

गंगा समाचार

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Editorial

River Ganga has been a symbol of India's age old culture and civilization and considered as the most sacred river. Ganga rejuvenation is a movement for restoring the wholesomeness of river in terms of its water quality. Besides various activities being executed by CPCB, collection of news articles on River Ganga may be useful to people at large committed for taking initiative in rejuvenation of River Ganga.

Action taken to prevent Industrial Pollution in River Ganga

As per the SPCBs estimates in 2012, there were 764 Grossly Polluting Industries (GPIs) discharging waste water into Ganga main stem, which comprises of Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal. The industrial effluent accounts for 7.5% (501MLD) of 6600 MLD and 30% of BOD load (131 tonnes per day out of 426 tpd) of the waste water discharged into Ganga main stem. The remaining waste water and pollution load comes from sewage generated by the cities and towns located on the bank/vicinity of the river. The waste water reaches Ganga through 144 major drains meeting river Ganga directly and 13 drains through its tributaries Kali-East and Ramganga.

Out of 764 GPIs, Sugar, Distilleries, Pulp and paper, Tanneries and Textile contribute 90% of pollution load and Action Plan



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Mass Bathing at Haridwar



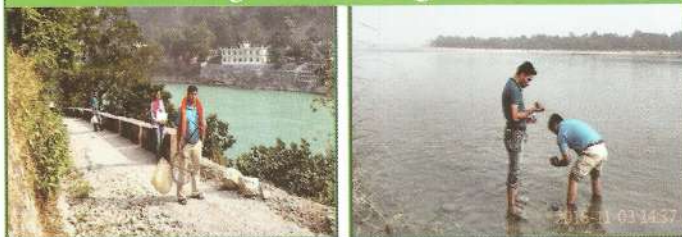
comply with the bathing water quality criteria with respect to BOD of <math>< 3\text{mg/l}</math>.

- Water quality of River Ganga meets the Dissolved Oxygen and pH levels with bathing water quality criteria.
- Water quality does not conform to the Total Coliform and Fecal Coliform criteria for bathing water at most of the locations on river Ganga.

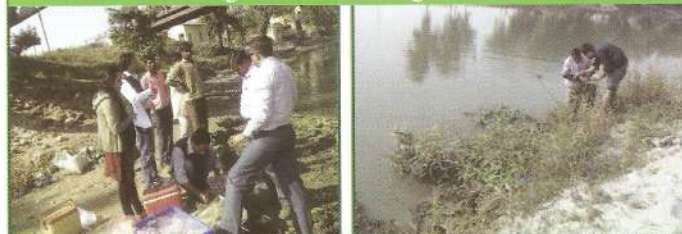
BIO-MONITORING/BIO-MAPPING OF RIVER GANGA

Bio-monitoring indicates the health of the river and the impact of pollution on aquatic life which in turn determines suitability of water for human consumption. It also indicates the migration or disappearance of native species due to various hydrological interventions and suggests the nature and extent of pollution due to domestic and industrial waste. Benthic macro-invertebrates are the best suitable indicators of surface water quality. Their presence in water body having high saprobic and diversity score ensures better water quality. Lower score determines deterioration in water quality. CPCB has carried out Bio-monitoring of entire stretch of River Ganga at 66 locations. The outcome of the results indicated

