Study of the trophic status of Choghakhor wetland using a trophic state index, in Chaharmahal and Bakhtiari Province, Iran

Razieh Dehghannezhad¹ Rasool Zamani-Ahmadmahmoodi^{2*} Fardin Shaluei³ Nasrin Gharahi⁴

- 1. Master of Science Student in Aquatic Ecology, Faculty of Natural Resources and Earth Science, Shahrekord University, Shahrekord, Iran
- 2, 3. Assistant professor of Fisheries and Environmental Sciences, Faculty of Natural Resources and Earth Science, Shahrekord University, Shahrekord, Iran
- 4. Assistant professor of Rangeland and Watershed Management, Faculty of Natural Resources and Earth Science, Shahrekord University, Shahrekord, Iran

*Corresponding Author:

rasoolzamani@yahoo.com

Received date: 2018.09.24 Reception date: 2019.09.30

Abstract

Choghakhor wetland, covering 1500 hectares, is one of the largest and most beautiful wetlands of Chaharmahal and Bakhtiari Province, Iran. To determine the trophic status of Choghakhor wetland, water sampling was performed in 40 stations during the summer season of 2017. The location of each sampling station was registered using the Global Positioning System. In this study, the eutrophication status of Choghakhor wetland was considered using a Trophic State Index (TSI) based on total phosphorus and chlorophyll a, with depth determined by Secchi disk. According to the present study's results, the average trophic state index was calculated to be 37.35. Based on this value, the wetland is in mesotrophic status. To improve the status of Choghakhor wetland, discharge of agricultural, municipal and domestic wastewaters to the wetland should be banned.

Keywords: Choghakhor wetland, Trophic state index, Eutrophication.