World Academy of Science, Engineering and Technology
International Journal of Bioengineering and Life Sciences
Vol:14, No:06, 2020

Evaluating Water Quality Index of Euphrates River South-West Part of Iraq, Najaf, Alhadaria by Using GIS Technique

Authors : Ali Abojassim, Nabeel Kadhim, Adil Jaber, Ali Hussein

Abstract : Water quality index (WQI) is valuable and unique rating to depict the total water quality status in a single term that is helpful for the selection of appropriate treatment technique to meet the concerned issues. Fifteen surface water samples were collected from the Euphrates river within AlHaydria is sub district of AL-Najaf (Iraq). The quality of surface water were evaluated by testing various physicochemical parameters such as pH, Total Dissolved Solid (TDS), , Calcium, Chloride, Sulphate and Electrical conductivity. The WQI for all samples were found in the range of 25.92 to 47.22. The highest value of WQI was observed in the Ali Hajj Hassan(SW4,SW8), El Haj Abdel Sayed (SW 10 to SW 12)and Hasan alsab(SW 14) sampling locations. Most of the water samples within study area were found good to moderate categories. most of the water samples for study area were found good as well as moderate categories

Keywords : water quality index, GIS, physicochemical parameters, Iraq Standards for irrigation purpose 2012
Conference Title : ICABEC 2020 : International Conference on Advances in Biology, Environment and Chemistry
Conference Location : Oslo, Norway
Conference Dates : June 25-26, 2020