The Natural Hazards Data Resources Directory

A Resource for the Disaster and Hazard Management Community of Practitioners and Research Scholars

Leaura M. Hennig
Compiler and Editor

NHRAIC Special Publication No. 21
NGDC Key to Geophysical Records Documentation No. 23

GB5014
.N3
H46
1990

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE
National Geophysical Data Center
Boulder, Colorado

March 1990

The Natural Hazards Data Resources Directory

A Resource for the Disaster and Hazard Management Community of Practitioners and Research Scholars

Leaura M. Hennig
Compiler and Editor

NHRAIC Special Publication No. 21
NGDC Key to Geophysical Records Documentation No. 23

Published jointly by:

Natural Hazards Research and Applications Information Center
University of Colorado
Boulder, Colorado

U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Geophysical Data Center
Boulder, Colorado

with additional support from the National Science Foundation

US Department of Commerce
NOAA Coastal Services Center Library
2234 South Hobson Avenue
Charleston, SC 29405-2413

JUN 18 1997
GB5014 .N3 H46 1996c1 OCLC# 35022240

Acknowledgements

I thank Dave Morton for endless references;
Dave Butler, Sylvia Dane and Emily Nye for editorial assistance;
Mary Fran Myers for project management excellence;
& Illana Gallon for proofreading.

I also acknowledge the inspirational support of my teachers
Lynn Starker Blyth, Emily Nye, Nicholas Helburn
Marilyn Bailin, Verna Newton

&

My students
Chris Hansen, Kathy Madsen, Candice Smith, Amy Tvetne

Copyright 1990
by the
University of Colorado
Institute of Behavioral Science

Library of Congress
Catalog Card No. 90-060033

ISBN 1-877943-01-0

TABLE OF CONTENTS

INTRODUCTION 1

GEOLOGICAL HAZARDS
- Avalanche 7
- Earthquake: Social Data 9
- Earthquake: Technical Data 16
- Geotechnical Data 33
- Landslide & Mass Earth Movements 36
- Radon 40
- Tsunami 41
- Volcano 44

METEOROLOGICAL HAZARDS
- Climatological Data 49
- Coastal Management 57
- Drought 63
- Flood 68
- Hurricane 75
- Severe Storms 79
- Snow & Ice 82
- Tornado & Severe Winds 85
- Water Resources Data 88
- Wildfire & Forestry 94

SOCIETAL RESPONSE
- Building Technology & Transportation 99
- Demographic Data 102
- Disaster Relief 106
- Emergency Preparedness 116
- Information & Research Centers 135
- Libraries 152
- Maps, Charts, Satellite Images 163
- Professional Organizations 169

APPENDICES

State Offices
- State Climatologists 191
- Coastal Zone Management 194
- Emergency Management 196
- Geological Survey 200
- Natural Resources 203
- Soil Conservation 206
- Water Resources 209

Federal Offices
- Army Corps of Engineers 215
- Environmental Protection Agency 217
- Federal Emergency Management Agency 218
- Geological Survey 219
- Geological Survey Water Resources 220
- Land Grant Extension Services 224
- National Oceanic & Atmospheric Climate Centers 228
- National Weather Service 229
- Small Business Administration 230

Additional Offices

Sea Grant Programs 233

Water Resources Research Institutes 235

World Health Organization 238

INDICES

Organizational 241

Geographic Index: International 246

Geographic Index: US 247

Introduction

A natural hazard is a rare or extreme event in nature that adversely impacts human life, property, or activity. No human settlements are free from the risk of natural hazards, therefore it is vital that researchers and decision-makers have access to all available hazards information.

Information needs are especially acute as we enter the 1990s, and we contemplate rising tolls from natural hazards worldwide. In response to this threat, the United Nations General Assembly designated the 1990s the Decade for Natural Disaster Reduction--a 10-year period devoted to improved efforts to reduce losses from natural extremes. The challenge to the hazards community is to halt or reverse the trend of rising impacts. Experience suggests that enough knowledge already exists, if properly applied, to substantially reduce both human and property losses from natural disasters.

The United Nations called upon all countries to: establish national Decade programs which examine their capabilities for reducing the toll of natural hazards; assess the particular requirements of their respective countries in order to improve those capabilities; and develop a strategy for attaining these goals. An important first step in this process is identifying available information resources that address hazards management and mitigation activities. This directory was compiled to take that step as a contribution to the United States Decade program.

The directory was prepared by the Natural Hazards Research and Applications Information Center at the University of Colorado at Boulder, in conjunction with the National Oceanic and Atmospheric Administration's National Geophysical Data Center in Boulder. Financial support was provided by the National Science Foundation through grant # CES-8717115 to the Program on Environment and Behavior of the Institute of Behavioral Science at the University of Colorado. Special thanks to Dr. Eleonora Sabadell of NSF's Natural and Manmade Hazards Mitigation Program for this grant. NOAA's National Geophysical Data Center funded the publication of this directory.

How this Directory was Compiled

Data resource surveys were mailed to nearly 1400 potential sources of natural hazards data in the winter of 1988-89. These sources were identified from existing data bases at the Natural Hazards Center as well as through a wide-ranging search for other appropriate data resources. Following the mail survey, the responses were screened and sorted, including those which provided data, technical assistance, or services related to hazards on a regional or national basis. In addition, a follow-up telephone survey was conducted of all non-respondents believed to be maintaining valuable data resources. Those not included were primarily private for-profit firms, and state agencies with data pertaining only to a specific state.

Usefulness

Despite efforts to be complete and thorough in the preparation of this directory, there may be sources of information which are not included. Additionally, information contained herein may contain minor inaccuracies, especially because prices, data, content, format, contact people, and offices are ever-changing. It is intended that the directory be updated periodically, and therefore we ask you to send any comments about its usefulness, as well as corrections or additions, to:

Natural Hazards Center
University of Colorado
Campus Box 482
Boulder, CO 80309-0482 USA

How to Use this Directory

The directory includes two types of information: 1) data resources organized by natural hazard topic, and 2) lists of hazard-related organizations.

Each data resource listed includes the following:

	Data Resource Title
Organization	The Organization indicates which administrative group is maintaining the data.
Contact	The Contact provides the person to call or write for further information.
Description	The Description of the data resource may include the topic, level of aggregation, geographic area covered, time period of record, and source of data.
Format	The Format describes the structure of the data, e.g. hard copy (printed matter); computer copy (disks, tapes, on-line); audio-visual materials; and/or technical assistance.
Availability	The Availability informs the user of costs for acquiring the data, restrictions on access (if any), location of the data if different from the contact, frequency of updating the data, and related services.
Additional Related Information	The Additional Related Information lists any pertinent information such as reports, articles, pamphlets, and users' guides which describe the data.

The hazard-related organizations located in the Appendix include numerous state and federal institutions, as well as US and international programs. When appropriate, general functions of these organizations are described.

The directory has three indices: agency, subject, and geographic. Many data resources apply to more than one hazard (e.g. earthquake and fire); therefore, through cross-referencing in the subject index, the user may locate multi-hazard data resources.

To use this directory, simply look for a data resource by topic in the Table of Contents or Subject Index, and turn to the appropriate page.

GEOLOGICAL HAZARDS

Avalanche Information

Organization

Colorado Avalanche Information Center

Contact

Knox Williams, Director
Colorado Avalanche Information Center
c/o Rocky Mountain Forest and Range Experiment Station
Forest Service
US Department of Agriculture
240 West Prospect Street
Fort Collins, CO 80526
Telephone: (303) 498-1847
FTS: 323-1847

Description

The Westwide Avalanche Network consists of 40 observing stations in the Western United States and Alaska. The Network maintains daily avalanche, snow cover, and weather data. Each month the network receives data from the observing stations. The Network contains data for the last twenty to thirty-five years. The Colorado Avalanche Information Center also operates the Colorado Avalanche Warning Service, and publishes articles on avalanche accidents.

Format

The Center stores data on computer cards and magnetic tape. The Center provides data listings or punched cards at no cost, except for large requests. The Center updates data annually, during the summer.

Availability

Contact the Rocky Mountain Forest and Range Experiment Station.

Avalanche Information

Organization

Northwest Avalanche Center

Contact

Sue Ferguson, Meteorologist
7600 Sandpoint Way NE
Box C-15700
Seattle, WA 98115
Telephone: (206) 526-6164

Description

The Northwest Avalanche Center, NWAC, collects data on mountain weather, snow and avalanche fatalities, snow stability, avalanche hazard forecasts, as well as snow and avalanches occurrences. Specifically, NWAC collects data from several elevations and geographic locations within the Olympics and Cascades of Washington and Northern Oregon from November through April. These data include: hourly temperature, wind, precipitation, and relative humidity from remote automated sensors; and daily observations of weather, snow, and avalanches from field observers.

AVALANCHE

NWAC also prepares daily forecasts from November through April. These forecasts include: summaries with micro- and meso-scale forecasts, snowpack analysis, avalanche forecast advisory, and hazard assessment.

Format

Archival data and forecasts are available on-line as requested. Current forecasts are available on-line through a computerized bulletin board.

Availability

Cooperators of NWAC's program have free access to all data and forecasts. Other users may be charged a minimal fee depending upon the expense of the request.

Additional Information

Contact NWAC for an extensive list of publications.

See also the following appendices:

- State Climatologists
- NOAA Regional Climate Centers
- National Weather Service

Earthquake Consortium

Organization

Central United States Earthquake Consortium

Contact

Harvey Ryland, Executive Director
Central United States Earthquake Consortium
2630 Holmes Road East
Memphis, TN 38118
Telephone: (901) 345-0932

Description

The Central United States Earthquake Consortium (CUSEC) protects the citizens of Missouri, Mississippi, Illinois, Arkansas, Tennessee, Kentucky, and Indiana from earthquakes. CUSEC maintains a mitigation strategy plan, and provides public awareness programs. CUSEC also participates in resource inventories and multi-state exercises.

Format

Hard copy and videos.

Availability

CUSEC distributes all of the earthquake related Federal Emergency Management Agency publications, as well as state published resources from the seven CUSEC states.

Additional Information

CUSEC Monographs and list of publications.

Earthquake Consortium

Organization

Western States Seismic Policy Council

Contact

Roy Breckenridge, Chair
Western States Seismic Policy Council
University of Idaho
Morill Hall, Room 332
Moscow, ID 83843
Telephone: (208) 885-7991

Description

The Western States Seismic Policy Council, WSSPC, formed in 1979 and the early 1980s. WSSPC improves understanding about earthquake preparedness, and formulates policy to lessen the impacts of earthquakes. The Council provides a cooperative forum for enhancing the development of comprehensive local, state, and national seismic safety policies and programs. WSSPC's fourteen member states include: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Texas, Utah, Washington and Wyoming. Each year WSSPC sponsors a conference. The location of the conference rotates among the member states annually.

EARTHQUAKE: SOCIAL DATA

Format Annual conference.

Availability Contact Roy Breckenridge.

Earthquake Education & Preparedness

Agency Association of Bay Area Governments

Contact
Jeanne Perkins, Program Manager
Association of Bay Area Governments
Earthquake Program
PO Box 2050
Oakland, CA 94604-2050
Telephone: (415) 464-7900
Telex: (415) 464-7979

Description The Association of Bay Area Governments, ABAG, helps solve problems that cross city and county boundaries. ABAG conducts research and forecasts population, housing and employment trends in order to plan for the future. ABAG's Earthquake Program examines the Bay area's existing building stock and the liability of both local governments and businesses and industries for earthquake hazards and losses. ABAG also produces an earthquake hazards map for the Bay area.

Format Hard copy, floppy disks, dBASE III files, maps, and technical assistance.

Availability Contact ABAG for publication information.

Earthquake Education & Preparedness

Organization Bay Area Regional Earthquake Preparedness Project

Contact
Sarah Nathe, Resource & Publications Coordinator
Bay Area Regional Earthquake Preparedness Project
Metro Center
101 8th Street, Suite 152
Oakland, CA 94607-4756
Telephone: (415) 540-2713

Description The Bay Area Regional Earthquake Preparedness Project, BAREPP, is specifically charged with assisting local governments in the California Bay Area in reducing their structural and non-structural vulnerability to earthquakes. The resources maintained are documents and audio-visual

materials on building retrofit, public awareness, emergency planning, and disaster response.

Format

Hard copy, videotapes, slides, and audiotapes.

Availability

Publications are for sale through the Association of Bay Area Governments (ABAG), PO Box 2050, Oakland, CA 94604. All other materials are available only to public and private organizations in the 10 county Bay Area.

Additional Information

Contact ABAG for a list of BAREPP publications.

Earthquake Education & Preparedness

Organization

California Seismic Safety Commission

Contact

Ed Hensley, Information Officer
California Seismic Safety Commission
1900 K Street, Suite 100
Sacramento, CA 95814
Telephone: (916) 327-0669

Description

The California Seismic Safety Commission maintains documents and audio-visual materials that translate seismic research, engineering, and architectural information into practical guide books for local officials.

Format

Hard copy (guide books). Compliance data, earthquake safety legislation, are available on Macintosh computer files.

Availability

Send for guide books which are free of charge. The computer information may be received in printed or diskette form.

Additional Information

Guidebook: To Identify and Mitigate Seismic Hazards in Buildings. Report No. SSC 87-03. December, 1987. California Seismic Safety Commission. Sacramento, CA.

California at Risk: Steps to Earthquake Safety for Local Government. Report No. SSC 88-01, Jan. 1988. California Seismic Safety Commission. Sacramento, CA.

EARTHQUAKE: SOCIAL DATA

Earthquake Education & Preparedness

Organization Earthquake Education Center

Contact Joyce Bagwell, Director
Baptist College at Charleston
Earthquake Education Center
PO Box 10087
Charleston, SC 29411
Telephone: (803) 797-4208

Description The Earthquake Education Center maintains educational materials on earthquake history, causes and effects, and preparedness in the form of pamphlets, audio-visual aids, monographs, and bibliographic materials for schools (K-12 and post-secondary), hospitals, businesses, industries, life-line facilities, and special-needs groups (girl scouts, senior citizens, handicapped, and youth). The Center provides data on South Carolina's seismic activity from the US Geological Survey network located on the Baptist College campus.

Format Hard copy monographs, teachers' packages, pamphlets, bibliographic materials are available. Audio-visual materials include: films, slides, slide shows, photographs, and video and audio cassettes.

Availability Available upon request. Contact the Earthquake Education Center.

Earthquake Education & Preparedness

Organization Southern California Earthquake Preparedness Project

Contact Pamela Broadous, Public Information Officer
Southern California Earthquake Preparedness Project
600 South Commonwealth Avenue, Suite 1100
Los Angeles, CA 90005
Telephone: (213) 739-6695

Description The Southern California Earthquake Preparedness Project, SCEPP, maintains earthquake preparedness guidelines, reports, and a newsletter. SCEPP has a small library, as well as an Information Network Resource System and audio-visual materials.

Format Hard and computer copy, as well as audio-visuals.

Availability Call or write to request a listing of available resources. Books, brochures, data bases, videos, slide and tape programs are also available.

Additional Information

The Southern California Earthquake Preparedness Project. Brochure.

"Preparedness Planning Guides and Public Information Materials of the SCEPP." Product List.

Earthquake Education & Preparedness

Organization

Ventura County Office of Emergency Services

Contact

Karen Guidi
Ventura County Office of Emergency Services
800 South Victoria Ave.
Ventura, CA 93009
Telephone: (805) 654-2551

Description

Earthquake preparedness is encouraged for everyone in California, yet information on earthquake safety is not widely available in a medium for the hearing-impaired. In 1987 the Ventura County Office of Emergency Services produced a special video on household-level preparedness, after researchers discovered that 11% of Ventura County residents are either deaf or have some form of hearing impairment. Silent Quake (1987, 42 minutes long) is a signed, captioned, and narrated videotape of a deaf family's visit with a neighbor to discuss earthquake preparedness. It provides carefully presented, easily understood information on stocking a safety kit and food supplies for survival after an earthquake; securing heavy interior objects and a building's foundation; arranging with neighbors for communication and assistance after an earthquake; taking protective measures during an earthquake; handling damage to water, electrical, and gas lines; and assisting the injured.

Format

Videotape.

Availability

Cost is $30.

Additional Information

For further information regarding the production of Silent Quake contact Karen Guidi.

Earthquake Research & Information

Organization

Earthquake Engineering Research Center

Contact

Vitelmo Bertero, Director
Earthquake Engineering Research Center
National Information Service for Earthquake Engineering
University of California at Berkeley
1301 South 46th Street
Richmond, CA 94804
Telephone: (415) 231-9403

Description

The Earthquake Engineering Research Center's, EERC, program develops methods and procedures for the management of earthquake hazards through economically feasible design, construction, and land use planning. Projects also analyze physical, legal, social, and economic policy alternatives for risk control. The program includes the National Information Service for Earthquake Engineering, NISEE, at the University of California at Berkeley and at the California Institute of Technology which:

1) develop and maintain an earthquake engineering library of over 35,500 items,
2) collect and distribute computer software and programs (over 72 available),
3) publish Abstract Journal in Earthquake Engineering, "NISEE/EERC News," and EERC reports.

Format

Hard and computer copy.

Availability

Bibliographies of earthquake engineering reports and NISEE activities are available. The National Technical Information Service or NISEE provides copies of reports.

Additional Information

Bibliography of Earthquake Engineering, compiled by Edward Hollis, Earthquake Engineering Research Institute, Pasadena, CA 1971.
Abstract Journal in Earthquake Engineering, annual review of over 2,400 abstracts with subject and author indices. NISEE. University of California at Berkeley. Richmond, CA.
NISEE/EERC News, quarterly report of current earthquake engineering research. NISEE. University of California at Berkeley. Richmond, CA.

Earthquake Research & Information

Organization

Center for Earthquake Studies

Contact

David Stewart, Director
Center for Earthquake Studies
One University Plaza
Cape Girardeau, MO 63701-4799
Telephone: (314) 651-2000

Description

Because over 3 million Missourians, as well as more than 12 million midwesterners, are at risk from earthquakes originating in the New Madrid Seismic Zone, a Center for Earthquake Studies opened at the Department of Earth Sciences, Southeast Missouri State University. The center is a cooperative endeavor of the university and the Missouri State Emergency Management Agency. Its purpose is to protect people from earthquake hazards by a variety of mitigation activities, including applied research, that will prevent or reduce casualties, injuries, and property loss.

The founders of the center recognize that relatively small investments in seismic hazard mitigation yield significant savings in reduced damages. Therefore, they plan to undertake a wide range of activities including the development of public awareness campaigns; publication of books and videos; assessment of risk in specific regions; promotion of safe building practices, especially in schools; organization of conferences, seminars, courses, and training workshops; and the initiation of other activities with the Missouri State Emergency Agency.

Format

Hard copy, technical assistance, audio-visual materials.

Availability

For further information contact the Center.

See also the following appendices:

- Emergency Management
- Army Corps of Engineers
- FEMA
- Small Business Administration
- World Health Organization

EARTHQUAKE: TECHNICAL DATA

Computational Seismology

Organization

Center for Computational Seismology

Contact

Ernest Majer, Group Leader
Division of Geophysics and Geomechanics
Center for Computational Seismology
Lawrence Berkeley Labs
50 East #1 Cyclotron Road
Berkeley, CA 94720
Telephone: (415) 486-6709
Telex: 910-366-2037
Telefax: (415) 486-5686

Description

The Center for Computational Seismology, CCS, offers a wide variety of state-of-the-art software and hardware to conduct seismic research. CCS analyzes seismic data; develops seismic exploration and monitoring techniques; conducts hydrofracture detection, propagation and monitoring research, and generates seismic data bases. CCS is the data processing center for CALCRUST a consortium of four universities conducting research on crustal structural analysis. CCS also is a computational support base for the development of seismic monitoring via computers.

Format

On-line.

Availability

Arpa net Mil net
128.3.254.11 CCS@LBL.

Earthquake Data Base: Australia

Organization

Australian Seismological Center

Contact

Kevin McCue, Manager
Information Section
Australian Seismological Center
Bureau of Mineral Resources
GPO Box 378
Canberra ACT 2605
Australia
Telephone: [61] (62) 499675
Telex: 62229 BMRCOM
Telefax: [61] (62) 480913

Description

The Australian Seismological Center maintains an earthquake data file. This file contains epicenter data: time, latitude, longitude, depth, magnitude, number of stations, and source. The time period of the

earthquake data file is 1873 through 1988; the range of the file is 0-90 degrees South by 131-163 degrees East.

Format Information is available on ASCII files, floppy discs, or tapes.

Availability The cost per tape is $50. Working hours are Monday to Friday, 8am - 5pm.

Earthquake Data Base: California

Organization California Department of Conservation

Contact

Joseph Ziony, Assistant Director
California Department of Conservation
Division of Mines & Geology
1416 Ninth Street, Room 1341
Sacramento, CA 95814-5576
Telephone: (916) 445-1825

Description The California Department of Conservation is California's Geological Survey. Its publications on geology and seismology span from 1880 to the present and include: bulletins, special reports, special publications, preliminary reports, county reports, geologic maps, gravity maps, fault maps, map sheets, annual report of the State Geologist, Strong-Motion Instrumentation Program reports, earthquake planning scenarios, and California Geology magazine.

Format On-line and hard copy.

Availability Their computer bulletin board lists: all current publications for sale with prices, earthquakes in California with magnitudes greater than 3, other geohazard events, current state legislation affecting geology, telephone numbers of regional division offices, and a calendar of upcoming professional geology and seismology meetings.

Additional Information Write for free "List of Available Publications" booklet to Division of Mines & Geology, 660 Bercut Drive, Sacramento, CA 95814-0131; telephone (916) 445-5716 for publication sales information. Prepayment is required. California Geology magazine subscription is $7 per year. Computer bulletin board is named "CDMG ON-LINE", telephone (916) 327-1208, 8 bits, no parity, one stop.

Earthquake Data Base: Peru

Organization

Centro Regional de Sismologia para America del Sor

Contact

Alberto Giesecke, Director
Centro Regional de Sismologia para America del Sor
Apartado 14-0363
Lima
Peru
Telephone: [51] (14) 247421
Telex: [51] 20053PE PB LIMTC

Description

The Centro Regional de Sismologia para America del Sor maintains seismological bulletins from most South American countries over a variety of time spans.

Format

Hard copy.

Availability

Requests should be made by letter.

Earthquake Data Base: Southeastern US

Organization

Seismological Observatory

Contact

G. Bollinger, Director
Seismological Observatory
Virginia Tech
Blacksburg, VA 24061
Telephone: (703) 231-6729

Description

Virginia Tech's Seismological Observatory maintains an earthquake catalog for the Southeastern United States for all occurrences in the region from 1977 to the present.

Format

Hard copy and magnetic tape.

Availability

Handled on an ad hoc basis.

Earthquake Data Base: Switzerland

Organization

Swiss Seismological Service

Contact

D. Mayer-Rosa, Chief Seismologist
Swiss Seismological Service
ETH-Honggerberg
CH-8093 Zurich
Switzerland
Telephone: [41] (1) 377-2602
Telex: 823480 EHEB CH
Telefax: [41] (1) 371-1864

Description

The Swiss Seismological Service maintains the Earthquake Data Base, EDB. EDB contains about 5,000 epicenters in Switzerland from 1300 to 1989.

Format

Computer based off-line data bank.

Availability

Selections of data are available on request.

Additional Information

The Swiss Seismological Service produces a monthly seismological bulletin.

Earthquake Data Base: Turkey

Organization

Earthquake Research Institute

Contact

Oktay Ergunay, Head
Earthquake Research Institute
Eskisehir Yolu Lo ncu Km Lodumlu Mevkii
Ankara
Turkey
Telephone: (90) 4-2873640
Telex: 42477 afet tr
Telefax: 213 76 58

Description

The Earthquake Research Institute of Ankara, Turkey maintains a computer catalog of earthquakes for the period 1880-1986, and reports of Turkish earthquakes since 1940.

Format

Hard copy and computer copy.

Availability

Information is available upon written request.

Earthquake Data Bases: US & Worldwide

Organization

National Geophysical Data Center

Contact

NOAA/NESDIS
National Geophysical Data Center
325 Broadway
Boulder, CO 80303-3328

Description

Earthquake Data Base:

The National Geophysical Data Center's Earthquake Data Base contains information on over 500,000 earthquakes and associated phenomena, including dates and times of occurrences, latitude and longitude locations, magnitudes, depths of focus, and some related data on effects. Data are worldwide. The time span is B.C. to near present, but mostly since 1900. Sources are the US Geological Survey, university programs, historical catalogs.

Format

Magnetic-tape copies, hard copies, searches, plots, maps.

Availability

Magnetic tape copies, searches, plots, maps, and lists are available at cost of copying ($351 for tape copies, $126 for search lists and page-size maps). Searches usually cover a specific geographic area or data within specified limits, e.g. date, magnitude, depth of focus.

Additional Information

Summary of Earthquake Data Base, Wilbur Rinehart, Herbert Meyers, and Carl von Hake, Key to Geophysical Records Documentation No. 21, NOAA, National Geophysical Data Center, Boulder, CO, October 1985.

Preliminary Determination of Epicenters: Monthly Listing. US Geological Survey. Available from US Government Printing Office, Washington, DC 20402 (a 1 year subscription is $14.00 domestic and $17.50 foreign).

For additional information, contact:
Ray Habermann, Geophysicist
Telephone: (303) 497-6472
FTS: 323-6472

Description

Earthquake Effect File:

The National Geophysical Data Center's Earthquake Effect File contains data on earthquake effects measured on the Modified Mercalli Intensity Scale for over 22,000 earthquakes in the United States between 1928 and 1982. Information includes: the source of the earthquake, the latitude and longitude of the nearest city or town, and the calculated distance between the two points. The source of data is principally the US Earthquakes Series and Abstracts of Earthquake Reports for the US.

EARTHQUAKE: TECHNICAL DATA

Format

Magnetic tape copies, plots, maps, lists, searches, and technical assistance.

Availability

Magnetic tape copies, searches, plots, maps, and lists are available at cost of copying ($192 for tape copies, 1988 price). Searches usually cover a specific geographic area.

Additional Information

Earthquake Intensity Data. Announcement/SE-0201. NOAA. National Geophysical Data Center. Boulder, CO 80303. 1988.

US Earthquakes Series. US Geological Survey. Open File Services Section, Box 25425, Federal Center, Denver, CO 80225.

Earthquake History of the US. No. 41-1, Revised Edition through 1970. NOAA. National Geophysical Data Center. Boulder, CO 80303. 1973.

For additional information, contact:
Patricia Lockridge, Geophysicist
Telephone: (303) 497-6337
FTS: 320-6967

Description

Earthquake Slides:

The Geological Hazards Slide Set consists of eight unique sets of 35mm slides that depict geologic hazards throughout the world from 1811 to present. Each slide set includes 20 illustrations covering the following subjects:

- Earthquake Damage - General (Color)
- Earthquake Damage, San Francisco, California, April 18, 1906 (B&W)
- Earthquake Damage, Mexico City, Mexico, September 1985 (Color)
- Earthquake Damage to Transportation Systems (B&W, Color)
- Earthquake Damage to Schools (B&W, Color)
- Volcanoes in Eruption (B&W, Color)
- Volcanic Rocks and Features (color)
- Tsunami - General (B&W, Color)

Format

Color and black and white slides. Each set includes 20 slides and a list of captions.

Availability

$20.00 per set (1988 prices).

Additional Information

Geologic Hazards Slide Sets, SE-0801. NOAA. Boulder, CO 80303.

For additional information, contact:
Patricia Lockridge, Geophysicist
Telephone: (303) 497-6337
FTS: 320-6337

EARTHQUAKE: TECHNICAL DATA

Description

Significant Earthquake Data Base:

The Significant Earthquake Data Base contains nearly 3,000 records of earthquake events worldwide from 2,000 B.C. to the present. Events included meet these criteria: one million dollars in damage, 10 deaths, or magnitude of 7.5 or greater. The following parameters are included for each event: time, date, latitude, longitude, focal depth, magnitude, number of deaths, information on damage, and references.

Format

Magnetic tape, diskette, maps, and catalogs.

Availability

The magnetic tape copy of an entire file is $90. An entire file on IBM-PC compatible 5 ¼" high density floppy diskette is $30. Retrievals are $115. Catalogs ($10), wall maps ($5-10) are also available (1988 prices).

Additional Information

All non-federal orders must be prepaid.

For additional information, contact:
Patricia Lockridge, Geophysicist
Telephone: (303) 6337
FTS: 320-6337

Description

Strong-Motion Data Archive:

The Strong-Motion Data Archive is a continuously updated archive. It is a worldwide collection of digitized strong-motion accelerograms. The archive includes over 12,000 records from Australia, Canada, Chile, El Salvador, Fiji, India, Italy, Japan, Mexico, New Zealand, Nicaragua, New Guinea, Peru, Romania, Taiwan, the US, and the USSR. Types of data available include raw, filtered, and response spectra records obtained from a wide variety of recording environments such as buildings, dams, and bridges.

Format

Copies of records are available on 9 track magnetic tape and IBM compatible diskettes.

Availability

Data are furnished at cost of duplication.

Additional Information

Comprehensive Catalog of Digitized Strong-Motion Data, L.W. Row, Report SE-45, National Geophysical Data Center and World Data Center-A for Solid Earth Geophysics, Boulder, CO, 1989.

For additional information, contact:
Lee Row, III
Telephone: (303) 497-6764
FTS: 320-6764

Earthquake Data Base: West Germany

Organization

Institute of Geophysics

Contact

G. Schneider, Professor
Richard Wagner Strasse
Institute of Geophysics
44 D 7000 Stuttgart 1
West Germany
Telephone: [49] (711) 121-3592
Telex: [49] (07) 23563 Unig-d

Description

The Institute of Geophysics maintains seismological data from 1905 to the present, from seismological stations in the Southwest of Germany. The Institute also maintains macro-seismic data from 1800 to the present, and accelerograph data since 1976 for the Southwest of Germany.

Format

Data are available on-line via GRF at the Central Seismological Observatory. Seismograms and other information are available in hard copy.

Availability

Information is available upon request.

Additional Information

Earthquakes in the Territory of the Federal Republic of Germany.

Data Catalogue of Earthquakes in the Federal Republic of Germany and Adjacent Areas.

These publications are available from: BGR, Stilleweg 2, D-3000 Hanover 5r, West Germany.

Earthquake Data Base: Worldwide

Organization

International Seismological Center

Contact

The Director
International Seismological Center
Pipers Lane
Thatcham, Newbury, Berks RG13 4NS
United Kingdom
Telephone: [44] (635) 61022

Description

The International Seismological Center, ISC, a non-governmental organization, undertakes the final collection, analysis, and publication of standard earthquake information from all over the world. Earthquake

readings are received from some 1,500 seismograph stations representing every part of the globe, from Greenland to the South Pole.

The ISC produces four publications, as well as provides technical searches. The ISC Bulletin contains comprehensive lists of earthquake hypocenters and station observation reports. The Regional Catalog of Earthquakes and the Felt & Damaging Earthquakes Inventory are geographic sorts of the hypocenters. The Bibliography of Seismology contains references from 1250 current scientific journals.

Format

Hard copy or magnetic tape.

Availability

Prices for all publications and magnetic tapes are available from the ISC.

Additional Information

Data searches are available for hypocentral data and bibliographic information.

Earthquake Data Base: Worldwide

Organization

Office of Earthquakes, Volcanoes & Engineering

Contact

Kaye Shedlock, Branch Chief
Branch of Geologic Risk Assessment
Office of Earthquakes, Volcanoes & Engineering
USGS
MS 966, Box 25046
Denver Federal Center
Denver, CO 80225
Telephone: (303) 236-1586
FTS: 776-1586 & 776-1519
Telex: 5106014123 ESL UD
Telefax: (303) 236-1519

Description

The Office of Earthquakes, Volcanoes & Engineering maintains field data: seismograph readings; earthquake intensity information; and geologic, geophysical, and engineering data from sites and regions in the US and abroad. The field data covers thousands of years of past earth history up to and including recent geophysical events. Geologic risk assessment scientists, with specialization in geomechanics, geology, geography, geophysics, structural and civil engineering, and hazard and risk assessment, collect, map, and analyze the field data.

EARTHQUAKE: TECHNICAL DATA

Format

Geographic information system programs for earthquake hazard evaluations are available. In addition, information is also available from maps, scientific and technical reports, digital form, photographic records, and microfilm.

Availability

As a federal government mission agency, the US Geological Survey provides state-of-the-art earth science information to the public, universities, state and local governments, and the private sector to enhance public and private knowledge of scientific and technological information necessary for the effective management of the nation's resources and the health and welfare of the public. This information is available for a nominal fee. It can be obtained from all US repository libraries or from the Public Inquiries Offices of the US Geological Survey.

Data from geologic trenching, seismograph networks, and risk assessments are available in digital form and hard copy. Technical assistance in the areas of geophysics, geology, geomechanics, structural engineering, and hazards and risk assessment is also available.

Additional Information

Guide to Obtaining USGS Information. 1986. US Geological Survey Circular 900. Free upon request from: Books and Open-File Reports Section, USGS, Federal Center, Box 25425, Denver, CO 80222.

Earthquake Data Base: Worldwide

Organization

National Earthquake Information Center

Contact

James Taggart, Geophysicist
US Geological Survey
National Earthquake Information Center
MS 967, DFC Box 25046
Denver, CO 80225
Telephone: (303) 236-1506
Telex: (WUTCO) 5106014123ESL UD
Telefax: (303) 236-1519

Description

The National Earthquake Information Center, NEIC, maintains an extensive data base of earthquake locations (hypocenters) covering the period from ancient times to the present. Filmed analog seismograms from the 100+ station Worldwide Standardized Seismography Network are available for the period from 1962 to the present. Digital seismograph data are available for various stations and networks from 1977 to the present.

Format

Hypocenters are available in hard copy, on magnetic tape, and on CD ROM. Analog seismograms are available on microfiche. Digital seismograph data are available on magnetic tape and CD ROM. All data

are furnished at cost.

Availability

Hypocenter files are the most accessible data although other data are also available.

Additional Information

24-hour Earthquake Information (303) 236-1500.

Quick Epicenter Determinations, Preliminary Determination of Epicenters, Earthquake Data Report (monthly), and Preliminary Determination of Epicenters Monthly Listing are all available. Contact the NEIC for further information.

Earthquake Engineering

Organization

Earthquake Engineering Research Institute

Contact

Earthquake Engineering Research Institute
6431 Fairmount Ave., Suite 7
El Cerrito, CA 94530-3624
Telephone: (415) 525-3668

Description

The Earthquake Engineering Research Institute, EERI, produces slides sets and video tapes on earthquake hazards. EERI provides slide sets on a variety of earthquake topics: Armenia Earthquake, Earthquake Resistant Design, Dynamics of Structures, and Nonstructural Damage.

Format

Slide sets and video tapes.

Availability

All orders must be prepaid. Orders within California should include a 7% sales tax; those outside the US should include a 5% shipping charge.

Earthquake Engineering

Organization

National Information Service for Earthquake Engineering

Contact

Ruth Denton, Editor
National Information Service for Earthquake Engineering
Building 451, Richmond Field Station
University of California at Berkeley
1301 South 46th Street
Richmond, CA 94804
Telephone: (415) 231-9413

Description

Earthquake Engineering Abstracts distributes the only comprehensive annual collection of abstracts and citations of current world literature pertinent to the fields of earthquake engineering and earthquake hazard mitigation. The abstracts are available in printed form, on magnetic media, as well as on-line. Each year more than 2,000 new items are added. Abstracts of technical papers, research reports, books, codes and conference proceedings are obtained from 140 technical journals and publications in 24 countries.

Format

Hard copy (twice yearly) and on-line data base.

Availability

Contact Ruth Denton.

Additional Information

Abstract Journal in Earthquake Engineering. NISEE. University of California at Berkeley. Richmond, CA.

Earthquake Engineering

Organization

National Center for Earthquake Engineering Research

Contact

Patricia Coty, Manager
Information Services Division
National Center for Earthquake Engineering Research
c/o Science and Engineering Library
SUNY-Buffalo
342 Capen Hall
Buffalo, NY 14260
Telephone (716) 636-3377
Telex: (716) 636-3379

Description

The National Center for Earthquake Engineering Research, NCEER, supports and enhances earthquake hazard reduction research of more than 80 experts from various disciplines. Specifically, the Center undertakes

studies to improve basic knowledge about earthquakes, engineering practices, and the implementation of seismic hazard mitigation procedures. Since its inception in 1986, NCEER developed a broad program that includes: conducting research; hosting conferences, workshops and seminars; and publishing technical reports and a quarterly newsletter. In addition, NCEER maintains an Information Service that provides a variety of specialized services: computer searches through BRS, Dialog, Accusearch, and the USGS data bases; interlibrary lending and borrowing; microfiche printing and photoduplications; literature compilations and surveys; special reference services upon request; on-demand acquisition of books, periodicals, reports, slide sets, videocassettes, and other publications; and document delivery by courier, postal, electronic mail, Federal Express, UPS, and telefax.

QUAKELINE is NCEER's on-line bibliographic data base. The Information Services Division of the National Center for Earthquake Engineering Research offers bibliographic support for those seeking information on earthquake engineering, earthquake hazards mitigation, disaster preparedness, and related topics.

Format

NCEER's Information Services Division has a large collection of books, journals, technical reports, and audio-visual materials. They also maintain the on-line QUAKELINE bibliographic data base.

Availability

Services are available by telephone, mail, or at NCEER. QUAKELINE is available by application to the NCEER, Information Services Division. The cost is approximately $20-30 per connect hour.

Additional Information

Quakeline: A Guide to Searching. NCEER. Buffalo, NY.

A Guide to the Information Center. NCEER. Buffalo, NY.

Both are available free of charge

Earthquake Research and Information

Organization

Center for Earthquake Research and Information

Contact

Jill Stevens, Manager
Seismic Resources Center
Center for Earthquake Research and Information
Memphis State University
Memphis, TN 38152
Telephone: (901) 678-2007

Description

The Center for Earthquake Research and Information, CERI, produces the CERI Quarterly Seismological Bulletin and manages the Seismic Resource

Center. Data are available on seismic activity from two regional seismic networks, the Memphis Area Regional Seismic Network and the Southern Appalachian Regional Seismic Network. Information is also available on the New Madrid seismic zone, earthquake hazard mitigation. CERI also maintains an earthquake education library and speakers' bureau.

Format

Hard copy and audio-visual materials.

Availability

The bulletin is available free of charge. CERI's Seismic Resource Center loans select materials free-of-charge upon request, such as: books, slides, films, video-tapes, models. The center is open Monday-Friday from 8:30 am to 5:00 pm (CST).

Additional Information

CERI Reports. Contact the center for a current listing.

Earthquake, Volcano, and Landslide Hazards Data

Organization

Office of Earthquake Studies

Contact

Robert Wesson, Chief
Office of Earthquake Studies
US Geological Survey
905 National Center
Reston, VA 22092
Telephone: (703) 860-6472
FTS: 928-6472

Description

The Office of Earthquake Studies conducts a program of basic and applied research on earthquakes, volcanoes, and landslides which emphasizes:

1) Fundamental Studies designed to acquire and disseminate information on worldwide occurrences of earthquakes, volcanoes, and landslides;
2) Alerts, Warnings, Forecasts, and Predictions designed to develop an understanding of the physical processes of earthquakes, volcanoes, and landslides in order to warn the populace of the location, size, time, and probability of impending events;
3) Hazard Maps which delineate the spatial and temporal variations of the primary and secondary physical phenomena generated in an earthquake, volcanic eruption, or landslide;
4) Risk Assessment for economic losses and loss of life associated with events; and
5) Research Applications which foster the application of research results to preparedness and mitigation strategies of state and local governments.

Format

Hard copy reports, instrumental data, microfilm seismograms.

EARTHQUAKE: TECHNICAL DATA

Availability

Hard copy reports, professional papers, bulletins, circulars, maps, and open-file reports, and scientific and technical journals are available. Instrumental data may be obtained through individual investigators, who will generally release it in the Open-File series. Microfilm copies of seismograms are available through the Environmental Data and Information Service of the National Oceanic and Atmospheric Administration in Boulder, CO (see listing in the directory).

Additional Information

Facing Geologic and Hydrologic Hazards: Earth Science Considerations. Walter Hays, Editor, USGS Professional Paper 1240 B, Reston, VA, 1981.

Summaries of Technical Reports Submitted to National Earthquake Hazards Reduction Program. USGS, Office of Earthquake Studies, Menlo Park, CA. Semi-annual progress reports from USGS on grants and contracts projects.

Earthquake Information Bulletin, USGS, Reston, VA. Bi-monthly. $7.00 per yr. subscription from US Government Printing Office, Washington, DC.

National Earthquake Hazards Reduction Program

Organization

Federal Emergency Management Agency
Geological Survey
National Science Foundation
National Institute of Standards and Technology

Contact

Dennis Kwiatkowski
Federal Emergency Management Agency
500 C Street, SW
Washington, DC 20472
Telephone: (202) 646-2871

Richard Wright
National Institute of Standards and Technology
Building 226, Room 250
Gaithersburg, MD 20899
Telephone: (301) 975-5900

Robert Hanson
National Science Foundation
1800 G Street, NW
Washington, DC 20550
Telephone: (202) 357-9545

Robert Wesson, Chief
Office of Earthquakes, Volcanoes, and Engineering
US Geological Survey
905 National Center
Reston, VA 22092
Telephone: (703) 648-6714
Telex: 160 443 USGS UT
Telefax: (703) 648-6717

Description

The National Earthquake Hazards Reduction Program (NEHRP) was initiated by Congress on October 1, 1977 in order to reduce the risks to life and property within the US from future earthquakes. The program is designed to:

1) Conduct earthquake hazard identification and vulnerability analyses;
2) Develop seismic design and construction standards;
3) Develop an earthquake prediction capability;
4) Prepare plans for mitigation, preparedness, and response activities;
5) Conduct fundamental and applied research into the causes and implications of earthquake hazards;
6) Educate the public about earthquake hazards.

Format

On-line, hard copy, audio-visuals, technical assistance.

Availability

The USGS libraries in Reston, VA, Denver, CO, and Menlo Park, CA have copies of all maps and reports.

Additional Information

Contact NEHRP agencies for publications lists on geologic hazards.

Seismic Hazards at Naval Facilities

Organization

Department of Navy

Contact

Joe Tyrrell, Deputy Chief Engineer
NFACENCOM
Department of Navy
Code 04B0
200 Stovall Drive
Alexandria, VA 22332
Telephone: (202) 325-0047

Description

The Navy began a seismic hazards research project in 1970. Through this project the Navy assesses natural hazards at naval facilities. Assessments are carried out in three stages: preliminary evaluation, detailed analysis, and hazard-reduction construction. Twenty-six installations have been

surveyed, including 11,000 buildings, of which 1,300 are being evaluated in greater detail. Studies concentrate on earthquake and tsunami hazards and, to a lesser degree, on site hazards including soil liquefaction.

Format

Hard copy reports of completed studies.

Availability

Reports are available from the Naval Facilities Engineering Command for cost of duplication (about five cents per page). Twenty studies have been completed.

See also the following appendix:
- Geological Survey

Geotechnical Information

Organization

British Geological Survey

Contact

Richard Haworth, Chief Geophysicist
British Geological Survey
Nicker Hill, Keyworth
Nottingham NG12 5GG
United Kingdom
Telephone: [44] (60) 77 6111
Telex: 378173 BGSKEY G
Telefax: [44] (60) 77 6602

Description

The British Geological Survey maintains the National Geoscience Information Service, NGIS. NGIS is a comprehensive information service based on geological, geophysical, and geochemical data both in the United Kingdom and overseas. Some of the data dates back to 1850. Long term international data sets are principally restricted to the British Commonwealth countries. More recent data sets are worldwide.

Format

Hard copy and digital files contain NGIS on-line information.

Availability

Digital files extracted from NGIS can be transmitted internationally via the UK JANET computer network. On-line access is not yet available.

Additional Information

IGS Consultants in Applied Geology. 1982. Institute of Geological Sciences. Natural Environment Research Council. London.

