

Integrated Water Resources Management (IWRM) Projects and Initiatives in the Caribbean

Title: Assessing the potential impacts of climate change on Belize's water resources

Organisation: University of Belize

Aims and Objectives:

- Determine the current demand for and supply of water (i.e. water balance) in Belize's major and minor watersheds
- Assess future supply and demand, against the range of future land use scenarios and future climate change scenarios
- Examine how water quality might change as a result of climate change and land use change scenarios
- Determine which areas are highly vulnerable to climate change, and to what magnitude
- Support the development of national-level policies on adaptation to climate change
- Develop sustained capacity within Belizean institutions to iteratively model / assess climate change impacts on water resources and in other sectors
- Contribute to the regional body of knowledge on the potential impacts of climate change

Duration: Start Year: 2013 Completion Year: 2014

Additional Comments:

Estimated Cost (USD): Approximately \$80,000

Funding Source: Climate and Development Knowledge Network (CDKN)

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Key Words: Water Resources; Climate Change; Belize; Impacts; Vulnerability

Geographic Coverage: Belize

Sectoral Focus: Climate Change; Water Resources

Target Beneficiaries: National and Local Policy-makers; Belize National Climate Change Committee (BNCCC); Environmental sector

Outputs:

Policy brief for decision-makers; Technical reports and modelling to assess the potential impacts of climate change on the supply and demand for water and water quality in Belize across different climate change and land use scenarios.

Project Links and References:

<http://cdkn.org/project/impacts-of-climate-change-on-belizes-water-resources/>

Impacts:

The Project asked what climate change means for Belize, its water resources and for trans-boundary watersheds and basins with neighbouring countries that feed into Belize. The project has done modelling with existing/available data (i.e. data from IPCC 4th Assessment Report) and scenario building (this part has been finished) to find answers to the above question and feed these technical information into policy recommendations through technical reports and policy briefs.

There is also a capacity building component of the project. Capacity building to members of the Belize National Climate Change Committee (BNCCC) has taken place to ensure they understand the information coming out from this project and NGOs who are not part of the BNCCC, but who have an interest in the information (modelling and CC).

The project has established a good relationship with BNCCC and will present the results of the research to the BNCCC, and aims to feed the results of the project into the Belize National Climate Change Policy.

Global Water Partnership-Caribbean IWRM Projects and Initiatives Database

Sustainability:

Information not available

Lessons for the Future:

Information not available

Opportunities Arising from the Project:

Next steps would be to understand what the demand from policy-makers in terms of research and information in different sectors are and how a project continuation could help to generate demand and interest from stakeholders to want to know about these issues.

Moreover, questions that emerged so far, for example, are how decreased rainfall will impact Belize's energy security (hydro electrical plants) and agriculture.

Further Comments:

Contact us for more information.