

Publications of the U.S. Geological Survey, Water Resources Division, for Puerto Rico and the U.S. Virgin Islands, 1899-1992

By Ruth I. Guzmán-Otero

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U.S. GEOLOGICAL SURVEY
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Publications of the U.S. Geological Survey, Water Resources Division, for Puerto Rico and the U.S. Virgin Islands, 1899-1992

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Abstract

A list of publications of the water-resources investigations conducted by the U.S. Geological Survey, Water Resources Division, for Puerto Rico and the U.S. Virgin Islands was compiled. The water-resources data and the results of the interpretive investigations and research are published by either the U.S. Geological Survey or cooperating agencies. This report lists all publications resulting from water-resources activities in Puerto Rico and the U.S. Virgin Islands from 1899 to 1992, and lists sources of publication information in the U.S. Geological Survey.

INTRODUCTION

The U.S. Geological Survey, Water Resources Division's mission is to provide the hydrologic information and understanding needed for the optimum utilization and management of the Nations water resources for the overall benefit of the people of the United States and its territories. The U.S. Geological Survey has conducted water-resources investigations in Puerto Rico and the U.S. Virgin Islands since 1899.

The U.S. Geological Survey Caribbean District office was established in Puerto Rico in 1957. Since then, almost all of the water-resources investigations conducted by the U.S. Geological Survey have been in cooperation with local agencies. The studies include data collection related to streamflow, ground-water levels, water-quality, sediment transport, water-use inventories, and areal water-resources appraisals. The results of these investigations are published in a variety of data and interpretive reports.

ORGANIZATION OF THE PUBLICATIONS

This report includes publications regarding water-resources information in Puerto Rico and the U.S. Virgin Islands released from 1899 to 1992. The publications are grouped into four categories: by author(s), by specific locations in Puerto Rico and the U.S. Virgin Islands, by discipline of interest (climate and geomorphology, floods, geology, ground water, ground-water level, ground-water modeling, sediment, surface water, water quality, and water use), and publication by series or type. For the reader's information, a list of approved reports pending publication is included. As these reports are completed and printed, they will be available for distribution.

For each publication the following information is presented: author(s), year of publication, title, publisher, type of publication, and number of pages. Publications in all categories are listed alphabetically by senior author, except for the section on types of publications, which are in numerical order. There is also a section entitled 'Maps of Puerto Rico and the U.S. Virgin Islands' which shows the location of the U.S. Geological Survey Caribbean District (fig. 1), the municipios in Puerto Rico (fig. 2), the topographic maps (quadrangles) for Puerto Rico (fig. 3), the principal rivers in Puerto Rico (fig. 4), the principal streams in Culebra and Vieques, Puerto Rico (fig. 5), the principal drainages in St. Thomas and St. John, U.S. Virgin Islands (fig. 6), the principal drainages in St. Thomas, U.S. Virgin Islands (fig. 7), and the topographic maps (quadrangles) for the U.S. Virgin Islands (fig. 8). The reader should refer to these figures when necessary to find a particular area. An index of authors is also included at the end of this report. To help make this report more useful to the user, it would be appreciated if discrepancies are noted and sent to the Caribbean District office mentioned below, so that corrections can be incorporated into the next edition.

SOURCES AND AVAILABILITY OF PUBLICATIONS

Many of the publications listed in this report may be available from the U.S. Geological Survey, Caribbean District office. Journal articles, proceedings papers, and abstracts by Geological Survey personnel in non-Geological Survey publications are not available from the U.S. Geological Survey. Inquiries concerning available publications can be made by writing to the following address:

U.S. Geological Survey, WRD
GSA Center
651 Federal Drive, Suite 400-15
Guaynabo, Puerto Rico 00965

The inquiry should include the author of the report, type and number, and the full title of the report. The Caribbean District office also maintains library copies of some of the out-of-print publications. Many of the listed publications are out-of-print and can be obtained only through the National Technical Information Services (NTIS) or from the U.S. Geological Survey Text Distribution Center:

U.S. Geological Survey Publication Series

Water-Resources Investigations Reports
Open-File Reports

Hydrologic Investigations Atlases
Topographic Maps (quadrangles)

Sources of Publications

U.S. Geological Survey
Earth Science Information Center
Open-File Reports Section
Box 25286, MS 517
Denver Federal Center
Denver, Colorado 80225

USGS Map Distribution
Box 25286, Building 810
Denver Federal Center
Denver, Colorado 80225

U.S. Geological Survey Publication Series

Bulletins, Circulars, Leaflets
Professional Papers
Techniques of Water-Resources Investigations
Water-Supply Papers

Water-Data Reports

Sources of Publications

USGS Map Distribution
Box 25286, MS 306
Denver Federal Center
Denver, Colorado 80225

National Technical Information Service
U.S. Department of Commerce
5285 Port Royal Road
Springfield, Virginia 22161

Within Puerto Rico, topographic maps (quadrangles) may be obtained at the:

Highway Authority
Photogrammetry Office
Minillas South Building, Third Floor
Santurce, Puerto Rico

Questions about water resources in general or about the water resources of specific areas of the United States can be directed to the:

Hydrologic Information Unit
U.S. Geological Survey
420 National Center
Reston, Virginia 22092

This office will also answer inquiries about the availability of water-resources investigations reports.