Geotechnical Information

Organization

National Geophysical Data Center

Contact

Allen Hittleman, Supervisory Geophysicist
National Geophysical Data Center
NOAA, Code E/GC1
325 Broadway
Boulder, CO 80303
Telephone: (303) 497-6591
FTS: 320-6591

Description

This collection of North American data includes information on the following topics: earthquake seismology, thermal aspect and austral stress, topography, magnetics, gravity and satellite imagery.

Format Data are available on compact disc, standard magnetic tape, and diskette.

Availability Call for prices.

Geotechnical Information

Organization New Zealand Geological Survey

Contact
I. Speden, Director
New Zealand Geological Survey, DSIR
PO Box 30368
Lower Hutt
New Zealand

Description The New Zealand Geological Survey maintains 125 years of geological data, including 30 years of geodetic data for specialist earth information studies, volcanology, erosion, landslides, sea level change.

Format Data are available in manual and computer-based files, record field sheets, reports, and via technical assistance.

Availability Cost information is available for general use or research.

Additional Information Bibliographies of geology and Natural Hazards in New Zealand. 1984. National Commission on Natural Hazards. UNESCO. I. Speden, M.

Geotechnical Information

Organization Pan American Institute of Geography & History

Contact
J. Tanner, President
Pan American Institute of Geography & History
RR #1
Union, Ontario NOL 2L0
Canada
Telephone: (519) 631-3190
Telefax: 633-4997

Description The Pan American Institute of Geography & History maintains general geophysical information on solid earth geophysics, oceans and atmosphere, and solar terrestrial physics. The institute supports ongoing activities throughout all of the Americas and the Caribbean. Current interests

include geophysical maps and hazards-related research. Within five years, the institute plans to have continental scale maps available for Latin America and the Caribbean in gravity, magnetics, and seismic risk.

Format

Hard copy publications including Revista Geofisica, a journal appearing 2-3 times yearly.

Availability

Information is available through:
Secretary General Paigh
Apartado Postal 18879
11870 Mexico City
Mexico

Additional Information

An index of publications is available through the secretary general.

See also the following appendix:
- Geological Survey

LANDSLIDE & MASS EARTH MOVEMENTS

Landslide Hazards Reduction Program

Organization

Office of Earthquakes, Volcanoes, and Engineering

Contact

Gerald Wieczorek, Manager
Landslide Hazards Reduction Program
Office of Earthquakes, Volcanoes, and Engineering
US Geological Survey
905 National Center
Reston, VA 22092
Telephone: (703) 648-6713
FTS: 959-6713

Description

The Office of Earthquakes, Volcanoes, and Engineering is an information source for landslide studies within the USGS. There are currently 18 active projects which examine landslides. Landslide studies are currently concentrated in the Rocky Mountain region, California, and the Appalachian region. Specifically, these projects include one study which examines landslides caused by earthquakes.

Format

Results of completed studies are published as USGS publications or may be published in journals of various professional societies.

Availability

These study results are available for purchase through the US Government Printing Office, Washington, DC or the Publications Division, US Geological Survey, Reston, VA. Publications include maps at a variety of scales and bulletins or professional papers that describe specific areas or processes. Bibliographic data for many landslide publications are maintained in the Landslide Information Center, USGS, MS 966 Box 25046, Denver, CO.

Additional Information

Bibliography of US Landslide Maps and Reports. C. Alger and E. Brabb. USGS. Open-File Report 85-585. 1985.

Goals and Tasks of the Landslide Part of a Ground-Failure Hazards Reduction Program. USGS. USGS Circular 880. 1982.

Landslides--Analysis and Control: Transportation Research Board Special Report 176. R. Schuster, and R. Krizek, Eds. National Academy of Sciences. Washington, DC. 1978.

Landslide Information

Organization

Bureau of Reclamation

Contact

Ferne Studer, Operations & Maintenance Technician
US Bureau of Reclamation
Denver Federal Center, Code D-5210
PO Box 25007
Denver, CO 80225
Telephone: (303) 236-8087
FTS: 776-8087

Description

The Landslide Register contains data on significant landslides located at or near Bureau of Reclamation dam and reservoir sites. Data include slide characteristics, activity, and risk upon failure. Bureau of Reclamation personnel are the primary sources of the data. The Register covers the 17 Western States.

Format

Hard and computer copy.

Availability

All information is available from the Bureau of Reclamation Regional Offices and the Denver Office at the Denver Federal Center.

Additional Information

The Register is updated annually.

LANDSLIDE & MASS EARTH MOVEMENTS

Landslide Research

Organization International Landslide Research Group

Contact Earl Brabb, Geologist
International Landslide Research Group
3262 Ross Road
Palo Alto, CA 94303
Telephone: (415) 329-5140

Description The International Landslide Research Group publishes a worldwide newsletter, Landslide News, about people conducting landslide research.

Format Hard copy.

Availability The newsletter is published at irregular intervals. The price for three issues is $2 in the US and $4 for all other countries.

Landslide Research

Organization Victoria Geological Survey

Contact J. Neilson, Principal Geologist
Department of Industry, Technology and Resources
Victoria Geological Survey
228 Victoria Parade
East Melbourne, Victoria 3002
Australia
Telephone: [61] (3) 665-0576 & 665-0600
Telefax: [61] (3) 663-6325

Description The Victoria Geological Survey performs studies of slope stability having to do with landslides and other related hazards. It also provides advice on subsidence over former mining areas.

Format Hard copy, microfiche, and technical assistance.

Availability Information is available on a written or telephone request basis.

Sinkhole Research

Organization

Florida Sinkhole Research Institute

Contact

Barry Beck, Director
Florida Sinkhole Research Institute
Research Building A
University of Central Florida
Orlando, FL 32816
Telephone: (407) 281-5644

Description

The Florida Sinkhole Research Institute was founded in 1982 at the University of Central Florida in Orlando following the catastrophic impact of the Winter Park sinkhole. The Institute maintains data on more than 1,500 collapses in Florida; provides educational materials; and publishes research reports.

Format

Hard copy reports, computer based inventory of sinkholes in Florida, and audio-visual materials.

Availability

Contact the Institute at the above address.

Additional Information

Sinkholes in Florida: An Introduction. B. Beck, R. Kersten, and T. Colburn. 1986. Orlando, FL: The Florida Sinkhole Research Institute at the University of Central Florida. Report No. 85-86-4.

See also the following appendix:
- Geological Survey

Radon Data

Organization

Environmental Protection Agency

Contact

Radon Division
Office of Radiation Programs
US Environmental Protection Agency
401 M Street, SW
Washington, DC 20460
Telephone: (202) 475-9600

Description

Most of the regulatory responsibilities and program activities for which the Environmental Protection Agency, EPA, has jurisdiction do not come under the category of natural hazards. An exception is radon. The Radon Division of the EPA has developed publications on radon facts, radon reduction in homes, measurement protocols, reference manuals, and survey results.

Format

Hard copy reports.

Availability

Call or write the Radon Division for further information.

Additional Information

Radon Reference Manual. September 1987. Publication: 520/1-87-20. US EPA. Washington, DC 20460.

See also the following appendix:
- EPA

Tsumani Data

Organization

National Geophysical Data Center

Contact

Patricia Lockridge, Geophysicist
National Geophysical Data Center
NOAA, Code E/GC 4
325 Broadway
Boulder, CO 80303
Telephone: (303) 497-6337
FTS: 320-6337
Telex: 592811 NOAA MASC BDR

Description

Tsunami Data:

The National Geophysical Data Center maintains a variety of tsumani data. Historic tsunami data consist of about 6,600 records from 49 BC to present on wave heights, damage, travel times, arrival times, and number of deaths, plus earthquake epicenters, magnitudes, and depths. The center also maintains tsunami maps, photographs and slide sets, tsunami catalogs, tide gage records and bathymetric data.

Format

Hard copy publications, magnetic tapes, diskettes, maps, photographs, slides, and microfiches.

Availability

Contact the center for a list of available products and data.

Description

Tsunami Digital Data Base:

The Tsunami Digital Data Base contains data on about 2,000 tsunami events worldwide including date of occurrence, earthquake latitude, longitude and magnitude, depth of focus, tsunami magnitude, intensity, affected areas, wave heights, damage and deaths.

Format

Magnetic tape, diskette, technical assistance, maps, publications.

Availability

A magnetic tape copy of an entire file is $90. The entire file on IBM-PC compatible 5 ¼" high density floppy diskette is $30. Retrievals ($115), wall maps ($5-10), publication prices vary (1988 prices).

Description

Tsunami Mareograms:

The Tsunami Mareograms or tsunamigrams contain tide gage records of tsunamis recorded at US tide stations including Alaska, Hawaii, South Pacific islands, and the coastal US. They contain a 5 day span of wave data with adequate gage quiet time.

Format

35mm microfiche

TSUMANI

Availability

Copies of records on 35mm microfiche are $4 plus $10 handling charge (1988 price).

Additional Information

Tsunami Data. DE-1201. NOAA. National Geophysical Data Center. Boulder, CO 80303. 1988.

Tsunami Information

Organization

International Tsunami Information Center

Contact

George Pararas-Carayannis, Director
International Tsunami Information Center
PO Box 50027
Honolulu, HI 96850-4993
Telephone: (808) 541-1658
Telex: 984624 (ITIC UD)
Telefax: (808) 541-1657

Description

The International Tsunami Information Center maintains an extensive library of tsunami publications: bibliographies, historical tsunami data, maps, photograph files, newspaper articles, and early warning system technology materials.

Format

Hard copy, audio-visuals, and computerized data files.

Availability

Resources are available to visiting scientists. Because the Center's staff is small, a visit to the center is required. The Center is open during normal working hours.

Additional Information

Bibliographies and a newsletter are available.

Tsunami Research

Organization

Pacific Marine Environmental Laboratory

Contact

Eddie Bernard, Director
Pacific Marine Environmental Laboratory
7600 Sand Point Way NE, Building 3
Seattle, WA 98115-0070
Telephone: (206) 526-6800
Telex: 326005

Description

The Pacific Marine Environmental Laboratory has been a world leader in tsunami research for over 20 years. The Laboratory provides technical assistance on tsunami physical behavior and warning systems. The Laboratory has recorded deep ocean tsunamis measurements with bottom pressure instruments.

Format

Tsunami data, technical reports, journal articles.

Availability

Data and reports available upon request.

See also the following appendices:
- Coastal Zone Management
- National Weather Service
- Sea Grant Programs

Volcano Data Base: US

Organization

Geological Survey

Contact

Dwight Crandell
US Geological Survey
Volcano Hazards Assessment Program
Denver Federal Center
PO Box 25046, MS 903
Denver, CO 80225
Telephone: (303) 236-1024
FTS: 776-1024

Description

The Volcanic Hazards Assessment Program of the US Geological Survey, USGS, examines active volcanoes in the Cascade Range of Washington, Oregon, California, Alaska, and Hawaii. Studies include down-slope hazards (mudflows, floods, avalanches, etc.), basic stratigraphy, and ash deposition. The program includes the Hawaii Volcano Observatory, which monitors volcanic activity in Hawaii.

Format

Printed reports, open-file information, professional papers, bulletins and maps are available from the USGS retail outlets in Reston, VA, Denver, CO, and Menlo Park, CA.

Availability

Cost varies depending upon material.

Additional Information

Selected Bibliography: Volcano Hazards Project. D. Crandell. USGS. Denver, CO.

Hawaii Volcano Observatory:
Thomas Wright, Head Geologist
Hawaii Volcano Observatory
Hawaii National Park, HI 96718
Telephone: (808) 967-8819

Volcano Data Base: Middle America

Organization

Instituto Costarricense de Electricidad

Contact

Sergio Mora C., Chair
Department of Geology
Instituto Costarricense de Electricidad
Apdo. 10032-1000
San Jose
Costa Rica
Telephone: [506] 207141
Telex: [506] 314737

Description

The Instituto Costarricense de Electricidad has wide experience in the assessment of natural hazards in Costa Rica. This experience is aided by the Institute's relationship with the Comision Nacional de Emergencias and the Organization of the American States. Research reports are available on earthquake and volcano hazards in Middle America.

Format

Hard copy.

Availability

Contact Sergio Mora C. There are three conditions for provision of research reports: 1. cover the cost of photocopies and mail, 2. respect the credits of the publication, 3. engage in a mutual sharing of research reports.

Additional Information

Publications list of the Institute.

Volcano Data Base: Worldwide

Organization

Smithsonian Institution

Contact

Lindsey McClelland, Museum Specialist
SEAN, NHB MRC 129
Smithsonian Institution
Washington, DC 20560
Telephone: (202) 357-1511
FTS: 357-1511
Telex: 89599 (SCINET WSH)
Telefax: (202) 357-2476

Description

The Smithsonian Institution maintains descriptive reports on current volcanic activity, large and/or damaging earthquakes, and meteorites from 1968 to 1975 (Smithsonian Center for Short-Lived Phenomena). Since 1975 the Smithsonian Institution has maintained the Scientific Event Alert

Network, SEAN. Data are abstracted from SEAN for the Bulletin of Volcanology, Geotimes, and EOS (American Geophysical Union). The primary sources of information are SEAN correspondents, most of whom are research scientists and public officials.

The Smithsonian Institution also maintains two electronic bulletin boards:
1) KOSMOS -- the electronic bulletin board for SEAN, and
2) OMNET -- the electronic bulletin board for VOLCANOES.ETC.

Format

Hard copy bulletins, computer volcano data, technical services.

Availability

Monthly bulletins summarize events, and are sent to more than 1,000 correspondents who participate in SEAN. Bulletins are available through the American Geophysical Union, 2000 Florida Avenue NW, Washington, DC 20009. The subscription fee is $18 per year in the US and $24 per year outside of the US. News of events may be telephoned or cabled to scientists likely to study the event. Volcano data are archived on computer; documents are filed in the Department of Mineral Sciences. The two electronic bulletin boards may be accessed by contacting: KOSMOS, American Geophysical Union, 2000 Florida Avenue, NW, Washington, DC 20009, (800) 424-2488 & (202) 462-6903; OMNET, 70 Tonawanda Street, Boston, MA 02124, (617) 265-9230.

Additional Information

Scientific Event Alert Network Bulletin. Smithsonian Institution. Washington, DC. Monthly.

See also the following appendix:
- Geological Survey

METEOROLOGICAL HAZARDS

Climatological Data

Organization

Climate Analysis Center

Contact

Jim Laver, Meteorologist
Climate Analysis Center
Room 805, World Weather Building
Washington, DC 20233
Telephone: (301) 763-8071
Telefax: (301) 763-8381

Description

The National Oceanic and Atmospheric's, NOAA, Climate Analysis Center, CAC, maintains the Climate Assessment Data Base which contains daily summary meteorological and climatological parameters for over 6,000 global locations spanning the most recent 1,000 days. The Center produces the Weekly Climate Bulletin, a free publication indicating current surface climate conditions in the US and around the world. The bulletin's primary focus is anomalies of precipitation and temperature, which are defined from summarized preliminary operational data received via the Global Telecommunication System.

The CAC also provides a climate dial-up computer system. This system includes a number of data sets and other products to aid users working in such areas as agriculture, energy, water resources, forestry, and climate research. The system is menu driven, and a user can choose information selectively. Users must have a receiving device--anything from a simple terminal to a computer.

In addition, CAC offers information on severe short-term US climate anomalies through the NOAA Drought Advisory. This series of special advisories are updated weekly, and other agencies contribute to them (e.g., National Weather Service, National Climatic Data Centers, and state climatologists).

Format

Data are on-line, hard copy, audio-visual, and technical assistance.

Availability

The Weekly Climate Bulletin is free. The Climate Dial-Up Service costs $48-$600, depending on usage and is available 24 hours.

Additional Information

Drought Advisory Series, Weekly Climate Bulletin, Weekly Weather and Crop Bulletin, and Special Advisories.

Requests for copies of the Drought Advisory should be directed to the National Weather Service, Public Affairs Office, 8060 13th Street, Room 618, Silver Spring, MD 20910, (301) 427-7622.

CLIMATOLOGICAL DATA

Climatological Data

Organization Climate Impact Assessment Division

Contact Larson Lambert, Chief
Climate Impact Assessment Division
Assessment and Information Services Center
National Oceanic and Atmospheric Administration
1825 Connecticut Avenue NW, Suite 512
Washington, DC 20235
Telephone: (202) 673-5381
FTS: 673-5381

Description The Climatic Impact Assessment Division provides tailored assessment services and products. These services address the impact of climatic change on national, social, and economic programs and policies.

Format Hard copy and technical assistance.

Availability Contact the Climatic Impact Assessment Division for further information.

Climatological Data

Organization High Plains Climate Center

Contact Kenneth Hubbard, Director
High Plains Climate Center
237 Chase Hall
University of Nebraska
Lincoln, NE 68583
Telephone: (402) 472-6706
Telefax: (402) 472-2410

Description The Automated Weather Data Network, AWDN, provides hourly and daily weather measurements from about 70 stations in 7 states. The earliest data are from 1981. The High Plains Climate Center also maintains WEATHER data base (Weather Effects Analyzed for Tracking Heat, Evapotranspiration, and Rainfall). WEATHER is a dial-up system for retrieving all types of weather and climate-related information.

Format On-line.

Availability Hourly and daily weather data are furnished on diskette at a minimal charge for AWDN. WEATHER can be accessed at (402) 472-6615 via 300 or 1200 dial-up.

Additional Information

Hubbard, K.G., N.J. Rosenberg and D.C. Nielsen. 1983. "An Automated Weather Data Network in Support of Agricultural Operations." Journal of Water Resources Planning and Management. 109: 213-222.

Climatological Data

Organization

International Institute for Applied Systems Analysis

Contact

A. Solomon, Manager
Biosphere Project
International Institute for Applied Systems Analysis
A-2361 Laxenburg
Austria
Telephone: [43] 2236-715210
Telex: 079137 iiasaa

Description

The Biosphere Project designs, generates, and applies models of biosphere functioning in order to determine the human impact on the biosphere.

Format

On-line for in-house use. Output is available in hard copy and interactive CRT.

Availability

Requires a trained technician.

Climatological Data

Organization

National Center for Atmospheric Research

Contact

Roy Jenne, Manager of Data Support
National Center for Atmospheric Research
PO Box 3000
Boulder, CO 80307
(303) 497-1215
Telex: 989-764
Telefax: (303) 497-1137

Description

The Data Support Section of the National Center for Atmospheric Research, NCAR, maintains a large, organized archive of computer-accessible research data which is available to scientists around the world. The archive, which contains more than 300 distinct data bases, provides information to major national and international atmospheric and oceanic research projects. Sample data bases include information on: surface,

upper air, and climatological data, precipitation and water data, geophysical data, satellite data, and global analyses. These data span long periods of record in both analyses and observations and come as single reports, monthly averages, and digital data.

Format

On-line use for select users. Others can obtain data at cost.

Availability

There is a fee to copy tapes. NCAR concentrates on the needs of the research community and not the general public.

Additional Information

"Data Availability at NCAR." Roy Jenne. Updated each 12-24 months.

"Data Sets for Meteorological Research." Roy Jenne. NCAR TN/IA-111, 1975.

Institutional Directory: Climate-Related Impacts Network. 1989. National Center for Atmospheric Research. Boulder, CO.

Climatological Data

Organization

United Nations Environment Program

Contact

P.E.O. Usher
Environmental Assessment Service
United Nations Environment Program
PO Box 30552
Nairobi, Kenya

Description

The United Nations Environment Program provides a catalog of on-going and planned national or international research programs on climate impacts. Part of the World Climate Impact Study Programme of the World Climate Programme, the catalog enhances international cooperation and communication among researchers.

Format

Hard copy.

Availability

Contact P.E.O. Usher.

Meteorological Data

Organization Department of Army

Contact Richard Himebrook, Technology Transfer Coordinator, SLCAS-DP-P
Commander/Director
US Army Atmospheric Sciences Laboratory
White Sands Missile Range, NM 88002-5501

Description The US Army Atmospheric Sciences Laboratory maintains various meteorological parameters associated with research and development. The parameters span the fields of climatology, test specific meteorological data, and technical reports. Information is available on hazard assessments, meteorological sensors, meteorological data, atmospheric motion, atmospheric sciences, atmospheric modeling, climatology, ice forecasting, satellite meteorology, physical meteorology, seismic detection, and air pollution sampling.

Format Hard copy.

Availability Most data is restricted to government agencies and their contractors. For more information contact the above address.

Meteorological Data

Organization National Weather Service

Contact E. Hansen, Chief
Water Management Information Division
National Oceanic and Atmospheric Administration
National Weather Service
Office of Hydrology
Silver Spring, MD 20910
Telephone: (301) 427-7543
FTS: 427-7543

Description The Office of Hydrology provides a variety of data on precipitation frequencies and amounts, mostly for the US. These data include: depth, area, duration, and greatest known storm rainfall for 6, 12, 24, and 48 hours. Data also include: areal and temporal precipitation distributions, excessive and maximum observed rainfall for specific regions, and precipitation probabilities and frequencies.

CLIMATOLOGICAL DATA

Format Hard copy.

Availability Printed reports are available from the National Technical Information Service, Springfield, VA, or NOAA. Some reports are out of print.

Meteorological Data

Organization Oklahoma Climatological Survey

Contact Ellen Cooter, Assistant State Climatologist
Oklahoma Climatological Survey
710 Asp St, Suite 8
Norman, OK 73019
Telephone: (405) 325-2541

Description The Oklahoma Climatological Survey maintains a wide variety of meteorological, hydrological and related data series which support climate impact studies throughout the US. The Cooperative Meteorological Network, a complete series of cooperative network observations for the entire US period of record, provides data which are available as time-series, space arrays, or statistically interpolated to create uninterrupted, continuous data time series of maximum temperature, minimum temperature, and precipitation.

Format All data are digitized and are available in standard IBM format tapes at 1600 or 6250 BPI density. Data may be remotely accessed via the University of Oklahoma IBM mainframe.

Availability Data may be accessed directly by the client via the University of Oklahoma's IBM mainframe, by Oklahoma Climatological Survey personnel at the client's request, or the client can purchase all or part of the data set. Time and space data cost $100/reel. On the average, at 6250 BPI there are two tape reels per state. Interpolated data cost approximately $200/state at one reel per state.

Additional Information Sladewski, T. May 1986. Data Archives of the Oklahoma Climatological Survey. Oklahoma Climatological Survey.

Meteorological Data

Organization

Tennessee Valley Authority

Contact

Wayne Hamberger, Meteorologist
Tennessee Valley Authority
Data Systems
524 Union Ave (EB 3W 307A)
Knoxville, TN 37902
Telephone: (615) 632-4222

Description

The Tennessee Valley Authority's, TVA, obtains meteorological data from tall towers with multiple levels of wind and air temperatures, located at power plants throughout the Tennessee Valley Region. Dewpoint, solar radiation, precipitation, and atmospheric pressure data are also available. Length of record varies according to location, and parameter type ranges from 1966 to present. Data frequency are averaged hourly.

TVA obtains precipitation data from standard 8-inch and tipping bucket rain gauges located throughout the Tennessee Valley watersheds. Length of record ranges from 1934 to the present, and the number of gages ranges from 200 to over 600. Data frequency includes hourly, six-hourly, daily, and monthly totals depending upon location.

Format

The TVA mainframe computer data base or the Environmental Protection Agency's Aerometric Information Retrieval System archives meteorological data, depending on time and location. Magnetic, microfiche and hard copy formats are available.

Precipitation data are published daily, monthly, and annually as well as in summarized data in hard copy from 1934 to 1980. Unpublished daily totals from May 1980 to June 1982 are available in hard copy. Data are archived on TVA mainframe computer data base from June 1982 to September 1986, with magnetic or hard copy formats available. Daily precipitation totals from 1934 to present are available in hard copy. Six-hourly and daily precipitation totals from October 1986 to present are available on the departmental minicomputer data base and are available in magnetic or hard copy formats.

Availability

All data bases are accessible by TVA Data Systems personnel during normal business hours. Nonprofit cost recovery program is charged to clients for materials and labor.

CLIMATOLOGICAL DATA

Additional Information

"Precipitation in the Tennessee River Basin," published monthly from 1934 to April 1980 by the Tennessee Valley Authority.

See also the following appendices:
- State Climatologists
- NOAA Climate Centers

Coastal Management Data

Organization

Army Corps of Engineers

Contact

John Housley
Planning Division, Civil Works Directorate
Office of the Chief of Engineers
US Army Corps of Engineers
Washington, DC 20314
Telephone: (202) 272-0169

Description

In 1970 the US Army Corps of Engineers conducted the National Shoreline Study. This Study examined damage to shorelines. The Corps produced a final report of the Study, useful to researchers, and a series of three guidebooks for private property owners, engineers and contractors, and local government officials.

Format

Hard copy and microfiche.

Availability

Hard copies and microfiche of the National Shoreline Study and the Low Cost Shore Protection Study are available from the National Technical Information Service, Springfield, VA 22161. Prices are approximately $1.00 for microfiche and $3.00 to $6.00 for hard copies.

Additional Information

Report of the National Shoreline Study, Corps of Engineers, Department of the Army, Washington, DC, 1971. Summary volume and 11 supporting documents. Out of print.

Low-Cost Shore Protection, Corps of Engineers, Department of the Army, Washington, DC 1981. Final Report and 3 guidebooks. Out of print.

Coastal Management Information

Organization

Coastal Zone Management Information Center

Contact

Sallie Cauchon, Director
Office of Ocean and Coastal Resource Management
Coastal Zone Management Information Center
1825 Connecticut Avenue, NW, Room 729
Washington, DC 20235
Telephone: (202) 673-5115
FTS: (202) 673-5115

COASTAL MANAGEMENT

Description

The Coastal Zone Management Information Center collects and publishes information relating to coastal problems in the thirty-four coastal states and the Great Lakes region. Under the Coastal Zone Management Act of 1972, the government gives aid to states that prepare an approved plan for coastal areas management. The Center provides plans and supporting documents of the twenty-nine states that have submitted approved plans. The Center also maintains a photocopy file of magazine and newspaper articles on natural hazards.

Format

Printed reports and miscellaneous documents are available for reference in the Information Center.

Availability

Contact the Coastal Zone Management Information Center for further details.

Coastal Management Information: Great Lakes Region

Organization

Center for the Great Lakes

Contact

Ann Lindsay, Information Specialist
Center for the Great Lakes
435 North Michigan Avenue, Suite 1408
Chicago, IL 60611
Telephone: (312) 645-0901

Description

The Center for the Great Lakes views the Great Lakes as an irreplaceable asset which forms the foundation of a strong regional economy and quality of life. That potential can be realized only through a vigorous commitment to protecting and developing this unique natural resource. Therefore, the Center works to:

1) Foster regional cooperation among political, business, and environmental leaders on both sides of the US/Canadian border;
2) Identify critical natural resource and economic issues;
3) Conduct objective, concise analysis of these issues to bring about informed action by decision makers;
4) Promote public understanding and awareness of opportunities for action.

Format

Library resources in hard copy and technical assistance via workshops and conferences.

Availability

Contact Ann Lindsay for further information.

Coastal Management Information: Navy

Organization

Department of Navy

Contact

Larry Gadbois, Oceanographer
US Naval Ocean Systems Center
Marine Environmental Support Office
Code 522
San Diego, CA 92152-5000
Telephone: (619) 533-2804 & 533-5330
Telex: (619) 553-2667

Description

The Marine Environmental Support Office is available to provide consultation, referrals, data and information, documentation and field support in the areas of environmental impact, hazardous waste, and the Navy.

Format

Request information via phone, letter or electronic mail (MILnet: gadbois@NOSC.mil).

Availability

Confine phone calls to normal working hours.

Coastal Management Information: Red Tide

Organization

International Red Tide Information and Assistance Service

Contact

Alan White, Marine Science Advisor
International Red Tide Information and Assistance Service
Sea Grant Program
Woods Hole Oceanographic Institution
Woods Hole, MA 02543
Telephone: (508) 548-1400, ext. 2289
Telex: 951679
Telefax: (508) 548-1400, ext. 6208

Description

The International Red Tide Information and Assistance Service, IRITAS, maintains an international data base on red tide and toxic algal bloom researchers and managers. This data base expedites international information and assistance with red tide emergencies, particularly in developing countries.

Format

Hard copy.

Availability

Contact Alan White for further information.

COASTAL MANAGEMENT

Marine Education

Organization

New Jersey Marine Sciences Consortium

Contact

William Gordon, Vice President for Programs
New Jersey Marine Sciences Consortium
Sandy Hook Field Station
Building 22
Fort Hancock, NJ 07732
Telephone: (201) 872-1300

Description

The New Jersey Marine Sciences Consortium strives to make New Jersey a marine-literate society. The consortium comprises colleges in the New Jersey, New York, and Pennsylvania area, and operates two field stations at Sandy Hook and Seaville. Each is equipped to do a variety of estuarine and coastal sampling and survey work. The consortium's functions are: undergraduate college education, precollege education, provision of facilities and equipment to member institutions for research and education, grants and contract brokerage, public awareness, alliance for a larger voice in the affairs of the State of New Jersey, with particular reference to its coastal and estuarine areas.

Format

Technical and educational services, including classes.

Availability

Contact the consortium for further information.

Additional Information

Annual Report. 1988. New Jersey Marine Sciences Consortium. Fort Hancock, New Jersey.

Wetlands Information

Organization

Center for the Environment and Natural Resources

Contact

Steven Brown, Director
Center for the Environment and Natural Resources
Council of State Governments
PO Box 11910
Lexington, KY 40578
Telephone: (606) 231-1866

Description

WETLANDS is a data base established by the Center for the Environment and Natural Resources with support from the US Environmental Protection Agency's Office of Wetlands Protection. This national data base lists state wetland protection programs and contacts. The data base contains a directory of 475 state wetland officials as well as information regarding over

350 state programs affecting wetlands. The programs are catalogued according to 13 program types (acquisition, permits, taxation, etc.) and 21 attributes (name, legal authority, values protected, etc.). Users may retrieve data using any combination of these characteristics.

Format

On-line.

Availability

This electronic record is available to anyone interested in state wetland protection efforts who has access to a computer and modem.

Additional Information

To obtain a user name, password, and a Wetlands User Manual, contact Steven Brown.

Wetlands Information

Organization

Fish and Wildlife Service

Contact

1-800-USA-MAPS

Description

The US Fish and Wildlife Service and the US Geological Survey provide a toll-free number to call for wetlands data. Compliments of Fish and Wildlife's National Wetlands Inventory and USGS's National Cartographic Information Center, users can now dial 1-800-USA-MAPS to order any of over 10,000 highly detailed wetlands maps. Maps cover 45% of the lower 48 states, including 85% of their coastal zones, and 12% of Alaska. Customers provide the name of the state or town for which they seek information, and if possible, the name of the USGS quadrangle map that covers the area in question. The caller is then told whether the request can be filled, and how to order the map.

Format

Telephone map service.

Availability

Maps are mailed within five working days of the call.

Additional Information

Call 1-800-USA-MAPS for further information.

Wetlands Information

Organization

Washington Department of Ecology

Contact

Director
Wetlands Section
Shorelands and CZM Program
Washington Department of Ecology
Mail Stop PV-11
Olympia, WA 98504
Telephone: (206) 459-6774

Description

Following a 1986 wetlands conference, the Washington Department of Ecology established a data base of wetland experts and literature. The Resource Guide identifies more than 200 experts who may be consulted by planners, land use managers, public officials, and scientists in related fields. The Wetlands Bibliography of Technical Literature lists more than 750 citations of wetland literature pertaining to the Pacific Northwest.

Format

Hard copy.

Availability

Contact the Wetlands Section.

Additional Information

The Department of Ecology also is interested in updating its guide with names of additional experts in matters related to Pacific Northwest wetlands. Contact the Wetlands Section to add information to the guide.

See also the following appendices:
- Coastal Zone Management

Agricultural Data: US

Organization

Federal Crop Insurance Corporation

Contact

Beth Huffman, Coordinator
Actuarial Information Center
Actuarial Statistics Division
Federal Crop Insurance Corporation
9435 Holmes
Kansas City, MO 64131
Telephone: (816) 926-7861
FTS: (816) 926-7861

Description

The Federal Crop Insurance Corporation maintains information on the amount of assistance issued by state and county for crop loss. Crop loss conditions include drought, freeze, insects, and disease. The data cover regions eligible for insurance in the US from 1948 to present.

Format

Computerized tape copies for current data, computer printouts, diskettes, and/or hard copy summaries are available at cost of processing and/or duplication.

Availability

Contact:
Vondie O'Connor, Jr., Director
Actuarial Statistics Division
Federal Crop Insurance Corporation
US Department of Agriculture
PO Box 419293
Kansas City, MO 64141
Telephone: (816) 926-7910
FTS: (816) 926-7910

Additional Information

Cause of Loss Data, Federal Crop Insurance Corporation, US Department of Agriculture, Kansas City, MO. This document lists causes of crop damage at various levels. Summaries of these data may be received upon request.

Federal Crop Insurance Corporation: Information Products Catalog. Actuarial Statistics Division. Federal Crop Insurance Corporation. This catalog lists relevant reports on the Federal Crop Insurance Corporation.

DROUGHT

Agricultural Data: Worldwide

Organization World Agricultural Outlook Board

Contact Norton Strummen, Chief Meteorologist
Room 5133 S. Building
US Department of Agriculture
Washington, DC 20250
Telephone: (202) 447-9805
Telex: (202) 472-5805

Description The World Agricultural Outlook Board maintains crop-related data, such as crop yields and climate profiles. It produces two publications: Major Crop Areas and Climate Profiles.

Format Hard copy.

Availability One copy of a publication will be sent upon request. Additional copies may be purchased from the Government Printing Office.

Drought Index

Organization Climate Analysis Center

Contact Thomas Heddinghaus, Meteorologist
Agricultural Weather Station
Climate Analysis Center
NOAA/USDA Agricultural Weather Facility
USDA South Building, Room 5844
Washington, DC 20250

Description The Palmer Drought Severity Index relates climate and weather to prolonged and abnormal soil moisture deficiencies affecting water sensitive economies in the US. The index is useful in delineating disaster areas and indicating the availability of irrigation water supplies, reservoir levels, range conditions, amount of stock water, and potential intensity of forest fires. The index is disseminated in the Weekly Weather and Crop Bulletin, which is published by the NOAA/USDA Joint Agricultural Weather Facility and through the Climate Analysis Center's Climate Dial-Up System. Historical values are computed and archived by NOAA's National Climatic Data Center in Asheville, NC.

Format Maps of historical Palmer Drought Severity Indices are available from NCDC on a monthly basis across the US in two atlases for 1895-1983. Seven categories of drought are delineated by various thresholds of dryness and wetness. The maps illustrate the spatial and temporal variability of

drought, and prove useful to water resource managers, economists, hydrologists, meteorologists, climatologists, and geographers.

Availability

Copies of the atlas for the period 1895-1930 are $12.50 and the cost is $17.50 for the period 1931-1983. The two atlases and four related drought atlases are available in a set for $75. There is a $5 handling fee. The data used in constructing these maps are also available in digital form by writing to the: National Climatic Data Center, Federal Building, Asheville, NC 28801-2695, (704) 259-0682 and requesting: Historical Climatology Series 3-10, Atlas of Monthly Palmer Drought Severity Indices (1895-1930) for the Contiguous US, and/or Historical Climatology Series 3-11, Atlas of Monthly Palmer Drought Severity Indices (1931-1983) for the Contiguous US.

Computerized tapes are also available.

Additional Information

Maps of near-real time Palmer Drought Severity Indices are published in the Weekly Weather and Crop Bulletin which can be obtained at a cost of $35 (domestic), $50 (foreign) payable to US Department of Commerce, NOAA. Send check and address to: Weekly Weather and Crop Bulletin, USDA South Building, Room 5844, Washington, DC 20250, or call (202) 477-7017

The index and related parameters in tabular form are available in near-real time on CAC's Climate Dial-Up System. The system is menu driven and password accessed. Telephone access requires a modem and relatively simple user terminals (e.g. personal computers) capable of receiving at 300, 1200, or 2400 baud. For information call (301) 763-8071.

References: Technical Procedures Bulletin, Series No. 358, Drought Severity (Palmer) Index, National Weather Service, NOAA, Silver Spring, MD, 1985.

Meteorological Drought, Weather Bureau Paper No. 45, National Weather Service, NOAA, Silver Spring, 1965.

Drought Information

Organization

School of Renewable Natural Resources

Contact

Pamela Hathaway
School of Renewable Natural Resources
Biological Sciences East 325
University of Arizona
Tucson, AZ 85721
Telephone: (602) 621-5647

DROUGHT

Description

The Severe Sustained Drought Project, SSD, provides baseline information on the probability, frequency, and severity of drought. The project also examines the capability of existing infrastructural and institutional systems to respond to drought. The project outlines alternative drought management options. The project also highlights priorities and opportunities for additional drought-related research.

Format

Technical assistance.

Availability

The SSD project corresponds with researchers and other interested parties about drought in general and the SSD project.

Additional Information

Contact Pamela Hathaway for further information.

Drought Information: International

Organization

International Drought Information Center

Contact

Jan Schinstock
International Drought Information Center
Center for Agricultural Meteorology and Climatology
236 L.W. Chase Hall
University of Nebraska
Lincoln, NE 68583-0728
Telephone: (402) 472-3679

Description

The University of Nebraska at Lincoln established the International Drought Information Center, IDIC, to better understand the problem of drought. The Center strives to improve communication about prediction, monitoring, impact assessment, adjustment and adaptation, and planning and response to drought. The specific objectives of the IDIC are to:

1) Collect, analyze, and disseminate information on current episodes of drought and its impacts; response, mitigation, and planning activities of governments and international organizations; research results and the development and application of new technologies to manage drought; and publications and conferences;
2) Train persons from developed and developing countries in the science of drought planning and management; and
3) Stimulate and coordinate drought-related activities, including information flow about current drought conditions and impacts, between the Regional Climate Centers in the US.

The IDIC publishes Drought Network News, a free newsletter that summarizes drought conditions in various parts of the globe, discusses drought impacts, and reviews planning/response activities worldwide. The

Center also offers a series of regional training seminars on drought management and planning techniques to be carried out in various developing nations.

Format Workshops, newsletter.

Availability Contact Jan Schinstock.

See also the following indices:
- Soil Conservation
- Land Grant Extension Services

Dams, Dikes and Reservoirs

Organization

Bureau of Reclamation

Contact

Mary Laird
US Bureau of Reclamation
Denver Federal Center, Code D-5442
PO Box 25007
Denver, CO 80225
Telephone: (303) 236-8318
FTS: 776-8318

Description

This data base is a compilation of all Bureau of Reclamation storage dams, diversion dams, dikes, and reservoirs. It contains data on size of dam and reservoir and the date completed.

Format

Hard copy and computer tapes.

Availability

Call or write the Bureau of Reclamation.

Flood Damage Analysis

Organization

Flood Hazard Research Center

Contact

E. Penning-Rowsell, Director
Flood Hazard Research Center
Middlesex Polytechnic
Queensway, Enfield EN3 4SF
United Kingdom
Telephone: [44] (1) 368-1299 ext. 2248
Telex: 8954762
Telefax: [44] (1) 805-0702

Description

The Flood Damage Analysis Package, ESTDAM, is a tool for interactive, flexible benefit/cost analysis of urban flood protection schemes. ESTDAM helps evaluate flood alleviation schemes in the United Kingdom and Europe.

Format

ESTDAM is currently available as a mainframe application. A version for personal computer use is being developed.

Availability

Available via special arrangement.

Additional Information

Publications list.

Flood Data & Floodplain Management

Organization

Army Corps of Engineers

Contact

Jerome Peterson
HQUSACE (CECW-PF)
Chief, Flood Plain Management Services &
Coastal Resources Branch
20 Massachusetts Avenue, NW
Washington, DC 20314
Telephone: (202) 272-0169

Description

The Corps of Engineers acquire and compile hydrologic and hydraulic data for both river and coastal flooding and data on flood loss. General Investigations and Flood Plain Management Services, FPMS, carry out this mission. The FPMS unit in each of the 38 Corps offices nationwide serves as a point of contact. Data cover areas within district boundaries and may contain several different sources as well as several decades of flood experience.

Format

Data are not standardized but arranged to meet study requirements. Some are stored in computer-compatible format.

Availability

Cost, if any, depends on ease of access and volume of reproduction required.

Flood Data

Organization

Soil Conservation Service

Contact

Soil Conservation Service
US Department of Agriculture
PO Box 2890
Washington, DC 20013

Description

Dams, Dikes and Reservoirs:

The Earth (soil or rock) Spillway Flows data base contains reports of hydrologic and hydraulic and erosion analyses of the performance of earth spillways on dams constructed with assistance from the Soil Conservation Service. The Engineering Division initiates studies when spillway flow exceeds 3 feet (1 foot for early studies), or flows for 7 days or longer. Reports span from about 1972 to present.

Format

Printed reports are available through the National Technical Information Service, NTIS. See the NTIS listing in this directory under Information and

Research Centers. Reports currently available are: PB85-186856/AS Arkansas, Dec. 1982; PB89-114227/AS Mississippi, Dec. 1982; PB89-114235/AS Mississippi, May 1983; PB89-114730/AS Kentucky, May 1984; PB89-114748/AS Michigan, Sept. 1985.

Availability

Contact the Soil Conservation Service for detailed information on specific spillway flows.

Additional Information

For further information, contact:
Donald Basinger, Director
Engineering Division
Telephone: (202) 447-2520
FTS: 447-2520

Description

Flood Data:

The Division of Basin and Area Planning of the SCS maintains Flood Hazard Studies which provide reference data on approximately 600 studies performed by SCS. Information includes: name of the study, SCS project number, location, stream miles studied, US Geological Survey hydrologic code, one percent (100-year) flood plain acreage, date of study, and cost of study. The studies were performed throughout the United States from 1969 to the present. Contact state SCS offices with questions about specific studies, final reports, and supporting documents.

Format

Computerized printouts.

Availability

Computerized printouts are available at cost of computer services.

Additional Information

For further information contact:
Edward Riekert, Director
Basin and Area Planning Division
Telephone: (202) 447-2847
FTS: 447-2847

Flood Data

Organization

Susquehanna River Basin Commission

Contact

Robert Bielo, Executive Director
Susquehanna River Basin Commission
1721 North Front Street
Harrisburg, PA 17102-2391
Telephone: (717) 238-0422

Description The Susquehanna River Basin Commission gathers data on flooding in the basin, hydraulics, water quality, and census material. Some of this data has been reproduced in hard copy reports and some has been stored on the Commission's UNISYS computer system. The Commission maintains reports and publications, flood maps, and computerized hydraulic and other data.

Format Hard copy, maps, computerized data.

Availability Contact George Lazorchick, SRBC Staff, 8am-4pm (EST) weekdays, (717) 238-0425.

Additional Information Publications list.

Floodplain Management

Organization Flood Studies Center

Contact William van Eck, Professor
Flood Studies Center
West Virginia University
Morgantown, WV 26506-6108
Telephone: (304) 293-2219

Description The Flood Studies Center of West Virginia University provides a training, resource, and reference facility in support of the statewide integrated flood warning system--IFLOWS. The Center provides technical assistance and bibliographies on a variety of flood-related topics, including flood emergency preparedness, flood mitigation, and floodplain management.

Format Hard copy reports, books, bulletins, and bibliographies, complete file of floodplain maps for West Virginia communities, on-line model IFLOWS.

Availability Contact the Center for details.

Additional Information IFLOWS System Fact Sheet.

Floodplain Management

Organization

Floodplain Management Resource Center

Contact

Dave Morton, Librarian
Floodplain Management Resource Center
Natural Hazards Research and Applications Information Center
University of Colorado
Campus Box 482
Boulder, CO 80309
Telephone: (303) 492-6818
Telefax: (303) 492-6924

Description

The Association of State Floodplain Managers established the Floodplain Management Resource Center at the Natural Hazards Research and Applications Information Center at the University of Colorado at Boulder. The Floodplain Management Resources Center is both a library and a referral service for floodplain management publications. The library consists of regional and national publications related to floodplain hydrology and hydraulics, planning, disaster preparedness, floodproofing, flood control, and regulations.

