other data, including daily stream flow and sediment discharge. Information about WATSTORE or NWIS-II may be obtained from the *NWIS Program office*, *Branch of Computer Technology*.

National Water-Quality Networks Program. As the designated lead Federal agency responsible for describing and appraising the Nation's water resources, the USGS, in cooperation with other Federal and non-Federal agencies, operates four networks for monitoring water quality. The largest of these networks, which consists of more than 400 sampling sites, is the National Stream Quality Accounting Network (NASQAN). Samples from NASQAN datacollection sites, which are located at or near the downstream end of hydrologic accounting units or are at representative sites along coastal areas and the Great Lakes, are used to measure a comprehensive list of physical and chemical characteristics on a quarterly or bimonthly schedule to fulfill information needs of national and regional water-resources planners and managers. Operated within NASQAN is the Radiochemical Surveillance Network consisting of 45 sampling sites, generally on large rivers, at which gross radiochemical data for several isotopes are obtained. Additional radiochemical data are collected from the Tritium Network, which monitors tritium concentrations at 13 streamflow and 9 atmospheric precipitation sampling sites throughout the United States. The last network, the Hydrologic Bench-Mark Network, consists of 58 sampling sites used to monitor the "natural" streamflow and water quality of small river basins that are known to be relatively unaffected by man's activities. Radiochemical data also are collected at these sites. These networks are coordinated from the Headquarters office and further information can be obtained from the Office of Water Quality.

National Water Summary Program. The National Water Summary program was established in 1981 to synthesize information about the availability, quantity, quality, and use of water resources and to organize it in ways that portray the condition of the Nation's water resources to national, State, and local officials and to the general public. The information is being prepared on a continuing basis from results of the Geological Survey's water-resources investigations and data-collection programs. Publication of "National Water Summary" reports began in 1984. Maps, reports, and statistics to assist other Federal agencies in their water-resources assessment activities are other products from the program. Information about this program may be obtained from the *Branch of National Water Summary*.

National Water-Use Information Program. The National Water-Use Information program is a Federal-State cooperative program that was started in 1978 to provide for the comprehensive and systematic collection of data on water use throughout the United States. Personnel of cooperating States collect the water-use data and aggregate these data by county and hydrologic unit. The point data are stored in a State-level data base; the aggregated data are compiled by USGS personnel for incorporation into the computerized National Water-Use Data System. In 1992, 50 States and Puerto Rico are actively participating in this program. Additional information about the program can be obtained from the *Branch of Water-Use Information*.

Nuclear Waste Hydrology Program. Hydrologic and geologic research and field studies are conducted to develop better understanding of the mechanisms of radionuclide transport in ground-water systems. This program provides specialized consulting services to the Department of Energy (DOE), the Nuclear Regulatory Commission, the Environmental Protection Agency, and other Federal agencies on the hydrologic and geologic aspects of the use, development, and management of radioactive materials. The program also supports the Bureau's key role in the national high-level nuclear-waste repository program led by DOE and provides earth-science information and technical assistance to States and other Federal agencies in the management of low-level nuclear waste. Further information can be obtained from the Branch of Nuclear Waste Hydrology.

Other Federal Agency (OFA) programs. The studies conducted by the Geological Survey for other Federal agencies are too numerous to describe here. Information on these programs can be obtained from the Assistant Chief Hydrologist for Operations and the Assistant Chief Hydrologist for Program Coordination and Technical Support.

Regional Aquifer-System Analysis (RASA) Program. The RASA program represents a systematic effort to study a number of regional ground-water flow systems, which together include much of the country and represent a significant element of the national water supply. Twentyseven systems have been identified for study; in general, these systems transcend the political subdivisions to which hydrologic investigations have often been limited in the past. The overall objective of the program is to assemble hydrologic, geologic, and geochemical information and create capabilities necessary for effective management of the Nation's ground water. At the completion of the program a regional analysis will have been completed for 25 of the 28 systems identified for study. This program is coordinated from Headquarters and further information can be obtained from the *Office of Ground Water*.

Scientific Publications Program. The Geological Survey has been publishing the results of its studies for over 100 years. The Water Resources Division releases its information in several book series-water-supply papers, professional papers, bulletins, circulars, water-resources investigations reports, open-file reports-and also in several map series. These publications are listed in three catalogs: "Publications of the Geological Survey, 1879-1961," "Publications of the U.S. Geological Survey, 1962-70," and "Publications of the U.S. Geological Survey, 1971-81." Yearly supplements to these catalogs are available for 1982 through 1990. As new publications are released, they are announced in a monthly list, "New Publications of the U.S. Geological Survey." The catalogs may be obtained from the U.S. Geological Survey, Branch of Distribution, P.O. Box 25286, Denver, CO 80225. The 1879-1961 and 1962-1970 catalogs are \$6.00 each. The 1971-1981 catalog set is \$15.00. Yearly supplements are 1982 and 1983, \$3.00 each; 1984, \$3.25; 1985, \$3.75; 1986, \$4.25; 1987, \$4.00; 1988, \$3.75; 1989, \$4.00; 1990, \$4.50; and 1991, \$4.25. Subscriptions to the monthly list are available on application to the U.S. Geological Survey, 582 National Center, Reston, VA 22092.

The Water Resources Division's current program in the 50 States and Puerto Rico is explained in a series of reports entitled "Water-Resources Activities of the Geological Survey in (State)." A limited supply of reports for all States is kept by the *Hydrologic Information Unit* (HIU), U.S. Geological Survey, 419 National Center, Reston, VA 22092; reports for specific States are available from the appropriate District office listed in this Guide. HIU answers general questions on hydrology, water resources, hydrologic mapping, publications, activities, projects, and services of the Water Resources Division, making referrals to appropriate Field and Headquarters offices when

necessary. HIU also maintains limited stocks of Geological Survey general-interest publications. The general-interest publications series of the Geological Survey consists of short presentations on topics of interest to the general public in the form of leaflets, booklets, essay reprints, brochures, and water fact sheets. HIU functions as the focal point for reporting current hydrologic conditions and extreme hydrologic events for both the Water Resources Division and the Geological Survey. "**National Water Conditions**," a monthly summary of hydrologic conditions in the United States and southern Canada, is prepared by HIU with both single copies and subscriptions free on application.

