

Water Quality Assessment of Brari -Nambal Lagoon of Dal Lake Before and After Kashmir Floods

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ABSTRACT

Water quality monitoring has been high priority to determine the current conditions of the water system. The present study evaluates the surface water quality in terms of the physico-chemical parameters of the Brari-Nambal lagoon of Dal Lake, Kashmir. Various physico-chemical parameters of water samples for the Brari-Nambal lagoon of the Dal Lake were determined post September 2014 floods in Kashmir. The values of physico-chemical parameters in the lake water samples were compared with those of World Health Organization (WHO) guidelines. Data treatment by mathematical methods was also done to get the results in a better and structured way. Water Quality Index (WQI) was very poor and water quality falls under grade 'D' with values >75. Permeability Index (PI) value was 27.94 before floods and hence fit for irrigation and 24.98 after floods thereby unfit for irrigation. Sodium Adsorption Ratio (SAR) remains <10 and therefore fit for irrigation. Magnesium Hazard (MH) values were calculated and remained < 50 and hence an indication for fit water for irrigation purposes.