

A brief review on groundwater studies in Malaysia

Abstract

Groundwater studies related to coastal and small islands in Malaysia are briefly reviewed. Perspectives are addressed as three aspects: (a) study location, where groundwater studies in Malaysia are conducted in different types of coastal and small islands (b) methods, namely numerical modeling, geophysical investigations, hydrochemical analysis and geochemical modeling applied in groundwater studies of Malaysian coastal environment and small islands; (c) types of studies, where most of groundwater studies are more focused in investigating the groundwater resources and management as well as seawater intrusion. This review revealed that main objectives in most of Malaysian groundwater studies in coastal and small islands are groundwater resources, management as well as seawater intrusion problem. This showed that groundwater studies in Malaysia are clearly needed to be increased and strategized by smart partnerships, diverse groundwater type of studies by identification of effective methods as well as capacity building improve and develop skills, expertise and knowledge in the management. Future studies should give a focus in other types studies in utilization of this resource in order to fill in the knowledge gap of groundwater to provide clear direction in sustainable development of this precious resource.