Data on streamflow, ground-water levels, and water quality of surface and ground water are available for each State by water year in a publication series entitled "U.S. Geological Survey Water-Data Reports." These reports may be purchased from the National Technical Information Service (NTIS), U.S. Department of Commerce, Springfield, VA 22161; reference copies can be inspected at appropriate District offices.

Beginning with the 1990 water year, all water-data reports will also be available on Compact Disc-Read Only Memory (CD-ROM). All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, will be reproduced on a single CD-ROM disc.

Annual summaries of research projects in the National Research program and supported by the Water Resources Research Grants program, entitled respectively, "National Research program of the Water Resources Division, U.S. Geological Survey, Fiscal Year 19__" and "Water Resources Research Grant Program Project Descriptions, Fiscal Year 19__" can be purchased from the U.S. Geological Survey, Books and Open-File Reports, Box 25425, Denver Federal Center, Denver, CO, 80225. Reference copies of these reports are available at State Water Resources Research Institutes and at the offices listed in this guide.

Significant activities of the Water Resources Division are summarized annually in the U.S. Geological Survey Yearbook. A summary of hydrologic events and selected water-resources issues is published annually in the U.S. Geological Survey Water-Supply Paper "National Water Summary 19__." Both reports can be purchased from the U.S. Geological Survey, Branch of Distribution, P.O. Box 25286, Denver Federal Center, Denver, CO 80225; reference copies are available at large public and university libraries and at the offices listed in this Guide. "Selected Papers in the Hydrologic Sciences," first published in 1984, is a journal-type publication in the Water-Supply Paper series aimed at meeting widespread public and professional interests of the hydrologic community for timely results on hydrologic studies derived from the Federal Research program, and the Federal-State Cooperative program of the Geological Survey. Also included are results of some studies conducted on behalf of other Federal agencies. Dialogue between readers and authors is encouraged, and a discussion section for reader's comments and author's replies is included.

District offices usually maintain reference libraries containing single copies of selected water-supply papers, professional papers, bulletins, and circulars, and also at least one library copy of reports pertaining to the State or States in the District. These library copies can be examined by the general public. There are also over 1,200 Federal Depository Libraries that receive copies of selected U.S. Government reports from the Office of the Public Printer (Government Printing Office), with at least one of these libraries in each State, Territory, Commonwealth, or possession of the United States. The HIU has reference copies of "Federal Depository Libraries" (available from the Office of the Public Printer) which lists Depository Libraries, and can furnish the locations of libraries in an area or State. Questions on availability of publications in a particular library should be directed to that library.

Additional information about the publications program can be obtained from the *Branch of Scientific Publications*.

State Water Resources Research Institutes Program. This program is implemented through grants to 54 Institutes located at the Land Grant universities in each of the States, the District of Columbia, the Virgin Islands, Puerto Rico, and Guam, which also serves the Federated States of Micronesia. Grants are used by the Institutes to support research, education, and information-transfer on State and regional water-resources problems. All Institutes, with the exception of those in Guam, Puerto Rico, and the Virgin Islands, must match the Federal grants at a ratio of 2:1 with non-Federal funds. This program is authorized by the Water Resources Research Act of 1984, as amended by Public Law 99-662 and Public Law 101-397. Additional information on the program can be obtained from the *Office of External Research*.

Toxic Substances Hydrology Program (TSHP). The TSHP is an interdisciplinary program designed to provide the hydrologic information necessary both to improve waste-disposal practices and also to help mitigate surfaceand ground-water contamination problems. This program for uses on the occurrence, movement, and fate of toxic substances in the hydrologic system by (1) studying major types of contaminants in ground and surface waters and (2) develor ing new methods to assess the extent of contamination. The TSHP uses the results and data bases of previous studies by the USGS that are relevant to the program and coordinates with the RASA Program, the Branch of Nuclear Waste Hydrology, and other applicable programs. Additional information on the program can be obtained from the *Toxic Substances Hydrology Program Office*, *Office of Water Quality*.

Water-Data Program. Water-data stations at selected locations throughout the Nation are used by the USGS to obtain records on stream discharge (flow) and stage (height), reservoir and lake stage and storage, groundwater levels, well and spring discharge, and the quality of surface and ground water. These data provide a continuing record of the quantity and quality of the Nation's surfaceand ground-water resources, and thus provide the hydrologic information needed by Federal, State, and local agencies and the private sector for the development and management of land and water resources. All data collected are stored in the Survey's WATSTORE data base (see section on NWIS, page 8, for additional information on this data base) and also are published by water year for each State in a publications series entitled "U.S. Geological Survey Water-Data Reports" (see section "Scientific Publications Program" for availability of these reports). Information about the Water-Data program can be obtained from the Assistant Chief Hydrologist for Operations or from the District Chief of the State of interest.

Water Resources Research Grants Program. The Water Resources Research Grants Program is a national program of competitive grants to support research in water-resource problem areas. State Water Resources Research Institutes, qualified educational institutions, private foundations, private firms, individuals, and agencies of local or State government are eligible to receive grants on a dollar-for-dollar matching basis for research concerning any water-resource problem within the authority of the Water Resources Research Act of 1984, as amended. Periodically published announcements solicit proposals in six broad categories: water quality, groundwater flow and transport, engineering, climate and hydrology, biological sciences, and social sciences. Proposals are selected for funding on the basis of the relevance of the proposed research to national and regional water-resources problems; technical merit; the qualifications of the investigators and evidence that they are familiar with previous and ongoing related work; and the extent to which the proposed research would further the training of graduate students as research scientists.

Annual reports containing a summary of the problem, objective, and approach for each funded project and an abstract of the final report for each completed project during the year are published (see section "Scientific Publications Program" for availability of these reports).

This program is authorized by the Water Resources Research Act of 1984, as amended by Public Law 99-662 and Public Law 101-397. Additional information on the program can be obtained from the *Office of External Research*.

