

Theme 7: Lakes, rivers, estuaries: water quality, biotic resources, sustainable management

T7_Oral_04

**POLLUTION OF THE REGULATED RIVER BHADRA AT
BHADRAVATHI, KARNATAKA, INDIA**

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The river Bhadra at Bhadravathi is regulated due to construction of the reservoir at Lakkavalli to generate electricity and to irrigate agricultural lands of the command area. The water of the river at Bhadravathi is polluted due to inflow of domestic sewage of Bhadravathi and other villages which are located on the banks of the river. The entry of effluents from the Vishveshwaraiah iron and steel company, the sugar factory and the Mysore paper mills cause serious pollution at Bhadravathi. It is evident by the recorded high values of water temperature, pH, alkalinity, chlorides, total hardness calcium, magnesium, carbon dioxide and total dissolved solids which are considered as pollution indicating parameters. In contrast, the values of dissolved oxygen decreased at polluted sites. The river bed harboured luxuriant growth of macro-phytes. The sampling station S2, near railway track recorded maximum of fourteen taxa of macrophytes. The results are discussed based on the related literatures.

Keywords: Domestic sewage, industrial effluents, macrophytes, physical and chemical factors, pollution, river Bhadra