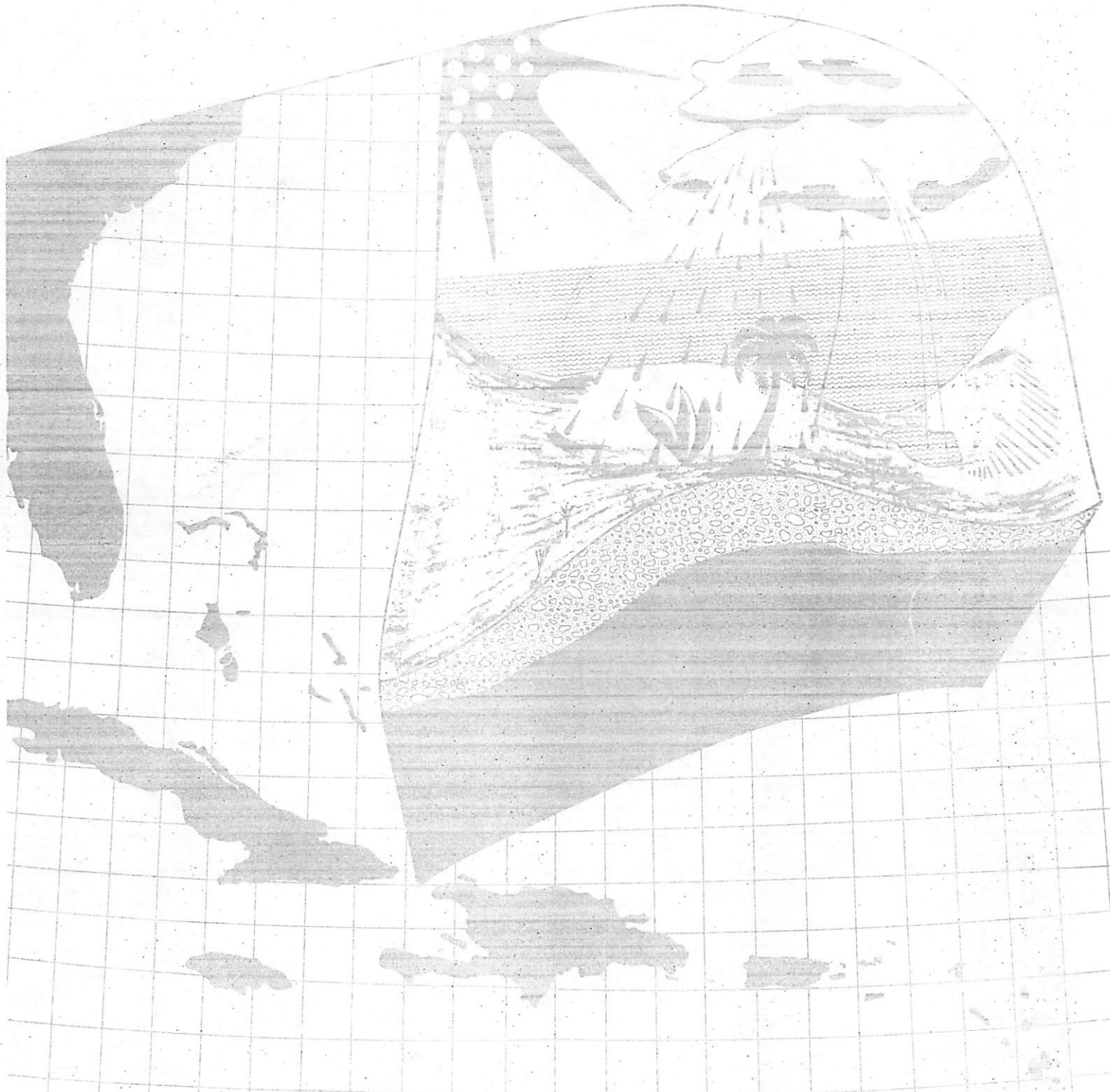


H. Smith

Third Caribbean Islands Water Resources Congress



22-25 July 1986

Virgin Isles Hotel, St. Thomas, U.S. Virgin Islands

Sponsored by

- U.S. GEOLOGICAL SURVEY, WATER RESOURCES DIVISION
- WATER RESOURCES RESEARCH INSTITUTE OF THE UNIVERSITY OF PUERTO RICO
- WATER RESOURCES RESEARCH INSTITUTE OF THE COLLEGE OF THE VIRGIN ISLANDS
- PUERTO RICO WATER RESOURCES ASSOCIATION
- NATIONAL SCIENCE FOUNDATION

PROCEEDINGS OF A SYMPOSIUM
HELD IN ST. THOMAS, U.S. VIRGIN ISLANDS
22 - 23 JULY 1986

3RD CARIBBEAN ISLANDS WATER RESOURCES CONGRESS

Edited by
FERDINAND QUINONES,
ANA V. SANCHEZ, AND
HENRY H. SMITH

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U.S. GEOLOGICAL SURVEY, WATER RESOURCES DIVISION
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PREFACE

Water has become a critical commodity in the Caribbean Region. In spite of a relative abundance of rainfall even on the smaller islands, the region is faced with severe seasonal shortages as well as increasing water quality problems. The supply of the water needs in the area will become even more critical as economic development accelerates and the population continues to increase. The development of the necessary infrastructure to supply the water needs of the next 30 years will require large capital investments. Perhaps even more important, it will require training of scientists and technicians in the investigation and management of the limited water resources. The lack of trained personnel could be the most important factor in the solution of the water resources problems in the region.

The principal objectives of the "Third Caribbean Islands Water Resources Congress", as well as the two previous meetings, are to provide a focus for the transfer of technology on hydrology and water resources investigations in the region. The organizations sponsoring the congress (Water Resources Research Institute of the College of the U.S. Virgin Islands; Water Resources Research Institute of the University of Puerto Rico; Water Resources Division of the U.S. Geological Survey, Caribbean District; and the Puerto Rico Water Resources Association) are involved in extensive water resources research, planning, or technology transfer in Puerto Rico and the U.S. Virgin Islands. These organizations can serve as a focus to provide the necessary training to the other islands in the region.

The topics of the papers presented in this Third Congress address the most important water issues in the area. The severe quality problems that affect water supplies in the U.S. Virgin Islands are the subject of two papers. The importance of a reliable data base on water use in small islands is exemplified on the paper on water use in St. Croix. Advanced techniques are discussed in how to measure ground water contributions to runoff, use of geochemical techniques for interpretation of water quality characteristics, use of dye tracers in karst areas, simulation of small island's aquifers, and use of borehole geophysical tools to estimate moisture. The concern for the contamination of ground water resources are presented in several papers focusing on monitoring, sludge management, and environmental assessment.

It is our purpose that these meetings be continued, and that our objectives on sharing resources and technology be achieved.

FERDINAND QUINONES
ANA V. SANCHEZ
DR. HENRY H. SMITH

Editors

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