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Caribbean Research Institute

College of the Virgin Islands, St. Thomas, U.S. Virgin Islands 00801

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NEW DIRECTOR AT CENTER

Dr. Richard D. Champney has been appointed director of the Water Resources Research Center. Dr. Champney replaces Dr. Roger Peebles who served as director from 1977 until March 31, 1980. Henry H. Smith, CRI research associate, was named acting director during the interim.

Dr. Champney comes to the Virgin Islands from Washington, D.C. where he was affiliated with the U.S. Department of Interior for five years. He held positions at the Bureau of Land Management and the Office of Surface Mining. Most recently he administered the Mining and Mineral Resources Research Institute program of the Office of Surface Mining. Prior to federal employment, Dr. Champney worked in various capacities in the field of geology in Arizona, Michigan and Colorado. He is originally from Milwaukee, Wisconsin.

He obtained the doctoral degree in geology in 1971 from the University of Arizona at Tucson. The subject of his dissertation was "Studies of Geologic Structures by Paleomagnetic Methods."

WELLS AND DISTRIBUTION SYSTEM BEING STUDIED

A project that is investigating the microbial quality of water from the public distribution system and from old dug wells in the town areas of St. John, St. Croix and St. Thomas has been started at the WRRC. The principal investigator for this project is Dr. Harvey Winters of the Fairleigh Dickinson University. Because of the age of the public water distribution systems in the Virgin Islands and the fluctuating pressures in the water lines due to rationing, many opportunities exist for water being distributed by this means to become contaminated from water leaking into the systems. There are documented cases of illness caused by use of this water. At the same time, several old wells scattered throughout the towns that were once a major source of water have been, in many cases, sealed. It was feared that water from these wells might be hazardous to public health. With these situations in mind, the study being undertaken will ascertain the microbial quality of water from these sources and determine whether pathogenic microorganisms are present in sufficient numbers that may be harmful to man.

STUDY OF USAGE PATTERNS COMPLETED

A study intended to determine the daily per capita demand for water in the USVI has been completed at the Water Center. The installation of water measuring devices in combination with a monitoring program provided the opportunity to obtain original water usage data from a sample of dwelling units. The test period started in November 1979 and ended in July 1980. The sample of dwelling units were occupied by tourists, residents who lived in the islands for all or most of their lives and contingents who have moved permanently to the islands.

The major conclusions of the study were that a comfortable lifestyle can be maintained in the V.I. with an average domestic usage of less than 40 gallons per day and that economic incentives to conserve water can substantially reduce residential water usage. Copies of the final completion report will be available at the WRRRC shortly.

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WRRRC REPRESENTED AT REGIONAL SEMINAR

Henry Smith of the Water Center and the Director of CRI, Dr. Norwell Harrigan, attended the Regional Seminar on Small Island Water Resources held in Barbados October 5-11, 1980. The conference was sponsored by the United Nations Department of Technical Cooperation for Development and the Commonwealth Science Council. The main objectives of the seminar were the interchanging of experience and ideas in solving water-related problems and the fostering of a spirit of friendly cooperation among all nations bordering on the Caribbean area. In addition to countries of the Caribbean, among nations represented at the seminar were Belize, the Prince Edward Islands, the United Kingdom and the United States.

The seminar dealt with the entire spectrum of conventional and non-conventional water resources related problems in small oceanic islands including exploration, assessment, planning, development management, protection, conservation and legislation. Special attention was paid to low-cost alternatives and to the growing importance of energy conservation.

The proceedings of the conference are being published and will be available for inspection at the Water Center.

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POSITION VACANT

Applications are being accepted for the position of Research Associate in Water Resources at the WRRRC. Candidates applying for this position must have a Master's degree and three years of experience as a water resources specialist, economist or planner. A strong technical writing ability is required. The chosen applicant will be assigned to work independently in developing research priorities and the community relation aspects of the Water Resources Research Center's program of the College's Caribbean Research Institute. The salary for this professional staff position is from \$15,000 to \$18,000 for the administrative year depending on qualifications and experience. Benefits include 21 working days of annual leave and 15 working days of sick leave. A comprehensive medical plan and TIAA-CREF retirement plan are available. Resumes or requests for information should be addressed to: Director of the Water Resources Research Center, Caribbean Research Institute, College of the Virgin Islands, St. Thomas, Virgin Islands 00801

INTERESTING PUBLICATION

A recently received publication, written jointly by the U.S. Department of Agriculture, Farmers Home Association, Veterans Administration and the U.S. Department of Housing and Urban Development is entitled "Water Conservation in Housing Assistance Programs."

Approximately 50 possible actions to achieve water use conservation were studied and this resulted in publication of the report. Topics discussed in the report include:

- The potential for residential water use conservation.
- Ideas considered
- Actions recommended for early implementation.
- Actions recommended for short term study.
- Related issues.

A copy of their report is available for review at the Water Center.

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WAA TA' STATISTICS

Rainfall(Inches)	Aug.	Sept.	Oct.
St. Croix			
A.H. Airport	1.12	2.13	.56
Annally	3.73	5.57	1.19
Sprat Hall	2.72	7.60	2.20
St. Thomas			
Fort Mylner	3.88	6.01	7.29
Dorethea	4.31	7.05	10.37
Red Hook	3.83	3.81	5.08
St. John			
Cruz Bay	3.85	2.54	6.69
Catheringberg	3.91	3.16	5.10
Water in Storage at Public Works (1000 gallons)			
St. Thomas	18,328	9,399	27,909
St. Croix	1,752	1,752	1,752

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WEATHER STATION AT CVI

In conjunction with the project "Land Use Runoff and Recharge on Selected Watersheds in the U.S. Virgin Islands", the WRRC has established a weather monitoring station on the St. Thomas campus of CVI. This station is primarily intended to measure the various components of the water budget. A recording evaporimeter measures evaporation while a recording rain gage measures rainfall. Soil moisture blocks are being installed to measure changes in soil moisture.

It is planned that this station will remain active even after the project ends.

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