Format

Hard copy and computer copy.

Availability

Anyone may use the services of the Center at no cost by calling (303) 492-6818 from 9 am-4 pm weekdays, MST.

Floodplain Management

Organization

Tennessee Valley Authority

Contact

James Wright, Senior Technical Specialist
Floodplain Management Division
Tennessee Valley Authority
200 Liberty Building
415 Walnut Street
Knoxville, TN 37902
Telephone: (615) 632-4455

Description

The Tennessee Valley Authority maintains the Flood Information Management System, a flood data base on streams in the Tennessee region. The data base includes information on: watershed and stream change conditions, intense storms, historic floods, dam and reservoir data, community floodplain regulations, and previous flood hazard information, flood insurance, and comprehensive flood damage reduction. The data base also has graphic capabilities.

The Tennessee Valley also helps reduce flood damage by providing communities with technical expertise on assessment issues, interpreting data, enacting effective local floodplain ordinances, assessing flood insurance eligibility, and providing information on warning and forecasting systems.

Format

Hard copy, computer copy, and audio-visual materials.

Availability

Contact the Floodplain Management Division for further information.

Additional Information

TVA's Floodplain Management Program: How It Benefits You, Pathways for Floods, Floodplain Management: The TVA Experience.

National Flood Insurance Program

Organization

Federal Emergency Management Agency

Contact

Edward Pasterick, Assistant Administrator
Federal Insurance Administration
National Flood Insurance Program
Federal Emergency Management Agency
Washington, DC 20472
Telephone: (202) 646-3443

Description

The National Flood Insurance Program Management Information System, MIS, contains data on nearly 18,000 communities participating in the National Flood Insurance Program, NFIP, and on 4,000 nonparticipating communities that have been identified at some point as flood-prone. MIS includes information on the community's status in the NFIP, available flood hazard area maps, demographic data on the community and its flood hazard areas, and flood insurance policy and claims data.

Flood Hazard Boundary Maps or Flood Insurance Rate Maps are available for most communities. Approximately 10,000 of these maps include 100-year flood elevations for one or more flooding sources. Maps were developed for the Federal Emergency Management Agency, FEMA, by private consulting firms and other Federal agencies.

Format

Computerized. Tape copies are available. A hard copy community status book is published periodically. FEMA plans to convert this file to FOXBASE for use on a personal computer. Data are updated regularly.

Availability

For small requests there is generally no charge.

FLOOD

Additional Information

For information on MIS contact the above individual. For information on maps contact: Federal Emergency Management Agency, Flood Map Distribution Center, 6930 (A-F) San Thomas Road, Baltimore, MD 21227-6227, Telephone: (800) 333-1364. For general information about the National Flood Insurance Program contact: David Cobb, Federal Insurance Administration, Federal Emergency Management Agency, Washington, DC 20472, Telephone: (202) 646-2774.

See also the following appendices:

- Coastal Zone Management
- Army Corps of Engineers
- Sea Grant Programs

Hurricane Data

Organization National Hurricane Center

Contact Robert Sheets, Director
National Hurricane Center
1320 South Dixie Highway, Room 631
Coral Gables, FL 33146
Telephone: (305) 666-4612

Description The National Hurricane Center provides a record of hurricanes from 1871 to the present, containing position and strength estimates at 6-hour intervals.

Format Hard copy and on-line. Booklet, computer listing, floppy diskette, and magnetic tape are available.

Availability Contact the Center. Costs vary depending on requests.

Hurricane Research

Organization Hurricane Research Center

Contact Howard Friedman, Meteorologist
Hurricane Research Center
Atlantic Oceanographic and Meteorological Laboratory
4301 Rickenbacker Causeway
Miami, FL 33149
Telephone: (305) 361-4319
Telex: 600 510-3049

Description The Hurricane Research Center provides damage maps for selected landfalling tropical cyclones. Also available are maps developed by Professor T.T. Fujita, University of Chicago.

Format Hard copy.

Availability Contact the center.

Hurricane Research

Organization

University of Puerto Rico

Contact

Aurelio Mercado, Assistant Professor
Department of Marine Sciences
University of Puerto Rico
PO Box 5000
Mayaguez 00709-5000
Puerto Rico
Telephone: (809) 834-4040, ext. 3439, 3443, 3447

Description

University of Puerto Rico's Marine Sciences Department conducts hurricane research focusing on hazard and vulnerability analyses in the Caribbean Sea region. Since Puerto Rico has not been struck by a full-blown hurricane since 1932, field data is scarce; however, the Department does conduct computer simulations of hurricanes striking Puerto Rico. The computer model adapted and tested is SLOSH (Sea, Land, and Overland Surges from Hurricanes) developed by the National Oceanic and Atmospheric Administration.

Format

Hard copy reports available upon request.

Availability

Call or write the University of Puerto Rico.

Additional Information

Storm Surge Modelling in Puerto Rico and the US Virgin Islands. 1987. Mercado, A. University of Puerto Rico. Mayaguez, Puerto Rico.

Tropical Cyclone Data: Worldwide

Organization

National Climatic Data Center

Contact

Joe Elms
National Climatic Data Center
National Oceanic and Atmospheric Administration
Federal Building
Asheville, NC 28801
Telephone: (704) 259-0344
FTS: 672-0344

Description

The National Climatic Data Center shows position and stage for tropical cyclones (including hurricanes). Data are organized by ocean basin: North Atlantic, Eastern North Pacific, Western North Pacific, North Indian, Southwest Indian, and Southwest Pacific and Australian Region. Period covered varies with geographic area and is generally the late 1800s to 1986

(1871-1986 for North Atlantic). The source of data for the North Atlantic and Eastern North Pacific Ocean is the National Hurricane Center. Other basins include Foreign Meteorological Services and the Joint Typhoon Warning Center, Guam.

Format

On magnetic tape. Copies, plots, searches and analyses are available at cost.

Availability

Contact the National Climatic Data Center for further information.

Tropical Cyclone Information: Worldwide

Organization

World Meteorological Organization

Contact

T. Potter, Director
World Weather Watch Department
World Meteorological Organization
41, Giuseppe-Motta
Case Postale No. 5
CH-1211 Geneva 20
Switzerland
Telephone: [41] (22) 34 64 00
Telex: 23 260 OMM CH
Telefax: [41] (22) 34 23 26

Description

The World Meteorological Organization, WMO, includes the Tropical Cyclone Program, the World Climate Program, and the Hydrology and Water Resources Program. The programs assist members of WMO in their efforts to minimize loss of life, disruption of economic activity, and damage caused by meteorological and hydrological phenomena. By establishing national, regional, and globally coordinated systems, the WMO helps their national meteorological and hydrological services provide better and more effective warnings. The WMO Congress defines the programs' activities at four-year intervals. They are implemented by the national services under the coordination and with the support of the WMO and its secretariat.

Format

Hard copy publications and audio-visuals including films and video tapes.

HURRICANE

Availability

Publications, films, and video tapes may be purchased. Some technical reports may be obtained free of charge.

Additional Information

Catalogues of Publications of WMO, Meteorological Training Publications and Audio-visual Aids, and Tropical Cyclone Programme Reports.

See also the following appendices:
- Coastal Zone Management
- National Weather Service

Severe Storm Data

Organization

National Climatic Data Center

Contact

Henry Vigansky
National Climatic Data Center
National Oceanic and Atmospheric Administration
Federal Building
Asheville, NC 28801
Telephone: (704) 259-0448
FTS: 672-0448

Description

The National Oceanic and Atmospheric Administration provides data detailing storm location, date, damages, injuries, and death for the US from 1959 to the present. Data are updated annually. Data sources include: Storm Data, news media, technical reports, and publications of the American Meteorological Society.

Format

Hard copy, computer copy, slides, films, and searches.

Availability

Phone, write or visit the laboratory.

Severe Storms Education

Organization

National Severe Storms Laboratory

Contact

Mary Meacham, Librarian
National Severe Storms Laboratory
1313 Halley Circle
Norman, OK 73069
Telephone: (405) 366-0421
FTS: 736-3421

Description

The National severe Storms Laboratory, NSSL, provides posters, pamphlets, slides, and films on severe weather and related safety measures. Posters and pamphlets are available at no cost. Films and slides are loaned; slides and non-copyright films may be duplicated. The laboratory loans books via inter-library loan originated at the local library. All services are free.

Format

Hard copy, slides, and films.

Availability

Patrons may call, write, or come in person.

Additional Information

Many NSSL technical memoranda are still available; for those not still in print, NTIS ordering data is provided.

Severe Storms Education

Organization American Red Cross

Contact
Rocky Lopez
Disaster Services
National Headquarters
American Red Cross
431 18th St., NW
Washington, DC 20006-5399
Telephone: (202) 639-3400

Description The Weather Education and Awareness Project aims to reduce property damage, injuries, and loss of life from weather-related disasters. The project is a cooperative venture of the American Red Cross and the Weather Channel. The two organizations are developing several different media materials that are made available through local Red Cross chapters and the network's local cable television affiliates. As a result of these efforts, the project produces publications and videotapes, e.g., Weather Times, a newspaper, Calm to Catastrophe a videotape, and Weather Guidebooks.

Format Newspaper, audio-visual materials, guidebooks.

Availability For further information contact a local chapter of the American Red Cross or Rocky Lopez.

Severe Storm Information

Organization National Weather Wire Service

Contact
R. Morris
Contel ASC-Government Networks Division
National Weather Wire Service
7916 Westpark Drive
McLean, VA 22102-9922
Telephone: (800) 633-2340

Description The National Weather Wire Service, NWWS, provides broad, fast, reliable, and accessible weather forecasts and data via a direct broadcast satellite system. The service also issues timely warnings of severe weather and floods. Subscribers equipped with the appropriate satellite receiver system can collect weather information, warnings, and forecasts transmitted to the satellite from Weather Service Forecast Offices throughout the US. Users

of the Weather Wire can specify exactly which NWWS reports they wish to receive and can display the information using a variety of devices including printers, video displays, and personal or mainframe computers.

Format

Satellite communications.

Availability

Fixed rate regardless of location.

Additional Information

Contact R. Morris for further information.

See also the following appendix:
- National Weather Service

Ice Data: Great Lakes Region

Organization

Great Lakes Environmental Research Laboratory

Contact

Frank Quinn, Head
Lake Hydrology Department
Great Lakes Environmental Research Laboratory
2205 Commonwealth Boulevard
Ann Arbor, MI 48105
Telephone: (313) 668-2255

Description

The Great Lakes Environmental Research Laboratory, GLERL, provides a 20-winter computerized ice concentration data base established for the Great Lakes. Some 2800 historic ice charts spanning the years 1960-79 were digitized on a 5 x 5 cm grid resolution. GLERL provides maximum, median, minimum, and average mode ice concentrations for each grid square for nine half-month periods.

Format

Magnetic tape. Address inquiries to National Snow and Ice Data Center, NSIDC, CIRES, Campus Box 449, University of Colorado, Boulder, CO 80309. Telephone: (303) 492-1834; FTS: 320-5311.

Availability

Contact the Laboratory for further information.

Snow & Ice Data: Worldwide

Organization

National Snow and Ice Data Center

Contact

Ronald Weaver, Scientific Manager
World Data Center A for Glaciology
National Snow and Ice Data Center
Cooperative Institute for Research in Environmental Sciences
Campus Box 449
University of Colorado
Boulder, CO 80309
Telephone: (303) 492-5171
Telex: 257673 WDCA UR
Telefax: (303) 492-1149

Description

The World Data Center A for Glaciology, National Snow and Ice Data Center, WDC/NSIDC, archives analog and digital data on numerous areas of snow and ice research. The majority of the data sets describe snow cover and sea ice, but also include data relating to glacial geophysics and satellite microwave research. The Center archives published material on snow and ice, with a collection of approximately 10,000 aerial and terrestrial glacier photographs dating from the late 19th century to the 1960s. In addition,

NSIDC archives data from the US Air Force Defense Meteorological Satellite Program, DMSP. The center holds over 1 million pieces of satellite imagery with worldwide coverage.

Format

Hard copy and on-line. Most of the data sets are digital. The DMSP data is a hard copy transparency product. The library holdings are in an on-line data base, CITATION.

Availability

Data sets are available to the public. Prices and accessibility varies.

Snow & Ice Research

Organization

Army Cold Regions Research and Engineering Laboratory

Contact

Nancy Lisbon, Librarian
US Army Cold Regions Research and Engineering Laboratory
72 Lame Road
Hanover, NH 03755
Telephone: (603) 646-4221

Description

The US Army Cold Regions Research and Engineering Laboratory provides the on-line Bibliography on Cold Regions Science and Technology, which contains 135,000 references dating to 1951. This international bibliography covers engineering, hydrology, climatology, snow, ice, and permafrost.

Format

On-line and hard copy. Engineering information is available from technical experts.

Availability

On-line access is available 24 hours a day, $80 per connect hour from Orbit Search Service, Westpark Drive, McLean, VA 22022, 1-800-45-ORBIT.

Additional Information

Hard copy of the bibliography is available from NTIS, Springfield, VA.

Snow Information

Organization

Snow Survey and Water Supply Forecasting Program

Contact

David Johnson
US Department of Agriculture
Soil Conservation Service
Snow Survey Program
SNOTEL
511 NW Broadway, Room 248
Portland, OR 97209-3489
Telephone: (503) 221-2843

Description

The Snow Survey and Water Supply Forecasting Program forecasters determine the relationship between mountain snowpack and the subsequent snowmelt runoff. The program collects data from about 1600 snow courses several times each winter. Surveyors determine the depth and water content of the snowpack, and estimate the amount of runoff from mountain watersheds.

SNOTEL is a network of automated radio-telemetry data sites that provide daily data on streamflow potential. This information is especially valuable during periods of drought or flood. The data collected by both snow surveyors and SNOTEL are translated into water supply forecasts that the Soil Conservation Service, SCS, state offices issue monthly from January to June in cooperation with the National Weather Service.

The Centralized Forecasting System is a free dial-up menu-driven computer system. It makes snow survey and related planning information available to local conservation districts and the SCS offices, the National Weather Service, numerous government agencies, and private entities.

Format

Hard copy and on-line services.

Availability

For further information contact David Johnson.

See also the following appendix:
- Water Resources

Severe Wind Information

Organization

National Climatic Data Center

Contact

User Services Branch
National Climatic Data Center
NOAA
Federal Building
Asheville, NC 28801
Telephone: (704) 259-0682
FTS: 672-0683

Description

The Tornado and Natural Hazards Files at the National Climatic Data Center include statistical information on tornadoes, tropical storms and hurricanes, and lightning. The Center also maintains standard temperature and precipitation records.

Format

Hard and computerized tape copies.

Availability

Call or write the National Climatic Data Center for details.

Additional Information

Storm Data. National Climatic Data Center. NOAA. Asheville, NC. Published monthly. Storm Data contains state listings of storms and unusual weather including date and time of storm, deaths, injuries, property damage, crop losses, and storm characteristics. Storm Data serves as a source for several of the files.

Severe Wind Information

Organization

Soil Conservation Service

Contact

Tommy George, Director
Resources Inventory Division
Soil Conservation Service
US Department of Agriculture
PO Box 2890
Washington, DC 20013
Telephone: (202) 447-5424
FTS: 447-5424

Description

The Resources Inventory Division of the Soil conservation Service, SCS, files wind erosion reports three times a year during the November to May wind erosion season. Data include: estimates of land and crops damaged, contributing factors to wind erosion, social and environmental effects of soil blowing, and erosion control plans for the ten Great Plains states from the

1950s to the present. Reports are based on observations by SCS field office staff. National headquarters collects only state summaries. Field office data are available at SCS state offices.

Format

Hard copy, unpublished.

Availability

Copies are free. Reports are filed three times per year in January, March and June.

Additional Information

Wind Erosion Conditions Inventory. National Inventory and Monitoring Manual. 290-V. Issue 1. Part 505.02. Soil Conservation Service. US Department of Agriculture. Washington, DC. May 1981.

Severe Wind Research

Organization

Institute for Disaster Research

Contact

Jim McDonald, Director
Institute for Disaster Research
Texas Tech University
PO Box 4089
Lubbock, TX 79409-4089
Telephone: (806) 742-3476
Telefax: (806) 742-1900

Description

The Institute for Disaster Research, IDR, program focuses on extreme winds and their effects on the built environment. Studies explore tornadoes, hurricanes and other extreme winds. The IDR program performs wind engineering research on the interaction between wind and structures, and disseminates the information for professional use.

The IDR maintains a wind damage data base of slides and photographs of windstorm damage from more than sixty windstorms, dating from 1970 to the present.

Format

Hard copy reports, photographs, and slides.

Availability

Call or write the Institute at the above address.

Additional Information

Contact the Institute for a list of publications.

Research Capabilities of the Institute for Disaster Research. August 1988. James McDonald. Lubbock, Texas. Texas Tech University.

Tornado Data

Organization

National Climatic Data Center

Contact

Henry Vigansky
National Climatic Data Center
National Oceanic and Atmospheric Administration
Federal Building
Asheville, NC 28801
Telephone: (704) 259-0448
FTS: 672-0448

Description

The National Climatic Data Center maintains tornado statistics on the location, movement, Fujita Index, damage, deaths, and injuries for each tornado. The tornado statistics cover the United States from 1951 to 1987. The National Severe Storms Forecast Center developed the file from NOAA Storm Data.

Format

On magnetic tape. Updated annually.

Availability

Searches, plots, and analyses are available at cost.

Additional Information

Climatological Data National Summary, Annual Tornado Summary. National Climatic Data Center. Asheville, NC.

Storm Data. National Climatic Data Center. Asheville, NC.

See also the following appendices:
- Soil Conservation
- National Weather Service

Hydrological Data

Organization

Australian Water Research Advisory Council

Contact

The Secretary
Australian Water Research Advisory Council
Department of Primary Industries and Energy
GPO Box 858
Canberra ACT 2601
Australia
Telephone: [61] (62) 72 3933

Description

The Australian Water Research Advisory Council, AWRAC, sponsors STREAMLINE, a national computerized data base covering all aspects of water and wastewater information produced by Australians or about Australia. Subject categories include: water quantity, aquatic environments, water resource investigation, and urban water utilities. STREAMLINE includes bibliographic and research and progress reports.

Format

On-line. The STREAMLINE Coordination Unit produces hard copy publications as well.

Availability

STREAMLINE is available seven days a week. An annual account maintenance fee is charged on all accounts.

Hydrological Data

Organization

Soil Conservation Service

Contact

Howard Tankersley, Director
Watershed Projects Division
Soil Conservation Service
US Department of Agriculture
P.O. Box 2890
Washington, DC 20013
Telephone: (202) 447-3527
FTS: 447-3527

Description

The Soil Conservation Service, SCS, provides reference data on approximately 1400 projects carried out under the 1954 Watershed Act (Public Law 83-566). Projects serve a number of functions including flood prevention, water supply, drainage and irrigation, water quality, conservation, and fish and wildlife for small watersheds under 250,000 acres. Data include name, location, purpose, cost, and milestone dates. Projects include structural and nonstructural approaches.

Format On-line and hard copy.

Availability Computerized tape copies and printouts are available at cost of duplication. An annual status report is available free of charge.

Hydrological Data & Information

Organization Geological Survey

Contact

Owen Williams
US Geological Survey
421 National Center
Reston, VA 22092
Telephone: (703) 648-5684
FTS: 959-5684

Description

National Water Data Exchange:

The National Water Data Exchange, NAWDEX, is an indexing and reference service for water data users. NAWDEX assists users in identifying, locating, and acquiring needed data on the US and Canada. NAWDEX accesses two files: the Water Data Sources Directory and the Master Water Data Index.

The Water Data Sources Directory provides information on over 2000 organizations which generate water data, as well as the type of data maintained and the geographic area of data collection. These organizations are members of the National Water Data Exchange.

The Master Water Data Index consists of data from over 460,000 collection sites. The data include the: collection agency, type of data, period of record, parameters measured, frequency of measurements, data media, and site locations.

NAWDEX also accesses several other computerized data bases, including STORET of the Environmental Protection Agency and ENDEX/OASIS of the National Oceanic and Atmospheric Administration.

Format Hard copy and on-line data searches.

Availability Cost estimates are provided upon request. Contact the USGS at the above address for more information.

WATER RESOURCES DATA

Additional Information

"Guide to Obtaining US Geological Survey Information." Circular 900. 1986. Free upon request from:
Books & Open-File Reports Section
US Geological Survey
Federal Center
Box 25425
Denver, CO 80225

Description

Water Data Storage and Retrieval System:

In 1971 the US Geological Survey, USGS, established WATSTORE, the National Water Data Storage and Retrieval System. WATSTORE modernized the USGS's existing water-data processing procedures and techniques and provided for more effective and efficient management of its data-releasing activities. Data may be obtained from WATSTORE through any of the Water Resources Division's district offices.

WATSTORE maintains data from approximately 16,000 gaging stations, 1,000 lakes and reservoirs, 5,200 surface water quality stations, 1,020 sediment stations, 30,000 water-level observation wells, and 12,500 ground water quality wells. WATSTORE indexes daily values, peak flow, water-quality, and unit values for each site when possible.

Format

Hard copy and magnetic tape.

Availability

Cost estimates for these products may be obtained from USGS district offices.

Additional Information

For further information, contact:
Chief Hydrologist
US Geological Survey
437 National Center
Reston, VA 22092

Description

Urban Geology and Hydrology Projects:

The US Geological Survey conducts mapping of basic and interpretive geology within urban areas. These maps include definition of hazards associated with floods, earthquakes, landslides, subsidence and poor foundation materials. The USGS mapped urban areas with increasing water resources and land demands. These urban areas include: Baltimore-Washington, Connecticut Valley, greater Pittsburgh, San Francisco Bay region, Tucson-Phoenix, Puget Sound, WA, Front Range Urban Corridor, CO, and Fairfax County, VA.

Format

Hard copy maps and reports.

Availability

For further information, contact:
Director
Engineering Geology Division
US Geological Survey
106 National Center
Reston, VA 22092
Telephone: (703) 648-4425
FTS: 959-4425

Hydrological Engineering

Organization

Hydrologic Engineering Center

Contact

Vern Bonner, Chief
Training Division
US Army Corps of Engineers
Hydrologic Engineering Center
Water Resources Support Center
609 Second Street
Davis, CA 95616-4687
Telephone: (916) 551-1748

Description

The Hydrologic Engineering Center, HEC, provides technical support in hydrologic engineering. Products include training courses, videotapes of lectures, computer programs, and technical documents.

Format

Hard copy reports, videotapes in 1/2" VHS, and computer programs in MSDOS diskettes.

Availability

Contact HEC for a copy of their Publications Catalog, Videotape Sales Library, and Computer Program Catalog.

Additional Information

Contact HEC for a copy of their annual report.

Hydrometeorological Data

Organization

National Weather Service

Contact

E. Hansen, Chief
Water Management Information Division
National Oceanic and Atmospheric Administration
National Weather Service
Office of Hydrology
Silver Spring, MD 20910
Telephone: (301) 427-7543
FTS: 427-7543

Description

The Office of Hydrology provides a bibliography of studies of hydrometeorological interest published by NOAA during the past 30 years. Topics relevant to natural hazards are:
Drought (Department of Agriculture)
Floods (NWS, Office of Hydrology)
Tropical cyclones (NOAA National Climatic Center)
Precipitation (NWS, Office of Hydrology)
Snow (cover, water content, frequency and intensity of snow fall, and Blizzards on north-central Plains, forecasting, snowline variations, runoff)
Severe storms (number, structure, movement, meteorology, and related effects)

Format

Hard copy. Printed individual reports are available from National Technical Information Service, Springfield, VA., US Government Printing Office, Washington, DC, or the appropriate NOAA offices. Prices vary with publications.

Availability

Contact the Office for more details.

Hydrometeorological Data

Organization

World Meteorological Organization

Contact

Director
World Meteorological Organization
PO Box 5
CH-1211 Geneva 20
Switzerland

Description

The World Meteorological Organization, WMO, is a specialized agency of the United Nations of which 154 states and territories are members. It was created to:

1) Facilitate worldwide cooperation in the establishment of meteorological observation station networks and the rapid exchange of information;
2) Promote standardization of meteorological observations;
3) Further the application of meteorology to aviation, shipping, water problems, agriculture, and other human activities;
4) Encourage research and training in meteorology and coordinate international aspects of such research and training.

Format

Hard copy and technical assistance.

Availability

Data are available on request. Some data are available according to the agreement of the country concerned.

Additional Information

To obtain information from the World Meteorological Organization's six regional offices in Africa, Asia, South America, North and Central America, South-West Pacific, and Europe, contact the WMO at the above address.

See also the following appendices:
- Water Resources
- Geological Survey: Water Resources
- Water Resources Research Institutes

Forestry Data: Insects & Diseases

Organization

Forest Service

Contact

James Space, Director
Forest Insect and Disease Management Division
Forest Service
US Department of Agriculture
PO Box 2417
Washington, DC 20013
Telephone: (703) 235-1560
FTS: 235-1560

Description

The Forest Service Regional and Area Forest Insect and Disease Management Division annually conducts aerial and ground surveys to monitor the status of destructive insect and disease pests on Forest Service lands. State forestry organizations monitor insect and disease conditions on state and private lands. Archival data are available at regional or area headquarters for about the last 20 years. Tabular summaries of acres infested by causal agents and intensity of damage are available from regional or area offices. In addition, maps are available showing location of infestation. Annual Regional and National Forest Insect and Disease Condition reports are also available.

Format

Hard copy and on-line computer services.

Availability

Contact the Service for further information.

Forestry Information

Organization

Department of Agriculture

Contact

Seung Sinatra, Network Coordinator
Forestry On-line
Forest Service Information Network
US Department of Agriculture
10301 Baltimore Boulevard
Beltsville, MD 20705
Telephone: (301) 344-2507

Description

The Forest Service Information Network, FS INFO, contains 50,000 bibliographic citations. New citations to journal articles, Forest Service publications, books, and chapters in books are added each month. The Network also adds subject-oriented data bases such as FIREBASE. Future efforts will be made to incorporate all Forest Service publications and 10 INFO Center library holdings.

Format On-line and microfiche.

Availability Contact FS INFO for a microfiche catalog and brochure.

Wildfire Data

Organization Boise Interagency Fire Center

Contact

Roger Bradshaw
Boise Interagency Fire Center
3905 Vista Avenue
Boise, ID 83705
Telephone: (208) 389-2603
FTS: 554-2603

Description The Boise Interagency Fire Center collects fire data from over 800 Forest Service weather stations for estimating the severity of fire danger and forest management planning. These data include: the number of fires, acres burned, dollar damage or net value change, fire size class, and major causes. These data cover fires in national forests and are catalogued by forest, region, and state.

Format Hard and computer copy.

Availability Contact the Boise Interagency Fire Center.

Additional Information

1987 National Forest Fire Report, prepared by Aviation and Fire Management Staff. Forest Service. US Department of Agriculture. Washington, DC 1988. Annual Report.

The National Fire Weather Data Library: What It Is and How to Use It, R. William Furman and Glen E. Brink, General Technical Report RM-19, Rocky Mountain Forest and Range Experiment Station, Forest Service, US Department of Agriculture, Ft. Collins, CO, 1975.

Wildfire and Natural Hazards Information: Australia

Organization Macquarie University

Contact Russell Blong, Professor
School of Earth Sciences
Macquarie University
AA 122377 Macuni
New South Wales 2109
Australia

Description Macquarie keeps a data base on the effects of natural hazards in Australia from 1788-1988, and in Papua, New Guinea from 1880-1988. Hazards covered include fire, earthquake, tropical cyclone, drought, and flooding.

Format Computer-based in Notebook II and dBXL.

Availability Contact the University for further information.

Wildfire & Natural Hazards Information: US

Organization Intermountain Research Station

Contact Richard Klade, Leader
Research Information Group
Intermountain Research Station
324 25th Street
Ogden, UT 84404
Telephone: (801) 625-5436

Description The Intermountain Research Station, INT, provides quarterly announcements listing 40 to 80 new publications, and several hundred journal articles by INT scientists and cooperators. Subjects include all phases of natural resource research and wildfire, landslides, erosion, pollution, and other hazards.

Format Hard copies.

Availability Write INT to receive the quarterly mailing list.

See also the following appendix:
- National Weather Service

SOCIETAL RESPONSE

Building Technology

Organization Applied Technology Council

Contact Christopher Rojahn, Executive Director
Applied Technology Council
3 Twin Dolphin Drive, Suite 275
Redwood City, CA 94065
Telephone: (415) 595-1542

Description The Applied Technology Council is a nonprofit corporation which conducts projects, workshops, and seminars in support of the structural engineering profession. The Council publishes structural engineering reports which result from their research projects and workshops.

Format Publications are available in hard copy.

Availability Call for publication prices; mail payment with order.

Building Technology

Organization Building Seismic Safety Council

Contact James Smith, Executive Director
Building Seismic Safety Council
1015 15th Street, NW, Suite 700
Washington, DC 20005
Telephone: (202) 347-5710

Description The Building Seismic Safety Council provides information, data, and technical assistance on seismic regulations for new buildings. The Council's efforts respond to requests posited by the National Earthquake Hazards Reduction Program.

Format Hard copy.

Availability All reports are available in limited quantities at no cost.

Additional Information The Building Seismic Safety Council maintains a publications list which spans the categories of: seismic regulations for new buildings and existing buildings, societal implications, abatement of seismic hazards to lifelines, and seismic design and construction considerations.

BUILDING TECHNOLOGY & TRANSPORTATION

Building Technology

Organization

Center for Building Technology

Contact

National Institute of Standards and Technology
National Engineering Laboratory
Center for Building Technology
Gaithersburg, MD 20899
Telephone: (301) 975-5904
Telefax: (301) 975-2128

Description

The Disaster Mitigation Program at the Center for Building Technology focuses on developing improved building practices which reduce the damage caused by floods, hurricanes, tornadoes, earthquakes, and other extreme natural forces. Major thrusts of this program include: safety evaluation of existing buildings, improved design criteria and standards, post-disaster investigations, and more reliable measures of effects of natural and human-made forces on buildings.

Format

Data are released in hard-copy periodicals and reports.

Availability

Publications of the National Institute of Standards and Technology are available from the US Government Printing Office, Washington, DC 20402, and the National Technical Information Service, Springfield, VA 22161.

Transportation Research

Organization

National Transportation Safety Board

Contact

Stan Smith (SP-30)
National Transportation Safety Board
800 Independence Avenue, SW
Washington, DC 20594
Telephone: (202) 382-6672

Description

The National Transportation Safety Board, NTSB, investigates and maintains records of aircraft accidents. Records date from 1964 to present, and describe approximately 3,000 accidents per year. Records include: the cause of the accident, number of injuries and deaths, type of aircraft, accident location, type of accident, and the weather at time of the accident.

Format

Information is available in hard copy, on computer tape, and via technical services.

Availability

Hard-copy reports which summarize the records are available.

Additional Information

NTSB Publications. National Transportation Safety Board. Publications Unit. Washington, DC.

Aircraft Accident Reports--Brief Format, US Civil Aviation. National Transportation Safety Board, Washington, DC, 6 issues per year. Available from the National Technical Information Service.

Annual Review of Aircraft Accident Data--US Air Carrier Operations, National Transportation Safety Board, Washington, DC. Annual Report. Available from the National Technical Information Service.

Annual Review of Aircraft Accident Data--US General Aviation, National Transportation Safety Board, Washington, DC. Annual report. Available from National Technical Information Service.

Aviation Special Safety Studies, National Transportation Safety Board, Washington, DC. Irregular. Available from the National Technical Information Service.

Transportation Research

Organization

Transportation Research Board

Contact

Jerome Maddock, Director of Information Services
Transportation Research Board
2101 Constitution Avenue, NW
Washington, DC 20418
Telephone: (202) 334-3250
Telex: 248664 NASWUR
Cable: NARECO

Description

Transportation Research Information Services, TRIS, is an on-line transportation data base. TRIS consists of abstracts of published articles, reports, and recently completed research projects which examine transportation system planning, development, operation, and performance. TRIS follows developments in air, highway, rail, maritime, and waterborne transport, as well as developments in mass transit. Users may search the entire TRIS data base or any combination of record types.

Format

On-line.

Availability

Contact the Transportation Research Board regarding questions concerning the TRIS data base.

DEMOGRAPHIC DATA

Census, Health, Socio-Economic: US

Organization

Lawrence Berkeley Laboratory

Contact

Deane Merrill, Computer Scientist
Computer Science Research Department
Lawrence Berkeley Laboratory
University of California
Building 50B, Room 3238
Berkeley, CA 94720
Telephone: (415) 486-5033

Description

The Social, Economic, Environmental, Demographic Information System, SEEDIS, provides on-line access to 200 data bases which emphasize public health applications. SEEDIS spans 1940-1990 and includes the 1970 census, 1980 census, vital statistics, cancer incidences, and socioeconomic data. SEEDIS contains 10 gigabytes or 10 billion characters.

Format

Machine-readable data files are archived on magnetic disk and tape. Files are accessible through an interactive dial-up system as well.

Availability

SEEDIS is available to the general public for a consulting fee of $50 per hour plus computing costs which are usually negligible. Qualified government collaborators may use SEEDIS for computing costs only.

Additional Information

The SEEDIS Project: A Summary Overview of the Social, Economic, Environmental, Demographic Information System. McCarthy, J. May 1982. PUB-424/250. Lawrence Berkeley Laboratory. Berkeley: University of California.

Census: US

Organization

Bureau of the Census

Contact

Customer Services
US Bureau of the Census
Washington, DC 20233
Telephone: (301) 763-4100

Description

The Census Bureau collects and publishes statistics on: population, transportation, housing, retail trade, agriculture, wholesale trade, mineral industries, selected service industries, construction industries, governments, manufacturers, and foreign trade, to mention a few topics.

The Census Bureau compiles data through censuses, surveys, administrative records, and estimate programs. Data may be obtained for many aggregate levels from a city block to the entire US.

Format

Census data comes in: printed reports, machine-readable data files on tape, on-line via CENDATA, diskettes, compact disks and computer programs (e.g., the upcoming TIGER/lie file for computer mapping of the 1990 census), maps, microfiche, microfilm, and file printouts. Costs vary from $5 for reports to $175 for magnetic tapes. A variety of consultation, training, and special services are available. Files are updated at intervals from 1 day to 10 years.

Availability

Available free from Customer Services is the Monthly Product Announcement.

The US Government Printing Office, State and Regional Census Data Centers, and select libraries have:
Census Catalog and Guide (annual)
Census and You (a monthly newsletter)

Health: Europe

Organization

World Health Organization

Contact

Eva Nielsen, Librarian, Information Scientist
World Health Organization
Regional Office for Europe
Scherfigivej 8
2100 Copenhagen 0
Denmark
Telephone: [45] (1) 290 111
Telex: 15348 WHO dk
Telefax: [45] (1) 181 120

Description

The World Health Organization's, WHO, Europe Office provides technical assistance, and maintains a statistical data base--Health for All, HFA, as well as a bibliographic data base--EURODOC. EURODOC contains: EURO documents and publications, consultant reports on country missions, travel reports of staff members, library acquisitions including HFA documentation from member states, and reports on health activities carried out by other organizations. EURODOC's contents are comprehensive as of January 1, 1988 and include material recorded during the development phase, 1986-1987. Access to disaster information is via the medical subject headings, MeSH and NLM.

Format

Hard copy and on-line.

Availability

See User's Guide.

Additional Information

"EURO DOCumentation." World Health Organization. Regional Office for Europe. Copenhagen.

EURODOC: Documentation Retrieval Data Base. A "Hands On" User Guide. World Health Organization. Regional Office for Europe. Copenhagen. 1988.

Health: US

Organization

National Center for Health Statistics

Contact

Harry Rosenberg, Chief
Mortality Statistics Branch
National Center for Health Statistics
Room 1-44 Center Building
3700 East-West Highway
Hyattsville, MD 20782
Telephone: (301) 436-8884
FTS: (301) 436-8884

Description

The National Center for Health Statistics collects a wide range of statistics on marriage, divorce, families, health, and mortality. Mortality statistics in the US are classified using the International Classification of Diseases categories. Causes of mortality include accidents resulting from natural and environmental factors, excessive heat or cold, high and low air pressure, lightning, flood, hurricanes, cataclysm, and others. Individual mortality records also include: place of occurrence and residence (state and county), age, sex, and race. Mortality data covers the US and select foreign countries from 1933 to the present. Mortality data are compiled from annual death certificates.

Format

Printed reports, computer tapes, and special unpublished tabulations are available. Data are updated annually.

Availability

Contact the National Center for Health Statistics

Additional Information

Catalog of Publications, 1980-87, National Center for Health Statistics, Public Health Service, Hyattsville, MD June 1988.

Catalog of Public Use Tapes, National Center for Health Statistics, Hyattsville, MD, July 1988.

Series of annual volumes:
Vital Statistics of the United States
Monthly Vital Statistics Report

Socio-Economic: Eastern Caribbean

Organization

Organization of Eastern Caribbean States

Contact

Sandra John, Network Manager
Organization of Eastern Caribbean States
Central Secretariat
PO Box 179
The Morne, Castries
St. Lucia
Telephone: (809) 452-2537

Description

INFONET is the information network of the Organization of Eastern Caribbean States, OECS. The network includes primarily socio-economic information produced in or relevant to OECS member states. Member states include: Antigua and Barbados, Bermuda, Dominica, Grenada, British Virgin Islands, Montserrat, St. Kitts and Nevis, Street Lucia, Street Vincent and the Grenadines. OECS compiled information from 1980 onward, and the subject coverage is general, with a bias toward socio-economic literature.

Format

Hard copy.

Availability

OECS provides printed output upon request.

Additional Information

INFONET Current Awareness Bulletin. Monthly. July 1987 to present.

INFONET News. Monthly. July 1987 to present.

See also the following appendices:

- Emergency Management
- Army Corps of Engineers
- FEMA
- Small Business Administration
- World Health Organization

Disaster Assistance

Organization

Agricultural Stabilization and Conservation Service

Contact

Director
Kansas City Management Office
Agricultural Stabilization and Conservation Service
US Department of Agriculture
PO Box 419205
Kansas City, MO 64141-0205
Telephone: (816) 926-6502
FTS: 926-6502

Description

In the event of a Presidentially declared disaster, the Agricultural Stabilization and Conservation Service, ASCS, may provide assistance, such as feed grains, grazing and haying privileges, emergency conservation aid, wildlife feeding assistance, distress donations for Native Americans, and disaster payments. ASCS maintains records of disaster payments for low yields; these records include the type of disaster and the dollars spent.

Format

Hard copy and computer copy.

Availability

Hard copy and magnetic tape copy are available for the cost of duplication.

Additional Information

Further information is available from the US Department of Agriculture's county offices.

Disaster Assistance

Organization

Federal Emergency Management Agency

Contact

Joseph Russell
Federal Emergency Management Agency
SL-DA-PC, Room 705
Washington, DC 20472
Telephone: (202) 646-3069

Description

The Federal Emergency Management Agency, FEMA, operates the Automated Disaster Assistance Management System, ADAMS. ADAMS is a personal computer-network designed to expedite the management of grants and assistance programs in Presidentially declared disasters. ADAMS has four modules: public assistance, grants to government entities; individual assistance, temporary housing, cash grants, and other assistance to families or individuals; hazard mitigation; and program support, administrative functions.

FEMA also maintains the Disaster Accountability Management System, DAMAGES. DAMAGES, as a part of FEMA's accounting system, records payments, refunds, and other financial data on disaster-assistance grants and programs.

Format Hard copy and magnetic tape.

Availability Printouts are available for the cost of copying, and are subject to the provisions of Federal laws and regulations regarding the protection of individual privacy.

Disaster Information: Canada

Organization Emergency Canada Research Unit

Contact
Joseph Scanlon
Emergency Canada Research Unit
Carleton University
Ottawa, Canada K1S 5B6
Telephone: (613) 231-5532

Description The Emergency Canada Research Unit of Carleton University is developing a computerized data base of Canadian disasters. The data base includes information on: agency involvement, type of incident, and location.

Format Computerized data.

Availability Contact Joseph Scalon.

Disaster Information: Developing World

Organization Relief and Development Institute

Contact
Edward Clay, Director
1 Ferdinand Place
London, NW1 8EE
United Kingdom
Telephone: [44] (01) 485-0944
Telex: [44] 21879 Disinst
Telefax: [44] (01) 284-0244

Description The Relief and Development Institute, RDI, carries out research and evaluations, organizes workshops, and maintains its own document

collection and bibliographic data base on relief and development issues in the developing world.

Format

Hard copy.

Availability

Contact the Relief and Development Institute.

Additional Information

RDI may also be contacted by electronic mail. UK Telecom Gold/DIALCOM Network 72:MAG35771.

Disaster Information: International

Organization

Agency for International Development

Contact

Andrew Natsios, Director
Office of US Foreign Disaster Assistance
Agency for International Development
US Department of State
Washington, DC 20523
Telephone: (202) 647-8924

Description

Disaster History File:

The Disaster History File contains a quantitative record of all foreign disasters to which the Agency for International Development/Office of US Foreign Disaster Assistance, AID/OFDA, has responded since 1964, plus selected major disasters dating back to 1900. These 2,816 records of foreign, natural and human-made, disasters include: dates; locations; casualties; damages to housing, transportation, communications, and crops; and magnitude of impact. These records are worldwide excluding the US. The Disaster History File provides intervention information for the prediction of disaster patterns and response requirements. The Disaster History File's sources are published reports from the AID/OFDA, international organizations, and voluntary agencies. Detailed information on disasters to which AID/OFDA has responded is recorded in disaster case reports and OFDA's Annual Reports.

Format

The data base is updated quarterly, and data may be retrieved by a variety of selection criteria, including data, region, and disaster type.

Availability

Searches and listings are available free to qualified users. A chronological list of disasters by country is published annually, and is available upon request.

Additional Information

"Disaster History, 1900 to Present," US Department of State, Washington, DC 20523, 1988.

Description

Country Profiles:

The Office of Foreign Disaster Assistance maintains profiles of over forty disaster-prone countries in Africa, Asia, Latin America, the Caribbean, and the Pacific. The profiles are updated every five or six years, and provide background information on specific countries. Each Country Profile has three sections. Section 1 describes general baseline information on the country's geography, population, history, economic and political systems, and health indicators. Section 2 describes the disaster vulnerability of the country, and examines disaster types. Section 3 describes the disaster preparedness and assistance of the country, specifically governmental and non-governmental institutions, and resources. Section 3 also describes past AID/OFDA involvement in the country, and provides addresses and brief descriptions of private voluntary agencies and international organizations active in the country.

Format

Hard copy documents, including maps, charts, and a bibliography.

Availability

Price list available from OFDA. Copies for purchase are available from:
A.I.D. Document and Information Handling Facility
7222 47th Street, Suite 100
Chevy Chase, MD 20815

Description

Disaster Case Reports:

OFDA produces final summary case reports on foreign disasters, in which the US Government provided assistance. Each case report provides: official statistics on the number of people killed and affected, a description of the disaster, the actions taken by the government and non-governmental organizations, and a detailed accounting of the assistance provided by the US, private voluntary organizations, and the international community.

Format

Hard copy document.

Availability

Individual case reports are available from OFDA, no earlier than one year after the event. Case reports are also compiled for the OFDA Fiscal Year Annual Report.

Additional Information

Oliver Davidson, Assistant Director of Operations Support
Telephone: (202) 647-5916

Bill Garvelink, Assistant Director of Africa and Europe
Telephone: (202) 647-8746

Fred Cole, Assistant Director of Asia and Pacific
Telephone: (202) 647-8477

Barry Heyman, Assistant Director of Latin America and the Caribbean
Telephone: (202) 647-7544

Renee Bafalis, Press Officer
Telephone: (202) 647-7539

Paul Krumpe, Science Advisor and Program Officer
Telephone: (202) 647-9758

Disaster Information: US

Organization

Army Corps of Engineers

Contact

Robert Fletcher
US Army Corps of Engineers' Headquarters
Emeregency Mangement Branch (CECW-OE-D)
Operations and Readiness Division
Directorate of Civil Works
Washington, DC 20314-1000
Telephone: (202) 272-0251

Description

After a disaster, especially a flood disaster, the Army Corps of Engineers issues an After Action Report. This report summarizes the disaster operations and interagency coordination, including: a discussion of the emergency situation, types of assistance provided and the cost, coordination with the Federal Emergency Management Agency and other agencies, effectiveness of the response, strengths and weaknesses of the operation, and specific problems and solutions.