The U.S. Geological Survey issues a list of "New Publications of the Geological Survey." A subscription to this monthly catalog is free by writing to the:

U.S. Geological Survey
582 National Center
Reston, Virginia 22092

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MAPS OF PUERTO RICO AND THE U.S. VIRGIN ISLANDS

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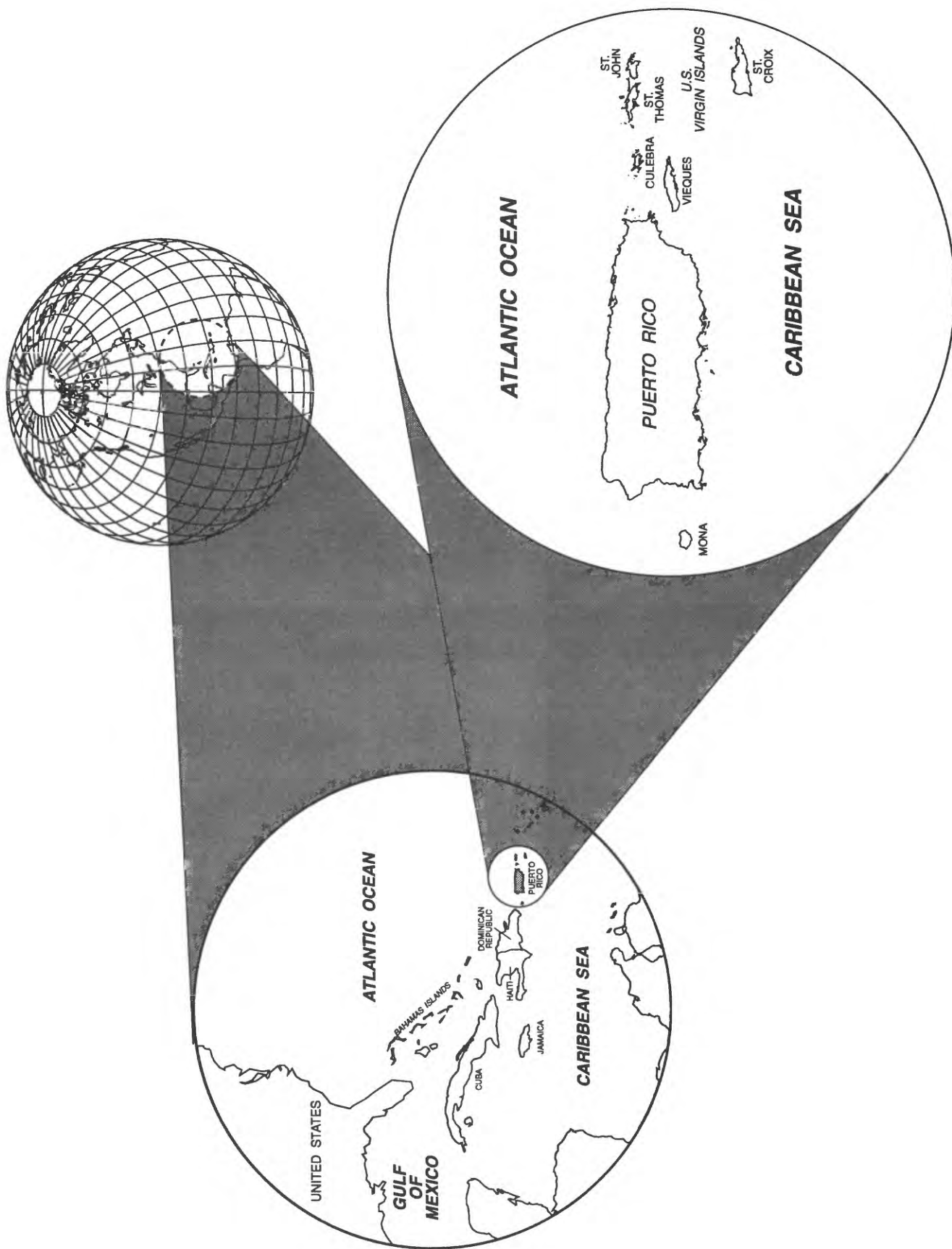


Figure 1. Location of the U.S. Geological Survey Caribbean District, Puerto Rico and the U.S. Virgin Islands.

