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Abstract

A sediment reduction program was prepared for the U.S. Virgin Islands Department of Conservation and Cultural Affairs in 1979 by the firm BC&E-CH2M Hill. The stated purpose of the program was to minimize the occurrence of soil eroding and being transported into the islands coastal waters. The Water Resource Map was adopted in 1979 and became a requirement for the acquisition of a development permit. The maps display terrestrial and marine features that are directly related to sediment reduction or biological communities sensitive to the affects of sediment discharge. Despite changes to the landscape and seascape of the Territory, the Water Resource Map has not been updated and is still a requirement for a development permit.

Impoundments are major features on the Water Resource Map. They serve an essential role in sediment control. The overtopping protection and holding capacity are indicators of how well an impoundment is functioning. A survey will be conducted to assess the existing condition of the impoundments mapped in 1979. In addition, impoundments changed or developed in the study areas after 1978 will be identified and mapped. The mapping for this project will be done using Geographic Information System (GIS) technology. This technology will allow the integration of data collected with other existing map layers. This study will review the relevancy of how the Water Resource Map is used currently. Stakeholders in land development related activities will be asked to participate in focus group meetings to assess how the Water Resource Map is used in making land use management decisions. Procedures will be developed for expanding, integrating and maintaining updates of the data needed for planning and enforcing sediment controls.