One-Day Field Course for Water Resource Professionals and Island Educators, with Educational Webpage on the Northern Guam Lens Aquifer

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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 is 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 course that could be completed in a single-day to professional educators at the university, community college, and secondary school levels. It would consist of (1) a single day of intensive personal instruction delivered in the field, with (2) a binder of materials and a supporting webpage 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. The course will be modeled after, and build upon, a similar course offered the previous year to senior executives in local and federal government agencies on Guam. This program has been extremely well received in its first two offerings, so is being repeated to extend it to more.

The proposed program of instruction would consist of at least two separate course offerings in one year. Each offering would consist of a single full day of instruction delivered at selected field sites, with instruction also delivered during transit using handouts and course materials contained in a binder that would be provided to each participant. Materials for the course will be extracted and modified from existing materials developed for a successful previous engineering professional development course and tailored for the proposed course. In addition, a new permanent webpage 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.

Executive/Professional Officials examining physical features of Barrigada Limestone at the Dededo Quarry, while on the one-day field course.