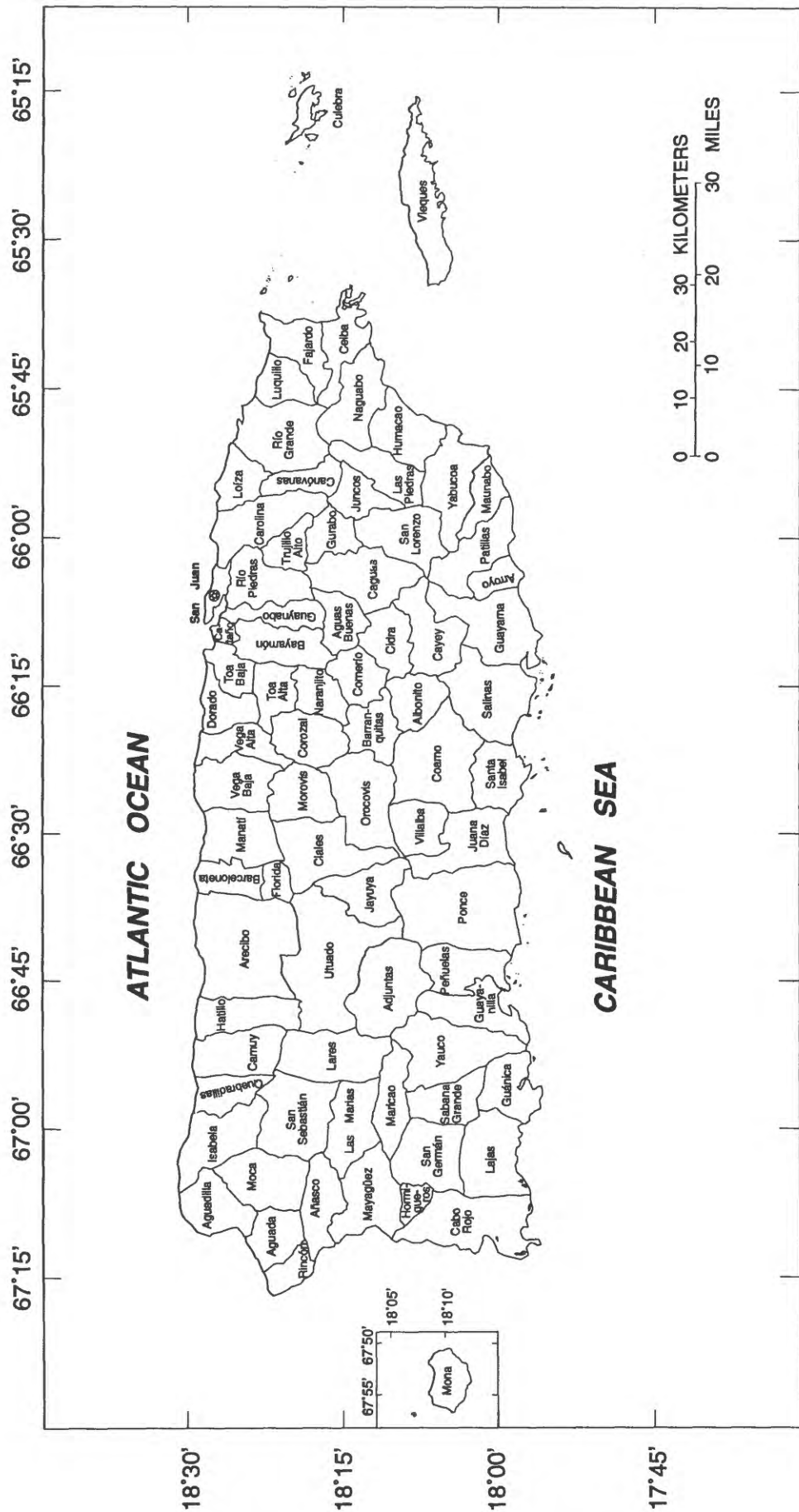
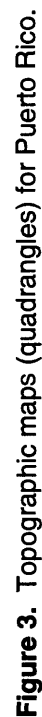


Figure 2. Municipios in Puerto Rico.