Water Resources Scientific Information Center (WRSIC). WRSIC was established to increase the availability and knowledge of water-related scientific and technical information to the public and private users. To accomplish this purpose, WRSIC abstracts water-resource publications from throughout the world and makes this information available to the water-resources community and the public through publications and computerized bibliographic information services. The bibliographic database comprises about 250,000 abstracts cumulated since 1968. The database until 1992 was published monthly as Selected Water Resources Abstracts but is now available from several commercial vendors on CD-ROM. Two commercial on-line services also make the database available to the public. Within WRD the on-line services also make the database available to the public. Within WRD the on-line service for the entire database will be available on the DIS-II. Information on WRSIC products can be abtained from the Chief, WRSIC Program Office, Branch of Water Information Transfer.

100

1993 WATER YEAR/FISCAL YEAR

			177.				1 EAN/F15C							
_		DCT (RIL 1			_	
S	Μ	Т	W	Т	F	S	S	Μ	Т	W	Т	F	S	
				1	2	3					1	2	3	
4	5	6	7	8	9	10	4	5	6	7	8	9	10	
11	12	13	14	15	16	17	11	12	13	14	15	16	17	
18	19	20	21	22	23	24	18	19	20	21	22	23	24	
25	26	27 -	28	29	30	31	25	26	27	28	29	30		
	N	OVE	MBE	R 199	92				MA	AY 19	93			
1	2	3	4	5	- 6	7							1	
8	9	10	11	12	13	14	2	3	4	5	6	7	8	
15	16	17	18	19	20	21	9	10	11	12	13	14	15	
22	23	24	25	26	27	28	16	17	18	19	20	21	22	
29	30						23		25	26	27	28	29	
							30				;			
	D	ECE	MBE	R 199	2				JU	NE 19	93			
		1	2	3	4	. 5			1	2	3	4	5	
6	7	8	9	10	11	12	6	7	8	9	10	11	12	
13	14	15	16	17	18	19	13	14	15	16	17	18	19	
20	21	22	23	24	25	26	20		22	23	24	25	26	
27	28	<u></u> 29	30	31			27		<u></u> 29	30				
2,	20		50	51			27	20		50				
	J	ANU	ARY	1993					JU	LY 19	993			
					1	2					1	2	3	
3	4	E		7	8	- 9	4	5	6	7	8	9	10	
	-	5	6		U	· 7	7	5	U		U		IU	
10	11	5 12	6 13	/ 14	15	16	11		13	, 14	15	16	17	
10 17								12						
17	11 18	12 19	13 20	14 21	15 22	16 23	11 18	12 19	13	14 21	15	16	17 24	
17 24	11	12	13	14	15	16	11	12 19	13 20	14	15 22	16 23	17	
17	11 18 25	12 19	13 20 27	14 21 28	15 22 29	16 23	11 18	12 19 26	13 20	14 21 28	15 22 29	16 23	17 24	
17 24	11 18 25	12 19 26	13 20 27	14 21 28	15 22 29	16 23	11 18	12 19 26	13 20 27	14 21 28	15 22 29	16 23	17 24	
17 24	11 18 25 Fl	12 19 26 EBRU	13 20 27 JARY	14 21 28 7 199	15 22 29 3	16 23 30	11 18 25	12 19 26	13 20 27 AUG	14 21 28 UST	15 22 29 1993	16 23 30	17 24 31	
17 24 31 7	11 18 25 Fl 1	12 19 26 EBRU 2 9	13 20 27 JARY 3 10	14 21 28 7 199 4	15 22 29 3 5	16 23 30 6	11 18 25 1	12 19 26 2 9	13 20 27 AUG 3	14 21 28 UST 4	15 22 29 1993 5	16 23 30	17 24 31 7	
17 24 31 7 14	11 18 25 Fl 1 8 15	12 19 26 EBRU 2 9 16	13 20 27 JARY 3 10 17	14 21 28 7 199 4 11 18	15 22 29 3 5 12 19	16 23 30 6 13 20	11 18 25 1 8 15	12 19 26 2 9 16	13 20 27 AUG 3 10 17	14 21 28 UST 4 11 18	15 22 29 1993 5 12 19	16 23 30 6 13 20	17 24 31 7 14 21	
17 24 31 7 14 21	11 18 25 Fl 1 8	12 19 26 EBRU 2 9	13 20 27 JARY 3 10	14 21 28 7 199 4 11	15 22 29 3 5 12	16 23 30 6 13	11 18 25 1 8 15 22	12 19 26 2 9 16 23	13 20 27 AUG 3 10 17 24	14 21 28 UST 4 11	15 22 29 1993 5 12	16 23 30 6 13	17 24 31 7 14	
17 24 31 7 14	11 18 25 Fl 1 8 15	12 19 26 EBRU 2 9 16	13 20 27 JARY 3 10 17	14 21 28 7 199 4 11 18	15 22 29 3 5 12 19	16 23 30 6 13 20	11 18 25 1 8 15	12 19 26 2 9 16 23	13 20 27 AUG 3 10 17	14 21 28 UST 4 11 18	15 22 29 1993 5 12 19	16 23 30 6 13 20	17 24 31 7 14 21	
17 24 31 7 14 21	11 18 25 FI 1 8 15 22	12 19 26 EBRU 2 9 16	13 20 27 JARY 3 10 17 24	14 21 28 (199 4 11 18 25	15 22 29 3 5 12 19	16 23 30 6 13 20	11 18 25 1 8 15 22	12 19 26 2 9 16 23 30	13 20 27 AUG 3 10 17 24	14 21 28 UST 4 11 18 25	15 22 29 1993 5 12 19 26	16 23 30 6 13 20 27	17 24 31 7 14 21	
17 24 31 7 14 21	11 18 25 FI 1 8 15 22	12 19 26 EBRU 2 9 16 23	13 20 27 JARY 3 10 17 24	14 21 28 (199 4 11 18 25	15 22 29 3 5 12 19	16 23 30 6 13 20	11 18 25 1 8 15 22	12 19 26 2 9 16 23 30	13 20 27 AUG 3 10 17 24 31	14 21 28 UST 4 11 18 25 MBE 1	15 22 29 1993 5 12 19 26 R 199 2	16 23 30 6 13 20 27	17 24 31 7 14 21	
17 24 31 7 14 21	11 18 25 FI 1 8 15 22	12 19 26 EBRU 2 9 16 23 MAF	13 20 27 JARY 3 10 17 24 RCH	14 21 28 (199 4 11 18 25 1993	15 22 29 3 5 12 19 26	16 23 30 6 13 20 27	11 18 25 1 8 15 22	12 19 26 2 9 16 23 30 SI	13 20 27 AUG 3 10 17 24 31	14 21 28 UST 4 11 18 25 MBE	15 22 29 1993 5 12 19 26 R 19	16 23 30 6 13 20 27	17 24 31 7 14 21 28	
17 24 31 7 14 21 28	11 18 25 FI 1 8 15 22	12 19 26 EBRU 2 9 16 23 MAF 2	13 20 27 JARY 3 10 17 24 RCH	14 21 28 (199 4 11 18 25 (1993 4	15 22 29 3 5 12 19 26 5	16 23 30 6 13 20 27 6	11 18 25 1 8 15 22 29	12 19 26 2 9 16 23 30 SI 6	13 20 27 AUG 3 10 17 24 31 EPTE	14 21 28 UST 4 11 18 25 MBE 1	15 22 29 1993 5 12 19 26 R 199 2	16 23 30 6 13 20 27 93 3	17 24 31 7 14 21 28 4	
17 24 31 7 14 21 28 7	11 18 25 FI 1 8 15 22	12 19 26 EBRU 2 9 16 23 MAF 2 9	13 20 27 JARY 3 10 17 24 RCH 3 10	14 21 28 (199 4 11 18 25 (1993 4 11	15 22 29 3 5 12 19 26 5 12	16 23 30 6 13 20 27 6 13	11 18 25 1 8 15 22 29 5	12 19 26 2 9 16 23 30 SH 6 13	13 20 27 AUG 3 10 17 24 31 EPTE 7	14 21 28 UST 4 11 18 25 MBE 1 8	15 22 29 1993 5 12 19 26 R 199 2 9	16 23 30 6 13 20 27 93 3 10	17 24 31 7 14 21 28 4 11	
17 24 31 7 14 21 28 7 14 21	11 18 25 FI 1 8 15 22 1 8 15	12 19 26 EBRU 2 9 16 23 MAR 2 9 16	13 20 27 JARY 3 10 17 24 RCH 3 10 17 24	14 21 28 (199 4 11 18 25 1993 4 11 18	15 22 29 3 5 12 19 26 5 12 19	16 23 30 6 13 20 27 6 13 20	11 18 25 1 8 15 22 29 5 12	12 19 26 2 9 16 23 30 SI 6 13 20	13 20 27 AUG 3 10 17 24 31 EPTE 7 14	14 21 28 UST 4 11 18 25 MBE 1 8 15	15 22 29 1993 5 12 19 26 R 19 2 9 16	16 23 30 6 13 20 27 93 3 10 17	17 24 31 7 14 21 28 4 11 18	
17 24 31 7 14 21 28 7 14	11 18 25 FI 1 8 15 22 1 8 15 22	12 19 26 EBRU 2 9 16 23 MAR 2 9 16 23	13 20 27 JARY 3 10 17 24 RCH 3 10 17	14 21 28 (199 4 11 18 25 1993 4 11 18	15 22 29 3 5 12 19 26 5 12 19	16 23 30 6 13 20 27 6 13 20	11 18 25 1 8 15 22 29 5 5 12 19	12 19 26 2 9 16 23 30 SH 6 13 20 27	13 20 27 AUG 3 10 17 24 31 EPTE 7 14 21	14 21 28 UST 4 11 18 25 MBE 1 8 15 22	15 22 29 1993 5 12 19 26 R 19 2 9 16 23	16 23 30 6 13 20 27 93 3 10 17	17 24 31 7 14 21 28 4 11 18	

