

ABSTRACT

Water was the basic needs of living things in this world. Infrastructure development that increased would cause the needs of water. Therefore, it has to be balanced with manage the good plan of water absorption region in an area. This research has been done in Kulon Progo districts that aimed at made maps and map the potential of water absorption region in Kulon Progo districts.

The method used in this research was the tiered quantitative analysis survey with Geography Information System (SIG) software with the weighting parameter categorize model using overlap techniques in each parameter. The parameters were kind of rocks, rainfall, used land, and slope of the land. The data of the research was secondary data. Those were administration map, Rupabumi Indonesia map (RBI), land used map, rainfall data, Shuttle Radar Topography Mission (SRTM), and land map.

The result of this research showed that water absorption region in Kulon Progo with dominated suitability condition in unsuitable class as wide as 32.804 ha followed by class as wide as 17.124 ha, and the smallest was class condition quite appropriate as wide as 7.976 ha.

Keywords: ArcGIS, weighting, infiltration