Programme Objectives Series: PROBES/151/2026-27







REPORT ON

ANNUAL ACTIVITIES UNDER NAMAMI GANGE PROGRAMME

2025-26

CPCB

CENTRAL POLLUTION CONTROL BOARD

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

GOVERNMENT OF INDIA

REPORT
ON
ANNUAL ACTIVITIES UNDER
NAMAMI GANGE PROGRAMME 2025-26

NOVEMBER, 2026

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LIST OF ABBREVIATIONS

Abbreviation	Full Form
A2O	Anaerobic–Anoxic–Aerobic
ACF	Activated Carbon Filter
APCD	Air Pollution Control Device
APHA	American Public Health Association
ASP	Activated Sludge Process
BDL	Below Detection Limit
BMWP	Biological Monitoring Working Party
BMWQ	Biological Water Quality
BOD	Biochemical Oxygen Demand
BRS	Brine Recovery System
BSPCB	Bihar State Pollution Control Board
BTT	Bio Tower Technology
BWQC	Biological Water Quality Criteria
CCA	Consolidated Consent & Authorization
CETP	Common Effluent Treatment Plant
CMS	Chemical Management System
COD	Chemical Oxygen Demand
CPCB	Central Pollution Control Board
CPHEEO	Central Public Health and Environmental Engineering Organisation
CPU	Condensate Polishing Unit
CWS	Constructed Wetland System
DAF	Dissolved Air Flotation
DDGS	Distillers Dried Grains with Solubles
DJB	Delhi Jal Board
DMF	Dual Media Filter
DO	Dissolved Oxygen
DQSC	Data Quality and Surveillance Consultant
DSP	Data Service Provider
EA	Executing Agency
EC	Electrocoagulation
EMC	Environment Management Cell
ETP	Effluent Treatment Plant
EWQDES	Environmental Water Quality Data Entry System
FAB	Fluidized Aerobic Bioreactor
FBAS	Fixed-Bed Activated Sludge
FC	Faecal Coliform
FCR	Food Chain Reaction
FDS	Filterable Dissolved Solids
FMC	Force Majeure Conditions
FS	Faecal Streptococci
FSTP	Faecal Sludge Treatment Plant
GPI	Grossly Polluting Industry
GST	Goods and Services Tax
HCH	Hexachlorocyclohexane
HPPCB	Himachal Pradesh Pollution Control Board
HSPCB	Haryana State Pollution Control Board
IMP	Irrigation Management Plan
JHPCB	Jharkhand State Pollution Control Board
KL/KL	Kilo Litres per Kilo Litre
KL/MT	Kilo Litres per Metric Tonne
KLD	Kilo Litres per Day
L/T	Litres per Tonne
LTP	Leather Technology Park
MEE	Multi-Effect Evaporator
MGF	Multi-Grade Filter
MLD	Million Litres per Day

MLSS	Mixed Liquor Suspended Solids
MLVSS	Mixed Liquor Volatile Suspended Solids
MoEF&CC	Ministry of Environment, Forest and Climate Change
MPN	Most Probable Number
MPR	Multi Pressure Distillation
MTD	Metric Tonnes per Day
NABL	National Accreditation Board for Testing and Calibration Laboratories
NGP	Namami Gange Programme
NGT	National Green Tribunal
NITRA	Northern India Textile Research Association
NMCG	National Mission for Clean Ganga
NOC	No Objection Certificate
NWMP	National Water Quality Monitoring Programme
OCEMS	Online Continuous Effluent Monitoring System
OCP	Organochlorine Pesticide
OP	Oxidation Pond
OPP	Organophosphorus Pesticide
PCC	Pollution Control Committee
PETP	Primary Effluent Treatment Plant
PIAS	Pollution Inventorization, Assessment and Surveillance
PIL	Public Interest Litigation
PSM	Process Safety Management
PTZ	Pan-Tilt-Zoom
RCF	Recycled Fibre
RPCA	Rooma Pollution Control Association
RTI	Right to Information
RTWQM / RTWQMS	Real Time Water Quality Monitoring / Station
SAR	Sodium Adsorption Ratio
SBR	Sequential Batch Reactor
SBT	Soil Bed Technology
SER	Strengthening of Environmental Regulators
SMCG	State Mission for Clean Ganga
SOP	Standard Operating Procedure
SPCB(s)	State Pollution Control Board(s)
SPS	Sewage Pumping Station
SPV	Special Purpose Vehicle
SRS	Sulphur Removal System
STP	Sewage Treatment Plant
TCD	Tonnes of Cane Crushed per Day
TDS	Total Dissolved Solids
TF	Trickling Filter
TKN	Total Kjeldahl Nitrogen
TOC	Total Organic Carbon
TPD	Tonnes per Day
TSS	Total Suspended Solids
UASB	Upflow Anaerobic Sludge Blanket
UKPCB	Uttarakhand Pollution Control Board
UPGWD	Uttar Pradesh Ground Water Department
UPPCB	Uttar Pradesh Pollution Control Board
UPSIDC	Uttar Pradesh State Industrial Development Corporation
UV	Ultraviolet (Disinfection)
WBPCB	West Bengal Pollution Control Board
WISKI	Water Information System Kisters
WQM	Water Quality Monitoring
WSP	Waste Stabilization Pond
WTP	Water Treatment Plant
ZLD	Zero Liquid Discharge

EXECUTIVE SUMMARY

The Namami Gange Programme (NGP), launched by the Government of India in 2014, is being implemented by the National Mission for Clean Ganga (NMCG) in association with the State Missions for Clean Ganga (SMCGs) to achieve the objectives of pollution abatement, conservation and rejuvenation of the River Ganga. The Central Pollution Control Board (CPCB), in coordination with NMCG, continues to support these efforts through the implementation of three major initiatives: Pollution Inventorization, Assessment and Surveillance (PIAS), Strengthening of Environmental Regulators (SER) and the Water Quality Monitoring (WQM) System for River Ganga. Through these initiatives, CPCB monitors wastewater generation, collection, conveyance and treatment infrastructure, while evaluating the performance and compliance of sewage and effluent treatment facilities. This report presents a consolidated account of the activities undertaken and the key achievements accomplished by CPCB during the year 2025 under these projects.

The PIAS project focuses on the identification and assessment of pollution sources and the estimation of pollutant load entering the River Ganga and its tributaries. The WQM project facilitates continuous assessment of river water quality through a network of 40 real-time, sensor-based monitoring stations. In addition, CPCB carries out bi-annual biological monitoring of the Rivers Ganga and Yamuna at 42 and 26 designated locations, respectively, along with tributaries of River Ganga and Yamuna (08 nos each of river Ganga and Yamuna), to evaluate their ecological health and aquatic integrity. The SER project aims to strengthen the environmental regulatory framework and enhance water quality monitoring capabilities across the Ganga basin states of Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal, in collaboration with the respective State Pollution Control Boards (SPCBs), thereby supporting effective implementation of the provisions of the Water (Prevention and Control of Pollution) Act, 1974.

CPCB has been carrying out annual inspection of Grossly Polluting Industries (GPIs) in the Ganga basin since 2017 through third-party technical institutes in collaboration with the SPCBs. From 2020 onwards, GPIs located in the Yamuna main stem states have also been included under the annual inspection programme. During 2025, the 8th round of inspections in the Ganga main stem and the 5th round in the Yamuna main stem were undertaken through 25 technical institutes, covering 3662 GPIs across 113 districts with potential discharge into 46 tributaries/sub-tributaries of the Ganga and Yamuna rivers. Out of 3,662 inspected units, 3,114 units were operational, with 2,188 complying and 926 found non-complying with respect to discharge norms or not having valid consent/authorization/NOC. The inspections revealed total freshwater consumption of 1,042.16 MLD and wastewater discharge of 403.69 MLD, contributing an estimated BOD pollution load of 12.02 TPD. Compared to 2024, a reduction in the number of GPIs as well as a significant decline in pollution load from key industrial sectors was found, particularly tanneries (from 4.92 TPD to 2.35 TPD) and sugar industries (from 2.75 TPD to 1.92 TPD) along the Ganga main stem.

Tri-annual monitoring of 8 Common Effluent Treatment Plants (CETPs) & Sewage Treatment Plants (STPs) (Ganga-167; Yamuna-100) for compliance verification and performance evaluation and bi-annual monitoring of drains (Ganga-716 during pre-monsoon & 739 during post-monsoon; Yamuna-163 during post-monsoon 2025) was carried out by CPCB during 2025-26. The inspections revealed that several CETPs continued to operate below their designed capacities and exhibited persistent non-compliance with prescribed discharge standards. Major issues observed included inadequate or obsolete treatment technologies, improper operation and maintenance of CETPs and member industries' Primary Effluent Treatment Plants (PETPs), non-compliance with prescribed inlet effluent quality norms, variable organic loading and inadequate capacity utilization. CPCB issued directions/letters to the concerned State Pollution Control Boards for corrective actions and recommended upgradation of treatment technologies, strengthening of surveillance of

member industries, improved operation and maintenance of CETPs and PETPs, regular calibration and maintenance of Online Continuous Effluent Monitoring Systems (OCEMS) and implementation of sector-specific cleaner production measures for achieving sustained compliance.

In the Ganga basin, 10 CETPs were monitored during the annual inspection through third party technical institutes. Nine CETPs were found operational during the monitoring period, of which 6 CETPs (67%) were found complying and 3 CETPs were non-complying with the prescribed discharge standards and one CETP of Jharkhand was found non-operational. The cumulative installed treatment capacity of these CETPs was 86.03 MLD, against which the utilized capacity was 43.18 MLD (50.2%), indicating significant under-utilization of the available treatment infrastructure.

In the Yamuna basin, 31 CETPs were monitored during the annual inspection through third party technical institutes. All CETPs were operational during the monitoring period, of which 23 CETPs (74%) were found complying and 8 CETPs were non-complying with the prescribed discharge standards. The cumulative installed treatment capacity of these CETPs was 432.03 MLD, against which the utilized capacity was 243.13 MLD (56%), indicating significant under-utilization of the available treatment infrastructure.

During 2025-26, tri-annual monitoring of 167 Sewage Treatment Plants (STPs) located in 73 Ganga-front towns across Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal was carried out, covering an installed treatment capacity of 3222.65 MLD. A total of 624 monitoring events of commissioned STPs were undertaken during 2025-26, while implementation progress of 89 non-commissioned STPs was also assessed. Different sewage treatment technologies are in operation, with Sequential Batch Reactor (SBR) systems continuing to be the most widely adopted technology. Of the commissioned STPs monitored, 141–145 plants were operational during each monitoring round, with average capacity utilization ranging between 70.9% and 74.3%, indicating that under-utilization of installed capacity remains a major operational challenge. While compliance with pH and TSS standards consistently exceeded 96% and BOD compliance ranged between 80% and 89%, compliance with faecal coliform standards remained low (41–56%), highlighting the need for optimization of disinfection systems. Overall BOD removal efficiency remained high, achieving 84–87% reduction in organic pollution load across the monitoring rounds. Major issues identified include non-compliance with faecal coliform standards, weak-strength sewage at STP inlets, continued operation of non-functional or obsolete STPs, widespread under-capacity operation due to incomplete sewerage networks and localized over-capacity operation in rapidly growing urban centres. CPCB communicated monitoring findings to the concerned State Government agencies, STP operating agencies, NMCG and SMCGs for corrective action, while recommending augmentation of sewerage networks, optimization of disinfection systems, installation of OCEMS/flow meters, improved operation and maintenance, rehabilitation of non-operational STPs and enhanced utilization and reuse of treated wastewater.

During August–November 2025, CPCB monitored 100 Sewage Treatment Plants (STPs) located in 20 Yamuna-front towns across Delhi, Haryana, Uttar Pradesh and Himachal Pradesh, covering an installed treatment capacity of 5210.43 MLD. Of the monitored STPs, 96 were operational, while four STPs were under commissioning/non-operational during the monitoring period. Sequential Batch Reactor (SBR) technology continued to be the most widely adopted treatment process across the basin. Large-sized STPs (>25 MLD) accounted for the majority of the installed treatment capacity in Delhi, Haryana and Uttar Pradesh. Monitoring indicated that although compliance with pH standards remained consistently high (89–100%), compliance with TSS, BOD, COD and particularly Faecal Coliform (FC) standards remained unsatisfactory in many STPs. Overall FC compliance ranged from nil in Himachal Pradesh to 32.8% in Uttar Pradesh, highlighting the need for optimization of disinfection systems and improved operation and

maintenance. Capacity utilization varied considerably across the states, ranging from about 43% in Himachal Pradesh to over 90% in Delhi, indicating that under-utilization of installed treatment capacity continues to be a significant operational challenge in several locations. CPCB communicated the monitoring findings to the concerned state agencies for corrective action, organized capacity-building programmes for STP operators and supported ongoing initiatives for augmentation and upgradation of sewage treatment infrastructure, including adoption of advanced treatment technologies, decentralized STPs and improved disinfection systems to achieve prescribed discharge standards and support the rejuvenation of River Yamuna.

Half-yearly monitoring of drains discharging into River Ganga and its tributaries was carried out during pre-monsoon and post-monsoon 2025 across the five Ganga main stem states of Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal. A total of 716 drains were monitored during the pre-monsoon season and 739 during the post-monsoon season, following an updated inventory that included an increase in the number of identified drains in West Bengal. Monitoring revealed that a large proportion of drains remain untapped or only partially tapped to sewage treatment plants, with frequent overflow from tapped drains. During post-monsoon monitoring, the 739 drains collectively discharged about 12,582 MLD of wastewater with an estimated BOD pollution load of 811.7 TPD, of which untapped drains alone contributed nearly 80% of the total BOD pollution load. Interim remediation measures, predominantly bio-remediation, phytoremediation and constructed wetlands, were implemented in 69 drains, primarily in Uttar Pradesh; however, several installations were found non-functional, poorly maintained or ineffective. Nevertheless, more than 40% reduction in BOD was observed in 11 drains, demonstrating the potential of these technologies when properly designed and maintained. Compared to 2016, the proportion of tapped drains has increased substantially from 3% to 39.5%, reflecting progress in sewerage interception and diversion, although significant gaps remain. Drains discharging wastewater from 13 priority cities/towns—Kashipur, Meerut, Bulandshahar, Moradabad, Kanpur, Prayagraj, Varanasi, Patna, Kolkata, Bahrampore, Bhatpara, Uluberia and Howrah-contributed 60.3% of the total wastewater flow and 73.0% of the total BOD pollution load.

Half-yearly monitoring of 163 drains discharging directly into River Yamuna was carried out during the post-monsoon season of 2025 across the five Yamuna main stem states of Uttarakhand, Himachal Pradesh, Haryana, Delhi and Uttar Pradesh. The monitored drains collectively discharged about 6,085 MLD of wastewater with an estimated BOD pollution load of 500.16 TPD, of which 112 untapped drains contributed nearly 82% of the total flow and 83% of the total BOD pollution load. Monitoring revealed that 51 drains were tapped or partially tapped, although frequent overflows and inadequate tapping arrangements were observed in several locations. Interim remediation measures were implemented in only 9 drains, while many untapped drains continued to discharge untreated wastewater directly into the river. In addition, CPCB, in coordination with NMCG, DPCC and DJB, undertook monthly joint monitoring of the Sahibi River (Najafgarh Drain) and Shahdara Drain networks at 52 locations in the Delhi–NCR stretch to identify pollution hotspots and support targeted interventions. The monitoring identified severe organic pollution in several major and interstate drains, with the Sahibabad Drain, Mungeshpur Drain, New Moti Nagar Drain, Shahdara Drain and Palam Drain emerging as key pollution hotspots due to discharge of untreated domestic sewage, industrial effluents, solid waste dumping and inadequate or non-functional tapping arrangements.

CPCB continued manual water quality monitoring of River Ganga during 2025 through a network of 112 monitoring locations across five basin states, comprising Uttarakhand (19), Uttar Pradesh (41), Bihar (33), Jharkhand (4), and West Bengal (15). Water quality was assessed with respect to primary water quality criteria. Assessment of the 2025 monitoring data indicated that pH complied with the bathing water quality criteria at all monitoring locations, while DO met the

criteria at all assessed locations. BOD complied at most locations, with isolated non-compliance observed in selected stretches of Uttar Pradesh. Compared to 2024, improvements were observed at 91 locations for DO, 67 locations for BOD, 65 locations for Faecal Coliform, and 50 locations for Faecal Streptococci. In addition, a network of 40 Real-Time Water Quality Monitoring (RTWQM) stations on River Ganga and its tributaries also exists.

Manual water quality monitoring of River Yamuna is carried out by CPCB through SPCBs/PCCs at 33 locations across Uttarakhand (4), Himachal Pradesh (4), Haryana (6), Delhi (7), and Uttar Pradesh (12). Water quality was assessed with respect to primary water quality criteria.

During 2025, CPCB conducted five rounds of fortnightly joint monitoring (December 2024–February 2025) of River Ramganga, its tributaries (Dhela, Bahela and Kosi), and adjoining drains in Udham Singh Nagar (Uttarakhand) and Moradabad (Uttar Pradesh) to assess water quality of the River Ganga at Prayagraj. The monitoring revealed relatively better water quality in River Ramganga and River Kosi, while Rivers Dhela and Bahela were significantly polluted due to the discharge of highly contaminated drains, particularly Dhandhi, Choti Dhandhi, Pachhana and Rampur drains, carrying high organic pollution loads into the river system.

A total of 126 biomonitoring events were conducted during 2025 in two monitoring rounds at 42 locations on River Ganga and 26 locations on River Yamuna using benthic macro-invertebrates as bio-indicators. Biological assessment showed that River Ganga largely exhibited “Good” to “Very Good” biological water quality in the upper reaches of Uttarakhand, while downstream stretches across Uttar Pradesh, Bihar, Jharkhand and West Bengal were predominantly classified as “Good” to “Moderate”, with localized influences from barrages, anthropogenic activities, wastewater discharges, solid waste dumping and reduced river flow. None of the monitored locations exhibited “Poor” or “Severe” biological water quality. In River Yamuna, the upper reaches in Uttarakhand and Himachal Pradesh generally showed “Good” biological water quality, whereas stretches through Haryana, Delhi and parts of Uttar Pradesh were predominantly “Moderate”, reflecting higher anthropogenic pressures. Long-term biological water quality trends indicate sustained “Good” to “Very Good” conditions in the upper reaches of River Ganga and gradual improvement at several locations, including the downstream stretch of Jagjeetpur, while River Yamuna continues to exhibit persistent “Moderate” biological water quality through the urban Delhi stretch, with improvements observed in the lower reaches downstream of major tributary confluences.

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SECTION 1: INTRODUCTION

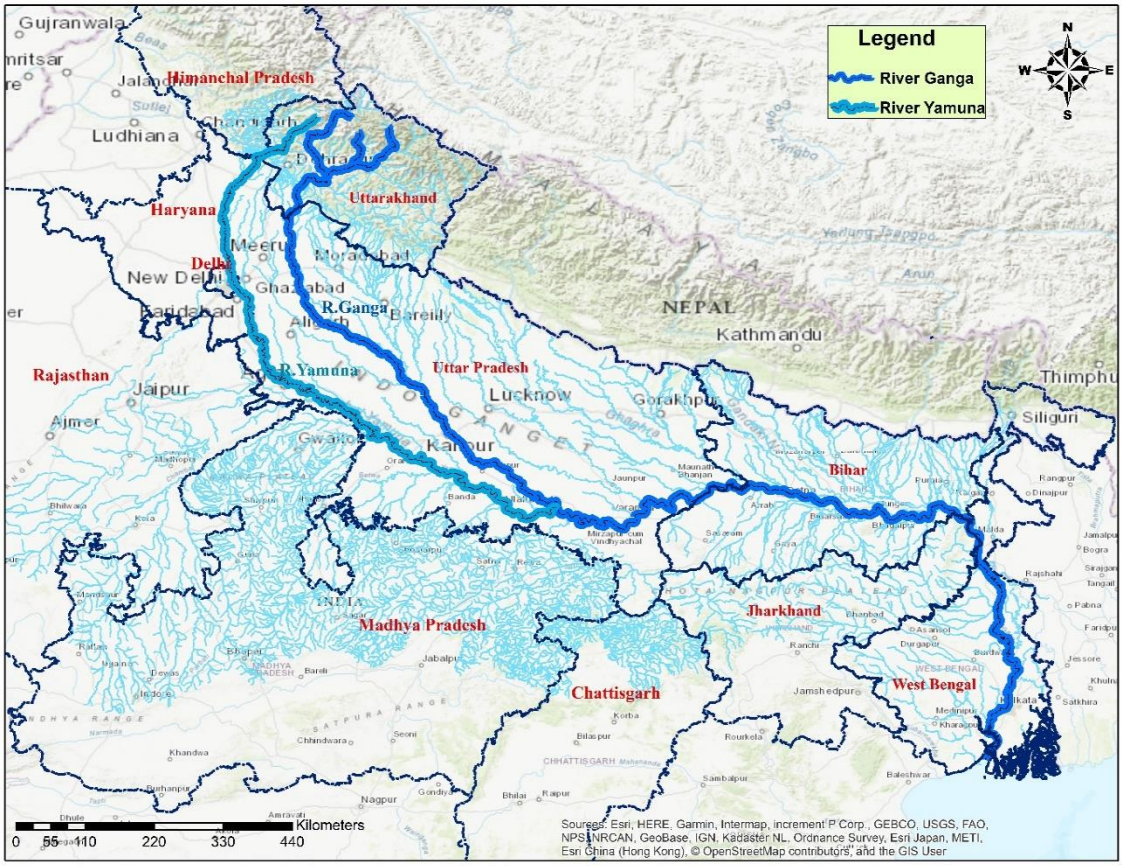


Figure 1.1 Location map showing basin of River Ganga and Yamuna

1.1 River Ganga:

The River Ganga, one of the world's most significant river systems, originates from the Gangotri Glacier at Gaumukh in Uttarakhand at an elevation of approximately 4,100 m above mean sea level. Traversing nearly 2,525 km, it flows through the states of Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal before discharging into the Bay of Bengal. The Ganga basin extends over 861,404 km², accounting for nearly 26% of India's geographical area, and supports approximately 43% of the country's population, making it the most densely populated river basin in India (**Figure 1.1**). Besides sustaining millions of people, the river is of immense ecological, economic, cultural and spiritual significance. Despite its importance, the River Ganga continues to face significant environmental challenges arising from rapid urbanization, industrialization, population growth, and changing land-use patterns. Large quantities of untreated and partially treated municipal sewage, industrial effluents and solid waste enter the river directly or through its tributaries, adversely affecting water quality and aquatic ecosystems. Agricultural runoff, indiscriminate disposal of solid waste and encroachments further aggravate the pollution scenario, threatening biodiversity, public health and the livelihoods dependent on the river.

Recognizing the urgent need for restoring the ecological integrity of the river, the Government of India launched the Namami Gange Programme (NGP) in 2014 as a flagship initiative for the conservation, protection, and rejuvenation of the National River Ganga. The programme is implemented by the National Mission for Clean Ganga (NMCG) in coordination with the State Missions for Clean Ganga (SMCGs) through an integrated river basin management approach encompassing pollution abatement, river conservation, ecological restoration, public awareness and sustainable development.

1.2 River Yamuna:

The Yamuna River is one of India's most important rivers and the largest tributary of the Ganga River. Originating from the Yamunotri Glacier in the lower Himalayas at an elevation of about 6,387 m in Uttarakhand, it flows approximately 1,376 km through the states of Uttarakhand, Himachal Pradesh, Haryana, Delhi, and Uttar Pradesh before joining the Ganga at Triveni Sangam at Prayagraj (**Figure 1.1**). The river basin covers about 3.66 lakh km², accounting for nearly 40% of the Ganga Basin. Nearly 57 million people depend on the Yamuna's waters, and the river accounts for more than 70 percent of Delhi's water supply. It has an annual flow of 97 billion cubic metres, and nearly 4 billion cubic metres are consumed every year (of which irrigation constitutes 96%).

The Yamuna is a vital source of drinking water, irrigation, industrial water supply, and ecological services for millions of people. It is particularly significant for the National Capital Territory of Delhi, where nearly 70% of the city's drinking water demand depends on the river. However, rapid urbanization, population growth, industrialization, and inadequate sewage infrastructure have severely degraded the river's water quality, especially in the Delhi stretch, which contributes a disproportionately high pollution load despite constituting only about 2% of the river's length.

To address these challenges, the Government of India has implemented several river conservation initiatives over the past three decades, culminating in a comprehensive Yamuna Rejuvenation Plan that integrates pollution abatement, sewage management, industrial regulation, riverfront restoration, and ecological conservation.

For the rejuvenation and pollution abatement of the Yamuna River in Delhi, governance and monitoring are structured through specific multi-tier bodies: The High Level Committee (HLC), The Executive Committee (EC), and Central Monitoring Committees (CMC). The High Level Committee (HLC) is constituted under the Chairmanship of Hon'ble Chief Minister, Delhi to oversee and guide the rejuvenation of the Yamuna river in Delhi ensuring a comprehensive and sustainable approach to restore its ecological health and aesthetic value. First HLC meeting was conducted on 21.01.2026. The Executive Committee (EC) is constituted under the Chairpersonship of the Hon'ble Chief Secretary, Delhi to execute the directions of HLC. At Central Level the progress of implementation of action plans of States / UTs is reviewed by the Central Monitoring Committee (CMC) constituted under the Chairmanship of Hon'ble Secretary, Ministry of Jal Shakti.

1.3 Namami Gange Projects implemented at CPCB:

The Central Pollution Control Board (CPCB) is the Executing Agency (EA) for three major projects under the Namami Gange Programme: **(i)** Pollution Inventorization, Assessment and Surveillance on River Ganga Basin (PIAS); **(ii)** Strengthening of Environmental Regulators (SER) - CPCB; and **(iii)** Water Quality Monitoring (WQM) System for River Ganga. The financial expenditure incurred under these projects is presented in **Appendix 1.1**.

The **PIAS Project** aims to comprehensively assess pollution sources and prioritize remedial measures across the Ganga basin. The project involves inventorization of pollution sources, assessment of pollution load entering the River Ganga and its tributaries, identification and characterization of major drains and evaluation of the quantity and quality of wastewater discharged into the river system. The project covers major tributaries including the Banganga, Ramganga, Kali (East), Pandu and the Hindon sub-basin comprising the Hindon, Kali (West), and Krishni rivers. The **Water Quality Monitoring (WQM) Project**, supported by the World Bank, focuses on strengthening water quality assessment through a combination of real-time water quality monitoring (RTWQM) and biological monitoring. CPCB operates a continuous RTWQM network along the River Ganga using sensor-based monitoring systems. In addition, biomonitoring of the Rivers Ganga, Yamuna, and their major tributaries is undertaken on a half-yearly basis (pre- and post-monsoon) to assess the ecological health of river stretches. The **Strengthening of Environmental Regulators (SER) Project** enhances the national water quality monitoring framework through a network of 112 monitoring locations established on the main stem of the River Ganga and 33 monitoring locations established on the main stem of the River Yamuna under the National Water Quality Monitoring Programme (NWMP). These monitoring stations are operated in collaboration with the respective State Pollution Control Boards (SPCBs)/Pollution Control Committee (PCC). Monitoring is carried out in accordance with the provisions of

the Water (Prevention and Control of Pollution) Act, 1974 and the Standard Operating Procedures (SOPs) prescribed by CPCB.

The implementation of these projects is coordinated by the Water Quality Monitoring-II (WQM-II) Division of CPCB, with engagement of WQM-I Division for RTWQM and Bioscience Laboratory at CPCB Head Office, Delhi, for bio-monitoring. CPCB Regional Directorates at Lucknow and Kolkata play a vital role in field implementation through performance evaluation and monitoring of Sewage Treatment Plants (STPs), Common Effluent Treatment Plants (CETPs), drains, bio-monitoring, industrial inspections, etc.

The CPCB undertakes regular assessment of domestic and industrial wastewater generation, its conveyance, and treatment, along with evaluating the performance of Effluent Treatment Plants (ETPs) and Sewage Treatment Plants (STPs) established along the River Ganga.

This report presents the activities undertaken, key findings, monitoring outcomes, and progress achieved by CPCB under the Namami Gange Programme during the year 2025-26, highlighting the initiatives implemented towards the conservation, pollution abatement, and rejuvenation of the River Ganga.

SECTION 2: INDUSTRIAL POLLUTION CONTROL

CPCB conducted third party inspection of Grossly polluting industries and CETPs facilities under PIAS project annually. Annually, inventory of GPIs is being finalized and updated in consultation with concerned State Pollution Control Boards (SPCBs)/Pollution Control Committee (PCC). Common Effluent Treatment Plants (CETPs) located in the industrial clusters are also covered under this exercise.

2.1 Annual Inspection of Grossly Polluting Industries during 2025-26 through TPA

Grossly Polluting Industries (GPIs) are defined as "industries having potential to discharge 100 kg/day BOD (Bio-chemical oxygen demand) load or uses or produces substances containing hazardous/toxic chemicals as per Manufacturing, Storage and Import of Hazardous Chemicals Rules (MSIHC), 1989, that leads to generation of toxic effluent. Under PIAS Project, WQM-II division organizes annual inspection of Grossly Polluting Industries (GPIs) and Common Effluent Treatment Plants (CETPs) located in Ganga main stem states namely Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal, since 2017, in association with various knowledge partners (third party technical institutes) like IITs, NITs and other expert institutes. Year 2020 onwards, GPIs operating in river Yamuna main stem states namely Uttarakhand, Haryana, NCT-Delhi and Uttar Pradesh were also included under the ambit of annual inspection. Since 2017, eight rounds of inspections in Ganga main stem and five rounds in Yamuna main stem have been completed. During 2025-26, total number of 3703 inspection completed (3662 GPIs and 41 CETPs). A brief account of state wise changes in the GPIs inventory is reflected in ***Fig 2.1 & Table 2.1.***

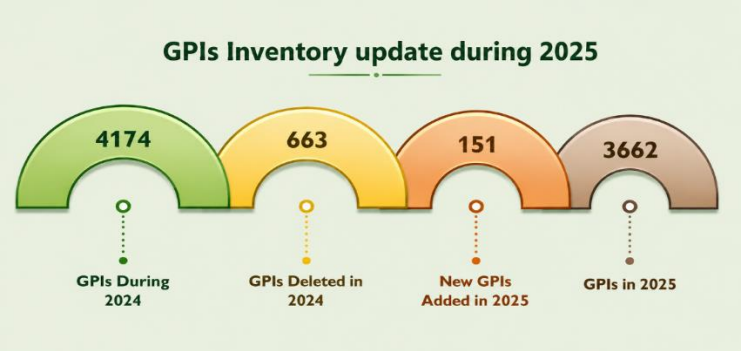


Figure 2.1: GPIs Inventory Status

Table 2.1: State-wise changes in GPI inventory from 2024 to 2025

State	GPIs during 2024	GPIs deleted	New GPIs added	GPIs in 2025
Uttarakhand	89	8	2	83
Haryana	1542	117	23	1448
Delhi	176	25	0	151
Uttar Pradesh	2178	503	109	1784
Bihar	105	8	7	104
Jharkhand	19	2	10	27
West Bengal	65	0	0	65
Total	**4174**	**663**	**151**	**3662**

State and sector wise distribution of 3662 GPIs are shown in **Table 2.2**.

Table 2.2: State and sector wise distribution of 3662 GPIs

Sector	Uttara-khand	Haryana	Delhi	Uttar Pradesh	Bihar	Jhar-khand	West Bengal	Total
Chemical	5	97	0	65	2	3	10	182
Distillery	5	11	0	92	21	5	5	139
Food & Beverages	13	141	3	104	44	6	11	322
Others*	6	516	113	284	9	10	11	949
Pulp & Paper	34	3	0	100	7	3	22	169

Sector	Uttara-khand	Haryana	Delhi	Uttar Pradesh	Bihar	Jhar-khand	West Bengal	Total
Slaughter House	10	15	1	63	6	0	0	95
Sugar	8	7	0	124	10	0	1	150
Tannery	0	18	0	400	2	0	0	420
Textile	2	640	34	552	3	0	5	1236
Total	**83**	**1448**	**151**	**1784**	**104**	**27**	**65**	**3662**
Others- majorly electroplating, metal surface treatment and automobile units.								

These 3662 GPIs are located in 113 districts and has the potential to discharge into 46 tributaries/sub-tributaries of river Ganga and River Yamuna. Out of total 3662 GPIs in river Ganga basin, 1286 GPIs are operating in river Ganga main stem states of Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal whereas 2376 GPIs are operating in river Yamuna main stem states of Uttarakhand, Haryana, Delhi and Uttar Pradesh. State and sector wise distribution of GPIs in river Ganga and Yamuna main stem stretches are listed in **Table 2.3** and **Table 2.4**, respectively.

Table 2.3: State and sector wise distribution of 1286 GPIs in river Ganga main stem

Sector	Bihar	Jharkhand	UP	UK	WB	Total
Chemical	2	3	33	4	10	52
Distillery	21	5	73	4	5	108
Food & Beverages	44	6	50	12	11	123
Others	9	10	166	6	11	202
Pulp & Paper	7	3	44	28	22	104
Slaughter House	6	0	19	10	0	35
Sugar	10	0	104	6	1	121
Tannery	2	0	390	0	0	392
Textile	3	0	139	2	5	149
Total	**104**	**27**	**1018**	**72**	**65**	**1286**

Table 2.4: State and sector wise distribution of 2376 GPIs in river Yamuna main stem

Sector	Delhi	Haryana	UP	UK	Total
Chemical	0	97	32	1	130
Distillery	0	11	19	1	31
Food & Beverages	3	141	54	1	199
Others	113	516	118	0	747
Pulp & Paper	0	3	56	6	65
Slaughter House	1	15	44	0	60
Sugar	0	7	20	2	29
Tannery	0	18	10	0	28
Textile	34	640	413	0	1087
Total	**151**	**1448**	**766**	**11**	**2376**

2.1.1 Work accomplished during 2025-26

The inspections of the GPIs were carried out on surprise basis by the joint teams of experts from third party technical institutes (one faculty member and one Research Scholar) and concerned SPCBs/PCC. During 2025, for inspection of 3662 GPIs, 25 technical institutes were engaged. Apart from inspections, nodal agencies were identified for compilation of sector specific reports; IIT Delhi for Pulp & Paper sector, ICT Mumbai for Textile sector; NSI Kanpur for Sugar sector; VSI Pune for Distillery sector; JMI for Slaughter House; CLRI for Tannery; NIT Delhi for Food, Dairy & Beverages and IIT Roorkee for Chemical and Others sectors.

- Inspection of all 3512 GPIs (except 150 sugar units), were completed from March 20, 2025 to October 31, 2025. Inspection of sugar mills were completed from November 24, 2025 to January 30, 2026. All inspection reports were uploaded on web-portal by March 09, 2026 for action by concerned SPCBs/PCC and the actions got completed by May, 2026. During this period, around 25 weekly meetings were

organized to review the progress of inspection & report submission by technical institutes and action by SPCBs/PCC.

- During inspections, technical institutes reported about 57 cases related to bypass of untreated effluent, non-operational ETP/PETP, non-cooperation and entry denied by GPIs. These cases were forwarded to the concerned SPCBs/PCCs for priority action. Among 57 GPIs, concerned SPCBs/PCC issued 18 SCN and 10 closure directions. State-wise details are as follow:

Table 2.5: State-wise compliance status of bypass, non-operational ETP/PETP, non-cooperation and entry denied by GPIs

State	No. of GPIs	Cases				Action taken by SPCBs/PCC				
		By-pass	Bypass and non-operational ETP/PETP	Entry denied	Non-operational ETP/PETP	Temporary Closed	Permanent Closed	Complied	Non-Complied	
									SCN	Closure
Bihar	2	2	0	0	0	0	0	0	1	1
Delhi	1	1	0	0	0	0	0	1	0	0
Haryana	21	5	0	11	5	1	1	11	8	0
Uttar Pradesh	31	11	6	9	5	0	0	14	9	8
Uttarakhand	1	1	0	0	0	0	0	0	0	1
West Bengal	1	1	0	0	0	0	0	1	0	0
Grand Total	57	21	6	20	10	1	1	27	18	10

2.1.2 Data generation and regulatory actions based on inspection of GPIs

As this chapter focuses on the GPIs only, other details w.r.t 41 CETPs monitoring carried out by technical institutes will be covered at ***Section 2.2***.