12 Water Resources Division Information Guide

· 1

HEADQUARTERS

U.S. Geological Survey (Mail Stop Number) National Center Reston, Virginia 22092 Telephone: (703) 648-Extension Office hours: 7:45 a.m. to 4:15 p.m. Eastern Time

Position	Telephone extension	Mail stop
Chief Hydrologist	5215	409
Associate Chief Hydrologist	5216	408
Program Officer	6843	406A
Deputy Program Officer	6845	406A
Assistant Chief Hydrologist for Operations	5031	441
Deputy Assistant Chief Hydrologist for Operations	5033	441
Branch of Administrative Management Systems	5298	447
Branch of Administrative Services	5027	442
Branch of Instrumentation	5364	460
Branch of Human Resources Management Support	5244	406
Branch of Operational Support	5251	405
Branch of Planning Support	6838	404
Assistant Chief Hydrologist for Program Coordination and Technical Support	5229	414
Deputy Assistant Chief Hydrologist for Program Coordination and Technical Support	4169	414
Branch of Quality Assurance, see inside back cover	4105	-1-
Branch of Systems Analysis	5701	410
	5670	410
Branch of Water Use Information	2010	414
Yucca Mountain Project Branch, see inside back cover	6071	416
Office of Atmospheric Deposition Analysis	6874	416
Office of Ground Water	5001	411
Branch of Nuclear Waste Hydrology	5719	411
Office of Surface Water	5301	415
Office of Water Quality	6862	412
Branch of Analytical Services, see inside back cover		
Branch of Toxic Substances Hydrology	6862	412
Office of Deputy Assistant Chief for National Water Quality Assessment Program	5012	413
Assistant Chief Hydrologist for Research and External Coordination	5041	436
Deputy Assistant Chief Hydrologist for Research and External Coordination	5042	436
Office of External Research	6801	424
Office of Hydrologic Research	5043	436
Branches of Regional Research, see inside back cover		
Assistant Chief Hydrologist for Scientific Information Management	5699	440
Branch of Computer Technology	5605	440
National Water Information System Program	5686	437
Branch of Scientific Publications	5653	439
Hydrologic Information Unit	6817	419
Branch of Water Information Transfer.	5605	446
Environmental Affairs Program	6832	423
National Water Information Clearinghouse	*	423
NAWDEX Program	6848	421
Water Resources Scientific Information Center	6820	425
	6820	
Assistant Chief Hydrologist for Water Assessment and Data Coordination		407
Deputy Assistant Chief Hydrologist for Water Assessment and Data Coordination	5022	407
Branch of National Water Summary	6856	407
Office of Water Data Coordination	5015	417