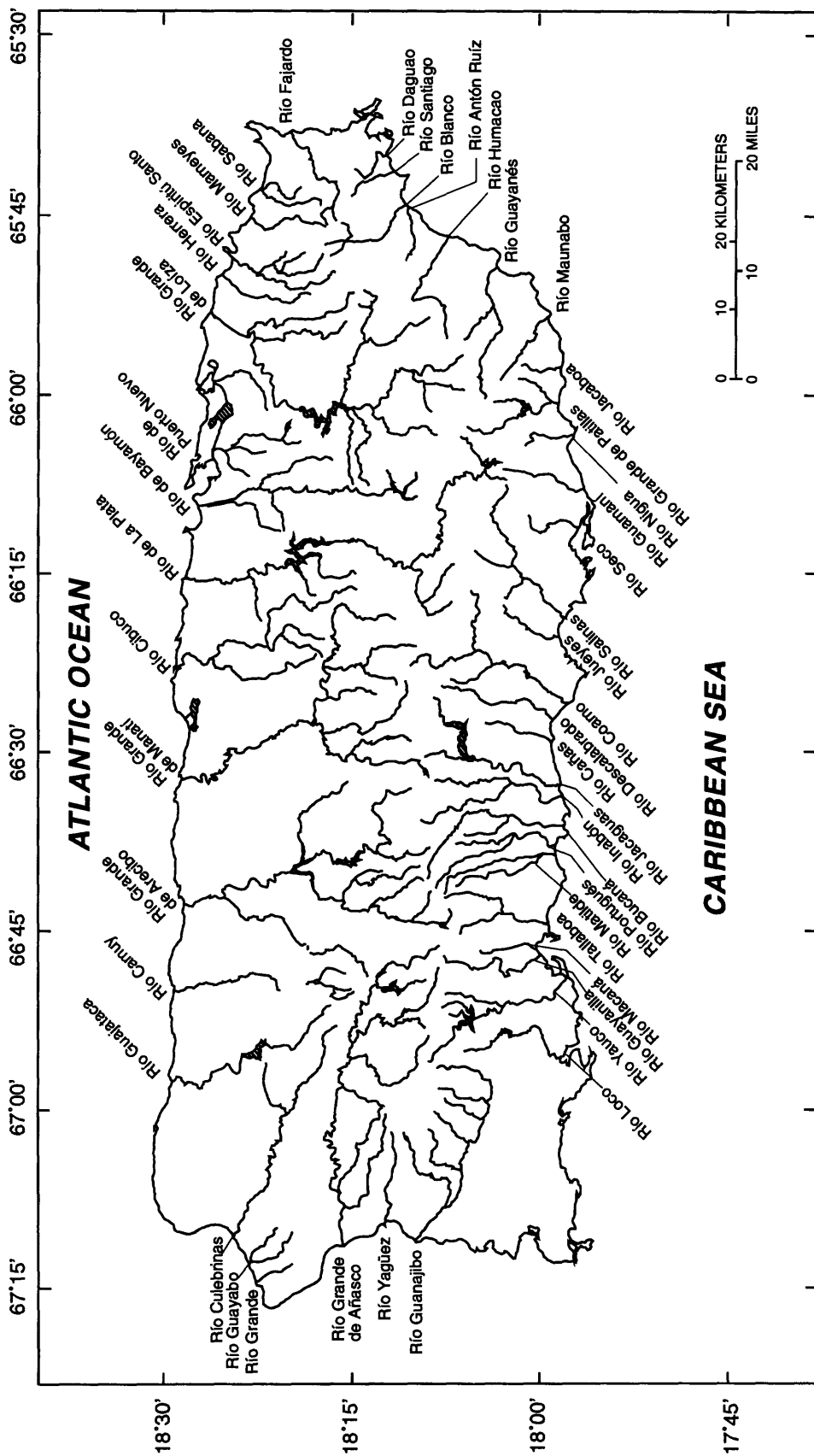


Figure 4. Principal rivers in Puerto Rico.

