

Kajian Pencemaran Air Sungai Wai Batu Merah Kota Ambon Provinsi Maluku

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Intisari

DAS Wai Batu Merah merupakan salah satu DAS di Kota Ambon dimana bagian hulu DAS ini dijadikan sebagai pemasok air bagi masyarakat Kota Ambon. Berbagai aktivitas penggunaan lahan di wilayah DAS Wai Batu Merah seperti permukiman, pertanian, dan industri diperkirakan telah mempengaruhi kualitas air seperti tingginya tekanan terhadap pemanfaatan sumberdaya air sehingga debit air mulai berkurang. Oleh sebab itu, penelitian ini bertujuan untuk menganalisis kualitas air sungai, menganalisis tingkat pencemaran air, dan merumuskan upaya pengendalian untuk menanggulangi pencemaran air Sungai Wai Batu Merah. Metode yang digunakan untuk menganalisis kualitas air sungai yaitu dibandingkan dengan baku mutu kualitas air menurut PP Nomor 82 Tahun 2001. Status mutu air Sungai Wai Batu Merah ditentukan menggunakan Indeks Pencemaran. Upaya pengendalian pencemaran dirumuskan berdasarkan observasi di lapangan, studi literatur, dan *indepth interview*. Hasil penelitian ini menunjukkan kualitas air sungai Wai Batu Merah pada setiap titik dipengaruhi parameter dominan yang belum memenuhi baku mutu adalah TDS, BOD, COD, Nitrit, total fosfat, total coliform dan, *Fecal coliform*. Tingkat pencemaran sungai Wai Batu Merah secara keseluruhan berada pada kategori tercemar ringan sampai tercemar berat dengan kisaran nilai antara 2,124 (terendah) sampai 16,001 (tertinggi). Upaya pengendalian yang perlu dilakukan pada DAS Wai Batu Merah dari zonasi hulu sampai hilir dapat dilakukan melalui pemerintah berupa inventarisir sumber-sumber pencemar, sosialisasi dan penyuluhan tentang kebersihan lingkungan sungai, pembuatan *septic tank* komunal, pengadaan bak sampah, pembuatan IPAL, perlunya pemantauan kualitas air dan penetapan baku mutu air sungai secara rutin, penetapan daya tampung beban pencemar, serta pembuatan papan himbauan tentang pentingnya sungai bagi kehidupan masyarakat. Upaya pengendalian yang dapat dilakukan melalui masyarakat yaitu pembersihan sungai, penerapan aturan dalam membuang limbah di sungai, larangan kepada masyarakat untuk tidak beraktivitas di sungai seperti Mandi Cuci dan Kakus (MCK), pembuatan *septic tank* dan penertiban saluran pembuangan.

Kata kunci: Kualitas Air, Indeks Pencemaran, Upaya Pengendalian

Water Pollution Study of Wai Batu Merah River, Ambon City, Maluku Province

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Abstract

Wai Batu Merah watershed is one of the watersheds in Ambon City where the upstream part of this watershed is used as a water supplier for the people of Ambon City. Various land-use activities in the Wai Batu Merah watershed, such as settlements, agriculture, and industry, are thought to have affected water quality, such as high pressure on the use of water resources so that the water discharge began to decrease. Therefore, this study aims to analyze the quality of river water, analyze the level of water pollution, and formulate management efforts to overcome pollution of the Wai Batu Merah River. The method used to analyze the quality of river water is compared with the water quality standard according to Government Regulation No. 82 of 2001. The status of the water quality of the Wai Batu Merah River is determined using the Pollution Index. Pollution control efforts are formulated based on field observations, literature studies, and in-depth interviews. The results of this study indicate that the water quality of the Wai Batu Merah river at each point is influenced by the dominant parameters that do not meet the quality standards, namely TDS, BOD, COD, Nitrite, total phosphate, total coliform, and *Fecal coliform*. The level of pollution of the Wai Batu Merah river as a whole is in the category of lightly polluted to heavily polluted with a range of values between 2,124 (lowest) to 16,001 (highest). Pollution control efforts that need to be carried out on the Wai Batu Merah watershed from upstream to downstream zoning can be carried out through the government in the form of an inventory of pollutant sources, socialization and counseling about river environmental cleanliness, making communal *septic tank*, procurement of garbage bins, construction of WWTPs, the need for monitoring water quality, and regular determination of river water quality standards, determination of pollutant load capacity, and the manufacture of warning boards regarding the importance of rivers for people's lives. Pollution control efforts that can be carried out through the community are river cleaning, application of rules in disposing of waste in rivers, prohibiting the community from doing activities in rivers such as Bathing, Washing, and Latrines (MCK), making *septic tank*, and controlling sewers.

Keywords: water quality, pollution level, management effort