

INTISARI

STUDI FISIS UNTUK MENENTUKAN KUALITAS AIR PADA OBJEK WISATA WADUK GAJAH MUNGKUR KABUPATEN WONOGIRI

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Telah dilakukan penelitian untuk menentukan kualitas air pada perairan sepanjang objek wisata Waduk Gajah Mungkur Kabupaten Wonogiri. Penelitian ini bertujuan untuk mengetahui nilai kualitas air waduk pada kawasan objek wisata ditinjau dari parameter fisika, kimia dan biologi berdasarkan baku mutu sesuai dengan Peraturan Pemerintah No. 82 Tahun 2001, serta mengetahui tingkat pencemaran air waduk berdasarkan titik pengambilan sampel serta variasi waktu. Pengujian dilakukan dengan variasi jarak masing-masing titik 500 meter sepanjang kawasan objek wisata serta dengan variasi waktu pagi, siang, dan sore. Hasil penelitian menunjukkan adanya penyimpangan pada beberapa parameter seperti warna, BOD, COD, klorin, dan *E coli*. Penyimpangan tertinggi ditemukan pada kandungan *E coli* sebanyak 1600 /100 mL yang berada jauh di atas standar baku yang telah ditetapkan sebesar 1000 mL. Hal ini menunjukkan bahwa air waduk telah tercemar oleh aktivitas manusia, terutama pada titik pengambilan sampel dengan jarak terdekat yaitu titik B yang dekat dengan sungai buangan.

Kata kunci: kualitas air, pencemaran, waduk Gajah Mungkur

ABSTRACT

PHYSICAL STUDY FOR DETERMINING THE WATER QUALITY ON OBJECT TOURISM AT GAJAH MUNGKUR RESERVOIR, WONOGIRI REGENCY

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The research of water quality in the waters throughout the tourism area of Gajah Mungkur Reservoir of Wongiri Regency has been conducted. The aim of this study is to determine the value of water quality of the reservoir in the tourist object area in terms of physical, chemical and biological parameters which are based on the quality standard in accordance with Government Regulation number 82 Year 2001, and to know the water pollution level of the reservoir based on sampling point and time variation. The test is done by varying the distance of each 500 meter point along the tourism area as well as with the variation of morning, the day, and afternoon time. The results showed that there were deviations on some parameters such as color, BOD, COD, chlorine, and *E coli*. The highest deviation is found on the content of E coli as much as 1600/100 mL which is far above the standard that has been set at 1000 mL. This indicates that the reservoir water has been contaminated by human activity, especially at the point of sampling with the closest distance that is point B which is close to the river of waste.

Keywords : water quality, water pollution, Gajah Mungkur Reservoir