NWMP Monitoring Network

National Water Quality Monitoring Programme (NWMP): -

Central Pollution Control Board (CPCB) in collaboration with State Pollution Control Boards (SPCBs) in the States and Pollution Control Committees (PCCs) in Union Territories has established a National Water Quality Monitoring Network (NWMP) in order to assess status of water quality of water resources and to facilitate for prevention and control of pollution in water bodies.

Water Quality Monitoring Network: Present water quality monitoring network under NWMP comprises 4484 stations onsurface and groundwater in 28 States and 8 Union Territories. Monitoring is carried out with a frequency onmonthly, quarterly, half yearly and yearly basis. Year-wise growth of monitoring network is given in **Figure 1.**

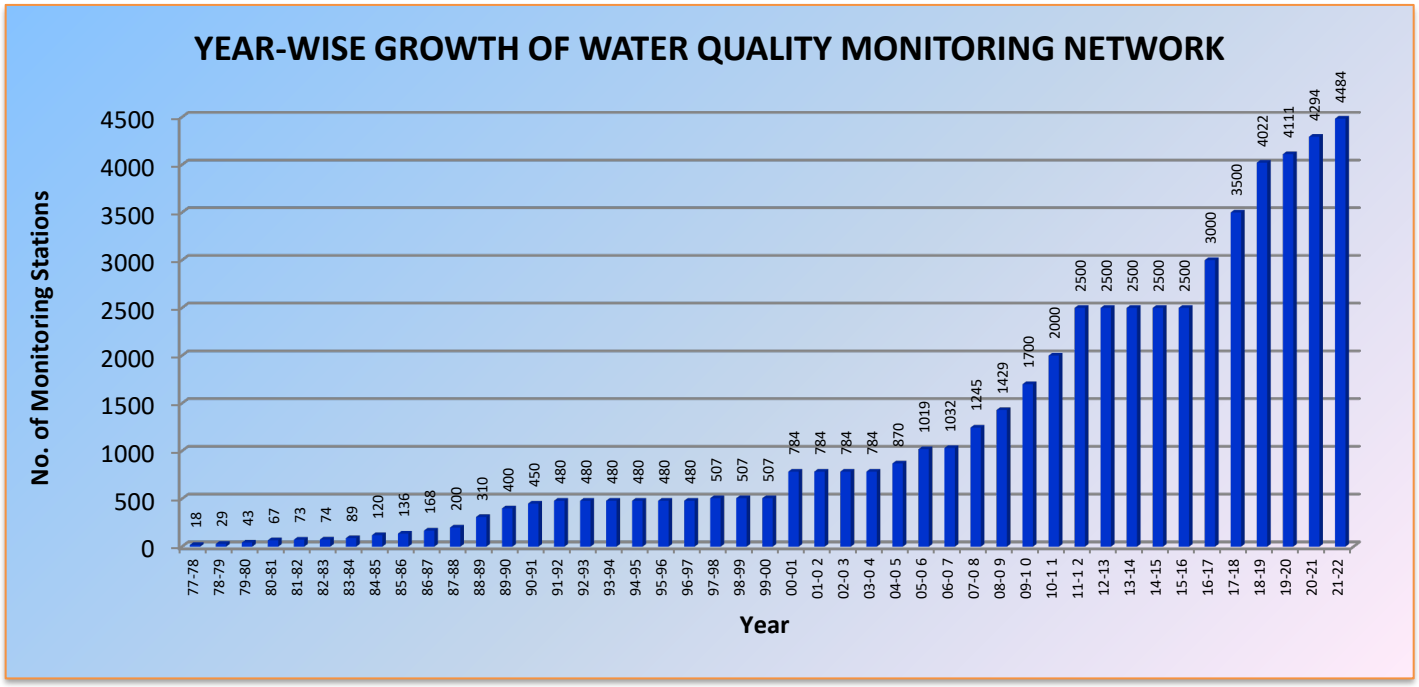
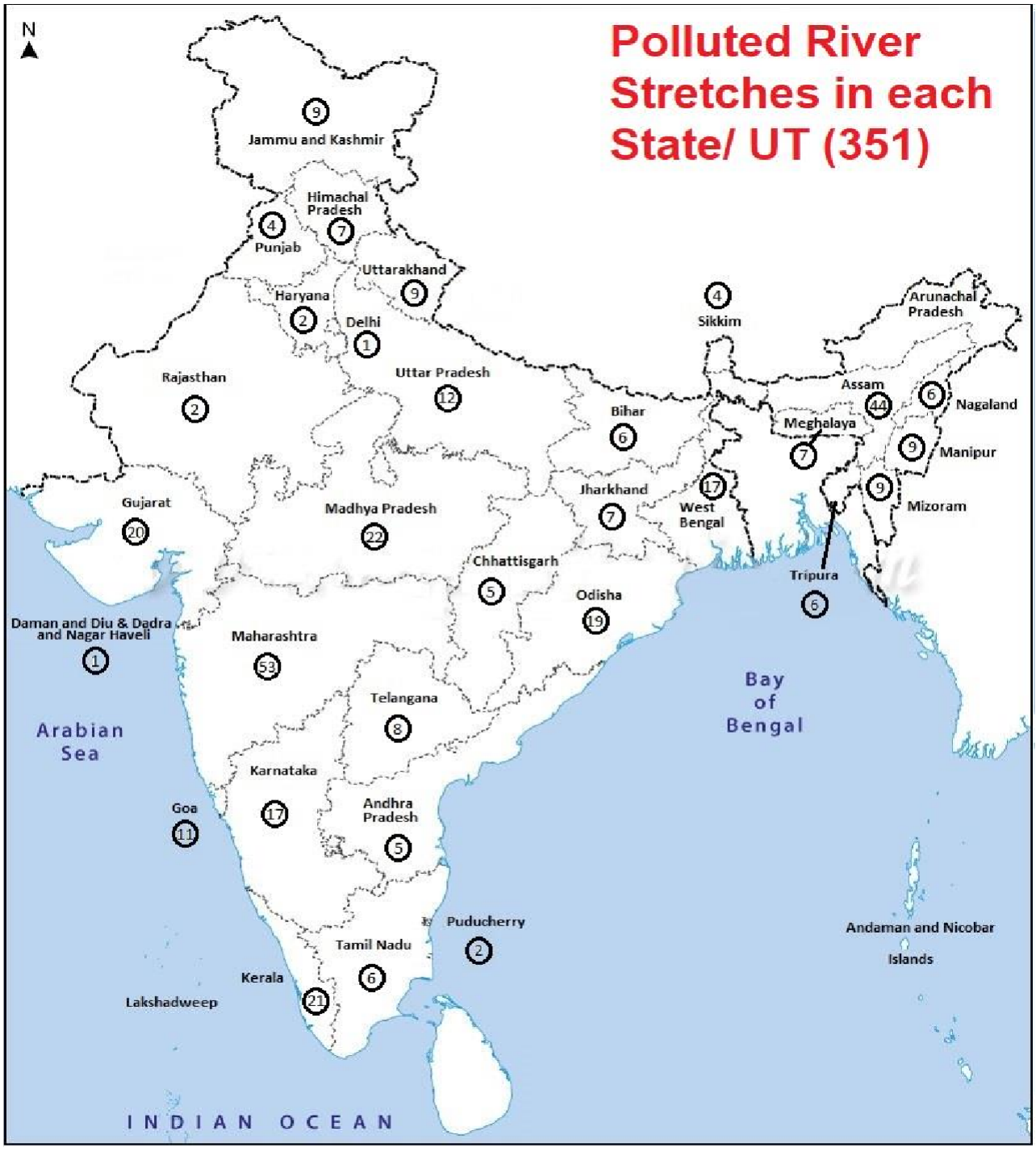


