TEKNIK KONSERVASI MATA AIR TERHADAP KETERSEDIAAN AIR BERSIH DI KAPANEWON SAMIGALUH, KABUPATEN KULON PROGO, DAERAH ISTIMEWA YOGYAKARTA

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INTISARI

Mata air di Kalurahan Sidoharjo yaitu Tuk Mudal, Cung Lanang, dan Slilin memenuhi kebutuhan air pada delapan dusun. Permasalahan mata air yaitu kuantitas menurun saat kemarau, kualitas menurun saat penghujan, tidak ada bak penampung dan pelindung yang memadai. Tujuan penelitian yaitu mengetahui karakteristik mata air, potensi mata air memenuhi kebutuhan air bersih, serta arahan konservasi mata air dan daerah imbuhan.

Metode penelitian yaitu kombinasi dari kuantitatif dan kualitatif, metode pengumpulan data (survei pemetaan, wawancara, pengukuran, uji laboratorium), metode sampling (purposive sampling), dan metode analisis (matematis, skoring, analisis wawancara, evaluasi).

Hasil penelitian ketiga mata air karakteristik rekahan; kontinuitas perennial spring; debit Tuk Mudal kelas V, Cung Lanang kelas VI, dan Slilin kelas VII; kualitas cukup baik namun beberapa parameter masih melampaui baku mutu pada Tuk Mudal (TSS, COD, BOD, total-coliform), Cung Lanang (TSS, BOD, total-coliform), Slilin (DO, TSS, COD, BOD, total-coliform). Mata air mampu memenuhi kebutuhan 2628 warga di lokasi penelitian pada musim penghujan dan kemarau, meskipun grafik kuantitas dan kebutuhan air saling mendekati. Rencana konservasi daerah imbuhan khususnya penggunaan lahan kebun dan semak belukar yaitu teras individu, konservasi teknis mata air yaitu pembangunan bak pelindung dan bak penampung sedangkan non-teknis yaitu pendekatan dengan sosialisasi kepada masyarakat dan instansi terkait.

Kata kunci: mata air, karakteristik mata air, potensi mata air, konservasi daerah imbuhan, konservasi mata air

SPRING CONSERVATION TECHNIQUES FOR CLEAN WATER AVAILABILITY IN SAMIGALUH DISTRICT, KULON PROGO REGENCY, SPECIAL REGION OF YOGYAKARTA

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ABSTRACT

The springs in the Sidoharjo Village, namely Tuk Mudal, Cung Lanang, and Slilin, meet the water needs of eight hamlets. The problem with springs is that the quantity decreases during the dry season, the quality decreases when it rains, and there is no adequate storage and protection tank. The research objectives are to determine the characteristics of the springs, the potential of the springs to meet the needs for clean water, as well as the direction of conservation of springs and recharge areas.

The research method is a combination of quantitative and qualitative, data collection methods (mapping surveys, interviews, measurements, laboratory tests), sampling methods (purposive sampling), and analytical methods (mathematical, scoring, interview analysis, evaluation).

The results of the three springs have fracture characteristics; perennial spring continuity; the discharge of Tuk Mudal class V, Cung Lanang class VI, and Slilin class VII; the quality is quite good but some parameters still exceed the quality standard in Tuk Mudal (TSS, COD, BOD, total-coliform), Cung Lanang (TSS, BOD, total-coliform), Slilin (DO, TSS, COD, BOD, total-coliform). The springs can meet the needs of 2628 residents in the research location in the rainy and dry seasons, although the graphs of quantity and water demand are close to each other. The plan for the conservation of recharge areas, especially the use of garden land and shrubs, namely individual terraces, technical conservation of springs, namely the construction of protective tanks and reservoirs, while non-technical approaches are through outreach to the community and related agencies.

Keywords: springs, characteristic of springs, potential of springs, conservation of recharge areas, conservation of springs