

Waraporn Settaprueksa 2009: Potential Assessment for Groundwater Resources Management in Suphan Buri Povince. Master of Science (Environmental Science), Major Field: Environmental Science, College of Environment. Thesis Advisor: Associate Professor Piboon Prabuddham, Ph.D. 199 pages.

This study is aimed to assess the groundwater potential for groundwater resources management in Suphan Buri Province by using Geographic Information System (GIS) ; Overlay and Interpolation Techniques.

The study results show that the storage yields of main aquifers are approximately 39,976, 3,681, 1,044, and 596 million m³ for the Floodplain Deposits (Qfd), Terrace Deposits (Qt), Ordovician Limestone (Ols), and Silurian-Devonian Metamorphic (SDmm) aquifers, respectively. The overall groundwater demands in the study area are about 69 million m³/y. The annual recharge from rainfall infiltration was about 14 million m³/y, so the groundwater uses are over than the safe yield. The groundwater management for sustainable use are consists of water treatment before use, protection the groundwater contaminate and use groundwater for the reserve only.

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Thesis Advisor's signature

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