* 1-800-H2O-9000

NORTHEASTERN REGION

Connecticut, Delaware, District of Columbia, Illinois, Indiana, Kentucky, Maine, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia, Wisconsin

OFFICE OF THE REGIONAL HYDROLOGIST

Address: Regional Hydrologist U.S. Geological Survey 433 National Center Reston, VA 22092 Telephone: (703) 648-5817 Office hours: 7:45 a.m. to 4:15 p.m. Eastern Time

AREA HYDROLOGISTS

MID-ATLANTIC PROGRAM (Maryland-Delaware-D.C., Virginia, and West Virginia)

Address: Area Hydrologist, WRD U.S. Geological Survey 208 Carroll Bldg. 8600 La Salle Road Towson, MD 21204 Telephone: (410) 828-1535 Office hours: 6:30a.m. to 5:30 p.m. Eastern Time

MID-EAST PROGRAM (New Jersey and Pennsylvania)

Mailing address: Area Hydrologist, WRD U.S. Geological Survey Suite 206, Mountain View Office Park 810 Bear Tavern Rd. West Trenton, NJ 08628 Telephone: (609) 771-3902 Office hours: 7:45 a.m. to 4:15 p.m. Eastern Time

NEW ENGLAND PROGRAM (Massachusetts-Rhode Island, Connecticut, Maine, and New Hampshire-Vertinont)

Address: Area Hydrologist, WRD

U.S. Geological Survey

NEW ENGLAND PROGRAM—Continued 28 Lord Road, Suite 280 Marlborough, MA 01752 Telephone: (508) 490-5002 Office hours: 8:00 a.m. to 4:30 p.m. Eastern Time

OHIO VALLEY PROGRAM (Indiana, Kentucky, and Ohio) Address: Area Hydrologist, WRD U.S. Geological Survey 5957 Lakeside Blvd. Indianapolis, IN 46278-1996 Telephone: (317) 290-3333 Office hours: 7:30 a.m. to 4:00 p.m. Eastern Time

WESTERN GREAT LAKES PROGRAM (Wisconsin,

Illinois, and Michigan) Address: Area Hydrologist, WRD U.S. Geological Survey 6417 Normandy Lane Madison, WI 53719-1133 Telephone: (608) 274-3535 Office hours: 8:00 a.m. to 4:30 p.m. Central Time

DISTRICT OFFICES

CONNECTICUT

Address: District Chief, WRD U.S. Geological Survey Abraham A. Ribicoff Federal Bldg., Rm. 525 450 Main Street Hartford, CT 06103 Telephone: (203) 240-3060 Office hours: 7:45 a.m. to 4:15 p.m. Eastern Time

DELAWARE See also Maryland

Address: Subdistrict Chief, WRD U.S. Geological Survey Federal Bldg., Rm. 1201 300 S. New Street Dover, DE 19901 Telephone: (302) 734-2506 Office hours: 8:00 a.m. to 4:30 p.m. Eastern Time

DISTRICT OF COLUMBIA See Maryland

14 Water Resources Division Information Guide

ILLINOIS Address: District Chief, WRD U.S. Geological Survey 102 E. Main St., 4th floor Urbana, IL 61801 Telephone: (217) 398-5353 Office hours: 8:00 a.m. to 4:30 p.m. Central Time

INDIANA

Address: District Chief, WRD U.S. Geological Survey 5957 Lakeside Blvd. Indianapolis, IN 46278-1996 Telephone: (317) 290-3333 Office hours: 7:30 a.m. to 4:00 p.m. Eastern Time

KENTUCKY

Address: District Chief, WRD U.S. Geological Survey 2.9.0

KENTUCKY—Continued 2301 Bradley Ave. Louisville, KY 40217 Telephone: (502) 582-5241 Office hours: 8:00 a.m. to 4:45 p.m. Eastern Time

MAINE

Address: District Chief, WRD U.S. Geological Survey 26 Ganneston Drive Augusta, ME 04330 Telephone: (207) 622-8201 Office hours: 7:30 a.m. to 4:15 p.m. Eastern Time

MARYLAND/DELAWARE/DISTRICT OF COLUMBIA

Address: District Chief, WRD U.S. Geological Survey 208 Carroll Bldg. 8600 La Salle Road Towson, MD 21204 Telephone: (410) 828-1535 Office hours: 6:30a.m. to 5:30 p.m. Eastern Time

MASSACHUSETTS/RHODE ISLAND

Address: District Chief, WRD U.S. Geological Survey 28 Lord Road, Suite 280 Marlborough, MA 01752 Telephone: (508) 485-6360 Office hours: 8:00 a.m. to 4:30 p.m. Eastern Time

MICHIGAN

Address: District Chief, WRD U.S. Geological Survey 6520 Mercantile Way, Suite 5 Lansing, MI 48911 Telephone: (517) 377-1608 Office hours: 7:45 a.m. to 4:15 p.m. Eastern Time

NEW HAMPSHIRE/VERMONT

Address: District Chief, WRD U.S. Geological Survey 525 Clinton St. Bow, NH 03304 Telephone: (603) 225-4681 Office hours: 7:45 a.m. to 4:15 p.m. Eastern Time

NEW JERSEY

Address: District Chief, WRD U.S. Geological Survey Suite 206, Mountain View Office Park 810 Bear Tavern Rd. West Trenton, NJ 08628 Telephone: (609) 771-3900 Office hours: 7:45 a.m. to 4:15 p.m. Eastern Time

NEW YORK

Mailing address: District Chief, WRD U.S. Geological Survey P.O. Box 1669 Albany, NY 12201

December 1992

NEW YORK—Continued Office address: James T. Foley U.S. Courthouse, Rm. 343 445 Broadway Albany, NY 12201 Telephone: (518) 472-3107 Office hours: 7:30 a.m. to 4:00 p.m. Eastern Time

