

INTISARI

Telaga Ngipik merupakan perairan yang dimanfaatkan masyarakat sebagai irigasi, cuci pakaian, cuci piring, mandi, tempat wisata, pemancingan umum, dan suplai air ke beberapa industri. Lokasi Telaga Ngipik berada di tengah perkotaan yang dengan beberapa indutri dari skala kecil, menengah hingga besar. Tujuan penelitian ini adalah : (a) mengkaji kualitas air berdasarkan indeks saprobitas dari fitoplankton di perairan Telaga Ngipik Kabupaten Gresik; (b) Mengkaji kualitas air berdasarkan indeks penecmaran di perairan Telaga Ngipik Kabupaten Gresik; (c) Mengkaji aktivitas manusia yang mempengaruhi kondisi atau kualitas di perairan Telaga Ngipik Kabupaten Gresik; dan (d) Merumuskan strategi pengelolaan pencemaran air di perairan Telaga Ngipik Kabupaten Gresik. Metode yang digunakan dalam penelitian ini adalah *integrated rapid survey* dengan fokus kajian data primer dari berbagai obyek kajian mengenai indeks saprobitas fitoplankton sebagai bioindikator pencemaran wilayah perairan Telaga Ngipik. Kondisi lingkungan dianalisis terhadap aspek kultural, yaitu berdasarkan aktivitas masyarakat meliputi pengetahuan, sikap dan perilaku dengan cara pengisian kuesioner. Hasil penelitian menunjukkan bahwa komposisi fitoplankton yang ditemukan sebanyak 27 famili, 36 genus, dan 39 spesies. Kualitas perairan Telaga Ngipik berdasarkan indeks saprobitas tergolong pada tingkat saprobik α/β -Mesosaprobik dengan nilai -0,58 (tercemar sedang). Kualitas perairan Telaga Ngipik berdasarkan status mutu menggunakan indeks pencemaran tergolong kondisi baik ($0 \leq P_{ij} \leq 1,0$) dengan nilai 0,43-0,66. Berdasarkan analisis aspek kultural menunjukkan bahwa aktivitas manusia memiliki pengetahuan, sikap dan perilaku yang baik dalam menjaga perairan telaga. Namun, masih terdapat beberapa masyarakat yang membuang limbah cair di selokan. Berdasarkan strategi pengelolaan pencemaran air di telaga Ngipik tertinggi berada pada kriteria ekonomi dengan perumusan strategi berupa pengawasan dan pemantauan; sosialisasi dan penyuluhan; menata ulang fungsi tata ruang; serta ekowisata pancing.

Kata kunci : Bioindikator, Fitoplankton, Indeks Saprobitas, Pencemaran Perairan, Pengelolaan Lingkungan

ABSTRACT

Telaga Ngipik is a body of water utilized by the community for irrigation, laundry, dishwashing, bathing, recreational activities, public fishing, and supplying water to several industries. The location of Telaga Ngipik is within an urban area with several industries ranging from small to large scale. The objectives of this research are: (a) to assess water quality based on the saprobity index of phytoplankton in the waters of Telaga Ngipik, Gresik Regency; (b) to assess water quality based on pollution indices in the waters of Telaga Ngipik, Gresik Regency; (c) to study human activities influencing the conditions or quality of the waters of Telaga Ngipik, Gresik Regency; and (d) to formulate pollution management strategies for the waters of Telaga Ngipik, Gresik Regency. The method used in this research is an integrated rapid survey focusing on primary data analysis from various study objects regarding the saprobity index of phytoplankton as a pollution indicator in the waters of Telaga Ngipik. Environmental conditions are analyzed in terms of cultural aspects, based on community activities including knowledge, attitudes, and behaviors through questionnaire responses. The research findings indicate that the discovered phytoplankton composition consists of 27 families, 36 genera, and 39 species. The water quality of Telaga Ngipik, based on the saprobity index, falls under the level of α/β -Mesosaprobic with a value of -0.58 (moderately polluted). The water quality of Telaga Ngipik, based on quality status using pollution indices, falls under good condition ($0 \leq P_{ij} \leq 1.0$) with values ranging from 0.43 to 0.66. Based on cultural aspect analysis, it is evident that human activities demonstrate good knowledge, attitudes, and behaviors in maintaining the lake's water quality. However, there are still some communities disposing of liquid waste in the drainage channels. Regarding the highest pollution management strategy in Telaga Ngipik, it pertains to economic criteria with the formulation of strategies including supervision and monitoring; socialization and education; rearranging spatial functions; and fishing ecotourism.

Keywords: Bioindicator, Environmental Management, Phytoplankton, Saprobity Index, Water Pollution