

ABSTRAK ANALISIS STATUS MUTU AIR SUNGAI CIRARAB MENGUNAKAN METODE IKA-INA

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Sungai Cirarab mengalami perubahan kondisi semakin buruk yang disebabkan oleh perubahan warna air sungai Cirarab semakin hitam, berbau dan berbusa. Berdasarkan Peraturan Pemerintah No. 82 Tahun 2001 tentang Pengelolaan Kualitas Air dan Pengendalian Pencemaran Air pasal 55, untuk sungai yang belum atau tidak ditetapkan baku mutu airnya maka berlaku kriteria mutu air untuk kelas II. Oleh karena itu untuk menentukan status mutu air sungai Cirarab dapat menggunakan perhitungan Indeks Kualitas Air. Tujuan penelitian ini adalah untuk menentukan status mutu air sungai Cirarab menggunakan Indeks Kualitas Air dan mengetahui keterkaitan antara kualitas air dan status mutu air dengan sumber pencemar yang ada di Sungai Cirarab. Penelitian ini dilakukan beberapa tahap yaitu pengambilan sampel air sungai sebanyak 6 titik lokasi pantau pada musim hujan dan kemarau, kemudian memeriksa sampel air sungai di Laboratorium untuk diuji parameter TSS, TDS, DO, BOD, COD, pH, NO₃-N, NH₃-N, Total Phospat dan Fecal coliform. Lalu menghitung indeks kualitas air sungai Cirarab agar dapat menentukan status mutu air sungai dan dapat mengetahui keterkaitan antara kualitas air sungai dan status mutu air sungai cirarab dengan sumber pencemar yang ada di sungai Cirarab. Berdasarkan hasil penelitian ini nilai rata-rata IKA sungai Cirarab pada musim hujan sebesar 36,935 dan musim kemarau sebesar 35,312. Berdasarkan kriteria mutu air dalam PP No.82 Tahun 2001, air sungai Cirarab termasuk dalam Kelas IV dengan kriteria marginal pada musim kemarau dan buruk pada musim hujan. Hasil analisa biodegradable dari Sungai Cirarab pada seluruh titik menunjukkan hasil non-biodegradable dengan nilai rasio BOD/COD berkisar antara 0,05-0,2.

Kata kunci : Indeks Kualitas Air, Sungai Cirarab, Biodegradable

ABSTRACT ANALYSIS OF WATER QUALITY OF CIRARAB RIVER USING IKA-INA METHOD

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The Cirarab River experienced a change in conditions for the worse caused by the change in the color of the Cirarab river water getting dark, smelly and foamy. Based on Peraturan Pemerintah no. 82 Tahun 2001 pasal 55 concerning Water Quality Management and Water Pollution Control, for rivers whose water quality standards have not been or have not been determined, the water quality criteria for class II apply. Therefore, to determine the water quality status of the Cirarab river, the calculation of the Water Quality Index is used. The purpose of this study was to determine the water quality status of the Cirarab River using the Water Quality Index and to determine the relation between water quality and water quality status with pollutant sources in the Cirarab River. This research was carried out in several stages, namely taking river water samples from 6 monitoring locations in the rainy and dry seasons, then checking river water samples in the laboratory to test parameters for TSS, TDS, DO, BOD, COD, pH, NO₃-N, NH₃-N, Total Phosphate and Fecal Coliform. Then calculate the water quality index of the Cirarab river in order to determine the status of river water quality and can find out the relationship between river water quality and the status of the water quality of the Cirarab river with pollutant sources in the Cirarab river. Based on the results of this study, the average value of Cirarab river IKA in the rainy season is 36,935 and the dry season is 35,312. Based on Peraturan Pemerintah no. 82 Tahun 2001, Cirarab river's water is included in Class IV with marginal criteria in the dry season and bad in the rainy season. The results of biodegradable analysis from the Cirarab River at all points showed non biodegradable results with BOD/COD ratio values ranging from 0.05-0.2.

Keywords: Water Quality Index, Cirarab River, Biodegradable.