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PROBLEM-RESEARCH ANALYSIS

The Water Resources Research Center has recently published a project completion report titled Problem-Research Analysis in the U.S. Virgin Islands, Insular Region, Atlantic Subregion. The purpose of the project was to solicit from the public and governmental officials statements about the problems in meeting the increasing demand for water and the role of research as an aid in solution of the more urgent needs.

The first step in the problem-research analysis was to identify the major researchable water problems in the U.S.V.I. and to establish a rank of importance or urgency in the problems identification. This was accomplished by distributing a questionnaire to persons considered to have an interest or involvement in water resources of one nature or another. Responses received from 21 individuals were tabulated and ranked.

The Water Center then conducted three workshops between October 1974 and April 1976 to further explore the various water problems. The workshops were attended by government officials, legislators, representatives of the academic community and civic organizations, and private citizens.

The problem-research analysis, through the questionnaire and the

workshops, identified and ranked the most severe water problems in the U.S.V.I. The major categories are:

- (1) Alternatives in water supply
- (2) Conservation and water re-use
- (3) Water Quality and waste management
- (4) Social, economic, and institutional problems in water resources planning and management

The entire project was supported by funds provided by the United States Department of Interior, Office of Water Research and Technology as authorized under the Water Resources Act of 1964. Copies of the report Problem-Research Analysis in the U.S. Virgin Islands can be obtained from the Caribbean Research Institute, College of the Virgin Islands, St. Thomas.

COMPREHENSIVE PLAN STARTED AT VIPO

The Water Resources Staff at the V.I. Planning Office is currently developing a framework for a comprehensive water and related land resources plan for the Virgin Islands. The initial stage of the plan is an analysis of the duties and functions of all agencies in the Virgin Islands involved with water resources. It is felt that such an investigation is necessary because without a critical evaluation of the entire water

spectrum there is no means of pinpointing areas of deficiencies and identifying agencies responsible for satisfying needs.

Through this evaluation, the Planning Office intends to determine desirable levels of services and the scope of water resources involvement by local and federal agencies; to identify the specific duties of agencies engaged in or concerned with water conservation, use and improvement; to ascertain if each agency is meeting the requirements and intent of its delegated purposes; to seek out areas of overlap and duplication of effort; and to identify functions and services which are inadequately provided or neglected altogether. It is anticipated that a comprehensive plan can be prepared within three years.

OTHER PUBLICATIONS OF INTEREST

The Water Resources Center at the University of California has published a report on The Design of New Residential Water Consumption Systems. The report includes a profile of typical residential consumption, a history of water use in the home, the impact of economic, socio-cultural, institutional, and technological factors, a survey of relevant aerospace technology, strategies for reducing the homeowner demand, and recommendations for specific actions to be taken by lawmakers and utility companies to reduce residential consumption. It is a non-technical report intended to homeowners, builders, developers, planners, lawmakers, and utility managers who are seeking ways to reduce water consumption.

The report is available from: Water Resources Center, Director's Office, 475 Kerr Hall, University of California, Davis, CA 95616. The price of the publication is \$7.50 per copy (prepaid, postage and handling included). A copy will soon be available for inspection at the Water

Resources Research Center, CVI.

RESULTS OF 1975 NATIONAL WATER ASSESSMENT

The V.I. Planning Office recently completed a report for the U.S. Water Resources Council 1975 National Water Assessment. The Assessment resulted in four technical reports and consists of an inventory of water use and water resource problems in the V.I. The following list of potential studies was also included in the assessment of water resources in the Virgin Islands.

- (1) Evaluation of the effects of cistern water on public health.
- (2) Inventory of the number of cisterns on the islands, establishing the capacities and condition.
- (3) Assessment of the present quality of all wells (public and private) and a procedure devised for monitoring the quality and quantity of all wells.
- (4) Evaluation of water quality from catchment and associated storage facilities.
- (5) Survey to locate aquifers and establish data on their capabilities for supplying fresh water.
- (6) Evaluation of streamflow.
- (7) Inventory and assessment of impoundment for water use.
- (8) Evaluation of water consumed by evapotranspiration.
- (9) Applications of solar energy technology to supply water needs (eg. desalination plants, methods for removing water from the atmosphere, etc.).
- (10) Continuing study of the use of highly treated (tertiary) sewage effluent for recharging aquifers.