ABSTRACT

ANALYSIS STUDY FOR MANAGEMENT AND PEOPLE'S CONSUMPTION BEHAVIOR OF GROUND WATER DURING DRY SEASON

By

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Poor management of ground water causes bad supply of natural water throughout the year, especially during dry season. Water crisis becomes a problem that difficult to solved because of people's tendency to fixate the conventional water sources that vulnerable to drought, such as dug well and drill well. This study aims to determine the management of ground water and people's water consumption behavior. And also to find a solution of both these aspects in order to overcome the problem of water crisis in the dry season.

The research was conducted in the Village Pidada, District Panjang, Bandar Lampung for study of ground water management and people's water consumption behavior, and in the area of Building E, Civil Engineering, Engineering Faculty, University of Lampung for infiltration well physical modeling. Infiltration well chosen as an alternative solution that may be applied in the Village Pidada. It is assumed that permeability and characteristics at both locations is analogous. Volumes and costs data collecting of daily water consumption is done by distributing questionnaires to 50 household samples. Physical modeling is done to determine the capacities of infiltration well and it's construction costs.

The study results showed that dry season causes reduced of water supply but it is not cause drought. People react by reducing the volume of water consumption. The majority people of Village Pidada using drilling well that owned by other people or government by distribution through the hose into their homes. The distribution is charged depending on distance and time of drainage. With the infiltration well in accordance with the physical modeling in the research, people of Village Pidada can cut daily costs of water consumption minimally 5% - 6.25%.

Key words: management of ground water, infiltration well