KONSERVASI MATAAIR BERDASARKAN KAJIAN KARAKTERISTIK DAN POTENSI MATAAIR DI DESA DLINGO, KECAMATAN DLINGO, KABUPATEN BANTUL, D. I. YOGYAKARTA

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INTISARI

Peta Indeks Kekeringan Kabupaten Bantul tahun 2011, menunjukkan bahwa Desa Dlingo, Kecamatan Dlingo, Kabupaten Bantul merupakan daerah yang termasuk dalam kawasan dengan indeks kekeringan rawan – sangat rawan. Terdapat enam (6) mataair yang tersebar di Desa Dlingo dan digunakan oleh warga sehari-hari yang debitnya berkurang setiap musim kemarau, dan pengelolaannya masih belum efisien. Oleh karena itu, perlu dilakukan penelitian untuk memetakan dan menganalisis karakteristik dan potensi mataair, serta teknik konservasi mataair yang tepat di daerah penelitian.

Metode yang digunakan dalam penelitian ini di antaranya metode survei dan pemetaan, wawancara, laboratorium, dan matematis. Karakteristik yang dikaji meliputi tipe mataair berdasarkan sifat pengaliran, debit, tenaga gravitasi, dan kualitas. Potensi mataair diketahui dari debit (kuantitas) mataair. Kualitas air dari mataair diketahui menggunakan analisis laboratorium dan uji langsung di lapangan. Parameter yang digunakan untuk analisis kualitas secara keseluruhan yaitu sifat fisik (warna, rasa, bau, temperatur, kekeruhan, dan TDS), sifat kimia (kesadahan ($CaCO_3$), nitrat, dan pH)), dan sifat biologi (*total coliform*) dengan acuan Peraturan Menteri Kesehatan No. 492 Tahun 2010 tentang Persyaratan Kualitas Air Minum. Teknik Konservasi mataair ditentukan berdasarkan penentuan daerah imbuhan menurut Peraturan Menteri Pekerjaan Umum Nomor 2 Tahun 2013 tentang Pedoman Penyusunan Rencana Pengelolaan Sumber Daya Air dan pengelolaan mataair dengan pendekatan secara agronomis dan teknik.

Mataair di Desa Dlingo seluruhnya memiliki sifat pengaliran menahun. Debit mataair beragam, Mataair Koripan IIa 2,933 L/detik, Mataair Koripan IIb 3,879 L/detik, Mataair Koripan I 3,78 L/detik, Mataair Dlingo II 0,207 L/detik, Mataair Dlingo I 0,069 L/detik, dan Mataair Pokoh II 1,554 L/detik. Kualitas seluruh mataair sesuai standar bakumutu, kecuali parameter biologis yaitu total coliform. Potensi mataair dapat mencukupi kategori kebutuhan air domestik penduduk enam (6) dusun selama sepuluh (10) tahun ke depan dengan kebutuhan air penduduk masyarakat sebesar 139,283 liter/orang/hari. Teknik konservasi mataair yang dilakukan adalah pada daerah imbuhan dan sempadan dengan metode agronomis dengan menanam tanaman Beringin (*Ficus benjamin*) dan Bambu *(Bambuseae)*, metode teknik dengan pembuatan lubang resapan, pembangunan bak penampung, serta pendekatan baik ke masyarakat dan pemerintahan.

Kata Kunci: Mataair, Karakteristik Mataair, Potensi Mataair, Daerah Imbuhan, Konservasi.

SPRING CONSERVATION BASED ON SPRING'S CHARACTERISTICS AND POTENTIAL STUDY AT DLINGO VILLAGE, DLINGO SUBDISTRICT, BANTUL DISTRICT, SPECIAL DISTRICT OF YOGYAKARTA

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ABSTRACT

Drought Index Map of Bantul District year of 2011, shows Dlingo Village, Dlingo Subdistricts, Bantul District is classified as one of the area with the highest drought index. There are six (6) springs on the area and are being used daily by the resident and every dry season the discharge always decreasing, however the management of those springs are not yet being close to efficient. Because of that, a research to plot dan analyse the springs' characteristic and potential, also the spring conservation technique need to be done.

The methods that being used are survey and mapping, interwiew, laboratorium analysis, and mathematical. The characteristic that are being studied including the type of spring based on the stream characteristic, discharge, the gravitational forces, and water quality of the springs. The potential of the spring can be determined by knowing the quantity of the discharge and the quality are determined by both direct and laboratorium test. Parameter used are physical characteristic (color, taste, smell, temperature, turbidity, and TDS), chemical characteristic (hardness of $CaCO_3$, nitrate, and pH), and the biological characteristic (total coliform) refers to the Regulation of the Minister of Health No. 492 year of 2010 about the Requirements of Drinking Water Quality. Spring conservation technuique is determined by recharge area evaluation and springs management by agronomy and technical approach based to Regulation of the Minister of Public Works No. 2 year of 2013 about the Guidelines for the Preparations of Water Resources Management Plans.

All springs in Dlingo Village is classified as yearly stream spring. The discharge are vary, Koripan IIa 2,933 L/second, Koripan IIb 3,879 L/second, Koripan I 3,78 L/second, Dlingo II 0,207 L/second, Dlingo I 0,069 L/second, and Pokoh II 1,554 L/second. The water quality from all of the spring is accordance to the standards, except the biological parameter of the total coliform. Spring's potentials are able to fulfill water domestic needs for six (6) villages for the next ten (10) years with the average of water domestic needs in amount of 139,283 L/day. Spring conservation technuique that can be done on the recharge area and the springs' border by the agronomical method with planting Beringin (*Ficus benjamin L.*) *and Bamboo (Bambuseae), techincal method with well's infiltration, water tank, and also community and governmental approach.*

Keywords: Spring, Spring Characteristic, Spring Potential, Conservation.