During inspections, out of 3662 GPIs, 3114 were found operational and 548 were non-operational. Out of 3114 operational GPIs, 2188 were complying and 926 were non-complying w.r.t discharge norms or not having valid consent to operate/hazardous waste authorization/NOC from concerned ground water authority. SPCBs/PCC issued show cause notices to 912 non-complying GPIs and closure directions to remaining 14 non-complying GPIs. The state- and sector-wise compliance status of GPIs is listed at **Table 2.6 (a & b).**

Table 2.6 (a): State-wise status of inspected GPIs (As on date of inspection)

State	Total GPIs	Operational	Complied	Non-Complied		Self-Closed	
				SCN	Closure	Temporary Closed	Permanent Closed
	a	*b*	*c*	*d=b-c*		*e=a-b*	
Bihar	104	89	71	17	1	8	7
Delhi	151	116	71	44	1	5	30
Haryana	1448	1265	638	624	3	137	46
Jharkhand	27	22	11	11	0	5	0
Uttar Pradesh	1784	1498	1288	203	7	263	23
Uttarakhand	83	70	63	5	2	13	0
West Bengal	65	54	46	8	0	10	1
Total	**3662**	**3114**	**2188**	**912**	**14**	**441**	**107**

Table 2.6 (b): Sector-wise status of inspected GPIs (As on date of inspection)

Sector	No of GPIs	Operational	Complied	Non-Complied		Self-Closed	
				SCN	Closure	Temporary Closed	Permanent Closed
Chemical	182	158	108	49	1	20	4
Distillery	139	96	89	7	0	40	3
Food & Beverages	322	276	196	78	2	37	9
Others	949	853	604	246	3	55	41
Pulp & Paper	169	152	146	6	0	14	3
Slaughter House	95	65	51	12	2	30	0
Sugar	150	142	133	9	0	8	0
Tannery	420	333	288	43	2	80	7
Textile	1236	1039	573	462	4	157	40
Total	**3662**	**3114**	**2188**	**912**	**14**	**441**	**107**

Out of 1286 GPIs operating in ***Ganga main stem***, 1090 were operational and 196 non-operational. Out of 1090 operational GPIs, 934 were complying and 156 were non-complying w.r.t discharge norms or not having valid consent to operate. SPCBs/PCC issued show cause notices to 148 non-complying GPIs and closure directions to remaining 8 non-complying GPIs. State and Sector- wise details of GPIs are given in **Table 2.7 (a & b).**

Table 2.7 (a): State-wise details of complying and non-complying GPIs of river Ganga main stem states (As on date of inspection)

State	No. of GPIs	Operational	Complied	Non-Complied		Self-Closed	
				SCN	Closure	Temporary Closed	Permanent Closed
	a	*b*	*c*	*d=b-c*		*e=a-b*	
Uttarakhand	72	61	54	5	2	11	0
Uttar Pradesh	1018	864	752	107	5	147	7
Bihar	104	89	71	17	1	8	7
Jharkhand	27	22	11	11	0	5	0
West Bengal	65	54	46	8	0	10	1
Total	**1286**	**1090**	**934**	**148**	**8**	**181**	**15**

Table 2.7 (b): Sector-wise details of complying and non-complying GPIs of river Ganga main stem states (As on date of inspection)

Sector	No of GPIs	Operational	Complied	SCN	Closure	Temporary Closed	Permanent Closed
Chemical	52	49	40	9	0	3	0
Distillery	108	73	68	5	0	32	3
Food & Beverages	123	111	83	27	1	9	3
Others	202	186	150	34	2	16	0
Pulp & Paper	104	90	85	5	0	12	2
Slaughter House	35	23	21	0	2	12	0
Sugar	121	115	108	7	0	6	0
Tannery	392	309	267	40	2	77	6
Textile	149	134	112	21	1	14	1
Total	**1286**	**1090**	**934**	**148**	**8**	**181**	**15**

Out of 2376 GPIs operating in ***Yamuna main stem***, 2024 were operational and 352 were non-operational. Out of 2024 operational GPIs, 1254 were complying and 770 were non-complying w.r.t discharge norms or not having valid consent to operate. SPCBs/PCC issued show cause notices to 764 non-complying GPIs and closure directions to remaining 6 non-complying GPIs. State wise details of Yamuna main stem GPIs are given in **Table 2.8 (a & b).**

Table 2.8 (a): State-wise details of complying and non-complying GPIs of river Yamuna main stem states (As on date of inspection)

State	No. of GPIs	Operational	Complied	Non-Complied		Self-Closed	
				SCN	Closure	Temporary Closed	Permanent Closed
	a	*B*	*c*	*d=b-c*		*e=a-b*	
Delhi	151	116	71	44	1	5	30
Haryana	1448	1265	638	624	3	137	46
Uttar Pradesh	766	634	536	96	2	116	16
Uttarakhand	11	9	9	0	0	2	0
Total	**2376**	**2024**	**1254**	**764**	**6**	**260**	**92**

Table 2.8 (b): Sector-wise details of complying and non-complying GPIs of river Yamuna main stem states (As on date of inspection)

Sector	No of GPIs	Operational	Complied	SCN	Closure	Temporary Closed	Permanent Closed
Chemical	130	109	68	40	1	17	4
Distillery	31	23	21	2	0	8	0
Food & Beverages	199	165	113	51	1	28	6
Others	747	667	454	212	1	39	41
Pulp & Paper	65	62	61	1	0	2	1
Slaughter House	60	42	30	12	0	18	0

Sugar	29	27	25	2	0	2	0
Tannery	28	24	21	3	0	3	1
Textile	1087	905	461	441	3	143	39
Total	**2376**	**2024**	**1254**	**764**	**6**	**260**	**92**

Inspection reports submitted by technical institutes were reviewed by CPCB. It was estimated that total freshwater consumption was **1042.16** MLD by 3114 operational GPIs. Wastewater discharge was 403.69 MLD having BOD pollution load of 12.02 TPD. State-wise details of freshwater consumption, wastewater discharge and BOD pollution load are given in **Table 2.9** and corresponding sector-wise details are given in **Figure 2.2.**

Table 2.9: State-wise details of freshwater consumption, wastewater discharge and BOD pollution load of GPIs

State	No. of GPIs	Operational GPIs	Freshwater consumption (MLD)	Wastewater discharge (MLD)	BOD Pollution Load (TPD)
Bihar	104	89	43.75	16.41	0.65
Delhi	151	116	5.38	1.3	0.06
Haryana	1448	1265	248.36	53.1	2.86
Jharkhand	27	22	66.52	0.42	0.01
Uttar Pradesh	1784	1498	356.81	222.92	6.87
Uttarakhand	83	70	79.72	46.98	1.07
West Bengal	65	54	241.62	62.56	0.5
Total	**3662**	**3114**	**1042.16**	**403.69**	**12.02**

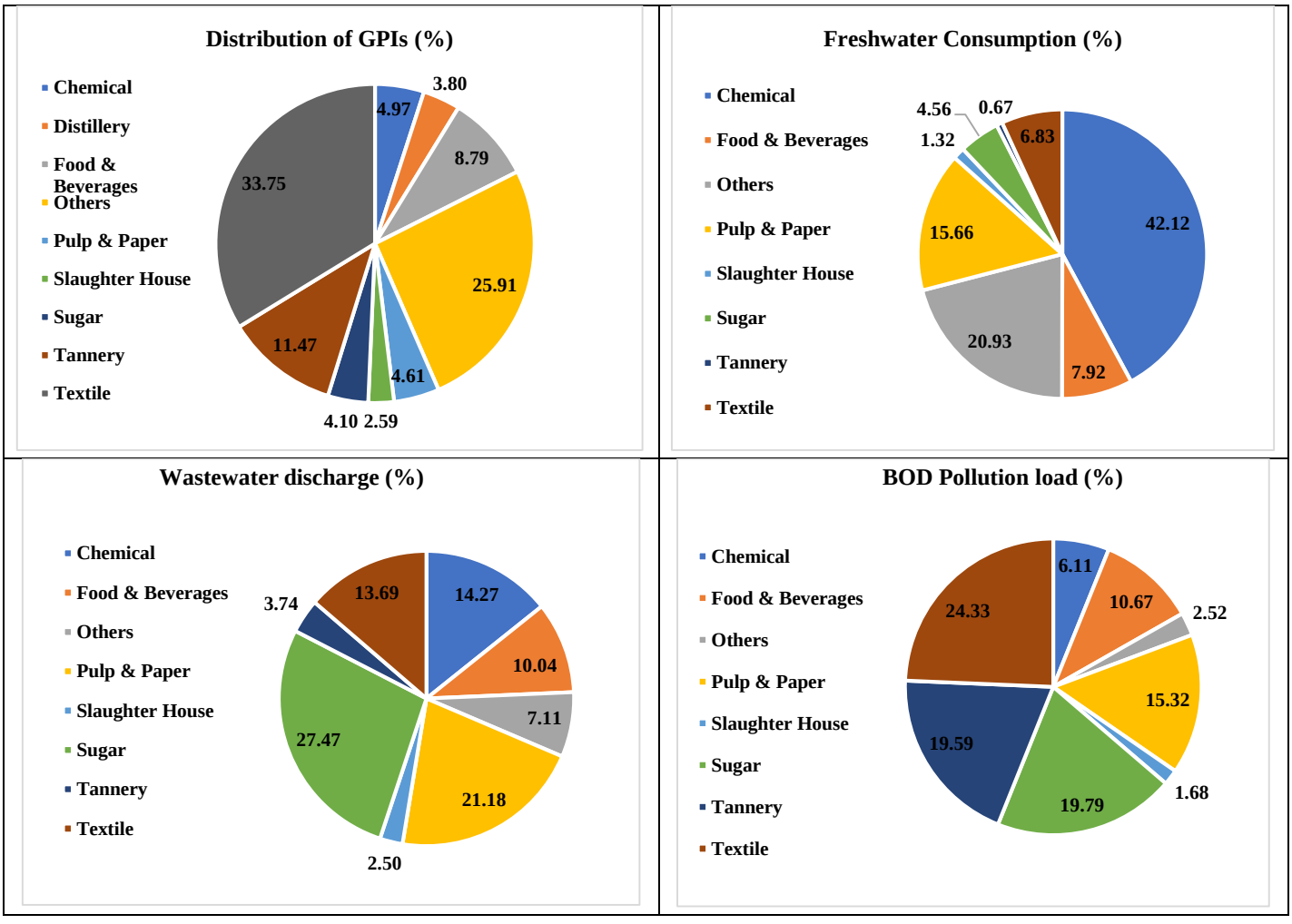


Figure 2.2: Overall sector-wise % contribution of no. of GPIs, freshwater consumption, wastewater discharge and BOD Pollution load (Ganga and Yamuna)

2.1.3 Annual inspection 2024 Vs 2025

A comparison of the annual inspection data for the year 2025 with that of 2024 is presented in **Figure 2.3a**.

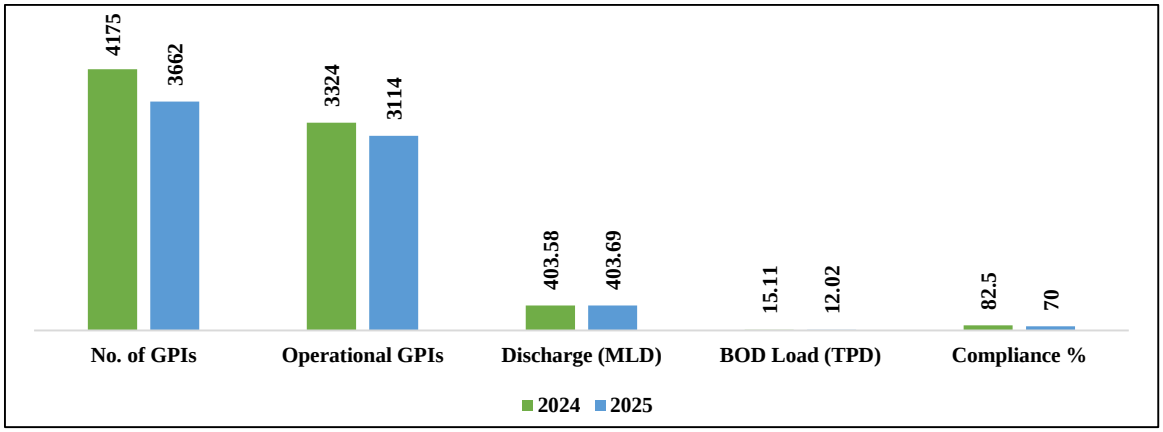


Figure 2.3a: Comparison of annual inspection data for 2025 and 2024

The number of Grossly Polluting Industries (GPIs) decreased in 2025 compared to 2024. In 2025 along the main stem of the Ganga, the BOD pollution load was observed to be lower in tannery sector i.e., 2.35 TPD from 4.92 TPD (2024) and also in sugar sector i.e., 1.92 TPD from 2.75 TPD (2024), compared to 2024.

The number of GPIs decreased in 2025 compared to 2024. In 2025 along the main stem of the Ganga, the BOD pollution load was observed to be lower in tannery sector i.e., 2.35 TPD from 4.92 TPD (2024) and also in sugar sector i.e., 1.92 TPD from 2.75 TPD (2024), compared to 2024. A comparison of the annual inspection data for the year 2025 with that of 2024 for Ganga is presented in **Figure 2.3b** below:

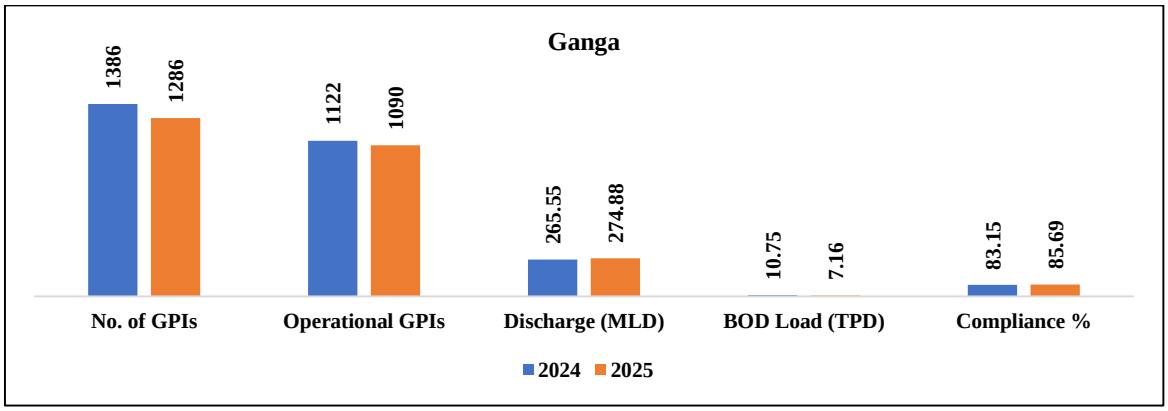


Figure 2.3b: Comparison of annual inspection data for 2025 and 2024 –Ganga

The number of operational GPIs decreased in 2025 compared to 2024. In 2025 along the main stem of the Yamuna, the BOD pollution load was observed to be higher i.e. 4.86 TPD as compared to 2024 i.e. 4.36 TPD which maybe due to improvement in record keeping of flow data, increase in non-compliance of GPIs and bypass cases observed during visit in Yamuna. A comparison of the annual inspection data for the year 2025 with that of 2024 for Yamuna is presented in **Figure 2.3c** below:

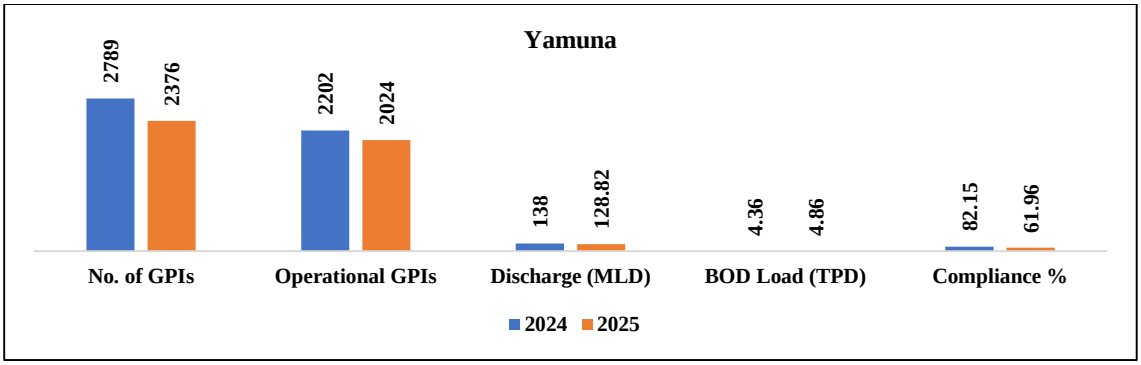


Figure 2.3c: Comparison of annual inspection data for 2025 and 2024 –Yamuna

a) River Ganga main stem

State-wise details of freshwater consumption, wastewater discharge and BOD pollution load of GPIs of river Ganga main stem are given in **Table 2.10** and sector-wise details are given in **Figure 2.4.**

Table 2.10: State-wise details of freshwater consumption, wastewater discharge and BOD pollution load of GPIs of river Ganga main stem

State	No. of GPIs	Operational GPIs	Freshwater consumption (MLD)	Wastewater discharge (MLD)	BOD pollution load (TPD)
Uttarakhand	72	61	77.27	44.60	1.03
Uttar Pradesh	1018	864	211.13	150.89	4.97
Bihar	104	89	43.75	16.41	0.65
Jharkhand	27	22	66.52	0.42	0.01
West Bengal	65	54	241.62	62.56	0.50
Total	**1286**	**1090**	**640.29**	**274.88**	**7.16**

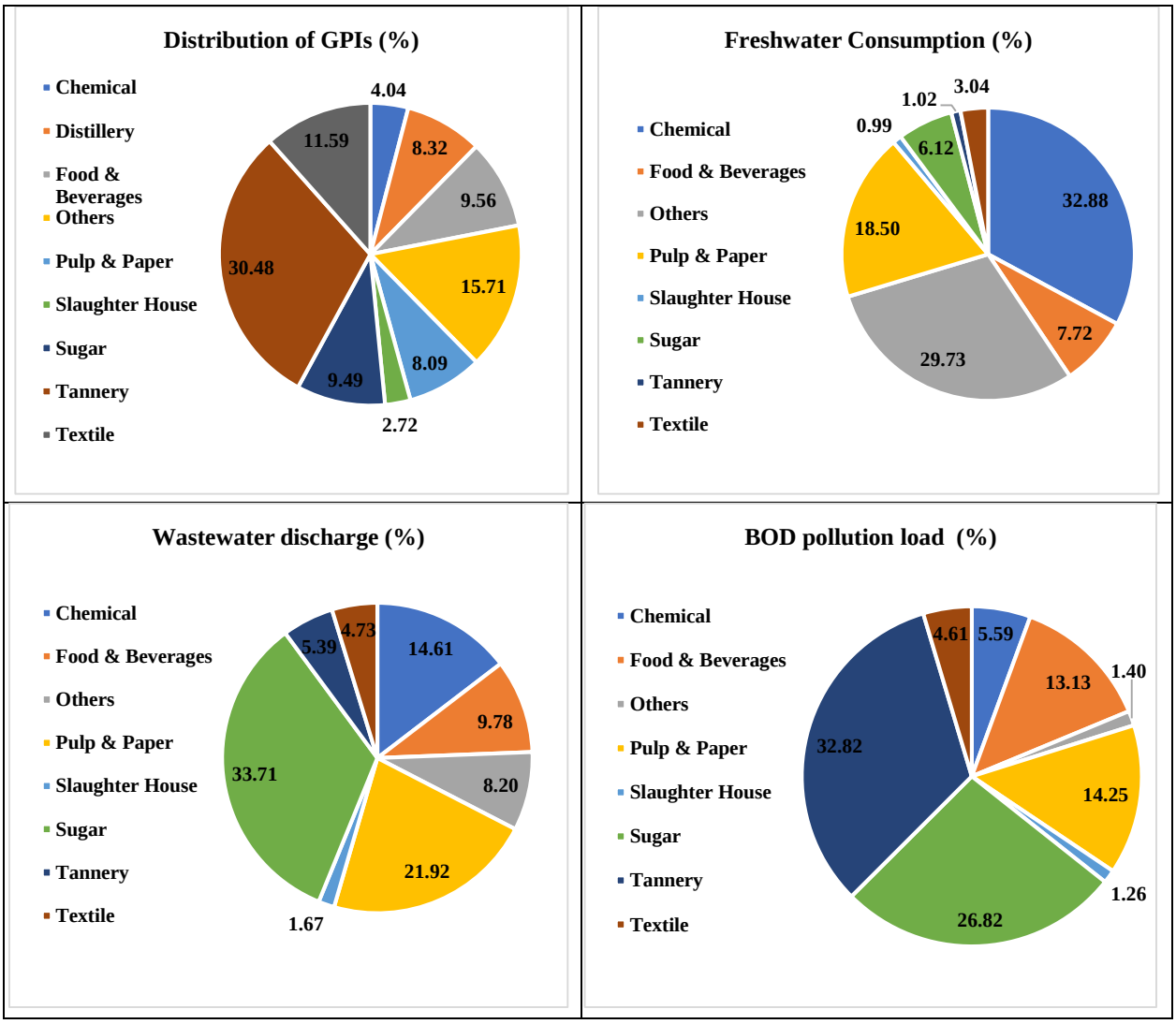


Figure 2.4: Sector-wise % contribution of no. of GPIs, freshwater consumption, wastewater discharge and BOD pollution load of river Ganga main stem

b) River Yamuna main stem

State-wise details of freshwater consumption, wastewater discharge and BOD pollution load of GPIs of River Yamuna main stem are given in **Table 2.11** and sector-wise details are given in **Figure 2.5.**

Table 2.11: State-wise details of freshwater consumption, wastewater discharge and BOD pollution load of GPIs of river Yamuna main stem

State	No. of GPIs	Operational GPIs	Freshwater consumption (MLD)	Wastewater discharge (MLD)	BOD pollution load (TPD)
Uttarakhand	11	9	2.44	2.38	0.04
Haryana	1448	1265	248.36	53.10	2.86
Delhi-NCT	151	116	5.38	1.30	0.06
Uttar Pradesh	766	634	145.68	72.03	1.90
Total	**2376**	**2024**	**401.87**	**128.82**	**4.86**

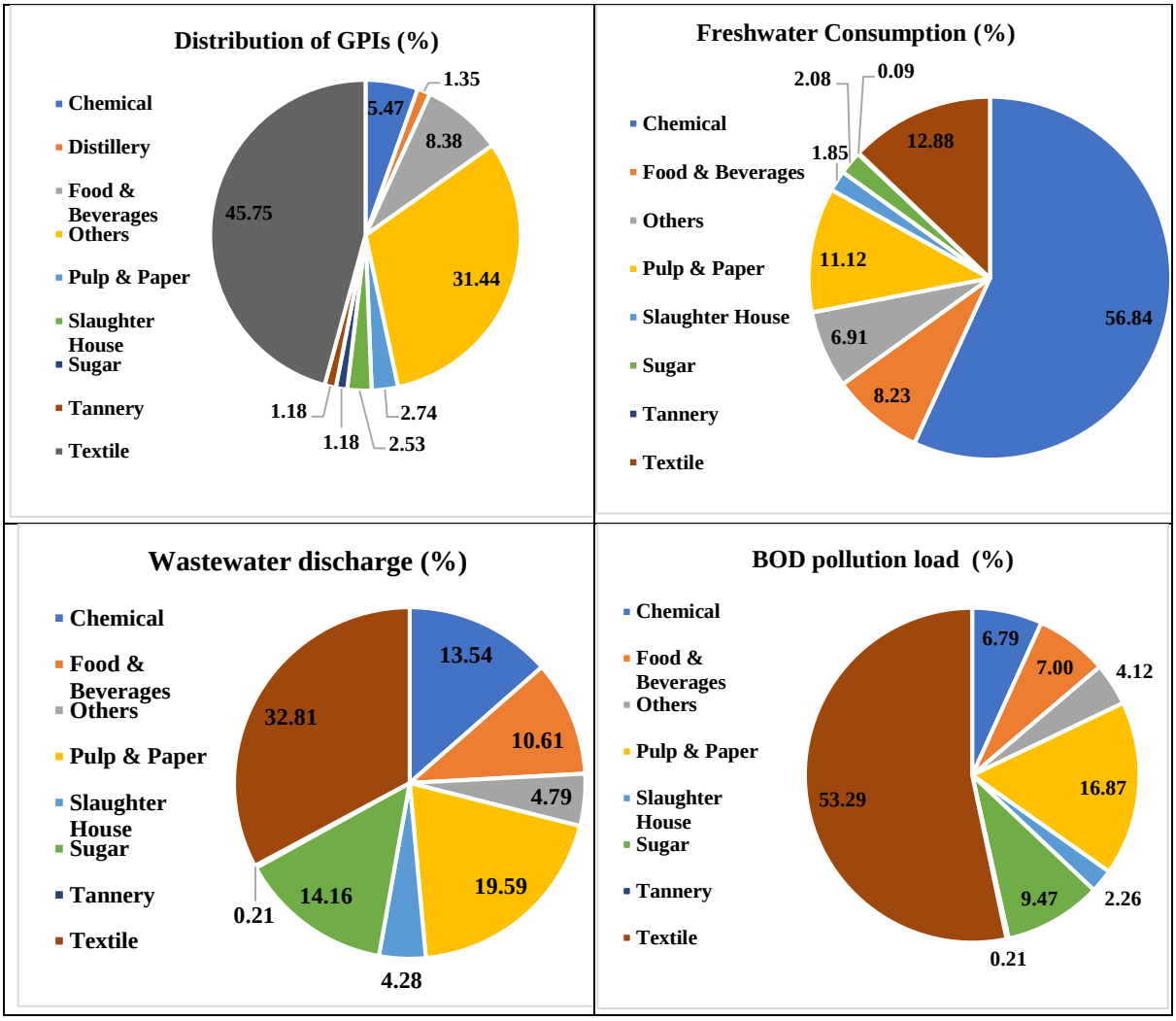


Figure 2.5: Sector-wise % contribution of no. of GPIs, freshwater consumption, wastewater discharge and BOD pollution load of river Yamuna main stem

2.1.4 Sector-wise data analysis

i Pulp and Paper

In 2025, a total of 169 nos. of Pulp & Paper industries were identified as GPIs, with 104 nos. located in states along the main stem of the River Ganga and 65 nos. in states along the main stem of the River Yamuna. These industries are spread across six states viz. Haryana, Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal. During inspections, 152 industries were found operational (Ganga-90; Yamuna-62). Total production was estimated to be 21292.12 MTD (Ganga-12980.10 MTD; Yamuna-8312.02 MTD). Freshwater consumption for operational units was estimated to be 163.17 MLD (Ganga-118.48 MLD; Yamuna-44.69 MLD). Effluent discharge was 85.49 MLD (Ganga-60.26 MLD; Yamuna-25.23 MLD) with estimated organic

pollution load of 1.84 TPD (Ganga-1.02 TPD; Yamuna- 0.82 TPD). Among the total 152 operational units, 60 RCF based Pulp & paper industries reported to be operating on the Zero Liquid Discharge (ZLD) scheme.

In river Ganga main stem, overall specific freshwater consumption was estimated to be 9.06 KL/MT; while the overall specific effluent discharge was estimated to be 4.70 KL/MT. Similarly, in river Yamuna main stem, the overall specific freshwater consumption was estimated to be 5.38 KL/MT; while the overall specific effluent discharge was estimated to be 3.04 KL/MT.

Based on 2025 annual inspection data, about 91% of operational (discharging) pulp & paper units were found to achieve BOD value of <20 mg/L (**Figures 2.6 & 2.7**).

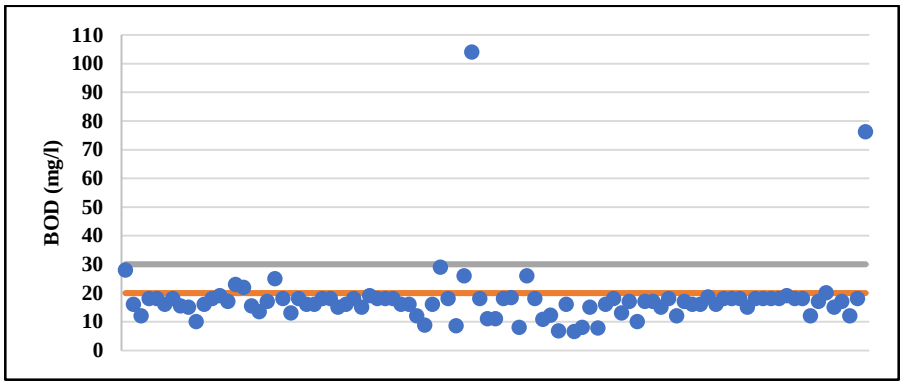


Figure 2.6: BOD distribution (concentration based) in Pulp & Paper industries during 2025

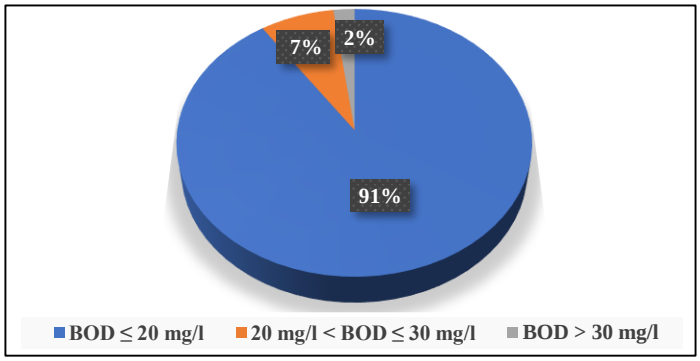


Figure 2.7: BOD distribution (%) in Pulp & Paper industries during 2025

ii Sugar sector

There were a total number of 150 sugar mills located in the main stem of the Ganga states. Out of 150 sugar mills, 142 were found to be operational during the annual inspection in 2025. Among these 142 operational sugar mills, 115 were located in river Ganga main stem and 27 in river Yamuna main stem (**Fig. 2.8**).



Figure 2.8: Key Findings of Sugar Mills – 2025

In 2025, 94% of sugar mills (134 units) found complied with norms, showing improvement due to issued guidelines, directions, and the Sugar Charter. Additionally, out of 142 operational sugar units monitored, 66 units (46%) achieved a BOD concentration of ≤ 20 mg/L**,** indicating compliance with more stringent effluent quality standards. A majority of the units, 71 units (50%), reported BOD levels in the range of 20–30 mg/L, indicating compliance with the prescribed discharge standard of 30 mg/L. However, 5 units (4%) recorded BOD concentrations exceeding 30 mg/L, suggesting the need for improved treatment efficiency and closer monitoring to ensure compliance with environmental norms (**Fig. 2.9**). Overall, 96.48% of the units maintained BOD levels within the prescribed limit of 30 mg/L, reflecting satisfactory performance of effluent treatment systems.

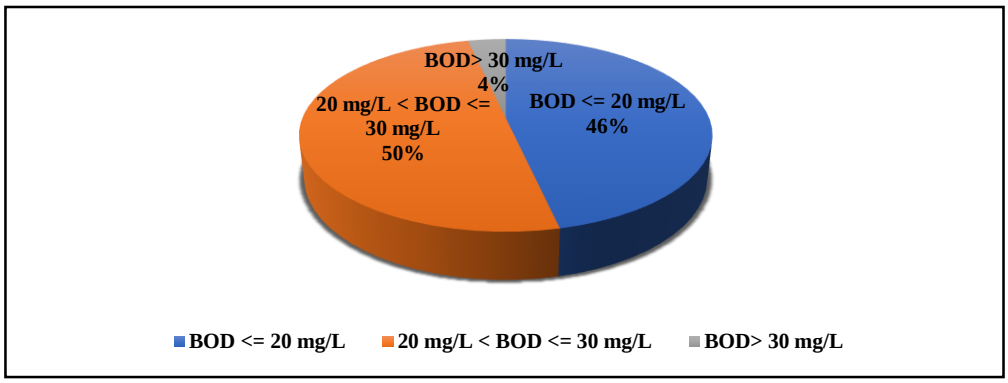


Figure 2.9 BOD distribution in Sugar Units during 2025

Implementation of Sugar Charter 2.0:

During inspection it was observed that, sugar units has implemented several technological interventions to reduce fresh water consumption and comply with effluent discharge norms. These measures include installation of flow meters at water abstraction points, process consumption points, ETP inlet/outlet, and spray pond/process cooling tower overflow locations for effective monitoring and water accounting. Industries have adopted the 4R approach (Reduce, Reuse, Recycle and Renew) through installation of cooling towers and Condensate Polishing Units (CPUs) to enhance water conservation and reuse. Continuous monitoring systems such as OCEMS and PTZ cameras have been installed for real-time surveillance of effluent discharge and emissions.

Further improvements include construction of hazardous wash-water collection tanks, installation of Sulphate Removal Systems (SRS) for cooling tower overflow streams, adoption of two-stage brine recovery systems in sugar refineries, and upgradation of ETPs with diffused aeration, tertiary treatment units, and mechanized sludge handling systems. Several units have also provided anaerobic or double extended aeration facilities for enhanced effluent treatment efficiency. To strengthen environmental management, laboratories have been established at ETPs for regular analysis of key parameters such as pH, BOD, COD, TSS, and TDS. In addition, industries have entered into agreements for scientific disposal and recycling of solid and hazardous wastes, developed impermeable lagoons for treated effluent storage and reuse, established Environment Management Cells (EMCs), and installed separate Sewage Treatment Plants (STPs) for treatment of domestic sewage generated from factory colonies.

These interventions have significantly improved water-use efficiency, pollution control, and environmental compliance across the sugar sector.

iii Distillery sector

In 2025, a total of 139 distilleries were identified along the main stems of the Ganga and Yamuna rivers. Out of these, 94 units were found operational, of which 82 were distilleries, comprising 28 molasses-based, 45 grain-based, and 10 dual-feedstock (molasses and grain-based) units. The remaining operational units included 7 brewery/bottling units and 4 yeast manufacturing units.

Of the operational distilleries, all 83 units were operating under the Zero Liquid Discharge (ZLD) scheme. The ZLD systems adopted included Multiple Effect Evaporators (MEE), Condensate Polishing Units (CPU),

incineration boilers, bio-composting facilities, and spray dryer systems, depending upon the type and configuration of the distillery.

In Ganga basin, the average specific freshwater consumption in operational distilleries was 5.51 KL per KL of alcohol produced, while the average specific spent wash generation was about 6.73 KL per KL of alcohol produced. All operational distilleries were equipped with Condensate Polishing Units (CPU), facilitating the reuse of treated condensate in process and utility applications and thereby significantly reducing freshwater consumption.

Updation of Distillery Charter

The charter was formulated to enforce appropriate technologies for effluent treatment in distillery units in Ganga basin and to motivate the distillery industries to comply with the prescribed environmental norms. Overall, implementation and adoption of charter by the distillery industries in Ganga basin achieved the desirable outcomes viz. Based on the industrial data collection and its verification during annual inspections being carried out by third party technical institutes it has been substantiated that the specific fresh water consumption has reduced from 15 KL/KL of alcohol produced in 2016-17 to 5.51 KL/KL of alcohol produced in 2025-26, leading to a 63.3% reduction in specific fresh water consumption. Similarly, specific spent wash generation is reduced from 11.1 KL/KL of alcohol produced in 2016-17 to 6.73 KL/KL alcohol produced in 2025-26, leading to 38.8% reduction in spent wash generation. Positive results of execution of previously implemented charter has led to the formulation of Charter 2.0 in which much stringent norms for specific freshwater consumption and specific spent wash generation are proposed to be revised on the basis of type of feed stocks used by the distillery unit.

iv Textile sector

During 2025, there were a total of 1236 Textile units in 2025, with 149 located in states along the main stem of the river Ganga and 1087 in states along the main stem of the river Yamuna. Of these, 1021 units were found to be operational during inspections, with 133 along the Ganga and 888 along the Yamuna. Freshwater consumption was estimated as 71.21 MLD (Ganga- 19.44 MLD; Yamuna-51.78 MLD), effluent discharge 55.27 MLD (Ganga-13.00 MLD; Yamuna-42.27 MLD) and pollution load 2.92 TPD (Ganga-0.33 TPD; Yamuna-2.59 TPD).

v Tannery sector

During 2025, there were 420 tanneries out of which 392 were located in Ganga main stem and 28 in Yamuna main stem. Out of 420, 333 tanneries were found operational (Ganga-309; Yamuna-24). In Ganga main stem, tanneries are located mainly in 03 clusters namely Jajmau, Banthar and Unnao. About 297 tanneries are connected to CETPs namely CETP Jajmau (260), CETP Banthar (25) and Site-II Unnao (12) whereas 09 have individual ETP to treat the effluent. Effluent discharge was estimated to be 15.09 MLD (Ganga-14.81 MLD; Yamuna-0.28 MLD) with pollution load of 2.36 TPD (Ganga-2.35 TPD; Yamuna-0.01 TPD).

vi Food, Dairy & Beverages (FDB)

There were 322 FDB units during 2025 out of which 123 were located in river Ganga main stem and 199 in river Yamuna main stem. Out of 322, 276 units were found operational (Ganga-111; Yamuna-165). Freshwater consumption, effluent discharge and pollution load by these 276 operational FDB units were estimated as 82.53 MLD (Ganga-49.44 MLD; Yamuna-33.09 MLD), 40.55 MLD (Ganga-26.88 MLD; Yamuna-13.67 MLD) and 1.28 TPD (Ganga-0.94 TPD; Yamuna-0.34 TPD), respectively.

vii Slaughter House

There were 95 slaughter houses during 2025 out of which 35 were located in river Ganga main stem and 60 in river Yamuna main stem. Out of 95, 65 units were found operational (Ganga-23; Yamuna-42). Freshwater consumption, effluent discharge and pollution load by these 66 operational slaughter houses were estimated as 13.75 MLD (Ganga-6.33 MLD; Yamuna-7.42 MLD), 10.09 MLD (Ganga-4.58 MLD; Yamuna-5.51 MLD) and 0.20 TPD (Ganga-0.09 TPD; Yamuna-0.11 TPD), respectively.

viii Chemicals

There were 182 chemical units (*including chemical, fertilizers, pharmaceuticals, petrochemicals, oil & refinery, pesticides*) during 2025 out of which 52 were located in river Ganga main stem and 130 in river Yamuna main stem. Out of 182, 158 units were found operational (Ganga-49; Yamuna-109). During inspections, freshwater consumption 438.94 MLD (Ganga-210.53 MLD; Yamuna-228.41 MLD), effluent discharge 57.59 MLD (Ganga-40.15 MLD; Yamuna-17.44 MLD) and pollution load 0.73 TPD (Ganga-0.40 TPD; Yamuna-0.33 TPD) were found.

ix Others Sector

There were 949 GPIs which belong to Others sector (*including Automobile, Electroplating, Galvanized Iron structure, Hair Oil Manufacture, Manufacturing & Repair of aircraft, Paint, Telephone sets, Diesel locomotive units*) during 2025 out of which 202 were located in river Ganga main stem and 747 in river Yamuna main stem. Out of 949, 853 units were found operational (Ganga-186; Yamuna-667). During inspections, freshwater consumption 218.07 MLD (Ganga-190.33 MLD; Yamuna-27.75 MLD), effluent discharge 28.71 MLD (Ganga-22.54 MLD; Yamuna-6.18 MLD) and pollution load 0.30 TPD (Ganga-0.10 TPD; Yamuna-0.20 TPD) were found. About 136 Others units are running on ZLD scheme (Ganga-96; Yamuna-40).

