

**KONSERVASI MATA AIR UNTUK KEBUTUHAN AIR BERSIH DI DUSUN
NGUNUT, DESA JETIS, KECAMATAN SAMBIREJO, KABUPATEN
SRAGEN, PROVINSI JAWA TENGAH**

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INTISARI

Dusun Ngunut memiliki dua mata air yang terletak pada sisi timur dan sisi selatan yang digunakan untuk kebutuhan air bersih. Permasalahan mata air yakni debit berkurang saat musim kemarau. Selain itu, air tersebut keruh dan terdapat endapan pada penampungan. Belum adanya pengelolaan berpengaruh terhadap potensi mata air. Tujuan penelitian yaitu menganalisis karakteristik mata air dan daerah imbuhan, menganalisis potensi mata air (kualitas dan kuantitas) untuk kebutuhan air bersih, dan merancang arahan pengelolaan mata air berdasarkan karakteristik daerah imbuhan serta potensi mata air.

Metode penelitian menggunakan metode survei dan pemetaan, wawancara, volumetrik, uji laboratorium, *Canadian Council Of Ministers Of The Environment Water Quality Indeks* (CCME WQI), matematis, dan analisis deskriptif. Karakteristik mata air dikaji berdasarkan tipe mata air. Daerah imbuhan dikaji berdasarkan Permen PU No.2 Tahun 2013. Pengujian kualitas air berupa parameter bau, rasa, suhu, TDS, kekeruhan, pH, DHL, kesadahan, dan total coliform yang dianalisis menggunakan metode CCME WQI berdasarkan baku mutu Permenkes No.2 Tahun 2023. Kuantitas mata air dikaji berupa debit mata air serta kebutuhan air penduduk yang dianalisis dengan Indeks Kekritisian Air (IKA).

Analisis karakteristik berdasarkan tipe mata air kontinuitas berupa mata air perenial, debit mata air berada pada kelas VI, tipe mata air berdasarkan tenaga gravitasi berupa mata air depresi. Daerah imbuhan memiliki klasifikasi kurang sesuai. Analisis kualitas mata air dengan CCME WQI pada mata air sisi timur termasuk klasifikasi kurang, mata air sisi selatan termasuk cukup. Hasil analisis IKA, mata air sisi timur termasuk sangat kritis, mata air sisi selatan belum kritis. Arahan pengelolaan dilakukan dengan konservasi teras individu, pembuatan bak penangkap dan penampung serta sistem distribusi.

Kata Kunci : Mata air, Karakteristik mata air, Daerah imbuhan, Potensi mata air, Kebutuhan air, Konservasi mata air.

**SPRING CONSERVATION FOR CLEAN WATER NEEDS IN NGUNUT
VILLAGE, JETIS VILLAGE, SAMBIREJO DISTRICT, SRAGEN REGENCY,
CENTRAL JAVA PROVINCE**

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ABSTRACT

Ngunut Village has two springs located on the east side and south side which are used for clean water needs. The problem of springs is that the discharge decreases during the dry season. In addition, the water is turbid and there are deposits in the reservoir. The absence of management affects the potential of springs. The purpose of the study is to analyze the characteristics of springs and recharge areas, analyze the potential of springs (quality and quantity) for clean water needs, and design directions for spring management based on the characteristics of recharge areas and spring potential.

The research method uses survey and mapping methods, interviews, volumetrics, laboratory tests, Canadian Council Of Ministers Of The Environment Water Quality Indeks (CCME WQI), mathematical, and descriptive analysis. Spring characteristics are studied based on spring type. Recharge areas were studied based on Permen PU No.2 Tahun 2013. Water quality testing in the form of odor, taste, temperature, TDS, turbidity, pH, DHL, hardness, and total coliform parameters were analyzed using the CCME WQI method based on the quality standards of Permenkes No. 2 Tahun 2023. The quantity of springs is studied in the form of spring discharge and water needs of the population which is analyzed with the Water Criticality Index (IKA).

Analysis of characteristics based on the type of continuity spring in the form of perennial springs, spring discharge is in class VI, spring types based on gravitational force in the form of depression springs. Recharge areas have a less appropriate classification. Analysis of spring quality with CCME WQI on the east side springs includes sufficient classification, south side springs include good. The results of IKA's analysis, the east side spring is very critical, the south side spring is not yet critical. Management direction is carried out by conservation of individual terraces, construction of catcher, water reservoir and distribution systems.

Keywords: Springs, Spring characteristics, Recharge areas, Spring potential, Water needs, Spring conservation.