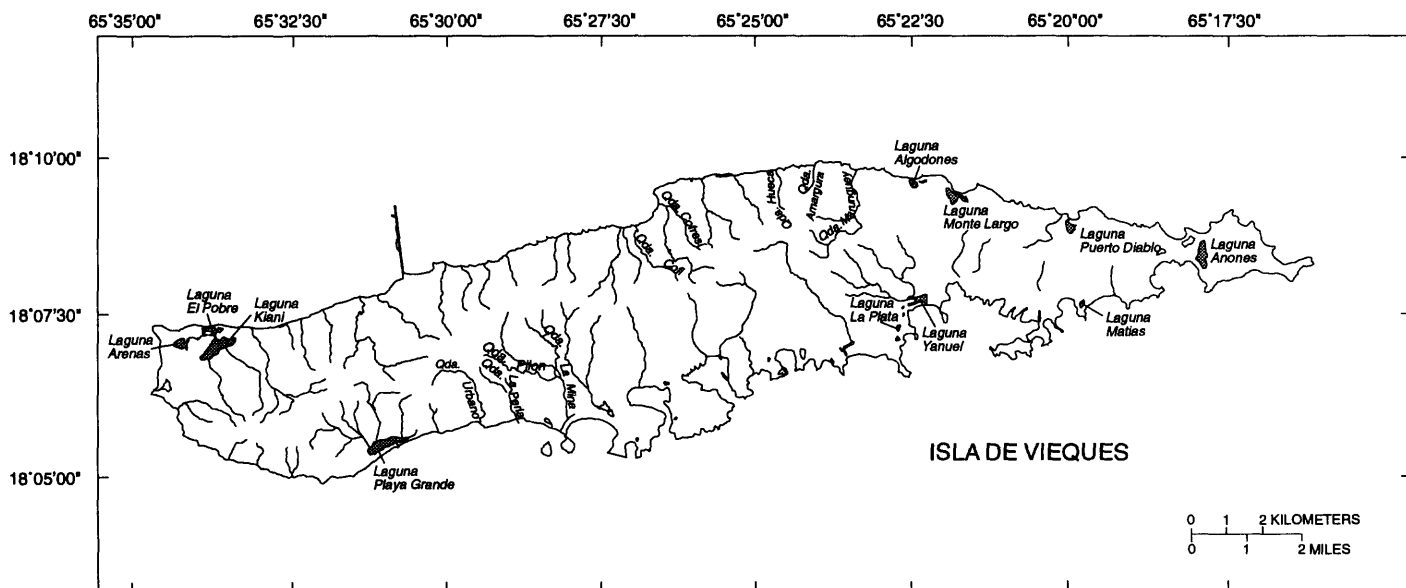
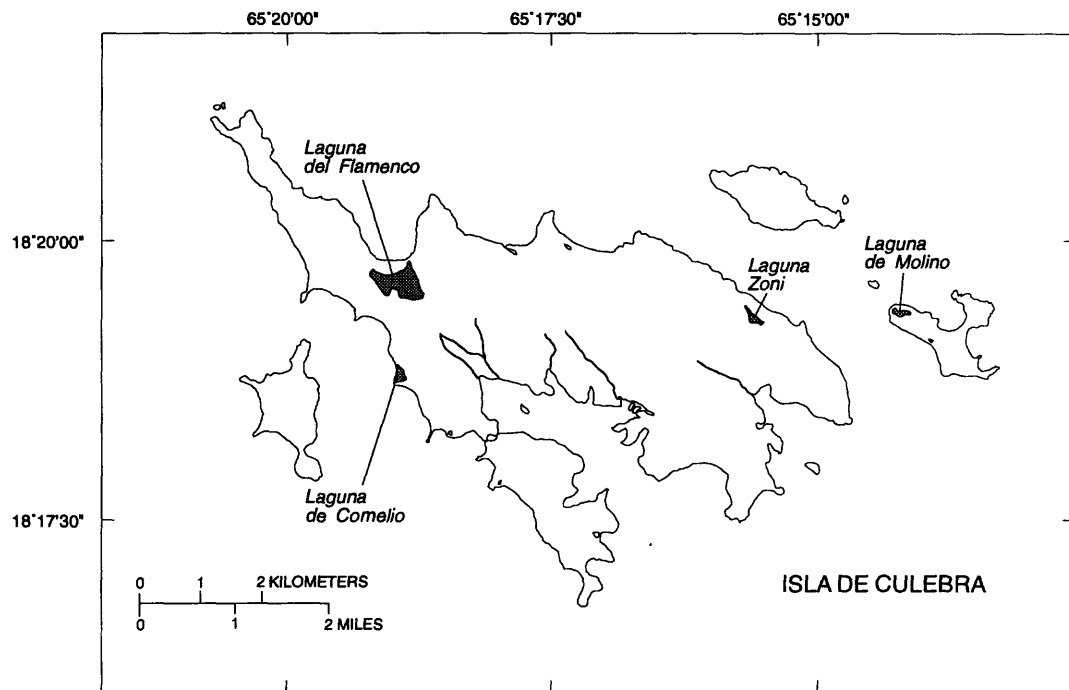


Figure 5. Principal streams in Culebra and Vieques, Puerto Rico.