Format

Hard copy.

Availability

Hard copy reports, records, and files are available for review in district offices.

Additional Information

The Army Corps of Engineers also performs a variety of flood prevention measures. Contact Robert Fletcher for further information.

Financial Assistance

Organization

Department of Education

Contact

Charles Hansen, Director
Impact Aid Programs
US Department of Education
400 Maryland Avenue, SW
Washington, DC 20202-6244
Telephone: (202) 732-3637
FTS: 732-3637

Description

The Department of Education provides disaster aid to schools affected by Presidentially-declared disasters. Administrative records contain the amount of payments to states, counties, and Congressional districts. The Department of Education also produces an annual report which includes information on disaster aid to schools, such as: authorizing legislation, assistance that may be provided, administration of funds, appropriations, and a summary of the disaster assistance.

Format

Printed annual reports and case files.

Availability

Contact the Impact Aid Programs.

Additional Information

Administration of Public Laws 81-874 and 81-815 HEW Publication No. (OC) 78-07300, annual report of the Secretary of Education, Department of Education, Washington, DC. The section on disaster aid to schools contains several pages of narrative, and tables of state expenditures. For sale by the US Government Printing Office, Washington, DC 20402.

Financial Assistance

Organization

Farmers Home Administration

Contact

Aimee Fisher
Freedom of Information Officer
Farmers Home Administration
US Department of Agriculture
Washington, DC 20250
Telephone: (202) 382-9638
FTS: 382-9638

Description

The Farmers Home Administration, FHA, makes emergency loans to family farmers, ranchers, and aquaculture operators to cover losses resulting from natural disasters. Loan funds may be used for annual farm operating

expenses, and other essentials for returning disaster victims' farming operations to financially sound bases. The FHA collected, catalogued, and computerized records of loans disbursed over the last 10 to 15 years by date, county, and disaster. Computerized data, from 1973 to present, are available on outstanding loans by county and state, including information on obligations, average size of loans, applications received, active borrowers, and delinquent borrowers. Summaries of emergency loans by state and disaster designation code (M-Presidential, S-Secretarial, N-Administrator's) are available for each fiscal year since 1972.

Format

Computerized records of outstanding loans and hard copy summaries of emergency loans are updated annually.

Availability

Computerized records for outstanding loans and hard copy summaries of emergency loans are available for the cost of duplication.

Additional Information

Farmer Program Statistics, 1939-1975, US Department of Agriculture, Farmers Home Administration, Washington, DC, 1977.

Farmer Program Statistics, 1976-1977, US Department of Agriculture, Farmers Home Administration, Washington, DC 1978.

Status of Loan and Grant Obligations/Allotments or Distribution, Report 205, US Department of Agriculture, Farmers Home Administration, Finance Office, Washington, DC.

Report of Emergency Loans Made Pertaining to Disasters through Month Ending September, 1988. Report 509. US Department of Agriculture. Farmers Home Administration. Finance Office. Washington, DC. Annual summary of emergency loans by state and designation code.

Financial Assistance

Organization

Small Business Administration

Contact

Bernard Kulik, Deputy Associate Administrator for Disaster Assistance
US Small Business Administration
1441 L Street, NW, Room 820
Washington, DC 20416
Telephone: (202) 653-6879
Telex: 202-653-2262

Description

The US Small Business Administration, SBA, provides long-term, low-interest loans to disaster victims, which enable them to repair or replace their damaged property. SBA is the primary Federal resource for this type of disaster assistance. SBA provides Home Disaster Loans for homeowners or renters to repair or replace disaster-related damage to homes or

personal property. SBA provides Business Physical Disaster Loans for businesses to repair or replace disaster-related damaged property, including inventory and supplies. SBA also provides Economic Injury Disaster Loans for small agricultural cooperatives and businesses to assist them through the disaster recovery period. These loans are available only if the business or its owners cannot obtain similar assistance from non-government sources.

Format Loans.

Availability Contact the SBA.

Medical

Organization National Disaster Medical System

Contact Loretta Gainor, Director
National Disaster Medical System
5600 Fishers Lane
Rockville, MD 20857
Telephone: (301) 443-4893

Description The National Disaster Medical System, NDMS, deals with medical care needs in disasters of great magnitude. Based on the concepts of the Civilian Military Contingency Hospital System, NDMS is a cooperative effort of the Department of Health and Human Services, the Department of Defense, the Federal Emergency Management Agency, the Veterans Administration, state and local governments, and the private sector. NDMS comprises 150 disaster medical response units to assist civilian casualties, anevacuation system, and 100,000 pre-committed beds in hospitals throughout the US.

Format Technical assistance and hard copy documents.

Availability Contact NDMS directly.

Additional Information

Disaster Medical Response Catalogue of Courses, Media Resources & Information Materials. National Disaster Medical System.

Disaster Medical Assistance Team Organization Guide. National Disaster Medical System.

DISASTER RELIEF

Psychological

Organization Center for the Study of Psychological Response in Disaster Emergencies

Contact Michael Blumenfield, Director
Center for the Study of Psychological Response in Disaster Emergencies
New York Medical College
Psychiatric Institute, Room B006
Valhalla, NY 10595
Telephone: (914) 285-7618

Description The Center for the Study of Psychological Response in Disaster Emergencies, PRIDE, consists of multi-disciplinary consultants who deal with the psychological components of disasters and related issues.

Format Consultants are available depending on the situation.

Availability By arrangement.

Search & Rescue

Organization Search and Rescue Dog ALERT

Contact Judy Graham, Editor
Search and Rescue Dog ALERT
PO Box 39
Somerset, CA 95684
Telephone: (916) 621-1833

Description Search and Rescue, SAR, dogs help locate victims of a wide range of hazards such as, avalanches, plane crashes, and urban disasters. ALERT acts as a primary source of information on SAR dogs in the US and worldwide. SAR ALERT publishes its newsletter, ALERT, eight times per year.

Format SAR ALERT offers a newsletter, as well as technical assistance, such as answering questions and making referrals.

Availability

A subscription to ALERT is $6.50 per year in the US, $8 per year in Mexico and Canada, and $10 per year in other foreign countries.

Additional Information

Hardy, Marian. National Search and Rescue Dog Directory. 1988. Search and Rescue: Somerset, CA.

See also the following appendices:
- Emergency Management
- Small Business Administration
- World Health Organization

Disaster Management: Africa

Organization

Panafrican Center for Emergency Preparedness and Response

Contact

Sandro Calvani, Director
Panafrican Center for Emergency Preparedness and Response
PO Box 3050
Addis Ababa
Ethiopia
Telephone: 002511-515460 / 002511-514416
Telex: 21548 WHO/EPR Addis Ababa
Telefax: 002511-514416 / 002511-514682 (attn: WHO/EPR)

Description

In 1989 the World Health Organization, WHO, opened the Panafrican Center for Emergency Preparedness and Response, EPR. The EPR works to strengthen the emergency preparedness and response of WHO member states in Africa. EPR recognizes that effective disaster mitigation can only be achieved as part of a broader program of national development. EPR publishes disaster reports and **The Ark**--their newsletter, maintains a library, and conducts training in disaster management. EPR will improve the efficiency of emergency health response, sponsor field research, assess needs, examine policy, and develop emergency plans for hazard-prone areas on the continent.

Format

Technical assistance and hard copy publications.

Availability

To learn more about EPR's program for promoting disaster management in Africa and to obtain the Center's newsletter, contact Sandro Calvani.

Disaster Management: The Americas

Organization

Organization of American States

Contact

Stephen Bender, Project Chief
Organization of American States
1889 F Street NW
Washington, DC 20006
Telephone: (202) 458-3005
Telex: 64128
Telefax: (202) 458-3967

Description

The Organization of American States, OAS, provides technical assistance and publications on natural hazards, natural resources, population, and infrastructure.

Format Hard copy documents and maps, and geographic information systems compatible diskettes.

Availability Information is available to OAS members. Contact the headquarters listed above for more information.

Disaster Management: Central America

Organization Center of Coordination for Prevention of Natural Disasters in Central America

Contact Aristoteles Vergara Munoz, Executive Secretary
Center of Coordination for the Prevention of Natural Disasters in Central America
7a Ave. 14-57, Zona 13
01013 Guatemala
Telephone: (502) 2-348317
Telex: (502) 2-348318

Description The Center of Coordination for the Prevention of Natural Disasters in Central America provides financial support for risk analysis on: earthquakes, volcanic eruptions, floods, and landslides in Central America. The Center maintains a catalog of Central American earthquakes from 1904 through 1987.

Format Hard copy.

Availability Information is available upon request.

Additional Information The Center will provide information on Central America's risk-reduction process.

Disaster Management: International

Organization

CSIRO, Division of Wildlife and Ecology

Contact

John Ive, Manager
Division of Wildlife & Ecology
CSIRO
PO Box 84
Lynearm, ACT 2602
Australia
Telephone: [61] (62) 421303
Telex: [61] (62) 413343

Description

CSIRO operates a computer-based, decision support system for rapid definition and profiling of impact zones associated with natural disasters and other catastrophic events. The support system accesses national data sets which can be used for pre- and post-disaster planning.

Format

The computer package is being developed for IBM computers.

Availability

Currently, a demonstration version is available. Packages will be available for sale in 1990.

Additional Information

Contact John Ive for further information.

Disaster Management: International

Organization

United Nations Disaster Relief Coordinator

Contact

John Tomblin, Chief
Prevention and Support Services Branch
UNDRO: Office of the United Nations Disaster Relief Coordinator
Palais des Nations
1211 Geneva 10
Switzerland
Telephone: [41] (22) 34.60.11
Telex: [41] 28148 undr ch
Telefax: [41] (22) 33.56.23

Philippe Boullé, Director
UNDRO
United Nations, Room S-2935
New York, NY 10017
Telephone: (212) 963-5705

Emergency Preparedness

Description

The United Nations Disaster Relief Coordinator, UNDRO, maintains a computer information network known as UNIENET, United International Emergency Network. UNIENET links together a network of computers, and contains information from other United Nations bodies, governmental agencies, and nongovernmental groups. The network places members of the worldwide, disaster management community in direct contact with each other, and provides them instantaneously with both background and operational disaster-related information. A computer terminal or personal computer allows access to the network.

UNIENET provides electronic mail service which allows you to exchange messages via computer with others having an interest in disaster management. UNIENET offers an electronic Bulletin Board of information on disaster-related subjects, and several data bases of detailed disaster-related information.

Format

On-line.

Availability

Contact UNDRO for costs.

Additional Information

Directory of Training Institutions for Disaster Management. 1989. UNDRO: Geneva.

Disaster Management: US

Organization

Department of Agriculture

Contact

Ted Maher, Program Leader
Extension Service
US Department of Agriculture
3865 South Building
Washington, DC 20250
Telephone: (202) 447-7185

Description

Agricultural extension educators provide local government officials with courses on establishing basic risk management programs for specific risks and natural hazards.

Format

Manuals, handbooks, workbooks, courses, and video tapes.

Availability

Courses and materials are available upon request.

Disaster Management: US

Organization

Federal Emergency Management Agency

Contact

Project Officer
Integrated Emergency Management Information System
Federal Emergency Management Agency
500 C Street, SW
Mail Stop FCP 626A
Washington, DC 20472
Telephone: (202) 646-3923

Description

The Federal Emergency Management Agency, FEMA, created the Integrated Emergency Management Information System, IEMIS. IEMIS is part of a comprehensive National Emergency Management System. IEMIS combines state-of-the-art communications, computer simulations, and color graphics to support decision-making in emergency management. IEMIS integrates conventional emergency response resources with new automated capabilities for single users or coordinated groups. FEMA headquarters in Washington, DC, ten regional FEMA offices, and the National Emergency Training Center, each house IEMIS work stations. FEMA also makes the system accessible to local, state, and other Federal officials for use according to their special needs. Emergency management officials may use a variety of equipment, from personal computers to minicomputers, to interact with IEMIS. IEMIS will give these officials a common basis for sharing data, cooperative planning, and interaction during simulated emergencies. These activities will also pave the way for the use of IEMIS in coordinating operations during real emergencies.

The goals of IEMIS are to: apply state-of-the-art automated data processing technology to emergency management; establish a dedicated, interactive computer system for the nation's emergency management community; foster the use and maintenance of integrated data bases among emergency managers and; encourage the use of similar technology for training, planning and emergency operations. IEMIS software includes computer utilities for: text processing, electronic communications, data base development and management, file management, business graphics, access to National Weather Service data; computer models for meteorological conditions, radiological dosage, heat radiation hazard, evacuation dynamics, and the development of expert systems; interactive color display and editing of an extensive national map data base which forms the background images for all model runs.

Format

IEMIS combines of computer hardware and software. The hardware core is located in a central minicomputer at FEMA headquarters in Washington, DC.

Availability

Contact the IEMIS project officer.

Additional Information

"Integrated Emergency Management Information System: Questions and Answers." Federal Emergency Management Agency. 1987. Washington, DC.

Disaster Management: US

Organization

University Center for Social and Urban Research

Contact

Pamela Snyder, Project Manager
University Center for Social and Urban Research
University of Pittsburgh
1701 Cathedral of Learning
Pittsburgh, PA 15260
Telephone: (412) 624-5524

Description

The Crisis Response Conclusion Retrieval System, CRCRS, is a data base management system that accesses conclusions derived from documents concerning behavior and attitudes associated with emergency management and disaster research. The primary output from CRCRS is conclusions and bibliographic information covering approximately the last twenty years. Conclusions are accompanied by information on--the methodology of the documents from which the conclusions were drawn, and assessments to help one decide how much confidence to place in each conclusion.

Format

CRCRS is available on 18 high density, double sided disks. The DOS command Backup was used to copy the system onto the diskettes from the subdirectory CRCRS.

Availability

In order to install CRCRS on your machine, you will need at least 20 megabytes of space on your hard disk and a high density drive. First, you must set up a subdirectory called CRCRS, then use the DOS command Restore to copy the files from the diskettes into the subdirectory on your hard disk area. The diskettes are numbered, and must be restored in sequence, 1 to 18. Please refer to your MS-DOS manual for the proper commands. Documentation for CRCRS is provided with the program.

The Federal Emergency Management Agency will make CRCRS available to the research community. For details, contact:

Ralph Swisher
Federal Emergency Management Agency
Room 602
500 C Street, SW
Washington, DC 20472
Telephone: (202) 646-3561

Additional Information

In addition, searches for conclusions on specific topics may be requested from the Center for Social and Urban Research from 9:00 am to 5:00 pm EST, weekdays. A hard copy of the conclusion printout will be supplied to the individual without charge. For more information contact Pamela Snyder at the Center for Social and Urban Research at the above address.

Emergency Coordinator

Organization

Department of Agriculture

Contact

Leonard Mandrgoc, Emergency Coordinator
Office of Personnel
Emergency Programs
US Department of Agriculture
Room S-302, S Building
Washington, DC 20250-9600
Telephone: (202) 447-5711
FTS: 447-5711

Description

The Emergency Coordinator directs US Department of Agriculture's, USDA, crisis preparedness and response activities for natural and human-made disasters and civil defense. Key functions include maintaining the continuity of government in a national emergency, response, and recovery. Regional, state, and county emergency staffs assist the national office.

Format

The Emergency Coordinator does not collect natural hazards data, but serves as a point of contact for USDA emergency preparedness.

Availability

Contact Leonard Mandrgoc.

Emergency Coordinator

Organization

Department of Commerce

Contact

R. Bruce Pelton, Emergency Coordinator
Office of the Secretary
Emergency Planning and Coordinating Division
14th & Constitution Avenue, Room 683A
US Department of Commerce
Washington, DC 20230
Telephone: (202) 377-3627
FTS: 377-3627

Emergency Preparedness

Description

The Emergency Coordinator provides planning assistance to Department of Commerce offices which are developing emergency preparedness plans and programs. The Emergency Coordinator monitors, reviews, and reports on all such plans and programs. The Coordinator, the primary contact for emergency programs within the Department of Commerce, maintains lists of program supervisors, personnel, and technical experts for emergency preparedness activities at the national and regional levels.

Format

The Emergency Coordinator does not collect natural hazards data, but may be a point of contact.

Availability

Contact Bruce Pelton.

Additional Information

"The Contact Guide: National Security Emergency Preparedness." July 1988. FEMA Doc.FPG6.101.

Emergency Coordinator

Organization

Department of Labor

Contact

William McLoughlin, Emergency Coordinator
US Department of Labor
200 Constitution Avenue, NW
Washington, DC 20210
Telephone: (202) 523-6414
FTS: 523-6414

Description

The Department of Labor's Emergency Coordinator does not collect or maintain data on natural hazards, but does participate in various emergency preparedness planning functions, including the Earthquake Hazard Reduction Program. The Department, being more oriented toward economic and nuclear crises, has limited responsibilities in natural disasters. The Emergency Coordinator could serve as a point of contact for information.

Format

Individual contact.

Availability

Contact William McLoughlin.

Emergency Coordinator

Organization Department of Transportation

Contact Lloyd Milburn, Emergency Coordinator
Office of Emergency Transportation
US Department of Transportation
400 Seventh Street, SW
Washington, DC 20590
Telephone: (202) 366-5270
FTS: 366-5270

Description The Emergency Coordinator develops, coordinates, and reviews policies, plans, and programs for attaining and maintaining a high state of civil transportation. Emergency preparedness policies include: all emergencies which affect national defense at a national or regional level, including emergencies caused by natural disasters and other crisis situations. Specifically, the Emergency Coordinator oversees damage assessments to the civil transportation system from military attacks, natural disasters, or other crises, and prepares plans and procedures for its repair.

Format The Emergency Coordinator does not collect data, but maintains lists of national, regional, and field-level emergency staffs.

Availability Contact Lloyd Milburn.

Emergency Education: The Americas

Organization Emergency Preparedness & Disaster Relief Coordination Program

Contact Claude de Ville de Goyet, Chief
Emergency Preparedness & Disaster Relief Coordination Program
Pan American Health Organization
525 Twenty-third Street, NW
Washington, DC 20037
Telephone: (202) 861-4325
Telex: 201535(PED)
Telefax: (202) 775-4578

Description The Pan American Health Organization's, PAHO, Emergency Preparedness Program produces disaster preparedness training materials for member countries in Latin America and the Caribbean. PAHO also maintains Disaster Preparedness Update: A Computerized Index of Emergency Preparedness and Disaster Relief Bibliography. This computerized guide provides information on documents collected by PAHO's Emergency

Preparedness and Disaster Relief Offices. Both published and unpublished books and reports in English, French, and Spanish are available.

Format

Materials are print scientific publications, slide programs, video presentations, and a computerized index.

Availability

Material may be requested directly from PAHO.

Additional Information

Write PAHO for a list of available material.

Emergency Education: The Americas

Organization

Partners of the Americas

Contact

Howard Spielgelman, Director
Emergency Preparedness Program
1424 K Street, NW, Suite 700
Washington, DC 20005
Telephone: (202) 628-3300
Telefax: (202) 628-3306
Telex: 64261 NAPAR

Description

Partners of the Americas, a non-profit organization created in 1964, carries out grass-roots, self-help projects, via volunteers, which enhance the economic, social and community development of the Americas. Through Partners of the Americas, US states are paired with Latin American and Caribbean countries to form "partnerships," for developing projects in: agriculture, community development, special education, university linkages, women and youth serving programs, cultural exchanges, and in many other areas. In 1984, Partners of the Americas initiated an Emergency Preparedness Program to promote the exchange and development of emergency preparedness professionals and programs throughout the hemisphere. The program offers the exchange of emergency management professionals and information, small assistance grants, and emergency preparedness training. Partners of the Americas also provides disaster assistance, usually in the form of technical assistance and small projects which focus on rehabilitation and recovery needs.

Format

Partners provides grants which partially cover travel expenses for volunteers to provide technical assistance to designated "partner areas" of Latin America and the Caribbean, and for Latin American and Caribbean emergency management professionals to visit the US.

Availability

Contact Partners at the above address or via computer: TYMNET:(On Tyme)DNA.NAPA.

Emergency Education: Canada

Organization

Emergency Preparedness Canada

Contact

Mike Theilmann, Information Officer
Emergency Preparedness Canada
122 Bank Street
Jackson Building, 2nd Floor
Ottawa, Ontario K1A 0W6
Canada
Telephone: (613) 991-7038

Description

Emergency Preparedness Canada maintains a range of free publications, on various emergency preparedness topics, and a small selection of videos. Publications are available which describe its mandate and activities. Videos on severe storms, earthquakes, and general emergency preparedness are available. Printed materials include: Emergency Preparedness Digest, a quarterly magazine covering the whole spectrum of emergency planning; Self-Help Advice Booklets on earthquakes, floods, severe storms, winter power failures, winter driving, and woods safety tips; and reports on specific disasters or topics.

Format

Hard copy and audio-visuals.

Availability

Publications are available free of charge upon request. Audio-visual material is sent out on a loan basis.

Emergency Education: Canada

Organization

Simon Fraser University

Contact

Peter Anderson
Department of Communication and Continuing Studies
Simon Fraser University
Burnaby, BC V5A 1S6
Canada
Telephone: (604) 291-3687
Telefax: (604) 291-4045

Description

Under the sponsorship of Emergency Preparedness Canada, Simon Fraser University, SFU, in Burnaby, British Columbia, established a microcomputer-based electronic bulletin board on emergency preparedness. This newly established, 1989, project intends to stimulate networking and regular exchange of ideas and information among members of the emergency preparedness community. The system's structure will be continually modified to reflect users' needs. Currently, the bulletin board

encompasses seven areas of interest: hazards/risks, emergency planning, emergency communications, health services, emergency social services, search and rescue, and training/education.

The content of each area will be determined, in part, by user input. However, additional material will be obtained from other sources such as the University of Delaware's Disaster Research Center computer network, SFU research, and conference papers. In addition, it is anticipated that the bulletin board will be used to conduct conferences among persons involved in emergency management who, because of scheduling or financial restrictions, would otherwise be unable to meet.

Format

On-line.

Availability

The bulletin board is free to users, except where long distance telephone charges apply.

Additional Information

For more information on the system and a description of the sign-on procedures, contact Peter Anderson.

Emergency Education: Caribbean

Organization

Pan Caribbean Disaster Preparedness and Prevention Project

Contact

Jennifer Roman, Document Specialist
Pan Caribbean Disaster Preparedness and Prevention Project
PO Box 1399
America Road
St. John's
Antigua
Telephone: (809) 462-4432/35
Telex: 2195 AK
Telefax: (809) 462-4431

Description

The Pan Caribbean Disaster Preparedness and Prevention Project, PCDPPP, maintains a specialized collection of material pertaining to all aspects of disasters with emphasis on the Caribbean. PCDPPP collects material of all formats, and particularly public awareness and education material. PCDPPP's goal of disseminating disaster preparedness information reaches Caribbean countries and territories which are building their own collections of disaster information.

Format

Monographs, periodicals, pamphlets, videotapes, audio-cassettes, slides and 16mm films.

Availability

While data cannot be accessed directly by computer, queries may be sent to PCDPPP by electronic mail through UNIENET. The call sign is UNXO15.

Emergency Preparedness

Additional Information

Natural Hazards of the Caribbean. Diane Bertrand. Pan Caribbean Disaster Preparedness and Prevention Project. June 1988.

Emergency Education: Pacific Islands

Organization

East-West Center

Contact

Charles Lepani, Director
The Pacific Islands Development Program
Disaster Preparedness and Rehabilitation Project
East-West Center
University of Hawaii
1777 East-West Road
University of Hawaii
Honolulu, HI 96848
Telephone: (808) 944-7745

Description

The Pacific Islands Development Program, PIDP, at the East-West Center helps meet the special development needs of the Pacific Islands through cooperative research, education, and training. A major objective of the Program has been to provide quality in-depth analytical studies on specific priority issues as identified by the Pacific Island leaders and people. The studies aim to provide leaders with detailed information and alternative strategies on policy decisions. The Program publishes books and reports on natural hazards, including, Dealing With Disaster: Hurricane Response in Fiji, Procedures and Guidelines for Disaster Preparedness and Response, and Post-Disaster Assessment: Management.

Format

Hard copy.

Availability

Contact the PIDP at the above address for a publication list. Some publications may be accessed through the interlibrary loan system.

Emergency Education: US

Organization

Federal Emergency Management Agency

Contact

Emergency Education Network
Federal Emergency Management Agency
National Emergency Training Center
Emmitsburg, MD 21727
Telephone: (301) 447-1068

Emergency Preparedness

Description

The Federal Emergency Management Agency's, Emergency Education Network, EENET, presents satellite videoconferences covering topics such as evacuation of the disabled, communicable disease issues, hazardous materials, and fire prevention and response. The broadcasts, which are one-way video, two-way audio, are transmitted on C band via satellite Spacenet 1, transponder 1, 102 degrees W. Viewers need access to a satellite dish receiver--available through colleges, local cable operators, hotels, and private owners, and a telephone with access to toll-free lines. The videoconferences are in the public domain, and continued rebroadcast is encouraged by EENET.

Format

Satellite communications.

Availability

Videotapes and program transcripts of each broadcast are also available for a modest cost.

Additional Information

For more information on these programs, contact EENET.

Emergency Education: Washington

Organization

Mothers for HELP

Contact

Beverly Carter
Mothers for Help
PO Box 8399
Kirkland, WA 98034
Telephone: (206) 820-6313

Description

Mothers for HELP wants to Help Everyone Learn Preparedness. Volunteers work with local fire departments and community groups in the state of Washington to establish neighborhood command centers and teach household preparedness. They work closely with local school districts to devise evacuation plans, provide I.D. cards for school children, and plan shelter programs to house children whose parents are unavailable after a disaster. Mothers for HELP also trains individuals in first aid, search and rescue skills, and the placement of survival items in schools, churches, and fire departments throughout their neighborhoods.

While acknowledging the lack of electronic communication in the aftermath of a major earthquake, Mothers for HELP created a "signal ribbon" method of informing rescue workers of the status of members of each household in a community. "Signal ribbons" save rescue workers time. A family which hangs a green ribbon on the front door indicates that all members are safe. A yellow ribbon signifies the presence of an injured person, and a red ribbon denotes a person in a life-threatening situation.

Format

Community activism.

Emergency Preparedness

Availability Send a self-addressed stamped envelope for further information.

Health: Europe

Organization European Center for Disaster Medicine

Contact

S. Gunn, Director
La Panetiere
1261 Bogis Bossey
Switzerland

Description

The European Center for Disaster Medicine, an intergovernmental, international organization, was established in 1986 under the aegis of the Council of Europe. The Center is situated in the Republic of San Marino. The Center promotes the prevention and mitigation of natural and technological disasters. The Center conducts training, supports research, coordinates health assistance, and provides disaster information. The Center works in cooperation with the World Health Organization, Office of the United Nations Disaster Relief Coordinator, universities, and civil protection associations.

Coordination of medical disaster assistance for Europe is a top priority. The Center promotes interdisciplinary and international cooperation in medical assistance and disaster management.

The Center's information program consists of four components:

1) collects information and enters it into computerized files;
2) maintains a data bank which facilitates quick access to teaching materials and bibliographic information on disaster management;
3) maintains a specialized library of disaster literature;
4) publishes and distributes teaching materials, manuals, papers, and proceedings which reflect the concerns and activities of the Center.

Format Technical assistance, hard copy, and computerized materials.

Availability Interested persons are invited to contact S. Gunn or the Center.

Additional Information

The European Center for Disaster Medicine itself is located at the:
State Hospital
47031 Republic of San Marino
Telephone: 39 (0) 549-994535 / 906244
Telefax: 39 (0) 549-903706

Health: International

Organization World Health Organization

Contact
K. Elo, Head
Emergency Preparedness and Response
World Health Organization
20 Avenue Appia
CH 1211 Geneva 27
Switzerland
Telephone: [41] (22) 791-2777
Telex: [41] 5416 OMS CH
Telefax: [41] (22) 791-07-46

Description The World Health Organization's Emergency Preparedness and Response Program, EPR, maintains a collection of documents on emergency preparedness and disaster relief, specifically health and disasters.

Format Hard copy documents, slide sets, videotapes, technical assistance.

Availability Contact K. Elo of EPR.

Health: US

Organization National Institute of Mental Health

Contact
Chief
Emergency Services Branch
National Institute of Mental Health
5600 Fishers Lane, Room 7C-02
Rockville, MD 20857
Telephone: (301) 443-4735

Description The Emergency Services Branch of the National Institute of Mental Health produces disaster response training materials for human service workers, mental health workers, and emergency managers which prepare them for the psychosocial issues of disasters.

Format Monographs and audio-visuals.

Availability Many single copies of monographs are available free of charge, and copies of films may be loaned free of charge.

Emergency Preparedness

Additional Information

Contact the Office of Scientific Information, Public Inquiries, National Institute of Mental Health, 5600 Fishers Lane, Room 15C-05, Rockville, MD 20857 for further information about obtaining a list of monographs, and audio-visuals, as well as ordering details.

Nuclear Reactor Safety Research

Organization

Nuclear Regulatory Commission

Contact

Public Affairs Office
Nuclear Regulatory Commission
Washington, DC 20555
Telephone: (301) 492-0240
FTS: 492-0240

Description

The Nuclear Regulatory Commission, NRC, provides detailed reports on nuclear facility safety, including assessment of natural hazards.

Format

Printed reports, documents, applications. Congressional testimony.

Availability

Materials are available for review in the public documents room of the NRC.

Shelter Data Base

Organization

Federal Emergency Management Agency

Contact

Lida Whitaker
Federal Emergency Management Agency
500 C Street, SW, Room 603
Washington, DC 20472
Telephone: (202) 646-3061
FTS: (202) 646-3061

Description

The Shelter Data Base results from three surveys:

1) National Facility Survey: identifies fallout shelters in buildings nationwide.
2) Reception and Care Survey: identifies facilities which can provide temporary lodging for evacuees from major disasters including nuclear attack.
3) Natural Hazard Vulnerability Survey: identifies the relative vulnerability

of buildings exposed to earthquakes, high winds, hurricanes, tornadoes, and floods. Essentially all structures nationwide are surveyed with the exception of private residences.

Format

Computerized.

Availability

Costs depend on the nature of the request and user. Requests should be sent to the Federal Emergency Management Agency Computer Center.
Eugene Ushinski
Federal Support Center
5321 Riggs Road
Gaithersburg, MD 20822
Telephone: (301) 926-5305

Warning System

Organization

Geological Survey

Contact

Assistant Director
Engineering Geology Department
US Geological Survey
106 National Center
Reston, VA 22092
Telephone: (703) 648-4422
FTS: 959-4422

Description

The Department of Engineering Geology coordinates the US Geological Survey's warning and preparedness system. This warning system identifies geologic-related hazards The USGS, under the Disaster Relief Act of 1974 and executive orders in 1975 and 1976, was delegated this responsibility. The warning system coordinates: the identification of hazards through the work of field scientists, the evaluation of the potential severity of hazards, the determination of USGS policy for issuing public notifications concerning hazards, and the coordination of information releases with appropriate state and local governments.

Format

Printed press releases, letters transmitting hazard notices, and supporting documents are available for the cost of duplication from address below. Published reports are available through the US Geological Survey's distribution centers.

Emergency Preparedness

Availability

Contact the Engineering Geology Department.

Additional Information

Federal Register Statement, Vol.42, No.70, pp. 19292 to 19296, April, 1977. Procedures and definition of USGS responsibilities.
"Revision of Terminology for Geologic Hazard Warnings," Vol. 99, No. 21, January 31, 1984.

Warning System

Organization

National Weather Service

Contact

Donald Wernly, Chief
Warning and Forecast Branch
National Weather Service
8060 13th Street, Room 1326
Silver Spring, MD 20910
Telephone: (301) 427-8090
FTS: 427-7342

Description

The National Weather Service provides hazard awareness materials such al brochures, films, videotapes, and slide sets for the general public. These materials cover the following hazards: hurricanes, fire weather, heat waves, tornadoes, floods, lightning, severe storms, tsunamis, winter storms, and space forecasts for solar and geomagnetic activity.

Format

Hard copy and audio-visual materials.

Availability

Contact the national logistics supply center for the National Weather Service in Kansas City, MO 64131.

See also the following appendices:

- Emergency Management
- Army Corps of Engineers
- FEMA
- Small Business Administration
- World Health Organization

Arid Lands

Organization

Arid Lands Information Center

Contact

Manager
Arid Lands Information Center
Office of Arid Lands Studies
University of Arizona
845 North Park Avenue
Tucson, AZ 85719
Telephone: (602) 621-7897
Telex: 1561507 ARID UT

Description

The Arid Lands Information Center, ALIC, builds, maintains, and provides public access to their arid lands document collection of 30,000 items. ALIC provides reference services to researchers, US and other governmental agencies, international organizations, and the general public. ALIC disseminates and exchanges information on the nature, development, and management of arid lands. The Center publishes The Arid Lands Newsletter, special bibliographies, conference proceedings, environmental profiles, and organizational directories. In 1988 ALIC prepared Arid Lands Research Institutions: A World Directory.

Format

Hard copy documents and computerized data bases.

Availability

Contact ALIC for a publications list. Office hours are 8 am to noon and 1 pm to 5 pm.

Disaster Management: Australia & Pacific Region

Organization

Disaster Management Studies Center

Contact

Neil Britton, Director
Disaster Management Studies Center
Cumberland College of Health Sciences
East Street
PO Box 170
Lidcombe, Sydney NSW 2141
Australia
Telephone: [61] (2) 646-6444
Telefax: [61] (2) 646-4853

Description

Cumberland College of Health Sciences in Sydney, Australia established the Disaster Management Studies Center, DMSC, because of a need for

research and training in disaster management. The Center has seven objectives:

1) To promote disaster research and teaching in the southern hemisphere and to generate greater awareness of the need for emergency management;
2) To develop curricula and training materials relating to disaster and emergency health management;
3) To provide expert advice on matters in these areas;
4) To conduct research throughout Australia, the western Pacific, and other regions;
5) To collaborate with existing institutions to develop greater expertise in disaster management;
6) To collect and disperse pertinent information; and
7) To communicate and work with other experts, institutions, and agencies involved in disaster and health emergency programs to promote disaster management throughout the region.

These objectives result in five activities: research, teaching, training, disseminating information, and consulting. Several Cumberland College faculty members are involved in the Center, and the college offers undergraduate courses in disaster management.

Format

Technical assistance, hard copy materials.

Availability

For further information about the DMSC, contact Neil Britton.

Disaster Management: International

Organization

Disaster Management Center

Contact

Don Schramm, Director
Disaster Management Center
University of Wisconsin at Madison
Department of Engineering Professional Development
432 North Lake Street
Madison, WI 53706
Telephone: (800) 262-6243 or (608) 262-2061
Telex: 265452

Description

Founded in 1982, the Disaster Management Center, DMC, offers educational programs on the management of international, natural disasters and emergencies that involve refugees and displaced persons. Although the DMC focuses on international disaster management, one may apply findings to domestic emergencies. DMC offers 15 self-study course modules for use in hazard-prone areas outside the United States. Some courses are available in Spanish, and the DMC plans to translate its course modules into other languages.

Format Hard copy and a video series.

Availability Contact DMC at the above address for course descriptions and applications.

Disaster Management: The Netherlands

Organization Disaster and Emergency Reference Center

Contact
Krisno Nimpuno, Director
Disaster and Emergency Reference Center
PO Box 5048
2600 GA DELFT
The Netherlands
Telephone: (015) 78-44-04
Telex: 38151 butud nl for derc
Telefax: (015) 76-18-55 for derc

Description The Disaster and Emergency Reference Center, DERC, studies both human-made and natural disasters in developing countries. Through such studies DERC aims to improve the quality of disaster mitigation efforts. DERC is developing a collection of disaster preparedness, prevention, mitigation, relief, and rehabilitation case studies. Currently, DERC is compiling a directory of Dutch experts and institutions related to disaster mitigation.

Format Hard copy and technical assistance.

Availability Please contact Krisno Nimpuno.

Additional Information "DERC: Disaster & Emergency Reference Center." (Pamphlet).

Disaster Management: New Zealand

Organization

The National Civil Defense Resource Center

Contact

Doug Bent, Civil Defense Commissioner
Ministry of Civil Defense
The National Civil Defense Resource Center
PO Box 5010
Wellington
New Zealand
Telephone: [64] (04) 738-699
Telex: [64] CIVDEX NZ3410
Telefax: [64] (04) 712-197

Description

The National Civil Defense Resource Center maintains bibliographic and audio-visual materials on civil defense for research, planning, and educational purposes. Most information held relates to New Zealand although the Center also holds much overseas information. Specifically, the Center maintains publications and periodicals on civil defense, reports on past disasters and civil defense emergencies, civil defense plans, and instructional and public awareness materials. All holdings are currently being catalogued on a personal computer data base.

Format

Hard copy and audio-visual.

Availability

Make requests for information by writing to Doug Bent.

Additional Information

New Zealand Ministry of Civil Defense. "Facts: The Who, Why and How of New Zealand's Civil Defense System." (Pamphlet).

Disaster Research: Australia

Organization

Australian Counter Disaster College

Contact

Australian Natural Disaster Organization
Australian Counter Disaster College
Mt. Macedon 3441
Victoria
Australia
Telephone: [61] (054) 261-205

Description

The Australian Natural Disaster Organization, ANDO, publishes The Macedon Digest, a newsletter designed to disseminate recent disaster news and views to practitioners. The quarterly newsletter provides managers, planners, trainers, and researchers working on disaster mitigation and civil

defense with problems and topics specific to the Australian and southwest Pacific region.

Format Hard copy newsletter.

Availability The publication is available free to all interested organizations and individuals.

Additional Information Persons interested in receiving or contributing to the newsletter should contact The Macedon Digest at the above address.

Disaster Research: International

Organization Disaster Research Center

Contact

JoAnne Nigg, Director
Disaster Research Center
University of Delaware
Newark, DE 19716
Telephone: (302) 451-6618
BITNET: ACJ00984@UDACSVM.BITNET
INTERNET: ACJ00984@acsvm.acs.udel.edu

Description The Disaster Research Center, DRC, the first of its kind, was established at Ohio State University in 1963, and moved to the University of Delaware in 1985. The Center engages in a variety of sociological and social science research on group and organizational preparations for, responses to, and recovery from community-wide emergencies, particularly natural and technological disasters. Since the Center's inception, there have been over 490 different field studies. The Center has a number of professionals on its staff, and activities are supported by diverse sources: the National Science Foundation, National Institute of Mental Health, Department of the Interior, and the Federal Emergency Management Agency to name a few.

Format Hard copy and electronic mail.

Availability Contact the DRC for availability.

Additional Information Contact the DRC for a list of publications.

Disaster Research: Japan

Organization

National Research Center for Disaster Prevention

Contact

Masataka Kominami, Head of Data Section
National Research Center for Disaster Prevention
Science and Technology Agency
3-1, Tennodai, Tsukuba-shi
Ibaraki-ken, 305
Japan

Description

The National Research Center for Disaster Prevention, NRCDP, promotes synthetic research on technology for natural disasters; collects, analyzes and presents documents related to technology for disaster prevention; maintains large-scale earthquake and rainfall simulators; and dispatches cooperative research officers to related organizations in order to cooperate in their studies. The Center's studies span the field of natural disasters from earthquakes to snowfall damages.

Format

Hard copy and technical assistance.

Availability

Contact Masataka Kominami.

Additional Information

National Research Center for Disaster Prevention. Research Activities of the National Research Center for Disaster Prevention.

Institute of Snow and Ice Studies
National Research Center for Disaster Prevention
187-16, Maeyama, Suyoshi
Omachi, Nagaoka-shi
Niigata-ken, 940 Japan
Telephone: 0258-35-7522
Telefax: 0258-35-0020

Hiratsuka Branch of Oceanographic Studies
National Research Center for Disaster Prevention
9-2, Nijigahama, Hiratsuka-shi
Kanagawa-ken, 254, Japan
Telephone: (81) 0463-32-7159
Telefax: (81) 0463-33-3635

Disaster Research: US

Organization National Research Council

Contact Riley Chung, Director
National Research Council
Division of Natural Hazard Mitigation
Room HA 286
2101 Constitution Avenue
Washington, DC 20418
Telephone: (202) 334-3312

Description The Division of Natural Hazard Mitigation examines various natural hazards, forms of disaster assistance, and related government programs and policies. The Division conducts post-disaster studies worldwide on a variety of natural hazards including: earthquakes, floods, landslides, tornadoes, and hurricanes.

Format Hard copy reports.

Availability Contact Riley Chung for a list of publications and costs.

Disaster Research: US

Organization Wharton Risk and Decision Processes Center

Contact Howard Kunreuther, Director
Wharton Risk and Decision Processes Center
1303 Steinberg-Dietrich Hall
University of Pennsylvania
Philadelphia, PA 19104
Telephone: (215) 898-5688

Description The Wharton Risk and Decision Processes Center increases understanding of disaster potential, and analyzes programs for dealing with them. The Center seeks to discover how people assimilate probabilistic information. The Center's research reaches into the fields of decision sciences, economics, finance, insurance, management, marketing, policy analysis, and psychology.

Format Hard copy and technical assistance.

Availability Contact Howard Kunreuther.

Environmental Research: International

Organization

Datum International

Contact

James Lewis, Director
Datum International
101 High Street
Marshfield, nr. Chippenham
Wiltshire, SN 14 8LT
United Kingdom
Telephone: [44] (225) 891426
Telex: (44) 46625 WECO G

Description

Datum International examines issues dealing with the environment and human settlements. Datum International analyzes regions, communities, locations, buildings, institutions, and systems in relation to natural environments, in particular hazards, accidents, and risk and vulnerability assessments. Datum International publishes books, reports, monographs, bibliographies, and articles. The group also conducts research and training.

Format

Hard copy and technical assistance.

Availability

All documents carry a nominal charge to cover costs of copying and postage. Overseas payments should be made by check at the prevailing London currency, and should include the equivalent of £5.00 to cover bankers' charges.

Additional Information

Contact Datum International for information on their workshops and seminars. Many of their publications are also available from the Disaster Information Service of the Joint Assistance Center, H-65 South Extension 1, New Delhi 110049 India.

Environmental Research: International

Organization

Environmental Protection Agency

Contact

Head Reference Librarian
US Environmental Protection Agency
Information Services and Management Division
Headquarters Library, PM-211A
401 M Street, SW, Room 2904 WSM
Washington, DC 20460
Telephone: (202) 382-5921
FTS: (8) 382-5921

Description The INFOTERRA data base, an international environmental network of 135 countries, serves as an environmental referral organization providing sources, documents, and bibliographic information to inquirers. INFOTERRA comes under the auspices of the United Nations Environment Programme, and in 1975 the US Department of State designated the Environmental Protection Agency as the US National Focal Point for INFOTERRA.

Format Hard copy and technical assistance.

Availability Contact the Environmental Protection Agency.

Environmental Research: US

Organization INFORM

Contact Jerri McDermott, Publications Manager
INFORM
381 Park Avenue South
New York, NY 10016
Telephone: (212) 689-4040

Description INFORM, a nonprofit environmental research and educational organization, identifies and reports on practical actions for the preservation and conservation of natural resources and public health. INFORM's current research focuses on such critical environmental issues as hazardous waste reduction, garbage management, urban air pollution, and land and water conservation. INFORM Reports is the group's bimonthly newsletter. In addition, more than 31 reports are available, including Garbage Management in Japan, Tracing a River's Toxic Pollution, and Controlling Acid Rain.

Format Hard copy.

Availability Books may be purchased at catalog prices plus $2.50 for postage and handling. A subscription to INFORM Reports costs $25 per year.

