

Workshop on groundwater geochemistry and flow around Mandalay, Myanmar

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Myanmar is a former military state known as Burma, which was closed for the last half century and recently opened in 2011. Myanmar has been developing fast and the lack of basic information on hydrogeology has resulted in groundwater pollution, and the over development of aquifers. Mandalay is a major city in central Myanmar, which contains an inefficient solid waste disposal process, and a high urban population. The aim of this study is to investigate the physical and chemical properties of this groundwater system to determine potential risks to their groundwater supply. Much of the local population use shallow dug wells in the shallow aquifer for drinking, cooking, and washing. Groundwater modeling and hydrogeochemistry data show that the aquifer is very susceptible to contamination from anthropogenic sources. This is the first study like this in the country. A workshop for faculty at Myanmar Universities was done to train them in the methods so additional studies of groundwater can be done in the future and to train the next generation of geochemists and hydrogeologists.