Sector-wise effluent discharge and pollution load - Ganga

- There is an improvement in compliance from 39% in 2017 to 86% in 2025.
- About 21 % reduction in effluent discharge from 349.13 MLD in 2017 to 274.88 MLD in 2025 has been estimated. Sector wise effluent discharge in River Ganga during 2017 and 2024 is given in **Figure 2.10.**
- About 72 % reduction in BOD pollution load from 26.06 TPD in 2017 to 7.16 TPD in 2025 has been estimated. Sector wise BOD pollution load in River Ganga during 2017 and 2025 is given in **Figure 2.11.**
- Reduction in Specific Water consumption (2017 to 2025) has been observed through re-use and recycle of treated effluent, from 2017 to 2025: Pulp & Paper-46%, Sugar-80%, Distillery-63.27% and Textile-84.37%.

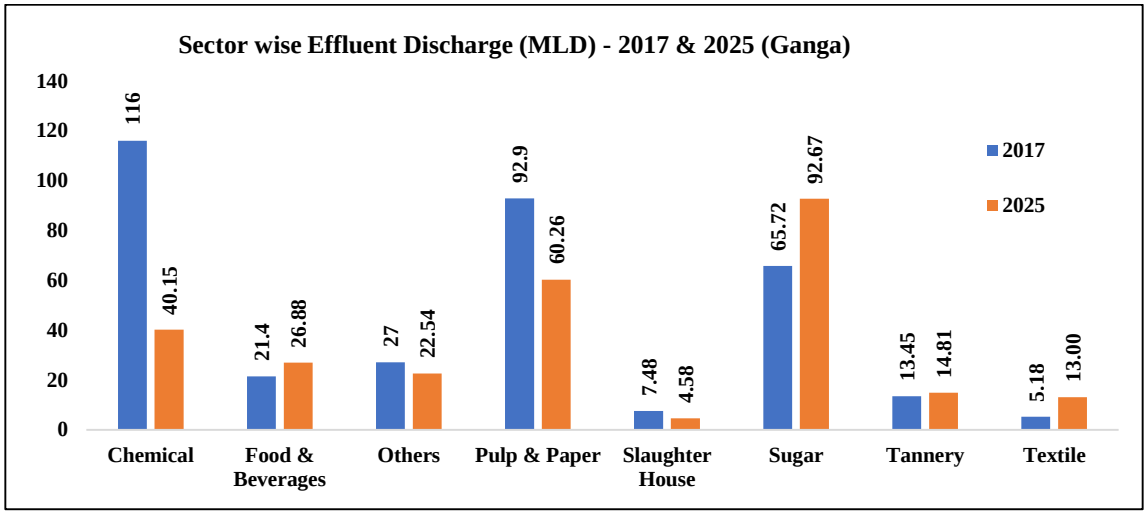


Figure 2.10 Sector wise effluent discharge (MLD) during 2017 & 2025 in River Ganga

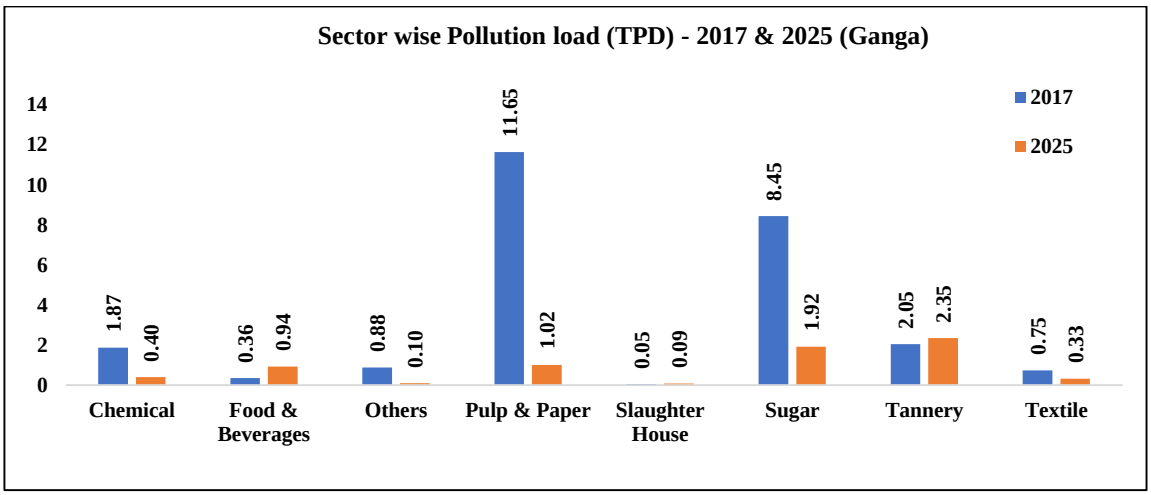


Figure 2.11 Sector wise Pollution load (TPD) during 2017 & 2025 in River Ganga

2.2 Annual Inspection of Common Effluent Treatment Plants (CETPs) during 2025-26 through TPA

2.2.1 Common Effluent Treatment Plants (CETPs) of main stem of river Ganga & its tributaries

Ten Common Effluent Treatment Plants (CETPs) are located on main stem of river Ganga or its tributaries. Out of 10 CETPs, 3 are located in tannery-clusters at Jajmau, Banthar and Unnao in Kanpur (Uttar Pradesh), 2 CETPs in textile-clusters at Rooma, Kanpur and Pilakhua, Hapur in Uttar Pradesh and 3 CETPs in mixed industrial clusters at Pantnagar, Sitarganj and Haridwar in Uttarakhand and 1 CETP in the mixed industrial cluster of Jharkhand. CETP at Jharkhand found non-operational during visit due to unavailability of CTP from concern SPCB. One CETP of Jajmau i.e. 36 MLD is now being utilized as a Sewage Treatment Plant (STP). The geographical locations of operational CETPs are shown in **Figure 2.12**.

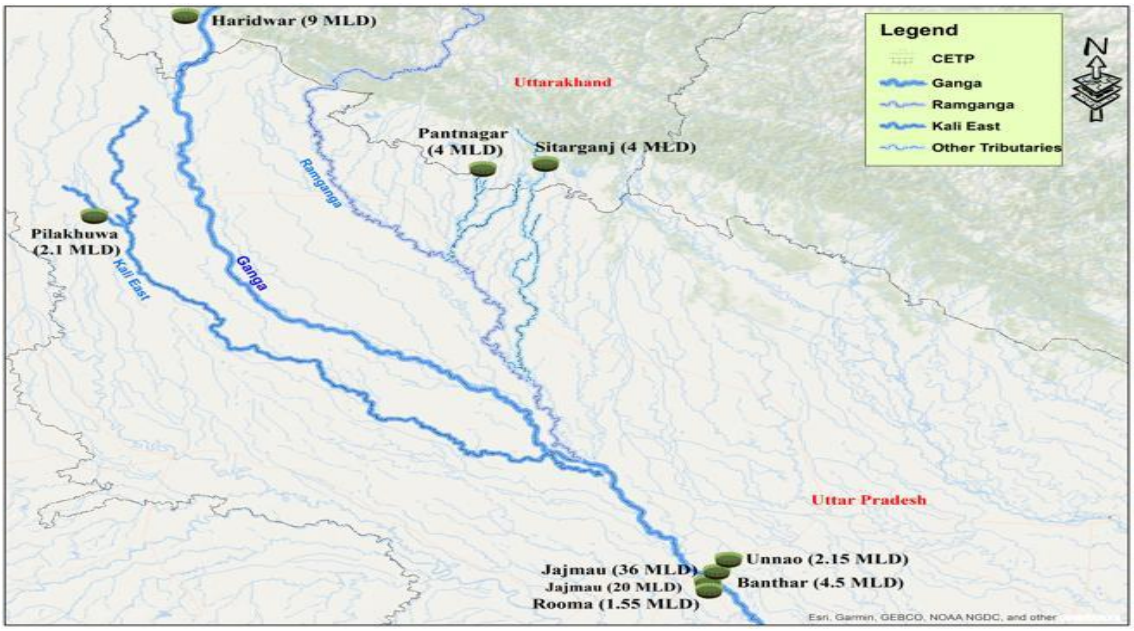


Figure 2.12 Geographical locations of CETPs

Under PIAS project, monitoring of these CETPs are carried out on surprise basis by CPCB authorized third party technical institutes and concerned SPCBs/PCC. During 2025, for monitoring of 31

CETPs, three technical institutes namely IIT-Delhi, CLRI Lucknow and NIT Panta were engaged. During monitoring, 9 CETPs, were found operational and 1 found non-operational. Out of 9 operational CETPs, 8 were based on physico-chemical followed by biological treatment (Aerobic) & filtration technology and 1 CETP at Jajmau (20 MLD) was based on Extended Aeration technology. Out of 9 CETPs, 23 were found complying and 8 were non-complying w.r.t standards prescribed by concerned SPCB/PCC. Installed capacity of these 31 CETPs was found as 432.03 MLD, however utilized capacity was found as 243.13 MLD (56% capacity). State wise details of CETPs showed in **Table 2.12**.

Table 2.12 State wise details of CETPs located in main stem of River Ganga & its tributaries

State	No of CETP	Operational CETP	No. of industries connected	Installed capacity (MLD)	Utilised capacity (MLD)	% Utilisation	Complying
Uttarakhand	3	3	914	17	12.6	74	2 (66%)
Uttar Pradesh	6	6	874	65.5	30.57	47	2 (33%)
Jharkhand	1	0	-	-	-	-	-
Total	**10**	**09**	**1788**	**82.5**	**43.2**	**52**	**4 (44%)**

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2.2.1.1 Data generation and salient findings

i. Tannery cluster

There are 03 tannery clusters on the main stem of river Ganga located at Jajmau, Banthar and Unnao. Each cluster has its CETP and member tanneries have installed primary effluent treatment plants (PETPs). PETP treated effluent of member tanneries is collected through network of piping system and further treated at the respective CETPs.

Out of total 442-member tannery units, 400 are connected to 20 MLD CETPs Jajmau in Kanpur, 27 units located in Leather Technology Park (LTP) to CETP Banthar, and 15 units located in Site-II Unnao to CETP Unnao. Also, there are 14 individual tannery units (Unnao-10, Kanpur-2 and Bihar-2) having their own Effluent Treatment Plants (ETPs). These units are located outside the CETP network. One CETP of Jajmau i.e. 36 MLD is now being utilized as a Sewage Treatment Plant (STP). Status of CETPs of Tannery cluster is given in **Table 2.13**.

Table 2.13 Status of CETPs of Tannery cluster

Parameter	Jajmau – 20 MLD	Banthar – 4.5 MLD	Unnao – 2.15 MLD
Member Units	400	27 tanneries	15 tanneries
Discharge	Discharge to irrigation canal	Discharges to City Jail drain	Discharges to Loni river (drain)
Operating Load	10.15 MLD (51%)	1.08 MLD (24%)	0.5MLD (23%)
Compliance Status	Compliant	Non-compliant	Non-compliant
Parameters Failed	-	Chloride, TDS	Oil & Grease, Chloride, TDS, Sulphide
BOD Removal Efficiency	99%	97%	99 %
Key Issues	Consistent non-compliant; high FDS and TSS not as per UPPCB inlet norms	Consistent non-compliant Improper operation TSS & Total Cr not meeting UPPCB inlet norms	Consistent non-compliant Improper operation: TSS & Total Cr not meeting UPPCB inlet norms
Additional Notes	New 900 KLD CCRP– Non-operational since commissioning	Upgradation in progress	Inadequate treatment system

ii. Textile cluster

Table 2.14 Status of CETPs of Textile cluster

Parameter	CETP Pilkhuwa (2.1 MLD)	CETP Rooma (1.55 MLD; capacity reduced to 50%)
Location	Textile Centre Scheme Premises, Pilkhuwa, Hapur, UP	UPSIDC Textile Zone, Rooma, Kanpur
Operating Agency	CETP Textile Centre Pilkhuwa Association	Rooma Pollution Control Association (RPCA)

Parameter	CETP Pilkhuwa (2.1 MLD)	CETP Rooma (1.55 MLD; capacity reduced to 50%)
Connected Units	40 textile units	11 textile units (out of 18 members)
Designed Capacity	2.1 MLD	1.55 MLD (effective allowed capacity = 50%)
Operating load	1.38 MLD (66%)	0.49 MLD (64%)
Treatment Scheme	Physico-chemical → Secondary biological → Tertiary filtration	Physico-chemical → Secondary biological → Tertiary filtration
Effluent Discharge Route	Local drain → Kadrabad drain → River Kali-East	Local drain → UPSIDC drain → Irrigation canal → Ganga (through breaches)
Compliance Status	Compliant	Non-compliant
Parameters Failed	FDS, Nitrate	FDS
BOD Removal Efficiency	87%	96 %
Inlet Issues	Did not meet UPPCB norms for FDS and TSS	Did not meet UPPCB norms of FDS at inlet Inadequate treatment technology
Key Observations	Improper PETP operation by member units	Under-capacity aeration tank; capacity restricted since 2018; Improper PETP operation by member units

iii. Mixed cluster

Table 2.15 Status of CETPs of Mixed cluster

Parameter	CETP Haridwar (9 MLD)	CETP Pantnagar (4 MLD)	CETP Sitarganj (4 MLD)
Location	Integrated Industrial Estate, Haridwar, Uttarakhand	Integrated Industrial Estate, Pantnagar, Uttarakhand	ELDECO SIDCUL Industrial Park, Sitarganj, Uttarakhand
Ownership	SIIDCUL	SIIDCUL	ESIPL (JV of SIDCUL & ELDECO)
Operator	M/s SK UEM Water Projects Pvt. Ltd.	M/s Pantnagar CETP Pvt. Ltd. (PCETPPL)	M/s JITF ESIPL CETP (Sitarganj) Ltd.
Connected Units	537 industries	286 industrial units	76 units (design considers 210 units)
Designed Capacity	9 MLD	4 MLD	4 MLD
Treatment Technology	MBBR → Activated Sludge Process	Activated Sludge Process → Filtration	Activated Sludge Process → Filtration
Effluent Disposal Route	Rawli Rao drain → River Sukhi → River Ganga	Local drain → River Kalyani	Local drain
Recycling/Reuse	Used for dosing chemicals, flushing, gardening, construction	Not specified	Not specified
Operating Load	9.47 MLD (105%)	1.88 MLD (45%)	1.25 MLD (31%)
Compliance Status	Non-compliant	Compliant	Compliant
Parameters Failed	BOD, TSS, Ammonia nitrogen	-	-
BOD Removal Efficiency	82%	93%	57%
Key Issues	Over capacity utilisation	Under capacity utilization;	Inadequate treatment; persistent under capacity utilization; un-stabilised aeration tank

2.2.2 Common Effluent Treatment Plants (CETPs) of main stem of river Yamuna & its tributaries

There are 31 Common Effluent Treatment Plants (CETPs) located in main stem of river Yamuna & its tributaries. Out of 31 CETPs, 16 are located in the state of Haryana, 13 are located in NCT-Delhi and 2 are located in Uttar Pradesh.

Out of 16 CETPs of Haryana, 2 are located in Faridabad (one in mixed industrial cluster and one in electroplating industrial cluster), 2 are located in Gurugram (one in mixed industrial cluster and one in electroplating industrial cluster), 2 are located in textile industrial clusters of Panipat, 1 in Rewari (in mixed industrial cluster), 3 in Rohtak (in mixed industrial clusters),5 in Sonipat (in mixed industrial clusters) and 1 in Yamunanagar (in mixed industrial clusters). All the 13 CETPs of NCT-Delhi are designed for treatment of mixed type of effluent. Both CETPs of Uttar Pradesh at Mathura and Loni city are designed for treatment of effluent generating from textile industries. The geographical locations of these CETPs are shown in **Figure 2.13**.

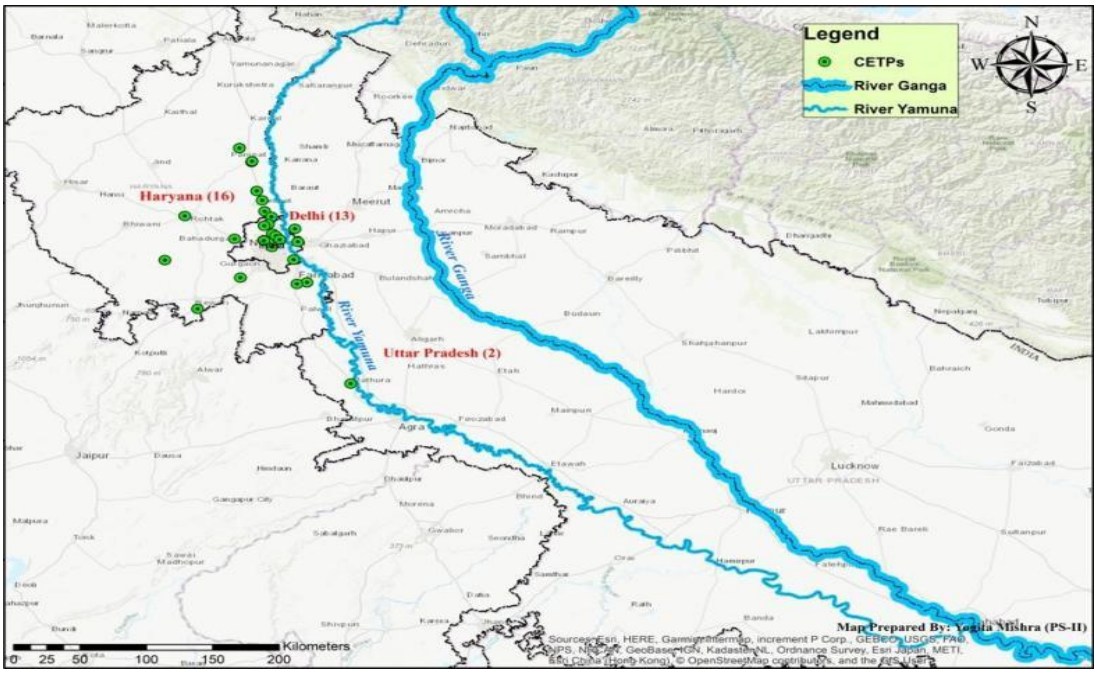


Figure 2.13 Geographical locations of CETPs located in main stem of River Yamuna & its tributaries

Under PIAS project, monitoring of these CETPs are carried out on surprise basis by CPCB authorized third party technical institutes and concerned SPCBs/PCC. During 2025, for monitoring of 31 CETPs, three technical institutes namely IIT-Delhi, NEERI and ICT Mumbai were engaged. During monitoring, all 31 CETPs, were found operational. Out of 31 CETPs, 12 were based on physico-chemical & filtration technology and rest 19 were based on physico-chemical followed by biological treatment. Out of 31 CETPs, 23 were found complying and 8 were non-complying w.r.t standards prescribed by concerned SPCB/PCC. Installed capacity of these 31 CETPs was found as 432.03 MLD, however utilized capacity was found as 243.13 MLD (56% capacity). State wise details of CETPs showed in **Table 2.16**.

Table 2.16 State wise details of CETPs located in main stem of River Yamuna & its tributaries

State	No of CETPs	Operational CETPs	No. of industries connected	Installed capacity (MLD)	Utilised capacity (MLD)	% Utilisation	Complying
UP	2	2	72	12.25	4.91	40	1 (50%)
Delhi	13	13	26879	212.3	78.12	37	10 (77%)
Haryana	16	16	7249	207.48	160.10	77	12 (75%)
Total	**31**	**31**	**34200**	**432.03**	**243.13**	**56**	**23 (74%)**

2.2.2.1 Cluster wise performance of CETPs

i. Textile Cluster:

On the main stem of river Yamuna, 4 textile clusters have its CETP and member textile industries have installed primary effluent treatment plants (PETPs). PETP treated effluent of member textile units is collected through network of piping system and further treated at the respective CETPs. Out of these 4 CETPs, two are located in Haryana and two are located in Uttar Pradesh.

Out of total 472-member textile units, 200 are connected to CETP Panipat Phase-I (Haryana), 200 textile units are connected to CETP Panipat Phase-II (Haryana), 56 are connected to CETP Ghaziabad (Uttar Pradesh) and 16 are connected to CETP Mathura (Uttar Pradesh).

CETPs of Haryana

In Haryana, there are two CETPs in textile clusters for treatment of industrial effluent generating from textile industries. One is located at Phase-I, Panipat and another is located at located at Phase-II, Panipat.

1. CETP ***Phase-I, Panipat*** have 200 textile member units. Design capacity of this CETP is 21 MLD, however operating capacity was found 16.3 MLD. During 2025, this CETP was found complying w.r.t standards prescribed by Haryana State Pollution Control Board (HSPCB).
2. CETP ***Phase-II, Panipat*** have 200 textile member units. Design capacity of this CETP is 21 MLD, however operating capacity was found 19.2 MLD. During 2025, this CETP was found complying w.r.t standards prescribed by HSPCB.

CETPs of Uttar Pradesh

In Uttar Pradesh, there are two CETPs in textile clusters for treatment of industrial effluent generating from wet processing of textile industries. One is located in Ghaziabad and another is located in Mathura.

1. ***Ghaziabad CETP*** have design capacity of 6 MLD, however operating capacity was found 2.3 MLD (38% utilization). During 2025, this CETP was found complying w.r.t standards prescribed by Uttar Pradesh Pollution Control Board (UPPCB).
2. ***Mathura CETP*** have designed capacity of 6.25 MLD, however operating capacity was found 2.6 MLD (42 % utilization). About 50 % of the treated effluent is recycled in member industrial units and balance treated effluent is discharged into industrial drain and then to River Yamuna. During 2025, this CETP exhibited non-compliance w.r.t. surface water body (drain) discharge standards prescribed by UPPCB.

ii. Mixed Industrial Cluster:

On the main stem of river Yamuna, there are 25 mixed industrial clusters having its operational CETPs and member industrial units have installed primary effluent treatment plants (PETPs). PETP treated effluent of member textile units is collected through network of piping system and further treated at the respective CETPs. Out of these 25 CETPs, 12 are located in the state of Haryana and 13 are located in the state of NCT-Delhi.

CETPs of Haryana

In Haryana, there are 12 CETPs in mixed industrial clusters for treatment of industrial effluent generating from mixed type of industries. Out of 11, one is located at Faridabad, 1 in Gurugram, 1 in Rewari, 3 in Rohtak, 5 in Sonipat and 1 in Yamunanagar.

Table 2.17 Status of CETPs of Haryana

Location / CETP	Capacity (MLD)	Operating Load	Member Units	Treatment Scheme	Discharge Route	2025 Compliance Status
Faridabad (BLB-CETP-001)	10.5	9.86 MLD (94%)	450	Physico-chemical → ASP → tertiary → disinfection	Agra Canal → Sukhi → Yamuna	**Complied**
Gurugram (GRS-CETP-001)	55	49.5 MLD (90%)	–	Physico-chemical → ASP → tertiary	Badshahpur drain → Jhajjar Canal / Najafgarh → Yamuna	**Complied**
Rewari (DHR-CETP-001)	22.5	10.4 MLD (46%)	600	Physico-chemical → Extended aeration →	Used in horticulture	**Non- Complied** (no

Location / CETP	Capacity (MLD)	Operating Load	Member Units	Treatment Scheme	Discharge Route	2025 Compliance Status
				tertiary → disinfection		consents/HW auth.)
IMT, Rohtak (BHD-CETP-001)	10	6.78 MLD (68%)	55	Physico-chemical → ASP → tertiary → disinfection	Gandhara drain → Yamuna	**Complied**
Kutana, Rohtak (BHD-CETP-002)	3	1.5 MLD (50%)	400	Physico-chemical → ASP → tertiary	Industrial drain → Yamuna	**Complied**
Bahadurgarh,Rohtak (BHD-CETP-003)	12.5	3.54 MLD (28%)	120	Physico-chemical → ASP → tertiary → disinfection	Irrigation use	**Complied**
Sonipat (SON-CETP-001 – 16 MLD)	16	12.6 MLD (79%)	136–	Physico-chemical → SBR → DMF → chlorination	2000 KLD reused; rest to Drain 6 → Yamuna	**Complied**
Sonipat (SON-CETP-001 – new 10 MLD)	10	6.8 MLD (68%)	136	DAF → Physico-chemical → SBR → DMF → chlorination	Drain 6 → Yamuna	**Complied**
Sonipat (SON-CETP-002, Rai)	10	8.5 MLD (85%)	700	Physico-chemical → ASP → DMF/ACF → chlorination	Closed pipe → drain → Yamuna	**Complied**
Sonipat (SON-CETP-003, Kundli)	10	9.5 MLD (95%)	1200	Physico-chemical → ASP → tertiary	Drain → Yamuna	**Complied**
Sonipat (SON-CETP-004, Murthal)	0.2	0.2 MLD (100%)	70	Physico-chemical → ASP → tertiary	Drain → Yamuna	**Complied**
03 MLD CETP , Manakpur Industrial Estate, Jagadhri, Yamuna nagar	3.0	2.7 (90%)	200	Physico-chemical → ASP → tertiary	Drain → Yamuna	**Non- Complied**

CETPs of NCT-Delhi

In NCT-Delhi, there are 13 CETPs in mixed industrial clusters for treatment of industrial effluent generating from mixed type of industries. Out of 13 CETPs, 1 is located in East Delhi, 2 are located in West Delhi, 1 is located in South Delhi, 8 are located in North West Delhi and 1 is located in South West Delhi.

Table 2.18 Status of CETPs of NCT-Delhi

CETP / Location	Capacity (MLD)	Operating Load	Member units (nos.)	Treatment Scheme	Discharge / Reuse	2025 Compliance Status
Jhilmil & Friends Colony (East Delhi)	16.8	4.97 MLD (30%)	139	Equalization → Chlorination → Tube Settler → Vacuum Filter	75–100 KLD reused for horticulture; rest to drain → Yamuna	**Non- Complied w.r.t notified discharge norms**
Mayapuri Industrial Area (West Delhi)	12	4.05 MLD (34%)	400	Equalization → Chlorination → Tube Settler → Vacuum Filter	Partial reuse; rest to drain	**Complied**
DSIIDC Nangloi & Udyog Nagar (West Delhi)	12	3.54 MLD (29%)	636	Physico-chemical → DMF & ACF	Gardening reuse + discharge to Najafgarh drain	**Complied**
Okhla Industrial Area (South Delhi)	24	2.84 MLD (12.0%)	3000	Physico-chemical → ACF & MGF (UV for small volume)	Partial reuse; rest to Indrakalyan drain	**Complied**

CETP / Location	Capacity (MLD)	Operating Load	Member units (nos.)	Treatment Scheme	Discharge / Reuse	2025 Compliance Status
Badli Industrial Estate (North-West Delhi)	12	2.5 MLD (21%)	415	Physico-chemical → DMF & ACF	Part reused; rest to drain	**Complied**
Mangolpuri Industrial Area (North-West Delhi)	2.4	1.43 MLD (60%)	877	Physico-chemical → ASP → DMF & ACF	Partial reuse; rest to CETP drain	**Complied**
Wazirpur Industrial Area (North-West Delhi)	24	5.43 MLD (23%)	2000	Physico-chemical → DMF & ACF	Discharge to CETP drain	**Complied**
SMA Industrial Area (North-West Delhi)	12	2.65 MLD (26%)	365	Physico-chemical → DMF & ACF → Disinfection	Partial reuse; rest to drain	**Complied**
GTK Road Industrial Estate (North-West Delhi)	6	2.0 MLD (33%)	478	Physico-chemical → DMF & ACF	Gardening reuse + discharge to Shakti Nagar drain	**Non- Complied w.r.t notified discharge norms**
Narela CETP – PNC Delhi Infra (North-West Delhi)	22.5	8.78 MLD (39%)	3200	Physico-chemical → ASP → DMF & ACF	Partial reuse; rest to CETP drain	**Complied**
Bawana CETP (North-West Delhi)	35	33.5 MLD (96%)	14000	Physico-chemical → ASP → Rapid Sand Filtration	Reuse + discharge to CETP drain	**Complied**
Keshav Puram (KESPIA) (North-West Delhi)	12	1.5 MLD (13%)	637	Physico-chemical → DMF & ACF	Discharge to Ranibagh drain	**Non- Complied w.r.t notified discharge norms**
Naraina Industrial Area (South-West Delhi)	21.6	5.0 MLD (23%)	732	Physico-chemical → DMF & ACF	Partial reuse; rest to CETP drain	**Complied**

iii. Electroplating Industrial Cluster:

On the main stem of river Yamuna, there are 2 electroplating industrial clusters having its CETP and member industrial units have installed primary effluent treatment plants (PETPs). PETP treated effluent of member textile units is collected through network of piping system and further treated at the respective These both CETPs are located in the state of Haryana.

CETPs of Haryana

In Haryana, there are two CETPs in electroplating industrial clusters for treatment of industrial effluent generating from electroplating industries. One is located in Faridabad and another is located in Gurugram.

Table 2.19 Status of CETPs of Haryana

CETP / Location	Capacity	Operating Load	Member Units	Treatment Scheme	Discharge Route	2025 Compliance Status
Faridabad (FBD-CETP-001)	675 KLD	668 KLD (99%)	250	Physico-chemical → DMF & ACF	Closed industrial drain	**Non- Complied**
Gurugram (GRN-CETP-001)	300 KLD	54.6 KLD (18%)	32	Physico-chemical → DMF & ACF	Industrial drain	**Non- Complied**

2.2.2.2 CETP Gap Analysis

During 2023-24, preliminary investigation was made for following 27 industrial clusters for feasibility of CETPs, to decrease capital & operating cost of individual ETP and for effective treatment of the effluent.

2.2.2.3 Major Issues and Remedial measures

Based on the monitoring data during 2025, the major issues identified in the CETPs and remedial measures suggested by CPCB are shown in **Table 2.20.**

Table 2.20 Major issues identified during monitoring in 2025 and remedial measures suggested

Type of CETP	Issues	Remedial measures
Textile Sector (Mathura & Panipat)	✓ Consistence non-compliance of CETP with respect to prescribed norms. ✓ Poor operation and maintenance of CETP. ✓ Poor operation and maintenance of Primary effluent treatment plant (PETP) by member units. ✓ Use of toxic chemicals & high salt dye that affects microbial growth. ✓ Less recycling of treated effluent.	✓ PETP to be operated properly ▪ Regular monitoring of PETP outlet quality to be ensured. ▪ Wise use of chemicals in industrial processing via adopting chemical management system (CMS). ▪ Use of eco-friendly non-toxic chemicals & low salt dyes. ✓ Implementation of cleaner technology via. adopted CPCB Charter. ✓ Recycling of the treated effluent shall be done at maximum level.
Electroplating Sector (Faridabad & Gurugram)	✓ High influent organic load (BOD) 192 & 325 mg/l) at Sector 37 Gurugram and FBD-CETP-001, Faridabad, respectively ✓ No biological treatment system for removal of organic load ✓ Poor operation and maintenance.	✓ CETP without biological systems shall be upgraded as per influent waste water quality. ✓ CETP shall be operated properly. ✓ Recycling of the treated effluent shall be done at maximum level.
Mixed/Heterogenous (Delhi, Sonipat, Ambala, Panchkula, Panipat, Rohtak, Gurugram, Ballabhgarh, Jind, Rewari)	✓ Non-compliance of CETPs w.r.t notified norms. ✓ Inadequate treatment technology, 10 no. without biological system in spite of BOD > 100 mg/l). ✓ Poor operation and maintenance of CETP. ✓ Less recycling of treated effluent.	✓ All possible efforts to be made for consistent compliance of CETP with respect to prescribed norms through proper O&M. ✓ All 7 CETP without biological system shall be upgraded. ▪ Maintenance of DO & MLSS level in aeration tank at least 2 ppm & 2500-3000 mg/l, respectively. ▪ Optimization of dosing of coagulant and flocculants as per feed flow condition. ▪ Recycling of the treated effluent shall be done at maximum level.

2.2.2.4 Actions taken

i. Implementation of cleaner technology for reduction in fresh water consumption and reduction in effluent load discharging to CETP by textile industries:

   - Workshops were organized by CPCB in Panipat (4 days), Sonipat (1 day), Gurugram (1 day) and Mathura (1 day) for preparation of individual action plans with short term, medium term and long-term goals in textile industries.
   - Technical experts from ICT Mumbai, Solidaridad and NITRA also accompanied these workshops to share their technical knowhow w.r.t wet processing in textile industries.

ii. CETP feasibility study has been carried out by CPCB in textile clusters, which are not having their own CETP.

2.3 Tri-annual Inspection of Common Effluent Treatment Plants (CETPs) during 2025-26 by CPCB

In addition to the annual inspection of GPIs through TPA, CPCB monitored nine operational Common Effluent Treatment Plants (CETPs) located on main stem of river Ganga or its tributaries. Out of 9 CETPs, 4 are located in tannery-clusters at Jajmau, Banthar and Unnao in Kanpur (Uttar Pradesh), 2 CETPs in textile-clusters at Rooma, Kanpur and Pilakhua, Hapur in Uttar Pradesh and 3 CETPs in mixed industrial clusters at

Pantnagar, Sitarganj and Haridwar in Uttarakhand. 36 MLD CETP at Jajmau tannery cluster is now operating as a STP as the tannery effluent from Jajmau tannery cluster now being diverted towards new 20 MLD CETP. The geographical locations of these CETPs are shown in **Figure 3.1**.

2.3.1 Issues and action taken

Based on the monitoring data during 2025, the major issues identified in the CETPs and action taken by CPCB is as follows:

i. Higher organic load at inlet than designed value (CETP Haridwar)

ii. Member units not operating their Primary effluent treatment plant (PETP) properly (CETPs at Rooma, Jajmau, Unnao and Banthar)

iii. Use of obsolete technologies and machinery with more chemical consumption and sludge generation by the member tannery units (CETP Unnao)

iv. Lack of maintenance & capacity augmentation of CETP over a period of time and lack of trained man power (CETP Rooma)

Action Taken:

i. CPCB issued directions under section 18 (1) (b) of Water Act, 1974 to UPPCB (for 3 CETPs) and UKPCB (for 3 CETPs) regarding non-compliance of CETP.

ii. CPCB issued direction under section 5 of E(P) Act 1986 to CETP Rooma operating agency regarding non-compliance of CETP w.r.t. discharge standards.

SECTION 3: SEWAGE TREATMENT PLANTS (STPs)

3.1 Ganga

The Central Pollution Control Board (CPCB) conducts tri-annual monitoring of 167 commissioned STPs out of which 156 sewage treatment plants (STPs) located in 73 towns situated along River Ganga were monitored during December 2025-March 2026, to ensure compliance verification and for performance evaluation. This monitoring activity also verifies the status of under construction STPs in these Ganga front towns. The state-wise distribution of STPs located in Ganga front towns are shown in **Table 3.1.**

Table 3.1: State wise distribution of STPs

State	Towns covered/total town	Total STPs monitored	Installed capacity of monitored STP (MLD)
Uttarakhand	18/19	48	330.5
Uttar Pradesh	16/28	51	1588.1
Bihar	12/18	20	570
Jharkhand	2/2	3	15.5
West Bengal	25/44	34	685.5
Total	**73/111**	**156**	**3189.6**

The analysed data is communicated to respective state Government agencies responsible for operation and maintenance of the STPs and other stakeholders for needful action as deemed fit. In 2025, three rounds of monitoring were performed and a total of 468-monitoring of commissioned STPs were carried out and in 2026 one round of monitoring was performed and a total of 156-monitoring of commissioned STPs were carried out. The status of monitored STPs in the four-rounds carried out during 2025-26 is summarized in **Table 3.2**.

