

KAJIAN KERUSAKAN LINGKUNGAN AIRTANAH BEBAS AKIBAT LIMBAH CAIR DOMESTIK DI PERUMNAS CONDONGCATUR SLEMAN

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INTISARI

Perumnas Condongcatu memiliki tingkat kepadatan permukiman yang cukup tinggi. Hal mengindikasikan banyaknya jumlah penduduk yang menghuni di daerah tersebut. Penelitian ini bertujuan untuk mengidentifikasi dan mengkaji jenis-jenis kerusakan lingkungan airtanah bebas serta menganalisis tingkat kerusakan lingkungan airtanah bebas akibat pembuangan limbah cair domestik, merumuskan kebijakan dan strategi pengelolaan lingkungan airtanah bebas di Perumnas Condongcatu.

Penelitian ini menggunakan metode survei lapangan dan analisa laboratorium. Parameter yang digunakan adalah warna, kekeruhan, TDS, BOD, COD, DO, nitrit, nitrat, fosfat, amonia, dan pH. Metode indeks pencemar digunakan untuk menentukan tingkat pencemaran. Tingkat pencemaran aspek biotik yaitu parameter total koliform menggunakan pembobotan, serta kajian aspek kultural menggunakan metode kualitatif wawancara mendalam.

Hasil dari penelitian menunjukkan bahwa diseluruh lokasi pengambilan sampel kualitas airtanah secara fisika dan kimia berstatus cemar ringan, sedangkan komponen biotik yaitu total koliform secara dominan berstatus cemar berat, Jarak sumur dengan tangki septik berpengaruh terhadap banyaknya jumlah total koliform di airtanah. Strategi dan kebijakan pengelolaan lingkungan dapat dilakukan dengan cara meningkatkan kesadaran masyarakat terhadap lingkungan, mensosialisasikan kondisi airtanah, faktor penyebab dan strategi penanganan di perumnas Condongcatu.

Kata kunci : *kerusakan lingkungan, airtanah, perumnas condongcatu, limbah domestik*

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STUDY OF GROUNDWATER DAMAGE DUE TO DOMESTIC WASTEWATER IN PERUMNAS CONDONGCATUR SLEMAN

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ABSTRACT

Perumnas Condongcatur has a high level of settlement density. It indicates the number of inhabitants who inhabit the area. This research aims to identify and examine the types of groundwater environmental damage as well as analyze the level of damage to the groundwater environment reviewed from the abiotic, biotic, and cultural components, formulating policies and the groundwater environment management strategy in Perumnas Condongcatur.

This research is using field survey method and laboratory analysis. The parameters used are color, turbidity, TDS, BOD, COD, DO, nitrite, nitrate, phosphate, ammonia, and pH. The pollutant index method is used to determine the pollution level. The level of biotic pollution aspect is the total parameters of the bacteria using the weighted, and study of cultural aspects using a qualitative method of interviews in depth.

The results of this study shows that all of the soil quality sampling site of physics and chemistry is mild pollutants, while the biotic component is the total form of the state of the high-polluting. The distance between the wells and the septic tank affects the amount of total coliform in the groundwater. The most important amount of the groundwater. Environmental management strategies and policies can be done by raising public awareness of the environment, socializing the groundwater condition, causal factor and handling strategies in Condongcatur.

Keywords: *environmental damage, groundwater, perumnas condongcatur, domestic wastewater.*

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