

ABSTRAK

Air merupakan sesuatu yang sangat penting bagi kehidupan manusia dan makhluk hidup di bumi dan digunakan sebagai sumber daya yang sering dimanfaatkan manusia dan makhluk hidup. Danau Batur terletak di Kabupaten Bangli, danau Batur diperdagangkan oleh Masyarakat sekitar sebagai budidaya ikan. Pencemaran air danau Batur bisa berasal dari pertanian, budidaya ikan dan limbah dari rumah tangga.

Penelitian ini merupakan penelitian deskriptif kualitatif yang menggunakan desain *crosssectional*, penelitian ini dilaksanakan di Danau Batur Kabupaten Bangli. Dengan menggunakan metode Purposive Random Sampling dengan memilih tiga lokasi yaitu didekat permukiman, dekat pertanian dan ditengah danau.

Hasil penelitian kualitas air danau Batur menunjukkan ada beberapa hasil yang belum memenuhi standar baku mutu air danau kelas II Peraturan Pemerintah Republik Indonesia No. 22 Tahun 2021 Tentang Penyelenggaraan Perlindungan dan Pengelolaan Lingkungan Hidup. Hasil penelitian air danau Batur dengan parameter fisika yaitu temperatur berkisar 27,1°C – 27,5°C, kekeruhan berkisar 5, TDS berkisar 1.470mg/L – 1.640mg/L dan TSS berkisar 10mg/L – 12mg/L , parameter kimia yaitu pH hasilnya 9,7 – 9,9 , COD hasilnya 120mg/L - 199mg/L, DO hasilnya 7,2 mg/L – 8,6 mg/L, Nitrat hasilnya 0,1mg/L - 0,5mg/L, Nitrit hasilnya 0,08mg/L - 0,01 mg/L, Kadium hasilnya 0,001 mg/L – 0,002 mg/L, Tembaga hasilnya 0,01 mg/L, dan parameter biologi memperoleh hasil *Fecal Coliform* yaitu 2,2/100ml – 10/100ml. Pencemaran air yang mempengaruhi air danau Batur berasal dari permukiman, pertanian dan danau itu sendiri.

Kata kunci : Kualitas air, Danau Batur, Parameter, Pencemar

ABSTRACT

Water is something that is very important for human life and living things on earth and is used as a resource that is often utilized by humans and living things. Lake Batur is located in Bangli Regency, Lake Batur is utilized by the surrounding community as a fish farm. Lake Batur water pollution can come from agriculture, fish farming and waste from households.

This research is a descriptive qualitative study that uses a cross-sectional design, this research was conducted at Lake Batur, Bangli Regency. By using the Purposive Random Sampling method by selecting three locations namely near settlements, near agriculture and in the middle of the lake.

The results of the Batur lake water quality study showed that there were several results that did not meet the class II lake water quality standards of the Government of the Republic of Indonesia Regulation No. 22 of 2021 concerning the Implementation of Environmental Protection and Management. The results of Batur lake water research with physical parameters, namely temperature ranging from 27.1oC - 27.5oC, turbidity ranging from 5, TDS ranging from 1,470mg/L - 1.640mg/L and TSS ranging from 10mg/L - 12mg/L, chemical parameters are pH results 9.7 - 9.9, COD results 120mg/L - 199mg/L, DO results 7.2 mg/L - 8.6 mg/L, Nitrate results 0.1mg/L - 0.5mg/L, Nitrite results 0.08mg/L - 0.01 mg/L, Palladium results 0.001 mg/L - 0.002 mg/L, Copper results 0.01 mg/L, and biological parameters obtained Fecal Coliform results of 2.2/100ml - 10/100ml. Water pollution that affects Lake Batur water comes from settlements, agriculture and the lake itself.

Keywords: *Water quality, Lake Batur, Parameters, Pollutants*