Environmental Research: US

Organization University of Illinois at Urbana-Champaign

Contact Deanna Glosse, Project Coordinator
Environmental Technical Information System
University of Illinois at Urbana-Champaign
1003 West Nevada
Urbana, IL 61801
Telephone: (217) 244-5359

Description The Environmental Technical Information System, ETIS, a collection of information systems, assists planners and decision makers in making better and more informed decisions. Their three primary programs are: economic impact forecast system, computer-aided environmental legislative data system, and soils systems. Environmental Information Connection, a data base search service is also available through ETIS. The staff can assemble bibliographies, search environmental topics, or supply contact names of environmental organizations or businesses.

Format Hard copy and on-line data bases.

Availability Users pay a one-time $200 subscription fee, an annual $20 maintenance fee, and are billed monthly for connect charges at $90 per hour, pro-rated by the minute. Staff time is billed at $25 per hour.

Industrial Crisis

Organization Industrial Crisis Institute

Contact Paul Shrivastava, Executive Director
Industrial Crisis Institute, Inc.
649 East 19th Street
Brooklyn, NY 11230
Telephone: (718) 859-3435

Description The Industrial Crisis Institute is a non-profit research and educational organization. The Institute conducts theoretical and empirical studies of industrial crises, and disseminates information on preventing and coping with crises. The Institute publishes Industrial Crisis Quarterly. In addition, the Institute hosts an international conference on industrial crisis management and sponsors seminars and workshops.

Format Hard copy, technical assistance, and conferences.

Availability Contact the Institute at the address above for more information.

Landslide Information Center

Organization

Landslide Information Center

Contact

Bob Fleming
Landslide Information Center
US Geological Survey
MS 966
Box 25046
Denver, CO 80225
Telephone: (303) 236-1588

Description

In 1981 the US Geological Survey established the Landslide Information Center. The Center gathers information on landslide research and applications to hazard mitigation, and promotes the adoption of engineering techniques and land use planning. The Center's specific tasks include:

1) Providing bibliographic and landslide activities information by using a computerized data management system,
2) Developing and maintaining files of photographs, press releases, reports, and legislation (ordinances, land use regulations) on landslides,
3) Developing and maintaining a mailing list of researchers and others interested in landslide hazard reduction,
4) Answering information requests and contributing to newsletters, and
5) Sponsoring workshops designed to promote the implementation of landslide research findings.

The Center maintains thousands of reports and maps which are accessible through a computerized bibliographic system, as well as a list of over 750 individuals involved in landslide research or the use of landslide data.

Format

Computerized bibliographic system, hard copy reports and documents, landslide photographs, landslide legislation.

Availability

Materials may be examined at the center, and copies of maps and reports may be obtained for the cost of reproduction.

Additional Information

For more information or to contribute information, contact Bob Fleming.

Hazards: International

Organization

United Nations Educational, Scientific and Cultural Organization

Contact

M. Hashizume, Programme Specialist
United Nations Educational, Scientific and Cultural Organization
7 Place de Fontenoy
75700 Paris
France
Telephone: [33] (1) 4568 4122
Telex: (33) 43061122

Description

The United Nations Educational, Scientific and Cultural Organization, UNESCO, sponsors a worldwide Natural Hazards Program. Publications are available.

Format

Contact the headquarters listed above for publication format.

Availability

Contact UNESCO for further information.

Hazards: US

Organization

Hazards Assessment Laboratory

Contact

Dennis Mileti, Co-Director
Hazards Assessment Laboratory
Colorado State University
Ft. Collins, CO 80523
Telephone: (303) 491-7347

Description

The Hazards Assessment Laboratory, HAL, at Colorado State University facilitates the interdisciplinary research of geophysical, climatological, and human-made hazards and emergencies. Hazard mitigation, HAL's primary focus, emphasizes planning and preparedness for emergency response. HAL conducts research programs, and offers short courses in hazards management. Projects include: development of a cross-cultural Disaster Impacts Scale, use of microcomputers in flood hazard mitigation, and emergency planning for nuclear power plant accidents.

Format

Hard copy and technical assistance.

Availability

Contact HAL for further information.

Hazards: US

Organization

Hazards Reduction and Recovery Center

Contact

Dennis Wenger, Director
Hazards Reduction and Recovery Center
College of Architecture
Texas A&M University
College Station, TX 77643-3137
Telephone: (409) 845-7813
Telex: 510-892-7689
Telefax: (409) 845-4491

Description

The Hazards Reduction and Recovery Center has an interdisciplinary focus. The Center investigates the development of cost-effective community mitigation, preparedness, and recovery techniques for reducing the impact of disasters, including loss of life, degradation of health, damage to the built environment, and social and economic disruption. The Center sponsors research, offers a graduate course on hazards risk assessment and management, and operates an extension program for consultations with local governments, state agencies, professional groups, and private companies. Current projects include: the use of microcomputers for testing emergency support capabilities for civil defense, reconstruction following Hurricane Gilbert in Jamaica and Mexico, and structural damage prediction modelling from hurricanes.

Format

Hard copy and technical assistance.

Availability

Contact the Center for course and project information and availability.

Hazards: US

Organization

Natural Hazards Research and Applications Information Center

Contact

David Morton, Librarian
Natural Hazards Research and Applications Information Center
Campus Box 482
University of Colorado
Boulder, CO 80309-0482
Telephone: (303) 492-6818
Telefax: (303) 492-6924

Description

Since 1976, the Natural Hazards Research and Applications Information Center, NHRAIC, has served as a national clearinghouse for research dealing with the economic loss, human suffering, and social disruption caused by earthquakes, floods, and other natural disasters. The Center

maintains a large library and annotated data base in order to respond to requests for information. The Center also publishes monographs, working papers, and bibliographies related to natural hazards and mitigation programs. The Center hosts symposia and workshops on natural hazards and publishes the bimonthly newsletter, Natural Hazards Observer.

Format Hard copy reports and computerized annotated bibliographic data base.

Availability Information requests are answered at no charge, and visitors are welcome to use the library on an appointment basis. The newsletter is free; other publication cost from $1.50 to $15.00. The Center is open 8:30 am to 4:30 pm.

Hazards: US

Organization Oak Ridge National Laboratory

Contact

John Sorensen, Group Leader
Hazard Management Group
Oak Ridge National Laboratory
PO Box 2008
Oak Ridge, TN 37831-6206

Description The Hazard Management Group specializes in research and applied work on natural and technological hazards. The group has an interdisciplinary social science focus, but works with a variety of researchers in the physical sciences and engineering. The group has three professional interests:

1) public acceptance of hazardous technology;
2) public and private perception and management of risk and associated implications for hazard mitigation and emergency planning;
3) human response to natural and technological risks and disasters at both the individual and organizational level.

Format Hard copy publications by the group and Oak Ridge's civil defense library.

Availability Contact John Sorensen.

Additional Information Contact the Hazard Management Group for a list of their recent publications.

Hazards: US Urban & Regional

Organization

Center for Urban and Regional Studies

Contact

Jonathan Howes, Director
Center for Urban and Regional Studies
University of North Carolina at Chapel Hill
Campus Box 3410
Hickerson House
Chapel Hill, NC 27599-3410
Telephone: (919) 962-3074

Description

The Center for Urban and Regional Studies covers a full range of activities from fundamental investigations to applications for policy makers in urban affairs. The Center devotes research efforts to urban growth and development processes, hazards management, and coastal zone management, and publishes reports on these topics. Recent titles include: Cities Under Water: A Comparative Evaluation of Ten Cities' Efforts to Manage Floodplain Land Use; "Evaluating the Effects of Local Floodplain Management Policies on Property Owner Behavior" in Environmental Management, and "The Anatomy of Losses to State and Local Governments from Natural Disasters."

Format

Hard copy.

Availability

Send publication orders to the Publications Office, 108 Battle Lane Hickerson House, Chapel Hill, North Carolina.

Public Affairs

Organization

Office of Public Affairs

Contact

Federal Emergency Management Agency
Office of Public Affairs
500 C Street, SW
Washington, DC 20472
Telephone: (202) 287-0307

Description

The Federal Emergency Management Agency's, FEMA, Public Affairs Computer System, PACS, offers prompt, accurate, and current disaster information. State and local, public information officers may have access. The system was originally designed for communication between regional FEMA public affairs offices. The system uses portable computers linked by modems to transmit information among: personnel in Washington, DC, personnel at various regional headquarters, and personnel at disaster sites.

PACS also links the White House Press Office and numerous federal agencies and departments to disaster information.

Format

On-line. Upon contracting with ITT/Dialcom, the company managing the PACS data base, state and local public information officers may use PACS to: monitor FEMA press releases, messages, and the other information on the PACS data base; transmit their own messages via electronic mail; and receive news copy from the Associated Press and United Press International wires.

Availability

A potential user need only have a computer terminal with a 300 or 1200 baud modem. The system may be used at almost any location in the country by dialing a local phone number.

Additional Information

Contact FEMA's Public Affairs Office for additional information on utilizing PACS.

Technical Information

Organization

National Technical Information Services

Contact

Director
National Technical Information Services
US Department of Commerce
5285 Port Royal Road
Springfield, VA 22161
Telephone: (703) 487-4640
Telefax: (703) 321-8547

Description

The National Technical Information Service, NTIS, provides more than 130,000 summaries of completed and on-going US and foreign government-sponsored research, development, and engineering activities annually. NTIS also manages the Federal Computer Products Center and the Center for the Utilization of Federal Technology. A sample of NTIS titles includes: Radioactive Waste Management, Transportation Energy Research, and Acid Precipitation.

Format

Hard copy, computer software and data files, and microfiche copies are available for sale. A variety of services, including subscriptions, bibliographies, and summaries are available.

Availability

Contact the NTIS office listed above for further information.

Additional Information

National Technical Information Service. Search Guide to the NTIS Bibliographic Database: On DIALOG. US Department of Commerce: Springfield, VA. 1988.

National Technical Information Service. Directory of Federal Laboratory and Technology Resources: 1988-1989. US Department of Commerce: Springfield, VA. 1988.

LIBRARIES

Agricultural Library

Organization

National Agricultural Library

Contact

Joseph Howard, Director
National Agricultural Library
US Department of Agriculture
10301 Baltimore Blvd.
Beltsville, MD 20705
Telephone: (301) 344-3726
FTS: 344-3755

Description

The National Agricultural Library, NAL, acquires, organizes, and makes available worldwide literature and data dealing with all aspects of agriculture and related subjects. NAL maintains the AGRICOLA data base of bibliographic entries related to agriculture. NAL provides information through specialized information centers, such as the Food and Nutrition Information Center, and general library services including literature searches, bibliographies, reference services, loan of publications, interlibrary loan, and photocopy of articles.

Format

Hard copy and microform are available.

Availability

NAL's AGRICOLA data base may be acquired as a service on magnetic tape. AGRICOLA is also available on-line through DIALOG Information Services and BRS Information Technologies.

Disaster Exercises Library

Organization

Federal Emergency Management Agency

Contact

Hal Gaut
Federal Emergency Management Agency
State and Local Programs and Support
Washington, DC 20472
Telephone: (202) 287-0170

Description

The Federal Emergency Management Agency, FEMA, maintains a library of disaster exercises for use by state and local governments. Disaster exercises include those on natural hazards--floods, hurricanes, volcanic eruptions, drought, and wildfire, technological hazards, and nuclear preparedness. Upon receiving a request from a local agency for a particular type of exercise, the library will send synopses of those exercises which

seem to fit the agency's needs. The agency can then select what it wants and adapt it to its specific site.

Format Hard copy.

Availability There is no charge for the materials.

Additional Information Those wishing to contribute to the collection should send a copy of their materials to a FEMA regional office, which will forward the exercise to headquarters.

Disaster Research Library

Organization Joint Assistance Center

Contact

Narendra Kumar Jain
Joint Assistance Center
H-65 South Extension-1
New Delhi 110 048
India
Telephone: [91] (11) 697 986 & 616 940

Description The Joint Assistance Center, JAC, maintains a small library with about 3000 holdings on disaster related subjects. It has materials on training and education for disaster preparedness, directories of voluntary agencies and their disaster efforts, materials on the environment, and information on almost all types of disasters. The center also monitors several leading Indian newspapers on disasters, and has relationships with several resource agencies in the environmental field. The Joint Assistance Center produces Disaster Management, the first journal devoted to disaster prevention in Asia.

Format Hard copy and audio-visuals.

Availability Contact the JAC for a publication and price list.

Disaster Response Library

Organization

Australian Overseas Disaster Response Organization

Contact

Lynne Johnson, Information Officer
Australian Overseas Disaster Response Organization
PO Box K425
Haymarket NSW 2000
Australia
Telephone: [61] (2) 264-9544
Telefax: [61] (2) 264-9558

Description

While the Australian Overseas Disaster Response Organization serves as an overseas disaster response organization, AODRO, it provides both practical and theoretical information on hazards through their library. AODRO's computerized bibliographic system allows for easy retrieval of data and reports in their rapidly expanding collection. AODRO's Information Service can furnish current disaster news, reference services, training materials, and research assistance. They also publish a bi-monthly newsletter.

Format

Hard and computerized copy.

Availability

Contact Lynne Johnson.

Earthquake Library

Organization

National Information Service for Earthquake Engineering

Contact

Ken Wong, Development Engineer
National Information Service for Earthquake Engineering
Computer Applications
404A Davis Hall
University of California
Berkeley, CA 94720
Telephone: (415) 642-5113

Description

The National Information Service for Earthquake Engineering's, NISEE, Computer Applications Project is a public service project administered by the Earthquake Engineering Research Center of the University of California, Berkeley. Computer software, developed as a result of National Science Foundation funded research, are distributed by NISEE to a worldwide audience including professionals, academic researchers, governmental agencies and the general public. Activities include dissemination of information about available computer programs, distribution of the programs and educational seminars on their use.

Format A variety of magnetic media is available, including magnetic tapes, diskettes, and electronic mail.

Availability For more information, including a catalog of available software, contact Ken Wong.

Economic and Social Development Library

Organization United Nations Economic & Social Commission for Western Asia

Contact
Mohammed Wahab, Economic Affairs Officer
Environment Coordination Unit
Natural Resources, Science & Technology Division
United Nations Economic & Social Commission for Western Asia
Hay Al-Jihad Quarter 893/27/50
PO Box 27
Baghdad
Iraq
Telephone: [964] (1) 5564282, ext. 582
Telex: 213303 UNECWA IK
Telefax: [964] (1) 213468A/213468B

Description The United Nations Economic and Social Commission for Western Asia maintains an economic and social development library with holdings in English, Arabic, and French. The collection includes reference books, monographs, journals, special reports, and United Nations publications. A portion of the collection dates back to the late 1950s and early 1960s.

Format Hard copy and microfiche. The Library expects to have a computerized, bibliographic data base by 1990.

Availability Contact the Library for information.

Additional Information Contact the Library for an acquisitions list.

Geological Survey Computer Library

Organization

Online Computer Library Center

Contact

Online Computer Library Center
Electronic Publishing and Information Delivery Division
6565 Frantz Road
Dublin, OH 43017-0702
Telephone: (800) 848-5878 ext. 4388
in Ohio (800) 848-8286 ext. 4388
in Canada (800) 533-8201
in Europe (021) 236-3224

Description

The Online Computer Library Center is a nonprofit membership organization engaged in computer library service and research. It makes available computer-based services, bibliographic data, and other information for libraries, other educational organizations, and individual library users. The newly added data bases are:

1) The US Geological Survey's library catalog, which provides bibliographic references to materials in the USGS library;
2) GeoIndex which provides information on more than 15,000 geologic maps of the United States and its territories. These maps are produced by the USGS, other federal agencies, state surveys, professional societies, academic institutions, and commercial organizations;
3) The Earth Science Data Directory which is a catalog of approximately 1,900 listings of earth science and natural resources data bases. These data bases are products of governmental agencies, academic institutions, and the private sector.

Format

Compact disc.

Availability

Contact the Online Computer Library Center for prices and membership.

Government Printing Office

Organization

Government Printing Office

Contact

Superintendent of Documents
US Government Printing Office
Washington, DC 20402
Telephone: (202) 783-3238
FTS: 783-3238

Description

The US Government Printing Office produces more than 270 subject bibliographies on subjects or fields of interest. Bibliographies related to natural hazards are:

Accidents, SB 229
Agriculture, SB 162
Agriculture Yearbooks, SB 31
Census of Agriculture, SB 277
Farms and Farming SB 161
Architecture, SB 215, 157
Census of Population, SB 181
Block Statistics, SB 311
Census of Housing, SB 181, SB 311, SB 312
Disaster Preparedness and Civil Defense, SB 241
Conservation, SB 238
Earth Sciences, SB 160
Weather, SB 234
Environmental Education and Protection, SB 88
Fire Prevention and Management, SB 76
Maps, SB 102, 183
Vital and Health Statistics, SB 121

Format

Hard copy.

Availability

Contact the Superintendent of Documents for further publication and bibliographical information.

Library of Congress

Organization

Library of Congress

Contact

Nancy Bush, Information Officer
US Library of Congress
Washington, DC 20540
Telephone: (202) 707-2905

Description

The Library of Congress, with holdings of over 88 million items, offers reference, bibliographic, and referral services. Although there is no organized natural hazards data resource, information may be obtained from:

General Collections: limited reference services in response to written requests (General Reading Rooms Division);

Science and Technology Division: computerized catalogs, abstracts and indexing services, bibliographic guides to selected scientific and technical topics;

National Referral Center: refers inquiries to appropriate organizations, institutions, research projects or laboratories;

Library of Congress Computerized Catalog: over 10 million books cataloged since 1969. Searches available; standard fee is $20.00 plus eight cents per record retrieved. (Cataloging Distribution Service, Customer Services Section);

Interlibrary Loan: to supplement resources of other libraries. (Libraries should send requests on standard forms to Loan Division);

Photoduplication Service: for unrestricted documents not under copyright;

Congressional Research Service: available to members and committees of Congress only. Prepares issue briefs on topics of current interest to Congress (e.g., earthquake prediction, emergency preparedness).

Format

Hard and computerized copies.

Availability

If there are any charges, these are available from the divisions listed.

Additional Information

For specific inquiries write:
(division or section name)
Library of Congress
Washington, DC 20540

Medical Library

Organization

National Library of Medicine

Contact

Bruno Vasta, TOXNET Administrator
National Library of Medicine
Division of Specialized Information Services
8600 Rockville Pike
Bethesda, MD 20894
Telephone: (301) 496-6531

Description

The National Library of Medicine publishes TOXNET. This computerized system of data banks and files is oriented toward the toxicology and chemical properties of hazardous substances. Among its component files are: (1) Hazardous Substances Data Bank, a scientifically reviewed and edited data bank containing chemical and toxicological information, environmental fate/exposure, emergency handling procedures, and regulations on approximately 4200 chemicals; (2) Registry of Toxic Effects of Chemical Substances, toxicity data on approximately 91,000 chemicals; (3) Chemical Carcinogenesis Research Information System, data on short and long-term bioassays, mutagenicity and tumor promotion studies; (5) the

Environmental Teratology Information Center file, citations from pre-1950 through 1987 on teratology and developmental toxicology. Other data bases in areas such as environmental releases of toxic chemicals, risk assessment, and genetic toxicology are in development.

Format

The above mentioned data bases are available through the TOXNET system, an on-line data base.

Availability

To obtain further information regarding access and costs, please contact Bruno Vasta.

Natural Disasters Library

Organization

INTERTECT

Contact

Jean Parker, Projects Coordinator
INTERTECT
PO Box 565502
Dallas, TX 75356
Telephone: (214) 521-8921

Description

INTERTECT maintains a library which is open to the public. This library contains books, manuals, field reports, periodicals, slides, and videotapes related to natural disasters and refugee emergencies. INTERTECT also has publications for sale.

Format

Published and unpublished hard copies in the library, videos (either VHS or 3/4" Umatic), 35mm slides.

Availability

The Library is open to all users. Photocopies of hard copy resources are $.20 per page. Charges for specific searches are made on a case-by-case basis.

Additional Information

Contact INTERTECT for a list of publications and their library classification index.

Photographic Library

Organization

Geological Survey

Contact

Librarian
Photographic Library
US Geological Survey
MS 914, Box 25046, Federal Center
Denver, CO 80225-0046
Telephone: (303) 236-1010
FTS: 776-1010

Description

The US Geological Survey's Photographic Library contains approximately 300,000 photographs from the US and a few foreign countries. Photographs are cataloged by subject and geographic area, along with captions. The Photographic Library includes photos of: geologic, geomorphologic, and topographic features; natural events; people at work in USGS laboratories, offices, and in the field; historic photos, especially of the Western US, including photos from the pre-1879 Hayden, Powell, Wheeler and King expeditions; and other topics. Material in the Photographic Library dates from the 1860s to the present.

Format

There are about 30,000 color transparencies, and the remainder of the collection is mostly black and white. There is no published catalog. There are manual card catalogs in the library.

Availability

Reproductions are available at cost. A small collection of photos for media use is available through:
Visual Information Services
US Geological Survey
790 National Center
Reston, VA 22092
Telephone: (703) 648-4357
FTS: 959-4357

Additional Information

The US Geological Survey's Photographic Library. U. S. Geological Survey. Reston, VA. 1987. Brochure.

Sea Grant Library

Organization

Pell Library

Contact

Betty Edel, Manager
National Sea Grant Depository
Pell Library-Bay Campus
University of Rhode Island
Narragansett, RI 02882

Description

The National Sea Grant Depository, NSGD, is an information and documentation center established by the Office of Sea Grant in 1971 at the University of Rhode Island's Pell Marine Science Library. NSGD aims to ensure that all publications generated by the National Sea Grant Program are available in a single location for loan and archival purposes. NSGD is the only collection of its kind which extends borrowing privileges throughout the world.

The collection consists primarily of reprints, technical reports, marine advisory reports, and summaries from conference proceedings. These publications touch on a wide variety of subjects including such areas as: coastal management, aquaculture, fisheries, pollution, ecosystem research, law and socio-economics, and ocean engineering.

Format

Hard copy materials are computer catalogued. The monthly acquisition list provides up-to-date bibliographic information on new acquisitions.

Availability

Materials are available through inter-library loan. The collection may also be used on-site. Packaged literature searches are also conducted on selected topics.

Additional Information

Contact NSGD for a copy of the yearly Sea Grant Publications Index or the monthly Sea Grant Acquisitions List.

Technology, Environment and Development Library

Organization

Center for Technology, Environment and Development

Contact

Jeanne Kasperson, Research Librarian
Center for Technology, Environment and Development
Clark University
Worchester, MA 01610
Telephone: (508) 751-4623

Description

The Center for Technology, Environment and Development, CENTED, Library houses a noncirculating research collection, a substantial portion of which deals with risks and hazards. The collection consists of approximately 6000 plus books, 375 journals, data boxes, and computer files.

Format

The Library's catalog is on-line in the OCLC international bibliographic data base. The collection is hard copy; there are specialized computer files as well.

Availability

The library is open M-F from 9am-5pm. While the library is open to the public, the library staff gives priority to CENTED researchers.

Additional Information

Contact the CENTED Library for a list of publications and brochure.

World Hunger Research Library

Organization

Alan Shawn Feinstein World Hunger Program

Contact

Jeanne Kasperson, Senior Research Associate
Box 1831
Brown University
Providence, RI 02912
Telephone: (401) 863-2797
Telefax: (401) 863-3700

Description

The World Hunger Research Library maintains a multidisciplinary research collection in all aspects of world hunger, from prehistoric times into the future.

Format

The library catalog is on-line in the OCLC, international bibliographic database of library holdings. The collection itself is hard copy.

Availability

Reading room hours are from 9am-5pm, M-F.

Additional Information

Contact the World Hunger Research Library for a list of publications, prospectus, and The Hunger Report: Update.

Maps & Photographs

Organization

National Cartographic Information Center

Contact

National Cartographic Information Center
US Geological Survey
509 National Center
Reston, VA 22092

Description

Aerial Photographs:

The National Cartographic Information Center, NCIC, produces the Aerial Photography Summary Record System. The System describes existing aerial photography projects from various federal, state, and commercial sources. The System provides geographic location, date of acquisition, scale, and information about the film and camera, and identifies the holding organization for approximately 500,000 aerial photography projects.

Format

Fifty-three microfiche sets are available for the 50 states, District of Columbia, Pacific Islands, Puerto Rico, and Virgin Islands. Each entry provides a summary record for an aerial photography project that is located by longitude and latitude, and sorted by date. Microfiches and searches are available at cost. The NCIC will assist in locating and ordering aerial photographs.

Availability

Contact the Center at the address listed above, or call the state NCIC office.

Additional Information

For additional information contact NCIC's data base manager at:
Telephone: (703) 648-5903
FTS: 959-5903

Description

Digital Elevation Models:

The National Cartographic Information Center publishes the Catalog of Cartographic Data. The NCIC also publishes digital representations of terrain elevations produced by the Defense Mapping Agency Topographic Center. The Center plans to make other digital map files available as they are added to the collection.

Format

Computerized maps. Tapes are available for the cost of duplication.

Availability

Write for NCIC's cartographic data catalog.

MAPS, CHARTS, SATELLITE IMAGES

Additional Information

For additional information contact NCIC at:
Telephone: (703) 860-6045
FTS: 959-6045

Description

Mapping:

The National Mapping Division provides information about the US Geological Survey's published topographic maps, topographic maps of other agencies, and nautical charts. These maps and charts cover the US from 1884 to the present.

The National Cartographic Information Center maintains third-order horizontal and vertical geodetic control information established by the US Geological Survey. Vertical control lists are available with descriptions, locations, and elevations of bench marks. Horizontal lists contain descriptions, geodetic and/or geographic positions of transit traverses, triangulations, and electronic traverse stations. These lists cover the US from 1900 to the present.

Format

Hard copy, microfiche, microfilm, and computer printouts.

The NCIC provides diagrams showing the location and order of geodetic control; these are available for $.50 for each 15 foot block. The National Geodetic Survey is developing a computerized data base of this information.

Availability

Contact NCIC for the Catalog of Cartographic Data.

Additional Information

For additional information contact NCIC at:
Telephone: (703) 860-6045
FTS: 959-6045

Nautical and Aeronautical Charts

Organization

National Oceanic and Atmospheric Administration

Contact

Donald Florwick
National Oceanic and Atmospheric Administration
Charting and Geodetic Services
6001 Executive Boulevard
Rockville, MD 20852
Telephone: (301) 443-8741
FTS: 443-8741

MAPS, CHARTS, SATELLITE IMAGES

Description

National Oceanic and Atmospheric Administration's, NOAA, National Ocean Service produces nautical and aeronautical charts. Nautical charts illustrate the nature and form of the coast, water depths, character of the ocean bottom, aids to navigation such as channel landmarks, navigation hazards, magnetic variations, port and harbor facilities, and cultural details. Nautical charts vary in scale. Aeronautical charts depict communications facilities, navigational charts, airport landing patterns, safe operating procedures, and air traffic rules.

Format

Hard copy.

Availability

Nautical and aeronautical charts are available free of charge from:
Distribution Branch, N/CG33
National Ocean Survey
National Oceanic and Atmospheric Administration
Riverdale, MD 20737-1199

Remote Sensing

Organization

Technology Application Center

Contact

Michael Inglis, Associate Director
Technology Application Center
University of New Mexico
Albuquerque, NM 87131
Telephone: (505) 277-3622
Telefax: (505) 277-3614

Description

The Technology Application Center, TAC, provides digital remote sensing and geographic information system design and development services for natural resources projects and programs. TAC annually holds a four-week, digital-image processing workshop. TAC also engages in several ecological research programs, and provides a photo search service. TAC produces a quarterly review of remote sensing literature.

Format

Hard copy and technical assistance.

Availability

Contact the Center for further information.

Remote Sensing

Organization Wave Propagation Laboratory

Contact
Robert Frost
Wave Propagation Laboratory
National Oceanic and Atmospheric Administration
US Department of Commerce
325 Broadway
Boulder, CO 80303
Telephone: (303) 497-6244
Telefax: (303) 497-6750

Description The Wave Propagation Laboratory, WPL, aims to improve the nation's geophysical research and services through creating and assessing new remote measurement systems. WPL remotely senses lower tropospheric air flows relevant to urban pollution and hazardous emission dispersal. In addition, WPL investigates wave propagation and technical developments, atmospheric and oceanic research, and technology transfer.

Format Contact WPL for more information.

Availability Contact WPL for information on current researchers and their research interests.

Satellite Imagery

Organization National Geophysical Data Center

Contact
National Geophysical Data Center
National Oceanic and Atmospheric Administration
Code E/GC1
325 Broadway
Boulder, CO 80303
Telephone: (303) 497-6729

Description The National Geophysical Data Center, NGDC, maintains several satellite data sets applicable to Earth studies. The data sets facilitate regional and global levels of analysis. Currently NGDC makes available: GEOSAT, MAGSAT, GEOS-III, and SEASAT.

Format Write or call NGDC for information and prices on data tapes.

Availability Contact the NGDC for further information.

Satellite Imagery

Organization National Oceanic and Atmospheric Administration

Contact Frances Holt, Chief
Physical Science Branch
National Oceanic and Atmospheric Administration
National Environmental Satellite Data and Information Service
World Weather Building, Room 601 E/RA 21
Washington, DC 20233
Telephone: (301) 763-8251
FTS: 763-8251

Description The National Environmental Satellite Data and Information Service maintains a ten year collection of meteorological data and maps, including a browse file of satellite imagery. The Service also offers training films and technical assistance.

Format Hard copy, computer copy, microfilm, and technical assistance.

Availability Call to schedule an appointment.

Satellite Imagery

Organization National Space Science Data Center

Contact National Aeronautics and Space Administration
National Space Science Data Center
Code 630.2
Goddard Space Flight Center
Greenbelt, MD 20771
Telephone: (301) 286-6695
FTS: 888-6695

Description The National Space Science Data Center, NSSDC, provides satellite images from Nimbus, geostationary orbital environmental satellites (GOES), synchronous meteorological satellites, SMS, and the heat capacity mapping mission. Data cover the entire world from 1964 to the present.

MAPS, CHARTS, SATELLITE IMAGES

Format Hard copy, computer tapes, microfilm, microfiche, prints, and positive and negative transparencies.

Availability Nimbus, GOES, and SMS User's Guides are available from NSSDC.

See also the following appendices:
- Geological Survey
- National Weather Service

Avalanche

Organization American Association of Avalanche Professionals

Contact Editor
American Association of Avalanche Professionals
PO Box 510904
Salt Lake City, UT 84151

Description The American Association of Avalanche Professionals, AAAP, deals with all issues relating to avalanches, and produces The Avalanche Review.

Format Hard copy.

Availability Write for a subscription or membership information. The AAAP publishes The Avalanche Review monthly from October through March; a yearly subscription is $18.00.

Dam Safety

Organization Association of State Dam Safety Officials

Contact Lori Spragens, Executive Director
Association of State Dam Safety Officials
PO Box 55270
Lexington, KY 40555
Telephone: (606) 257-5140

Description The Association of State Dam Safety Officials, ASDSO, compiles a publication, Bibliography on Dam Safety. The group also makes available its mailing list of dam safety officials.

Format Hard copy and diskette.

Availability Write to ASDSO for membership and publication information.

Disaster Experts

Organization

Association of International Disaster Experts

Contact

Claire Rubin
Association of International Disaster Experts
PO Box 2208
Arlington, VA 22202
Telephone: (202) 676-7386

Description

This professional association of emergency and disaster management specialists adheres to the following objectives:

1) To create an association of persons throughout the world who are engaged in projects in the fields of emergency management and disasters;
2) To enable members to meet other persons engaged in related work in order to share experience and develop collaborative efforts;
3) To provide a directory of members that includes details about expertise and experience; and
4) To meet annually to discuss consulting opportunities and other aspects of work in these fields that are of general interest.

Format

Professional association.

Availability

Membership is open to professionals--teachers, researchers, administrators, managers, and consultants--working in the areas of emergency management and disaster response for natural and technological disasters, as well as hostage taking, and terrorism.

Additional Information

For further information or a membership application contact Claire Rubin.

Earth Sciences

Organization The Royal Society of Edinburgh

Contact Janet Crichton, Assistant to the Publications Secretary
The Royal Society of Edinburgh
22/24 George Street
Edinburgh EH2 2PQ
Scotland
United Kingdom
Telephone: [44] (31) 225-6057

Description Publications of the Royal Society of Edinburgh cover all aspects of earth and related planetary sciences. Contributions emphasize principles and worldwide topics.

Format Hard copy.

Availability Contact the Royal Society of Edinburgh's headquarters for publication and price information.

Earthquake

Organization Earthquake Engineering Research Institute

Contact Susan Tubbesing, Executive Director
Earthquake Engineering Research Institute
6431 Fairmount Avenue, Suite 7
El Cerrito, CA 94611
Telephone: (415) 525-3668
Telefax: (415) 524-9577
Email is also available.

Description The Earthquake Engineering Research Institute is a national, not-for-profit, technical society of engineers, geoscientists, architects, planners, public officials, and social scientists. The Institute offers both membership and technical assistance, including technical monographs, a newsletter, a journal, and a conference.

Format Hard copy, slides, and technical assistance.

Availability Contact Susan Tubbesing for membership and publication information.

PROFESSIONAL ORGANIZATIONS

Earthquake

Organization Seismological Society of America

Contact Susan Newman, Director
Seismological Society of America
201 Plaza Professional Building
El Cerrito, CA 94530
Telephone: (415) 525-5474

Description The Seismological Society of America, SSA, publishes a bi-monthly journal, The Bulletin of the Seismological Society of America, of advanced research in seismology and related fields. The bulletin is available by membership or subscription.

Format Hard copy. Back issues are available in microform.

Availability Contact the SSA for membership and subscription information.

Emergency Management

Organization National Coordinating Council on Emergency Management

Contact Elizabeth Buzzerd, Executive Manager
National Coordinating Council on Emergency Management
7297 Lee Highway, Unit N
Falls Church, VA 22042
Telephone: (703) 533-7672
Telex: (703) 241-5603

Description The National Coordinating Council on Emergency Management, NCCEM, is the only national organization of local emergency managers and civil defense coordinators. Membership is open to any person or organization. Members receive networking opportunities with the other 1,200 members at both an annual and mid-year conference, and at an annual exhibition. Members also receive a monthly newsletter, the NCCEM Bulletin.

Format Hard copy.

Availability Membership is $50 per year for an individual and $150 per year for an organization.

Fire

Organization

National Fire Protection Association

Contact

Martin Henry, Director
Public Fire Protection Division
National Fire Protection Association
Batterymarch Park
Quincy, MA 02269
Telephone: (617) 770-3000
Telex: (617) 770-0700

Description

The National Fire Protection Association, NFPA, founded in 1896, addresses virtually every aspect of fire protection. NFPA's mission is to safeguard humans and their environment from fire. Membership totals more than 40,000 fire protection and prevention professionals. NFPA maintains fire data, performs data analysis, develops codes for fire investigations, and provides educational materials.

Format

Hard copy, videos, 16mm movies, and slide-tape sets.

Availability

Call or write NFPA.

Additional Information

Directory of Member Services. NFPA. Quincy, MA 02269.
The NFPA Catalog. 1988. NFPA. Quincy, MA 02269.

Flood

Organization

Association of State Floodplain Managers

Contact

Larry Larson, Executive Director
Association of State Floodplain Managers, Inc.
PO Box 2051
Madison, WI 53701-2051
Telephone: (608) 266-1926
Telefax: (608) 267-3579

Description

The Association of State Floodplain Managers, ASFM, maintains a national resource center on floodplain management. ASFM's computerized indexing system provides quick references for any caller.

Format Hard and computer copy.

Availability Write or call AFSPM for user information.

Flood

Organization National Association of Flood and Stormwater Management Agencies

Contact Diane VanDeHei, Assistant Executive Director
National Association of Flood and Stormwater Management Agencies
1225 Eye Street, NW
Washington, DC 20005
Telephone: (202) 682-3761 Ext. 204

Description The National Association of Flood and Stormwater Management Agencies, NAFSMA, informs Congress and Federal policy makers on a broad range of water resources management issues. These issues include: stormwater management, flood prevention, damage mitigation, disaster assistance, flood insurance, and flood control project authorizations. NAFSMA publishes a review of The Federal Register, as well as a monthly newsletter. The organization also hosts an annual meeting and various committees.

Format Hard copy and technical assistance.

Availability Contact NAFSMA for further information.

Geography

Organization American Geographical Society

Contact Mary Lynne Bird, Director
American Geographical Society
156 Fifth Avenue
New York, NY 10010-7002
Telephone: (212) 242-0214

Description The American Geographical Society has produced a scholarly journal, Geographical Review, for 71 years. An index of hazards articles in the Review is also available.

Format Hard copy.

Availability Geographical Review is available in any academic library and in many public libraries.

Geography

Organization Association of American Geographers

Contact

Roger Kasperson, Treasurer
Hazards Specialty Group
CENTED
Clark University
Worcester, MA 01610
Telephone: (508) 793-7665

Description

In 1987 a group of interested geographers formed the Hazards Specialty Group, HSG, of the Association of American Geographers, AAG. The organization's three-fold mission is to:

1) Promote research, education, and the application of knowledge about natural, technological, and social hazards;
2) Strengthen communication and collaborative activities among geographers who share an interests in hazards; and
3) Encourage collaboration between geographers and members of other disciplines and professions that share an interest in hazards.

The organization is open to all interested AAG members, although other persons who are members of related professional organizations may become HSG affiliates. The organization publishes a newsletter, Hazards, that reports on: research in progress, activities of national and international hazards organizations, the findings and publications of university and government research centers, and publications and theses titles of members and affiliates. The group presents sessions on hazards issues at the national AAG level.

Format Professional society.

Availability The group actively seeks additional members. Membership and subscription to Hazards may be obtained by sending a check for $5 payable to CENTED/HSG, attention-Roger Kasperson.

Additional Information The group seeks timely information to be included in the newsletter.

PROFESSIONAL ORGANIZATIONS

Geology

Organization International Association of Engineering Geology

Contact L. Primel, Secretary General
International Association of Engineering Geology
58 Boulevard Lefebvre
75732 Paris Cedex 15
France
Telephone: [33] (1) 40-43-56-43
Telex: (33) LCPARI 200361 F.
Telefax: [33] (1) 40-43-54-98

Description The International Association of Engineering Geology is an international organization devoted to hazards. The Association publishes papers in the semi-annual Bulletin of the IAEG.

Format Hard copy.

Availability The secretary general will forward the bulletin number requested.

Geology

Organization Sociedad Geologica Mexicana

Contact Ing. Bernardo Martell Andrade, President
Sociedad Geologica Mexicana
Torres Bodet 176, Sta. Ma. La Rivera C.P. 06400
Mexico City
Mexico
Telephone: [52] (5) 47-26-66

Description Sociedad Geologica Mexicana (Mexican Geologic Association) publishes The Mexican Geologic Society Bulletin twice a year. The bulletin contains information about the geologic characteristics of Mexico.

Format Hard copy.

Availability It costs $15 per year for a subscription to the Bulletin.

Geology

Organization

Societe Belge de Geologie

Contact

M. Dusar, Secretary-General
Jenner Str. 13
B 1040 Brussels
Belgium
Telephone: [32] (2) 6476400
Telefax: [32] (2) 6477359

Description

The Belgian Geological Society produces a scientific bulletin and an informational publication on natural hazards. The Bulletin contains scientific articles on Belgian geological phenomena, as well as studies by Belgians and associated earth scientists. Miscellanea provides information on upcoming events, gives information on student research topics, and relates events and hazards mentioned in the press.

Format

Hard copy. The Bulletin, a scientific periodical, is distributed quarterly, and Miscellanea, an information newsletter, is distributed monthly.

Availability

Subscription to the Bulletin is 1200 Belgian Francs per year.
Subscription to Miscellanea is 500 Belgian Francs per year.

Geophysics

Organization

American Geophysical Union

Contact

Director
American Geophysical Union
2000 Florida Avenue NW
Washington, DC 20009
Telephone: (202) 462-6900

Description

The American Geophysical Union, AGU, has been expanding the frontiers of the geophysical sciences for almost 70 years. The AGU publishes a weekly geophysics newsletter and a monthly magazine, Physics Today. In addition, the AGU publishes numerous journals dealing with atmospheric, oceanic, hydrologic, and space sciences.

Format

Hard copy and microfiche.

Availability

Contact the AGU office for membership information and a publication price list.

PROFESSIONAL ORGANIZATIONS

Geotechnology

Organization Canadian Geotechnical Society

Contact A. Stermag, Director General
Canadian Geotechnical Society
170 Atwell Drive, Suite 602
Rexdale, Ontario M9W 5Z5
Canada

Description The Canadian Geotechnical Society, CGS, is a federally incorporated non-profit organization which facilitates information exchange and technology transfer within four divisions: soil mechanics and foundations, engineering geology, rock mechanics, and cold regions technology. The CGS produces a newsletter, Geotechnical News, as well as technical publications. CSG has hosted the Annual Geotechnical Society Conference since 1947, and also offers a lecture tour, workshops and seminars, national and international liaisons, and assistance to developing countries.

Format Hard copy and technical assistance.

Availability Contact CGS for membership information.

Hydrology

Organization American Institute of Hydrology

Contact Helen Klose, Executive Manager
American Institute of Hydrology
3416 University Avenue SE, Suite 200
Minneapolis, MN 55414
Telephone: (612) 379-1030

Description The American Institute of Hydrology publishes the quarterly journal, Hydrological Science and Technology Journal. The journal communicates new techniques, methods, and summaries of hydrological projects or investigations, including water pollution and hazardous waste issues.

Format Hard copy.

Availability Subscription to the Journal is available to members for $24 annually and $48 for non-members.

Insurance

Organization National Association of Independent Insurers

Contact C. Robert Hall, Vice President
National Association of Independent Insurers
2600 River Road
Des Plaines, IL 60018
Telephone: (312) 297-7800

Description The National Association of Independent Insurers, NAII, is a trade association which represents over 550 insurance companies. These companies write over 25 percent of property insurance nationally, and represent all aspects of the insurance industry including: legal, actuarial, risk selection, and losses.

Format Hard copy papers and bulletins relating to property and liability insurance.

Availability Contact C. Robert Hall.

Insurance

Organization National Committee on Property Insurance

Contact Director of Information Services
National Committee on Property Insurance
Ten Winthrop Square
Boston, MA 02110
Telephone: (617) 423-4620
Telex: (617) 423-7633

Description The National Committee on Property Insurance, NCPI, is the All Industry Insurance Forum for the review and discussion of matters relating to residual and distress property insurance markets. NCPI is also the repository for all Residual Property Insurance Plans, as well as their data and results. In addition, NCPI is the host organization for the Earthquake Project.

Format Hard copy.

Availability Contact NCPI.

Additional Information NCPI provides a list of publications which includes topics from beach and wind plans to guidelines for state property insurance plans.

PROFESSIONAL ORGANIZATIONS

Medical Services

Organization

The National Association of State Emergency Medical Services Directors

Contact

Larry Jordan, President
The National Association of State Emergency Medical Services
Iron Works Pike
PO Box 11910
Lexington, KY 40578-1910
Telephone: (606) 231-1903

Description

The National Association of State Emergency Medical Services Directors, NASEMSD, formed in 1980 to enhance the effectiveness of emergency medical services, EMS, across all states. NASEMSD is a vehicle for state EMS directors to exchange information.

Format

Hard copy reports.

Availability

Contact the NASEMSD.

Additional Information

National EMS Clearinghouse. The EMS Office: Its Structure and Functions. The Council of State Governments: Lexington, KY. 1988.

Other available titles include: State Emergency Medical Services Transportation Systems and Available Facilities, State Emergency Medical Services Public Information and Education Systems, State Emergency Medical Services Communications Systems and Disaster Preparedness, and Training and Certification of EMS Personnel. All these publications are available from the Council of State Governments, PO Box 11910, Iron Works Pike, Lexington, KY 40578, (606) 252-2291.

