

<b>Project Name</b>	Caribbean Coastal Scenarios
<b>Acronym</b>	CCS
<b>Study Region</b>	Cuba, Hispaniola, Jamaica, and Puerto Rico
<b>Principal Investigator</b>	Prof. Michael McClain
<b>Duration</b>	January 1, 2006 - December 31, 2010
<b>Project Website</b>	<a href="#">Link to project website</a>
<b>LOICZ Project Database</b>	<a href="#">Click here for more project information</a>

### PROJECT DESCRIPTION

CCS is a 5-year research initiative to develop island-scale models of land-ocean interactions in the Caribbean that will inform and support a regional dialog on management and policy actions to respond to the development challenges facing Cuba, Hispaniola, Jamaica, and Puerto Rico. CCS investigators are working closely with key governmental and non-governmental stakeholders to examine the threats and possible responses in the context of plausible scenarios. As a result of consultations with governmental and non-governmental stakeholders during the planning phase of the project, we have defined the following science objectives. 1) Develop island-scale quantitative models to simulate seasonal and inter-annual fluxes of fresh water, sediments, and dissolved loads to coastal zones as a function of climate, catchment characteristics, and socioeconomic variables. 2) Examine specific and realistic scenarios of future change in driving variables, evaluating the risks to coastal ecosystems and vulnerabilities of humans to projected changes. These science objectives support associated objectives in capacity building and direct support to decision makers to identify feasible, sustainable, and desirable scenarios for future development. Our methodology involves teams of scientists, resource managers, and policy makers working together in a step-wise and parallel fashion through workshops and coordinated island-based activities. Specific actions include: 1. Assembling internally consistent, island-scale datasets for relevant climate, biophysical, and socio-economic variables and managing data and outputs using new web-portal technologies. 2. Simulating seasonal and inter-annual fluxes of fresh water, sediments, and dissolved loads to coastal zones of each island as a function of key biophysical and policy variables and evaluating coastal impacts linked to inland runoff. 3. Developing (using IPCC protocols) a reasonable number of realistic future scenarios that consider past and future trends in the nature and distribution of policy variables (e.g. population growth, urbanization, tourism growth, land management practices, waterworks, etc.) 4. Presenting project findings in national seminars and workshops.

### THE PROJECT RELATES TO THE FOLLOWING PRIORITY TOPICS AND SCIENTIFIC THEMES

Priority Topics:

- 1 - Link social and ecological systems in the coastal zone
- 3 - Link governance and science in coastal regions

Scientific Themes:

- 1- Vulnerability of Coastal Systems and Hazards to Society
- 2 - Implications of Global Change for Coastal Ecosystems and Sustainable Development
- 3 - Human Influences on River Basin-Coastal Zone Interactions
- 5 - Towards Coastal System Sustainability by Managing Land-Ocean Interactions