Table 3.2: Monitoring carried out during 2025-26

Monitoring round	Total commissioned STPs monitored (A)	Non-commissioned STPs (B)	Total (A+B)
Dec'24 – Mar'25	160	19	179
Apr'25 – Jul'25	161	21	182
Aug'25 – Nov'25	147	22	169
Dec'25 – Mar'26	156	19	175
Total	**624**	**89**	**705**

The monitoring of STPs under the present programme for compliance staus is based on grab sampling and composite sampling, wherein samples are collected at discrete points in time during each monitoring round. While grab sampling provides a snapshot of the operational and treatment at the time of inspection, it has its own limitations in performance assessment of STPs. So, performance assessment of STP, considering only three grab sampling may not fully capture short-term, diurnal, or seasonal variations in influent characteristics, hydraulic loading, power availability, process upsets, or operational practices. Consequently, performance assessment of STPs may be interpreted in conjunction with operational records and composite sampling for a more comprehensive assessment.

Composite sampling involves combining multiple samples collected over a defined period (time-based or flow-proportional), providing a more representative picture of average wastewater quality and treatment performance. This method is particularly useful for regulatory compliance and process evaluation. Nevertheless, composite sampling requires more effort, equipment, and careful handling, and there is a risk of sample degradation or loss of volatile constituents during the collection period. Therefore, the choice between grab and composite sampling depends on the monitoring objective, with grab sampling suited for immediate analysis and composite sampling preferred for overall performance assessment.

3.1.1 Data generation and salient findings

The operational status of STPs monitored during 2025-2026 (December'24 to March'25, April'25 to July'25 and August'25 to November'25 and December'25 to March'26) is summarized in **Table 3.3.** Technology wise categorization of operational STPs in Ganga front towns is summarized in **Table 3.4.** Status of STPs can be obtained from **Appendix-3.1.**

Table 3.3: State-wise operational status of STPs monitored during 2025-26

State	Dec'24 – Mar'25			April'25– July'25			Aug'25 – Nov'25			Dec'25 – Mar'26		
	No. of STPs monitored	**Operational**	**Non-operational**	**No. of STPs monitored**	**Operational**	**Non-operational**	**No. of STPs monitored**	**Operational**	**Non-operational**	**No. of STPs monitored**	**Operational**	**Non-operational**
Uttarakhand	53	50	3	53	51	2	53	51	2	48	48	0
Uttar Pradesh	50	43	7	49	44	5	49	41	8	51	44	7
Bihar	11	10	1	13	11	2	16	13	2	20	17	3
Jharkhand	3	3	0	3	1	2	3	3	0	3	3	0
West Bengal	43	36	7	43	36	7	42	33	3	34	33	1
Total	160	142	18	161	143	18	163	141	15	156	145	11

Table 3.4: Technology wise categorization of Operational STPs in Ganga front towns (Total 145)

Treatment Technologies in Use	UK	UP	BH	JH	WB	Total
Electrocoagulation	17	-	-	-	-	17
Activated Sludge Process (ASP)	2	8	2	-	9	21
Fluidized Aerobic Bed Reactor	5	1	-	-	-	6
Moving Bed Biofilm Reactor (MBBR)	2	1	1	-	-	4
Sequencing Batch Reactor (SBR)	20	16	13	3	6	58
SBT (Soil Bio-technology)	2	-	-	-	-	2
Aneroic-Anoxic-Oxic with Biological Nutrient Removal (A2O with BNR)	-	1	-	-	-	1
Bio-Tower Technology (BTT) followed by ASP	-	3	-	-	-	3
Constructed wetland	-	1	-	-	-	1
Extended Aeration	-	1	-	-	-	1
Food Chain Reactor	-	3	1	-	-	4
Trickling Filter & Activated Sludge Process	-	1	-	-	-	1
Upflow Anerobic Sludge Blanket Reactor (UASB)	-	6	-	-	-	6
Waste Stabilizatiuon Pond (WSP)	-	2	-	-	7	9
Aeration through Long Channel Traverses (ALCT)	-	-	-	-	1	1
Aerated Lagoon	-	-	-	-	5	5
Fixed Bed Biofilm Activated Sludge (FBAS)	-	-	-	-	2	2
Oxidation Pond	-	-	-	-	1	1
Trickling Filter+Waste Stabilizatiuon Pond	-	-	-	-	2	2

Total 145 Operational STPs during December 2025-March 2026

The designed and utilized capacity of STPs monitored during 2025-2026 (December'24 to March'25, April'25 to July'25 and August'25 to November'25 and December'25 to March'26) is shown in **Figure 3.1**.

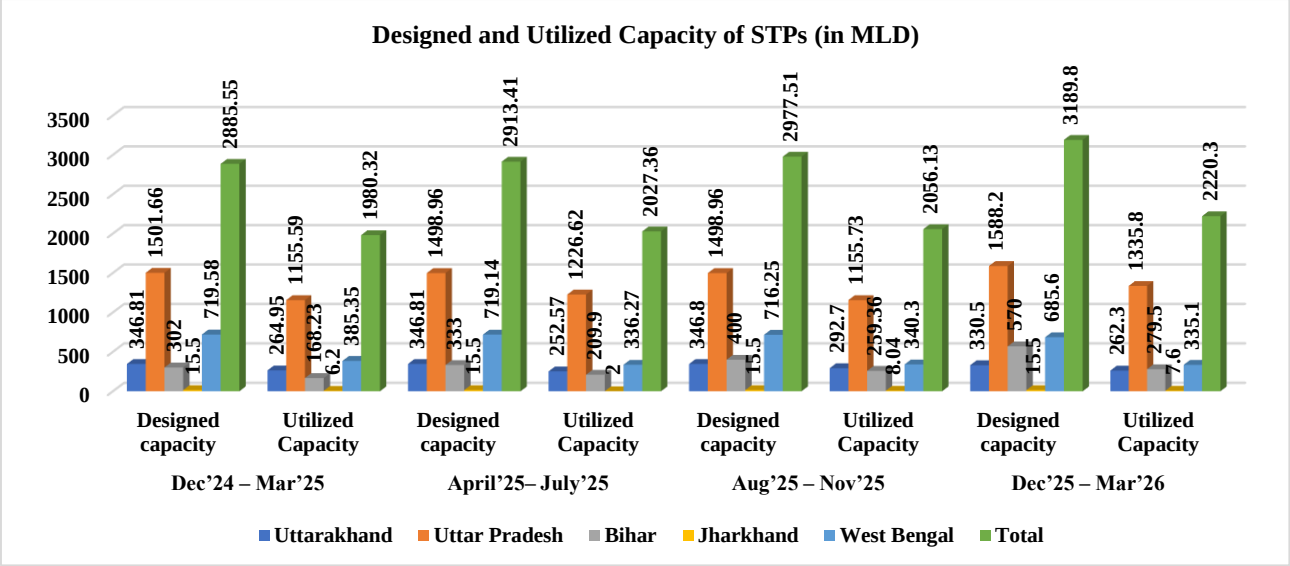


Figure 3.1: Designed and Utilized capacity (MLD) of STPs monitored during 2025-26

3.1.1.1 Compliance Status of STPs

3.1.1.1a – Compliance status of STPs for 2025-26

Table 3.5. Shows the status of compliance of operational STPs for December 2024 - March 2025 with respect to standards prescribed by MoEF&CC vide notification dated 13.10.2017.

Table 3.5: Details of STPs compliance (Dec'24-March'25)

Details of STPs compliance for the duration of Dec 2024-March 2025										
Capacity Range	Operational STPs (No.)	Designed Capacity	Compliant STPs							
			pH		BOD		TSS		FC	
			N	%	N	%	N	%	N	%
Small size STPs (<5 MLD)	53	72.61	50	94	39	74	49	92	19	36
Mid size STPs (5-25 MLD)	54	655.49	52	96	47	87	53	98	33	61
Large size STPs (>25 MLD)	35	2063	35	100	32	91.43	34	97.14	24	68.57
	142	**2791.1**	**137**	**97**	**118**	**84**	**136**	**96**	**76**	**55**

It may be observed that 53 smaller STPs cater to 72.61 MLD (2.60%) while 54 midsize STP cater to 655.49 MLD (23.49%) and the bigger 35 STPs cater to 2063 MLD (73.91%).

Primary and Secondary Treatment: The compliance level for all operational STPs for pH is 97% and TSS is 96%, whereas, for BOD the compliance status is 84%. It may be noted that non-compliance is primarily concentrated in smaller size (<5 MLD) STPs.

Tertiary Treatment (Disinfection System): Overall Compliance level w.r.t. FC is only 55%, which requires optimization of the disisnfection system, proper operation & maintenance.

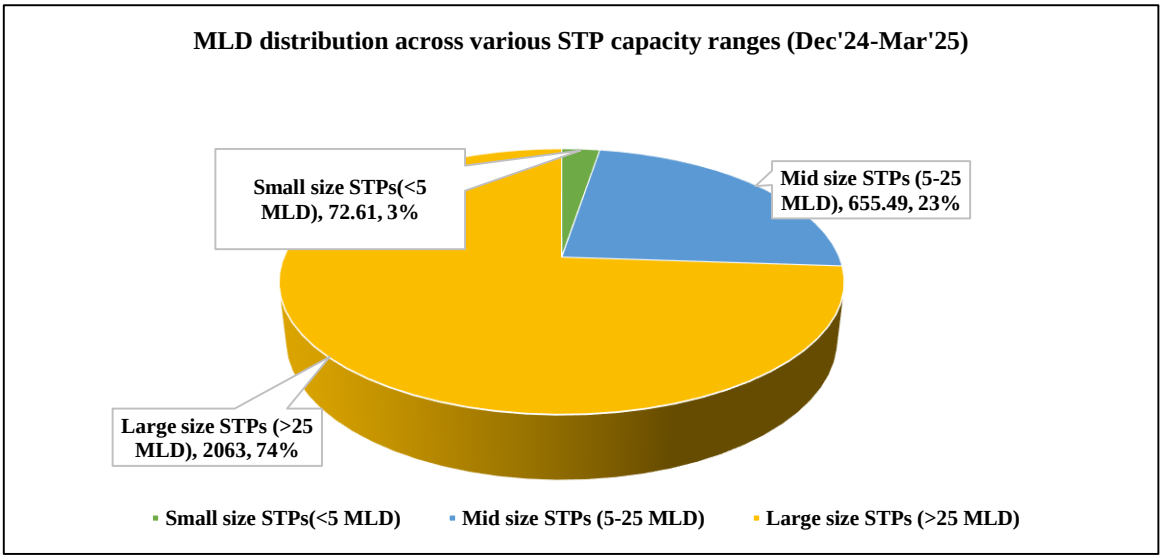


Figure 3.2: STPs Capacity distribution (Dec'24 – Mar'25)

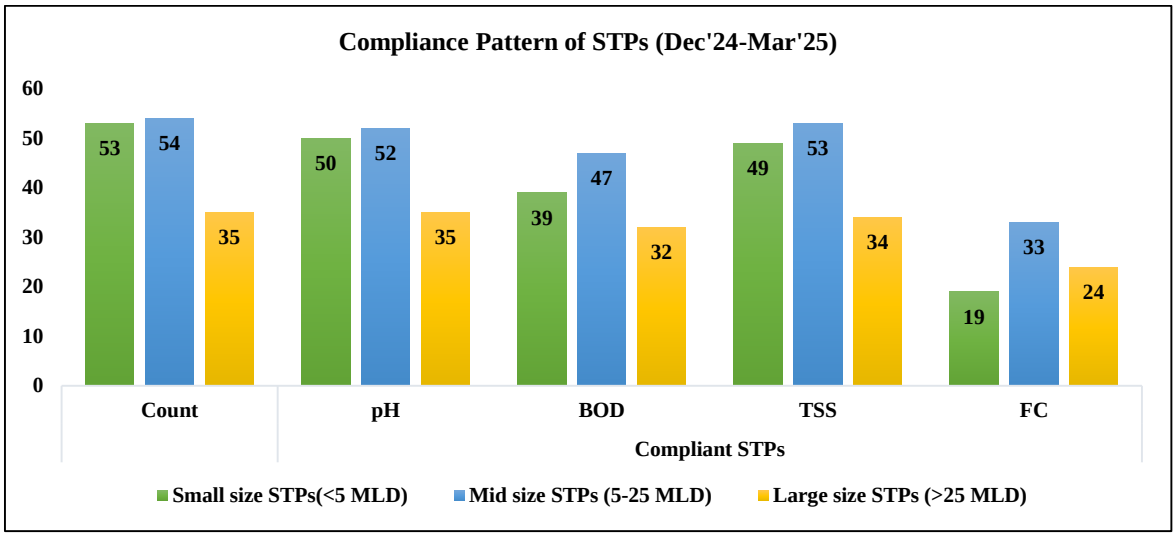


Figure 3.3: Compliance status of STPs monitored during Dec 23- March 24

3.1.1.1b – Compliance status of STPs April'25 – July'25

Table 3.6: Shows the status of compliance of operational STPs for April'25 – July'25 with respect to standards prescribed by MoEF&CC vide notification dated 13.10.2017.

Table 3.6: Details of STPs compliance (April'25 – July'25)

Details of STPs compliance for the duration of April 2025-July 2025										
Capacity Range	**Operational STPs (No.)**	**Designed Capacity**	**Compliant STPs**							
			pH		**BOD**		**TSS**		**FC**	
			N	**%**	**N**	**%**	**N**	**%**	**N**	**%**
Small size STPs (<5 MLD)	57	76.83	53	93	43	75	53	93	15	26
Mid size STPs (5-25 MLD)	53	669.05	52	98	52	98	53	100	23	43
Large size STPs (>25 MLD)	33	1983	33	100	31	93.94	32	96.97	18	54.55
	143	**2728.88**	**138**	**97**	**126**	**89**	**138**	**97**	**56**	**41**

It may be observed that 57 smaller STPs cater to 76.83 MLD (2.82%) while 53 midsize STP cater to 669.05 MLD (24.52%) and the bigger 33 STPs cater to 1983 MLD (72.6%).

Primary and Secondary Treatment: The compliance level for all operational STPs for pH is 97% and for TSS it is >97% as well. Whereas, for BOD the compliance status is 89%. It may be noted that non-compliance is primarily concentrated in smaller size (<5 MLD) STPs.

Tertiary Treatment (Disinfection System): FC compliance rate is 41%, requiring optimization of the disinfection system, proper operation & maintenance.

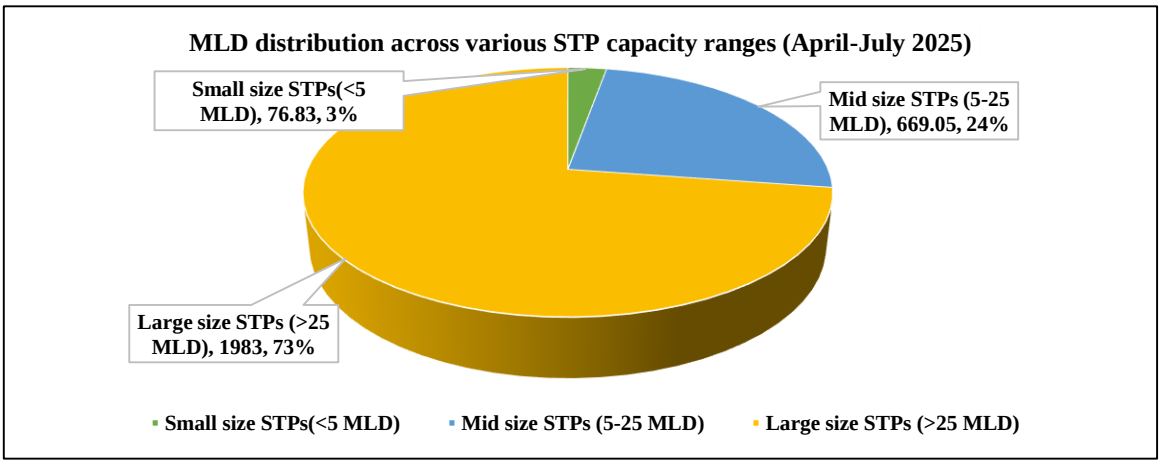


Figure 3.4: STPs Capacity distribution (April-July 2025)

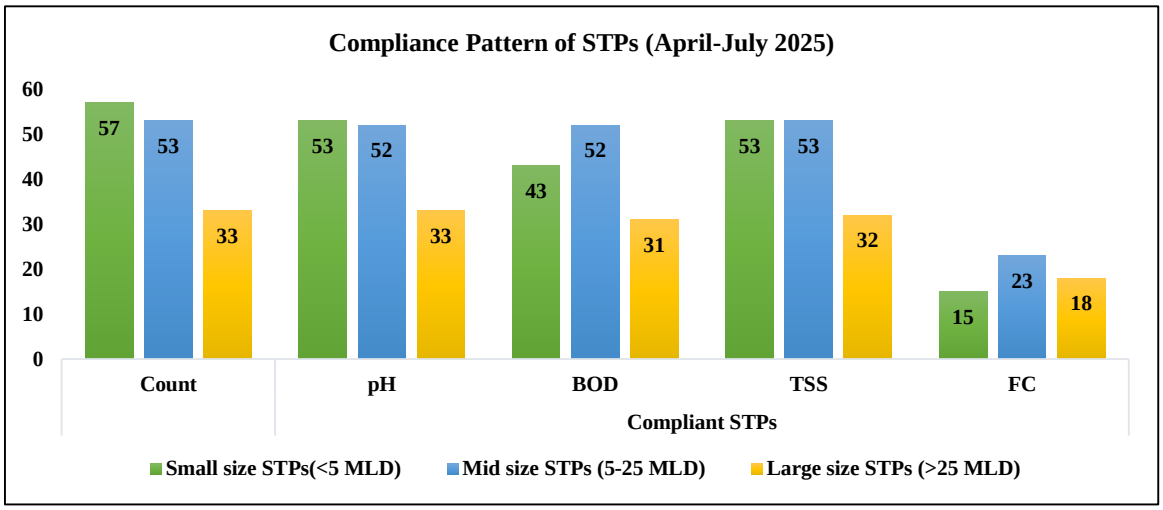


Figure 3.5: Compliance status of STPs monitored during April-July 2025

3.1.1.1c – Compliance status of STPs August-November 2025

Table 3.7: Shows the status of compliance of operational STPs for August-November, 2025 with respect to standards prescribed by MoEF&CC vide notification dated 13.10.2017.

Table 3.7: Details of STPs compliance (August-November 2025)

Details of STPs compliance for the duration of April 2025-July 2025										
Capacity Range	**Operational STPs (No.)**	**Designed Capacity**	**Compliant STPs**							
			pH		**BOD**		**TSS**		**FC**	
			N	**%**	**N**	**%**	**N**	**%**	**N**	**%**
Small size STPs(<5 MLD)	53	67.87	50	94	38	72	51	96	13	25
Mid size STPs (5-25 MLD)	53	665.29	52	98	52	98	52	98	34	64
Large size STPs (>25 MLD)	35	2078	35	100	32	91.43	35	100.00	27	77.14
	141	**2811.16**	**137**	**97**	**122**	**87**	**138**	**98**	**74**	**56**

It may be observed that 53 smaller STPs cater to 67.87 MLD (2.41%) while 53 midsize STP cater to 665.29 MLD (23.67%) and the bigger 35 STPs cater to 2078 MLD (73.92%).

Primary and Secondary Treatment: The compliance level for all operational STPs for pH and TSS is more than 97%, whereas, for BOD the compliance status is 87%. It may be noted that non-compliance is primarily concentrated in smaller size (<5 MLD) STPs.

Tertiary Treatment (Disinfection System): Overall Compliance level w.r.t. FC is only 56%, which requires optimization of the disinfection system, proper operation & maintenance.

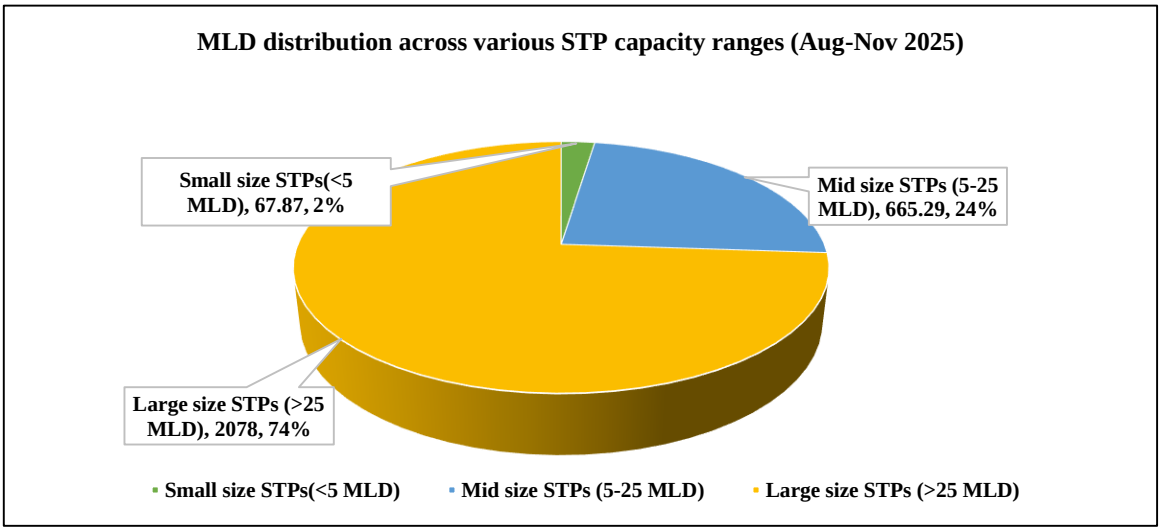


Figure 3.6: STPs Capacity distribution (Aug-Nov 2025)

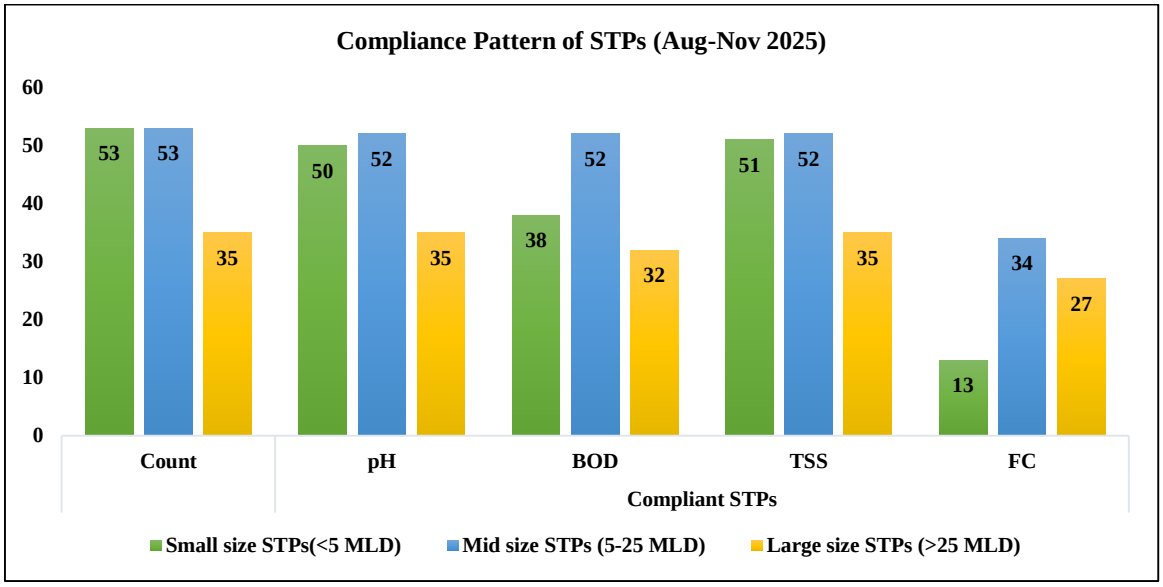


Figure 3.7: Compliance status of STPs monitored during Aug-Nov 2025

3.1.1.1d – Compliance status of STPs December 2025 to March 2026

Table 3.8 Shows the status of compliance of operational STPs for Dec'25 – Mar'26 with respect to standards prescribed by MoEF&CC vide notification dated 13.10.2017.

Table 3.8: Details of STPs compliance (Dec'25 – Mar'26)

Details of STPs compliance for the duration of Dec'25-Mar'26										
Capacity Range	Operational STPs (No.)	Designed Capacity	Compliant STPs							
			pH		BOD		TSS		FC	
			N	%	N	%	N	%	N	%
Small size STPs(<5 MLD)	48	60.41	45	94	29	60	43	90	9	19
Mid size STPs (5-25 MLD)	57	712.79	56	98	50	88	56	98	35	61
Large size STPs (>25 MLD)	40	2349	40	100	37	92.50	40	100.00	19	47.50
	145	**3122.2**	**141**	**97**	**116**	**80**	**139**	**96**	**63**	**43**

It may be observed that 48 smaller STPs cater to 60.41 MLD (1.93%) while 57 midsize STPs cater to 712.79 MLD (22.83%) and the bigger 40 STPs cater to 2349 MLD (75.24%).

Primary and Secondary Treatment: The compliance level for all operational STPs for pH and TSS is 97% and 96%, respectively. Whereas, for BOD the compliance status is 80%. It may be noted that non-compliance is primarily concentrated in smaller size (<5 MLD) STPs.

Tertiary Treatment (Disinfection System): Overall Compliance level w.r.t. FC is only 43%, which requires optimization of the disinfection system, proper operation & maintenance.

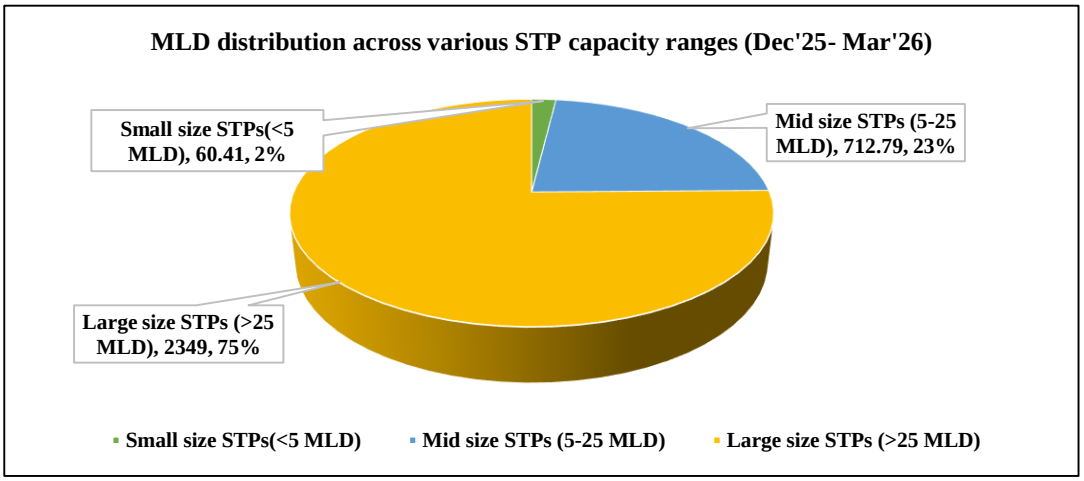


Figure 3.8: STPs Capacity distribution (Dec'25-Mar'26)

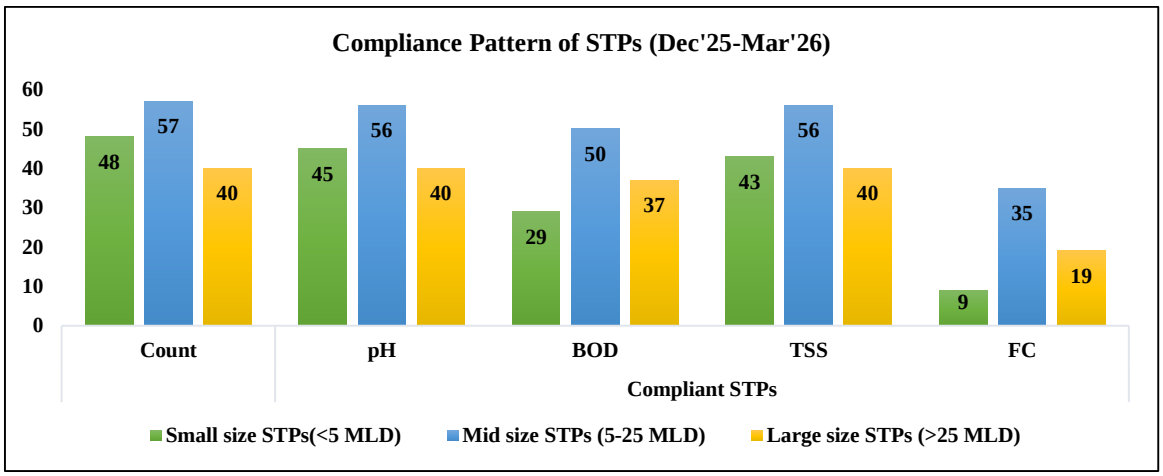


Figure 3.9: Compliance status of STPs monitored during Dec'25-Mar'26

Table 3.9: Overall Status of STPs (Dec'24- March'25)

State	Range	Total no. of STPs	No. of operational STPs	Designed capacity of operational STPs	Utilized capacity (average) of Operational STPs	Non-complying for parameters			
						pH	TSS	BOD	FC
Uttarakhand	<5	**39**	37	31.04	17.2	3	4	13	24
	5 to 25	**10**	9	112.5	110.21	1	0	1	4
	>25	**4**	4	189	137.54	0	0	0	2
	A	**53**	**50**	**332.54**	**264.95**	**4**	**4**	**14**	**30**
Uttar Pradesh	<5	13	8	12.85	9.7	0	0	0	4
	5 to 25	20	18	244.5	204.87	0	0	3	5
	>25	17	17	1213	941.01	0	0	2	4
	B	**50**	**43**	**1470.35**	**1155.58**	**0**	**0**	**5**	**13**
Bihar	<5	1	1	3.5	1.3	0	0	0	0
	5 to 25	4	3	27.5	11	0	0	0	1
	>25	6	6	262	155.93	0	1	0	3
	C	**11**	**10**	**293**	**168.23**	**0**	**1**	**0**	**4**
Jharkhand	<5	1	1	3.5	1	0	0	0	1
	5 to 25	2	2	12	5.2	0	0	0	0
	>25	-	-	-	-	-	-	-	-
	D	**3**	**3**	**15.5**	**6.2**	**0**	**0**	**0**	**1**
West Bengal	<5	10	6	21.72	15.63	0	0	1	5
	5 to 25	25	22	258.99	131.25	1	1	3	11
	>25	8	8	399	238.47	0	0	1	2
	E	**43**	**36**	**679.71**	**385.35**	**1**	**1**	**5**	**18**
Grand Total (A to E)		**160**	**142**	**2791.1**	**1980.31**	**5**	**6**	**24**	**66**
All 5 States	<5	64	53	72.61	44.83	3	4	14	34
	5 to 25	61	54	655.49	462.53	2	1	7	21
	>25	35	35	2063	1472.95	0	1	3	11
	Total	**160**	**142**	**2791.1**	**1980.31**	**5**	**6**	**24**	**66**

Table 3.10: Overall Status of STPs (April'25 – July'25)

State	Range (MLD)	Total no. of STPs	No. of operational STPs	Designed capacity of operational STPs (in MLD)	Utilized capacity (sum) of Operational STPs (in MLD)	Non-complying for parameters			
						pH	TSS	BOD	FC
Uttarakhand	<5	39	38	31.3	16.37	4	3	12	29
	5 to 25	10	9	112.5	107.78	0	0	0	7
	>25	4	4	189	128.41	0	0	0	3
	A	**53**	**51**	**332.8**	**252.56**	**4**	**3**	**12**	**39**
Uttar Pradesh	<5	12	10	15.42	12.63	0	1	2	5
	5 to 25	20	18	250.5	216.31	0	0	0	11
	>25	17	16	1178	997.68	0	0	2	6
	B	**49**	**44**	**1443.92**	**1226.62**	**0**	**1**	**4**	**22**
Bihar	<5	1	1	3.5	1.5	0	0	0	0
	5 to 25	6	4	47.5	28.4	0	0	0	3
	>25	6	6	262	180	0	1	0	2
	C	**13**	**11**	**313**	**209.9**	**0**	**1**	**0**	**5**
Jharkhand	<5	1	1	3.5	2	0	0	0	1
	5 to 25	2	0	0	0	0	0	0	0
	>25	0	0	0	0	0	0	0	0
	D	**3**	**1**	**3.5**	**2**	**0**	**0**	**0**	**1**
West Bengal	<5	10	7	23.11	15.79	0	0	0	7
	5 to 25	25	22	258.55	144.64	1	0	1	9
	>25	8	7	354	175.84	0	0	0	4
	E	**43**	**36**	**635.66**	**336.27**	**1**	**0**	**1**	**20**
Grand Total (A to E)		**161**	**143**	**2728.88**	**2027.35**	**5**	**5**	**17**	**87**
All 5 States	<5	63	57	76.83	48.3	4	4	14	42
	5 to 25	63	53	669.05	497.13	1	0	1	30
	>25	35	33	1983	1481.93	0	1	2	15
	Total	**161**	**143**	**2728.88**	**2027.36**	**5**	**5**	**17**	**87**

Table 3.11: Overall Status of STPs (August'25- November'25)

State	Range (MLD)	Total no. of STPs	No. of operational STPs	Designed capacity of operational STPs (in MLD)	Utilized capacity (sum) of Operational STPs (in MLD)	Non-complying for parameters			
						pH	TSS	BOD	FC
Uttarakhand	<5	39	38	31.3	17.83	3	2	12	32
	5 to 25	10	9	112.5	104.02	1	0	0	6
	>25	4	4	189	170.85	0	0	0	3
	(A)	**53**	51	**332.8**	**292.7**	**4**	**2**	**12**	**41**
Uttar Pradesh	<5	12	8	12.39	5.66	0	0	2	7
	5 to 25	20	17	232.7	193.77	0	0	0	2
	>25	17	16	1178	954.9	0	0	3	2
	(B)	**49**	**41**	**1423.09**	**1154.33**	**0**	**0**	**5**	**11**
Bihar	<5	1	1	3.5	2.3	0	0	0	0
	5 to 25	7	5	58.5	35.8	0	0	0	3
	>25	7	7	312	221.26	0	0	0	2
	(C)	**15**	**13**	**374**	**259.36**	**0**	**0**	**0**	**5**
Jharkhand	<5	1	1	3.5	1.25	0	0	0	0
	5 to 25	2	2	12	6.79	0	0	0	0
	>25	0	0	0	0	0	0	0	0
	(D)	**3**	**3**	**15.5**	**8.04**	**0**	**0**	**0**	**0**
West Bengal	<5	7	5	17.18	18.96	0	0	1	1
	5 to 25	21	20	249.59	134.65	0	1	1	7
	>25	8	8	399	186.69	0	0	0	1
	(E)	**36**	**33**	**665.77**	**340.3**	**0**	**1**	**2**	**9**
Grand Total	**(A) to (E)**	**156**	**141**	**2811.16**	**2054.73**	**4**	**3**	**19**	**66**
All 5 States	<5	60	53	67.88	46	3	2	15	40
	5 to 25	60	53	665.29	475.03	1	1	1	18
	>25	36	35	2078	1533.7	0	0	3	8
	Total	**156**	**141**	**2811.16**	**2054.73**	**4**	**3**	**19**	**66**

Table 3.12: Overall Status of STPs (December'25- March'26)

State	Range	Total no. of STPs	No. of operational STPs	Designed capacity of operational STPs	Utilized capacity (average) of Operational STPs	Non-complying for parameters			
						pH	TSS	BOD	FC
Uttarakhand	<5	35	35	29.04	15.47	3	5	17	29
	5 to 25	9	9	112.5	108.92	0	0	3	3
	>25	4	4	189	137.95	0	0	0	3
	A	**48**	**48**	**330.54**	**262.34**	**3**	**5**	**20**	**35**
Uttar Pradesh	<5	12	7	10.89	6.26	0	0	2	6
	5 to 25	20	18	248.7	221.19	0	0	1	8
	>25	19	19	1304	1108.29	0	0	2	11
	B	**51**	**44**	**1563.59**	**1335.74**	**0**	**0**	**5**	**25**
Bihar	<5	1	1	3.5	1.9	0	0	0	0
	5 to 25	10	7	76.5	38.33	0	0	0	2
	>25	9	9	457	239.3	0	0	0	4
	C	**20**	**17**	**537**	**279.53**	**0**	**0**	**0**	**6**
Jharkhand	<5	1	1	3.5	1.1	0	0	0	0
	5 to 25	2	2	12	6.5	0	0	0	0
	>25	0	0	0	0	0	0	0	0
	D	**3**	**3**	**15.5**	**7.6**	**0**	**0**	**0**	**0**
West Bengal	<5	4	4	13.48	12.68	0	0	0	4
	5 to 25	22	21	263.09	137.14	1	1	3	9
	>25	8	8	399	185.23	0	0	1	3
	E	**34**	**33**	**675.57**	**335.05**	**1**	**1**	**4**	**16**
Grand Total (A to E)	**A+E**	**156**	**145**	**3122.2**	**2220.26**	**4**	**6**	**29**	**82**
All 5 States	<5	53	48	60.41	37.41	3	5	19	39
	5 to 25	63	57	712.79	512.08	1	1	7	22
	>25	40	40	2349	1670.77	0	0	3	21
	Total	**156**	**145**	**3122.2**	**2220.26**	**4**	**6**	**29**	**82**

3.1.1.2 Reduction in organic (BOD) load

- The total designed capacity of monitored STPs during December 2024-March 2025, stood at 2791.10 MLD, with an actual utilization of 1980.32 MLD, indicating a utilization rate of 70.95%.
- The total designed capacity of monitored STPs during April-July 2025 amounted to 2728.88 MLD, with an actual utilization of 2027.36 MLD, indicating a utilization rate of 74.29%.
- During the period August-November 2025, monitored STPs were found to have total designed capacity of 2811.16 MLD, of which 2054.74 MLD were actually utilized, representing a utilization rate of 73.09%.
- The total designed capacity of monitored STPs during December 2025-March 2026 was 3122.2 MLD, with an actual utilization of 2220.26 MLD, indicating a utilization rate of 71.11%.

