

Groundwater quality assessment of Labuan Island using GIS

ABSTRACT

Groundwater has been considered as an important source of water supply due to its relatively low susceptibility to pollution in comparison to surface water, and its large storage capacity (US EPA 1985). It should be mentioned that water pollution is any chemical, physical or biological change in the quality of water that has a harmful effect on any living thing that drinks or uses or lives (in) it. When humans drink polluted water it often has serious consequences on their health. Water pollution can also make water unsuited for the desired use. In present study different water quality parameters were observed from the different monitoring wells through the Labuan Island. Then by interpolation between the available data different water quality parameters maps were created. Each map is classified based on the Malaysia water quality standards. Results show those areas which are susceptible to groundwater contamination.

Keyword: GIS; Groundwater quality; Labuan Island; Monitoring wells; Water pollution