OHIO

Address: District Chief, WRD U.S. Geological Survey 975 West Third Avenue Columbus, OH 43212 Telephone: (614) 469-5553 Office hours: 7:30 a.m. to 4:30 p.m. Eastern Time

PENNSYLVANIA

Address: District Chief, WRD U.S. Geological Survey 840 Market Street Lemoyne, PA 17043-1586 Telephone: (717) 730-6900 Office hours: 7:30 a.m. to 4:00 p.m. Eastern Time

RHODE ISLAND See also Massachusetts

Address: Subdistrict Chief, WRD U.S. Geological Survey John O. Pastore Federal Bldg. & U.S. Post Office Room 237 Providence, RI 02903 Telephone: (401) 528-5135 Office hours: 8:00 a.m. to 4:30 p.m. Eastern Time

VERMONT See New Hampshire

VIRGINIA

Address: District Chief,WRD U.S. Geological Survey 3600 West Broad Street, Rm. 606 Richmond, VA 23230 Telephone: (804) 771-2427 Office hours: 8:00 a.m. to 4:45 p.m. Eastern Time

WEST VIRGINIA

Address: District Chief, WRD U.S. Geological Survey 603 Morris Street Charleston, WV 25301 Telephone: (304) 347-5130 Office hours: 7:30 a.m. to 4:00 p.m. Eastern Time

WISCONSIN

Address: District Chief, WRD U.S. Geological Survey 6417 Normandy Lane Madison, WI 53719-1133 Telephone: (608) 274-3535 Office hours: 8:00 a.m. to 4:30 p.m. Central Time

SOUTHEASTERN REGION

Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, Missouri, North Carolina, Puerto Rico, South Carolina, Tennessee, Virgin Islands

OFFICE OF THE REGIONAL HYDROLOGIST

Address: Regional Hydrologist U.S. Geological Survey Spaulding Woods Office Park 3850 Holcomb Bridge Road, Suite 160 Norcross, GA 30392 Telephone: (404) 409-7701 Office hours: 7:30 a.m. to 4:00 p.m. Eastern Time

AREA HYDROLOGISTS

FLORIDA-CARIBBEAN PROGRAM (Florida and Caribbean)

Address: Area Hydrologist, WRD U.S. Geological Survey 227 N. Bronough St., Suite 3015 Tallahassee, FL 32301 Telephone: (904) 681-7620 Office hours: 7:45 a.m. to 4:30 p.m. Eastern Time South Carolina, and Tennessee) Address: Area Hydrologist, WRD U.S. Geological Survey Spaulding Woods Office Park 3850 Holcomb Bridge Road, Suite 160 Norcross, GA 30392 Telephone: (404) 409-7703 Office hours: 7:30 a.m. to 4:00 p.m. Eastern Time

SOUTHEAST PROGRAM (Georgia, Alabama, North Carolina,

LOWER MISSISSIPPI PROGRAM (Arkansas, Louisiana,

Missouri, and Mississippi) Address: Area Hydrologist, WRD U.S. Geological Survey Federal Office Bldg., Rm. 2301 700 West Capitol Avenue Little Rock, AR 72201 Telephone: (501) 324-6391

DISTRICT OFFICES

ALABAMA

Address: District Chief, WRD U.S. Geological Survey 520 19th Avenue Tuscaloosa, AL 35401 Telephone: (205) 752-8104 Office hours: 7:30 a.m. to 4:00 p.m. Central Time

Office hours: 7:30 a.m. to 4:00 p.m. Central Time

ARKANSAS

Address: District Chief, WRD U.S. Geological Survey Federal Office Bldg., Rm. 2301 700 West Capitol Avenue Little Rock, AR 72201 Telephone: (501) 324-6391 Office hours: 7:30 a.m. to 4:00 p.m. Central Time

CARIBBEAN (PUERTO RICO/U.S. VIRGIN ISLANDS)

Mailing address: District Chief, WRD U.S. Geological Survey P.O. Box 364424 San Juan, PR 00936-4424

CARIBBEAN (PUERTO RICO/U.S. VIRGIN ISLANDS) --Continued

Office address: GSA Center, Building 652 Highway 28, km. 7.2 Guaynabo, PR 00657 Telephone: (809) 749-4346 Office hours: 7:45 a.m. to 4:30 p.m. Atlantic Time

FLORIDA

Address: District Chief, WRD U.S. Geological Survey 227 N. Bronough St., Suite 3015 Tallahassee, FL 32301 Telephone: (904) 681-7620 Office hours: 7:45 a.m. to 4:30 p.m. Eastern Time

GEORGIA

Address: District Chief, WRD U.S. Geological Survey Peachtree Business Center, Suite 130 3039 Amwiler Road Atlanta, GA 30360-2824 Telephone: (404) 903-9100 Office hours: 8:00 a.m. to 4:30 p.m. Eastern Time

LOUISIANA

Mailing address: District Chief, WRD U.S. Geological Survey P.O. Box 66492 Baton Rouge, LA 70896 Office address: 6554 Florida Boulevard Baton Rouge, LA 70806 Telephone: (504) 389-0281 Office hours: 7:45 a.m. to 4:30 p.m. Central Time

MISSISSIPPI

Address: District Chief, WRD U.S. Geological Survey Federal Bldg., Suite 710 100 West Capitol Street Jackson, MS 39269 Telephone: (601) 965-4600 Office hours: 8:00 a.m. to 4:30 p.m. Central Time

MISSOURI

Address: District Chief, WRD U.S. Geological Survey 1400 Independence Road, Mail Stop 200 Rolla, MO 65401 Telephone: (314) 341-0825 Office hours: 7:30 a.m. to 4:00 p.m. Central Time NORTH CAROLINA Address: District Chief, WRD U.S. Geological Survey P.O. Box 30728 Raleigh, NC 27606 Office address: 3916 Sunset Road Raleigh, NC 27606 Telephone: (919) 571-4000 Office hours: 8:00 a.m. to 4:45 p.m. Eastern Time

