

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

**Title:** Identification, Inventory and Assessment of suitable alternative water sources (underground sources) that could be managed and made available to the public during water scarcity situations such as floods and droughts

**Organisation:** Water Resource Management Agency (WRMA), St. Lucia

**Aims and Objectives:**

**Aim:** To contribute towards improved quality of life, health, sanitation, economic development, and to mitigate against the ill-effects of extreme events such as floods and droughts, through sustainable approaches to water management and disaster risk reduction.

**Objectives:** To investigate the hydrogeology of Saint Lucia and to locate suitable underground sources of water.

**Duration:** Start Year: 2012 Completion Year: 2014

**Additional Comments:**

**Estimated Cost (USD):** \$148,000

**Funding Source:** Australian Agency for International Development (AusAID)

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**Key Words:** Groundwater; Roseau Watershed; Underground sources of water; Geophysical exploration;

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**Geographic Coverage:** St. Lucia

**Sectoral Focus:** Water

**Target Beneficiaries:** Government of St. Lucia; Public at large

**Outputs:**

- Report on geophysical exploration for potential groundwater sites in the Roseau watershed of St. Lucia
- Training manual and resource kit for geophysical exploration
- Report on well monitoring

**Project Links and References:**

Project title: An Early Warning System and Hydrological Monitoring for Water Management and Disaster Risk Reduction- Component 2: Identification, Inventory, and assessment of suitable alternative water sources (underground sources)

**Impacts:**

The project was completed in June 2014.

Project impacts are as follows:

- Use of identified sites with groundwater potential for borehole drilling in order to augment the country's water availability;
- Increased water availability especially after/during severe events such as floods and drought.

If the project did not take place, there would be no scientific evidence to suggest groundwater availability in the Roseau watershed presently and no justification for borehole drilling and pumping of groundwater to augment water supplies in the watershed.

**Sustainability:**

Factors limiting long term sustainability:

- Continued groundwater investigations are being carried out by staff trained in geophysical methods however staff availability is limited therefore investigations within one watershed may take as long as 2 years.
- Funding is a major limiting factor since borehole drilling is costly

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### **Lessons for the Future:**

- Increase the time allotted to the project
- Increase the number of persons responsible for technical aspects of the project
- Increase the funding associated with the project to include test borehole drilling and pump tests

### **Opportunities Arising from the Project:**

- Borehole drilling
- Pump tests
- Investigations in additional key watersheds

### **Further Comments:**

Information not available