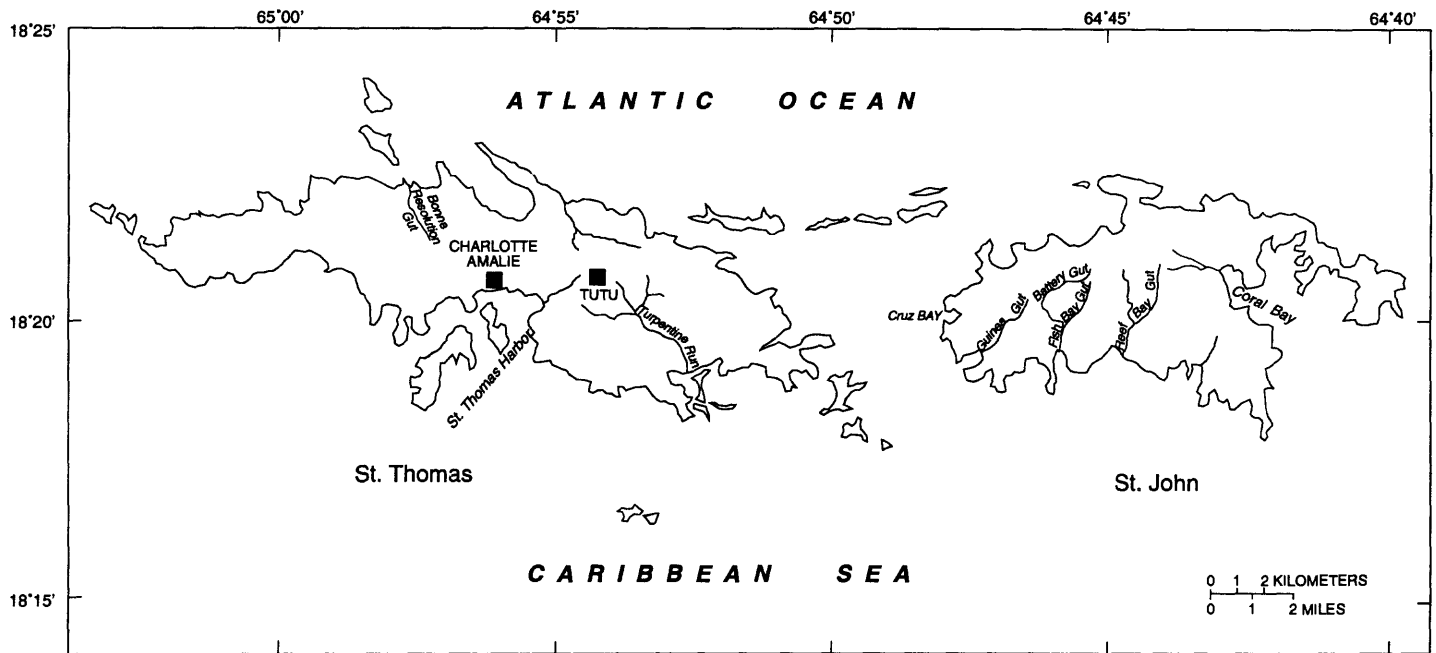


Figure 6. Principal drainages in St. Thomas and St. John, U.S. Virgin Islands.

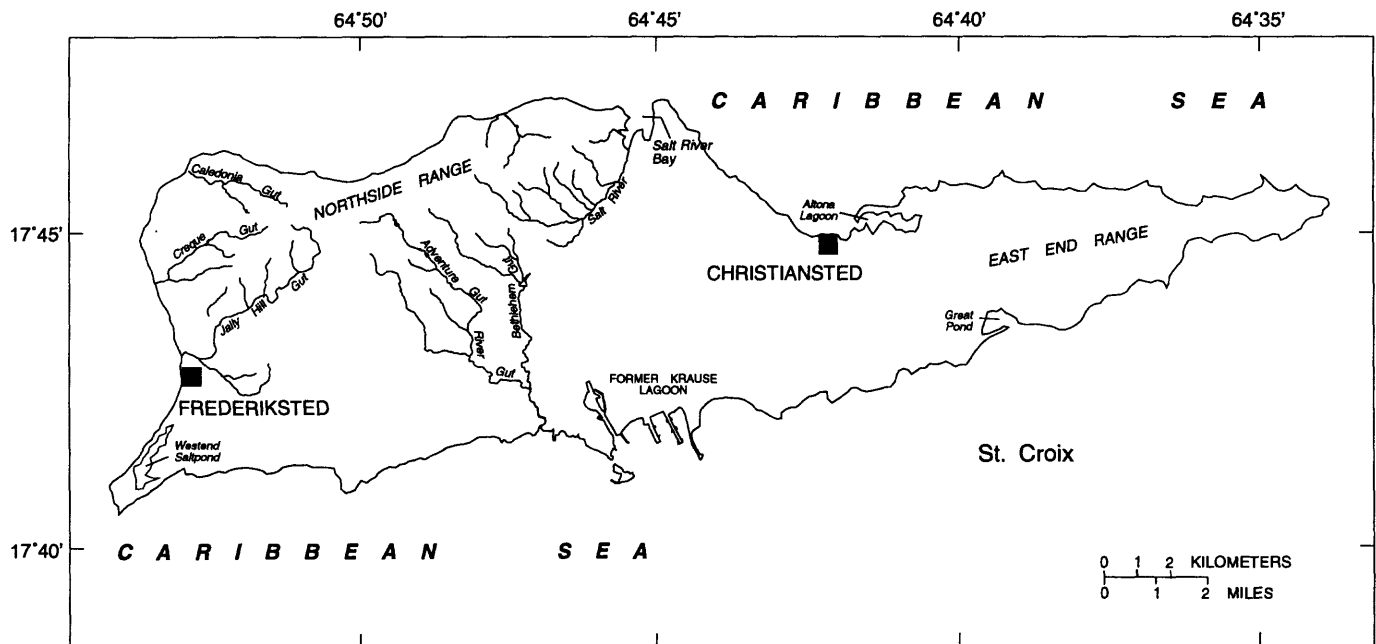


Figure 7. Principal drainages in St. Croix, U.S. Virgin Islands.

