

**TEKNIK KONSERVASI MATA AIR GUNA MELESTARIKAN AIR BAKU
DI DUSUN ONGGOMERTAN, DESA MAGUWO HARJO, KECAMATAN
DEPOK, KABUPATEN SLEMAN, DIY**

Oleh

Almi Hutari Dzakiyah Diandika
114160063

INTISARI

Dusun Onggomertan, Desa Maguwoharjo, Kecamatan Depok, merupakan dusun yang masih memanfaatkan mata air dalam memenuhi kebutuhan air masyarakat. Belum adanya upaya preventif di daerah mata air dan kajian mengenai kondisi daerah imbuhan mata air. Selain itu, pertumbuhan penduduk mempengaruhi meningkatnya kebutuhan air bersih. Penelitian ini bertujuan untuk mengetahui tipe mata air dan potensi mata air (kuantitas dan kualitas) serta bagaimana arahan konservasi yang tepat dalam melestarikan mata air.

Penelitian menggunakan metode penelitian kuantitatif dengan cara pengumpulan data dan analisis data dengan teknis penelitian menggunakan metode survei dan pemetaan, metode matematis, analisis deskriptif dan spasial dan metode uji laboratorium. Tipe mata air dikaji berdasarkan kelas debit, sifat pengaliran, dan tenaga gravitasi yang mempengaruhi munculnya mata air. Potensi mata air meliputi kuantitas dan kualitas mata air. Kualitas mata air mengacu berdasarkan Peraturan Gubernur DIY Nomor 20 tahun 2008 kelas I dan kemudian dilakukan perhitungan status mutu mata air dengan metode indeks pencemaran guna mengetahui kondisi kualitas mata air.

Ketiga mata air termasuk kedalam tipe mata air depresi, dengan sifat pengalirannya mata air menahun. Berdasarkan debitnya, mata air 1 dan mata air 2 termasuk ke dalam kelas 6 (0,1-1 liter/detik), mata air 3 termasuk ke dalam kelas 7 (0,01-0,1 liter/detik). Potensi mata air secara kuantitas mampu memenuhi kebutuhan air. Berdasarkan kualitas pada mata air, terdapat 2 mata air dalam kondisi Tercemar ringan, dan 1 mata air dengan kondisi baik. Teknik konservasi mata air yang dapat dilakukan yaitu pembuatan bak penampungan dan hidran umum serta pembuatan sumur resapan pada daerah imbuhan mata air.

Kata kunci : Mata air, Potensi mata air, Konservasi mata air, Daerah imbuhan.

**SPRING CONSERVATION TECHNIQUES TO PRESERVE CLEAN WATER IN
ONGGOMERTAN, MAGUWOHARJO VILLAGE, DEPOK DISTRICT, SLEMAN
REGENCY, DIY**

By

**Almi Hutari Dzakiyah Diandika
114160063**

ABSTRACT

Onggomertan Hamlet, Maguwoharjo Village, Depok, a hamlet that still use the spring to meet the water needs of the community. The absence of preventive efforts in the area of springs and assessment of the condition of the spring recharge area. In addition, increasing population growth affects the development of settlements which will affect the potential of springs. This study aims to determine the type of springs and the potential of the springs (quantity and quality) as well as how the proper conservation directions are in preserving the springs.

This research method used was a quantitative method by data collection and data analysis with technical implementation used were survey and mapping, mathematics analysis, descriptive and spasioal analysis and laboratory test. The types of springs based on debit classification, stream characteristics and based on the gravity power. The potential of the spring can be determined by knowing the debit (quantity) and the quality of water from that spring. The quality of the springs refers to the Regulation of the Governor of DIY Number 20 of 2008 and then the classification of the quality status of the springs is the pollution index method to determine the condition of the quality of the springs.

The springs were classified as depression spring, based on continuity of water discharge, the type of springs are parental springs. Based on water discharge, these 2 spring were categorised as 6 class (0,1-1 liter/sec), and the spring 3 as 7 class of spring (0,01-0,1 liter/sec). The potential of springs based on quantity is able to meet water needs. Based on quality of springs generally meets the quality standard except for TSS, pH, BOD, COD, DO, and nitrat parameters. The spring conservation techniques were constructing springs reservoirs, and distribution systems using public hydrant at springs and constructing infiltration wells for recharge area.

Key word : Springs, Potential of springs, Conservations, Recharge area.