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## **DETERMINATION OF WATER QUALITY DETERIORATION AT PILGRIMAGE CENTRE ALONG RIVER NETRAVATHI, MANGALORE USING WQI APPROACH**

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### **Abstract**

An attempt has been made to develop Water Quality Index (WQI), using six water quality parameters at riverside stations located in the vicinity of temples of Dakshina Kannada district, Karnataka, South India. Rating curves were drawn based on the tolerance limits of inland waters and health point of view. Bhargava WQI method and Harmonic Mean WQI method were used to find overall WQI along the stretch of the river basin. Five point rating scale was used to classify water quality in each of the study areas. It was found that the water quality of Netravathi varied from Excellent to Marginal range by Bhargava WQI method and Excellent to Poor range by Harmonic Mean WQI method. It was observed that the impact of human activity was severe on most of the parameters. The MPN values exceeded the tolerable limits at almost all the stations. It was observed that the main cause of deterioration in water quality was due to the lack of proper sanitation, unprotected river sites and high anthropogenic activities.

**Keywords:** water quality index, Bhargava's WQI, harmonic mean WQI, pilgrimage

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