Meteorology

Organization

American Meteorological Society

Contact

Richard Hallgren, Executive Director
American Meteorological Society
45 Beacon Street
Boston, MA 02108
Telephone: (617) 227-2425
Telefax: (617) 742-8718

Description

The American Meteorological Society, AMS, represents professional meteorologists nationwide.

Format Contact the AMS for format information.

Availability Call or write the AMS headquarters listed above.

Additional Information List of publications.

Natural Hazards

Organization Natural Hazards Society

Contact

M. El-Sabh
International Society for the Prevention and Mitigation of Natural Hazards
310 Allee des Ursulines
Rimouski, Quebec
Canada G5L 3A1

Description The International Society for the Prevention and Mitigation of Natural Hazards--The Natural Hazards Society, NHS, founded in 1988, is a professional society espousing the following goals:

1) Promotion of research in all aspects of natural hazards;
2) Distribution of preparedness and emergency response plans for all countries; and
3) Formulation and implementation of educational programs concerning hazard prevention and mitigation.

The society will hold at least one international scientific meeting every two years in different parts of the world, with special symposia on topical natural disaster events or natural hazard studies. In addition, the NHS will co-sponsor appropriate scientific meetings, summer school programs, or workshops organized by other bodies. Natural Hazards: An International Journal of Hazards Research and Prevention, published by Kluwer Academic Publishers of the Netherlands, is now the official scientific publication of the society.

Format Hard copy journal, scientific meetings.

Availability Membership in the NHS is open to all international scientists and policy makers actively engaged in natural hazard studies or the prevention and mitigation of natural disasters. For 1989, an individual membership costs $20 ($5 for students). Members are eligible to receive Natural Hazards at a reduced rate, and can attend the biannual meetings for a reduced fee.

Additional Information Sections of the NHS may be organized as provided in the bylaws. Sections consist of members of the Society and other concerned persons who reside

near one another or share a common interest or problem. For further information about the Society or a membership application, write M. El-Sabh.

Planning

Organization American Planning Association

Contact
Director
American Planning Association
1313 East 60th Street
Chicago, IL 60637
Telephone: (312) 955-9100

Description The American Planning Association, APA, is a national organization of planners and citizens who work for better-planned communities. Through publications, research, and conferences, APA informs members on ways to improve national planning policies. The American Institute of Certified Planners is a part of APA that concentrates on standards and continuing education for the planning profession. APA provides research reports, monthly newsletters, the answer service for ordinance searches, advice, and loan services, as well as a variety of publications including Zoning News, APA Journal, and Planning. In particular, the APA maintains a disaster planning file.

Format Hard copy and technical assistance.

Availability Membership for the APA is salary-based; contact the APA for further information.

Planning Systems

Organization Urban and Regional Information Systems Association

Contact
Bob Alexander
US Geological Survey
Denver Federal Center
Box 25046, MS-516
Denver, CO 80225
Telephone: (303) 236-5838

Description The Urban and Regional Information Systems Association, URISA, is the oldest and largest professional organization for individuals concerned with

the effective use of information systems technology at the state, regional, and local levels. URISA advances interdisciplinary professional approaches to the planning, design, operation, and use of information systems for public management. URISA strives for mutual understanding among managers, technicians, and users of information technology so that integrated systems may be developed which provide information vertically to top management and horizontally among professional disciplines.

URISA organized a public safety special-interest group which relates urban and regional information technology to the fields of emergency management, natural and technological hazards, and public safety.

Format Professional organization.

Availability To become involved in URISA and the new special interest group on hazards and emergency management, contact Bob Alexander.

Public Works

Organization American Public Works Association

Contact Ronald Sears, Director of Education
American Public Works Association
Council on Emergency Management
1313 East Sixteenth Street
Chicago, IL 60637
Telephone: (312) 667-2200

Description The American Public Works Association, APWA, with nearly 27,000 members nationwide, conducts educational workshops, inservice programs, and technical session seminars on public works. APWA produces a quarterly newsletter, as well as a series of manuals directed at public works personnel. The APWA has a Council on Emergency Management.

Format Hard copy and technical assistance.

Availability Contact Ronald Sears.

PROFESSIONAL ORGANIZATIONS

Soil and Water Conservation

Organization

Soil and Water Conservation Society

Contact

Tim Kautza, Program Assistant
Soil and Water Conservation Society
7515 NE Ankeny Road
Ankeny, IA 50021-9764
Telephone: (515) 289-2331

Description

The Soil and Water Conservation Society, SWCS, a nonprofit, scientific, and educational organization, works to conserve the land, water, and related resources. The SWCS offers annual meetings and conferences as well as a scholarship program. SWCS publications include: the Journal of Soil and Water Conservation, a bimonthly newsletter, and numerous special publications.

Format

Hard copy and technical assistance.

Availability

Contact the SWCS for membership, publication, meeting, or scholarship information.

Testing and Materials

Organization

American Society for Testing and Materials

Contact

Patricia Downey, Manager of Public Relations
American Society for Testing and Materials
1916 Race Street
Philadelphia, PA 19103
Telephone: (215) 299-5524
Telex: 710-670-1037
Telefax: (215) 977-9679

Description

The American Society for Testing and Materials, ASTM, provides one of the world's largest voluntary standards development systems. The ASTM publishes standard test methods, specifications, practices, guides, classifications, and terminology for materials, construction, and petroleum products. The ASTM publishes annually The Book of ASTM Standards.

Format

Hard copy.

Availability

Contact the ASTM office for publication information.

PROFESSIONAL ORGANIZATIONS

Water Resources

Organization American Water Resources Association

Contact Kenneth Reid, Director
American Water Resources Association
5410 Grosvenor Lane, Suite 220
Bethesda, MD 20814
Telephone: (301) 493-8600

Description The American Water Resources Association publishes the Water Resources Bulletin, an interdiscilpinary scientific journal of water resources.

Format Hard copy.

Availability Contact the American Water Resources Association for further information.

Wetlands

Organization Association of State Wetlands Managers

Contact Jon Kusler, Executive Director
Association of State Wetlands Managers
PO Box 2463
Berne, NY 12023
Telephone: (518) 872-1804

Description The Association of State Wetlands Managers promotes the exchange and dissemination of information between wetland managers and other interested parties. The Association improves public education by providing state-of-the-art wetland protection information and techniques via workshops, seminars, lectures, and publications. The Association also publishes a newsletter.

Format Hard copy and technical assistance.

Availability The newsletter is available to members on a quarterly basis.

Wind Engineering

Organization	Wind Engineering Research Council
Contact	Kishor Mehta, President Wind Engineering Research Council, Inc. Box 4089 Texas Tech University Lubbock, TX 79409 Telephone: (806) 742-1900
Description	The Wind Engineering Research Council, WERC, provides primarily engineers with referrals to technical experts on wind-related topics. WERC connects engineers with experts on wind-induced damages, windstorms, hurricanes, tornadoes, and wind engineering research.
Format	Technical referrals.
Availability	Contact Kishor Mehta.

APPENDICES

STATE CLIMATOLOGISTS

(Conduct climatological research, provide climatological information, and archive weather records for the state.)

ALABAMA

Richard McNider, State Climatologist
Alabama Office of State Climatology
University of Alabama at Huntsville
Johnson Research Center
Huntsville, AL 35899
(205) 895-6257

ALASKA

James Wise, State Climatologist
AEIDC/University of Alaska
Alaska Climate Center
707 A Street
Anchorage, AK 99501
(907) 279-4523

ARIZONA

Anthony Brazel, State Climatologist
The Laboratory of Climatology
Arizona State University
Tempe, AZ 85287
(602) 965-6265

ARKANSAS

John Hehr, State Climatologist
Dept. of Geography
Carnall Hall 104
University of Arkansas
Fayetteville, AR 72701
(501) 575-3159

CALIFORNIA

William Mork, Director, State Climatologist
California Dept. of Water Resources
Div. of Flood Management
PO Box 388
Sacramento, CA 95802
(916) 445-5800

COLORADO

Thomas McKee, State Climatologist
Colorado Climate Center
Dept. of Atmospheric Science
Colorado State University
Fort Collins, CO 80523
(303) 491-8545

CONNECTICUT

David Miller, State Climatologist
Dept. of Renewable Natural Resources
1376 Storrs Road, Room 308
WBY Building
Box U-87
University of Connecticut
Storrs, CT 06268
(203) 486-2840

DELAWARE

John Mather, State Climatologist
State Climatologist for Delaware
Center for Climatic Research
Dept. of Geography
University of Delaware
Newark, DE 19716
(302) 451-8998

FLORIDA

Thomas Gleeson, State Climatologist
Dept. of Meteorology
Florida State University
Tallahassee, FL 32306
(904) 644-3417

GEORGIA

Gayther Plummer, State Climatologist
Institute of Natural Resources Ecology Building
University of Georgia
Athens, GA 30602
(404) 542-1555

HAWAII

Manabu Tagomori, State Climatologist
State Dept. of Land & Natural Resources
Div. of Water & Land Development
PO Box 373
Honolulu, HI 96809
(808) 548-7539

IDAHO

Myron Molnau, State Climatologist
Agricultural Engineering Dept.
University of Idaho
Moscow, ID 83843
(208) 885-6182

ILLINOIS

Wayne Wedland, State Climatologist
Illinois State Water Survey
2204 Griffith Dr.
Champaign, IL 61820
(217) 333-0729

INDIANA

Ken Scheeringa, State Climatologist
Agronomy Dept.
Purdue University
West Lafayette, IN 47907-7899
(317) 494-4772

IOWA

Harry Hillaker, Jr., State Climatologist
Iowa Dept. of Agriculture Weather Service
Municipal Airport, Room 10
Des Moines, IA 50321
(515) 281-4062

KANSAS

Dean Bark, State Climatologist
CES Computer System Office
Umberger Hall, Room 211
Kansas State University
Manhattan, KS 66506
(913) 532-6814

KENTUCKY

Glen Conner, State Climatologist
Dept. of Geography & Geology
Western Kentucky University
Bowling Green, KY 42101
(502) 745-4555

LOUISIANA

Robert Muller, State Climatologist
Dept. of Geography & Anthropology
Louisiana State University
Baton Rouge, LA 70803
(504) 388-6184

MAINE

Bernard Dethier, State Climatologist
1 Winslow Hall
University of Maine
Orono, ME 04469-0163
(207) 581-7980

MARYLAND

George Huffman, State Climatologist
1123A Jull Hall
University of Maryland
College Park, MD 20742
(301) 454-3110

MASSACHUSETTS

David Taylor, State Climatologist
Dept. of Environmental Management
Div. of Water Resources
496 Park Street
North Reading, MA 01864
(617) 275-8860, Ext. 138

MICHIGAN

Fred Nurnberger, State Climatologist
MDA/Climatology Div.
417 Natural Science Building
Michigan State University
East Lansing, MI 48824
(517) 373-8338

MINNESOTA

Jim Zandlo, Jr., State Climatologist
Minnesota Dept. of Natural Resources
University of Minnesota
S-325 Borlang Hall
St. Paul, MN 55108
(612) 296-4214

MISSISSIPPI

Charles Wax, State Climatologist
Dept. of Geology & Geography
Mississippi State University
Mississippi State, MS 39762
(601) 325-3915

MISSOURI

Wayne Decker, State Climatologist
Dept. of Atmospheric Science
University of Missouri at Columbia
701 Hitt Street
Columbia, MO 65211
(314) 882-6591

MONTANA

Joseph Caprio, State Climatologist
Plant & Soil Science Dept.
Montana State University
Bozeman, MT 59717
(406) 994-5067

NEBRASKA

Kenneth Hubbard, State Climatologist
CAMAC
237 Chase Hall (0728)
University of Nebraska
Lincoln, NE 68583-0728
(402) 472-6706

NEVADA

John James, State Climatologist
Geography Dept.
College of Arts & Sciences
University of Nevada at Reno
Reno, NV 89557-0048
(702) 784-6995

NEW HAMPSHIRE

Robert Adams, State Climatologist
Dept. of Geography, James Hall
University of New Hampshire
Durham, NH 03824
(603) 862-1719

NEW JERSEY

Mark Shulman, State Climatologist
Dept. of Meteorology &
Physical Oceanography
Cook College, Rutgers University
PO Box 231
New Brunswick, NJ 08903
(201) 932-9318

NEW MEXICO

Office of the State Climatologist
PO Box 5702
New Mexico Dept. of Agriculture
Las Cruces, NM 88003
(505) 646-2642

NEW YORK

Keith Eggleston
Atmospheric Science Unit
Box 21, Bradfield Hall
Cornell University
Ithaca, NY 14853
(607) 255-3034

NORTH CAROLINA

Jerry Davis, State Climatologist
Dept. of Marine, Earth &
Atmospheric Science
Box 8208
North Carolina State University
Raleigh, NC 27695-8208
(919) 737-7243

NORTH DAKOTA

John Enz, State Climatologist
Soils Dept.
North Dakota State University
Fargo, ND 58105
(701) 237-8576

OHIO

Jeffrey Rogers, State Climatologist
Dept. of Geography
Ohio State University
103 Bricker Hall
Columbus, OH 43210-1361
(614) 422-2514

OKLAHOMA

Claude Duchon, State Climatologist
Oklahoma Climatological Survey
University of Oklahoma
710 ASP, Suite 8
Norman, OK 73019
(405) 325-2541

OREGON

Kelly Redmond, State Climatologist
Office of the State Climatologist
Climate Research Institute
Oregon State University
Corvallis, OR 97331
(503) 754-3714

RHODE ISLAND

Robert Wakefield, State Climatologist
Dept. of Plant Sciences
Room 313, Woodward Hall
University of Rhode Island
Kingston, RI 02881
(401) 792-4549

SOUTH CAROLINA

John Purvis, State Climatologist
SC State Climatology Office
1201 Main Street, Suite 1100
Capital Center
Columbia, SC 29201
(803) 737-0811

SOUTH DAKOTA

Harold Werner, State Climatologist
Agricultural Engineering Dept.
South Dakota State University
Brookings, SD 57007
(605) 688-5141

TENNESSEE

Wayne Hamburger, State Climatologist
Tennessee Valley Authority
310 Evans Building
Knoxville, TN 37902
(615) 632-4222

TEXAS

John Griffiths, State Climatologist
Meteorology Dept.
Texas A&M University
College Station, TX 77843
(409) 845-7320

UTAH

Gail Bingham, State Climatologist
Utah State University, UMC-48
Logan, UT 84322
(801) 750-2190

VERMONT

Leonard Perry, State Climatologist
Hills Building
University of Vermont
Burlington, VT 05401
(802) 656-2630

VIRGINIA

Patrick Michaels, State Climatologist
Dept. of Environmental Sciences
Clark Hall
University of Virginia
Charlottesville, VA 22903
(804) 924-0549

WASHINGTON

Mark Albright, State Climatologist
Atmospheric Sciences Dept.
University of Washington, AK-40
Seattle, WA 98195
(206) 543-0448

WEST VIRGINIA

Stanley Tajchman, State Climatologist
Div. of Forestry
337 Perceival Hall
West Virginia University
Morgantown, WV 26505
(304) 293-3411

WISCONSIN

Douglas Clark, State Climatologist
University of Wisconsin Extension
1353 Meteorology & Space Science Building
1224 West Dayton Street
Madison, WI 53706
(608) 263-2374

WYOMING

Victor Hasfurther, State Climatologist
Wyoming Water Research Center
The University of Wyoming
PO Box 3067
Laramie, WY 82071
(307) 766-2143

COASTAL ZONE MANAGEMENT

(Plans and implements programs for the orderly development of coastal zones.)

ALABAMA

Thomas Savage, Director
Coastal Area Program
Environmental Management Dept.
3263 Demetropolis Road, #10
Mobile, AL 36609
(205) 271-7700

ALASKA

Thomas Hawkins, Director
Div. of Land & Water Management
Dept. of Natural Resources
PO Box 7005
Anchorage, AK 99510
(907) 762-4355

CALIFORNIA

Michael Wornum, Chairman
Coastal Commission
631 Howard Street, 4th Floor
San Francisco, CA 94105
(415) 543-8555

CONNECTICUT

Arthur Rocque, Director
Planning & Coastal Area Management
Environmental Protection Dept.
165 Capitol Avenue
Hartford, CT 06106
(203) 566-7404

DELAWARE

Robert Henry II, Manager
Beach Preservation Section
Div. of Soil & Water Conservation
PO Box 1401
89 Kings Hwy.
Dover, DE 19901
(302) 736-4411

FLORIDA

David Worley, Environmental Administrator
Coastal Zone Management
Environmental Regulation Dept.
2600 Blairstone Road
Tallahassee, FL 32301
(904) 488-4805

GEORGIA

Duane Harris, Director
Coastal Resources Div.
Dept. of Natural Resources
1200 Glynn Avenue
Brunswick, GA 31523
(912) 264-7221

HAWAII

Tatsuo Fujimoto, Div. Head
Planning Div.
Office of State Planning
PO Box 2359
Honolulu, HI 96804
(808) 548-4610

ILLINOIS

Daniel Injerd, Section Chief
Lake Michigan Management Section
Div. of Water Resources
310 S. Michigan, Room 1606
Chicago, IL 60604
(312) 793-3123

INDIANA

Dick Wawrvyniak, Assistant Director
Div. of Water
Dept. of Natural Resources
2475 Director's Row
Indianapolis, IN 46241
(317) 232-4221

LOUISIANA

Chip Groat, Director
Office of Coastal Management
Dept. of Natural Resources
PO Box 44124
Baton Rouge, LA 70804
(504) 342-4503

MAINE

Richard Silkman, Director
State Planning Office
State House Station #38
Augusta, ME 04333
(207) 289-3261

MARYLAND

Lee Zeni, Administrator
Tidewater Administration
Dept. of Natural Resources
Tawes State Office Building
Annapolis, MD 21401
(301) 974-2926

MASSACHUSETTS

Richard Delaney, Director
Coastal Zone Management
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202
(617) 727-9530

MICHIGAN

Christopher Shafer, Chief
Great Lakes Shoreland Section
Dept. of Natural Resources
PO Box 30028
Lansing, MI 48909
(517) 373-1950

MINNESOTA

Larry Seymour, Director
Water Division
Dept. of Natural Resources
500 Lafayette Road
St. Paul, MN 55155
(612) 296-4810

MISSISSIPPI

Rick Leard, Director
Bureau of Marine Resources
Dept. of Wildlife Conservation
University of Mississippi
Gulfport Campus
Long Beach, MS 39560
(601) 864-4602

NEW HAMPSHIRE

John Dabalewicz, Director
Office of State Planning
2 1/2 Beacon Street
Concord, NH 03301
(603) 271-2155

NEW JERSEY

John Weingart, Director
Div. of Coastal Resources
Environmental Protection Dept.
John Fitch Plaza, CN402
Trenton, NJ 08625
(609) 292-2795

NEW YORK

Thomas Jorling, Commissioner
Dept. of Environmental Conservation
50 Wolf Road
Albany, NY 12233
(518) 457-3446

NORTH CAROLINA

David Owens, Director
Coastal Management Div.
Natural Resources &
Community Development
512 North Salisbury Street
Raleigh, NC 27611
(919) 733-2293

OHIO

Robert Goettemoeller, Chief
Division of Water
Dept. of Natural Resources
Fountain Square Building E
Columbus, OH 43224
(614) 265-6712

OREGON

James Ross, Director
Policy Division
Dept. of Land Conservation & Development
1175 Court Street, NE
Salem, OR 97310
(503) 378-4928

PENNSYLVANIA

John McSparran, Director
Bureau of Water Resources Management
Dept. of Environmental Resources, Room 208
Evangelical Press Building
Harrisburg, PA 17120
(717) 787-6750

RHODE ISLAND

William Miner, Chairman
Coastal Resources Management Council
60 Davis Street
Providence, RI 02903
(401) 277-2476

SOUTH CAROLINA

H. Wayne Beam, Executive Director
Coastal Council
1116 Bankers Trust Tower
Columbia, SC 29201
(803) 734-1220

TEXAS

Bob Davis, Director
Governor's Office of Budget & Planning
Box 12428, Capitol Station
Austin, TX 78711
(512) 463-1778

VIRGINIA

Keith Buttleman, Administrator
Council on Environment, Room 903
Ninth Street Office Building
Richmond, VA 23219
(804) 786-4500

WASHINGTON

John De Meyer, Manager
Div. of Aquatic Lands
Dept. of Natural Resources
202 John Cherberg Building
Olympia, WA 98504
(206) 753-5326

WISCONSIN

William Brah, Director
Coastal Management Section
Dept. of Administration
PO Box 7864
Madison, WI 53707
(608) 266-3687

AMERICAN SAMOA

Coordinator
Office of Development Planning
Pago Pago, American Samoa 96799
(684) 633-5165

NORTHERN MARIANA ISLANDS

Robert Rudolph, Administrator
Coastal Resources Management Office
Office of the Governor
Saipan, CM 96950
(670) 234-6623

PUERTO RICO

Jose Gonzal Liboy, Sub-Secretary
Coastal Zone Div.
Puerta de Tierra
PO Box 5887
San Juan, PR 00904
(809) 725-2769

VIRGIN ISLANDS

Benjamin Nazario, Director
Coastal Zone Management Commission
#79 Altona & Welgunst
St. Thomas, Virgin Islands 00802
(809) 774-3320

EMERGENCY MANAGEMENT

(Prepares, maintains and implements state disaster plans and coordinates emergency activities.)

ALABAMA

Danny Cooper, Director
Emergency Management
520 S. Court Street
Montgomery, AL 36130
(203) 834-1375

Dan Turner, Director
Emergency Management Agency
64 North Union Street
Montgomery, AL 36130
(205) 261-3318

ALASKA

Ervin Martin, Director
Div. of Emergency Services
Military & Veterans Affairs Dept.
3501 East Bogard Road
Wasilla, AK 99687
(907) 249-1370

ARIZONA

Richard Colson, Director
Office of Emergency Services
Emergency & Military Affairs Dept.
5636 East McDowell Road
Phoenix, AZ 85008
(602) 231-6245

ARKANSAS

Leon McGoogan, Director
Office of Emergency Services
PO Box 758
Conway, AR 72032
(501) 329-5601

CALIFORNIA

William Medigovich, Director
Office of Emergency Services
2800 Meadowview Road
Sacramento, CA 95823
(916) 427-4990

COLORADO

John Byrne, Director
Disaster Emergency Services
DOC, Camp George West
Golden, CO 80401
(303) 273-1624

CONNECTICUT

Frank Mancusco, Director
Office of Civil Preparedness
Dept. of Public Safety
360 Broad Street
Hartford, CT 06105
(203) 566-3180

DELAWARE

Clarke Jester, Director
Div. of Emergency Planning Operations
PO Box C
Delaware City, DE 19706
(302) 834-4531

FLORIDA

Gordon Guthrie, Director
Bureau of Emergency Management
1720 S. Gadsden Street
Tallahassee, FL 32301
(904) 488-1900

GEORGIA

Billy Clack, Director
Emergency Management Agency
PO Box 18055
Atlanta, GA 30316
(404) 656-5500

Joseph Griffin
Adjutant General
Dept. of Defense
PO Box 17965
Atlanta, GA 30316
(404) 656-1700

HAWAII

Alexis Lum, Adjutant General of the
National Guard & Civil Defense
Dept. of Defense
3949 Diamond Head Road
Honolulu, HI 86816
(808) 734-2145

IDAHO

Darrell Waller, Coordinator
Bureau of Disaster Services
Military Division
650 West State Street
Boise, ID 83720
(208) 334-3460

ILLINOIS

Charles Jones, Director
Emergency Services & Disaster Agency
110 East Adams Street
Springfield, IL 62706
(217) 782-2700

INDIANA

William Patterson, Director
Dept. of Civil Defense &
Emergency Management
State Office Building, B-90
100 North Senate Avenue
Indianapolis, IN 46204
(317) 232-3838

IOWA

Ellen Gordon, Director
Disaster Services Div.
Dept. of Public Defense
Hoover State Office Building
Des Moines, IA 50319
(515) 281-3231

KANSAS

Mahlon Weed, Deputy Director
Office of Emergency Preparedness
Adjutant General's Dept.
2800 Topeka Avenue
Topeka, KS 66611
(913) 233-9253

KENTUCKY

Mike Molloy, Executive Director
Disaster & Emergency Services
Dept. of Military Affairs
Boone National Guard Center
Frankfort, KY 40601
(502) 564-8680

LOUISIANA

Thomas Creaghan, Assistant Secretary
Office of Emergency Preparedness
Dept. of Public Safety
PO Box 66536
Audubon Station
Baton Rouge, LA 70896
(505) 342-5470

MAINE

David Brown, Director
Civil Emergency Preparedness
Defense & Veterans Services Dept.
State House Station #72
Augusta, ME 04333
(207) 289-3211

MARYLAND

Edward Murray, Director
Emergency Management &
Civil Defense Agency
Sudbrook Lane & Reisterstown Road
Baltimore, MD 21208
(301) 486-4422

MASSACHUSETTS

Robert Boulay, Director
Massachusetts Civil Defense Agency &
Office of Emergency Preparedness
400 Worchester Road
Farmingham, MA 01701
(617) 237-0200

MICHIGAN

Arlyn Brower, Director
Emergency Management Div.
State Police Dept.
300 S. Washington Square
3rd Floor, Knopps Center
Lansing, MI 48913
(517) 334-7950

MINNESOTA

Thomas Motherway, Director
Div. of Emergency Services
Dept. of Public Safety
State Capitol, B-5
St. Paul, MN 55155
(612) 296-2233

MISSISSIPPI

James Maher, Director
Emergency Management Agency
1410 Riverside Dr.
Jackson, MS 39202
(601) 352-9100

MISSOURI

Richard Ross, Director
State Emergency Management Agency
Dept. of Public Safety
PO Box 116
Jefferson City, MO 65102
(314) 751-9500

MONTANA

George DeWolf, Administrator
Disaster & Emergency Services Div.
Dept. of Military Affairs
1100 North Last Chance Gulch
Helena, MT 59601
(406) 444-6954

NEBRASKA

James Carmona, Director
Civil Defense Agency
Military Dept.
1300 Military Road
Lincoln, NE 68508
(402) 473-1114

NEVADA

James Licklider, Acting Director
Div. of Emergency Management
Dept. of Military
2525 S. Carson Street
Carson City, NV 89710
(702) 885-4240

NEW HAMPSHIRE

Richard Strome, Director
State Civil Defense
State Office Park South
Concord, NH 03301
(603) 271-2231

NEW JERSEY

Clinton Pagano, Sr., Superintendent
Div. of State Police
Dept. of Law & Public Safety
PO Box 7068
West Trenton, NJ 08625
(609) 882-2000

NEW MEXICO

Robert Kemble, Secretary
Dept. of Public Safety
State Police Complex
Santa Fe, NM 87503
(505) 827-9001

Harry Taylor, Deputy Director
Civil Emergency Preparedness Div.
PO Box 4277
Santa Fe, NM 87501
(505) 473-2476

NEW YORK

David Axelrod, Commissioner
Dept. of Health
Empire State Plaza
Corning Tower Building
Albany, NY 12237
(518) 474-2011

Donald DeVito, Director
State Emergency Management Office
Div. of Military & Naval Affairs
Public Security Building
State Campus
Albany, NY 12226
(518) 457-2222

NORTH CAROLINA

Joe Myers, Director
Emergency Management, Crime Control &
Public Safety
116 West Jones Street
Raleigh, NC 27611
(919) 733-3867

NORTH DAKOTA

Ronald Affeldt, Director
Disaster Emergency Services
PO Box 5511
Bismark, ND 58502
(701) 224-2111

OHIO

Richard Lockhart, Deputy Director
Disaster Services Agency
2825 West Granville Road
Worthington, OH 43085
(614) 889-7150

OKLAHOMA

Norris Price, Director
Oklahoma Civil Defense Agency
PO Box 53365
Oklahoma City, OK 73152
(405) 427-8371

OREGON

Myra Lee, Director
Emergency Management Agency
Executive Dept.
43 State Capitol
Salem, OR 97310
(503) 378-4124

PENNSYLVANIA

Joe La Fleur, Director
Emergency Management Agency
B-151 Transportation & Safety Building
Harrisburg, PA 17120
(717) 783-8150

RHODE ISLAND

John Kiely, Adjutant General
National Guard
1051 North Main Street
Providence, RI 02904
(401) 457-4100

Santo Amato, Executive Director
Emergency Management Agency
State House
Providence, RI 02903
(401) 421-7333

SOUTH CAROLINA

Joshua Moore, Director
Emergency Preparedness Div.
Office of the Adjutant General
1429 Senate Street
Columbia, SC 29201
(803) 734-8020

SOUTH DAKOTA

Bob Gunderson, Director
Emergency & Disaster Services
Military & Veterans Affairs Dept.
State Capitol
Pierre, SD 57501
(605) 773-3231

TENNESSEE

Lacy Suiter, Director
Emergency Management Agency
Dept. of Military
3041 Sidco Dr.
Nashville, TN 37204
(615) 252-3311

TEXAS

Robert Lansford, Chief
Div. of Emergency Management
Dept. of Public Safety
PO Box 4087
Austin, TX 78773
(512) 465-2138

UTAH

Lorayne Tempest, Director
Div. of Comprehensive
Emergency Management
Dept. of Public Safety
1543 Sunnyside Avenue
Salt Lake City, UT 84108
(801) 533-5271

VERMONT

George Lowe, Director
Emergency Management Div.
Dept. of Public Safety
103 S. Main Street
Waterbury, VT 05676
(802) 244-5194

VIRGINIA

Addison Slayton, Jr., State Coordinator
Dept. of Emergency Services
310 Turner Road
Richmond, VA 23225
(804) 323-2897

WASHINGTON

Kate Heinbeck, Assistant Director
Emergency Management
Dept. of Commerce &
Economic Development
4220 East Martin Way
M/S PT-11
Olympia, WA 98504
(206) 459-5255

WEST VIRGINIA

Bill Jopling, Deputy Director
Office of Emergency Services
Room EB-80, State Capitol
Charleston, WV 25305
(304) 348-5380

WISCONSIN

Richard Braund, Administrator
Div. of Emergency Government
Dept. of Administration
PO Box 7865
Madison, WI 53707
(608) 266-0199

WYOMING

Ed Usiu, Coordinator
Disaster & Civil Defense Div.
Military Dept.
5500 Bishop Blvd.
Cheyenne, WY 82002
(307) 777-7566

DISTRICT OF COLUMBIA

Joseph Yeldell, Director
Office of Emergency Preparedness
2000 14th Street, NW 8th Floor
Washington, DC 20009
(202) 727-6161

AMERICAN SAMOA

Maiava Hunkin, Director
Emergency Management Coordination
Public Safety Dept.
Pago Pago, American Samoa 96799
(684) 633-4116

Igafo Faigata, Director
Office of Territorial Emergency
Management Coordination
Office of the Governor
PO Box 3296
Pago Pago, American Samoa 96799
(684) 633-2331

GUAM

Francisco Carbullido, Director
Civil Defense, Guam Emergency Services
Territory of Guam
PO Box 2877
Agana, Guam 96910
(671) 477-9841

NORTHERN MARIANA ISLANDS

James Reyes, Officer
Disaster Control Div.
Public Safety Dept.
Office of the Governor
Saipan, Mariana Islands 96950
(670) 322-9274

Jay Lather, Emergency Planner
Office of Planning & Statistics
Office of the High Commissioner
Trust Territory Headquarters
Saipan, Mariana Islands 96950
(670) 011-9333

PANAMA CANAL COMMISSION

Thomas Strider, Chief
Emergency Preparedness Div.
General Services Bureau
Panama Canal Commission
APO Miami, FL
(912) 226-1761

PUERTO RICO

Heriberto Acevedo, Director
Office of Civil Defense
Office of the Governor
PO Box 5127
Puerta de Tierra, Puerto Rico 00906
(809) 724-0124

VIRGIN ISLANDS

Robert Morehead, Adjutant General
V.I. National Guard
Alexander Hamilton Airport
Kingshill
St. Croix, Virgin Islands 00850
(809) 778-4916

Louis Tirell, Director
Civil Defense & Emergency Services
PO Box 1208
St. Thomas, Virgin Islands 00801
(809) 774-2244

GEOLOGICAL SURVEY

(Identifies, collects, and publishes geological information. Inventories and promotes mineral development, and advises governmental agencies on geologic problems.)

ALABAMA

Ernest Mancini, Director
Geological Survey
PO Box 0
Tuscaloosa, AL 35486-9780
(205) 349-2852

ALASKA

Robert Forbes, Director
Geological & Geophysical Surveys
794 University Avenue, Suite 200
Fairbanks, AK 99709
(907) 479-7625

ARIZONA

Larry Fellows, Director
Geological Survey
845 North Park Avenue, Suite 100
Tucson, AZ 85719
(602) 621-7906

ARKANSAS

Norman Williams, Director
Geological Commission
Vardelle Parham Geology Center
3815 West Roosevelt Road
Little Rock, AR 72204
(501) 371-1488

CALIFORNIA

James Davis, Director
Div. of Mines & Geology
1416 Ninth Street, Room 1341
Sacramento, CA 95814
(916) 445-1923

COLORADO

John Rold, Director
Geological Survey
1313 Sherman Street, Room 715
Denver, CO 80203
(303) 866-2611

CONNECTICUT

Hugo Thomas, Director
Geological & Natural History Survey
State Office Building
165 Capitol Avenue, Room 553
Hartford, CT 06106
(203) 566-3540

DELAWARE

Robert Jordan, Director
Geological Survey
University of Delaware
101 Penny Hall
Newark, DE 19716
(302) 451-2833

FLORIDA

Walter Schmidt, Director
Geological Survey
903 West Tennessee Street
Tallahassee, FL 32304-7795
(904) 488-4191

GEORGIA

William McLemore, Director
Geological Survey
Dept. of Natural Resources
19 Martin Luther King, Jr., Dr., Room 400
Atlanta, GA 30334
(404) 656-3214

HAWAII

Manabu Tagomori, Director
Div. of Land & Water Development
PO Box 373
Honolulu, HI 96809
(808) 548-7533

IDAHO

Robert Bartlett, Director
Geological Survey
Morrill Hall, Room 332
University of Idaho
Moscow, ID 83843
(208) 885-6195

ILLINOIS

Morris Leighton, Director
Geological Survey
Natural Resources Building
615 East Peabody Dr.
Champaign, IL 61820
(217) 333-4747

INDIANA

Norman Hester, Director
Geological Survey
611 North Walnut Grove
Bloomington, IN 47405
(812) 855-9350

IOWA

Donald Koch, Director
Geological Bureau
Dept. of Natural Resources
123 North Capitol Street
Iowa City, IA 52242
(319) 335-1575

KANSAS

Lee Gerhard, Director
Geological Survey
1930 Constant Avenue
West Campus
University of Kansas
Lawrence, KS 66046
(913) 864-3965

KENTUCKY

Donald Haney, Director
Geological Survey
Mining & Mineral Resources Building
Room 228
University of Kentucky
Lexington, KY 40506-0107
(606) 257-5500

LOUISIANA

Charles Groat, Director
Geological Survey
Box G, University Station
Baton Rouge, LA 70893
(504) 388-5320

MAINE

Walter Anderson, Director
Geological Survey
Dept. of Conservation
State House Station 22
Augusta, ME 04333
(207) 289-2801

MARYLAND

Walter Anderson, Director
Geological Survey
2300 St. Paul Street
Baltimore, MD 21218
(301) 554-5503

MASSACHUSETTS

Joseph Sinnott, Director
Dept. of Environmental Quality Engineering
Executive Office of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, MA 02202
(617) 727-9800

MICHIGAN

R. Thomas Segall, Director
Geological Survey Div.
PO Box 30028
Lansing, MI 48909
(517) 334-6923

MINNESOTA

Priscilla Grew, Director
Geological Survey
2642 University Avenue
St. Paul, MN 55114-1057
(612) 627-4780

MISSISSIPPI

Conrad Gazzier, Director
Bureau of Geology
PO Box 5348
Jackson, MS 39216
(601) 354-6228

MISSOURI

James Williams, Director
Div. of Geology & Land Survey
PO Box 250
Rolla, MO 65401
(314) 364-1752

MONTANA

Edward Ruppel, Director
Bureau of Mines & Geology
Montana College of Mineral Science & Technology
Butte, MT 59701
(406) 496-4180

NEBRASKA

Perry Wigley, Director
Conservation & Survey Div.
113 Nebraska Hall
University of Nebraska
Lincoln, NB 68588-0517
(402) 472-3471

NEVADA

State Geologist
Bureau of Mines & Geology
University of Nevada
Reno, NV 89557-0088
(702) 784-6691

NEW HAMPSHIRE

Eugene Boudette, Director
Dept. of Environmental Services
117 James Hall
University of New Hampshire
Durham, NH 03824
(603) 862-3160

NEW JERSEY

Haig Kasabach, Director
Geological Survey
CN-029
Trenton, NJ 08625
(609) 292-1185

NEW MEXICO

Frank Kottlowski, Director
Bureau of Mines & Mineral Resources
Campus Station
Socorro, NM 87801
(505) 835-5420

NEW YORK

Robert Fakundiny, Director
Geological Survey
3136 Cultural Education Center
Empire State Plaza
Albany, NY 12230
(518) 474-5816

NORTH CAROLINA

Stephen Conrad, Director
Dept. of Natural Resources & Community Development
Div. of Land Resources
PO Box 27687
Raleigh, NC 27611
(919) 733-3833

NORTH DAKOTA

Sidney Anderson, Director
Geological Survey
University Station
Grand Forks, ND 58202-8156
(701) 777-2231

OHIO

State Geologist
Div. of Geological Survey
Fountain Square, Building B
Columbus, OH 43224
(614) 265-6605

OKLAHOMA

Charles Mankin, Director
Geological Survey
830 Van Vleet Oval, Room 163
Norman, OK 73019
(405) 325-3031

OREGON

Donald Hull, Director
Dept. of Geology & Mineral Industries
State Office Building, Room 910
1400 SW 5th Avenue
Portland, OR 97201-5528
(503) 229-5580

PENNSYLVANIA

Donald Hoskins, Director
Bureau of Topographic & Geologic Survey
Dept. of Environmental Resources
PO Box 2357
Harrisburg, PA 17120
(717) 787-2169

RHODE ISLAND

J. Allan Cain, Director
Geological Survey
Dept. of Geology
University of Rhode Island
Kingston, RI 02881
(401) 792-2265

SOUTH CAROLINA

Norman Olson, Director
Geological Survey
5 Geology Road
Columbia, SC 29210
(803) 737-9440

SOUTH DAKOTA

Merlin Tipton, Director
Geological Survey
Science Center
University of South Dakota
Vermillion, SD 57069-2390
(605) 677-5227

TENNESSEE

William Hill, Director
Div. of Geology
Custom's House
701 Broadway
Nashville, TN 37219-5237
(615) 742-6691

TEXAS

William Fisher, Director
Bureau of Economic Geology
University of Texas
Box X, University Station
Austin, TX 78712-7508
(512) 471-1534

UTAH

Genevieve Atwood, Director
Geological & Mineral Survey
606 Black Hawk Way
Salt Lake City, UT 84108-1280
(801) 581-6831

VERMONT

Charles Ratte, Director
Geological Survey
Agency of Natural Resources
103 Main Street
Waterbury, VT 05676
(802) 244-5164

VIRGINIA

Robert Milici, Director
Div. of Mineral Resources
PO Box 3667
Charlottesville, VA 22903
(804) 293-5121

WASHINGTON

Raymond Lasmanis, Director
Div. of Geology & Earth Resources
Dept. of Natural Resources
Olympia, WA 98504
(206) 459-6372

WEST VIRGINIA

Robert Erwin, Director
Geological & Economic Survey
Mont Chateau Research Center
PO Box 879
Morgantown, WV 26507-0879
(304) 594-2331

WISCONSIN

Meredith Ostrom, Director
Geological & Natural History Survey
3817 Mineral Point Road
Madison, WI 53705
(608) 262-1705

WYOMING

Gary Glass, Director
Geological Survey
Box 3008, University Station
University of Wyoming
Laramie, WY 82071
(307) 742-2054

PUERTO RICO

Ramon Alonso, Director
Geological Survey Div.
PO Box 5887
Puerta de Tierra
San Juan, Puerto Rico 00906
(809) 724-8774

NATURAL RESOURCES

(Formulates and coordinates policies to protect, utilize, restore, and enhance the state's natural resources.)

