

State: VI
Project Number: 2008VI114B
Title: A Comparative Analysis of St. Croixs Waterways;
Project Type: Research
Focus Category: Water Supply, Groundwater, Water Quality
Keywords: GIS, Landsat, Land cover, Change analysis, soil test, soil permeability,
Start Date: 3/1/2008
End Date: 2/28/2009
Congressional District: N/A
PI: daley, brian
email:bdaley@uvi.edu
Co-PI(s):

Abstract

This project proposes conducting a comparative analysis on the natural waterways of St. Croix, U.S. Virgin Islands using a combination of remotely sensed data and field collected variables. The objective is to determine if there are significant differences in hydrographic and edaphic conditions within waterways with differing human land uses. This layer will be intersected with the results of a recent land cover change analysis conducted by the University of the Virgin Islands, Agricultural Experiment Station. Students will be trained to collect a suite of field metrics relating to soil density and permeability. These data will be analyzed and compared relative to predetermined human land-use categories in order to determine the influence human activities have on watershed health. The methods and results will be summarized in a fact sheet and made available to the community.