During the December 2024-March2025 round it was observed that the average pollution load reduction in terms of BOD was 87.09% by STPs operating across front towns of 5 river Ganga main stem States as detailed in **Table 3.13.**

Table 3.13: Reduction in BOD pollution load (%age) in 5 Ganga states during Dec'24-Mar'25

State	Number	BOD pollution load (TPD)		% reduction in BOD pollution load
		Inlet load	Outlet load	
Uttarakhand	50	29.93	1.32	95.59
Uttar Pradesh	43	148.43	21.63	85.43
Bihar	10	8.92	1.58	82.29
Jharkhand	3	0.48	0.007	98.54
West Bengal	36	18.49	4.88	73.61
Total	**142**	**206.25**	**29.417**	**87.09**

In the round April-July 2025, pollution load received at the STP inlet was 188.52 tons per day (TPD), while the discharged BOD pollution load was 27.70 TPD, indicating 83.95% reduction in pollution load (**Table 3.14**).

Table 3.14: Reduction in BOD pollution load (%age) in 5 Ganga states during April-July, 2025

State	Number	BOD pollution load (TPD)		% reduction in BOD pollution load
		Inlet load	Outlet load	
Uttarakhand	51	19.85	0.9	95.47
Uttar Pradesh	44	154.7	22.4	85.52
Bihar	11	5.7	1.04	81.75
Jharkhand	1	0.11	0.002	98.18
West Bengal	36	8.16	3.36	58.82
Total	**143**	**188.52**	**27.702**	**83.95**

During the monitoring round of August-November 2025, the BOD pollution load received at the STPs inlet was 230.7 TPD, whereas the discharged BOD pollution load was 24.12 TPD, demonstrating a reduction of 87% in BOD pollution load by STPs operating across front towns of 5 mainstem Ganga States **(Table 3.15)**.

Table 3.15: Reduction in BOD pollution load (%age) in 5 Ganga states during Aug-Nov, 2025

State	Number	BOD pollution load (TPD)		% reduction in BOD pollution load
		Inlet load	Outlet load	
Uttarakhand	51	23.52	1.38	94.13
Uttar Pradesh	41	186.14	18	90.33
Bihar	13	8.07	1.17	85.50
Jharkhand	3	0.47	0.019	95.96
West Bengal	33	12.5	3.56	71.52
Total	**141**	**230.7**	**24.12**	**87.49**

During the monitoring round of December'25-March'26, the BOD pollution load received at the STPs inlet was 273.69 TPD, whereas the discharged BOD pollution load was 30.63 TPD, demonstrating an

average reduction of 87% in BOD pollution load by STPs operating across front towns of 5 mainstem Ganga States **(Table 3.16)**. Values of Outlet BOD in treated sewage (December'25-March'26) are shown in **Table 3.17**.

Table 3.16: Reduction in BOD pollution load (%age) in 5 Ganga states during Dec'25 to Mar'26

State	Number	BOD pollution load (TPD)		% reduction in BOD pollution load
		Inlet load	Outlet load	
Uttarakhand	48	58.71	2.59	95.59
Uttar Pradesh	44	182.35	20.58	88.71
Bihar	17	14.17	1.93	86.38
Jharkhand	3	0.916	0.032	96.51
West Bengal	33	17.55	5.5	68.66
Total	**145**	**273.696**	**30.632**	**87.17**

Table 3.17: Values of Outlet BOD treated sewage (Dec'25-Mar'26)

State	Outlet BOD value (<10 mg/L)	Outlet BOD value range (10-20 mg/L)	Outlet BOD value range (21-30 mg/L)	Outlet BOD value (>30 mg/L)
Uttarakhand	18	6	4	20
Uttar Pradesh	20	15	4	5
Bihar	14	3	0	0
Jharkhand	3	0	0	0
West Bengal	8	17	6	2
Total	**63**	**41**	**14**	**27**

The range of BOD at inlet and compliance for BOD (Dec'25-Mar'26) are shown in **Table 3.18.**

Table 3.18: Range of BOD at Inlet and compliance for BOD (Dec'25-Mar'26)

S. No.	Inlet BOD (mg/l)	Number of STPs	Outlet BOD	Overall compliance w.r.t.
			≤ 30 mg/L	MoEF&CC norms
1	BDL-40	38	36	19
2	41-100	50	47	20
3	101-150	17	13	7
4	151-250	23	12	7
5	>250	17	10	3
Total		**145**	**118**	**56**

The analysis of BOD of raw sewage at inlet of STPs in the above table (**Table 3.18**) shows that 38 STPs were receiving BOD<40 mg/l, which indicates weak strength of raw sewage at inlet which may affect the performance efficiency of the STP.

3.1.1.3 Under-capacity operation

Under-capacity utilization is one of the major issues observed in STP operation. STPs receiving less than 75% flow of its designed capacity is considered as under-utilized STPs. The status of under-capacity STPs during 2025-26 is given in **Table 3.19.**

Table 3.19: Summary of STPs working under-capacity during 2025-26

Rounds of monitoring	No. of STP working under-capacity	Designed Capacity (MLD)	Utilized Capacity (MLD)
December'24 - March'25	90	1687.12	871.51
April - July'25	81	1495.69	760.08
August - November'25	78	1405.88	709.15
December'25 - March'26	116	2512.75	1494.61

The issue of under-utilization arises majorly because of i) incomplete sewerage network, ii) broken sewage line due to road construction and other activity, iii) less sewage generation in catchment area, iv) no connection of soak pits, v) less than targeted household connection, vi) deposition of sediments in sewer line and vii) lack of awareness in population. A large number of STPs located in Ganga Front Towns of five Ganga states were found working at under-capacity in at least two rounds of monitoring in 2025-26.

3.1.1.4 Over-capacity operation

The STPs receiving flow above than their designed capacity are considered as over-capacity STPs. The status of over-capacity STPs during 2025-26 is given in **Table 3.20**.

Table 3.20: Summary of STPs working over-capacity during 2025-26

Rounds of monitoring	No. of STP working over-capacity	Designed Capacity (MLD)	Utilized Capacity (MLD)
December'24 - March'25	34	688.53	711.61
April - July'25	18	435.51	531.86
August - November'25	29	704.04	829.9
December'25 - March'26	21	580.07	696.29

A large number of STPs located in following Ganga Front Towns of five Ganga States were found working at over-capacity during at least two rounds of monitoring during December,2024 – March, 2026.

Over-capacity operation of STPs may lead to hydraulic overloading, reduced treatment efficiency, inadequate retention time, deterioration in treated effluent quality, and increased risk of bypass/untreated sewage discharge. The excess flow may also indicate infiltration/inflow, storm-water mixing, or inadequate household sewer connectivity.

To minimize over-capacity operation of STPs, excess sewage flow may be diverted to other STPs within the city having adequate spare treatment capacity, subject to hydraulic feasibility and conveyance availability. Storm-water drains shall be physically separated from the sewerage network to prevent additional hydraulic loading, particularly during rainfall. 100% household connectivity for collection of greywater and blackwater shall be ensured to prevent direct discharge into open drains and facilitate treatment at designated STPs. Sources of extraneous flow, including illegal connections, groundwater infiltration and other non-revenue water entering the sewer network, shall be identified through flow monitoring and field inspections and suitably eliminated. Regular monitoring of STP inlet flows shall be undertaken to ensure appropriate load balancing among available STPs and to prevent both overloading and underutilization.

3.1.1.5 Performance Efficiency of STPs

Performance efficiency of STPs in terms of BOD removal was assessed and is categorized into four ranges: <50%, 50-70%, 70-90%, and >90%. The desired BOD removal efficiency for STPs based on modern technologies is >90%. In Uttarakhand, a significant portion of treatment plants demonstrates higher efficiency, with 9 facilities achieving 70-90% removal and 23 exceeding 90%. Meanwhile, Uttar Pradesh shows a trend, with 19 plants falling in the 70-90% range and 18 achieving over 90% efficiency. In Bihar, 09 STPs achieved 70-90% BOD removal and 06 STPs were found performing at 90% or higher BOD removal. In Jharkhand, all three plants achieved >90% efficiency. West Bengal exhibits a mixed performance, with 7 and 9 plants in <50% and 50-70% categories, respectively whereas 16 STPs were achieving 70-90% BOD removal, while only 1 STP achieved over 90% efficiency (**Figure 3.10**).

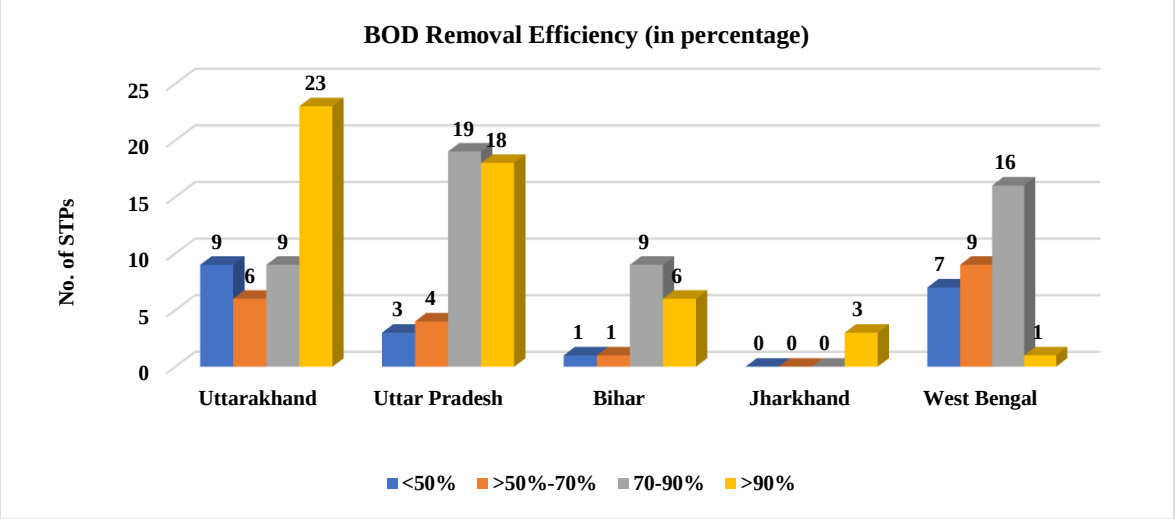


Figure 3.10: BOD removal efficiency (Percentage) in five Ganga states (Dec'25-Mar'26)

3.1.1.6 Online Continuous Effluent Monitoring System (OCEMS)

99 STPs located in Ganga front towns have OCEMS installed at their outlet (Upto March 2026) (**Table 4.18**).

3.1.1.7 Disinfection of treated sewage

Currently (March 2026), 34 STPs of Uttarakhand are equipped with disinfection system. In Uttar Pradesh, 41 STPs have installed disinfection system. In West Bengal 33 STPs are equipped with disinfection system. Few more are in the phase of installing the facility. In Bihar 10 and Jharkhand all 3 STPs have functional disinfection system installed.

It was observed that, during cumulative 290 monitorings of operational STPs (multiple monitoring of different STPs) in 2025, considering STPs having an inlet Fecal Coliform (FC) number of > 10^6 MPN/100 ml, analyzed for compliance for Faecal Coliform numbers, only 98 times met the Fecal Coliform standards, resulting in an overall compliance rate of approximately 34%.

However, a matter of concern is that even with disinfection system many STPs fail to meet compliance for FC. There remains scope to improve in the area of disinfection of treated sewage with optimization of disinfection system as per feed flow condition. The status of disinfection system installed at STPs in five Ganga states is summarized in **Table 3.21**.

Table 3.21 Status of OCEMS installed and disinfection system installed in five Ganga states

State	OCEMS installed	Disinfection system installed*
Uttarakhand	19	34
Uttar Pradesh	38	41
Bihar	12	10
Jharkhand	3	3
West Bengal	27	33
Total	**99**	**121**
**Actual number may vary as many units have under-commissioning disinfection systems*		

3.1.2 Major Issues and Challenges

- **Non-compliance for Faecal Coliform:** About 82 STPs failed to meet Faecal Coliform norms; proper installation and optimization of disinfection systems is required.
- **Weak-strength sewage at STP inlets:** 35 STPs, receive very low-strength sewage (BOD < 40 mg/L) instead of the expected 200–250 mg/L; during Dec'25 to Mar'26.

- **Rejuvenation of non-operational STPs:** 11 STPs—particularly in Uttar Pradesh (7 STPs), Bihar (3 STPs) and West Bengal (1 STP)—remained non-operational in multiple monitoring cycles and are undergoing rejuvenation or reconstruction due to obsolete technologies.
- **Under-capacity operation:** STPs operating at <75% of design capacity remain widespread; network augmentation (I&D works, pumping, household connections) is needed. During Dec'25 to Mar'26, **98 STPs** operated below capacity.
- **Over-capacity operation:** STPs in cities like Prayagraj and Haridwar operated beyond design capacity due to high floating populations (tourism, religious, educational, medical hubs). During Dec'25 to Mar'26, **30 STPs** exceeded capacity.
- Status of STPs can be obtained from **Appendix-3.1.**

3.1.3 Comparison between 2024 Vs 2025

3.1.3.1 Designed and utilized capacities of STPs

The designed and utilized capacities of STPs during 2024 & 2025 are shown in **Figure 3.11 a &b.**

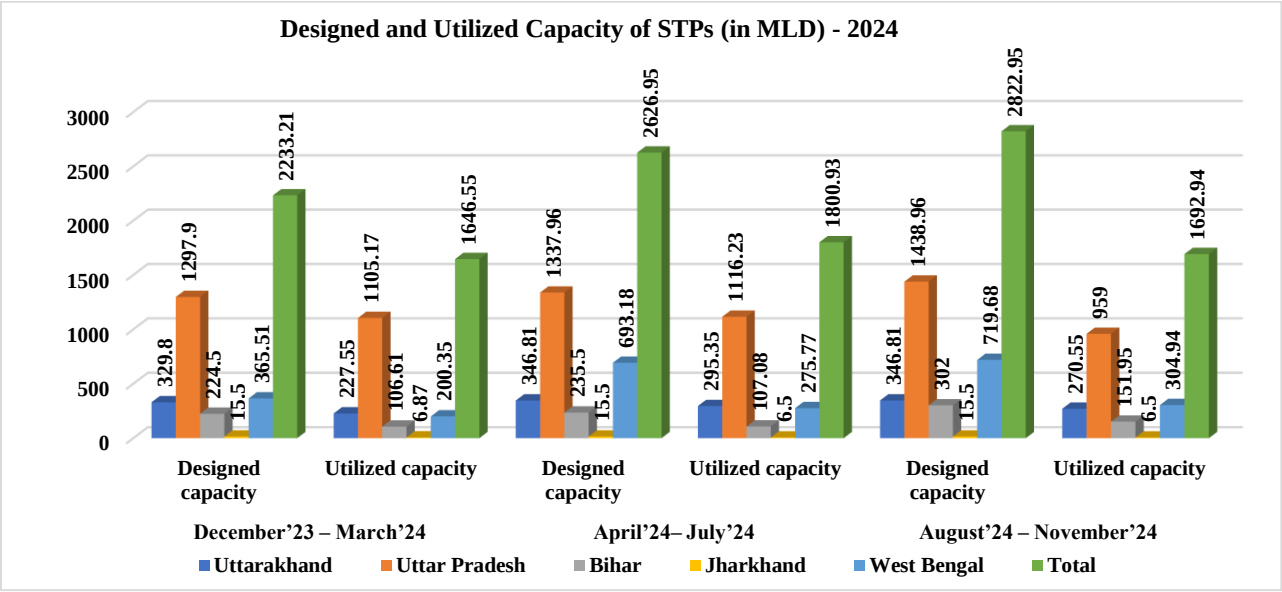


Figure 3.11 (a): Designed and utilized capacities of STPs in 2024

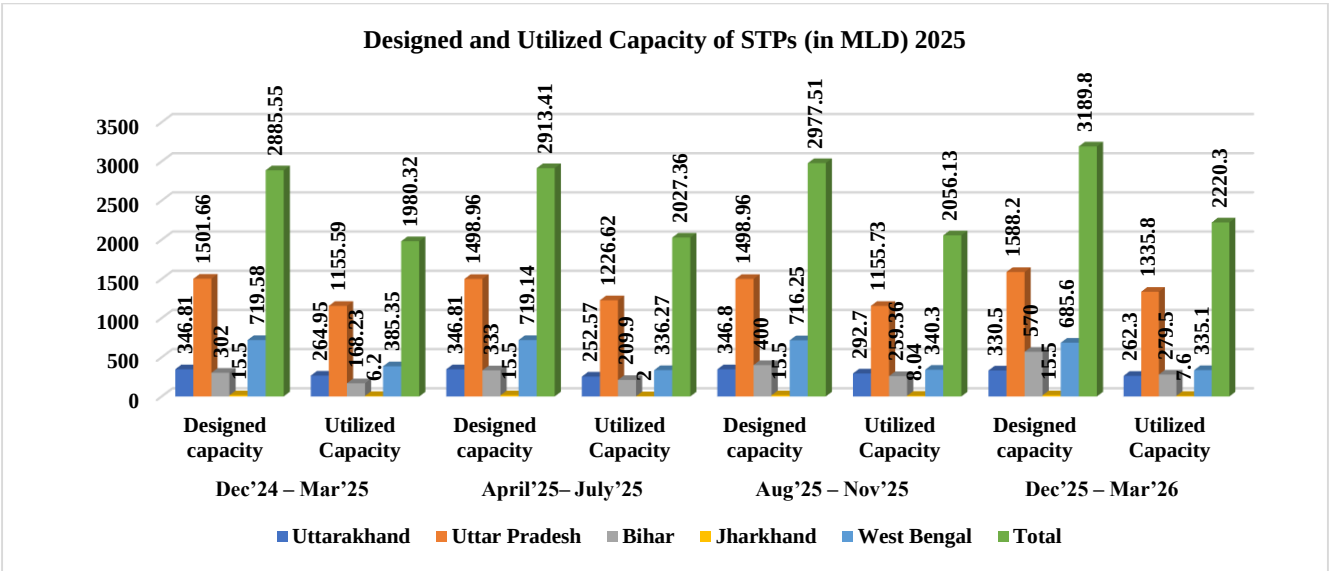


Figure 3.11 (b): Designed and utilized capacities of STPs in 2025

The observations made during comparative analysis of designed and utilized capacities of STPs during 2024 & 2025 are as follows:

- **December 2023–March 2024 Vs December 2024–March 2025:**
  - During **December 2023–March 2024**, the total designed capacity of STPs monitored across the five states was approximately 2233.21 MLD with a utilization capacity of 1646.55 MLD, respectively, indicating 73.73% utilization efficiency. Uttar Pradesh had the maximum designed capacity followed by West Bengal and Uttarakhand. Also, Uttar Pradesh had the highest utilization efficiency followed by Uttarakhand. Here, Jharkhand had the lowest utilization efficiency followed by Bihar.
  - In **December 2024–March 2025**, the total designed capacity of STPs monitored across the five states was increased to 2885.55 MLD, with a utilization capacity of 1980.32 MLD, indicating an overall utilization efficiency of around 68.62%. In Dec'24-March 2025, Uttar Pradesh had the maximum designed capacity followed by Uttarakhand and West Bengal, while Uttar Pradesh had higher utilization efficiency followed by Uttarakhand. Jharkhand had the lowest utilization efficiency followed by West Bengal.
- **April–July 2024 Vs April–July 2025**
  - In **April–July 2024**, the total designed capacity of STPs monitored across the five states was approximately 2626.95 MLD, with a utilization capacity of 1800.93 MLD, indicating an overall utilization efficiency of around 68.55%. In April-July 2024, Uttar Pradesh had the maximum designed capacity followed by West Bengal, wherein Uttarakhand had higher utilization efficiency followed by Uttar Pradesh. Here, Jharkhand had the lowest utilization efficiency followed by Jharkhand.
  - During **April–July 2025**, the designed capacity and utilization capacity increased to 2913.41 MLD and 2027.36 MLD, respectively. However, indicating slightly higher utilization efficiency around 70% as compared to year 2024. Uttar Pradesh had the maximum designed capacity followed by West Bengal. Here, Uttar Pradesh had the highest utilization efficiency followed by Uttarakhand. Here, Jharkhand had the lowest utilization efficiency followed by West Bengal.
- **August–November 2024 Vs August–November 2025**
  - In **Aug-Nov 2024**, the total designed capacity of STPs monitored across the five states was approximately 2822.95 MLD, with a utilization capacity of 1692.94 MLD, indicating an overall utilization efficiency of around 60%. In Aug-Nov 2024, Uttar Pradesh had the maximum designed capacity followed by West Bengal and Uttarakhand. Here, Uttarakhand had the highest utilization efficiency followed by Uttar Pradesh and Jharkhand had the lowest utilization efficiency, followed by West Bengal.
  - During **Aug-Nov 2025**, the designed capacity and utilization capacity slightly increased to 3198.8 MLD and 2220.3 MLD, respectively indicating high utilization efficiency around 70% as compared to year 2024. Uttar Pradesh had the maximum designed capacity followed by West Bengal and Uttarakhand. Here, Uttarakhand had the highest utilization efficiency followed by Uttar Pradesh and West Bengal had the lowest utilization efficiency followed by Jharkhand.

3.1.4 Action Taken by CPCB

1. Status of STPs monitored during **April-July 2024** to 05 Ganga state agencies for action to 05 states agencies, STP operating agencies, NMCG and SMCG vide letter dated **31.01.2025** for suitable action against operation and compliance.
2. Status of STPs monitored during **August-November 2024** to 04 Ganga state agencies except Jharkhand for action vide letter dated **03.04.2025** to STP operating agencies, NMCG and SMCG for suitable actions against operation and compliance.

3. Status of water quality monitoring of Sewage Treatment Plants (STPs) in Ganga front towns for the periods from **December 2023 –March 2025** and data trends and data sheet for **December 2024-March 2025** vide letter dated **26.05.2025** to submitted to NMCG.
4. Letter dated **24.06.2025** to 05 state agencies, STP operating agencies, NMCG and SMCG for suitable action against operation and compliance status of STPs monitored during December 2024-March 2025 including data trends for December 2023-March 2025.
5. Status of STPs monitored during **April-July 2025** forwarded vide letter dated **30.10.2025** to 05 state agencies (Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal), STP operating agencies, NMCG and SMCG for suitable actions against operation and compliance status.
6. Status of STPs monitored during **August-November 2025** forwarded vide letter dated **27.02.2026** to 05 state agencies (Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal), STP operating agencies, NMCG and SMCG for suitable actions.
7. Status of STPs monitored during **December 2025 – March 2026** forwarded vide letter dated **03.06.2026** for Uttarakhand and letter dated 10.06.2026 to state agencies, including STP operating agencies, NMCG and SMCG for Uttar Pradesh, Bihar, Jharkhand and West Bengal, for suitable actions against operational and compliance status.

3.1.5 Laboratory Audit of Ganga Main-stem States

CPCB has carried-out audit of laboratories of SPCBs in Ganga main stem (**Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal),** in context to the availability of infrastructural facilities w.r.t. sampling methodology and analysis to investigate causes behind anomalies in FC pollution measurement and Lab's QC exercises for microbiological parameters as per NABL requirement IS/ISO 17025:2017.

The laboratory audit was carried out in five states as per the below mentioned schedule:

1. Bihar SPCB – 5-7 November, 2024
2. West Bengal SPCB – 25-28 March, 2026
3. Jharkhand (Yuganthar Bharti Lab, Ranchi, a third party lab) – 01-04 April, 2025
4. Uttarakhand PCB - 24-27 November, 2025
5. Uttar Pradesh SPCB – 15-18 December, 2025

Based on the findings of the laboratory audits carried out by CPCB, the findings were forwarded to respective SPCBs to take remedial action against observations and findings made in the audit reports with letters detail below:

UPPCB – 20.01.2026, UKPCB – 06.01.2026, BSPCB – 14.01.2025, JHPCB – 28.04.2026 AND WBPCB – 28.04.2026

3.1.6 Way Forward

It is recommended that to ensure proper functioning or operation of STP and to enhance its performance, following actions may be taken:

a) All possible efforts shall be made to ensure consistent compliance of the standards referred.
b) Proper disinfection system should be maintained to regulate the fecal coliform count in the treated sewage.
c) Reason of high/low values of BOD, COD, TSS, and other parameters at inlet to be investigated.
d) Sewerage network to be augmented so that STP capacity may be optimally utilized.
e) OCEMS shall be installed at outlet of STP and connected to CPCB/SPCB servers.
f) Environmental labs and skilled manpower to be made available at all STP for its smooth operation and maintenance.
g) Flowmeters to be installed at inlet and outlet and respective logbooks may be maintained for inlet and outlet.

h) Diversion of flow from over-capacity STPs to under-capacity STPs for optimum utilization and performance of STPs.

i) Stopping/minimizing the dilution of sewage by mixing of freshwater from streams or household tap overflow.

j) Stopping of mixing of industrial effluent with sewage in industrial areas/towns for optimum performance of STPs.

3.2 Yamuna

Central Pollution Control Board has carried out monitoring of 104 STPs located in 20 Yamuna Front towns of 04 states (Himachal Pradesh (01), Haryana (09), Delhi and Uttar Pradesh (09)) during August-November 2025. Out of 104 monitored STPs, 04 STPs were under commissioning and 100 STPs were commissioned. Details of monitoring STPs in Yamuna front towns is mentioned at **Table 3.23** and different treatment technologies in use is mentioned at **Table 3.24.**

Table 3.23: Details of monitoring STPs in Yamuna front towns

State	Monitored STPs	Commissioned STP	Under commissioning	No. of towns	Operational	Non-operational
Delhi	37	37	0	01	37	0
Uttar Pradesh	33	33	3	09	30	3
Haryana	28	27	1	09	26	1
Himachal Pradesh	03	3	0	02	3	0
Total	**104**	**100**	**4**	**20**	**96**	**4**

Table 3.23 depicts different treatment technologies in use in the 104 STPs monitored in Yamuna front towns.

Table 3.24: Different treatment technologies in use

Technology in Use	Himachal Pradesh	Delhi	Uttar Pradesh	Haryana
SBR	1	2	15	22
MBBR	2	1	1	1
UASB	-	-	8	3
ASP	-	13	2	2
Oxidation pond	-	-	5	-
FCR	-	-	1	-
Bio Tower	-	-	1	-
A2O + IFFAS	-	3	-	-
IFFAS	-	9	-	-
BIOFOR	-	4	-	-
A2O + ASP	-	4	-	-
WSP	-	-	3	-
FAB	-	1	-	-
Total	**3**	**37**	**36**	**28**

- The performance evaluation of STPs located 04 States is provided herein –

3.2.1 Monitoring of Sewage Treatment Plants of River Yamuna basin in Delhi (August-November 2025)

A total of 37 commissioned STPs were inventoried in Delhi with Delhi Jal Board and monitoring of these STPs was carried out by CPCB. The operational and compliance status of STPs situated in River Yamuna basin in Delhi was monitored during August to November 2025 is summarized below:

Table 3.25: Details of STP compliance (August-November 2025)

Aug-Nov 2025																
Category of STPs	**Operational STPs (No.)**	**Designed Capacity (MLD)**	**Compliance % of STPs**													
			pH	**%**	**TSS**	**%**	**COD**	**%**	**BOD**	**%**	**TN***	**%**	**AN***	**%**	**FC**	**%**
Small size STPs(<5 MLD)	2	7.55	2	100	1	50	1	50	0	0	0	0	1	50	0	0

Mid size STPs (5-25 MLD)	8	134.56	8	100	1	12.5	5	62.5	3	37.5	0	0	2	25	0	0
Large size STPs (>25 MLD)	27	3423.58	26	96.2	14	51.8	14	51.8	9	33.3	0	0	14	51.8	5	18.5
	37	**3565.69**	**36**	**-**	**16**	**-**	**20**	**-**	**12**	**-**	**0**	**-**	**17**	**-**	**5**	**-**

(TN- Total Nitrogen, AN- Ammonical Nitrogen) *DPCC Standards

It may be observed that 2 smaller STPs cater to 7.55 MLD (0.21%) while 8 midsize STP cater to 134.56 MLD (3.77%) and the bigger 27 STPs cater to 3423.58 MLD (96.01%).

Primary and Secondary Treatment: The compliance level for all operational STPs for pH and TSS is Approximately 99% and 23.6%, respectively. It may be noted that noncompliance is observed in all three categories of STPs.

Tertiary Treatment (Disinfection System): Overall Compliance level w.r.t. FC is only 18.5%, which requires optimization of the disinfection system, proper operation & maintenance.

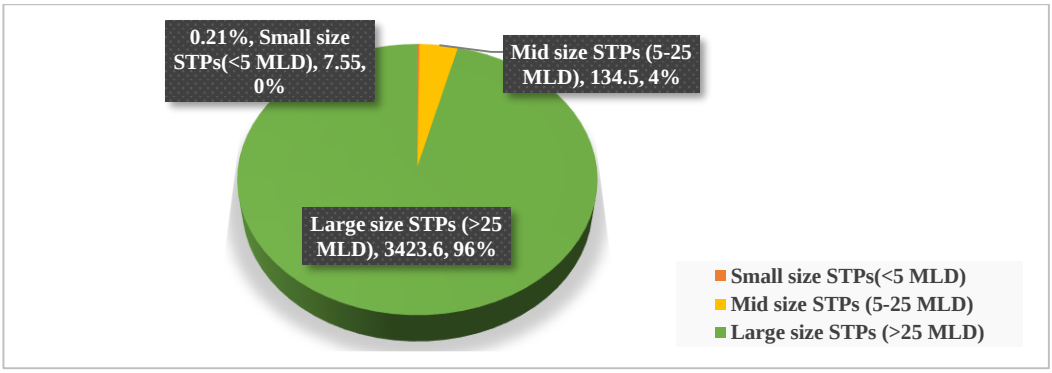


Figure 3.12: MLDs distribution of STPs Capacity range in Delhi (Aug-Nov 2025)

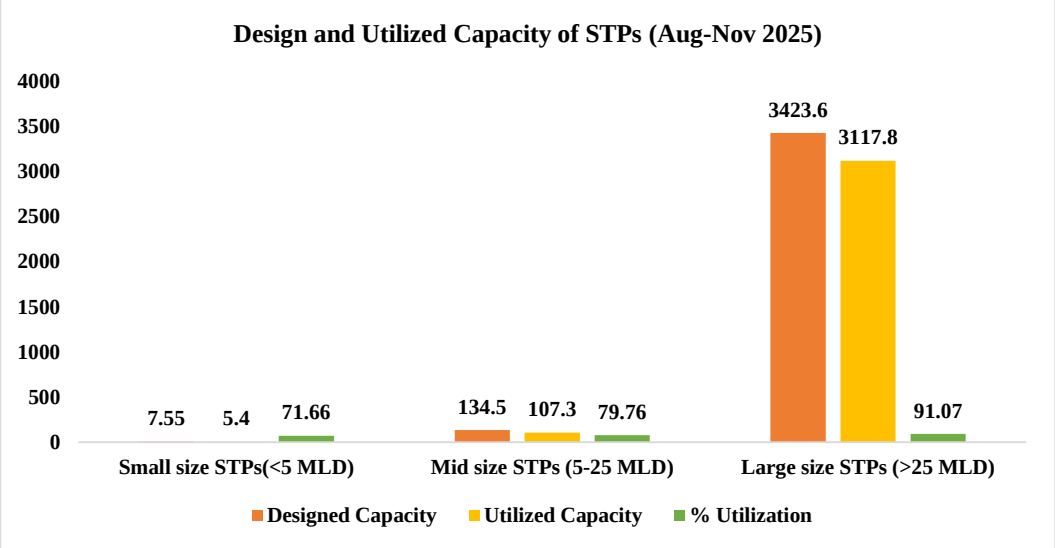


Figure 3.13: Category-wise comparison of Designed and Utilized Capacities of the STPs in Delhi (Aug-Nov 2025)

As depicted in **Figure 3.13**, utilization capacity of small size STPs is 71.65%, Mid-size STPs is 79.76% and Large size STPs is 91.06%.

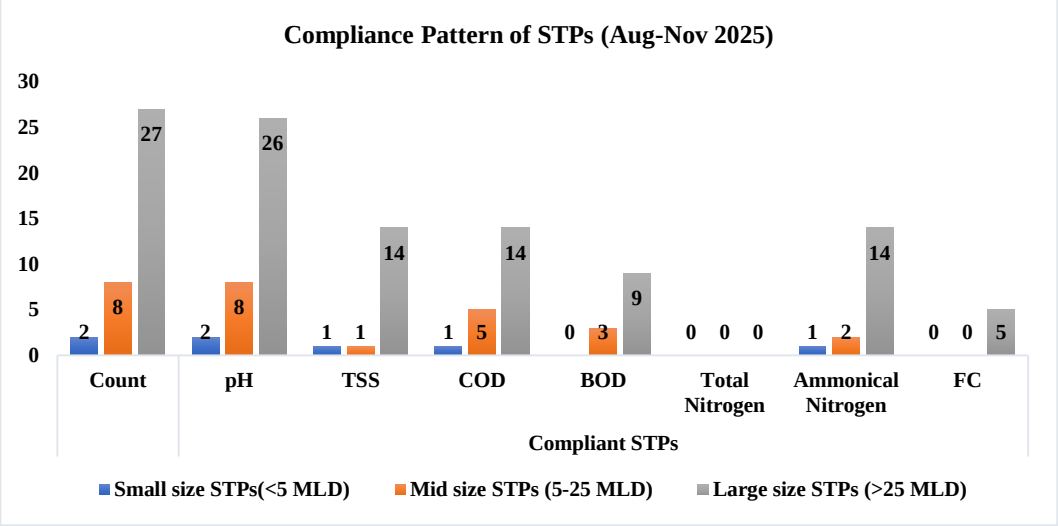


Figure 3.14: Compliance status of STPs monitored in Delhi (Aug-Nov 2025)

Table 3.26: Overall Status of STPs in Delhi (Aug-Nov 2025)

Status of STPs (Aug-Nov 2025)													
State	Range (MLD)	Total no. of STPs	No. of operational STPs	Designed capacity of operational STPs (in MLD)	Utilized capacity (sum) of Operational STPs (in MLD)	Non-complying for parameters							
						pH	TSS	COD	BOD	Total Nitrogen	Ammonical Nitrogen	FC
Delhi	<5	2	2	7.55	5.41	0	1	1	2	2	1	2
	5 to 25	8	8	134.56	107.28	0	7	3	5	8	6	8
	>25	27	27	3423.58	3117.83	1	13	13	18	27	13	22
Total		37	37	3565.69	3230.52	1	21	17	25	37	20	32

STPs located in Delhi:

i. DJB estimated sewage generation: 3596 MLD (792 MGD) based on 80% return flow of supplied water (990 MGD).
ii. 37 operational STPs at 21 locations with installed treatment capacity of 3701 MLD (814 MGD).
iii. Actual treatment/utilization: 3383.6 MLD (744.30 MGD), equivalent to ~91.4% sewage treatment, leaving a gap of ~216.84 MLD (47.7 MGD).
iv. 27 large STPs (>25 MLD) contribute 96.06% treatment capacity, while 8 mid-sized and 2 small STPs contribute 3.77% and 0.21%, respectively.

The major findings of this monitoring of STPs in Delhi is as follows:

- Total STPs: 37 nos.
  - 2 smaller STPs cater to 7.55 MLD (0.21%)
  - 8 mid-size STP cater to 134.56 MLD (3.77%)
  - 27 large size STPs cater to 3423.58 MLD (96.01%)
- Primary and Secondary Treatment: The compliance level for all operational STPs for pH and TSS is Approximately 99% and 23.6%, respectively. It may be noted that noncompliance is observed in all three categories of STPs.
- Tertiary Treament (Disinfection System): Overall Compliance level w.r.t. FC is only 18.5%, which requires optimization of the disinfection system, proper operation & maintenance.

3.2.2 Monitoring of Sewage Treatment Plants of River Yamuna basin in Haryana (August-November 2025)

A total of 28 STPs were inventoried and monitored by CPCB in Haryana, 01 STP out of 28 was in un-commissioned stage located at Aterna, Sonipat, due to lack of sewage availability. The operational and compliance status of STPs situated in River Yamuna basin in Haryana was monitored during August to November 2025 is summarized below:

Table 3.27: Details of Haryana STPs compliance (August-November 2025)

Aug-Nov 2025					Compliance % of STPs											
In MLD	**Total No. of STPs**	**Operational STPs (No.)**	**Designed Capacity (MLD)**	**Utilized Capacity (MLD)**	**pH**	**%**	**TSS**	**%**	**COD**	**%**	**BOD**	**%**	**Total nitrogen**	**%**	**FC**	**%**
Small size STPs(<5 MLD)	4	3	5.8	3.8	3	100	0	0	1	33	0	0	1	33	1	33
Mid size STPs (5-25 MLD)	16	16	243	140.06	16	100	7	43.7	6	37.5	6	37.5	2	12.5	0	0
Large size STPs (>25 MLD)	7	7	350	161.67	7	100	1	14.3	1	14.3	1	14.3	0	0	1	14.3
	27	**26**	**598.8**	**305.53**	**26**	**-**	**8**	**-**	**8**	**-**	**7**	**-**	**3**	**-**	**2**	**-**

Discharge standards of MoEF&CC dated 13.10.2017 are applicable here

It may be observed that 4 smaller STPs cater to 5.8 MLD (1%), 16 mid-size STPs cater to 243 MLD (41%), and 7 large size STPs cater to 350 MLD (58%).