ALABAMA

James Martin Commissioner
Dept. of Conservation & Natural Resources
64 North Union Street, Room 702
Montgomery, AL 36130
(205) 261-3486

ALASKA

Judy Brady, Director
Dept. of Natural Resources
PO Box M
Juneau, AK 99811
(907) 465-2400

ARIZONA

Jean Hassell, Director
Land Department
1624 West Adams Street, 4th Floor
Phoenix, AZ 85007
(602) 255-4621

ARKANSAS

Kay Arnold, Director
Dept. of Natural & Cultural Heritage
225 East Markham Street, #200
Little Rock, AR 72201
(501) 371-2761

CALIFORNIA

Randall Ward, Director
Dept. of Conservation
1416 Ninth Street, Room 1320
Sacramento, CA 95814
(916) 322-1080

COLORADO

Dennis Donald, Director
Dept. of Natural Resources
1313 Sherman Street, Room 718
Denver, CO 80203
(303) 866-3311

CONNECTICUT

Leslie Carothers, Commissioner
Div. of Environmental Quality
Environmental Protection Dept.
165 Capitol Avenue, Room 161
Hartford, CT 06106
(203) 566-2110

DELAWARE

John Wilson III, Secretary
Dept. of Natural Resources
& Environmental Control
89 Kings Hwy.
Dover, DE 19901
(302) 736-4403

FLORIDA

Elton Gissendanner, Director
Dept. of Natural Resources
3900 Commonwealth Blvd.
Tallahassee, FL 32303
(904) 488-1554

GEORGIA

J. Leonard Ledbetter, Commissioner
Dept. of Natural Resources
205 Butler Street, SW
Floyd Towers East, Suite 1252
Atlanta, GA 30334
(404) 656-3500

HAWAII

William Paty, Chairman
Board of Land & Natural Resources
1151 Punchbowl Street
Honolulu, HI 96813
(808) 548-6550

ILLINOIS

Don Etchison, Director
Dept. of Energy & Natural Resources
325 West Adams Street
Springfield, IL 62704
(217) 785-2002

INDIANA

James Ridenour, Director
Dept. of Natural Resources
608 State Office Building
Indianapolis, IN 46204
(317) 232-4020

IOWA

Larry Wilson, Director
Dept. of Natural Resources
Wallace State Office Building
Des Moines, IA 50319
(515) 281-5385

KANSAS

Allan Abramson, Director
Div. of Environment
Dept. of Health & Environment
Forbes Field
Topeka, KS 66620
(913) 862-9360

KENTUCKY

Mary Miller, Director
Natural Resources &
Environmental Protection Cabinet
Capital Plaza Tower
Frankfort, KY 40601
(502) 564-3350

LOUISIANA

Jim Porter, Secretary
Dept. of Natural Resources
PO Box 94396
Baton Rouge, LA 70804
(504) 342-4503

MAINE

Dean Marriott, Commissioner
Dept. of Environmental Protection
State House Station #17
Augusta, ME 04333
(207) 289-2811

MARYLAND

Torrey Brown, Secretary
Dept. of Natural Resources
Tawes State Office Building
Annapolis, MD 21401
(301) 974-3041

MASSACHUSETTS

James Gutensohn
Dept. of Environmental Management
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202
(617) 727-3163

MICHIGAN

Gordan Guyer, Director
Dept. of Natural Resources
Mason Building
PO Box 30028
Lansing, MI 48909
(517) 373-2329

MINNESOTA

Joseph Alexander, Commissioner
Dept. of Natural Resources
500 Lafayette Road
St. Paul, MN 55146
(612) 296-2549

MISSISSIPPI

Charlie Blalock, Executive Director
Dept. of Natural Resources
Southport Mall
Jackson, MS 39209
(601) 961-5000

MISSOURI

Frederick Brunner, Director
Dept. of Natural Resources
Jefferson State Office Building
205 Jefferson Street
Jefferson City, MO 65102
(314) 751-4422

MONTANA

Larry Fasbender, Director
Dept. of Natural Resources & Conservation
State Capitol
Helena, MT 59620
(406) 444-6699

NEBRASKA

Dayle Williamson, Director
Natural Resources Commission
301 Centennial Mall South
PO Box 94876
Lincoln, NE 68509
(402) 471-2081

NEVADA

Roland Westergard, Director
Dept. of Conservation & Natural Resources
201 S. Fall Street
Carson City, NV 89710
(702) 885-4360

NEW HAMPSHIRE

Commissioner
Dept. of Resources &
Economic Development
PO Box 856
Concord, NH 03301
(603) 271-2411

NEW JERSEY

Helen Fenske, Director
Natural Resources &
Environmental Protection Dept.
John Fitch Plaza, CN 402
Trenton, NJ 08625
(609) 292-3541

NEW MEXICO

Tom Bahr, Director
Energy, Minerals &
Natural Resources Dept.
525 Camino de los Marcos
Santa Fe, NM 87503
(505) 827-7835

NEW YORK

Thomas Jorling, Commissioner
Dept. of Environmental Conservation
50 Wolf Road
Albany, NY 12233
(518) 457-3446

NORTH CAROLINA

Tommy Rhodes, Secretary
Dept. of Natural Resources
& Community Development
512 North Salisbury Street
Raleigh, NC 27611
(919) 733-4984

NORTH DAKOTA

State Engineer
Water Commission
State Office Building
900 East Blvd.
Bismarck, ND 58505
(701) 224-2750

OHIO

Joseph Sommer, Director
Dept. of Natural Resources
Fountain Square, Building D-3
Columbus, OH 43224
(614) 265-6877

OKLAHOMA

Glenn Sullivan, Secretary
Dept. of Natural Resources
500 Will Rogers Building
Oklahoma City, OK 73105
(405) 521-2413

OREGON

Gail Achterman, Director
Dept. of Natural Resources
Office of the Governor
160 State Capitol
Salem, OR 97310
(503) 378-3109

PENNSYLVANIA

Arthur Davis, Secretary
Dept. of Environmental Resources
Fulton Building, 9th Floor
Harrisburg, PA 17120
(717) 787-2814

RHODE ISLAND

Robert Bendick, Director
Dept. of Environmental Management
9 Hayes Street
Providence, RI 02908
(401) 277-2771

SOUTH CAROLINA

John McMillan, Director
Energy, Agriculture &
Natural Resources Div.
Office of the Governor
1205 Pendleton Street
Columbia, SC 29201
(803) 734-0445

SOUTH DAKOTA

John Smith, Secretary
Dept. of Water & Natural Resources
Foss Building, 2nd Floor
Pierre, SD 57501
(605) 773-3151

TENNESSEE

Elbert Gill, Commissioner
Dept. of Conservation
701 Broadway
Nashville, TN 37219
(615) 742-6749

TEXAS

Larry Soward, Executive Director
Water Commission
Box 13087, Capitol Station
Austin, TX 78711
(512) 463-7898

UTAH

Dee Hansen, Executive Director
Dept. of Natural Resources & Energy
1636 West North Temple, Room 316
Salt Lake City, UT 84116
(801) 533-5356

VERMONT

Jonathan Lash, Secretary
Agency of Natural Resources
103 S. Main Street
Waterbury, VT 05676
(802) 244-7347

VIRGINIA

John Daniel III, Secretary
Office of the Secretary of Natural Resources
PO Box 1475
Richmond, VA 23212
(804) 786-0044

WASHINGTON

Brian Boyle, Commissioner of Public Lands
Dept. of Natural Resources
Public Lands Building
Olympia, WA 98504
(206) 753-5317

WEST VIRGINIA

Ronald Potesta, Director
Dept. of Natural Resources
1800 Washington Street East
Building 3, Room 669
Charleston, WV 25305
(304) 348-2754

WISCONSIN

Carroll Besadny, Secretary
Dept. of Natural Resources
101 S. Webster Street
PO Box 7921
Madison, WI 53707
(608) 266-2121

DISTRICT OF COLUMBIA

R. Benjamin Johnson, Administrator
Housing & Environmental Regulations
Dept. of Consumer & Regulatory Affairs
614 H Street, NW
Washington, DC 20001
(202) 727-7395

NORTHERN MARIANA ISLANDS

Nicolas Guerrero, Director
Natural Resources Dept.
Office of the Governor
Saipan, CM 96950
(670) 322-9830

PUERTO RICO

Justo Mendez, Secretary
Dept. of Natural Resources
PO Box 5887
San Juan, Puerto Rico 00906
(809) 724-8774

VIRGIN ISLANDS

Alan Smith, Commissioner
Dept. of Planning & Natural Resources
#79 Altona & Welgunst
St. Thomas, Virgin Islands 00802
(809) 774-3320

SOIL CONSERVATION

(Coordinates programs to conserve and protect the state's soil.)

ALABAMA

James Plaster, Executive Secretary
Soil & Water Conservation Committee
1445 Federal Dr.
PO Box 3336
Montgomery, AL 36193
(205) 261-2620

ALASKA

Dean Brown, Director
Div. of Agriculture
Dept. of Natural Resources
PO Box 949
Palmer, AK 99645
(907) 745-7200

ARKANSAS

Randy Young, Director
Soil & Water Conservation Commission
#1 Capitol Mall, Suite 2D
Little Rock, AR 72201
(501) 371-1611

CALIFORNIA

Steve Oliva, Div. Chief
Lands Resource Protection Div.
Dept. of Conservation
1416 Ninth Street
Sacramento, CA 95814
(916) 324-0859

COLORADO

Steven Horn, Director
Soil Conservation Board
Dept. of Natural Resources
1313 Sherman Street, Room 814
Denver, CO 80203
(303) 866-3351

CONNECTICUT

Leslie Carothers, Commissioner
Div. of Environmental Quality
Environmental Protection Dept.
165 Capitol Avenue, Room 161
Hartford, CT 06106
(203) 566-2110

DELAWARE

John Hughes, Director
Soil & Water Conservation Dev.
Dept. of Natural Resources &
Environmental Control
89 Kings Hwy., Box 1401
Dover, DE 19903
(302) 736-4411

FLORIDA

Glenn Bissett, Chief
Soil & Water Conservation
Agriculture & Consumer Services Dept.
PO Box 1269
Gainesville, FL 32602
(904) 376-1990

GEORGIA

F. Graham Liles, Jr., Executive Director
Soil & Water Conservation Committee
PO Box 8024
Athens, GA 30603
(404) 542-3065

HAWAII

William Paty, Chairman
Board of Land & Natural Resources
1151 Punchbowl Street
Honolulu, HI 96813
(808) 548-6550

IDAHO

Wayne Faude, Administrator
Soil Conservation Commission
Dept. of Lands
801 Capitol Blvd.
Boise, ID 83720
(208) 334-3865

ILLINOIS

Larry Werries, Director
Dept. of Agriculture
State Fairgrounds
Springfield, IL 62706
(217) 782-2172

INDIANA

Charles McKee, Director
Div. of Soil Conservation
AGAD Building, Room 7
West Lafayette, IN 47907
(317) 494-8383

IOWA

James Gulliford, Administrator
Div. of Soil Conservation
Dept. of Agriculture
Wallace State Office Building
Des Moines, IA 50319
(515) 281-5851

KANSAS

Kenneth Kern, Executive Director
Conservation Commission
217 SE Fourth Street, 4th Floor
Topeka, KS 66603
(913) 296-3600

KENTUCKY

H. Stanley Head, Director
Div. of Conservation
Natural Resources & Environmental
Protection Cabinet
605 Teton Trail
Frankfort, KY 40601
(502) 564-3080

LOUISIANA

Michael Mety, Assistant Commissioner
Office of Forestry
Dept. of Agriculture
PO Box 1628
Baton Rouge, LA 70821
(504) 925-4500

MAINE

Frank Ricker, Executive Director
Soil & Water Conservation Commission
Dept. of Agriculture, Food &
Rural Resources
State House Station #28
Augusta, ME 04333
(207) 289-2666

MARYLAND

Richard Wright, Chairman
Soil Conservation Committee
Dept. of Agriculture
50 Harry S. Truman Pkwy.
Annapolis, MD 21401
(301) 841-5863

MASSACHUSETTS

Joel Lerner, Director
Div. of Conservation Services
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202
(617) 727-1552

MICHIGAN

Donald Schaner, Chief
Soil Conservation Div.
Dept of Agriculture
Lewis Cass Building
Lansing, MI 48909
(517) 373-3898

MINNESOTA

Ron Nargang, Director
Soil & Water Conservation Board
Dept. of Agriculture
90 West Plato Blvd.
St. Paul, MN 55107
(612) 296-3767

MISSISSIPPI

Gale Martin, Executive Director
Soil & Water Conservation Commission
410 Robert East Lee Building
Jaskson, MS 39201
(601) 359-1281

MISSOURI

Donald Wolfe, Director
Soil & Water Conservation Program
Div. of Environmental Quality
PO Box 176
Jefferson City, MO 65102
(314) 751-4932

MONTANA

Ray Beck, Administrator
Conservation Districts Div.
Natural Resources & Conservation Dept.
25 S. Ewing
Helena, MT 59620
(406) 444-6667

NEBRASKA

Dayle Williamson, Director
Natural Resources Commission
301 Centennial Mall South
PO Box 94876
Lincoln, NE 68509
(402) 471-2081

NEW HAMPSHIRE

Robert Bodwell, Chairman
State Conservation Committee
Sambornton, NH 03269
(603) 286-4986

NEW JERSEY

Samuel Race, Executive Secretary
Soil Conservation Committee
Dept. of Agriculture, CN 330
Trenton, NJ 08625
(609) 292-5540

NEW MEXICO

Walt Hisenberg, Bureau Chief
Conservation Management
Dept. of Natural Resources
Villagra Building
Santa Fe, NM 87503
(505) 827-3988

NEVADA

Pamela Wilcox, Director
Div. of Conservation Districts
Dept. of Conservation & Natural Resources
201 S. Fall Street
Carson City, NV 89710
(702) 885-4363

NEW YORK

Thomas Jorling, Commissioner
Dept. of Environmental Conservation
50 Wolf Road
Albany, NY 12233
(518) 457-3446

NORTH CAROLINA

David Sides, Director
Soil & Water Conservation
Natural Resources & Community
Development Dept.
512 North Salisbury Street
Raleigh, NC 27611
(919) 733-2302

NORTH DAKOTA

Blake Vander Vorst, Executive Secretary
Soil Conservation Committee
Hwy. Building, Capitol Grounds
Bismarck, ND 58505
(701) 224-2650

OHIO

Lawrence Vance, Chief
Soil & Water Conservation Div.
Dept. of Natural Resources
Fountain Square
Columbus, OH 43224
(614) 466-6614

OKLAHOMA

Leonard Solomon, Executive Director
Conservation Commission
20 State Capitol
Oklahoma City, OK 73105
(405) 521-2384

OREGON

Charles Liles, Administrator
Soil & Water Conservation Commission
Dept. of Agriculture
635 Capitol Street, NE
Salem, OR 97310
(503) 378-3810

PENNSYLVANIA

Paul Swartz, Director
Soil & Water Conservation Bureau
Environmental Resources Dept.
PO Box 2357
Harrisburg, PA 17120
(717) 787-5267

RHODE ISLAND

John Lawrence, Chief
Div. of Agriculture & Marketing
Dept. of Environmental Management
22 Hayes Street
Providence, RI 02908
(401) 277-2781

SOUTH CAROLINA

Charles Logan, Deputy Director
Land Resources Conservation Commission
2221 Devine Street, #222
Columbia, SC 29205
(803) 734-9100

SOUTH DAKOTA

Jack Fifield, Director
Div. of Conservation
Dept. of Agriculture, Room 304
Anderson Building
Pierre, SD 57501
(605) 773-3258

TENNESSEE

James Robinson, Director
Soil Conservation
Dept. of Agriculture
Ellington Agricultural Center
Nashville, TN 37204
(615) 360-0108

TEXAS

Harvey Davis, Executive Director
Soil & Water Conservation Board
PO Box 658
Temple, TX 76503
(817) 773-2250

UTAH

James Christensen, Director
Div. of Agricultural Development
Dept. of Agriculture
350 North Redwood Road
Salt Lake City, UT 84116
(801) 533-4103

VERMONT

Patrick Parenteau, Commissioner
Dept. of Environmental Conservation
103 S. Main Street
Waterbury, VT 05676
(802) 244-8755

VIRGINIA

B. C. Leynes, Jr., Director
Dept. of Conservation & Historic Resources
1101 Washington Building
Richmond, VA 23219
(804) 786-2121

WASHINGTON

Wayne Reid, Executive Secretary
Conservation Commission
M/S PV-11
Olympia, WA 98504
(206) 459-6227

WEST VIRGINIA

Edward Bumgarner, Executive Secretary
Soil Conservation Committee
Dept. of Agriculture
State Capitol Complex
Charleston, WV 25305
(304) 348-2204

WISCONSIN

James Johnson, Director
Bureau of Land Resources, Agriculture,
Trade & Consumer Protection
PO Box 8911
Madison, WI 53708
(608) 267-9788

WYOMING

Director
Conservation Commission
Dept. of Agriculture
2219 Carey Avenue
Cheyenne, WY 82008
(307) 777-7321

DISTRICT OF COLUMBIA

R. Benjamin Johnson, Administrator
Housing & Environmental Regulations
Dept. of Consumer & Regulatory Affairs
614 H Street, NW
Washington, DC 20001
(202) 727-7395

AMERICAN SAMOA

Tofu Fia, Director
Dept. of Agriculture
Pago Pago, American Samoa 96799
(684) 633-5276

NORTHERN MARIANA ISLANDS

Joaquin Tenorio, Chief
Plant Industry & Extension Services Div.
Natural Resources Dept.
Saipan, CM 96950
(670) 322-9868

VIRGIN ISLANDS

Eric Dawson, Commissioner
Dept. of Economic Dev. & Agriculture
81 A & B Kronprindsens Gade
St. Croix, Virgin Islands 00802
(809) 774-8784

WATER RESOURCES

(Plans and manages water resource projects dealing with issues such as water supply, flood control, and drought.)

ALABAMA

Director
Water Improvement Commission
Dept. of Public Health
3815 Interstate Court
c/o State Office Building
Montgomery, AL 36130
(205) 277-3630

ARIZONA

Director
Dept. of Water Resources
15 South Fifteenth Avenue
Phoenix, AZ 85007
(602) 542-1541

ARKANSAS

Director
Soil & Water Conservation Commission
Dept. of Commerce
1818 West Capitol Avenue, Building A
Little Rock, AR 72202
(501) 371-1611

CALIFORNIA

Director
Dept. of Water Resources
Resources Building
1416 9th Street
Sacramento, CA 95814
(916) 445-9248

COLORADO

Director
Water Conservation Board
Dept. of Natural Resources
Centennial Building, Room 721
1313 Sherman Street
Denver, CO 80203
(303) 866-3441

CONNECTICUT

Director
Water & Related Resources
Div. of Conservation & Preservation
Dept. of Environmental Protection
State Office Building, Room 215
165 Capitol Avenue
Hartford, CT 06115
(203) 566-2090

DELAWARE

Director
Div. of Soil & Water Conservation
Dept. of Natural Resources &
Environmental Control
Tatnall Building, Capitol Complex
PO Box 1401
Dover, DE 19901
(302) 678-4411

FLORIDA

Chief
Bureau of Water Management
Dept. of Environmental Regulation
Twin Towers Building
2600 Blair Stone Road
Tallahassee, FL 32301
(904) 488-2657

GEORGIA

Director
Geologic & Water Resources Div.
Dept. of Natural Resources
Agriculture Building, Room 400
19 Martin Luther King, Jr., Dr., SW
Atlanta, GA 30334
(404) 656-3214

HAWAII

Manager
Div. of Water & Land Development
Dept. of Land & Natural Resources
Kalanimoku Building
1151 Punchbowl Street
Honolulu, HI 96813
(808) 548-7539

IDAHO

Director
Dept. of Water Resources
373 West Franklin Street
Boise, ID 83720
(208) 384-2215

ILLINOIS

Director
Div. of Water Resources
Dept. of Transportation
2300 S. Dirksen Pkwy.
Springfield, IL 62764
(217) 782-2152

INDIANA

Chief
Div. of Water
Dept. of Natural Resources
2475 Directors' Row
Indianapolis, IN 46241
(317) 232-4160

IOWA

Water Commissioner
Natural Resources Council
Wallace State Office Building
520 East 9th Street
Des Moines, IA 50319
(515) 281-5913

KANSAS

Director
Water Resources Board
503 Kansas Avenue
Topeka, KS 66603
(913) 296-3185

KENTUCKY

Staff Director
Div. of Water Resources
Dept. for Natural Resources &
Environmental Protection
501 Wilkinson Blvd.
Frankfort, KY 40601
(502) 564-3980

LOUISIANA

Chief
Water Resources Branch
Office of Public Works
Dept. of Transportation & Development
State Capitol 900 Riverside North
PO Box 44155
Baton Rouge, LA 70804
(504) 342-7567

MAINE

Commissioner
Dept. of Conservation
Ray Building
Hospital Street
c/o State House
Augusta, ME 04333
(207) 289-2212

MARYLAND

Director
Water Resources Administration
Dept. of Natural Resources
Tawes State Office Building
580 Taylor Avenue
Annapolis, MD 21401
(301) 269-3846

MASSACHUSETTS

Director
Div. of Water Resources
Water Resources Commission
Dept. of Environmental Management
Leverett Saltonstall State Office Building
100 Cambridge Street
Boston, MA 02202
(617) 727-3267

MICHIGAN

Chief
Water Management Div.
Dept. of Natural Resources
Stevens T. Mason Building, 8th Floor
PO Box 30028
Lansing, MI 48909
(517) 373-3930

MINNESOTA

Director
Div. of Waters
Dept. of Natural Resources
Centennial Office Building, Box 32
658 Cedar Street
St. Paul, MN 55155
(612) 296-4810

MISSISSIPPI

Water Engineer
Board of Water Commissioners
Primos Building Room 4
416 North State Street
Jackson, MS 39201
(601) 354-7236

MISSOURI

Staff Director
Soil & Water Conservation Program
Div. of Environmental Quality
Dept. of Natural Resources
2010 Missouri Blvd.
Jefferson City, MO 65101
(314) 751-3241

MONTANA

Director
Water Resources Div.
Dept. of Natural Resources & Conservation
32 S. Ewing Street
Capitol Station
Helena, MT 59601
(406) 449-2872

NEBRASKA

Director
Dept. of Water Resources
State Office Building
301 Centennial Mall, South
PO Box 94676
Lincoln, NE 68509
(402) 471-2363

NEVADA

State Engineer
Div. of Water Resources
Dept. of Conservation & Natural Resources
Nye Building
201 S. Fall Street
Capitol Complex
Carson City, NV 89710
(702) 885-4380

NEW HAMPSHIRE

Chairman
Water Resources Board
37 Pleasant Street
Concord, NH 03301
(603) 271-3406

NEW JERSEY

Director
Div. of Water Resources
Dept. of Environmental Protection
PO Box 2809
Trenton, NJ 08625
(609) 292-1637

NEW MEXICO

Director
Water Resources Div.
Natural Resources Dept.
Bataan Memorial Building
S. Capitol Place
Santa Fe, NM 87503
(505) 827-2127

NEW YORK

Director
Resources Program Development
Div. of Land Resources & Forest Management
Dept. of Environmental Conservation
50 Wolf Road
Albany, NY 12233
(518) 457-1952

NORTH CAROLINA

Director
Office of Public Works
Dept. of Natural Resources & Community Development
Archdale Building, 4th Floor
512 North Salisbury Street
PO Box 27687
Raleigh, NC 27611
(919) 733-4064

NORTH DAKOTA

State Engineer
Water Commission
State Office Building
900 East Blvd.
Bismarck, ND 58505
(701) 224-2750

OHIO

Director
Water Resources Development
Dept. of Natural Resources
Fountain Square
Columbus, OH 43224
(614) 466-6020

OKLAHOMA

Director
Water Resources Board
Jim Thorpe Office Building
2101 North Lincoln Blvd.
Oklahoma City, OK 73105
(405) 521-3945

OREGON

Director
Water Resources Dept.
Mill Creek Office Park
555 13th Street, NE
Salem, OR 97310
(503) 378-2982

PENNSYLVANIA

Director
Bureau of Soil & Water Conservation
Office of Resource Management
Dept. of Environmental Resources
Evangelical Press Building, Room 114
3rd and Reily Streets
Harrisburg, PA 17120
(717) 787-5267

RHODE ISLAND

General Manager
Water Resources Board
265 Melrose Street
PO Box 2772
Providence, RI 02907
(401) 277-2217

SOUTH CAROLINA

Director
Water Resources Commission
3830 Forest Dr.
PO Box 4515
Columbia, SC 29240
(803) 758-2514

SOUTH DAKOTA

Secretary
Dept. of Natural Resources
Joe Foss Building
Pierre, SD 57501
(605) 773-3151

TENNESSEE

Director
Div. of Water Resources
Dept. of Conservation
6213 Charlotte Avenue
Nashville, TN 37209
(615) 741-1281

TEXAS

Director
Dept. of Water Resources
Stephen Austin State Office Building
1700 North Congress Avenue
PO Box 13087
Capitol Station
Austin, TX 78711
(512) 475-3187

UTAH

Director
Div. of Water Resources
Dept. of Natural Resources
435 State Capitol
Salt Lake City, UT 84114
(801) 533-5401

VERMONT

Commissioner
Dept. of Water Resources
Agency of Environmental Conservation
Heritage Complex #2
79 River Street
Montpelier, VT 05602
(802) 828-3361

VIRGINIA

Executive Secretary
State Water Control Board
2111 North Hamilton Street
Richmond, VA 23230
(804) 257-0056

WASHINGTON

Supervisor
Water Resources Management Div.
Office of Water Programs
Dept. of Ecology
St. Martin's College
Olympia, WA 98504
(206) 753-2829

WEST VIRGINIA

Chief
Div. of Water Resources
Dept. of Natural Resources
1201 Greenbrier Street
Charleston, WV 25311
(304) 348-2107

WYOMING

State Engineer
Water Resources
Barrett Building
2301 Central Avenue
Cheyenne, WY 82002
(307) 777-7354

DISTRICT OF COLUMBIA

Director
Water Resources Management
Administration
Dept. of Environmental Services
Presidential Building, Room 307
415 12th Street, NW
Washington, DC 20004
(202) 629-4496

PUERTO RICO

Executive Director
Water Resources Authority
1110 Ponce de Leon Avenue, Stop 16 1/2
GPO Box 4267
San Juan, Puerto Rico 00936
(809) 724-3838

Federal Offices

ARMY CORPS OF ENGINEERS

(Provides technical assistance, expertise, and planning in water resources and emergency management.)

NORTH ATLANTIC

Director
US Army Corps of Engineers
New England Division Office
424 Trapelo Road
Waltham, MA 02154
(617) 894-2400, Ext. 545

Director
US Army Corps of Engineers
North Atlantic Division Office
90 Church Street
New York, NY 10007
(212) 264-7483

Director
US Army Engineer District, Baltimore
PO Box 1715
Baltimore, MD 21203

Director
US Army Engineer District, New York
26 Federal Plaza
New York, NY 10278

Director
US Army Engineer District, Norfolk
803 Front Street
Norfolk, VA 23510

Director
US Army Engineer District, Philadelphia
US Custom House
2nd & Chestnut Street
Philadelphia, PA 19106

OHIO RIVER

Director
US Army Corps of Engineers
Ohio River Division Office
550 Main Street
Cincinnati, OH 45201
(513) 684-3012

Director
US Army Engineer District, Huntington
502 8th Street
Huntington, WV 25701

Director
US Army Engineer District, Louisville
PO Box 59
Louisville, KY 40201

Director
US Army Engineer District, Nashville
PO Box 1070
Nashville, TN 37202

Director
US Army Engineer District, Pittsburg
William S. Moorhead Federal Building
1000 Liberty Avenue
Pittsburg, PA 15222

SOUTH ATLANTIC

Director
US Army Corps of Engineers
South Atlantic Division Office
510 Title Building
30 Pryor Street, SW
Atlanta, GA 30303
(404) 221-6702

Director
US Army Engineer District, Charleston
PO Box 919
Charleston, SC 29402

Director
US Army Engineer District, Jacksonville
PO Box 4970
Jacksonville, FL 32232

Director
US Army Engineer District, Mobile
PO Box 2288
Mobile, AL 36628

Director
US Army Engineer District, Savannah
PO Box 889
Savannah, GA 31402

Director
US Army Engineer District, Wilmington
PO Box 1890
Wilmington, NC 28402

LOWER MISSISSIPPI VALLEY

Director
US Army Corps of Engineers
Lower Mississippi Valley Division Office
1400 Walnut Street
Vicksburg, MS 39180
(601) 634-5843, Ext. 385

Director
US Army Engineer District, Memphis
B314 Clifford Davis Federal Building
Memphis, TN 38103

Director
US Army Engineer District, New Orleans
PO Box 60267
New Orleans, LA 70160

Director
US Army Engineer District, St. Louis
210 Tucker Blvd. North
St. Louis, MO 63101

Director
US Army Engineer District, Vicksburg
PO Box 60
Vicksburg, MS 39180

MISSOURI RIVER

Director
US Army Corps of Engineers
Missouri River Division Office
12565 West Center Road
Omaha, NE 68101
(402) 221-72701

Director
US Army Engineer District, Kansas City
700 Federal Building
601 East 12th Street
Kansas City, MO 64106

Director
US Army Engineer District, Omaha
6014 USPO & Courthouse
Omaha, NE 68102

NORTH CENTRAL

Director
US Army Corps of Engineers
North Central Division Office
536 S. Clark Street
Chicago, IL 60605
(312) 353-6531

Director
US Army Engineer District, Buffalo
1776 Niagara Street
Buffalo, NY 14207

Director
US Army Engineer District, Chicago
219 S. Darborn Street
Chicago, IL 60604

Director
US Army Engineer District, Detroit
PO Box 1027
Detroit, MI 61201

Director
US Army Engineer District, Rock Island
Clock Tower Building
Rock Island, IL 61201

Director
US Army Engineer District, St. Paul
1135 USPO & Customhouse
St. Paul, MN 55101

SOUTHWESTERN

Director
US Army Corps of Engineers
Southwestern Division Office
Main Tower Building
1114 Commerce Street
Dallas, TX 75242
(214) 767-2310

Director
US Army Engineer District, Albuquerque
PO Box 1580
Albuquerque, NM 87103

Director
US Army Engineer District, Forth Worth
PO Box 17300
Fort Worth, TX 76102

Director
US Army Engineer District, Galveston
PO Box 1229
Galveston, TX 77553

Director
US Army Engineer District, Little Rock
PO Box 867
Little Rock, AR 72203

Director
US Army Engineer District, Tulsa
PO Box 61
Tulsa, OK 74121

Director
US Army Engineer District, Huntsville
PO Box 1600, West Station
Huntsville, AL 35806

SOUTH PACIFIC

Director
US Army Corps of Engineers
Pacific Ocean Division Office
Building 230
Fort Shafter, HI 96858
(808)438-2883

Director
US Army Corps of Engineers
South Pacific Division Office
630 Sansom Street, Room 1216
San Francisco, CA 94111
(415) 556-0914

Director
US Army Engineer District, Los Angeles
PO Box 2711
Los Angeles, CA 90053

Director
US Army Engineer District, Sacramento
650 Capital Mall
Sacramento, CA 95814

Director
US Army Engineer District, San Francisco
211 Main Street
San Francisco, CA 94105

NORTH PACIFIC

Director
US Army Corps of Engineers
Pacific Ocean Division Office
Building 230
Fort Shafter, HI 96858
(808) 438-2883

Director
US Army Corps of Engineers
North Pacific Division Office
220 NorthWest 8th Avenue
Portland, OR 97208
(503) 221-3823

Director
US Army Engineer District, Alaska
Pouch 878
Anchorage, AK 99506

Director
US Army Engineer District, Portland
PO Box 2946
Portland, OR 97208

Director
US Army Engineer District, Seattle
PO Box C-3755
Seattle, WA 98124

Director
US Army Engineer District, Walla Walla
Building 602, City-County Airport
Walla Walla, WA 99362

ENVIRONMENTAL PROTECTION AGENCY

(Preserves environmental quality by controlling and regulating environmental impacts.)

HEADQUARTERS, WASHINGTON, DC

William Reilly, Administrator
Environmental Protection Agency
401 M Street, SW
Washington, DC 20460
(202) 475-8400

REGION I

Michael Deland, Administrator
Environmental Protection Agency
John F. Kennedy Federal Building
Boston, MA 02203
(617) 565-3715

REGION II

Christopher Daggett, Administrator
Environmental Protection Agency
26 Federal Plaza
New York, NY 10278
(212) 264-2525

REGION III

James Self, Administrator
Environmental Protection Agency
841 Chestnut Street
Philadelphia, PA 19107
(215) 597-9800

REGION IV

Lee DeHihns, Administrator
Environmental Protection Agency
345 Courtland Street NE
Atlanta, GA 30365
(404) 347-4727

REGION V

Valdas Adamkus, Administrator
Environmental Protection Agency
230 S. Dearborn Street
Chicago, IL 60604
(312) 353-2000

REGION VI

Robert Layton, Administrator
Environmental Protection Agency
1201 Elm Street
Dallas, TX 75270
(214) 655-6444

REGION VII

Morris Kay, Administrator
Environmental Protection Agency
726 Minnesota Avenue
Kansas City, KS 66101
(913) 236-2800

REGION VIII

James Scherer, Administrator
Environmental Protection Agency
999 18th Street
Denver, CO 80202
(303) 293-1603

REGION IX

John Wise, Administrator
Environmental Protection Agency
215 Fremont Street
San Francisco, CA 94105
(415) 974-8071

REGION X

Robie Russell, Administrator
Environmental Protection Agency
1200 6th Avenue
Seattle, WA 98101
(206) 442-5810

FEDERAL EMERGENCY MANAGEMENT AGENCY

(Integrates emergency preparedness, mitigation, and response activities at the Federal, state and local levels.)

HEADQUARTERS, WASHINGTON, DC

Administrator
Federal Emergency Management Agency
500 C Street, SW
Washington, DC 20472
(202) 646-4600

REGION I

Henry Vickers, Administrator
Federal Emergency Management Agency
J. West McCormack Building, Room 442
Boston, MA 02109
(617) 223-9540

REGION II

Jack Sable, Administrator
Federal Emergency Management Agency
26 Federal Plaza, Room 1338
New York, NY 10278
(212) 238-8207

REGION III

Paul Giordano, Administrator
Federal Emergency Management Agency
105 S. 7th Street
Philadelphia, PA 19106
(215) 931-5500

REGION IV

Major P. May, Administrator
Federal Emergency Management Agency
1371 Peachtree Street, NE, Suite 700
Atlanta, GA 30309
(404) 853-4200

REGION V

Robert Connor, Administrator
Federal Emergency Management Agency
175 West Jackson Blvd., 4th Floor
Chicago, IL 60606
(312) 431-5500

REGION VI

Edward Hargett, Administrator
Federal Emergency Management Agency
Federal Regional Center, Room 206
Denton, TX 76201
(817) 898-9399

REGION VII

Jerome Overstreet, Administrator
Federal Emergency Management Agency
911 Walnut Street, Room 300
Kansas City, MO 64106
(816) 283-7061

REGION VIII

Marian Olson, Administrator
Federal Emergency Management Agency
Federal Regional Center Building
Building 710
Denver, CO 80225
(303) 235-4811

REGION IX

Robert Vickers, Administrator
Federal Emergency Management Agency
Building 105, Presidio of San Francisco
San Francisco, CA 94129
(415) 923-7100

REGION X

William Mayer, Administrator
Federal Emergency Management Agency
130 228th Street, SW
Bothell, WA 98021
(206) 487-8800

GEOLOGICAL SURVEY

(Studies and maps the nation's natural resources and hazards and disseminates this information.)

EASTERN REGION

HEADQUARTERS, VIRGINIA

Dallas Peck, Director
US Geological Survey
National Center, Mail Stop 101
12201 Sunrise Valley Dr.
Reston, VA 22092
(703) 648-4000

MASSACHUSETTS

Robert Halley, Director
US Geological Survey
Quissett Campus
Woods Hole, MA 02543
(617) 548-8700

CENTRAL REGION

COLORADO

Harry Tourtelot, Director
US Geological Survey
Denver Federal Center, Box 25046
Mail Stop 911
Lakewood, CO 80225
(303) 236-5438

WESTERN REGION

ALASKA

Philip Emery, Director
US Geological Survey
4230 University Dr.
Anchorage, AL 99508-4664
(907) 271-4398

ARIZONA

Edwin Pfeifer, Director
US Geological Survey
2255 North Gemini Dr.
Flagstaff, AZ 86001
(602) 527-7000

CALIFORNIA

George Gryc, Director
US Geological Survey
345 Middlefield Road
Menlo Park, CA 94025
(415) 853-8300

HAWAII

Thomas Wright, Director
US Geological Survey
Hawaiian Volcano Observatory
Box 51
Hawaii National Park, HI 96718
(808) 967-7328

WASHINGTON

Donald Swanson, Director
US Geological Survey
Cascades Volcano Observatory
5400 MacArthur Blvd.
Vancouver, WA 98661
(206) 696-7693

GEOLOGICAL SURVEY WATER RESOURCES

(Provides factual and interpretive information on floods and assists in minimizing flood losses.)

NATIONAL HEADQUARTERS, VIRGINIA

Director
Water Resources Div.
US Geological Survey
National Center
Reston, VA 22092
(703) 648-5215

NORTHEASTERN REGION

REGIONAL HEADQUARTERS, VIRGINIA

Regional Hydrologist
US Geological Survey
433 National Center
Reston, VA 22092
(703) 648-5817

BRANCH OF REGIONAL RESEARCH

Chief
US Geological Survey
432 National Center
Reston, VA 22092
(703) 648-5833

CONNECTICUT

Hydrologist-in-Charge
Connecticut Office
Water Resources Div.
US Geological Survey
Abraham Ribicoff Federal Building
Room 525
450 Main Street
Hartford, CT 06103
(203) 722-2528

DELAWARE

Hydrologist-in-Charge
Delaware Office
Water Resources Div.
US Geological Survey
Federal Building, Room 1201
300 S. New Street
Dover, DE 19901
(302) 734-2506

ILLINOIS

District Chief
Water Resources Div.
US Geological Survey
Champaign County Bank Plaza
102 East Main Street, 4th Floor
Urbana, IL 61801
(217) 398-5353

INDIANA

District Chief
Water Resources Div.
US Geological Survey
6023 Guion Road, Suite 201
Indianapolis, IN 46254
(317) 927-8640

MAINE

Hydrologist-in-Charge
Maine Office
Water Resources Div.
US Geological Survey
26 Ganneston Dr.
Augusta, ME 04330
(207) 622-8208

MARYLAND

District Chief
Water Resources Div.
US Geological Survey
208 Carroll Building
8600 La Salle Road
Towson, MD 21204
(301) 828-1535

MASSACHUSETTS

District Chief
Water Resources Div.
US Geological Survey
150 Causeway Street, Suite 1309
Boston, MA 02114
(617) 223-2822

MICHIGAN

District Chief
Water Resources Div.
US Geological Survey
6520 Mercantile Way, Suite 5
Lansing, MI 48910
(517) 377-1608

MINNESOTA

District Chief
Water Resources Div.
US Geological Survey
702 Post Office Building
St. Paul, MN 55101
(612) 725-7841

NEW HAMPSHIRE

Hydrologist-in-Charge
New Hampshire Office
Water Resources Div.
US Geological Survey
525 Clinton Street, RFD 2
Bow, NH 03301
(603) 225-4681

NEW JERSEY

District Chief
Water Resources Div.
US Geological Survey
Suite 206, Mountain View Office Park
810 Bear Tavern Road
West Trenton, NJ 08628
(609) 771-0065

NEW YORK

District Chief
Water Resources Div.
US Geological Survey
PO Box 1669
Albany, NY 12201
(518) 472-3107

OHIO

District Chief
Water Resources Div.
US Geological Survey
975 West Third Avenue
Columbus, OH 43212
(614) 469-5553

PENNSYLVANIA

District Chief
Water Resources Div.
US Geological Survey
PO Box 1107
Harrisburg, PA 17108
(717) 782-4514

RHODE ISLAND

Hydrologist-in-Charge
Rhode Island Office
Water Resources Div.
US Geological Survey
John Pastore Federal Building &
US Post Office, Room 224
Providence, RI 02903
(401) 528-5135

VIRGINIA

Hydrologist-in-Charge
Virginia Office
Water Resources Div.
US Geological Survey
3600 West Broad Street, Room 606
Richmond, VA 23230
(804) 771-2427

WEST VIRGINIA

District Chief
Water Resources Div.
US Geological Survey
603 Morris Street
Charleston, WV 25301
(304) 347-5130

WISCONSIN

District Chief
Water Resources Div.
US Geological Survey
1815 University Avenue
Madison, WI 53705-4042
(608) 262-2488

SOUTHEASTERN REGION

REGIONAL HEADQUARTERS, GEORGIA

Regional Hydrologist
US Geological Survey
Richard Russell Federal Building
75 Spring Street, SW, Room 772
Atlanta, GA 30303
(404) 331-5174

BRANCH OF REGIONAL RESEARCH

Chief
US Geological Survey
Gulf Coast Hydroscience Center
Building 1100, Room 301
NSTL Station, MS 39529
(601) 688-3130

ALABAMA

District Chief
Water Resources Div.
US Geological Survey
520 19th Avenue
Tuscaloosa, AL 35401
(205) 752-8104

ARKANSAS

District Chief
Water Resources Div.
US Geological Survey
Federal Office Building, Room 2301
700 West Capitol Avenue
Little Rock, AR 72201
(501) 378-6391

FLORIDA

District Chief
Water Resources Div.
US Geological Survey
227 North Bronough Street, Suite 3015
Tallahassee, FL 32301
(904) 681-7620

GEORGIA

District Chief
Water Resources Div.
US Geological Survey
6481 Peachtree Industrial Blvd., Suite B
Doraville, GA 30360
(404) 331-4858

KENTUCKY

District Chief
Water Resources Div.
US Geological Survey
2301 Bradley Avenue
Louisville, KY 40217
(502) 582-5241

LOUISIANA

District Chief
Water Resources Div.
US Geological Survey
PO Box 66492
Baton Rouge, LA 70896
(504) 389-0281

MISSISSIPPI

District Chief
Water Resources Div.
US Geological Survey
Federal Office Building, Suite 710
100 West Capitol Street
Jackson, MS 39269
(601) 965-4600

NORTH CAROLINA

District Chief
Water Resources Div.
US Geological Survey
PO Box 2857
Raleigh, NC 27602
(919) 856-4510

PUERTO RICO

District Chief
Water Resources Div.
US Geological Survey
GPO Box 4424
San Juan, Puerto Rico 00936
(809) 783-4660

SOUTH CAROLINA

District Chief
Water Resources Div.
US Geological Survey
Suite 658
1835 Assembly Street
Columbia, SC 29201
(803) 765-5966

TENNESSEE

District Chief
Water Resources Div.
US Geological Survey
Federal Building & US Court House
Room A-413
Nashville, TN 37203
(615) 251-5424

CENTRAL REGION

REGIONAL HEADQUARTERS, COLORADO

Regional Hydrologist
US Geological Survey
Mail Stop 406, Box 25046
Denver Federal Center, Building 25
Lakewood, CO 80225
(303) 236-5920

BRANCH OF REGIONAL RESEARCH

Chief
US Geological Survey
Mail Stop 418, Box 25046
Denver Federal Center, Building 25
Lakewood, CO 80225
(303) 236-5021

COLORADO

District Chief
Water Resources Div.
US Geological Survey
Mail Stop 415, Box 25046
Denver Federal Center, Building 25
Lakewood, CO 80225
(303) 236-4882

IOWA

District Chief
Water Resources Div.
US Geological Survey
PO Box 1230
Iowa City, IA 52244-1230
(319) 337-4191

KANSAS

District Chief
Water Resources Div.
US Geological Survey
1950 Constant Avenue, West Campus
University of Kansas
Lawrence, KS 66046
(913) 864-4321

MISSOURI

District Chief
Water Resources Div.
US Geological Survey
1400 Independence Road, Mail Stop 200
Rolla, MO 65401
(314) 341-0824

MONTANA

District Chief
Water Resources Div.
Federal Building, Room 428
301 South Park Avenue
Drawer 10076
Helena, MT 59626-0076
(406) 449-5302

NEBRASKA

District Chief
Water Resources Div.
Federal Building, Room 406
100 Centennial Mall North
Lincoln, NE 68508
(402) 471-5082

NEW MEXICO

District Chief
Water Resources Div.
US Geological Survey
Western Bank Building, Room 720
505 Marquette, NW
Albuquerque, NM 87102
(505) 766-2246

NORTH DAKOTA

District Chief
Water Resources Div.
US Geological Survey
821 East Interstate Avenue
Bismarck, ND 58501
(701) 255-4011

OKLAHOMA

District Chief
Water Resources Div.
US Geological Survey
215 Dean McGee Avenue, Room 621
Oklahoma City, OK 73102
(405) 231-4256

SOUTH DAKOTA

District Chief
Water Resources Div.
US Geological Survey
Federal Building, Room 317
200 4th Street, SW
Huron, SD 57350-2469
(605) 352-8651

TEXAS

District Chief
Water Resources Div.
US Geological Survey
Federal Building, Room 649
300 East 8th Street
Austin, TX 78701
(512) 482-5766

UTAH

District Chief
Water Resources Div.
US Geological Survey
Administration Building, Room 1016
1745 West 1700 south
Salt Lake City, UT 84104
(801) 524-5663

WYOMING

District Chief
Water Resources Div.
US Geological Survey
PO Box 1125
Cheyenne, WY 82003
(307) 772-2153

WESTERN REGION

REGIONAL HEADQUARTERS, CALIFORNIA

Regional Hydrologist
US Geological Survey
345 Middlefield Road, Mail Stop 470
Menlo Park, CA 94025
(415) 323-8111

BRANCH OF REGIONAL RESEARCH

Chief
US Geological Survey
Mail Stop 472
345 Middlefield Road
Menlo Park, CA 94025
(415) 323-8111, Ext. 2339

ALASKA

District Chief
Water Resources Div.
US Geological Survey
4230 University Dr., Suite 210
Anchorage, AK 99508-4664
(907) 271-4138

ARIZONA

District Chief
Water Resources Div.
US Geological Survey
Federal Building
300 West Congress Street, FB-44
Tucson, AZ 85701
(602) 629-6671

CALIFORNIA

District Chief
Water Resources Div.
US Geological Survey
Federal Building, Room W-2235
2800 Cottage Way
Sacramento, CA 95825
(916) 978-4633

GUAM

Hydrologist-in-Charge
Subdistrict Office
Water Resources Div.
US Geological Survey
PO Box 188
FPO San Francisco, CA 96630
(671) 339-5293

HAWAII

District Chief
Water Resources Div.
US Geological Survey
PO Box 50166
Honolulu, HI 96850
(808) 546-8331

IDAHO

District Chief
Water Resources Div.
US Geological Survey
230 Collins Road
Boise, ID 83702
(208) 334-1750

NEVADA

Hydrologist-in-Charge
Nevada Office
Water Resources Div.
US Geological Survey
Federal Building, Room 224
705 North Plaza Street
Carson City, NV 89701
(702) 882-1388

OREGON

Hydrologist-in-Charge
Oregon Office
Water Resources Div.
US Geological Survey
847 NE 19th Ave., Suite 300
Portland, OR 97232
(503) 231-2009

WASHINGTON

District Chief
Water Resources Div.
US Geological Survey
1201 Pacific Avenue, Suite 600
Tacoma, WA 98402
(206) 593-6510

LAND GRANT EXTENSION SERVICES

(Provide information and encourage the application of research-based knowledge to agricultural pursuits at a variety of levels.)

