

Evaluation of thermal stratification and nutrient simulation in Chahnimeh reservoirs of Zabul

Abstract

Dam to increase water retention time, creating a layered effect and nutritious water in the tank. The phenomenon that makes water out of the tank is lower quality than the water and change the water quality in the reservoir. The broader management perspective and in addition to quantitative targets, quality control will also be included. The reservoirs are 25 kilometers from the city of Zabul in Sistan and Baluchestan province are 225 kilometers north of Zahedan is located. To search for quality tanks for qualitative parameters such as temperature, nitrate nitrogen, phosphate, pH and EC were measured during a period of one year. It was found in reservoirs in the spring and summer with thermal stratification is based on measured data three layers of Epilimnion, thermocline, Hypolimnion was formed in reservoir. Based on the data measured by the cold weather layering tank in the months of January to March poor and there is no layering in the tank and the tank is uniform. Nitrate concentrations also decreased in early spring and in November, the lowest level reached since then uptrend finds. The tank was very small concentration and in April, May, June and July will reduce the concentration of nitrogen in the tank and in the months of August and September increased dramatically. The reservoir based on trophic condition and class 3a and reservoir for drinking and for industrial applications required a complete treatment and is suitable for agricultural and recreational.

Keywords: Chahnimeh reservoirs, Thermal stratification, nutritional



University of Zabol
Management Graduate
Department of Water and Soil
Department of Water Engineering
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Supervisor:

Dr. Peyman Afrasiab

Advisor:

Dr. M. Delbari

Jamshid Piri

By:

Arman. Mirlashkari

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