

INTISARI

KAJIAN KARAKTERISTIK PENCEMAR BAGIAN HULU SUNGAI BELIK, DAERAH ISTIMEWA YOGYAKARTA

Oleh

Latifah Rizqi Mubarak

14/365900/GE/07846

Sungai Belik merupakan sungai yang mengalir di kawasan perkotaan. Bagian hulu Sungai Belik mendapat input limbah dari kegiatan domestik dan perikanan. Hal tersebut memberi dampak yang buruk terhadap kualitas air Sungai Belik. Oleh sebab itu, penelitian ini bertujuan untuk mengkaji status tingkat pencemaran air, mengidentifikasi penyebab pencemaran air, dan merumuskan strategi pengendalian pencemaran air bagian hulu Sungai Belik.

Metode yang digunakan untuk menentukan kualitas air yaitu metode komparatif. Status tingkat pencemaran air Sungai Belik ditentukan menggunakan Indeks Pencemaran. Penyebab pencemaran air diidentifikasi berdasarkan observasi lapangan. Perumusan strategi pengendalian pencemaran dirumuskan berdasarkan observasi di lapangan tentang penyebab pencemaran, studi literatur, dan wawancara.

Hasil penelitian ini menunjukkan status tingkat pencemaran air di bagian hulu Sungai Belik ditinjau dari parameter pH, TSS, TDS, BOD, deterjen, nitrat, dan fosfat yaitu berstatus tercemar ringan. Indeks pencemaran tertinggi terletak di titik 3 sebesar 3,55, kemudian di titik 4 sebesar 3,51, di titik 5 sebesar 2,96, di titik 2 sebesar 2,72, dan indeks pencemaran terendah berada di titik 1 sebesar 2,55. Penyebab pencemaran air adalah input limbah domestik yang berasal dari saluran pembuangan air dan saluran drainase warga, serta air buangan dari kolam perikanan Fakultas Pertanian UGM yang langsung dibuang ke Sungai Belik tanpa perlakuan. Nilai debit dan kecepatan aliran Sungai Belik juga memengaruhi tingkat status mutu air Sungai Belik.

Strategi pengendalian pencemaran air yang dapat dilakukan yaitu pembuatan IPAL komunal, menggunakan filter sebelum air buangan dari kolam perikanan di buang ke Sungai Belik, melakukan pembangunan sungai yang bersifat ekohidraulik dalam prokasi, mengoptimalkan peran masyarakat untuk ikut terlibat secara langsung dalam komunitas/organisasi pelestarian Sungai Belik, dan mengubah cara pandang masyarakat serta pemerintah terhadap pentingnya sungai kecil.

Kata kunci : Sungai Belik, Limbah Cair, Pencemaran Air, Strategi Pengendalian

ABSTRACT

THE STUDY OF CHARACTERISTICS POLLUTANTS IN THE UPSTREAM PART OF BELIK RIVER, YOGYAKARTA SPECIAL DISTRICT

By

Latifah Rizqi Mubarak

14/365900/GE/07846

Belik River is a river that flows in urban areas. The upstream part of Belik River receives waste input from domestic and fishery activities. This has a bad impact on the water quality of Belik River. Therefore, this study aims to assess the status of the level of water pollution, identify the causes of water pollution, and formulate strategies to control water pollution in the upstream of Belik River.

The method used to determine water quality is the comparative method. The status of Belik River water pollution level is determined using the Pollution Index. The causes of water pollution are identified based on field observations. Formulation of pollution control strategies is formulated based on field observations about the causes of pollution, literature studies, and interviews.

The results of this study indicate the status of the level water pollution in the upstream part of Belik River in terms parameters of pH, TSS, TDS, BOD, detergent, nitrate, and phosphate which are mildly polluted. The highest pollution index is located at point 3 is 3.55, then at point 4 is 3.51, at point 5 is 2.96, point 2 is 2.72, and the lowest pollution index is at point 1 is 2.55. The cause of water pollution is the input of domestic waste that comes from the drainage channel and the waste water from the fishery pond of the Faculty of Agriculture UGM which is directly disposed of into Belik River without treatment. The value of discharge and velocity also affects the status water quality level of Belik River.

Water pollution control strategies that can be carried out is communal Wastewater Treatment Plant (WWTP), using filters before the waste water from the fishing pond is disposed to the Belik River, carrying out the construction of an eco-hydraulic river in prokasih, optimizing the role of the community to be directly involved in the Belik River community/organization, and change the way people and government view the importance of small rivers.

Keywords: *Sungai Belik, Liquid Waste, Water Pollution, Control Strategy*