Primary and Secondary Treatment: The compliance level for all operational STPs for pH and TSS is 100% and 19%, respectively.

Tertiary Treatment (Disinfection System): Overall Compliance level w.r.t. FC is only 16%, which requires optimization of the disinfection system, proper operation & maintenance.

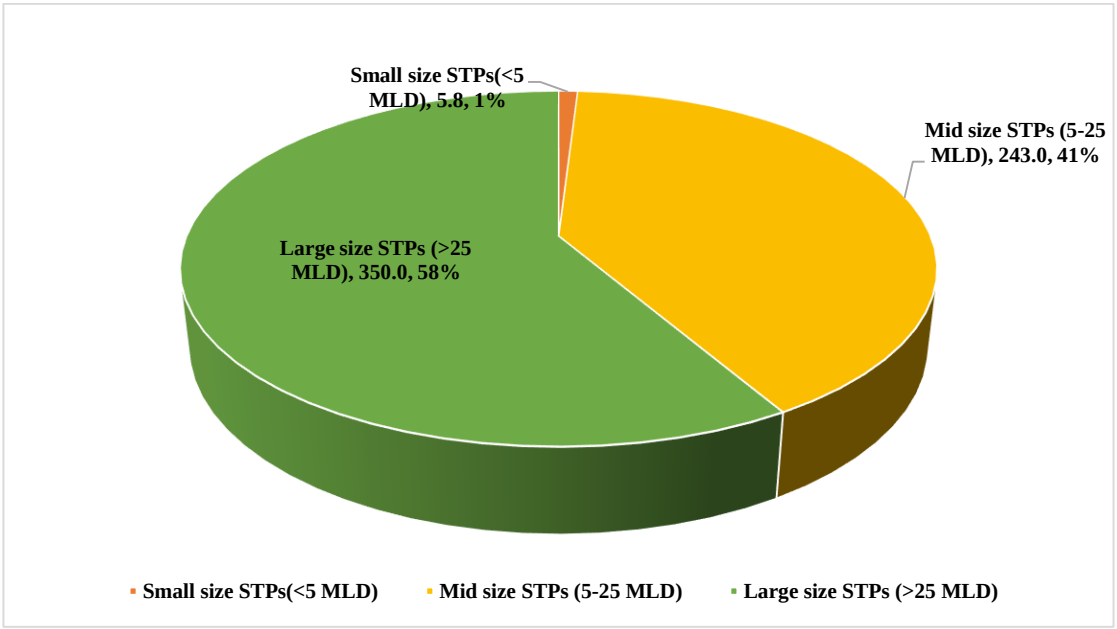


Figure 3.15: MLDs distribution of STPs Capacity range in Harayana (Aug-Nov 2025)

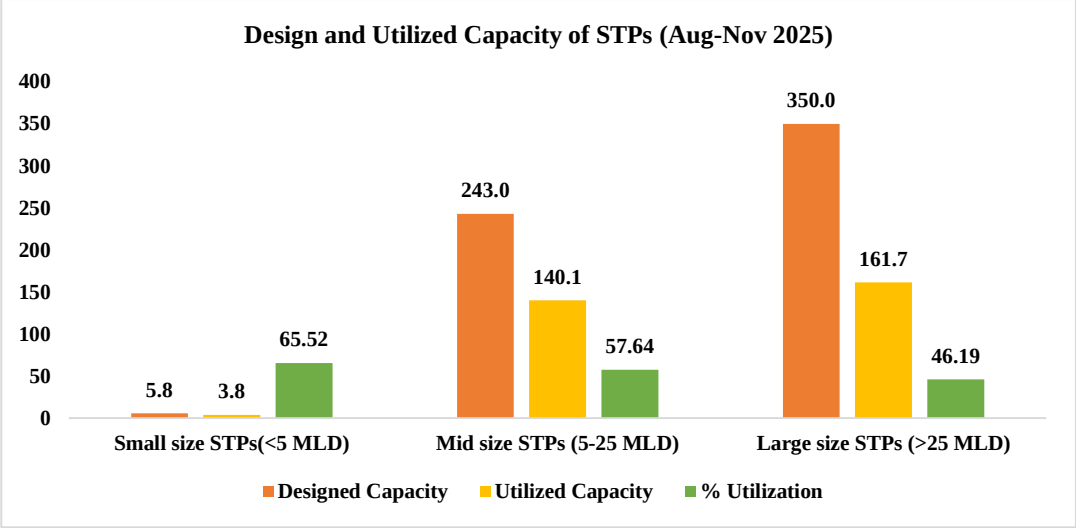


Figure 3.16: Category-wise comparison of Designed and Utilized Capacities of the STPs in Haryana (Aug-Nov 2025)

As depicted in **Figure 3.16**, utilization capacity of small size STPs is 65.52, mid-size STPs is 57.64 and large size STPs is 46.19%.

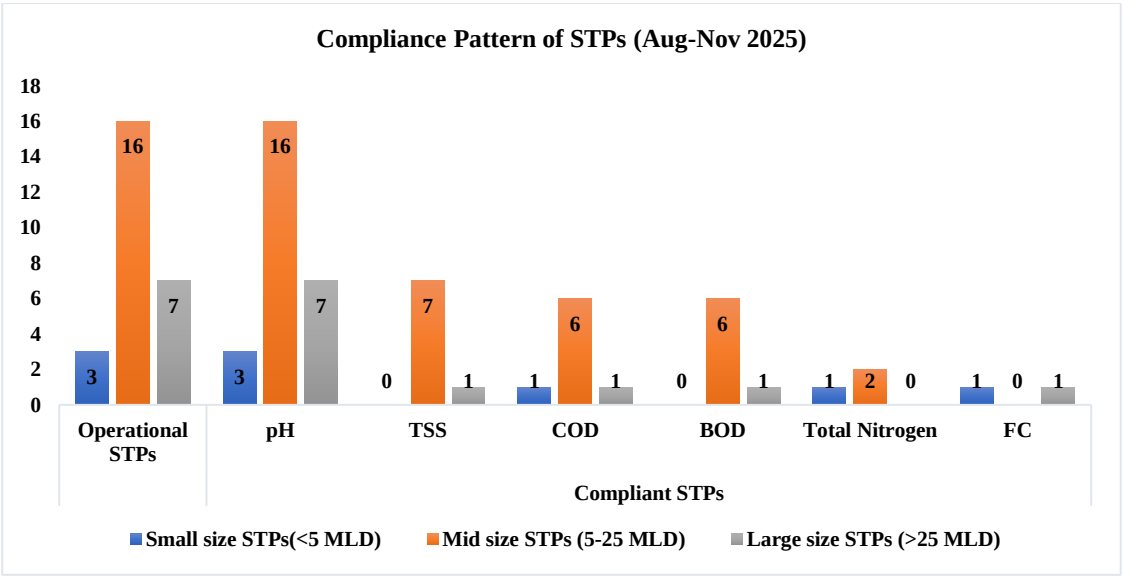


Figure 3.17: Compliance status of STPs monitored in Haryana (Aug-Nov 2025)

Table 3.28: Overall Status of STPs in Haryana (Aug-Nov 2025)

Status of STPs (Aug-Nov 2025)						Non-complying for parameters					
State	Range (MLD)	Total no. of STPs	No. of operational STPs	Designed capacity of operational STPs (in MLD)	Utilized capacity (sum) of Operational STPs (in MLD)	pH	TSS	COD	BOD	Total Nitrogen	FC
Haryana	<5	4	3	5.8	3.8	0	3	2	3	2	2
	5 to 25	16	16	243	140.06	0	9	10	10	14	16
	>25	7	7	350	161.67	0	6	6	6	7	6
Total		**27**	**26**	**598.8**	**305.53**	**0**	**18**	**18**	**19**	**23**	**24**

STPs located in Haryana:

- Total STPs: 27 nos. commissioned
  - 4 smaller STPs cater to 5.8 MLD (1%)
  - 16 mid-size STPs cater to 243 MLD (41%)
  - 7 large size STPs cater to 350 MLD (58%)
- Primary and Secondary Treatment: The compliance level for all operational STPs for pH and TSS is 100% and 19%, respectively.
- Tertiary Treatment (Disinfection System): Overall Compliance level w.r.t. Fecal Coliform (FC) is only 16%, which requires optimization of the disinfection system, proper operation & maintenance.

3.2.3 Monitoring of Sewage Treatment Plants of River Yamuna basin in Uttar Pradesh (August-November 2025)

A total of 36 STPs were inventoried in 09 Yamuna front towns of Uttar Pradesh and their monitoring were carried out. Three STPs out of 36 were under commissioning stage. The operational and compliance status of STPs situated in River Yamuna basin in Uttar Pradesh was monitored during August to November 2025 is summarized below:

Table 3.29: Details of STP compliance (August-November 2025)

Aug-Nov 2025																
Details					**Compliance % of STPs**											
In MLD	**Total No. of STPs**	**Operational STPs (No.)**	**Designed Capacity (MLD)**	**Utilized Capacity (MLD)**	**pH**	**%**	**TSS**	**%**	**COD**	**%**	**BOD**	**%**	**Total nitrogen**	**%**	**FC**	**%**
Small size STPs(<5 MLD)	4	3	9.03	7.86	2	66.7	1	33.3	0	0	0	0	0	0	1	33.33
Mid-size STPs (5-25 MLD)	13	12	175.74	133.25	12	100	3	25	1	8.3	1	8.3	2	16.67	3	25
Large size STPs (>25 MLD)	16	15	804	655.06	15	100	10	66.7	6	40	5	33.3	2	13.33	6	40
	33	**30**	**988.77**	**796.17**	**29**	**-**	**14**	**-**	**7**	**-**	**6**	**-**	**4**	**-**	**10**	**-**

Discharge standards of MoEF & CC dated 13.10.2017 are applicable here

It may be observed that 3 smaller STPs cater to 9.03 MLD (1%), 12 mid-size STPs cater to 175.74 MLD (18%), and 15 large size STPs cater to 804 MLD (81%).

Primary and Secondary Treatment: The compliance level for all operational STPs for pH and TSS is approx. 88.8% and 42%, respectively.

Tertiary Treatment (Disinfection System): Overall Compliance level w.r.t. FC is only 32.8%, which requires optimization of the disinfection system, proper operation & maintenance.

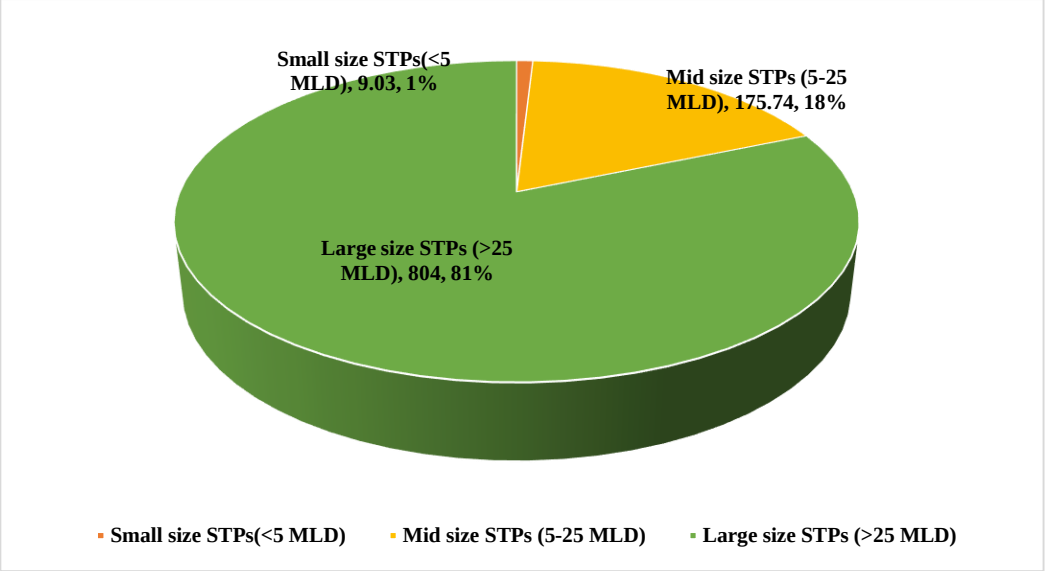


Figure 3.18: MLDs distribution of STPs Capacity range in Uttar Pradesh (Aug-Nov 2025)

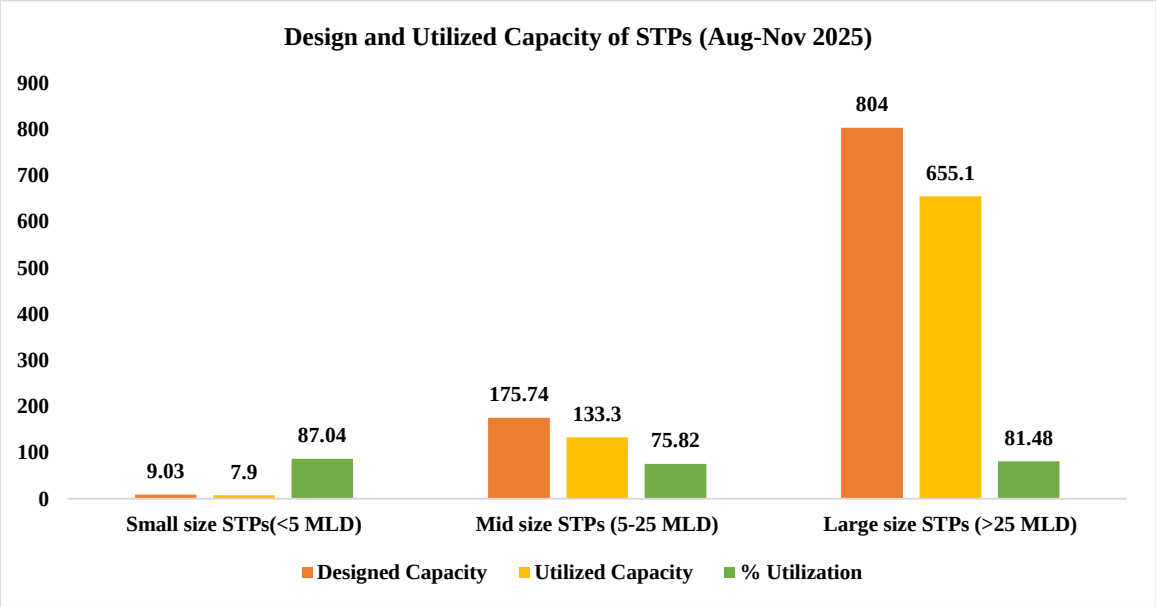


Figure 3.19: Category-wise comparison of Designed and Utilized Capacities of the STPs in Uttar Pradesh (Aug-Nov 2025)

As depicted in **Figure 3.19**, utilization capacity of small size STPs is 87.04, mid-size STPs is 75.82 and large size STPs is 81.48%.

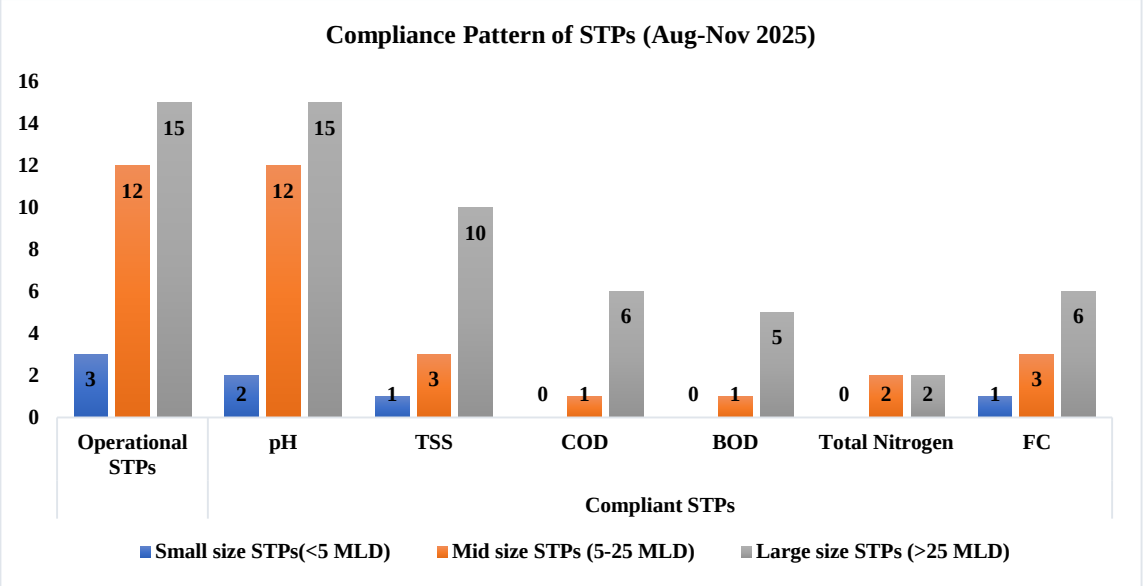


Figure 3.20: Compliance status of STPs monitored in Uttar Pradesh (Aug-Nov 2025)

Table 3.30: Overall Status of STPs in Uttar Pradesh (Aug-Nov 2025)

Status of STPs (Aug-Nov 2025)						Non-complying for parameters					
State	Range (MLD)	Total no. of STPs	No. of operational STPs	Designed capacity of operational STPs (in MLD)	Utilized capacity (sum) of Operational STPs (in MLD)	pH	TSS	COD	BOD	Total Nitrogen	FC
Uttar Pradesh	<5	4	3	9.03	7.86	1	2	3	3	3	2
	5 to 25	13	12	175.74	133.25	0	9	11	11	10	9
	>25	16	15	804	655.06	0	5	9	10	13	9
		33	**30**	**988.77**	**796.17**	**1**	**16**	**23**	**24**	**26**	**20**

3.2.4 Monitoring of Sewage Treatment Plants of River Yamuna basin in Himachal Pradesh (August-November 2025)

A total of 03 STPs located in Paonta Sahib, a Yamuna front town, were inventoried with State PCB and were monitored. The operational and compliance status of STPs situated in River Yamuna basin in Himachal Pradesh was monitored during August to November 2025 is summarized below:

Table 3.31: Details of STP compliance (August-November 2025)

			Compliance % of STPs													
In MLD	**Operational STPs (No.)**	**Designed Capacity (MLD)**	**pH**	**%**	**TSS**	**%**	**COD**	**%**	**BOD**	**%**	**Total nitrogen**	**%**	**Ammonical nitrogen**	**%**	**FC**	**%**
Small size STPs(<5 MLD)	3	3.16	3	100	3	100	3	100	2	67	3	100	3	100	0	0
	3	**3.16**	**3**	**-**	**3**	**-**	**3**	**-**	**2**	**-**	**3.00**	**-**	**3**	**-**	**0**	**-**

Discharge standards of MoEF&CC dated 13.10.2017 are applicable here

It may be observed that 3 smaller STPs cater to 3.16 MLD (100%).

Primary and Secondary Treatment: The compliance level for all operational STPs for pH and TSS is 100%.

Tertiary Treatment (Disinfection System): Overall Compliance level w.r.t. FC is nil, which requires optimization of the disinfection system, proper operation & maintenance.

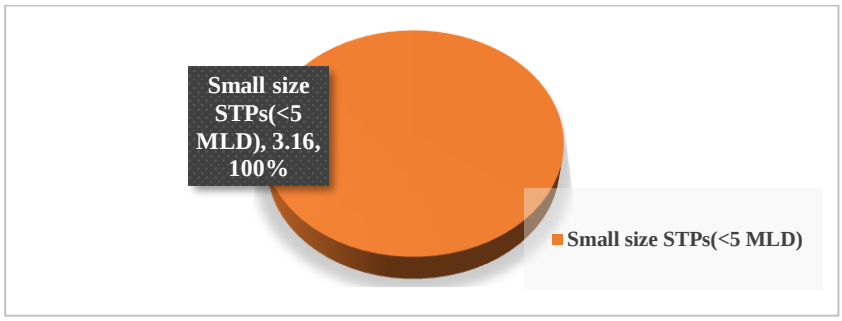


Figure 3.21: MLDs distribution of STPs Capacity range in Himachal Pradesh (Aug-Nov 2025)

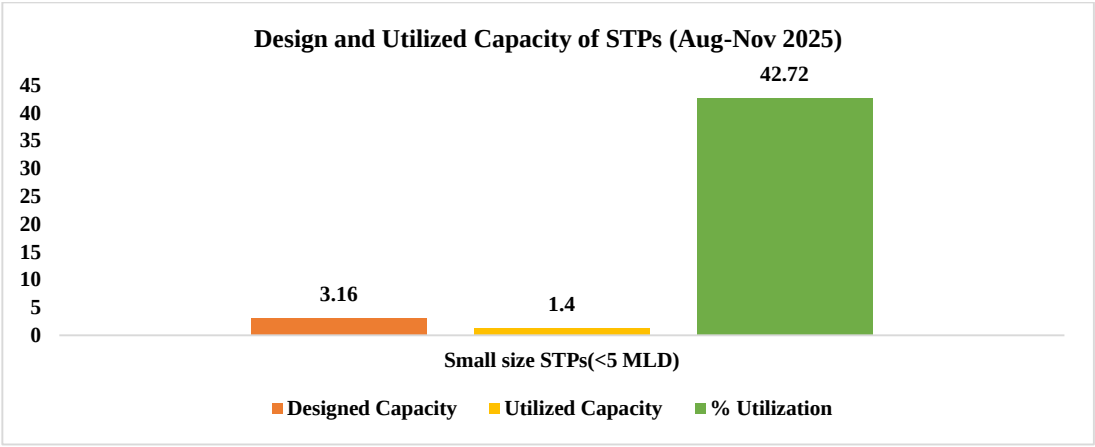


Figure 3.22: Category-wise comparison of Designed and Utilized Capacities of the STPs in Himachal Pradesh (Aug-Nov 2025)

As depicted in **Figure 3.22**, utilization capacity of small size STPs is 42.72%.

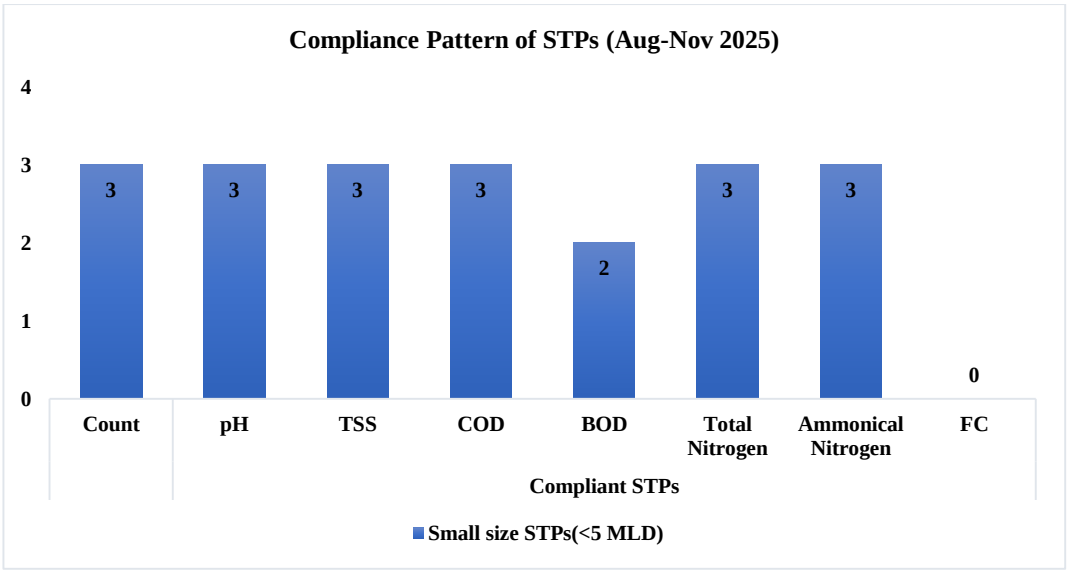


Figure 3.23: Compliance status of STPs monitored in Himachal Pradesh (Aug-Nov 2025)

Table 3.32: Overall Status of STPs in Himachal Pradesh (Aug-Nov 2025)

Status of STPs (Aug-Nov 2025)						Non-complying for parameters						
State	Range (MLD)	Total no. of STPs	No. of operational STPs	Designed capacity of operational STPs (in MLD)	Utilized capacity (sum) of Operational STPs (in MLD)	pH	TSS	COD	BOD	Total Nitrogen	Ammonical Nitrogen	FC
Himachal Pradesh	<5	3	3	3.16	1.35	0	0	0	1	0	0	3
	5 to 25	0	0	0	0	0	0	0	0	0	0	0
	>25	0	0	0	0	0	0	0	0	0	0	0
	Total	**3**	**3**	**3.16**	**1.35**	**0**	**0**	**0**	**1**	**0**	**0**	**3**

3.1.7 Follow-up Actions on STP Performance:

i. CPCB communicated STP status reports to DPCC, DJB & NMCG on 12.09.2025 and 04.02.2026 for necessary corrective actions.

ii. Capacity building: CPCB conducted a 4-day hands-on training (29 Oct–1 Nov 2025) for 21 DJB officials on microbiological assessment and Faecal Coliform analysis as per APHA (2024).

iii. DJB invited bids for upgradation & augmentation of 09 STPs (56 MGD) and construction of 29 Decentralized STPs (170 MGD) targeted by December 2027.

iv. Long-term augmentation plan: Treatment capacity proposed to increase from 814 MGD to 1500 MGD with advanced technologies (Integrated Fixed-Film Activated Sludge (IFAS), aeration, disc filters, UV disinfection & odour control) to achieve DPCC norms (BOD/TSS: 10/10 mg/L) by Dec 2028.

v. Pursuant to the directives of the Hon'ble Home Minister, Government of India, a High-Level Committee has been constituted under the chairmanship of the Hon'ble Chief Minister, Government of the National Capital Territory of Delhi to periodically review the progress of works being carried out for the rejuvenation of the River Yamuna. CPCB also issued letters to HSPCB and UPPCB vide letter dated 03.06.2026 to provide various information on efforts being undertaken/action plan formulated to reduce pollution in the drains/River Yamuna.

vi. Status of STPs in Yamuna front towns shared with NMCG for further necessary action.

SECTION 4: MONITORING OF DRAINS DISCHARGING INTO RIVER GANGA (& ITS TRIBUTARIES) AND RIVER YAMUNA

4.1 River Ganga

Monitoring of drains discharging directly into river Ganga and its tributaries is carried out by CPCB on half-yearly basis *i.e*. Pre and Post monsoon seasons in Ganga & Yamuna main stem states (Uttarakhand, Himachal Pradesh, Haryana, Uttar Pradesh, Delhi, Bihar, Jharkhand and West Bengal). These drains carry wastewater, which comprises sewage, industrial effluent, and surface run off. Inventory of drains is updated in-consultation of SPCBs, Jal Nigam/Jal Sansthan, NMCG and SMCG. Pollution source mapping of highly polluted drains was also conducted.

4.1.1 Work accomplished during 2025

Half yearly monitoring of 716 & 739 drains discharging directly into Ganga and its tributaries (Ganga forming tributaries in upper Ganga reaches, Suswa, Song, Sukhi, Banganga, Kali-East, Ramganga & its tributaries, Pandu, Yamuna, Varuna, Moorwa, Mansahaita, Jargo, Ojhala, Malini & Nandhaur) in Ganga main stem states (Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal) during pre-monsoon, 2025 & post-monsoon, 2025 season respectively. The inventory of drains discharging into river Ganga in West Bengal has also been updated from 104 to 158.

4.1.2 Half Yearly Monitoring of Drains Discharging into River Ganga and its Tributaries

4.1.2.1 Data Generation and Key findings

During pre- & post -monsoon, 2025 monitoring of 716 & 739 drains discharging directly into river Ganga and its tributaries namely Ganga forming tributaries in upper Ganga reaches, Suswa, Song, Sukhi, Banganga, Kali-East, Ramganga & its tributaries, Varuna, Moorwa, Mansahaita, Pandu, Jargo, Ojhala, Malini & Nandhaur in Ganga main stem states (Uttarakhand, Uttar Pradesh, Bihar and West Bengal) was conducted respectively.

A total of 61 drains during pre-monsoon 2025 and 124 drains during post-monsoon 2025 could not be measured for flow due to non-approachable sites, solid waste deposition, steep or uneven terrain, closed conduits, low/stagnant flow, temporary diversions, or dense macrophyte growth, although sampling was still carried out. Additionally, flow measurement and sampling could not be conducted in 53 drains (pre-monsoon) and 36 drains (post-monsoon) because of very low flow, stagnation, backflow from the river, or inaccessible locations. As a result, the total flow and BOD pollution load are likely higher than the reported values. State-wise status of monitored drains for Pre & Post monsoon 2025 is given in **Tables 4.1 & 4.2**.

Table 4.1: State wise status of drains monitored during Pre-Monsoon 2025

States (Ganga)	No. of towns Ganga front towns covered	Pre-Monsoon 2025				
		Monitored Drains	Flow (MLD)	BOD pollution load (TPD)	Tapped Drains	Interim Remedial measures
Uttarakhand	24	164	137.23	0.61	117	1
Uttar Pradesh	27	193	1064.19	54.29	81	68
Bihar	13	67	507.99	20.65	8	0
Jharkhand	2	6	0	0	6	0
West Bengal	45	104	7066.88	182.26	8	0
Total-A	**111**	**534**	**8776.28**	**257.80**	**220**	**69**
States (Tributaries)	**No. of towns non-Ganga front towns covered**					
Uttarakhand (Ramganga tributaries-Dhela, Kosi, Bahela, Pilakhar & Gaula)	5	25	959.66	58.25	10	0
Uttarakhand (Nandhaur, Tributary of Garra)	1	1	0.54	0.01	0	0
Uttarakhand (Suswa, Song, Banganga & Sukhi)	5	8	363.79	26.12	0	0
Uttar Pradesh (Ramganga & its tributaries-Kosi & Gagan)	6	30	653.08	30.74	1	20
Uttar Pradesh (Kali East)	9	29	762.10	101.63	6	1
Uttar Pradesh (Malini)	2	2	0	0	0	0
Uttar Pradesh (Pandu)	1	9	134.19	3.03	6	6
Uttar Pradesh (Yamuna)	1	36	18.04	1.49	26	0
Uttar Pradesh (Varuna & Morwa)	2	21	294.29	28.85	14	4
Uttar Pradesh (Mansahaita)	1	12	-	-	12	0
Uttar Pradesh (Jargo & Ojhala)	2	9	8.68	0.83	0	0
Total-B	**35**	**182**	**3194.36**	**250.95**	**75**	**31**
Grand Total (A+B)	**146**	**716**	**11970.65**	**508.75**	**295**	**100**

Note: Drains discharging into river Malini were found dry & having lean flow

Table 4.2: State wise status of drains monitored during Post-Monsoon 2025

States (Ganga)	No. of towns Ganga front towns covered	Post-Monsoon 2025 Status (State & River wise)				
		Monitored Drains	Flow (MLD)	BOD pollution load (TPD)	Tapped Drains	Interim Remedial Measures
Uttarakhand	25	163	275.95	2.91	120	0
Uttar Pradesh	26	197	908.37	90.83	80	45
Bihar	14	68	447.66	19.14	11	0
Jharkhand	2	6	0	0	6	0
West Bengal	46	158	8862.02	243.54	13	0
Total-A	**113**	**592**	**10494.00**	**356.42**	**230**	**45**
States (Tributaries)	**No. of towns non-Ganga front towns covered**					
Uttarakhand (Ramganga tributaries-Dhela, Kosi, Bahela, Pilakhar & Gaula)	5	26	441.42	218.24	17	0
Uttarakhand (Nandhaur, Tributary of Garra)	1	1	0.57	0.03	0	0
Uttarakhand (Suswa & Song)	5	6	69.12	0.277	0	0
Uttarakhand (Banganga & Sukhi)	6	2	77.62	1.09	0	0
Uttar Pradesh (Ramganga & its tributaries-Kosi & Gagan)	8	30	331.51	29.53	8	19
Uttar Pradesh (Kali East)	2	29	587.60	158.19	6	1
Uttar Pradesh (Malini)	1	2	16.78	3.37	0	0
Uttar Pradesh (Pandu)	1	9	201.90	24.79	6	0
Uttar Pradesh (Varuna & Morwa)	2	21	339.38	17.62	13	4
Uttar Pradesh (Mansahaita)	1	12	0	0	12	0
Uttar Pradesh (Jargo & Ojhala)	2	9	21.88	2.16	0	0
Total-B	**34**	**147**	**2087.79**	**455.29**	**62**	**24**
Grand Total (A+B)	147	**739**	**12581.79**	**811.71**	**292**	**69**

MLD -Millions Litre Per Day, TPD -Tonnes Per Day

The monitored drains are also categorized based on flow i.e. <1 MLD, 1-10 MLD and >10 MLD and the status is as follows:

Table 4.3: State wise tapped/untapped status of drains monitored during Pre-Monsoon 2025

State	Untapped				Tapped			
	Flow Range (MLD)	Total number of drains	Flow (MLD)	BOD pollution load (TPD)	Complete Tapped	Partial/ Overflow	Flow (MLD)	BOD pollution load (TPD)
Uttarakhand	<1	48	0.54	0.01	114	10	0.52	0.0421
	1-10	7	8.9	1.3		3	128.97	7.0992
	>10	16	1322.3	76.6		0	0	0
	Total A	**71**	**1331.73**	**77.85**	**114**	**13**	**129.49**	**7.14**
Uttar Pradesh	<1	82	10.642	0.713	108	11	2.348	0.1052
	1-10	66	197.08	18.42		14	46.84	2.85
	>10	47	1829.62	92.45		13	848.03	106.31
	Total B	**195**	**2037.34**	**111.59**	**108**	**38**	**897.22**	**109.27**
Bihar	<1	19	5.74	0.405	8	0	0	0
	1-10	30	89.48	4.99		0	0	0
	>10	10	412.77	15.26		0	0	0
	Total C	**59**	**507.99**	**20.65**	**8**	**0**	**0.00**	**0.00**
Jharkhand	<1	0	0	0	6	0	0	0
	1-10	0	0	0		0	0	0
	>10	0	0	0		0	0	0
	Total D	**0**	**0**	**0.00**	**6**	**0**	**0.00**	**0.00**
West Bengal	<1	24	1.56	0.0391	2	1	0.03	0.00024
	1-10	22	92.46	7.35		2	2.88	0.043
	>10	50	6901.93	172.27		3	68.02	2.56
	Total E	**96**	**6995.95**	**179.65**	**2**	**6**	**70.93**	**2.60**
Grand Total (A+B+C+D+E)		**421**	**10873.01**	**389.74**	**238**	**57**	**1097.64**	**119.01**

Note: Actual no. of drains required to be tapped is 361 out of 421 untapped drain excluding 60 nos. of dry/megre flow/lean flow drains. List of 60 no. of drains is attached at ***Appendix-4.1***.

Table 4.4: Status of drains categorised on the basis of flow during Pre-Monsoon 2025

Untapped/ Tapped	Flow Range (MLD)	Total number of drains	Flow (MLD)	BOD pollution load (TPD)
Untapped	<1	173	18.48	1.17
	1-10	125	387.88	32.03
	>10	123	10466.65	356.54
	Total (Untapped)	**421**	**10873.01**	**389.74**
Tapped	<1	22	2.90	0.15
	1-10	19	178.69	10.00
	>10	16	916.05	108.87
	Complete Tapped	238	0	0
	Total (Tapped)	**295**	**1097.64**	**119.01**
Grand Total (Untapped+Tapped)		**716**	**11970.64**	**508.75**

Note: Actual no. of drains required to be tapped is 361 out of 421 untapped drain excluding 60 nos. of dry/megre flow/lean flow drains. List of 60 no. of drains is attached at ***Appendix-4.1***.