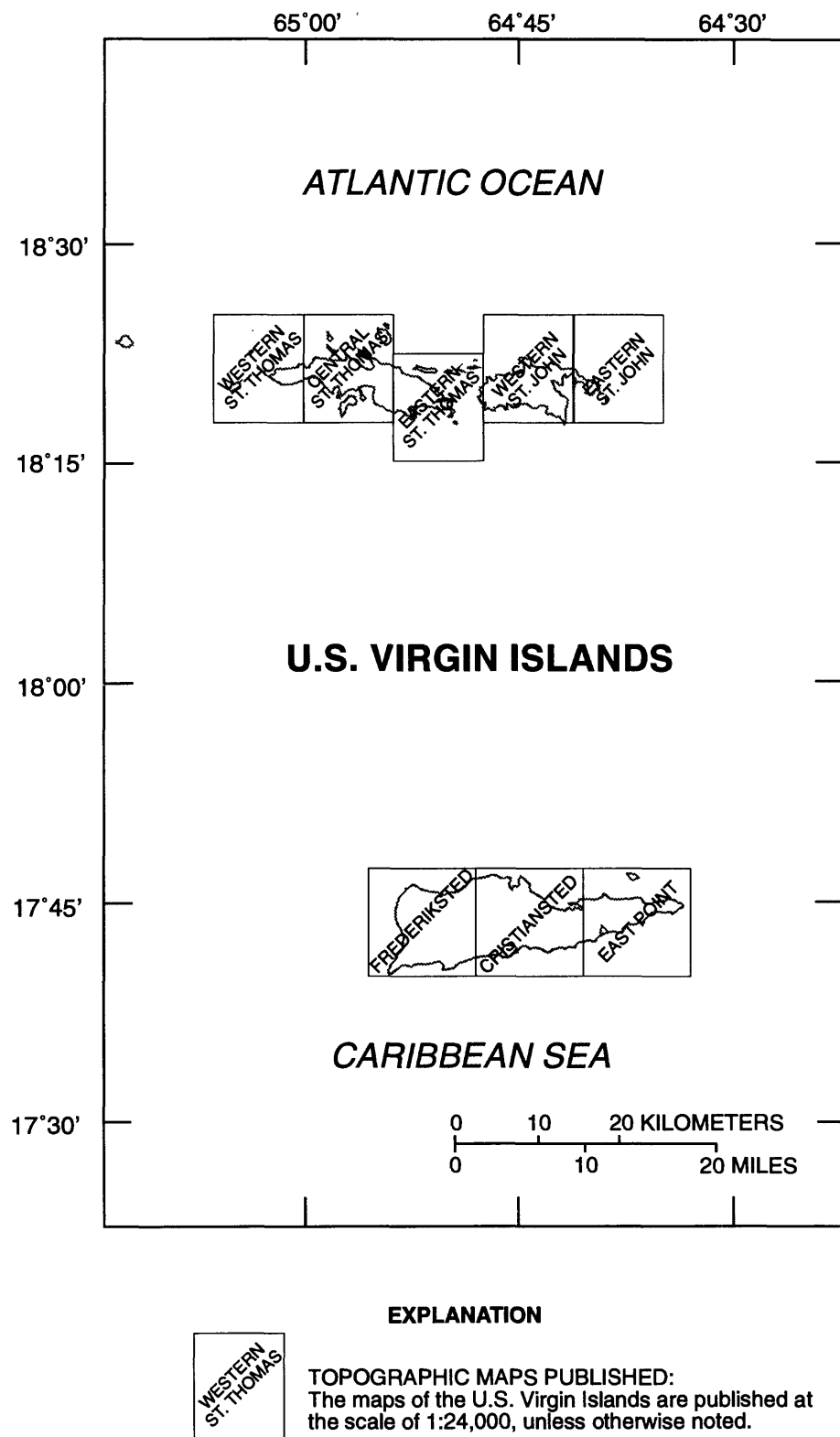


Figure 8. Topographic maps (quadrangles) for the U.S. Virgin Islands.

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LIST OF PUBLICATIONS BY AUTHOR

The list of publications by author includes all the publications listed in the other four categories of this report. The publications are listed alphabetically by senior author. Non-Geological Survey personnel who share authorship in articles with U.S. Geological Survey personnel are indicated by an asterisk (*) immediately following the name.

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Multidisciplinary
(Ground Water, Surface Water, and Water Quality)

Climate and Geomorphology
Floods
Geology
Ground Water
Ground-Water Level
Ground-Water Modeling
Sediment
Surface Water
Water Quality
Water Use

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PUBLICATIONS SERIES OR TYPES OF PUBLICATIONS

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- 643** **Durum, W.H., Hem, J.D., and Heidel, S.G.**, 1971, Reconnaissance of selected minor elements in surface waters of the United States, October 1970: U.S. Geological Survey Circular 643, 49 p.
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Bulletins contain significant data and interpretations that are of lasting scientific interest but are generally more limited in scope or geographic coverage than professional papers. They include the results of resource studies and of geologic and topographic investigations; as well as collections of short papers related to a specific topic.

