Islands Region of the United States Geological Survey’s National Institutes for Water Resources program are faced with a unique set of environmental and cultural issues pertinent to the management of water resources. Due to geographic isolation, limited physical resources, unique ecosystems, and susceptibility to natural disaster, tropical islands face immediate challenges in meeting the demand for safe and adequate drinking water supplies. The great distances that separate most island states from larger centers of academia and government mean that there is less frequent exchange between researchers on the islands and their colleagues in the major population centers. Enhanced communication and collaboration between island researchers can provide a vital, synergistic link which will strengthen all the researchers programs.

In response to these needs, the Island Institutes will convene a conference in Honolulu, Hawaii during December 2015. The conference will be a follow-up to a conference held by the institutes in November 2011 (Water Resource Sustainability Issues on Tropical Islands Conference, November 14-19, 2011, Honolulu, Hawaii) to provide a platform for discussion between water resources researchers and others on existing water resources issues facing tropical islands and those issues that are likely to develop in the future particularly due to the anticipated changes in climate.

Topics for which papers will be specifically invited include:

1. Historical, present, and anticipated patterns in climate affecting island water resources and climate change and climate variability
2. Conjunctive management of rainwater catchment, surface water, and groundwater resources
3. Protective strategies for island watersheds and aquifers
4. Development and improvement of island municipal water distribution systems
5. Managing demands as well as supply, including water conservation and reuse
6. Exploration of new water resources (e.g., high elevated groundwater sources in American Samoa and deep aquifers in Hawaii.)

Yap water reservoir before drought.

Yap water reservoir during drought.