## CONSERVATION TECHNIQUE WATER SPRINGS FOR NATURAL WATER NEEDS IN DUSUN PEGAULAN TENGAH, DESA DARMAKRADENAN, KECAMATAN AJIBARANG, KABUPATEN BANYUMAS, JAWA TENGAH

## by : <u>Restu Pamukti</u> 114130009/TL

## ABSTRACT

Water is one of the basic needs in human life and all living things. Almost all the needs of human life require water, but with the increasing number of people increasing, the need for clean water is increasing. This study aimed to determine the characteristics (discharge, quality, and type) of the water springs at the locations studied and to know the appropriate conservation techniques of the water springs at the locations studied.

Preparation stage to be prepared before the research is tentative map, and secondary data such as rainfall, population data, and public health data. The field stage is measuring the flow of water, interviewing the surrounding community about the amount of water demand used in daily life, and analyzing geological, soil, rock, flora, fauna and land use surveys using survey method. The lab stage will be tested in accordance with physical, chemical and biological parameters. The next stage of the studio maked the map as well as analysis the results of data obtained in the field stage, then the evaluation to obtain data in accordance with the formulation of the problem and then can determine the direction of management in accordance with the results of research.

The results of the calculation of the discharge of water springs in the location studied is water springs 1 0.364 liter / second (31.449,6 liter / day), water spring 2 of 0,739 liter / second (63,849,6 liter / day), and water spring 3 0,165 liter / second (14,256 liters / day). The use of water in the water springs for the needs of clean water per person is 58.03 liters / day. Water needs residents around the water springs to meet the needs of clean water is fulfilled even when the dry season arrives. Water quality on the three springs physically and chemically was below the established standard of quality, but biologically the total of coliform bacteria has exceeded the standard quality standard that has been set. The conservation technique applied to the locations studied was the determination of the recharge area referring to Peraturan Menteri Pekerjaan Umum Republik Indonesia No. 2 Tahun 2013, so that the conservation method used is the method of vegetative conservation.

Keywords: Water Springs, Conservation Technique, Recharge Area.