

**Teknik Penanggulangan Bencana Kekeringan di Sub DAS Bompon Desa Margoyoso dengan Menggunakan Metode *Trans Basin* dari Mataair Sub DAS Kaliwungu Desa Kaliabu, Kecamatan Kajoran, Kabupaten Magelang, Provinsi Jawa Tengah**

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**INTISARI**

Sub DAS Bompon pada musim kemarau tidak memiliki cadangan mataair yang cukup untuk memenuhi kebutuhan warga. Berdasarkan informasi dari masyarakat pada bulan Juli, Agustus, September, dan Oktober, Sub DAS Bompon mengalami kekeringan, karena potensi sumber daya air di desa ini terbatas, maka perlu adanya alternatif sumber daya air diluar sistem sub DAS Bompon. Alternatif tersebut salah satunya adalah menggunakan metode *trans basin*. Tujuan dari penelitian ini yaitu untuk mengetahui zonasi kerawanan bencana kekeringan, mengetahui kuantitas dan kualitas mataair, mengetahui pengelolaan mataair, dan mengetahui sistem distribusi air bersih.

Metode penelitian yang digunakan dalam penelitian ini adalah metode survey, wawancara, laboratorium, analisis dan evaluasi mataair, ketersediaan air, dan zonasi kerawanan bencana kekeringan dan tipe kekeringan. Potensi mataair diketahui dari debit (kuantitas) dan kualitas mataair. Kualitas mataair diketahui menggunakan analisis laboratorium. Parameter yang digunakan untuk analisis laboratorium yaitu sifat fisik (kekeruhan), sifat kimia (pH dan Besi), dan sifat biologi (Total Koliform) dengan acuan Peraturan Menteri Kesehatan No.32 Tahun 2017 tentang Standar Baku Mutu Kesehatan Lingkungan dan Persyaratan Kesehatan Air untuk Keperluan Higiene Sanitasi, Kolam Renang, *Solus Per Aqua*, dan Pemandian Umum.

Keempat mataair termasuk mataair menahun (*Perennial Springs*). Tipe mataair berdasarkan kelas debit mataair termasuk dalam kelas sedang. Tipe keempat mataair termasuk mataair depresi. Kualitas mataair termasuk buruk karena masih memiliki pH yang asam dan pada mataair 4 total koliform masih melebihi baku mutu. Berdasarkan perbandingan debit mataair dan kebutuhan air, kuantitas dari keempat mataair masih cukup untuk memenuhi kebutuhan air di Sub DAS Bompon. Berdasarkan zonasi kerawanan bencana kekeringan didapatkan kekeringan tingkat tinggi, sedang, dan rendah di daerah penelitian yang didapatkan dari overlay peta kemiringan lereng, penggunaan lahan, batuan, dan tekstur tanah. Arahan pengelolaan lingkungan yang sesuai untuk menjaga ketersediaan air dilokasi penelitian adalah dengan melakukan metode *trans basin* dan pembuatan daerah imbuhan berupa teras bangku.

**Kata Kunci :** *Kekeringan, Mataair, Karakteristik Mataair, Potensi Mataair, Trans Basin, Daerah Imbuhan, Teras Bangku.*

***Drought Disaster Management Techniques in the Bompon Sub-watershed of Margoyoso Village Using the Trans-Basin Method from Kaliwungu Sub-watersheds Springs Kaliabu Village, Kajoran Subdistrict, Magelang Regency, Jawa Tengah Province***

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**ABSTRACT**

*Bompon Sub-watershed in the dry season did not have enough reserve springs to fulfill the need of the people. Based on the information from the people in July, August, September, and October, Bompon Sub-watershed experienced a drought, since the potential water resource in this village was limited, therefore, alternative water resource other than Bompon Sub-watershed system was needed. One of the alternatives was by using the trans-basin method. The purpose of this research is to know the zoning of drought disaster insecurity, know the quantity and quality of management, knowing the mataair mataair, and knowing the clean water distribution system.*

*The methods used in this study were a survey, interview, laboratory, analysis, and evaluation. The quality of the springs was analyzed by using laboratory analysis. The parameters used were physical characteristics (drought), chemical characteristics (pH and Iron), and biological characteristics (total of coliform) referred to Minister of Health Regulation No.32 of 2017 concerning Quality Standards for Environmental Health and Water Health Requirements for Sanitation Hygiene Needs, Swimming Pools, Solus Per Aqua, and Public Baths.*

*The four springs were categorized as perennial springs. The type of the springs based on the springs debit was categorized into medium class. The type of the four springs was depressed springs. The quality of the springs was still low because they had Acidic pH and in springs 4, the total of coliform still exceeded the quality standard. Based on the comparison between springs debit and water needs, the quantity of the four springs was enough to fulfill the water needs in the Bompon Sub-watershed. Based on the drought hazard zoning obtained high, medium and low levels of drought in the study area obtained from overlaying slope maps, land use, rocks, and soil texture. Therefore, directives for environmental management that were suitable to maintain water availability at the research location were by conducting the trans-basin method and making recharge areas in the form of bench terraces.*

**Keywords :** *Drought, Springs, Springs Characteristics, Potential Springs, Trans Basin, Recharge Area, Bench Terrace.*