HEADQUARTERS

Janet Poley, Director
Communication, Information, & Technology
US Dept. of Agriculture
Room 3328, South Building
Washington, DC 20250-0900
(202) 447-3029

ALABAMA

West Strain, Head
Information Services
Cooperative Extension Service
Auburn University
Auburn, AL 36849-5623
(205) 826-4970

J. Dawson, Associate Dean
Cooperative Extension Service
Alabama A&M University
Normal, AL 35762
(205) 859-7337

P. Brown, Associate Dean
Cooperative Extension Service
Tuskegee University
Tuskegee, AL 36088
(205) 727-8806

ALASKA

North Newcomer, Acting Editor
Cooperative Extension Service
University of Alaska
Fairbanks, AK 99701
(907) 474-7214

ARIZONA

Jim Chamie, Director
Cooperative Extension Service
College of Agriculture
University of Arizona
Tucson, AZ 85721
(602) 621-7178

ARKANSAS

Charles Johnston, Section Leader
Communications Section
Cooperative Extension Service
University of Arkansas
PO Box 391
Little Rock, AR 72203
(501) 373-2527

Raymond Barclay, Jr., Research Associate
Cooperative Extension Service
University of Arkansas
110 Agriculture
Fayetteville, AR 72701
(501) 575-5647

Debbie Kinsey, Communications Specialist
Cooperative Extension Service
University of Arkansas
PO Box 82
Pine Bluff, AR 71601
(501) 541-6747

CALIFORNIA

Director
Office of Information Services & Publications
Cooperative Extension Service
Div. of Agriculture & Natural Resources
300 Lakeside, Drive, 6th Floor
University of California
Oakland, CA 94612-3560
(415) 987-0101

Forrest Cress, Communications Specialist
Cooperative Extension Annex
University of California
Riverside, CA 92521
(714) 787-3332

Karen Berke, Communications Specialist
Cooperative Extension Service
Agricultural Communications
University of California
Davis, CA 95616
(916) 752-1935

COLORADO

Paul Wisdom, Vice President for Public Affairs
Cooperative Extension Service
Colorado State University
Fort Collins, CO 80523
(303) 491-6281

CONNECTICUT

Bruce Wilbur, Head
Cooperative Extension Service
Agricultural Publications
U-35, 1376 Storrs Road
College of Agriculture & Natural Resources
University of Connecticut
Storrs, CT 06268
(203) 486-4129

DELAWARE

Doris Crowley, Coordinator
Cooperative Extension Service
College of Agricultural Sciences
University of Delaware
Newark, DE 19717-1303
(302) 451-1125

Ulysses Washington, Jr., Administrator
Cooperative Extension Service
Delaware State College
Dover, DE 19901
(302) 736-4929

FLORIDA

Don Springer, Professor
Cooperative Extension Service
Institute of Food & Agricultural Sciences
GO22 McCarty Hall
University of Florida
Gainesville, FL 32611
(904) 392-1771

Lawrence Carter, Administrator
Cooperative Extension Service
Florida A&M University
PO Box 339
Tallahassee, FL 32307
(904) 599-3546

GEORGIA

Randall Cofer, Div. Chairman
Cooperative Extension Service
Div. of Agricultural Communications
College of Agriculture
University of Georgia
Athens, GA 30602
(404) 542-2561

GEORGIA

Fred Harrison, Jr., Administrator
Cooperative Extension Service
Fort Valley State College
PO Box 4061
Fort Valley, GA 31030
(912) 825-6296

HAWAII

Charles DeLuca, Director
Cooperative Extension Service
College of Tropical Agriculture &
Human Resources
University of Hawaii
Agricultural Publications &
Information Office
3050 Maile Way, Gilmore Hall, Room 119
Honolulu, HI 96822
(808) 948-7036

IDAHO

Scott Fedale, Head
Cooperative Extension Service
Agricultural Communications Center
College of Agriculture
University of Idaho
Moscow, ID 83843
(208) 885-6436

ILLINOIS

James Evans, Head
Cooperative Extension Service
Office of Agricultural Communications
College of Agriculture
University of Illinois
Urbana, IL 61801
(217) 333-4782

INDIANA

East Fredericks, Head
Cooperative Extension Service
Agricultural Communications Service
Agricultural Administration Building
Purdue University
West Lafayette, IN 47907
(317) 494-8396

IOWA

Barbara Abbott, Communications Specialist
Cooperative Extension Service
Iowa State University
Morrill Hall
Ames, IA 50011
(515) 294-4843

KANSAS

Jack Burke, Head
Cooperative Extension Service
129 Umberger Hall
Kansas State University
Manhattan, KS 66506
(913) 532-5804

KENTUCKY

Douglas Darden, Director
Cooperative Extension Service
Dept. of Agricultural Communications
Room 131 Scovell Hall
College of Agriculture
University of Kentucky
Lexington, KY 40546-0064
(606) 257-4736

Harold Bensen, Administrator
Cooperative Extension Service
Kentucky State University
Box 196
Frankfort, KY 40601
(502) 227-6310

LOUISIANA

Mike Futrell, Div. Leader
Cooperative Extension Service
Communications Div.
128 Knapp Hall
Louisiana State University
Baton Rouge, LA 70803
(504) 388-2263

Leodrey Williams, Administrator
Cooperative Extension Service
Southern University & A&M College
Southern Branch
PO Box 10010
Baton Rouge, LA 70813
(504) 771-2242

MAINE

Melanie Spencer, Publications Specialist
Cooperative Extension Service
Public Information & Central Services
University of Maine
Orono, ME 04669

MARYLAND

Colleen Clark, Head
Cooperative Extension Service
Dept. of Information & Publications
0109 Symons Hall
University of Maryland
College Park, MD 20742
(301) 454-3621

Henry Brooks, Administrator
Cooperative Extension Service
University of Maryland
Eastern Shore
Princess Anne, MD 21853
(301) 651-2200

MASSACHUSETTS

Trish Sacks, Program Leader
Cooperative Extension Service
218 Stockbridge Hall
University of Massachusetts
Amherst, MA 01003
(413) 545-0027

MICHIGAN

Maxine Ferris, Professor
Cooperative Extension Service
ANR Information Services
Morrill Hall
Michigan State University
East Lansing, MI 48824-1036
(517) 355-1758

MINNESOTA

David Nelson, Unit Director
Cooperative Extension Service
Educational Development System
University of Minnesota
405 Coffey Hall
St. Paul, MN 55108
(612) 624-4950

MISSISSIPPI

Ned Browning, Dept. Head
Cooperative Extension Service
Mississippi State University
PO Box 5446
Mississippi State, MS 39762
(601) 325-2262

Samuel Donald, Administrator
Cooperative Extension Service
Alcorn State University
Box 479
Lorman, MS 30996
(601) 877-6528

MISSOURI

Donald Esslinger, Director
Cooperative Extension Service
1-98 Agricultural Building
University of Missouri
Columbia, MO 65211
(314) 892-2480

G. Enlow, Administrator
Cooperative Extension Service
Lincoln University
900 Moreau Drive
Jefferson City, MO 65101
(314) 681-5521

MONTANA

Carol Flaherty, Communications Specialist
Cooperative Extension Service
Agricultural & Extension Communications
111 Hamilton Hall
Montana State University
Bozeman, MT 59717-0017
(406) 994-5136

NEBRASKA

Gary Vacin, Head
Cooperative Extension Service
Institute of Agriculture &
Natural Resources
University of Nebraska
Lincoln, NE 68583-0918
(402) 472-2821

NEVADA

Alice Good, Communications Coordinator
Cooperative Extension Service
Agricultural Information Office
College of Agriculture
University of Nevada
Reno, NV 89557-0103
(702) 784-6731

NEW HAMPSHIRE

Extension Editor
Cooperative Extension Service
Taylor Hall
University of New Hampshire
Durham, NH 03824
(603) 862-1234

NEW JERSEY

Vincent Abbatiello, Communications
Specialist
Cooperative Extension Service
Rutgers, The State University of New Jersey
Alexander Johnston Hall
New Brunswick, NJ 08903
(201) 932-9761

NEW MEXICO

Terry Canup, Dept. Head
Cooperative Extension Service
Agricultural Information
Box 30003, Dept. 3AI
New Mexico State University
Las Cruces, NM 88003
(505) 646-2701

NEW YORK

David Watkins, Director
Cooperative Extension Service
Media Services
Cornell University
Ithaca, NY 14853
(607) 255-5431

NORTH CAROLINA

David Jenkins, Head
Cooperative Extension Service
Dept. of Agricultural Communications
North Carolina State University
Box 7603
Raleigh, NC 27695-7603
(919) 737-2800

Valorie McAlpin, Director
Cooperative Extension Service
North Carolina A&T State University
PO Box 21928
Greensboro, NC 27420
(919) 334-7636

NORTH DAKOTA

Chuck Humphrey, Assistant Director
Cooperative Extension Service
North Dakota State University
7 Morrill Hall, Box 5655
Fargo, ND 58105
(701) 237-7867

OHIO

Larry Whiting, Head
Cooperative Extension Service
Information and Applied Communications
Ohio State University
2021 Coffey Road
Columbus, OH 43210-1400
(614) 292-2011

OKLAHOMA

Kevin Hayes, Head
Cooperative Extension Service
Agricultural Information Services
102 Public Information Building
Oklahoma State University
Stillwater, OK 74078
(405) 624-6886

Gilbert Tampkins, Associate Administrator
Cooperative Extension Service
Langston University
PO Box 970, Room 301
Langston, OK 73050
(405) 466-2311

OREGON

Gwil Evans, Director
Cooperative Extension Service
Agricultural Communications
Administrative Services Building
Oregon State University
Corvallis, OR 97331
(503) 754-3311

PENNSYLVANIA

Art Hussey, Director
Cooperative Extension Service
Agricultural Information Services
Penn State University
401 Agricultural Administration Building
University Park, PA 16802
(814) 863-4678

RHODE ISLAND

Jacqueline McGrath, Public Information
Officer
Cooperative Extension Service
University of Rhode Island
10 Woodward Hall
Kingston, RI 02881
(401) 792-2465

SOUTH CAROLINA

Harry Durham, Director
Cooperative Extension Service
Clemson University
Clemson, SC 29634-5609
(803) 656-2061

Leon Chavous, Director
Cooperative Extension Service
South Carolina State College
PO Box 1765
Orangeburg, SC 29117
(803) 536-8928

SOUTH DAKOTA

Emery Tschetter, Dept. Head
Cooperative Extension Service
South Dakota State University
Agricultural Communications Office
PO Box 2231
Brookings, SD 57007-1897
(605) 688-4643

TENNESSEE

Conrad Reinhardt, Professor
Cooperative Extension Service
Institute of Agriculture
University of Tennessee
PO Box 1071
Knoxville, TN 37901-1071
(615) 974-7141

James Farrell, Administrator
Cooperative Extension Service
Tennessee State University
3500 John East Merrett Blvd.
Nashville, TN 37209-1562
(615) 320-3650

TEXAS

Barry Jones, Dept. Head
Cooperative Extension Service
Dept. of Agricultural Communications
Reed McDonald Building
Texas A&M University
College Station, TX 77843
(409) 845-2211

Hoover Carden, Administrator
Cooperative Extension Service
Prairie View A&M University
Drawer B
Prairie View, TX 77446
(409) 857-2023

UTAH

Director
Cooperative Extension Service
Utah State University
Logan, UT 84322
(801) 750-2656

VERMONT

Meg Genson Ashman, Head
Cooperative Extension Service
Morrill Hall
University of Vermont
Burlington, VT 05405-0106
(802) 656-3024

VIRGINIA

Larry Hincker, Director
Cooperative Extension Service
Educational Communications
Virginia Polytechnic Institute & State University
Blacksburg, VA 24061
(703) 961-6866

Clinton Turner, Director
Cooperative Extension Service
Virginia State University
PO Box 540
Petersburg, VA 23803
(804) 520-6421

WASHINGTON

Hugh Cameron, Chair
Cooperative Extension Service
401 Hulbert Hall
Washington State University
Pullman, WA 99164-6244
(509) 335-2823

WEST VIRGINIA

Dennis Godfrey, Program Leader
Cooperative Extension Service
508 Knapp Hall
Extension Service
West Virginia University
Morgantown, WV 26506-6031
(304) 293-4221

WISCONSIN

Marion Brown, Dept. Chair
Cooperative Extension Service
Dept. of Agricultural Journalism
University of Wisconsin-Madison
440 Henry Mall
Madison, WI 53706
(608) 263-2775

WYOMING

Patrick Wolfinbarger, Coordinator
Cooperative Extension Service
University of Wyoming
College of Agriculture
PO Box 3354
Laramie, WY 82071
(307) 766-5681

DISTRICT OF COLUMBIA

Thornell Page, Director
Cooperative Extension Service
University of the District of Columbia
901 Newton Street, NE
Washington, DC 20017
(202) 576-6980

GUAM

Ed Gould, Assistant Professor
Cooperative Extension Service
University of Guam
College of Agriculture & Life Sciences
University Station
Mangilao, GU 96932
(671) 734-4404

PUERTO RICO

Jorge Leon, Press Editor
Cooperative Extension Service
University of Puerto Rico
Managuex Campus
College of Agricultural Sciences
Agricultural Extension Service
PO Box 21120
Rio Piedras, PR 00928
(809) 765-8000

VIRGIN ISLANDS

Carrol Fleming, Editor
Cooperative Extension Service
University of the Virgin Islands
RR2, Box 10000, Kingshill
St. Croix, VI 08850
(809) 778-0246

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION CLIMATE CENTERS

(Promotes national and international understanding of climatic processes, natural and human-made, and their implications.)

HEADQUARTERS

Director
National Climate Program Office
Rockwall Building, Room 108
11400 Rockville Pike
Rockville, MD 20852
(301) 443-8981

National Climatic Data Center
Federal Building
Asheville, NC 28801
(704) 259-0682

NORTHEAST REGION

Warren Knaff, Director
Northeast Regional Climate Center
Atmospheric Sciences Unit
1113 Bradfield Hall
Cornell University
Ithaca, NY 14853
(607) 255-1751

SOUTHEASTERN REGION

John Purvis, Director
Southeastern Regional Climate Center
1201 Main Street, Suite 1100
Columbia, SC 29201
(803) 737-0811

MIDWESTERN REGION

Kenneth Kunkel, Director
Midwestern Climate Center
Illinois State Water Survey
2204 Griffith Drive
Champaign, IL 61820
(217) 244-1488

HIGH PLAINS REGION

Kenneth Hubbard, Director
High Plains Regional Climate Center
CAMAC
239 L.West Chase Hall
University of Nebraska
Lincoln, NE 68582-0728
(402) 472-3679

WESTERN REGION

Rick Rinehart, Assistant Director
Western Regional Climate Center
Desert Research Institute
Box 60220
Reno, NV 89506
(702) 677-3103

NATIONAL WEATHER SERVICE

(Observes and reports the weather and issues forecasts and warnings of weather and floods in the interest of national safety and the economy.)

HEADQUARTERS

Donald Wernly, Director
National Weather Service
8060 13th Street, Room 1326
Silver Spring, MD 20910
(301) 427-8090

CENTRAL REGION

Richard Augulius, Director
National Weather Service
601 East 12th Street
Kansas City, MO 64106
(816) 471-4840

PACIFIC REGION

Richard Hagemeyer, Director
National Weather Service
PO Box 50027
Honolulu, HI 96850-4993
(808) 546-5680

EASTERN REGION

Walter Seibert, Director
National Weather Service
630 Johnston Avenue
Bohemia, NY 11716
(516) 228-5400

WESTERN REGION

Hazen Bedke, Director
National Weather Service
PO Box 1118
Federal Building
Salt Lake City, UT 84147-0188
(801) 524-5122

ALASKAN REGION

Stuart Bigler, Director
National Weather Service
222 West Seventh Avenue, #23
Anchorage, AK 99513
(907) 271-5136

SOUTHERN REGION

Thomas Grayson, Director
National Weather Service
819 Taylor Street, Room 10A26
Fort Worth, TX 76102
(817) 334-2668

SMALL BUSINESS ADMINISTRATION
DISASTER ASSISTANCE DIVISIONS

(Provides long-term, low-interest loans to disaster victims, for repairing or replacing their damaged property.)

AREA 1

Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Puerto Rico, Rhode Island, Vermont, Virgin Islands.

Carl Jordan, Director
US Small Business Administration
15-01 Broadway
Fairlawn, NJ 07410
(202) 794-8195

AREA 2

Alabama, Delaware, District of Columbia, Florida, Georgia, Illinois, Indiana, Kentucky, Maryland, Michigan, Minnesota, Mississippi, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, West Virginia, Wisconsin.

Richard Nash, Sr., Director
US Small Business Administration
2306 Oak Lane, Suite 110
Grand Prarie, TX 75051
(214) 767-7571

AREA 3

Arkansas, Iowa, Kansas, Louisiana, Missouri, Nebraska, New Mexico, Oklahoma, Texas.

Bob Quackenbush, Director
US Small Business Administration
2306 Oak Land, Suite 110
Grand Prarie, TX 75051
(214) 767-7571

AREA 4

Alaska, Arizona, California, Colorado, Guam, Hawaii, Idaho, Montana, Nevada, North Dakota, Oregon, South Dakota, Utah, Washington, Wyoming.

Robert Belloni, Director
US Small Business Administration
PO Box 13795
Sacramento, CA 95853-4795
(916) 978-4578

Additional Offices

SEA GRANT PROGRAMS

(Inform citizens about important coastal issues including natural hazards.)

ALASKA

Ronald Dearborn, Director
Alaska Sea Grant College Program
University of Alaska
138 Irving II
Fairbanks, AL 99775-5040

CALIFORNIA

Robert Friedheim, Director
Sea Grant Program
Institute for Marine & Coastal Studies
University of Southern California
University Park
Los Angeles, CA 90089

James Sullivan, Director
Sea Grant College Program, A-032
University of California at San Diego
La Jolla, CA 92093

CONNECTICUT

Edward Monahan, Director
Connecticut Sea Grant
University of Connecticut
Avery Point
Groton, CT 06340

DELAWARE

Andrew Manus, Director
Sea Grant Program
Robinson Hall
University of Delaware
Newark, DE 19716

GEORGIA

Mac Rawson, Director
Sea Grant College Program
University of Georgia
Ecology Building
Athens, GA 30602

HAWAII

Jack Davidson, Director
Sea Grant College Program
University of Hawaii
1000 Pope Road, Room 220
Honolulu, HI 96822

INDIANA

Burnell Fischer, Director
Illinois/Indiana Sea Grant
Purdue University
Dept. of Forestry & Natural Resources
West Lafayette, IN 47097

LOUISIANA

Jack Van Lopik, Director
Sea Grant College Program
Center for Wetland Resources
Louisiana State University
Baton Rouge, LA 70803-7505

MARYLAND

John Greer, Director
Maryland Sea Grant College
H.J. Patterson Hall, Room 1222
University of Maryland
College Park, MD 20742

MASSACHUSETTS

Chryssostomos Chryssostomidis, Director
Sea Grant College Program
Massachusetts Institute of Technology
Building E38, Room 330
77 Massachusetts Avenue
Cambridge, MA 02139

David Ross, Director
Sea Grant Coordinator
Woods Hole Oceanographic Institute
Woods Hole, MA 02543

MAINE

Bryan Pearce, Director
UMO/UNH Sea Grant Program
University of Maine
14 Coburn Hall
Orono, ME 04469

MICHIGAN

Michael Parsons, Director
Sea Grant College Program
University of Michigan
2200 Bonisteel Blvd.
Ann Arbor, MI 48109

MINNESOTA

Donald McNaught, Director
Minnesota Sea Grant Program
University of Minnesota
116 Classroom Office Building
1994 Buford Avenue
St. Paul, MN 55108

MISSISSIPPI

James Jones, Director
Mississippi-Alabama Sea Grant Consortium
PO Box 7000
Ocean Springs, MS 39564-7000

NEW HAMPSHIRE

Darrell Grimes, Director
University of New Hampshire
Institute of Marine & Ocean Engineering
Marine Programs Building
Durham, NH 03824

NEW JERSEY

Bill Gordon, Director
Sea Grant Program
New Jersey Marine Science Consortium
Building 22
Ft. Hancock, NJ 07732

NEW YORK

Robert Malouf, Director
New York Sea Grant Institute
Dutchess Hall
SUNY/Stony Brook
Stony Brook, NY 11794-5001

NORTH CAROLINA

B. J. Copeland, Director
UNC Sea Grant Program
Box 8605
North Carolina State University
Raleigh, NC 27695-8605

OHIO

Jeffrey Reutter, Director
Ohio Sea Grant Program
Ohio State University
Research Foundation
1314 Kinnear Road
Columbus, OH 43212

OREGON

William Wick, Director
Sea Grant College Program
Administrative Services Building A-320
Oregon State University
Corvallis, OR 97331

RHODE ISLAND

Scott Nixon, Director
Sea Grant College Program
Marine Resources Building
University of Rhode Island
Narragansett Bay, RI 02882

SOUTH CAROLINA

Margaret Davidson, Director
South Carolina Sea Grant Consortium
287 Meeting Street
Charleston, SC 29401

TEXAS

Thomas Bright, Director
Sea Grant College Program
Texas A&M University
College Station, TX 77843

VIRGINIA

William Rickards, Director
Virginia Sea Grant College Program
Madison House, 170 Rugby Road
University of Virginia
Charlottesville, VA 22903

WASHINGTON

Louie Echols, Director
Sea Grant College Program
University of Washington, HG-30
3716 Brooklyn Avenue, NE
Seattle, Washington 98105

WISCONSIN

Robert Ragotskie, Director
Sea Grant Institute
University of Wisconsin at Madison
1800 University Avenue
Madison, WI 53705

PUERTO RICO

Manuel Hernandez-Avila, Director
Sea Grant Program
Dept. of Marine Science
University of Puerto Rico
Mayaguez, Puerto Rico 00708

WATER RESOURCES RESEARCH INSTITUTES

(Further understanding of basic water-related science.)

ALABAMA

Joseph Judkins, Director
Water Resources Research Institute
Auburn University
202 Hargis Hall
Auburn, AL 36849-5124
(205) 826-5075

ALASKA

Edward Brown, Director
Water Research Center
Institute of Northern Engineering
University of Alaska
Fairbanks, AL 99775-1760
(907) 474-7350

ARIZONA

William Lord, Director
Water Resources Research Center
University of Arizona
Tucson, AZ 85721
(602) 621-7607
BITNET: "billlord@arizrvax"

ARKANSAS

Kenneth Steele, Director
Water Resources Research Center
University of Arkansas
113 Ozark Hall
Fayetteville, AR 72701
(501) 575-4403

CALIFORNIA

Henry Vaux, Jr., Director
Water Resources Center
Rubidoux Hall
University of California
Riverside, CA 92521
(714) 787-4327
BITNET: "calwtr@ucrvms"

COLORADO

Neil Grigg, Director
Colorado Water Resources
Research Institute
410 University Services Center
Colorado State University
Fort Collins, CO 80523
(303) 491-6308

CONNECTICUT

David Miller, Director
Institute of Water Resources
University of Connecticut
Room 228, Hall Building, U-18
362 Fairfield Road
Stoors, CT 06269
(203) 486-3534

DELAWARE

Robert Varrin, Director
Water Resources Center
University of Delaware
101 Hullihen Hall
Newark, DE 19716
(302) 451-2136
BITNET: "bnz32766@vdacsvm"

FLORIDA

James Heaney, Director
Water Resources Research Center
University of Florida
424 Black Hall
Gainesville, FL 32611
(904) 392-0840
BITNET: "ufwrrc@nervm"

GEORGIA

Bernard Kahn, Director
Environmental Resources Center
Georgia Institute of Technology
205 Old Civil Engineering Building
Atlanta, GA 30332
(404) 894-3776

HAWAII

Stephen Lau, Director
Water Resources Research Center
University of Hawaii at Manoa
Holmes Hall 283
2540 Dole street
Honolulu, HI 96822
(808) 948-7847

IDAHO

Dale Ralston, Director
Water Resources Research Institute
University of Idaho
Morrill Hall Room 106
Moscow, ID 83843
(208) 885-6429

ILLINOIS

Glenn Stout, Director
Water Resources Center
University of Illinois
205 North Mathews Avenue
Urbana, IL 61801
(217) 333-0536
BITNET: "stout@uiucvmd"

INDIANA

John Cushman, Director
Water Resources Research Center
Purdue University
Lilly Hall
West Lafayette, IN 47907
(317) 494-8041

IOWA

Al Austin, Director
State Water Resources Research Institute
Iowa State University
355 Town Engineering Building
Ames, IA 50011
(515) 294-8921

KANSAS

Hyde Jacobs, Director
Water Resources Research Institute
Kansas State University
144 Waters Hall
Manhattan, KS 66506
(913) 532-5729

KENTUCKY

Billy Barfield, Director
Water Resources Research Institute
University of Kentucky
219 Anderson Hall
Lexington, KY 40506-0046
(606) 257-1299

LOUISIANA

Marty Tittlebaum, Director
Water Resources Research Institute
Louisiana State University
2401-A CEBA Building
Baton Rouge, LA 70803
(504) 388-8508
BITNET: "watitt@lsuvm"

MAINE

Gregory White, Director
Environmental Studies Center
University of Maine
11 Coburn Hall
Orono, ME 04410
(207) 581-1492
BITNET: "umlwrc@maine"

MARYLAND

Robert Menzer, Director
Water Resources Research Center
University of Maryland
0313 Symons Hall
College Park, MD 20742-5595
(301) 454-6406
BITNET: "menzer@umd2.umd.edu"

MASSACHUSETTS

Paul Godfrey, Director
Water Resources Research Center
University of Massachusetts
Blaisdell House
Amherst, MA 01003
(413) 545-2842
BITNET: "wrrc@umass"

MICHIGAN

Jon Bartholic, Director
Institute of Water Research
Michigan State University
334 Natural Resources Building
East Lansing, MI 48824
(517) 353-3742
BITNET: "17872iwr@msu"

MINNESOTA

Patrick Brezonik, Director
Water Resources Research Center
University of Minnesota
866 Bioscience Center
1445 Gortner Avenue
St. Paul, MN 55108
(612) 624-9282

MISSISSIPPI

Marvin Bond, Director
Water Resources Research Institute
PO Drawer AD
Mississippi State University
Mississippi State, MS 39762
(601) 325-3620
BITNET: "bond@msstate"

MISSOURI

Thomas Clevenger, Director
Water Resources Research Center
University of Missouri
Sinclair Road, Route 3
Columbia, MO 65211
(314) 882-3132

MONTANA

Howard Peavy, Director
System Water Resources Center
Montana State University
309 Montana Hall
Bozeman, MN 59717
(406) 994-6690

NEBRASKA

Roger Gold, Director
Nebraska Water Resources Center
University of Nebraska
103 Natural Resources Hall
Lincoln, NE 68583-0844
(402) 472-3305
BITNET: "wrri001@unlvm"

NEVADA

Jack Hess, Director
Water Resources Center
Desert Research Institute
University of Nevada System
PO Box 60220
Reno, NV 89506-0220
(702) 673-7365

NEW HAMPSHIRE

Thomas Ballestero, Director
Water Resources Research Center
University of New Hampshire
218 Science & Engineering Building
Durham, NH 03824
(603) 862-2144

NEW JERSEY

Alan McIntosh, Director
Div. of Water Resources
Center for Coastal & Environmental Studies
Rutgers State University of New Jersey
Doolittle Hall, Busch Campus
New Brunswick, NJ 08903
(201) 932-3596

NEW MEXICO

Bobby Creel, Director
Water Resources Research Institute
New Mexico State University
Box 30001 Dept. 3167
Las Cruces, NM 88003-0001
(505) 646-4337
BITNET: "wrri003@nmsuvml"

NEW YORK

Keith Porter, Director
Water Resources Institute
468 Hollister Hall
Cornell University
Ithaca, NY 14853-3501
(607) 255-5941
BITNET: "n65j@cornellc"

NORTH CAROLINA

David Moreau, Director
Water Resources Research Institute
North Carolina State University
219 Oberlin Road
Campus Box 7912
Raleigh, NC 27695-7912
(919) 737-2815

NORTH DAKOTA

Craig Schnell, Director
Water Resources Research Institute
North Dakota State University
202 Old Main
Fargo, ND 58105
(701) 237-7034
BITNET: "nu044000@ndsuvml"

OHIO

Robert Stiefel, Director
Water Resources Center
Ohio State University
1791 Neil Avenue
Columbus, OH 43210-1294
(614) 292-2334
BITNET: "ts5588@ohstvma"

OKLAHOMA

Norman Durham, Director
University Center for Water Research
Oklahoma State University
003 Life Sciences East
Stillwater, OK 74078-0281
(405) 744-9994

OREGON

Peter Klingeman, Director
Water Resources Research Institute
100 Merryfield Hall
Oregon State University
Corvallis, OR 97331-2410
(503) 754-4022

PENNSYLVANIA

Archie McDonnell, Director
Environmental Resources Research Institute
Pennsylvania State University
103 Land & Water Research Building
University Park, PA 16802
(814) 863-0291

RHODE ISLAND

Calvin Poon, Director
Water Resources Center
University of Rhode Island
310 Bliss Hall
Kingston, Rhode Island 02881
(401) 792-2297

SOUTH CAROLINA

Paul Zielinski, Director
Water Resources Research Institute
Clemson University
310 Lowry Hall
Clemson, SC 29634-2900
(803) 656-3273
BITNET: "wrri@clemson"

SOUTH DAKOTA

Alan Bender, Director
Water Resources Institute
South Dakota State University
PO Box 2120
Brookings, SD 57007
(605) 688-4910

TENNESSEE

William Colglazier, Director
Water Resources Research Center
University of Tennessee
428 South Stadium Hall
Knoxville, TN 37996-0750
(615) 974-2151

TEXAS

Wayne Jordan, Director
Texas Water Resources Institute
Texas A&M University
College Station, TX 77843-2118
(409) 845-1851
BITNET: "jensen@tamagen"

UTAH

Douglas James, Director
Center for Water Resources Research
Utah State University
Logan, UT 84322-8200
(801) 750-3168
BITNET: "uwrl@usu"

VERMONT

Alan McIntosh, Director
Water Resources Research Center
University of Vermont
321 George Aiken Center
Burlington, VT 05405
(802) 656-4057

VIRGINIA

William Walker, Director
Water Resources Research Center
Virginia Polytechnic Institute and
State University
617 North Main Street
Blacksburg, VA 24060-3397
(703) 961-5624
BITNET: "walderwr@vtvm1"

VIRGIN ISLANDS

Hari Krishna, Director
Water Resources Research Center
Caribbean Research Institute
University of the Virgin Islands
St. Thomas, VI 00802
(809) 776-9200, ext.1252

WASHINGTON

William Funk, Director
State of Washington Water Research Center
Washington State University
Albrook Lab 202B
Pullman, WA 99164-3002
(509) 335-5531

WEST VIRGINIA

Charles Jenkins, Director
Water Research Institute
West Virginia University
258 Stewart Street
Morgantown, WV 26506-6064
(304) 293-2757
BITNET: "wrri@wvnvm"

WISCONSIN

Gordon Chesters, Director
Water Resources Center
University of Wisconsin
1975 Willow Drive, 2nd Floor
Madison, WI 53706
(608) 262-3577
BITNET: chesters@wisemacc"

WYOMING

Steven Gloss, Director
Wyoming Water Research Center
University of Wyoming
PO Box 3067
Laramie, WY 82071
(307) 766-2143
BITNET: "rwrwwrc@wyocdcl"

DISTRICT OF COLUMBIA

Mamadou Watt, Director
Water Resources Research Center, MB5004
University of the District of Columbia
4200 Connecticut Avenue, NW
Washington, DC 20008
(202) 673-3442
BITNET: "watt@udcvm"

GUAM

Leroy Heitz, Director
Water and Energy Research
Institute of the Western Pacific
University of Guam
UOG Station
Mangilau, Guam 96923
(671) 734-3132

PUERTO RICO

Rafael Munoz Candelario, Director
Water Resources Research Institute
University of Puerto Rico
PO Box 5000
Mayaguez, PR 00709-5000
(809) 832-4040

WORLD HEALTH ORGANIZATION
LOCAL POINTS FOR EMERGENCIES

(Furnishes aid in emergencies and encourages preventive and preparedness measures.)

HEADQUARTERS, SWITZERLAND

Director
Emergency Preparedness & Response
World Health Organization
20 venue Appia
CH.1211 Geneva 27
SWITZERLAND
Telex: 27821 OMS CH
Telefax: 9107 46
Elecmail: UNC 362
Cable: UNISANTE GENEVA
Tel. Off.: (022) 912777

EUROPE

Director
Regional Office for Europe
Accident Prevention Programme
World Health Organization
8 Scherfigsvej
2100 Copenhagen
DENMARK
Telex: 15348 WHO
Telefax: 181120
Cable: UNISANTE COPENHAGEN
Tel. Off.: 290111

MEDITERRANEAN

Director
Regional Office for the
Eastern Mediterranean
World Health Organization
PO Box 1517
Alexandria, 21511
EGYPT
Telex: 54028/54684
Telefax: 4838916
Cable: UNISANTE ALEXANDRIA
Tel. Off.: 4830090/ 96/ 97

AFRICA

Director
Regional Office for Africa
World Health Organization
PO Box n 6
Brazzaville, CONGO
Telex: 5217/ 5364 UNISANTE
Cable: UNISANTE BRAZZAVILLE
Tel. Off.: 813860-65

AMERICAS

Director
Regional Office for the Americas
Emergency Preparedness &
Disaster Relief Coordination
World Health Organization
Pan American Sanitary Bureau
525 23rd Street NW
Washington, DC 20037
USA
Telex: 248338/ 440057 PASB
Telefax: 7754578
Cable: OFSANPAN WASHINGTON
Tel. Off.: 8613200

WESTERN PACIFIC

Director
Regional Office for the Western Pacific
Health Services, Development & Planning
World Health Organization
PO Box 2932
Manila 2801
PHILIPPINES
Telex: 27652/ 63260/ 40365 WHO
Telefax: 5211036
Cable: UNISANTE MANILA
Tel. Off.: 5218421

SOUTHEAST ASIA

Director
Regional Office for South East Asia
World Health Organization
World Health House
Indraprastha Estate
Mahatma Gandhi Rd
New Delhi, 110002
INDIA
Telex: 3165095/ 3165031 WHO
Telefax: 3318607
Cable: WHO NEW DELHI
Tel. Off.: 3317804-7823

Organizational Index

Agency for International Development 108
Agricultural Stabilization and Conservation Service 106
American Association of Avalanche Professionals 169
American Geographical Society 174
American Geophysical Union 177
American Institute of Hydrology 178
American Meteorological Society 180
American Planning Association 182
American Public Works Association 183
American Red Cross 80
American Society for Testing and Materials 184
American Water Resources Association 185
Applied Technology Council 99
Arid Lands Information Center 135
Army Cold Regions Research and Engineering Center 83
Army Corps of Engineers 57, 69, 110
Association of American Geographers 175
Association of Bay Area Governments 10
Association of International Disaster Experts 170
Association of State Dam Safety Officials 169
Association of State Floodplain Managers 173
Association of State Wetlands Managers 185
Australian Counter Disaster College 138
Australian Overseas Disaster Response Organization 154
Australian Seismological Center 16
Australian Water Research Advisory Council 88

Bay Area Regional Earthquake Preparedness Project 10
Boise Interagency Fire Center 95
British Geological Survey 33
Building Seismic Safety Council 99
Bureau of the Census 102
Bureau of Reclamation 37, 68

California Department of Conservation 17
California Seismic Safety Commission 11
Canadian Geotechnical Society 178
Center for Building Technology 100
Center for Computational Seismology 16
Center for Earthquake Research and Information 28
Center for Earthquake Studies 15
Center for Technology, Environment and Development 161
Center for the Environment and Natural Resources 60
Center for the Great Lakes 58
Center for the Study of Psychological Response in Disaster Emergencies 114
Center for Urban and Regional Studies 149
Center of Coordination for Prevention of Natural Disasters in Central America 117
Central US Earthquake Consortium 9
Centro Regional de Sismologia para America del Sur 18
Climate Analysis Center 49, 64

Climate Impact Assessment Division 50
Coastal Zone Management Information Center 57
Colorado Avalanche Information Center 7
CSIRO 118

Datum International 142
Department of Agriculture 94, 119, 122
Department of Army 53
Department of Commerce 122
Department of Education 11
Department of Labor 123
Department of Navy 31, 59
Department of Transportation 124
Disaster and Emergency Reference Center 137
Disaster Management Center 136
Disaster Management Studies Center 135
Disaster Research Center 139

Earthquake Education Center 12
Earthquake Engineering Research Center 14
Earthquake Engineering Research Institute 26, 171
Earthquake Research Institute 19
East-West Center 128
Emergency Canada Research Unit 107
Emergency Preparedness Canada 126
Environmental Protection Agency 40, 142
European Center for Disaster Medicine 130

Farmers Home Administration 111
Federal Crop Insurance Corporation 63
Federal Emergency Management Agency 73, 106, 120
Federal Emergency Management Agency 128, 132, 149, 152
Fish and Wildlife Service 61
Flood Hazard Research Center 68
Flood Studies Center 71
Floodplain Management Resource Center 72
Florida Sinkhole Research Institute 39
Forest Service 94

Geological Survey 24, 29, 36, 44, 89
Geological Survey 133, 160
Government Printing Office 156
Great Lakes Environmental Research Laboratory 82

Hazards Assessment Laboratory 146
Hazards Reduction and Recovery Center 147
High Plains Climate Center 50
Hurricane Research Center 75
Hydrologic Engineering Center 91

Industrial Crisis Institute 144
INFORM 143
Institute for Disaster Research 86
Institute of Geophysics 23
Instituto Costarricense de Electricidad 45

Intermountain Research Station 96
International Association of Engineering Geology 176
International Drought Information Center 66
International Institute for Applied Systems Analysis 51
International Landslide Research Group 38
International Red Tide Information and Assistance Service 59
International Seismological Center 23
International Tsunami Information Center 42
INTERTECT 159

Joint Assistance Center 153

Landslide Information Center 145
Lawrence Berkeley Laboratory 102
Library of Congress 157

Macquarie University 96
Mothers for HELP 129

National Agricultural Library 152
National Association of Flood and Stormwater Management Agencies 174
National Association of Independent Insurers 179
National Association of State Emergency Medical Services Directors 180
National Cartographic Information Center 163
National Center for Atmospheric Research 51
National Center for Earthquake Engineering Research 27
National Center for Health Statistics 104
National Civil Defense Resource Center 138
National Climatic Data Center 76, 79, 85, 87
National Committee on Property Insurance 179
National Coordinating Council on Emergency Management 172
National Disaster Medical System 113
National Earthquake Hazards Reduction Program 30
National Earthquake Information Center 25
National Fire Protection Association 173
National Geophysical Data Center 20, 33, 41, 166
National Hurricane Center 75
National Information Service for Earthquake Engineering 27, 154
National Institute of Mental Health 131
National Library of Medicine 158
National Oceanic and Atmospheric Administration 164, 167
National Research Center for Disaster Prevention 140
National Research Council 141
National Severe Storms Laboratory 79
National Space Science Data Center 167
National Snow and Ice Data Center 82
National Technical Information Services 150
National Transportation Safety Board 100
National Weather Service 53, 92, 134
National Weather Wire Service 80
Natural Hazards Research and Applications Information Center 147
Natural Hazards Society 181
New Jersey Marine Sciences Consortium 60

New Zealand Geological Survey 34
Northwest Avalanche Center 7
Nuclear Regulatory Commission 132

Oak Ridge National Laboratory 148
Oklahoma State Climatological Survey 54
Online Computer Library Center 156
Organization of American States 116
Organization of Easter Caribbean States

Pan American Health Organization 105
Pacific Marine Environmental Laboratory 43
Pan American Health Organization 124
Pan American Institute of Geography & History 34
Pan Caribbean Disaster Preparedness and Prevention Project 127
Panafrican Center for Emergency Preparedness and Response 116
Partners of the Americas 125
Pell Library 161

Relief and Development Institute 107
Royal Society of Edinburgh 171

School of Renewable Natural Resources 65
Search and Rescue Dog ALERT 114
Seismological Observatory 18
Seismological Society of America 172
Simon Fraser University 126
Small Business Administration 112
Smithsonian Institution 45
Snow Survey and Water Supply Forecasting Program 84
Sociedad Geologica Mexicana 176
Societe Belge de Geologie 177
Soil and Water Conservation Society 184
Soil Conservation Service 69, 85, 88
Southern California Earthquake Preparedness Project 12
Susquehanna River Basin Commission 70
Swiss Seismological Service 19

Technology Application Center 165
Tennessee Valley Authority 55, 72
Transportation Research Board 101

United Nations Disaster Relief Coordinator 118
United Nations Economic & Social Commission for Western Asia 155
United Nations Educational, Scientific and Cultural Organization 146
United Nations Environment Program 52
University Center for Social and Urban Research 121
University of Illinois at Urbana-Champaign 144
University of Puerto Rico 76
Urban and Regional Information Systems Association 182

Ventura County Office of Emergency Services 13
Victoria Geological Survey 38

Washington Department of Ecology 62
Wave Propagation Laboratory 166
Western States Seismic Policy Council 9
Wharton Risk and Decision Processes Center 141
Wind Engineering Research Council 186
World Agricultural Outlook Board 64
World Health Organization 103, 131
World Hunger Program 162
World Meteorological Organization 77, 92

Geographic Index: International

Antigua	127
Australia	16, 38, 88, 96, 118, 135, 138, 154
Austria	51
Belgium	177
Canada	34, 107, 126, 178, 181
Costa Rica	45
Denmark	103
Ethiopia	116
France	146, 176
Guatemala	117
India	153
Iraq	155
Japan	140
Kenya	52
Mexico	176
Netherlands	137
New Zealand	34, 138
Peru	18
St. Lucia	105
Switzerland	19, 77, 92, 118, 130, 131
Turkey	19
United Kingdom	23, 33, 68, 107, 142, 171
West Germany	23

Geographic Index: US

Arizona	65, 135
California	10-14, 16, 17, 26, 27, 38, 59, 91
California	99, 102, 114, 154, 171, 172
Colorado	7, 20, 24, 25, 33, 37, 41, 44, 51,
Colorado	68, 72, 82, 145-147, 160, 166, 182
Delaware	139
Florida	39, 75
Hawaii	42, 128
Idaho	9, 95
Illinois	9, 58, 144, 179, 182, 183
Iowa	184
Kentucky	60, 169, 180
Massachusetts	59, 161, 173, 175, 179, 180
Maryland	53, 92, 94, 100, 104, 113, 128
Maryland	131, 134, 152, 158, 164, 167, 185
Michigan	82
Minnesota	178
Missouri	15, 63, 106
Nebraska	50, 66
New Hampshire	83
New Jersey	60
New Mexico	53, 165
New York	27, 114, 118, 143, 144, 174, 185
North Carolina	76, 79, 85, 87, 149
Oklahoma	54, 79
Ohio	156
Oregon	84
Pennsylvania	70, 121, 141, 184
Rhode Island	161, 162
South Carolina	12
Tennessee	28, 55, 72, 148
Texas	86, 147, 159, 186
Utah	96, 169
Virginia	18, 29, 31, 36, 80, 89
Virginia	133, 150, 163, 170, 172
Washington	7, 43, 62, 129
Washington, DC	30, 40, 45, 49, 50, 57
Washington, DC	64, 69, 73, 80, 85, 88, 94, 99-102
Washington, DC	106, 108, 110-112, 116, 119
Washington, DC	120, 122-125, 132, 141, 142, 149
Washington, DC	152, 156-158, 167
Washington, DC	174, 175, 177
West Virginia	71
Wisconsin	136, 173
Puerto Rico	76

☆U.S. GOVERNMENT PRINTING OFFICE: 1990 774-702/25057

DATE DUE

GAYLORD No. 2333 PRINTED IN U.S.A.

NOAA COASTAL SERVICES CENTER LIBRARY
3 6668 00000 0200