

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

Title: Caribbean Water Initiative (CARIWIN)

Organisation: Caribbean Institute for Meteorology and Hydrology (CIMH)

Aims and Objectives:

The Caribbean Water Initiative is a collaborative project, designed to address the complex challenges of water management in the Caribbean region. CARIWIN is a six years project from (2006-2012) funded by the Canadian International Development Agency, through its University Partnerships in Cooperation and Development Program. The main institutional partners are the Brace Centre for Water Resources Management of McGill University and the Caribbean Institute for Meteorology and Hydrology (CIMH), with collaborating national agencies in Grenada (Ministry of Agriculture), Guyana (Ministry of Agriculture), and Jamaica (Water Resources Authority).

The project aims to improve existing capacity in these 3 pilot countries by involving local community organizations, water user associations and regional and national networks. Several training courses will be held each year on the principles of IWRM; hydro-meteorological data processing and management; use of field instrumentation; and water policy. These courses have been designed for all stakeholders ranging from community water users to technicians to engineers to senior administrators.

Duration: Start Year: 2006 Completion Year: 2012

Additional Comments:

Estimated Cost (USD): \$914,000

Funding Source:

CARIWIN, Canadian International Development Agency through University Partnerships in Cooperation and Development



Global Water Partnership-Caribbean IWRM Projects and Initiatives Database

Contact Information: Dr. Adrian Trotman, Caribbean Institute for Meteorology and Hydrology, Barbados **Telephone:** (246) 425 1362/3/5; **Email Address:** atrotman@cimh.edu.bb **Web Address:** <http://www.mcgill.ca/cariwin/cariwin-caribbean-water-initiative>

Key Words: Water Management; Community Water Strategies; Capacity Development; Drought; Monitoring

Geographic Coverage: Jamaica; Grenada; Guyana

Sectoral Focus: Water; Agriculture; Academia

Target Beneficiaries: Community Water Users; Farmers; Academics; Technicians; Engineers; Senior Administrators

Global Water Partnership-Caribbean IWRM Projects and Initiatives Database

Outputs:

Decision Support Tools: CARIWIN endeavored to meet these needs in the region through the development of three decision-support tools: the National Water Information Systems, the Caribbean Drought and Precipitation Monitoring Network and Community Water Strategies.

- A National Water Information System (NWIS) is a centralized database for a country's water-related information and a powerful decision-support tool. The NWIS is currently operational in five Caribbean countries, with several others in the initial phases of development or investigation.
- Caribbean Drought and Precipitation Monitoring Network: This Caribbean Drought and Precipitation Monitoring Network (CDPMN) was launched in 2009 and provides a Drought Alert service for the region, which has already served to inform water managers and other socio-economic sectors of the severity of the dry spell that had gripped the region in October 2009 until the end of May 2010
- Community Water Strategies: CARIWIN produced a documented framework to guide the development and implementation of Community Water Strategies (CWS) in the Caribbean, based on IWRM principles.
- Professional Development: In all, there were 301 individual professional development opportunities offered through 23 events held in seven countries. In addition to the 301 opportunities, an additional 136 persons were present in the role of presenters or experts
- Research
 - Drought metric research - the CIMH adopted the use of the SPI as the drought indicator of choice for the Caribbean Drought and Precipitation Monitor published on the CIMH website.
 - Modelling - The applicability of the Soil Water Assessment Tool (SWAT) was evaluated for use in an agricultural watershed in Jamaica.
- Academic Programs - Scientific research conducted through CARIWIN contributed to the advancement of effective water resources management in the Caribbean region and the conferment of five Master of Science degrees and one Doctoral degree
 - With additional financing from the University of Guyana, CARIWIN assisted in the development of a new academic program in the form of a Post-Graduate Certificate in Water Resource Management offered through the University of Guyana. The program consists of three courses: Hydrology and Water

Global Water Partnership-Caribbean IWRM Projects and Initiatives Database

Resources Management; Drainage and Irrigation; and Hydraulic Structures and Geotechnical Investigation.

- With additional financing from McGill University, CARIWIN assisted in the development of the on-line professional development program titled Integrated and Adaptive Water Resources Management and Governance offered through McGill University.
- Partnerships - The development and propagation of the National Water Information Systems included strategic partnership building between the national governments and their counterparts in other Caribbean countries and the CIMH, FAO, CEHI, GEF-IWCAM, GWI and UWI. In the case of the Caribbean Drought and Precipitation Monitor, the collaboration was extended to include CDEMA, NOAA, Agriculture and Agri-Food Canada, EU and the National Drought Mitigation Center.
- Dissemination - The Caribbean Water Initiative has, to date, published 10 papers and posters, made 8 conference presentations in the Caribbean and around the world, published innumerable freely accessible resources on the CARIWIN website as well as provided new information on the CIMH website

Project Links and References:

http://www.mcgill.ca/cariwin/files/cariwin/senecal_cef_2012_cariwin_paper_final_0.pdf

<http://www.mcgill.ca/cariwin/cariwin-caribbean-water-initiative>

Impacts:

Information not available

Sustainability:

Information not available

Lessons for the Future:

Information not available

Opportunities Arising from the Project:

Information not available

Global Water Partnership-Caribbean IWRM Projects and Initiatives Database

Further Comments:

Information not available