Table 4.5: State wise tapped/untapped status of drains monitored during Post-Monsoon 2025

State	Untapped				Tapped					
	Flow Range (MLD)	Total number of drains	Flow (MLD)	BOD pollution load (TPD)	Complete Tapped	No. of STPs	Partial/ Overflow	No. of STPs	Flow (MLD)	BOD pollution load (TPD)
Uttarakhand	<1	38	0.57	0.03	123	41	5	5	0	0
	1-10	8	14.6	1.2			4	4	11.26	1.53
	>10	15	748.2	216.3			5	5	90.08	3.49
	Total A	**61**	**763.34**	**217.52**	**123**		**14**	**14**	**101.34**	**5.02**
Uttar Pradesh	<1	70	13.06	39.65	88	32	4	5	1.360	0.17
	1-10	71	241.44	33.37			19	14	88.21	7.56
	>10	43	1439.28	108.80			14	13	624.07	136.93
	Total B	**184**	**1693.78**	**181.82**	**88**		**37**	**32**	**713.64**	**144.66**
Bihar	<1	18	6.37	0.58	11	5	0	0	0	0
	1-10	21	75.29	3.98			0	0	0	0
	>10	18	366	14.57			0	0	0	0
	Total C	**57**	**447.657**	**19.13**	**11**		**0**	**0**	**0**	**0**
Jharkhand	<1	0	0	0	6	3	0	0	0	0
	1-10	0	0	0			0	0	0	0
	>10	0	0	0			0	0	0	0
	Total D	**0**	**0**	**0.00**	**6**		**0**	**0**	**0**	**0**
West Bengal	<1	36	5.68	0.664	1	1	2	1	0.972	0.079
	1-10	60	186.40	11.36			5	4	15.73	0.895
	>10	49	8503.91	222.72			5	4	149.33	7.831
	Total E	**145**	**8695.99**	**234.74**	**1**		**12**	**9**	**166.03**	**8.81**
Grand Total (A+B+C+D+E)		**447**	**11600.76**	**653.21**	**229**	**82**	**63**	**55***	**981.01**	**158.49**

Note: Actual no. of drains required to be tapped is 389 out of 447 untapped drain excluding 58 no. of dry/megre flow/lean flow drains. List of 58 no. of drains is attached at ***Appendix-4.1***.
*55 STPs are also included within the no. of 82 STPs (***Appendix-4.2)***

Table 4.6: Status of drains categorised on the basis of flow during Post-Monsoon 2025

Untapped/ Tapped	Flow Range (MLD)	Total number of drains	Flow (MLD)	BOD pollution load (TPD)
Untapped	<1	162	25.68	40.92
	1-10	160	517.69	49.87
	>10	125	11057.39	562.4
	Total (Untapped)	**447**	**11600.76**	**653.21**
Tapped	<1	11	2.33	0.25
	1-10	28	115.20	9.99
	>10	24	863.48	148.25
	Complete Tapped	229	0	0
	Total (Tapped)	**292**	**981.01**	**158.49**
Grand Total (Untapped+Tapped)		**739**	**12581.77**	**811.70**

Note: Actual no. of drains required to be tapped is 389 out of 447 untapped drain excluding 58 no. of dry/megre flow/lean flow drains. List of 58 no. of drains is attached at ***Appendix-4.1***.

4.1.2.2 Interim remedial measures and alternate treatment technology

292 drains are diverted/tapped to 82 Sewage Treatment Plants (STP) for the treatment of wastewater whereas many drains are discharging domestic sewage or mixed effluent in to river Ganga and its tributaries directly without any treatment. In absence of conventional treatment (STP), interim remedial measure can be strategically helpful as a provisional measure until domestic sewage treatment plant is constructed or become functional. Interim remedial measure includes in-situ **remediation techniques- bio-remediation, phytoremediation, constructed wetland and ex–situ remediation techniques- Waste Stabilization Pond** and **Mechanically Aerated Lagoons.** In-situ treatment methods such as constructed wetland system,

phytoremediation and bio remediation are most favourable methods for alternative biological treatment technology of drains.

Advantage of alternate treatment technology:

i. Alternative biological treatment technology methods such as phytoremediation or wetland systems are efficient in terms of nutrient removal such as removal of nitrogen and phosphorous.
ii. All alternative biological treatment technologies are low in energy incentive and not only reduces carbon footprint thereby minimizing climate change impact but also contributes to carbon sequestration.
iii. The technologies provide benefits like increase in the biodiversity and biomass production apart from habitat conservation.
iv. Constructed Wetlands may attract migratory birds, as well as provide aesthetic and recreational services to the public. It also contributes to groundwater recharge as well as results in buffering of ambient temperature and odor.
v. Studies indicate that there is massive reduction in pathogenic microbes in alternative biological treatment technology as compared to conventional treatment.
vi. In-situ remediation is more efficient in restoring self-purification system of river and also immobilization of heavy metals.
vii. In-situ remediation technique does not require much energy, its maintenance cost is relatively low, it is easy to develop, operate and manage as compared to conventional technology.
viii. Besides high reduction efficiency of BOD, different alternative treatment technologies are efficient in increasing Dissolve Oxygen (DO) and reducing Fecal Coliform (FC) e.g. Phytoremediation technique can reduce FC by 50% and increase DO from 0 to 5 mg/l; Oxidation Pond can reduce FC by more than 95% and increase DO from 0 to 5mg/l; similarly, lagoons are efficient in reduction of FC by 50-70%.
ix. The cost of alternative biological treatment technology is extremely low.

Status of interim remedial measures adopted in drains discharging into river Ganga and tributaries:

i. Interim measures adopted in 69 drains (Ganga-45 and tributaries-24) in (69) in Uttar Pradesh. Interim measures were not adopted in most of the untapped drains in Uttrakhand, Bihar, Jharkhand and West Bengal due to tidal effects.
ii. Bio-remediation (microbial) is the most common in-situ remediation measures adopted in drains discharging into river Ganga and its tributaries. However, in few drains Constructed Wetland and Phyto-remediation is also adopted.
iii. Interim measures were found non-functional/defunct, bypass, poorly maintained and installed at inappropriate location in 13 drains in Uttar Pradesh (Ganga).
iv. Ineffective remedial measure in terms of BOD reduction (increase in BOD value at downstream of interim measure in comparison of upstream value) was observed in 18 drains (Ganga-07, Gagan-01, Ramganga-07, Morwa-02, and Varuna-01) in Uttar Pradesh. However, in 11 drains reduction in terms of BOD (> 40%) was observed in Uttar Pradesh.

a) Solid waste deposition observed in drains

Solid waste was found dumped along 41 drains in Uttarakhand, 176 drains in Uttar Pradesh, 60 drains in Bihar and 118 drains in West Bengal. The list of drains is attached as ***Appendix-4.3*** and solid waste disposal along drains is depicted at **Figure 4.1**.

b) Monitoring status of drains from 2016 onwards:

- In the year 2016, CPCB monitored 210 drains discharging into River Ganga and its tributaries draining about 10,492 MLD of wastewater having 520.6 TPD of pollution load.
- An increase in pollution load has been observed in 2025 w.r.t. previous year due significant increase in pollution load in river Ganga segment in Uttar Pradesh and West Bengal, River Ramganga segment in Uttarakhand and River Pandu segment in Uttar Pradesh.

- In 2016, 3% (6 drains) of monitored drains were found tapped and diverted to sewage treatment plants for treatment of wastewater. However, the number of tapped drains increased from 3% to 39.5% (292 out of 739 monitored drains) during post-monsoon 2025. Monitoring status of drain from 2016 onwards is shown in **Figure 4.2.**

c) Towns identified for immediate action:

Drains discharging waste water into river Ganga and its tributaries from 13 cities/towns namely Kashipur, Meerut, Bulandshahar, Moradabad, Kanpur, Prayagraj, Varanasi, Patna, Kolkata, Bahrampore, Bhatpara, Uluberia and Howrah contributes 60.3% of the total flow and 73.0% of the total BOD pollution load. The contribution of BOD pollution load and flow from drains discharging from 13 identified cities is given in **Table 4.7**.



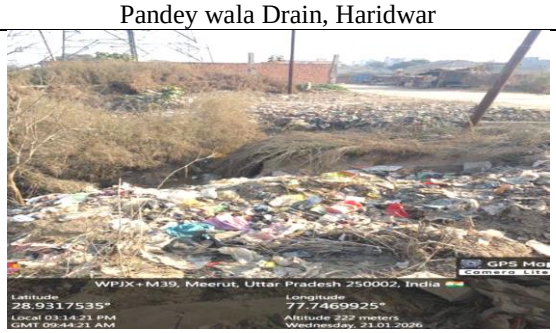
Kalyani river, Rudrapur



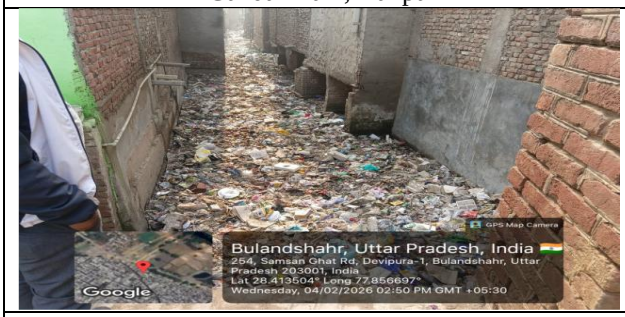
Pandey wala Drain, Haridwar



Ganda Drain, Kanpur



Odean Nala, Meerut



Devipura drain, Bulandshahar



Adil drain, Bulandshahar



Nishal Ghat drain, Bulandshahar



Lal Bagh Drain, Moradabad

Figure 4.1 Solid waste disposal observed along the drains

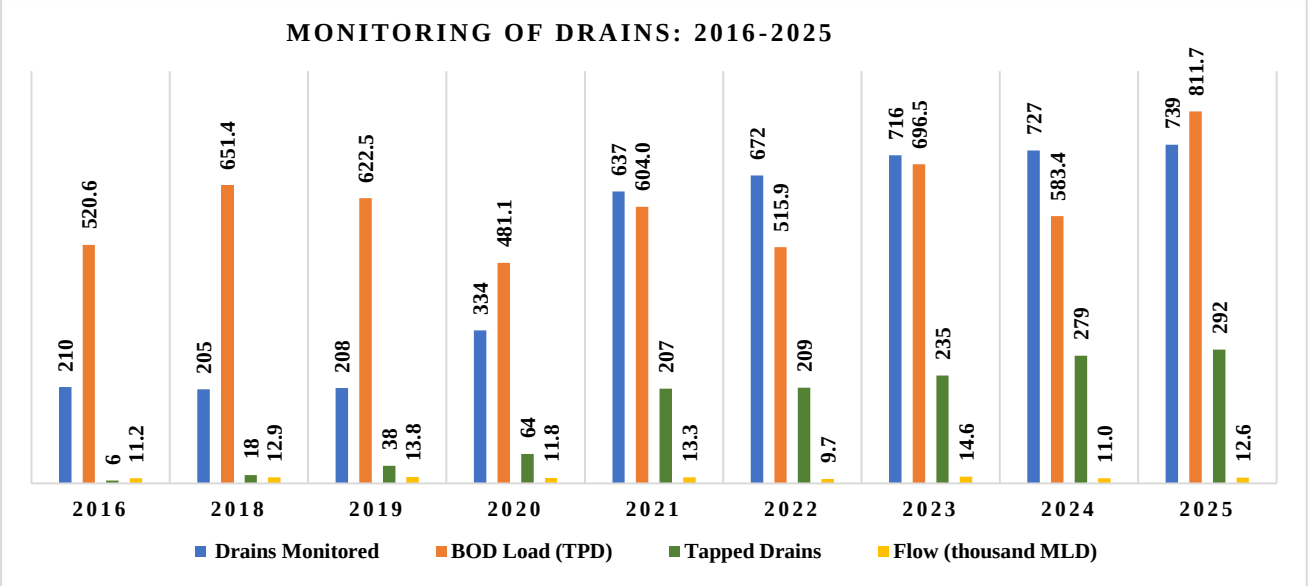


Figure 4.2 Monitoring status of drains from 2016 onwards

Table 4.7 Contribution of BOD pollution load and flow from drains discharging from identified cities

State	Town/City	Flow (MLD)	BOD pollution load (TPD)
Uttarakhand	Kashipur	143.59	212.26
Uttar Pradesh	Meerut	397	131.59
	Moradabad	164.58	23.21
	Bulandshahar	86.55	12.28
	Kanpur	325.81	38.15
	Prayagraj	138.54	48.73
	Varanasi	388.7	20.82
Bihar	Patna	164.51	6.14
West Bengal	Kolkata	897.94	37.49
	Bahrampore	103.16	9.7
	Bhatpara	103.03	9.67
	Uluberia	3160.37	20.11
	Howrah	1515.64	23.34
Total		**7589.42**	**593.49**

Note: Flow in certain drains was not measured, therefore, flow & load could be higher.

4.1.2.3 Action taken by CPCB

CPCB issued letters to the Pollution Control Boards of Uttarakhand, Uttar Pradesh and Bihar:

- To identify the source of pollution in drains and take appropriate action against contributing source/industrial unit.
- To direct concerned authorities to ensure that drains having broken/damaged/temporary tapping provisions shall be repaired immediately and sewage pumping stations shall be operated regularly so that no wastewater is discharged through tapped drains.
- To direct concerned authorities to remove solid waste dumped along identified drains and dispose it safely.

4.1.3 Monitoring of Rivers and Drains in Kanpur-Unnao Region

The CPCB, jointly with UPPCB, carried out regular monitoring of 29 drains (27 in Kanpur, 2 in Unnao), nine river water quality stations (eight on the Ganga, one on the Pandu) in the Kanpur–Unnao region during April

2025 and March 2026. Total 23 rounds of monitoring were conducted. Out of 27 drains, 18 have gradient towards River Ganga and 09 towards River Pandu. Out of 18 drains discharging towards River Ganga, 12 drains were tapped and 01 partially tapped. Overflow was observed in 8 tapped drains namely Sisamau drain, Parmath drain, Tafco drain, Muir Mill (3 MLD), Bhagwatdas drain (2.07 MLD), Sheetla Bazar (14.8 MLD), Budhiya Ghat and Wazidpur. Significantly high BOD (upto 1236 mg/L), COD (upto 2159 mg/L) and total chromium (upto 78.99 mg/L) concentrations were found in drains namely Wazidpur, Sheetla Bazar and Dabka. Out of 9 drains having gradient towards river Pandu, 2 drains were tapped and 4 are partially tapped Overflow (upto 216 MLD) was observed in both tapped drains namely COD drain (142.77 MLD) and ICI drain. High BOD (upto 523 mg/L) and COD (1944 mg/L) were observed in Panki, Shiv Nagar-Pipauri and Sagarpuri drains. In Unnao, there are two drains- City Jail drain and Loni drain and both are untapped, have their gradients towards river Ganga, and carry industrial wastewater besides sewage. High levels of BOD (200 mg/L), COD (580 mg/L) and total chromium concentration (2.4 mg/L) were observed in City Jail drain.

River water quality assessment across nine locations revealed that while dissolved oxygen levels in the Ganga met bathing criteria throughout, the river failed to comply with BOD and faecal coliform norms at all locations. In River Pandu, BOD levels were found up to 16.3 mg/L and did not meet DO, BOD or faecal coliform norms. Exceedance analysis showed that in River Ganga, the percent exceedances were 66.0% for BOD and 53% for faecal coliforms, while River Pandu exhibited percent exceedances of 44% for DO, 87% for BOD and 57% for faecal coliforms.

CPCB issued letter to UPPCB & Chief Secretary, Government of Uttar Pradesh, regarding pollution-source identification, repair of damaged tapping systems, strict operation of sewage pumping stations, surveillance of tanneries and illegal industrial units, and imposition of environmental compensation on violators. Major issues identified include non-compliance of river water quality with bathing norms, discharge from untapped drains, overflow from tapped drains, inadequate sewerage networks, insufficient pumping capacities and illegal industrial discharges. The recommended way forward includes preparation and implementation of robust pollution-control action plans, tapping and diversion of remaining drains, expansion of sewerage infrastructure and STPs, enhancement of pumping station capacity and maintenance, separation of sewage and stormwater systems, capping of leakage points, strengthened vigilance to ensure uninterrupted operation of sewage management systems. These coordinated actions by Municipal Corporation, UPPCB, CPCB, Development Authority and UP Jal Nigam are essential for effective river rejuvenation in the Kanpur–Unnao region.

4.2 River Yamuna

Monitoring of drains discharging directly into river Yamuna is being carried out by CPCB on half-yearly basis *i.e*. Pre and Post monsoon seasons in five Yamuna main stem states (Uttarakhand, Himachal Pradesh, Haryana, Delhi and Uttar Pradesh). These drains carry wastewater, which comprises sewage, industrial effluent, and surface run off. Inventory of drains is updated in-consultation of SPCBs, Jal Nigam/Jal Sansthan, NMCG and SMCG. Pollution source mapping of highly polluted drains was also conducted.

4.2.1 Work Accomplished During 2025

1. Half yearly monitoring of 163 drains discharging directly into river Yamuna in main stem states (Uttarakhand, Himachal Pradesh, Haryana, Delhi and Uttar Pradesh) during post-monsoon, 2025 season.
2. Delhi-Yamuna drains monitoring at 52 finalized locations (40 in Sahibi river including its sub-drains and 12 in Shahdara drain including its sub-drains)

4.2.2 Half Yearly Monitoring of Drains

4.2.2.1 Data Generation and Key findings

During post-monsoon 2025, monitoring of 163 drains discharging directly into river Yamuna in main stem states (Uttarakhand, Himachal Pradesh, Haryana, Delhi and Uttar Pradesh) was conducted. A total of 12 drains during post-monsoon 2025 could not be measured for flow due to non-approachable sites, solid waste/

religious waste deposition, scattered flow or low/ meagre/ stagnant flow although sampling was still carried out. Additionally, 12 drains were found dry. As a result, the total flow and BOD pollution load are likely higher than the reported values. State-wise status of monitored drains for Post monsoon 2025 is given in **Tables 4.8 & 4.9 (a & b).**

Table 4.8: State wise status of drains monitored during Post-Monsoon 2025

States	Yamuna drains Post-Monsoon 2025 Status				
	Monitored Drains	Flow (MLD)	BOD pollution load (TPD)	Tapped/ Drains	Interim remedial measures adopted
Uttarakhand	20	3.40	0.488	0	2
Himachal Pradesh	5	3.72	0.70	0	0
Haryana	4	2181.06	170.85	0	0
Delhi	2	2531.53	175.65	0	0
Uttar Pradesh	132	1365.54	152.48	51	7
Total-A	**163**	**6085.25**	**500.16**	**51**	**9**

MLD -Millions Litre Per Day, TPD -Tonnes Per Day

The monitored drains are also categorized based on flow i.e. <1 MLD, 1-10 MLD and >10 MLD and the status is as follows:

Table 4.9a: Status of drains categorised on the basis of flow during Post-Monsoon 2025

State	Untapped				Tapped					
	Flow Range (MLD)	Total number of drains	Flow (MLD)	BOD Load (TPD)	Complete Tapped	No. of STPs	Partial tapped/ Tapped with Overflow	No. of STPs	Flow (MLD)	BOD Load (TPD)
Uttarakhand	<1	17	0.00	0.000	0	0	0	0	0	0
	1-10	3	3.40	0.488			0	0	0	0
	>10	0	0	0			0	0	0	0
	Total A	**20**	**3.4**	**0.49**	**0**		**0**	**0**	**0**	**0**
Himachal Pradesh	<1	4	0.203	0.030	0	0	0	0	0	0
	1-10	1	3.520	0.665			0	0	0	0
	>10	0	0	0			0	0	0	0
	Total B	**5**	**3.72**	**0.70**	**0**		**0**	**0**	**0**	**0**
Haryana	<1	0	0	0	0	0	0	0	0	0
	1-10	0	0	0			0	0	0	0
	>10	4	2181.06	170.85			0	0	0	0
	Total C	**4**	**2181.06**	**170.85**	**0**		**0**	**0**	**0**	**0**
Delhi	<1	0	0	0	0	0	0	0	0	0
	1-10	0	0	0			0	0	0	0
	>10	2	2531.52	175.65			0	0	0	0
	Total D	**2**	**2531.52**	**175.65**	**0**		**0**	**0**	**0**	**0**
Uttar Pradesh	<1	40	13.19	1.36	33	9	7	4	3.30	0.483
	1-10	32	115.74	16.70			7	5	32.88	12.74
	>10	9	1058.63	50.79			4	4	141.8	70.40
	Total E	**81**	**1187.56**	**68.85**	**33**	**9**	**18**	**11**	**177.98**	**83.63**
Grand Total (A+B+C+D+E)		**112**	**5907.27**	**416.53**	**33**	**9**	**18**	**11***	**177.98**	**83.63**

Note: Actual no. of drains required to be tapped is 90 out of 112 untapped drain excluding 22 nos. of dry/megre flow/lean flow drains. List of 22 no. of drains is attached at ***Appendix-4.5***.
*The 11 STPs include 06 STPs that receive flow too from fully tapped drains. Therefore, 51 drains have been tapped or partially tapped across only 14 STPs.

Table 4.9 b: Status of drains monitored during Post-Monsoon 2025 categorised on the basis of Flow

Untapped/ Tapped	Flow Range (MLD)	Total number of drains	Flow (MLD)	BOD pollution load (TPD)
Untapped	<1	61	13.39	1.39
	1-10	36	122.66	51.94
	>10	15	5771.21	363.20
	Total (Untapped)	**112**	**5907.27**	**416.54**
Tapped	<1	7	3.30	0.48
	1-10	7	32.88	12.74
	>10	4	141.80	70.40
	Complete Tapped	33	0	0
	Total (Tapped)	**51**	**177.98**	**83.63**
Grand Total (Untapped + Tapped)		**163**	**6085.25**	**500.16**

4.2.2.2 Status of interim remedial measures adopted in drains discharging into river Yamuna

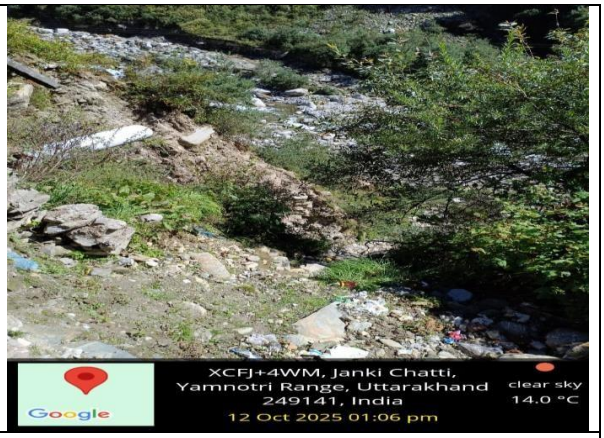
- Interim measures were adopted in 8 untapped/ partially tapped drains of Yamuna in Uttarakhand (2 untapped drains) and in Uttar Pradesh (5 untapped drains and 1 partiallt tapped drain). One drain, namely, Bhairo Nalla is partially tapped to 78 MLD Dhandupur STP and also has insitu interim measure.
- Interim measures were not adopted in 112 untapped drains in Uttarakhand (18), Himachal Pradesh (5), Haryana (4), Delhi (2) and Uttar Pradesh (76).
- Interim measures were found non-functional/defunct in 2 drains (near Naseem house, Dhakrani and near old gharaat, Dhakrani) in Uttarakhand and 1 drain (Radha Nagar Drain Balkeshwar) in Uttar Pradesh.
- Ineffective remedial measure in terms of BOD reduction (increase in BOD value at downstream of interim measure in comparison of upstream value) was observed in 1 drain namely, Kailash Mandir drain in Uttar Pradesh. However, in 1 drain namely Islam Nagar drain, in Uttarakhand showed reduction in terms of BOD (> 15.8 %).

4.2.2.3 Solid waste deposition observed in drains

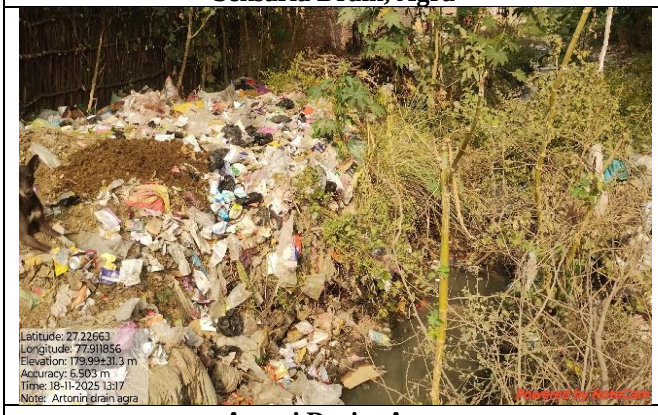
Solid waste was found dumped along 13 drains in Uttarakhand, 2 drains in Himachal Pradesh and 97 drains in Uttar Pradesh. The list of drains is attached as ***Appendix 4.4***. **Figure 4.3** shows solid waste disposal along drains:



Near Panda Samiti Shops Yamunotri



Near Primary School Drain, Narayanpur, Janki Chatti

	
Drain near Bridge / near Vidhayak Parking drain, Janki Chatti:	**Patleshwar Mandir Drain, Hamirpur**
	
Budhi Ka Nagla, Agra	**Katra Wazir Khan Drain-1, Agra**
	
Seksaria Drain, Agra	**Lohia Nagar Drain, Agra**
	
Artoni Drain, Agra	**Gailana Drain, Agra**



Jaswant Singh Ki Chatri - I, Agra



Gokul Nagar Drain, Agra

Figure 4.3 Solid waste disposal observed along the drains discharging into Yamuna

4.2.2.4 Status of drains tapped to various STPs

State wise status of drains tapped to various sewage treatment plants is given in **Table 4.10.**

Table 4.10 Status of drains tapped to various STPs

Ganga States	Name of STP	STP Capacity (MLD)	No. of Drains Tapped
Uttar Pradesh	Mand Road Vrindavan , Mathura	8	1
	Masani, Mathura (U.P.)	30	1
	Trans Yamuna, Laxmi Nagar, Mathura	16	1
	Dhadhupura	78	6
	Peelakhar	10	5
	Budi ka Nagla	2.25	1
	Jaganpur, Sikandarpur	14	1
	Karanpur	10.445	1
	Mauja Umrain	34.5	1
	Numayadahi	50	5
	Naini Old	80	9
	New Naini	42	16
	Devri Road	12	1
	Mohammadpur	67	2
Total			**51**

4.2.3 Joint Monitoring of Drains discharging into River Yamuna in Delhi-NCR Stretch at 52 Locations

Joint monitoring of drains discharging into river Yamuna in Delhi-NCR stretch was carried out by CPCB in coordination with NMCG, DPCC & DJB on monthly basis from May, 2025 to April, 2026. The monitoring program was designed to assess pollution loads entering the river, identify major sources of contamination, and support targeted interventions for improving water quality.

4.2.3.1 Data Generation and Key findings

Two major drains- Sahibi river (Najafgarh drain) and Shahdara drain- were identified for monitoring, along with their second-, third- and fourth- order drains, to facilitate detailed pollution source mapping. The monitoring programme covers a total of 52 sampling locations comprising 40 locations in the Sahibi River (Najafgarh Drain) network and 12 locations in the Shahdara Drain network. Subsurface samples were collected in accordance with the Standard Methods for the Examination of Water and Wastewater (APHA, 2025). The collected samples were analysed at the CPCB Head Office laboratories for 12 key water quality parameters, namely Colour, pH, Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD),

Total Suspended Solids (TSS), Nitrate Nitrogen (NO_3^--N), Nitrite Nitrogen (NO_2^--N), Total Kjeldahl Nitrogen (TKN), Ammonical Nitrogen (NH_3-N), Total Nitrogen (calculated as NO_3^--N + NO_2^--N + TKN), Total Phosphorus (TP), Total Organic Carbon (TOC) and Faecal Coliform (FC) following the procedures prescribed in Standard Methods (APHA, 2025).

4.2.3.2 Sahibi river (Najafgarh drain) network

The Sahibi River enters Delhi at Dhansa Border and joins the Yamuna River on its right bank near the Wazirabad Bridge. Of the 40 monitoring locations within the Sahibi River network, 12 are located on the main channel of the Sahibi River, while the remaining 28 are situated on drains discharging into it. These include 13 locations on major drains, 9 locations on interstate drains shared with the neighbouring states of Haryana and Uttar Pradesh; and 6 locations on supplementary drains (**Figure 4.4**).

The schematic diagram of Sahibi river drainage network is shown in **Figure 4.4**. The spatial distribution of BOD along the Sahibi River and its associated drains indicated a progressive deterioration in water quality. The lowest BOD concentrations were observed at Locations 1 & 2 (Dhansa at Regulator and the Sahibi River at Ghumanhera) with BOD values up to 51 mg/L indicating comparatively lower organic pollution at the entry point. As the river flows downstream, it receives wastewater from several drains, resulting in a gradual increase in BOD concentrations suggesting substantial organic loading and seasonal fluctuations. The highest pollution hotspots are associated with Leg 1 drain (318 mg/L), Outfall of Draili Nala (362 mg/L), Outfall of New Moti Nagar drain (514 mg/L), New Drain (AB7) A/C of Alipur Link Drain & Drain No.6 (314 mg/L), Mungeshpur L. drain before entering Delhi (552 mg/L), and Mandauri drain (Upstream of Mungeshpur drain near Auchandi Border) (825 mg/L) with maximum BOD concentrations exceeding 300 mg/L. Despite dilution after mixing with the Supplementary Drain, the Sahibi River (Location code 12) continues to exhibit elevated BOD (23–154 mg/L) before discharging into the Yamuna, reflecting the cumulative impact of urban wastewater inputs. Several locations contained outliers demonstrating episodic spikes in organic pollution, possibly resulting from intermittent wastewater discharges, storm water runoff, or seasonal changes in flow **(Figures. 4.5, 4.6, 4.7 and 4.8).**

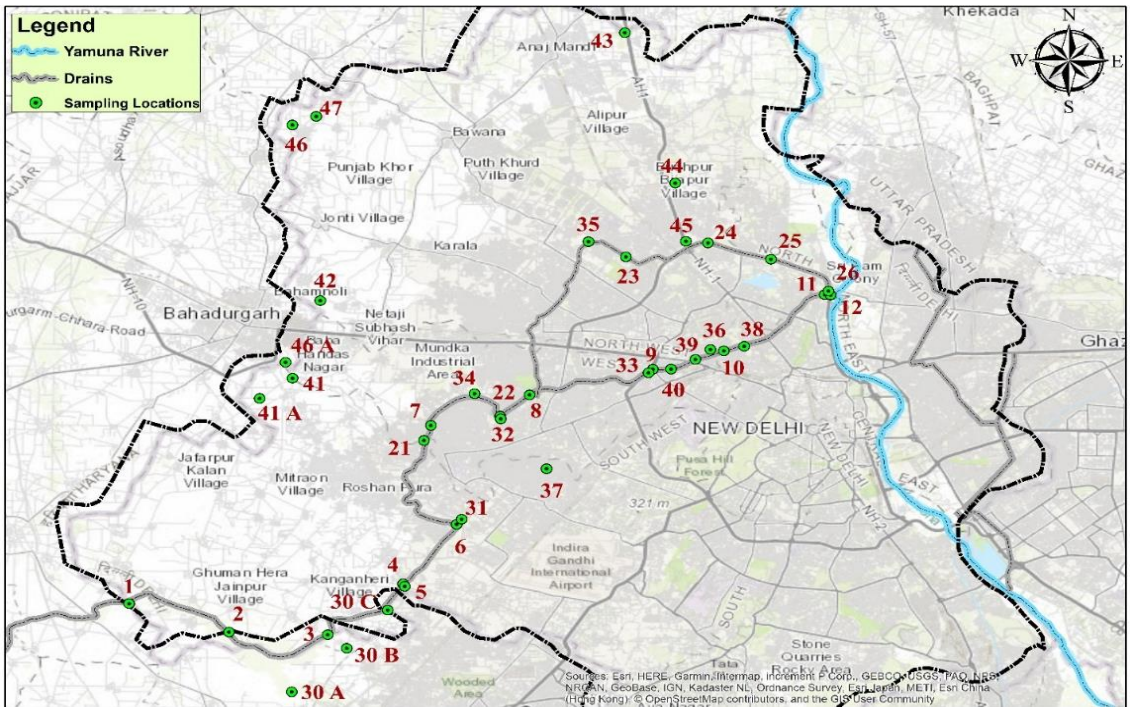


Figure 4.4: Monitoring locations on Sahibi River[1], its major drains[2], Interstate drains[3] and Supplementary drains[4]

[1]On Sahibi river (12 locations)	[2]Major drains (13 locations)	[3]Interstate drains (09 locations)	[4]Supplementary drains (06 locations)
Location Code 1- Dhansa at regulator 2- Sahibi river at Ghummanhera 3- Sahibi river at Jhatikara bridge 4- A/C of Mundhela drain (NB10) 5- A/C of Bijwasan drain (NB6) 6- A/C of Palam drain (NB2) 7- A/C of Mangeshpur drain 8- A/C of Pankha Road drain 9- A/C of Ramesh Nagar drain 10- A/C of JJ Colony + Wazirpur Link drain 11- A/C Jahangirpuri drain (AB16) 12- After merging of Sahibi river & Supplementary drain	Location Code 30 A- Leg 3 drain 30 B- Leg 2 drain 30 C- Leg 1 drain 31- Palam drain (NB2) 32- Pankha Road Drain (NB7) 33- Ramesh nagar Drain 34- Kirari Suleman Nagar Drain (KB12) 35- Nagloi Drain (KB10) 36- JJ Colony Drain 37- Nasirpur Link Drain (NB5) 38- Outfall of Driali Nala 39- Outfall of Shakurbasti Drain 40- Outfall of New Moti Nagar	Location Code 41- Mungeshpur Drain A/C Bupania Churania Drain (NB9) (near Nilwal) 41 A- Entry Point of Bhupania Churania drain (NB9) into Delhi 42- Mungeshpur Drain before entering Haryana (Near Nizampur) 43- Drain No. 6 (Delhi-Haryana Border near Narela) 44- New Drain (AB7) A/C of Alipur Link Drain & Drain No.6 45- New Drain (AB7) B/C to Supplemenatry Drain 46- Mungeshpur L. Drain before entering Delhi 46 A- Mundgeshpur drain (re-entry, 2nd entry) into Delhi 47- Mandauri drain (Upstream of Mungeshpur drain near Auchandi Border)	Location Code 21- Outfall of Supplementary Drain at Kakrola Mor 22- A/C of Kirari Suleman Nagar Drain (KB12) 23- A/C of Nangloi Drain (KB10) 24- A/C of New Drain (AB7) 25- A/C of Burari Creek (AB5) 26- A/C of Toe Drain (AB17) and Jagatpur Link Drain (AB13)
A/C- after confluence *B/C- before confluence*			

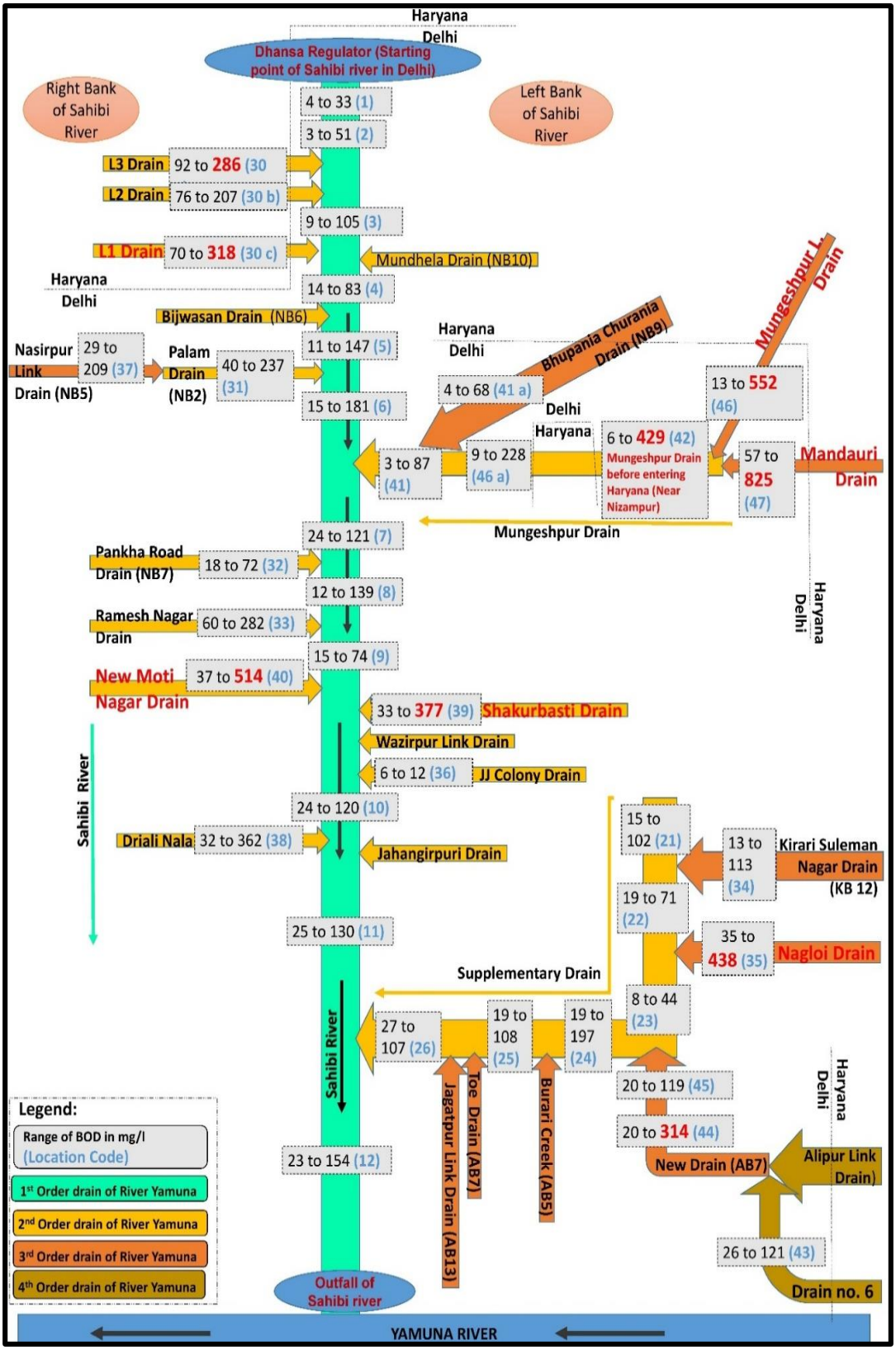


Figure 4.5: Schematic Diagram of Sahibi River drainage network
(BOD Range observed at various locations during May, 2025- April, 2026)

