



Workshop Series on Guam Groundwater Resources



Funded by:
US Geological Survey, Water Institute Program

Principal Investigator:
John Jenson & Nathan Habana

The military buildup and ongoing economic growth anticipated on Guam over the next decade has raised concerns regarding sustainable management of Guam's groundwater resources. Besides educating policy-makers and agency heads it also essential that island water resource professionals and educators be equipped with an accurate and up-to-date understanding of the essential characteristics of the island's aquifer and the factors that must be considered to frame and implement sustainable management practices. Professional people, including working-level technical professionals in the water resources industry, university instructors, and school teachers, have extremely limited time to engage in instructional opportunities. This proposal is for development and delivery of a series of workshops, each of which can be completed in a single-day, to local water resource professionals and educators. It will consist of a single day of intensive instruction in (1) the Northern Guam Lens Aquifer Database, (2) the basement map of northern Guam, (3) a field trip of the aquifer, (4) sinkholes and surface drainage of the aquifer, and (5) salinity trends, patterns, and processes in the aquifer. Instruction will be supported by Moodle website containing the instructional materials plus additional references and links to other relevant and useful resources, and forums for maintaining continuing educational interaction and information-sharing.

Each offering would consist of a single full day of instruction. Materials for the course will be extracted and modified from existing materials developed for previous courses. In addition, a new permanent web-page will be set up and equipped with a discussion board where former students and other users can engage in discussions or ask questions, etc. New features for the webpage will include additional maps and cross-sections that can be

accessed and used by course participants and other users. Each set of users will have access to resources designed to support their various needs: technical professionals, university and community college instructors, and secondary school educators. The instruction will carry professional development credit through the University of Guam's Office of Professional and International Programs (PIP) and will be offered during the summer and winter breaks to accommodate the schedule of educators.

The scope and objectives of the work include:

1. Preparation of instructional materials, including handouts and references
2. Delivery one-day workshops
3. Introduction to a webpage containing not only instructional materials but downloadable references and links to other relevant and useful resources
4. A forum on the webpage for subsequent correspondence among course participants and instructors to provide a permanent venue for information-sharing and updates on topics of interest



One-day fieldtrip of the Northern Guam Lens Aquifer Tour.