Figure 1. Year-Wise Growth of Water Quality Monitoring Network

Parameters Monitored: Water samples are analyzed for 9 core parameters, 19 general parameters, 9 trace metals and set of pesticides as per Guidelines on Water Quality Monitoring, 2017 issued by Ministry of Environment, Forest and Climate Change (MoEF & CC). Analyzed water quality parameters are compared with the designated best use water quality criteria recommended by CPCB or primary water quality criteria for outdoor bathing notified under The Environment (Protection) Rules, 1986 or BIS Drinking Water Specifications i.e. IS:10500-2012 or water quality standards for coastal water depending on the use of water bodies.

Achievement of Monitoring Programme: Water quality data is used for identification of polluted water bodies, identification of pollution sources in cities for formulation of River Action Plans including interception, diversion and treatment of municipal wastewater, waste management and stricter surveillance of industrial pollution sources. Water quality data is also used for dissemination of information i.e., to reply Parliament Questions, VIP references, Public Queries, for filing replies in Supreme Court, High Courts and in NGT, sharing of information with Non-Governmental Organization, Students, and Researchers.

Water Quality Assessment: Monitoring results obtained based on present network indicate that organic pollution continues to be the predominant source of pollution of aquatic resources. The organic pollution measured in terms of bio-chemical oxygen demand (BOD) & Coliform bacterial count gives indication of extent of water quality degradation in different parts of the Country. Total & Faecal Coliform which indicate presence of pathogens in water bodies is also a major concern. Based on exceedance of bathing water quality criteria limit of BOD, 351 polluted river stretches (**Figure 2**.) were identified in 28 States/3 Union Territories during the year 2018, based on the water quality data for the years 2016 & 2017.



Perspective Planning: Strengthening of monitoring network to cover 5000 locations by 2025 is envisaged.