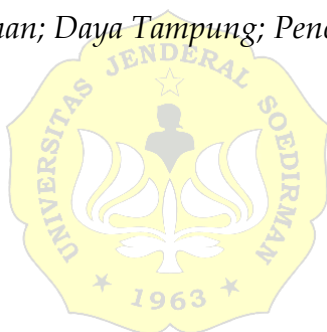


ABSTRAK

Waduk PB. Soedirman atau Waduk Mrica merupakan perairan yang berfungsi sebagai PLTA, sumber air irigasi, peternakan, perikanan, pertanian dan pariwisata. Aktivitas yang dilakukan di waduk dapat mengakibatkan masalah seperti sedimentasi, eutrofikasi dan penurunan kualitas air akibat masukan bahan organik yaitu fosfor. Tujuan penelitian ini yaitu untuk mengetahui daya tampung beban pencemaran waduk untuk budidaya perikanan berdasarkan kadar P-Total dan mengetahui jumlah keramba ideal berdasarkan daya tampung pencemaran fosfornya. Metode pengambilan sampel menggunakan *Purposive sampling*. Hasil penelitian ini menunjukkan bahwa berdasarkan PP Nomor 21 Tahun 2021 (Kelas III), daya tampung beban pencemaran fosfor di Waduk PB. Soedirman sudah tidak dapat menampung beban pencemar jika menggunakan standar baku mutu waduk, namun masih mampu menampung beban pencemaran fosfor jika menggunakan baku mutu sungai. Jumlah keramba aktif di Waduk PB. Soedirman yaitu 772 unit keramba. Jumlah unit keramba ideal jika menggunakan standar baku mutu waduk dan sungai berturut-turut yaitu 263 unit dan 307 unit keramba. Sehingga perlu adanya pengurangan jumlah keramba aktif di Waduk PB. Soedirman

Kata kunci : *Waduk PB. Soedirman; Daya Tampung; Pencemaran; Fosfor*



ABSTRACT

PB. Soedirman Reservoir or Mrica Reservoir is a body of water that functions as a hydroelectric power plant and, a source of water for irrigation, livestock, fisheries, agriculture, and tourism. Activities carried out in reservoirs can result in problems such as sedimentation, eutrophication, and decreased water quality due to the input of organic materials, namely phosphorus. This study aims to determine the pollution load capacity of reservoirs for aquaculture based on P-Total levels and to determine the ideal number of fish cages based on their phosphorus pollution capacity. The sampling method uses purposive sampling. The results of this research show that based on PP Number 21 of 2021 (Class III), the carrying capacity of the phosphorus pollution load in the PB Reservoir. Soedirman can no longer accommodate the pollution load if it uses reservoir quality standards, but is still able to accommodate the phosphorus pollution load if it uses river quality standards. Number of active cages in PB Reservoir. Soedirman, namely 772 cage units. The ideal number of cage units if using standard quality standards for reservoirs and rivers is 263 units and 307 cage units, respectively. So there is a need to reduce the number of active cages in the PB. Soedirman Reservoir.

Keywords: *PB. Soedirman Reservoir; Capacity; Pollution; Phosphorus*

