

ABSTRACT

Muhammad Furqan, M. Yusdar T. 2023. Analysis of Shallow Groundwater Production Capacity in Farmers' Wells in East Galesong Village, Kab. Takalar. Thesis, Department of Water Engineering, Faculty of Engineering, Muhammadiyah University of Makassar (supervised by Darwis Panguriseng and Muh. Yunus Ali).

Galesong District, Kab. Takalar, South Sulawesi is located between 5o031' to 5o0381 south latitude and between 199o0221' to 199o0391' east longitude. Galesong District has an area of 25.93 km² and is divided into 14 villages. One of them is East Galesong village which is the research location that will be studied. This research is a quantitative study which aims to determine the production capacity and condition of shallow groundwater in farmers' wells in the village of Galesong Timur, Kab. Takalar. The data collection technique used is direct research in the field by taking data from the Pumping Test process. Based on the research results, it can be concluded that (1) Production capacity of shallow groundwater in several wells observed in East Galesong Village, Kab. The average flow rate is around 3.35lt/sec. So the shallow groundwater production capacity is 289,440 liters/day = 289.44m³/day. (2) The condition of shallow groundwater in several farmers' wells in East Galesong Village, Kab. Takalar can be described by looking at the drop in groundwater level that is pumped between 20 hours and 28 hours, which is an average of around 7.76 cm/hour. This provides an illustration that the process of pumping shallow groundwater in East Galesong Village, Kab. Takalar is already in **critical** condition.

Keywords: Capacity, Production, Shallow Ground Water, Pumping Test