Bio-monitoring of River Ganga in Uttarakhand



Bio-monitoring of River Ganga in Uttar Pradesh



Bio-monitoring of River Ganga in Bihar



Bio-monitoring of River Ganga in Jharkhand

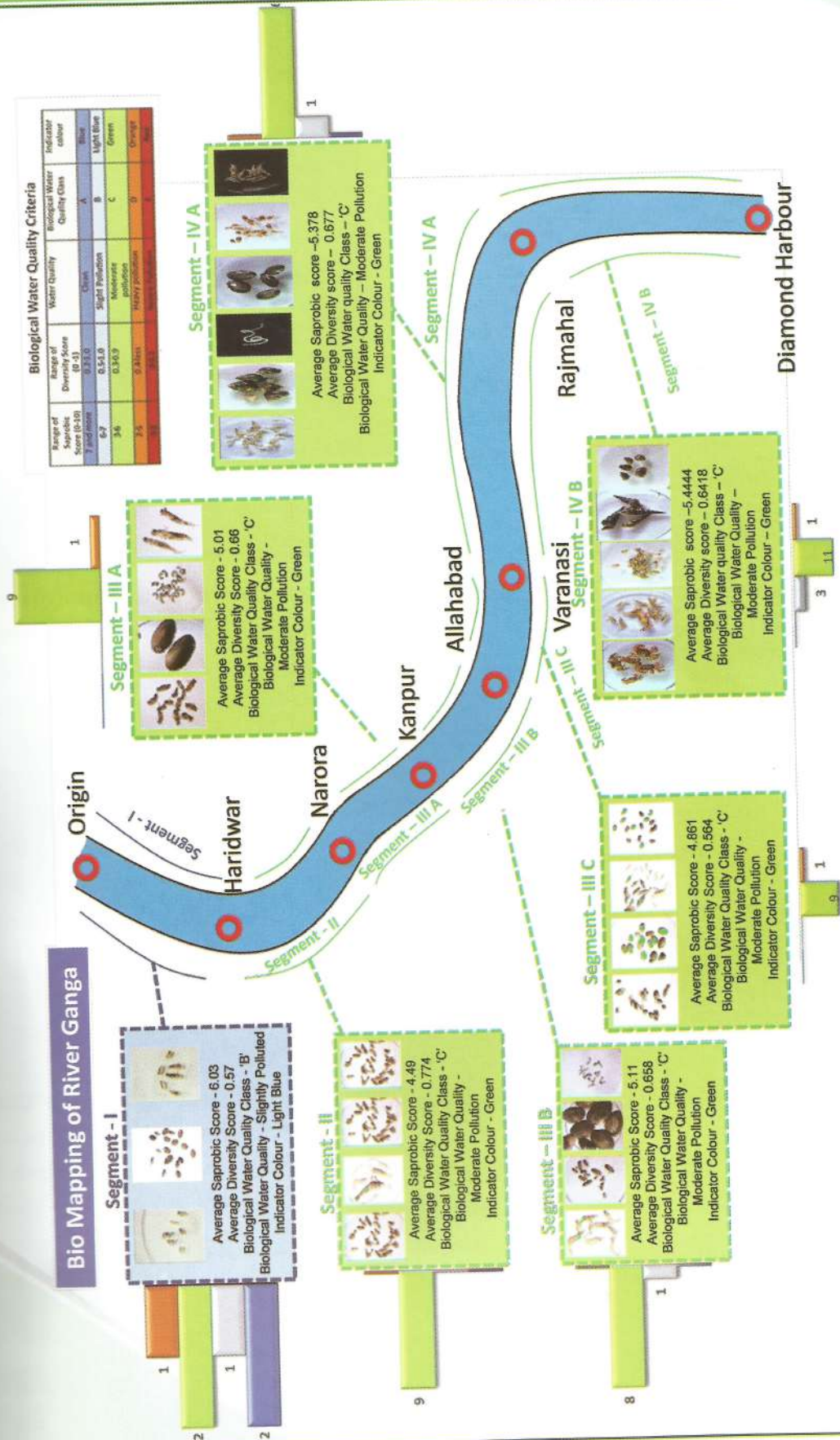


Bio-monitoring of River Ganga in West Bengal



that except for upper stretch of few locations in Segment I of River Ganga in Uttarakhand, the entire remaining stretch from downstream Haridwar does not meet the bathing water quality criteria (Bio-mapping of River Ganga is shown in Map-1).

Map 1: Bio-Mapping of River Ganga



CONSERVATION OF 'NATIONAL AQUATIC ANIMAL' IN RIVER GANGA

Gangetic dolphin (*Platanista gangetica gangetica*) is an indicator species of the ecological health of River Ganga ecosystem. Based on its significance, Government of India has declared this cetacean mammal as "National Aquatic Animal" in the year 2009. Gangetic dolphins normally prefer its habitat in places of eddy counter currents associated with enough depth of water (>10 meters) mainly at confluences, meanders and mid Channel Islands. Gangetic dolphin feed on several species of fishes and invertebrates. Presence of invertebrates in their habitats also characterise suitable biological water quality



for wildlife propagation of Gangetic dolphin in River Ganga. A recent biological survey of benthic macro-invertebrates in River Ganga, has indicated moderate pollution in biological water quality which required to be upgraded in view of conservation of Gangetic dolphins especially at places of their high numbers.

Maximum dominance of macro-invertebrates,



has been observed in the river stretch from Allahabad (Uttar Pradesh) to Buxar (Bihar) and Farakka Barrage to Tribeni in West Bengal. Most of these invertebrates belonged to Gastropoda, Coleoptera, Odonata, Hemiptera and Crustacea. Similarly, dominance of macro-invertebrates has been observed in stretch of River Ganga in

Bihar (Buxar to Maniharighat). Among all the invertebrates, Gastropods, Hemiptera, Coleoptera and Odonates were dominant species composing the feeding habitat of Gangetic dolphins. Decline in dominance of fresh water invertebrates and Gangetic dolphins in the stretch of West Bengal (Tribeni to Diamond Harbour).indicated impact of salinity on water quality from Bay of Bengal. This stretch was dominated by various species of Crustaceans and Polychaetes.

WASTE WATER QUALITY MONITORING FOR CLEANING RIVER GANGA

- CPCB is regularly monitoring 144 major drains joining entire stretch of River Ganga, at a frequency of six month.