WATER QUALITY INDEX ASSESSMENT OF GROUND WATER IN JAKKUR SUB WATERSHED OF BANGALORE, KARNATAKA, INDIA

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ABSTRACT

The water quality index (WQI) is a single number that expresses the quality of water by integrating the water quality variables. The purpose is to provide a simple and concise method for expressing the water quality for different usage. The present work deals with the monitoring of variation of seasonal ground water quality index of ground water for Jakkur sub watershed in Bangalore, Karnataka state of India. For calculating the WQI the following 12 physic-chemical parameters such as pH, Electric Conductivity, Total Dissolved Solids, Total Alkalinity, Chlorides, Total Hardness, Dissolved Oxygen, Fluoride, Calcium, Magnesium, Sulphate and Nitrate have been considered. The water quality index value of ground water was 84.46 in rainy season, 77.14 in winter season and 91.22 in summer season. In the present investigation the quality of water was found to be good in and around Jakkur sub watershed.

KEYWORDS: Ground Water, Physico-Chemical Parameters, Water Quality Index, Water Quality Standards