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- 3** Ward, P.E., and Truxes, C.S., 1964, Water wells in Puerto Rico: U.S. Geological Survey Water-Resources Bulletin 3, 249 p.
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- 5** Crooks, J.W., Grossman, I.G., and Bogart, D.B., 1968, Water resources of the Guayanilla-Yauco area, Puerto Rico: U.S. Geological Survey Water-Resources Bulletin 5, 55 p.
- 6** McClymonds, N.E., 1967, Water resources of the Guánica area, Puerto Rico - A preliminary appraisal, 1963: U.S. Geological Survey Water-Resources Bulletin 6, 43 p.
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- 8** Giusti, E.V., 1968, Water resources of the Juana Díaz area, Puerto Rico - A preliminary appraisal, 1966: U.S. Geological Survey Water-Resources Bulletin 8, 43 p.
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- 75-38 **Ellis, S.R., and Gómez-Gómez, Fernando**, 1976, Hydrologic characteristics of lagoons at San Juan, Puerto Rico, during a January 1974 tidal cycle: U.S. Geological Survey Water-Resources Investigations Report 75-38, 45 p.
- 75-41 **Anderson, H.R.**, 1976, Ground water in the San Juan Metropolitan area, Puerto Rico: U.S. Geological Survey Water-Resources Investigations Report 75-41, 34 p.
- 75-42 **Giusti, E.V., and Bennett, G.D.**, 1976, Water resources of the north coast limestone area, Puerto Rico: U.S. Geological Survey Water-Resources Investigations Report 75-42, 42 p.
- 76-3 **Jordan, D.G., and Gilbert, B.K.**, 1976, Water supply and waste disposal, Culebra, Puerto Rico: U.S. Geological Survey Water-Resources Investigations 76-3, 31 p.
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- 80-1282 **Johnson, K.G.**, 1982, Flood of September 16, 1975, in the Guayanilla Valley, Puerto Rico: U.S. Geological Survey Water-Resources Investigations Open-File Report 80-1282, 1 sheet.
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- 81-345 **Johnson, K.G., and Quiñones-Aponte, Vicente**, 1982, Flood of September 16, 1975, in the Añasco area, Puerto Rico: U.S. Geological Survey Water-Resources Investigations Open-File Report 81-345, 1 sheet.
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- 83-4055** McKinley, P.W., 1985, Surface water data network analysis for Puerto Rico: U.S. Geological Survey Water-Resources Investigations Report 83-4055, 14 p.
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- 32** **Wilson, H.M.**, 1899, Water resources of Puerto Rico: U.S. Geological Survey Water-Supply Paper 32.
- 1067** **Cederstrom, D.J.**, 1950, Geology and ground-water resources of St. Croix, Virgin Islands: U.S. Geological Survey Water-Supply Paper 1067, 117 p., 1 pl.
- 1460-A** **Lohr, E.W.**, 1957, Chemical character of public water supplies of the larger cities in Alaska, Hawaii, and Puerto Rico, 1954: U.S. Geological Survey Water-Supply Paper 1460-A, 39 p., 1 pl.
- 1547** **Harris, K.F.**, 1962, Inventory of published and unpublished sediment-load data, United States and Puerto Rico, 1950-60: U.S. Geological Survey Water-Supply Paper 1547, 117 p.
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- 2375** **Schuck-Kolben, R.E., and Kaufman, Lionel**, 1991, Storm-surge flooding by Hurricane Hugo on the U.S. Virgin Islands, Puerto Rico, and South Carolina, September 1989 - National Water Summary 1988-89: U.S. Geological Survey Water-Supply Paper 2375, p. 59-64.

WATER-DATA REPORTS

The annual hydrologic data reports of Puerto Rico and the U.S. Virgin Islands are of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each state, Puerto Rico, the U.S. Virgin Islands, and the other Trust Territories. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the area.

Water-resources data for Puerto Rico for calendar years 1958-67 were released in a series of reports entitled "Water Records of Puerto Rico." Water-resources data for the U.S. Virgin Islands for the calendar years 1962-69 were released in a report entitled "Water Records of U.S. Virgin Islands." Included were records of streamflow, ground-water levels, and water-quality data for both surface and ground water.

Beginning with the 1968 calendar year, surface-water records for Puerto Rico were released separately on an annual basis. Ground-water level records and water-quality data for surface and ground water were released in companion reports covering periods of several years. Data for the 1973-74 reports were published under separate covers. Water-resources data reports for 1975-76, 1977, 1978, 1979-80, 1981-82, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, and 1991 water years consist of one volume each and contain data for streamflow, water quality, and ground water.

Publications similar to these reports are published annually by the U.S. Geological Survey for all States. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, the most recent volume is identified as "U.S. Geological Survey Water-Data Report PR-90-1." These water-data reports are for sale in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia, 22161, (Curtis and others, 1991).

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- U.S. Geological Survey, 1973, Water resources data for Puerto Rico, 1968-72, Part 3, Ground water records: U.S. Geological Survey Water-Data Report, 78 p.
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