SOUTH CAROLINA

Address: District Chief, WRD U.S. Geological Survey 720 Gracem Road Stephenson Center, Suite 129 Columbia, SC 29210 Telephone: (803) 750-6100 Office hours: 7:45 a.m. to 4:30 p.m. Eastern Time TENNESSEE Address: District Chief, WRD U.S. Geological Survey 810 Broadway, Suite 500 Nashville, TN 37203

Office hours: 7:45 a.m. to 4:45 p.m. Central Time

U.S. VIRGIN ISLANDS See Puerto Rico

Telephone: (615) 736-5424

CENTRAL REGION

Colorado, Iowa, Kansas, Minnesota, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Utah, Wyoming

OFFICE OF THE REGIONAL HYDROLOGIST

Address: Regional Hydrologist U.S. Geological Survey Mail Stop 406, Box 25046 Denver Federal Center Lakewood, CO 80225 Telephone: (303) 236-5920 Office hours: 8:00 a.m. to 4:30 p.m. Mountain Time

AREA HYDROLOGISTS

MIDWEST PROGRAM (Kansas, Iowa, and Nebraska) Address:

> Area Hydrologist, WRD U.S. Geological Survey 4821 Quail Crest Place Lawrence, KS 66049 *Telephone:* (913) 832-3567 *Office hours:* 8:00 a.m. to 4:30 p.m. Central Time

NORTH CENTRAL PROGRAM (Minnesota, North Dakota, and South Dakota)

Address:

Area Hydrologist, WRD U.S. Geological Survey 2280 Woodale Drive Mounds View, MN 55112 *Telephone:* (612) 229-2600 *Office hours:* 8:00a.m. to 4:30 p.m. Central Time Wyoming) Address: Area Hydrologist, WRD U.S. Geological Survey

ROCKY MOUNTAIN PROGRAM (Colorado, Montana, and

Mail Stop 406, Box 25046 Denver Federal Center Lakewood, CO 80225 Telephone: ((303) 236-4882 Office hours: 8:00 a.m. to 4:30 p.m. Mountain Time

SOUTHWEST PROGRAM (Texas, New Mexico, and

Oklahoma)

Address: Area Hydrologist, WRD U.S. Geological Survey Building 1 8011 Cameron Road Austin, TX 78753 Telephone: (512) 873-3004 Office hours: 7:45 a.m. to 4:30 p.m. Central Time

DISTRICT OFFICES

KANSAS

Address: District Chief, WRD U.S. Geological Survey 4821 Quail Crest Place Lawrence, KS 66049 Telephone: (913) 832-3505 Office hours: 8:00 a.m. to 4:30 p.m. Central Time

MINNESOTA

Address: District Chief, WRD U.S. Geological Survey 2280 Woodale Drive Mounds View, MN 55112 Telephone: (612) 783-3100 Office hours: 8:00a.m. to 4:30 p.m. Central Time

COLORADO

Address: District Chief, WRD U.S. Geological Survey Mail Stop 415, Box 25046 Denver Federal Center, Bldg. 53 Lakewood, CO 80225 Telephone: (303) 236-4882 Office hours: 8:00 a.m. to 4:30 p.m. Mountain Time

IOWA

Mailing address: District Chief, WRD U.S. Geological Survey P.O. Box 1230 Iowa City, IA 52244-1230 Office address: Rm. 269, Federal Bldg. 400 S. Clinton St. Iowa City, IA 52240 Telephone: (319) 337-4191 Office hours: 7:45 a.m. to 4:30 p.m. Central Time

MONTANA

Address: District Chief, WRD U.S. Geological Survey Federal Bldg., Rm. 428 301 South Park Avenue Helena, MT 59626-0076 Telephone: (406) 449-5263 Office hours: 8:00 a.m. to 4:30 p.m. Mountain Time

NEBRASKA

Address: District Chief, WRD U.S. Geological Survey Federal Bldg., Rm. 406 100 Centennial Mall, North Lincoln, NE 68508 Telephone: (402) 437-5082 Office hours: 7:45 a.m. to 4:30 p.m. Central Time

NEW MEXICO

Address: District Chief, WRD U.S. Geological Survey Pinetree Office Park, Suite 200 4501 Indian School Rd., N.E. Albuquerque, NM 87110-3929 Telephone: (505) 262-5399 Office hours: 7:30 a.m. to 4:30 p.m. Mountain Time

NORTH DAKOTA

Address: District Chief, WRD U.S. Geological Survey 821 E. Interstate Avenue Bismarck, ND 58501-1199 Telephone: (701) 250-4601 Office hours: 8:00 a.m. to 5:00 p.m. Central Time

OKLAHOMA Address: District Chief, WRD U.S. Geological Survey 202 N.W. 66 Street, Building 7 Oklahoma City, OK 73116 Telephone: (405) 231-4256 Office hours: 8:00 a.m. to 4:45 p.m. Central Time SOUTH DAKOTA Address: District Chief, WRD U.S. Geological Survey 1608 Mt. View Road Rapid City, SD 57702 Telephone: (605) 394-1781 Office hours: 6:30 a.m. to 4:30 p.m. Mountain Time TEXAS Address: District Chief, WRD U.S. Geological Survey **Building 1** 8011 Cameron Road Austin, TX 78753 Telephone: (512) 873-3002 Office hours: 7:45 a.m. to 4:30 p.m. Central Time WYOMING Address: District Chief, WRD U.S. Geological Survey 2617 E. Lincoln Way Suite B Cheyenne, WY 82001 Telephone: (307) 772-2728

Office hours: 8:00 a.m. to 4:30 p.m. Mountain Time

WESTERN REGION

Alaska, Arizona, California, Guam, Hawaii, Idaho, Nevada, Oregon, Utah, Washington

OFFICE OF THE REGIONAL HYDROLOGIST

Address: Regional Hydrologist U.S. Geological Survey 345 Middlefield Road, Mail Stop 470 Menlo Park, CA 94025 Telephone: (415) 329-4414 Office hours: 7:45 a.m. to 4:15 p.m. Pacific Time

AREA HYDROLOGISTS

CALIFORNIA-PACIFIC PROGRAM (California and Hawaii) Address:

