Freshwater Resources of Guam

Geology & Hydrogeology of Guam

- Northern Guam - Limestone Plateau
- Groundwater Region
- Southern Guam - Volcanic Hills
- Surface water Region
Geologic Map of Guam

Artificial fill
Merizo Limestone
Janum Formation
Maemong Limestone
Alutom Formation (incl. Mahlac Shale)
Bollano Volcanics (incl. Dan Dan Flow)
Facpi Volcanics
Barrigada Limestone
Bonya Limestone
Bolano Limestone
Marianas Limestone
Alifan Limestone
Beach deposit
Alluvial deposit
Coral picture

(Modified and Simplified from Tracey et. al. 1964)
lens cross section

limestone plateau

freshwater

seawater

volcanic basement
Southern Hills

Hydrologic cycle:
- Rainfall
- Evapotranspiration
- Infiltration
- Discharge

Freshwater and seawater.
Drilling for Water
Pollution Sources
• Increase in operations cost
• Plant shutdown
• Loss of service
• Lowers reservoir capacity

The Bottom Line