

ABSTRAK

Ketersediaan air bersih yang layak pakai merupakan faktor penting dalam menunjang derajat kesehatan masyarakat. Penelitian ini bertujuan untuk mengkaji kelayakan pemanfaatan air permukaan Daerah Aliran Sungai (DAS) Seruyan di Kuala Pembuang, Kabupaten Seruyan, Kalimantan Tengah. Metode penelitian yang digunakan adalah kuantitatif deskriptif, dengan pendekatan analisis laboratorium terhadap parameter kualitas air, meliputi pH, BOD, COD, DO, TSS, nitrat, fosfat, dan fecal coliform. Data dianalisis menggunakan metode Indeks Pencemaran Air (IPA) berdasarkan Keputusan Menteri Lingkungan Hidup Nomor 115 Tahun 2003 dan dibandingkan dengan baku mutu air kelas II sesuai PP No. 22 Tahun 2021.

Hasil penelitian menunjukkan bahwa nilai indeks pencemaran air pada Semester I dan II Tahun 2024 berkisar antara 4,56 hingga 8,13, yang menunjukkan status mutu air dalam kategori cemar ringan hingga cemar sedang. Parameter yang paling berkontribusi terhadap pencemaran adalah BOD dan COD yang melebihi ambang batas kelas II. Meskipun air masih digunakan masyarakat untuk mandi, mencuci, dan kebutuhan harian lainnya, kondisi ini menimbulkan potensi risiko kesehatan seperti dermatitis, diare, dan infeksi saluran pencernaan. Kurangnya pengolahan air sebelum digunakan memperburuk paparan terhadap zat pencemar. Penelitian ini menyimpulkan bahwa air DAS Seruyan belum sepenuhnya layak sebagai sumber air bersih tanpa proses pengolahan. Diperlukan upaya pengelolaan kualitas air secara terpadu, peningkatan kesadaran masyarakat terhadap risiko

penggunaan air tercemar, serta penguatan regulasi dan pengawasan lingkungan untuk melindungi kesehatan masyarakat.

Kata kunci: DAS Seruyan, kualitas air, indeks pencemaran air



ABSTRACT

The availability of safe and clean water is a crucial factor in supporting public health. This study aims to assess the feasibility of utilizing surface water from the Seruyan River Basin (DAS Seruyan) in Kuala Pembuang, Seruyan Regency, Central Kalimantan. A quantitative descriptive method was employed by analyzing water quality parameters including pH, BOD, COD, DO, TSS, nitrate, phosphate, and fecal coliform. Data were analyzed using the Water Pollution Index (WPI) method based on the Decree of the Minister of Environment No. 115 of 2003 and compared with Class II water quality standards as stated in Government Regulation No. 22 of 2021.

The findings revealed that the water pollution index values for the first and second semesters of 2024 ranged from 4.56 to 8.13, indicating a pollution status between slightly polluted and moderately polluted. BOD and COD were the dominant parameters contributing to pollution, often exceeding the threshold for Class II water quality. Although the river water is still commonly used by residents for daily needs such as bathing and washing, it poses significant health risks including skin infections, diarrhea, and digestive illnesses. The absence of prior water treatment increases exposure to pollutants.

This study concludes that the surface water of DAS Seruyan is not entirely suitable as a clean water source without proper treatment. Integrated water quality management, increased public awareness regarding health risks, and stronger

environmental regulations are needed to ensure sustainable water use and protect community health.

Keywords: Seruyan River Basin, water quality, water pollution index