> Area Hydrologist, WRD U.S. Geological Survey Federal Bldg., Rm. W-2234 2800 Cottage Way Sacramento, CA 95825 Telephone: (916) 978-4633 Office hours: 7:30 a.m. to 4:00 p.m. Pacific Time

PACIFIC NORTHWEST PROGRAM (Washington, Alaska, Idaho, and Oregon) Address: Area Hydrologist, WRD U.S. Geological Survey 1201 Pacific Avenue, Suite 600 Tacoma, WA 98402 Telephone: (206) 593-6510 Office hours: 7:45 a.m. to 4:30 p.m. Pacific Time

GREAT BASIN PROGRAM (Nevada, Arizona, and Utah) Address: Area Hydrologist, WRD U.S. Geological Survey 333 West Nye Lane, Rm. 203 Carson City, NV 89706 Telephone: (702) 887-7601 Office hours: 8:00 a.m. to 4:30 p.m. Pacific Time

DISTRICT OFFICES

ALASKA

Address: District Chief, WRD U.S. Geological Survey 4230 University Dr., Suite 201 Anchorage, AK 99508-4664 Telephone: (907) 786-7110 Office hours: 7:00 a.m. to 4:30 p.m. Alaska-Hawaii Time

ARIZONA

Address: District Chief, WRD U.S. Geological Survey 375 S. Euclid Avenue Tucson, AZ 85719 Telephone: (602) 670-6671 Office hours: 7:30 a.m. to 4:00 p.m. Mountain Time

CALIFORNIA

Address: District Chief, WRD U.S. Geological Survey Federal Bldg., Rm. W-2234 2800 Cottage Way Sacramento, CA 95825 Telephone: (916) 978-4633 Office hours: 7:30 a.m. to 4:00 p.m. Pacific Time GUAM See also Hawaii Mailing address: Hydrologist-in-Charge Subdistrict Office, WRD U.S. Geological Survey PSC 455, Box 188 FPO San Francisco, CA 96540-1000 Office address: U.S. Navy Public Works Center, Bldg. 104 Agana, GU 96540-1000 Telephone: (011) 339-5293 Office howrs: 8:00 a.m. to 4:30 p.m. Kilo Time

HAWAII (Includes Guam)

Address: District Chief, WRD U.S. Geological Survey 677 Ala Moana Blvd., Suite 415 Honolulu, HI 96813 Telephone: (808) 541-2653 Office hours: 8:00 a.m. to 4:30 p.m. Alaska-Hawaii Time

IDAHO

Address: District Chief, WRD U.S. Geological Survey 230 Collins Road Boise, ID 83702-4520 Telephone: (208) 334-1750 Office hours: 7:45 a.m. to 4:15 p.m. Mountain Time

NEVADA

Address: District Chief, WRD U.S. Geological Survey 333 West Nye Lane, Rm. 203 Carson City, NV 89706 Telephone: (702) 887-7600 Office hours: 8:00 a.m. to 4:30 p.m. Pacific Time

OREGON

Address: District Chief, WRD U.S. Geological Survey 10615 S.E. Cherry Blossom Drive Portland, OR 97216 Telephone: (503) 251-3200 Office hours: 7:30 a.m. to 4:30 p.m. Pacific Time

UTAH

Address: District Chief, WRD U.S. Geological Survey Administration Bldg., Rm. 1016 1745 West 1700 South Salt Lake City, UT 84104 Telephone: (801) 975-3350 Office hours: 8:00 a.m. to 4:30 p.m. Mountain Time

WASHINGTON

Address: District Chief, WRD U.S. Geological Survey 1201 Pacific Avenue, Suite 600 Tacoma, WA 98402 Telephone: (206) 593-6510 Office hours: 7:45 a.m. to 4:30 p.m. Pacific Time

HEADQUARTERS BRANCH FIELD LOCATIONS

OFFICE OF THE ASSISTANT CHIEF HYDROLOGIST FOR PROGRAM COORDINATION AND TECHNICAL SUPPORT

Address: See page 13 Telephone: (703) 648-5229

BRANCH OF QUALITY ASSURANCE

BRANCH OF ANALYTICAL SERVICES

U.S. Geological Survey

Denver, CO 80225

Address:

Address: U.S. Geological Survey Mail Stop 401, Box 25046 Denver Federal Center Lakewood, CO 80225 Telephone: (303) 236-3601 Office hours: 7:00 a.m. to 3:30 p.m. Mountain Time

National Water-Quality Laboratory

DFC, Box 25046, Mail Stop 426

BRANCH OF ANALYTICAL SERVICES—Continued

Physical Location: 5293 Ward Road-B Arvada, CO 80002 Telephone: (303) 467-8000 Office hours: 8:00 a.m. to 4:30 p.m. Mountain Time

YUCCA MOUNTAIN PROJECT BRANCH

Address: U.S. Geological Survey Mail Stop 425, Box 25046 Denver Federal Center Lakewood, CO 80225 Telephone: (303) 236-0516 Office hours: 8:00 a.m. to 4:30 p.m. Mountain Time

OFFICE OF THE ASSISTANT CHIEF HYDROLOGIST FOR RESEARCH AND EXTERNAL COORDINATION

OFFICE OF HYDROLOGIC RESEARCH

Address: See page 13 Telephone: (703) 648-5043

BRANCHES OF REGIONAL RESEARCH

EASTERN REGION

Address: Chief, Branch of Regional Research U.S. Geological Survey 432 National Center Reston, VA 22092 Telephone: (703) 648-5833 Office hours: 8:00 a.m. to 4:30 p.m. Eastern Time

CENTRAL REGION

Address: Chief, Branch of Regional Research U.S. Geological Survey Mail Stop 418, Box 25046

December 1992

CENTRAL REGION—Continued Denver Federal Center Lakewood, CO 80225 Telephone: (303) 236-5021 Office hours: 8:00 a.m. to 4:30 p.m. Mountain Time

WESTERN REGION

Address: Chief, Branch of Regional Research U.S. Geological Survey Mail Stop 472 345 Middlefield Road Menlo Park, CA 94025 Telephone: (415) 329-4412 Office hours: 8:00 a.m. to 4:30 p.m. Pacific Time

Water Resources Division Information Guide

