Atoll Island Sustainability: Information Transfer and Training for the Federated States of Micronesia

Funded by:
US Geological Survey, Water Institute Program

Principal Investigator:
John W. Jenson

Funding: $18,433

This is an information transfer project specifically requested by FSM water managers at the 2009 WERI Advisory Council meeting, which will build on the instructional services provided last year. In summer 2009, the authors of the model trained FSM users on how to operate WERI’s atoll island spreadsheet groundwater model to estimate the responses of atoll island aquifers in the Caroline Islands to expected types of seasonal and inter-annual changes in rainfall. This year the authors of the model will present it at a workshop that will be conducted as part of a national meeting of FSM water resource managers to address central concerns regarding the sustainability of live on atoll islands.

Users of the model will include local government water resource managers, environmental staff, and educators (Item III.1, Education and Professional Training, FSM Critical Water Resources Research, Education And Training Needs, September 16, 2008).

The objective of this year’s training program is not only to train additional end-users of the model, but to demonstrate its application to questions of sustainability, such as the calculation of groundwater responses to sea level rise and changes in crop management practices. Such use may also include making forecasts of the effects of selected changes in rainfall on atoll islands affected by significant natural events, such ENSO-driven droughts, tropical storms, or wash-over events. A second objective is to cultivate an ongoing technical support relationship between the authors and end-users so that there will be a continuing dialogue to support continued successful use and application of the model to water resource management in the Federated States of Micronesia.