KAJIAN POLA PEMANFAATAN RUANG DALAM KAITANNYA DENGAN DAYA DUKUNG SUMBER DAYA AIR BAWAH TANAH DI KABUPATEN TANGERANG

THESIS
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ABSTRACT

The rapid population growth in Tangerang area is the main factor contributed to the land use changes from agriculture to non-agriculture such as industry, commercial, housing and residential. Its causes the quality of environmental resources decreases. Increasing population followed by increasing water demand, pushes the over exploitation of ground water, without considering its capacity. Actually this phenomena can be seen in the area of Kecamatan Teluknaga, Mauk, Kosambi, which difficult to get fresh water from ground water. Considering to this condition, the aim of this research is to read the hook of space use development specially land use development in order to availability of ground water resources.

This research, evaluate land use planning pattern limits the ground water recharge, the ground water is consequently decreased both in quantity and quality, the change of land use development, characteristic ground water resources, use and demand of water by using with descriptive explanatory method. The criteria used are condition of climate and hydrology, the change of land use, as well as the standard of water demand of household, industrial, and agriculture. The availability of ground water resources condition is identified by making the analysis of supply and demand of ground water resources balance.

The results indicated that the year 2005 ground water balance surplus 9,061,290 m³, but at year 2015 the ground water at Tangerang deficit 200,291,780 m³. Land use pattern such as industry, housing and residential, and commercial is more dominant at the recharge area in the South of Tangerang is the main factor that made infiltration of water surface become less and less. This changes condition of the land use planning and development impartarily the availability of ground water resources. Actually this condition can be seen if compared the land use by calculating and the land use in RTRW 2002 for year 2005.

In order to have the potency of availability of ground water resources could be supporting the development of the area. It would be needed to sheltered the willingness of ground water resources by protection of recharge area; made integrated infiltration system for milde or deep aquife; rehabilitation of Situ/Swamp; Controlling and monitoring fluctuation of water table with inspection well; Controlling and monitoring the exploitation of water by industries; inside coordination between government institution; and policy of land use development that partianly to the availability of ground water resources. Another solution to solve the problem of water resources is optimalization used the potential water surface from river, situ and swamp.