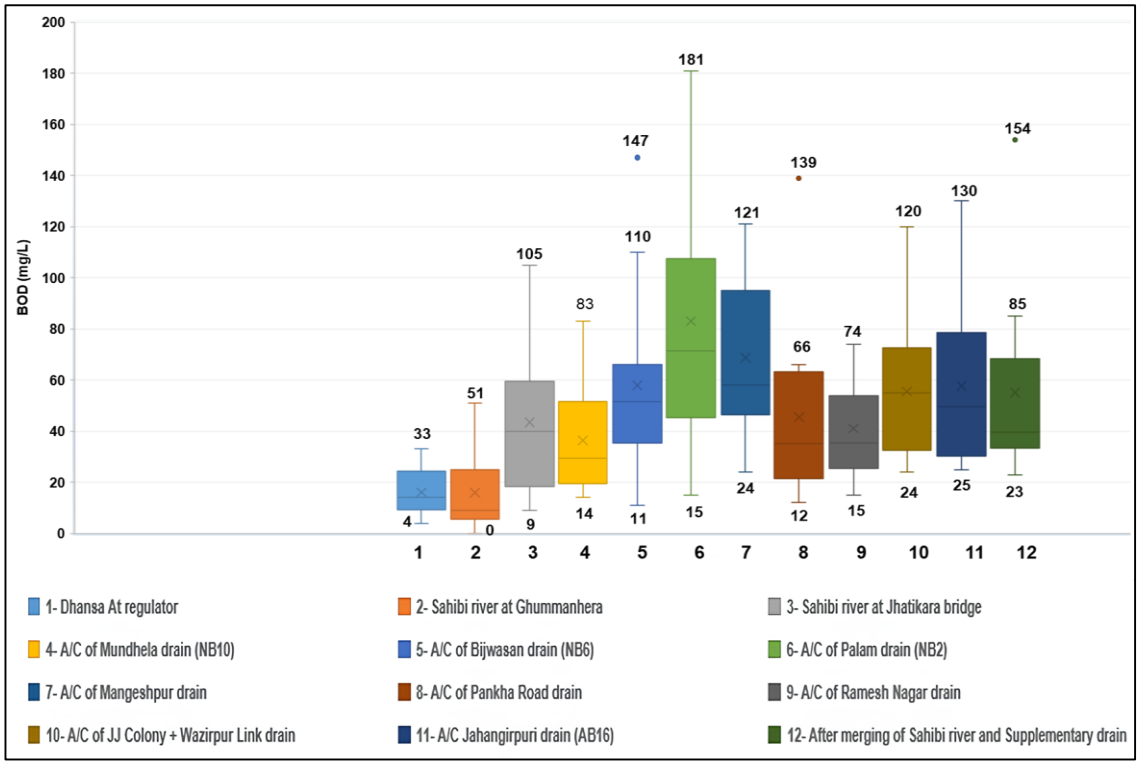


Figure. 4.6: BOD distribution at 12 monitoring locations of Sahibi river

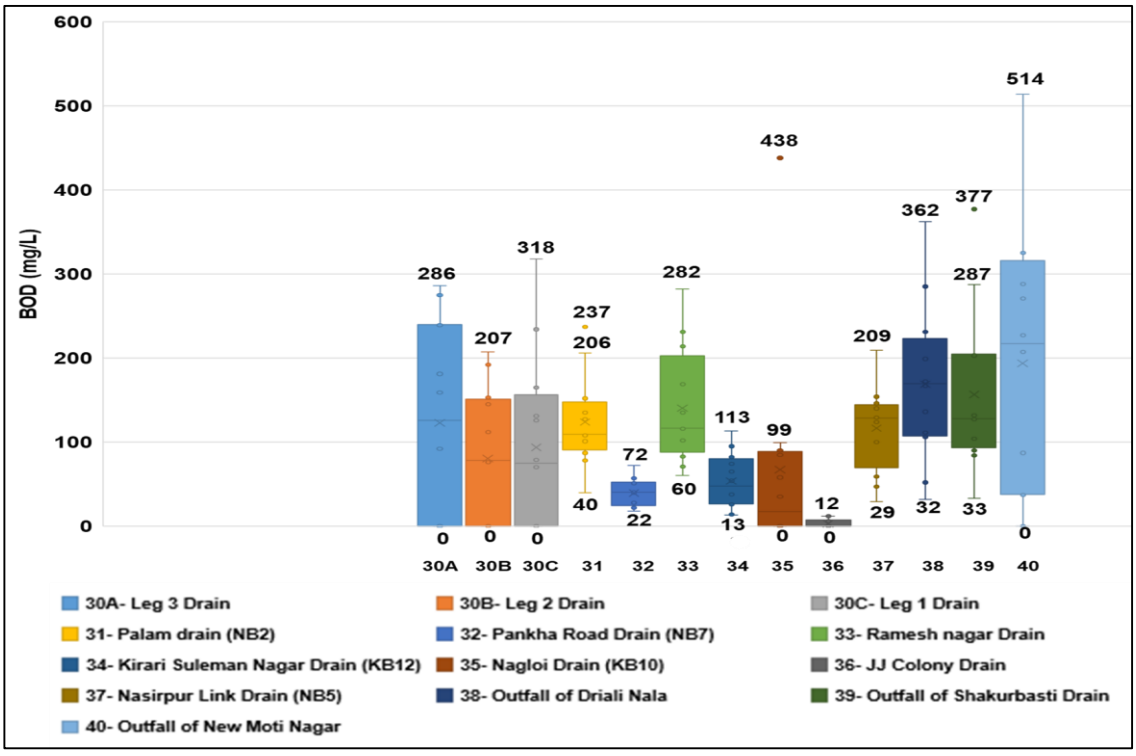


Figure. 4.7: BOD distribution at 13 monitoring locations on Major drains of Sahibi river

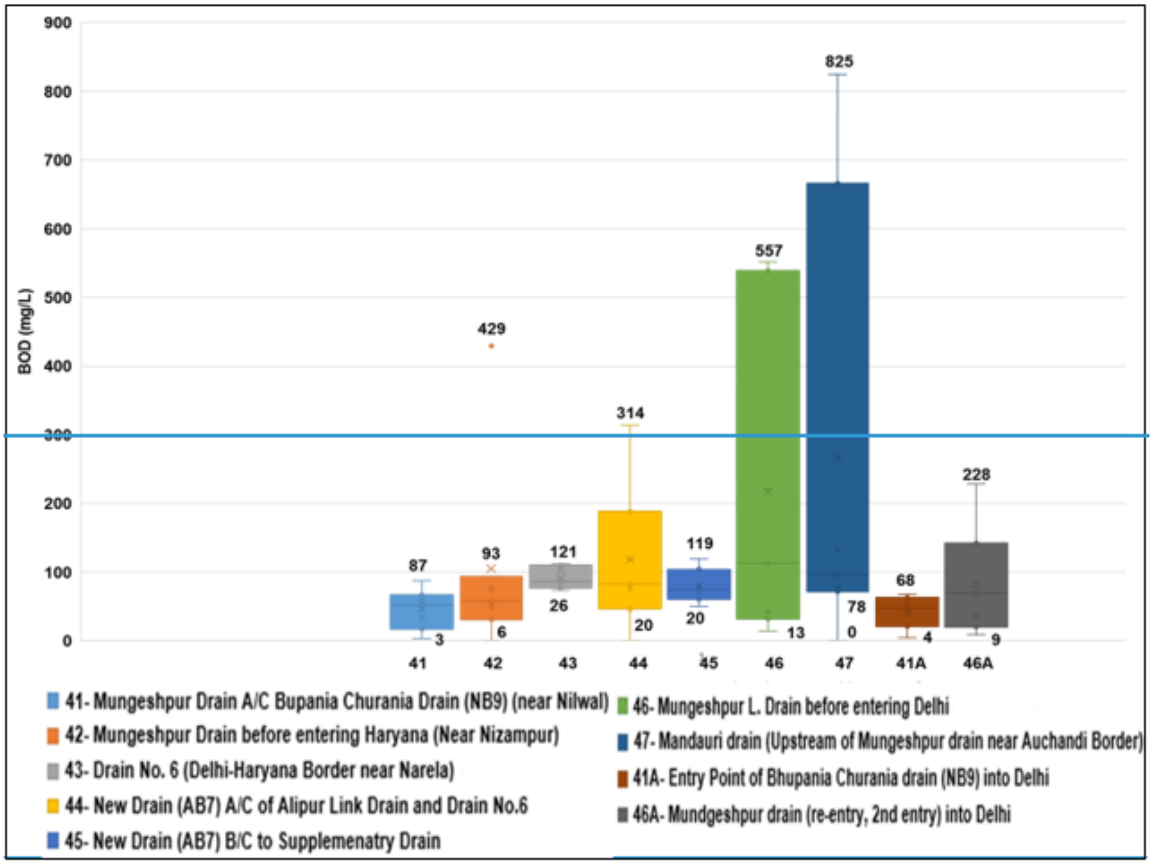


Figure. 4.8: BOD distribution at 9 monitoring locations of Interstate drains of Sahibi river

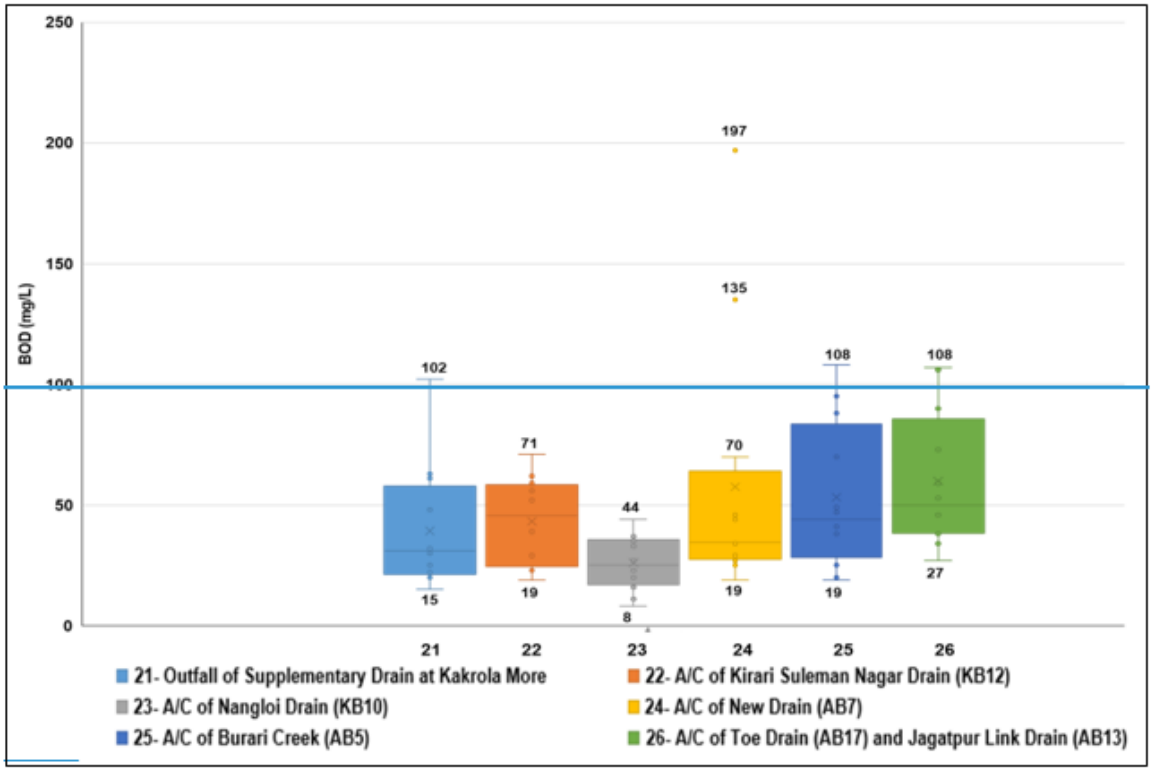


Figure. 4.9: BOD distribution at 6 locations on Supplementary drains of Sahibi river

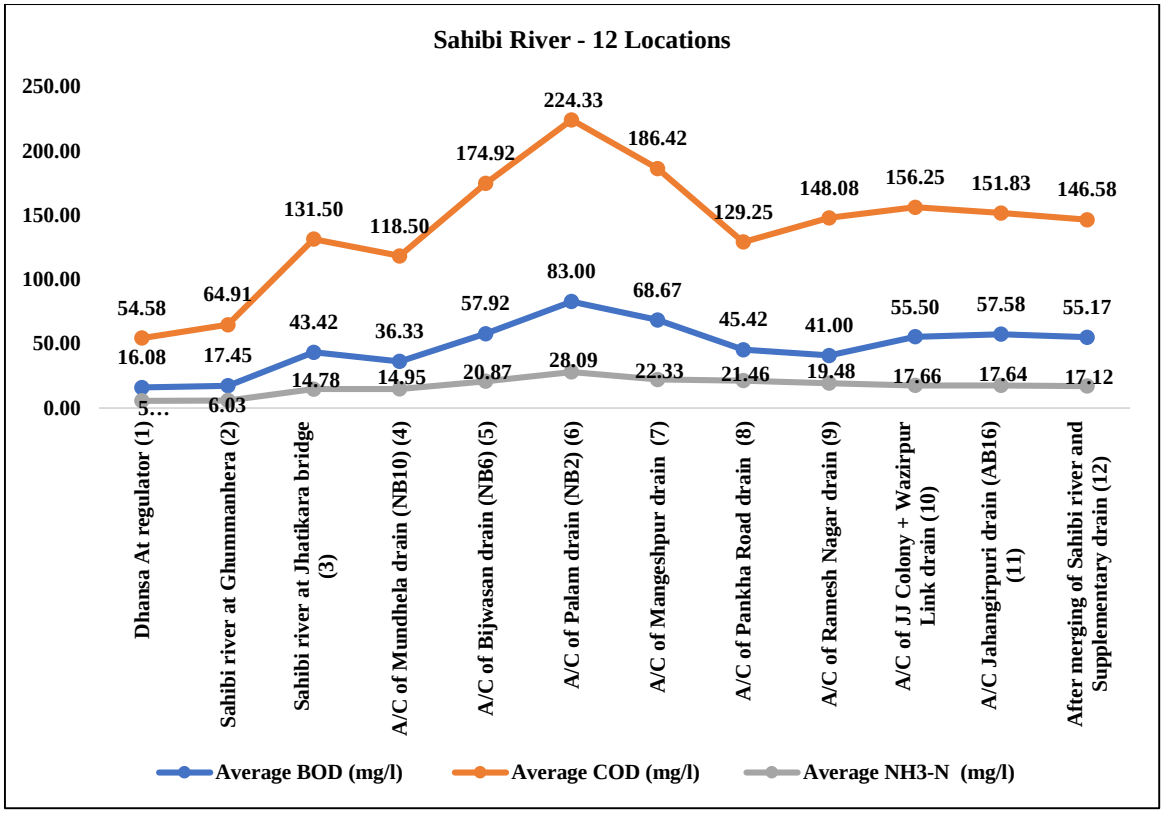


Figure. 4.10: Average BOD, COD and ammoniacal nitorgen at 12 monitoring locations of Sahibi river

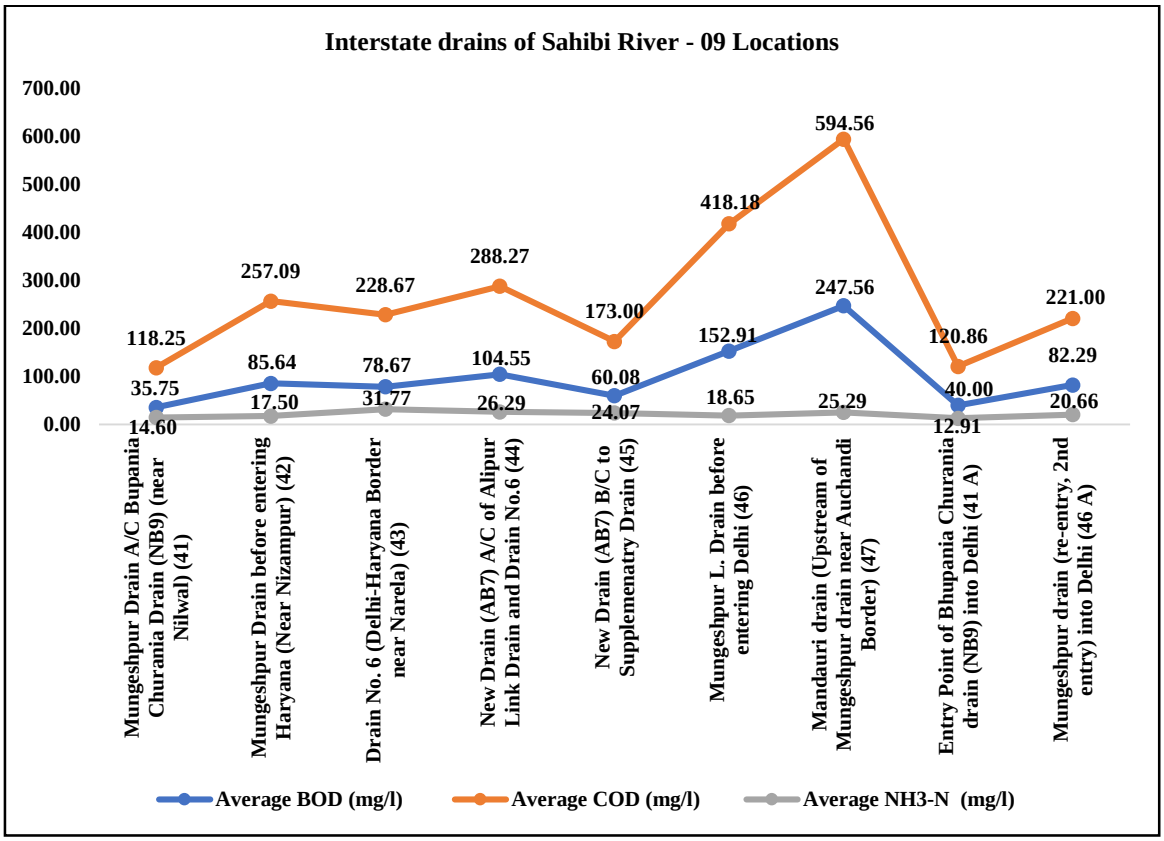


Figure. 4.11: Average BOD, COD and ammoniacal nitorgen at 09 monitoring locations at Interstate drains of Sahibi River

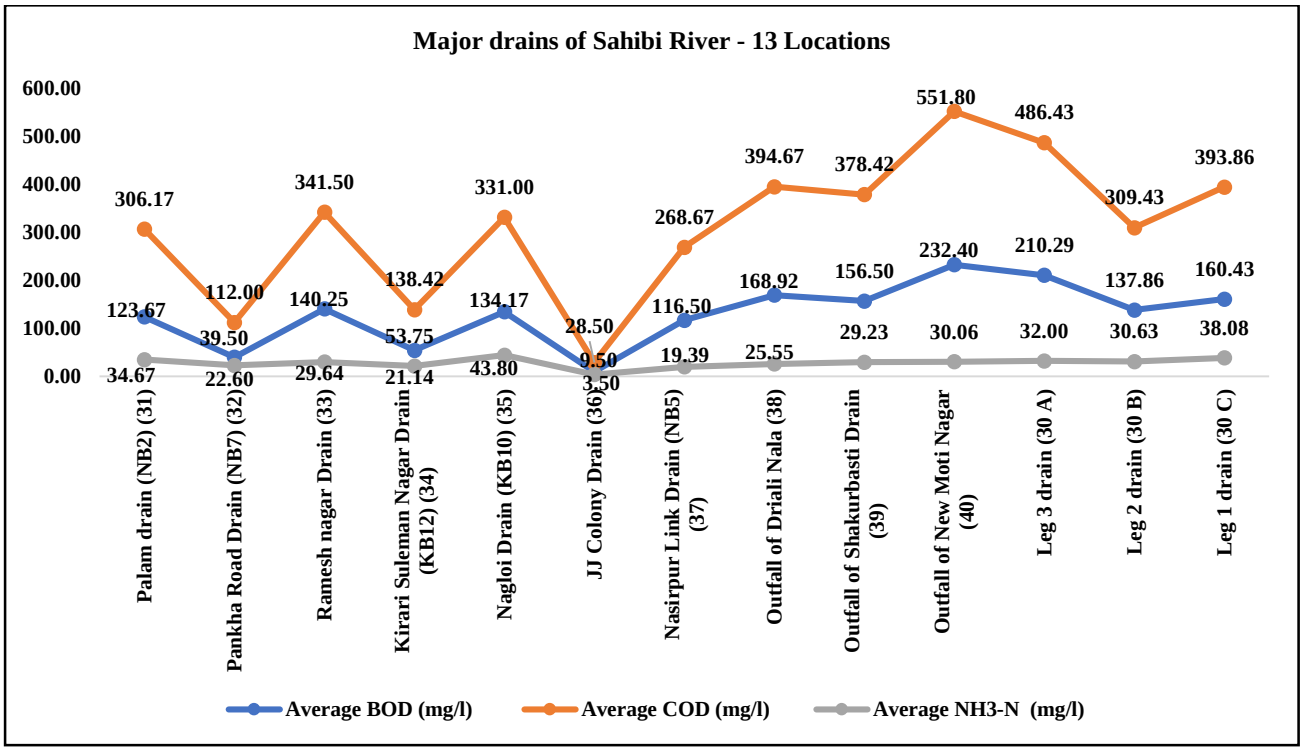


Figure. 4.12: Average BOD, COD and ammoniacal nitorgen at 13 monitoring locations at Major drains of Sahibi River

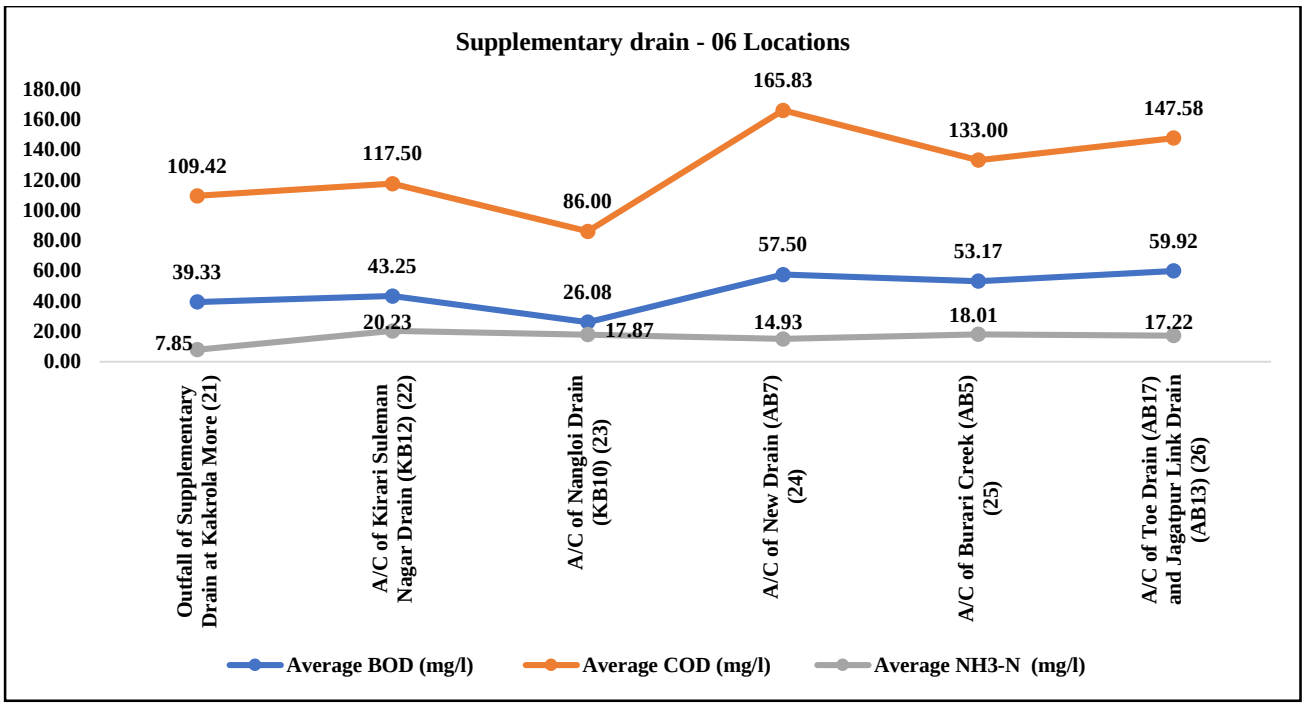


Figure. 4.13: Average BOD, COD and ammoniacal nitorgen at 06 monitoring locations at Supplementary drains

4.2.3.2.1 Shahdara drain network

Shahdara Drain joins the Yamuna River on its left bank. A total of 12 sampling locations have been established within the Shahdara Drain network. Of these, 06 monitoring locations are on the main channel of the Shahdara Drain, while the remaining 06 are on interstate drains that discharge into the Shahdara Drain (**Figure 4.14**).

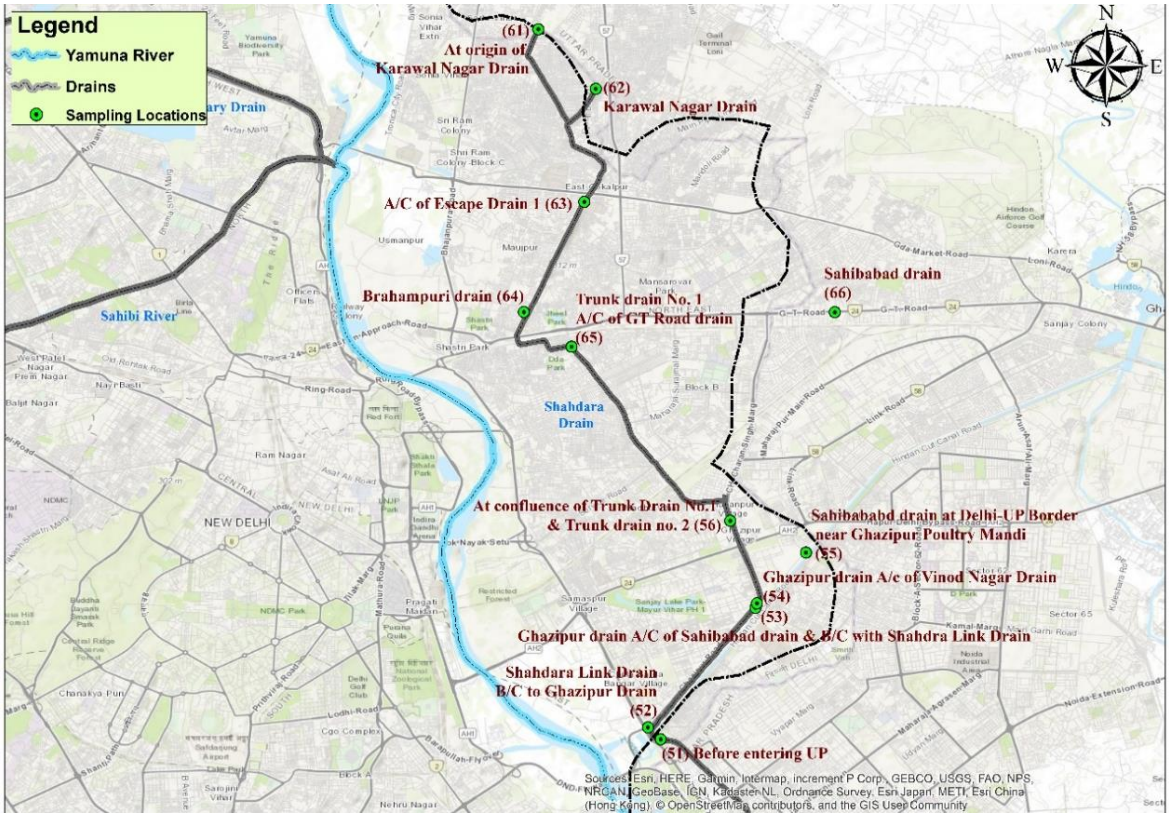


Figure 4.14: Monitoring locations on Shahdara drain[1] and its Interstate drains[2]

[1]On Shahdara drain (06 locations)	[2]Interstate drains (06 locations)
Location Code 51- Shahdara outfall drain (TY3) before entering UP 52- Shahdara Link Drain (TY5) B/C to Ghazipur Drain 53- Ghazipur drain A/C of Sahibabad drain & B/C with Shahdra Link Drain (TY5) 54- Ghazipur drain (TY4) A/c of Vinod Nagar Drain 55- Sahibababd drain at Delhi-UP Border near Ghazipur Poultry Mandi 56- At confluence of Trunk drain no. I & Trunk drain No. 2	Location Code 61- At origin of Karawal Nagar Drain (TY6) (Border of UP-Delhi) 62- Karawal Nagar Drain near Shiv Vihar (Delhi-UP Border) 63- A/C of Escape Drain I (TY9) with Trunk drain no. 1 64- Brahampuri drain (Gokalpur Drain) near Brahampuri drain SPS 65- Trunk Drain No. 1 A/C of GT Road drain 66- Sahibabad drain near Shaheed Nagar metro station at GT Road

The schematic diagram of Shahdara drainage network is shown in **Figure 4.15**. The spatial distribution of BOD along the Shahdara drain and its associated interstate drains indicated substantial organic load. The central stretches of the drain system (Locations 52–55) experience considerable organic pollution, with Location 55 (Sahibababd drain at Delhi-UP Border near Ghazipur Poultry Mandi) being the most critically affected with maximum BOD 438 mg/L. In contrast, Location 51 (Shahdara outfall drain (TY3) before entering UP) represents the least organic load with maximum BOD concentrations up to 211 mg/L. Although some reduction is observed at the confluence of Trunk drain no. 1 & Trunk drain no. 2 (Location 56), but BOD levels remain elevated, reflecting persistent impacts of untreated domestic and industrial wastewater on the drain network. Among interstate drains, Locations 61, 62 & 66 carry ample organic load with BOD concentrations exceeding 300 mg/L whereas Location 64 showed comparatively lower and more stable BOD concentrations (**Figures 4.15**).

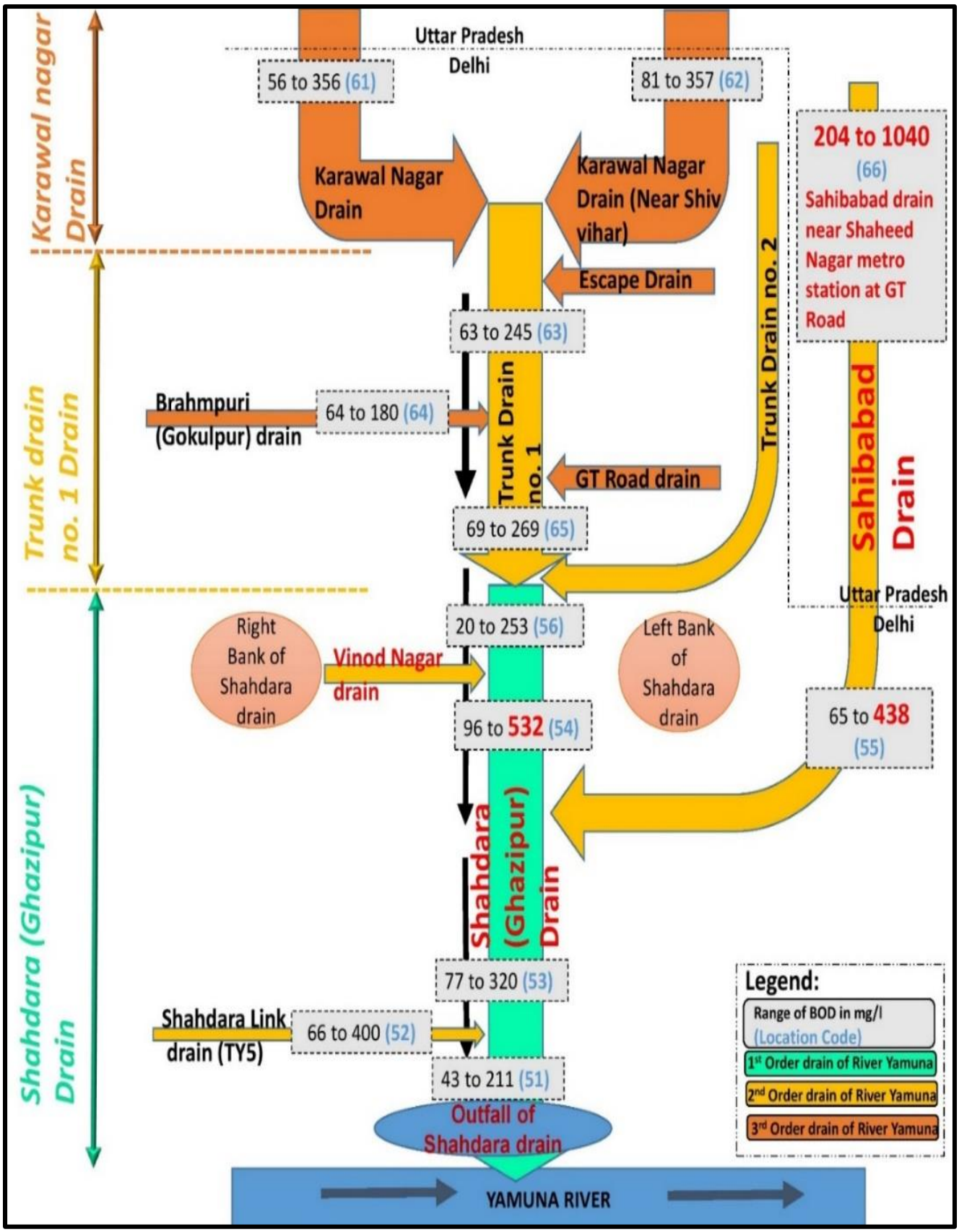


Figure 4.15: Schematic Diagram of Shahdara drainage network
(BOD range observed at various locations during May, 2025- April, 2026)

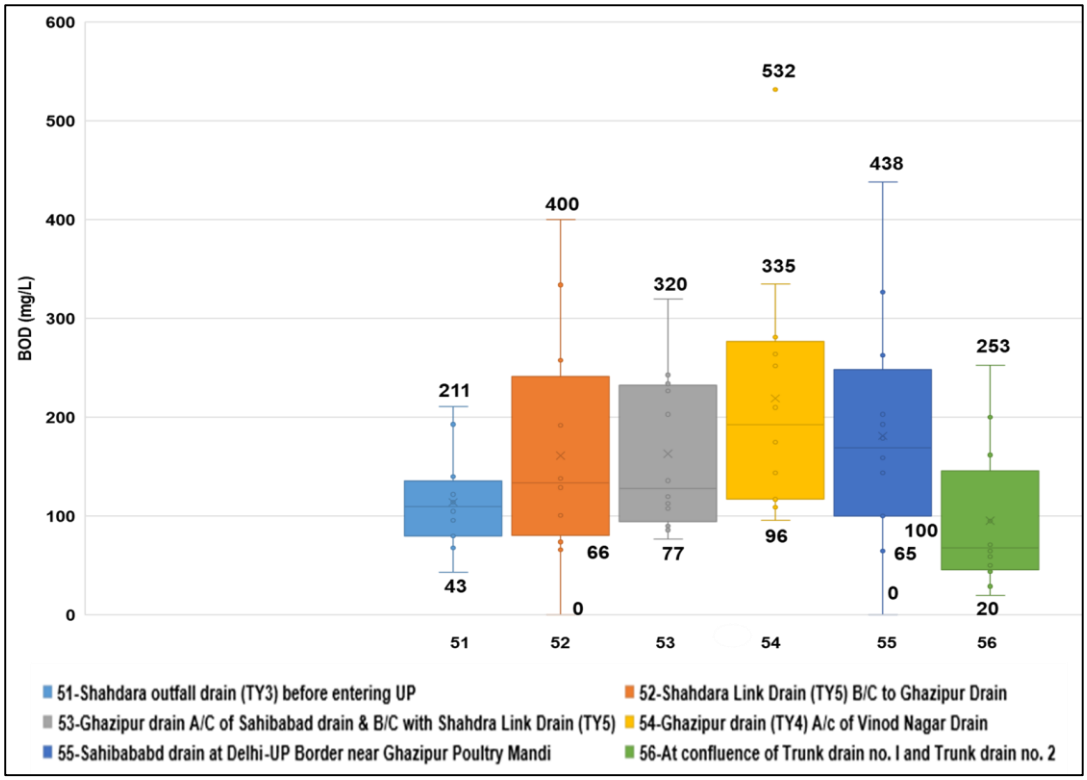


Figure. 4.16: BOD distribution at 06 locations on Shahdara drain

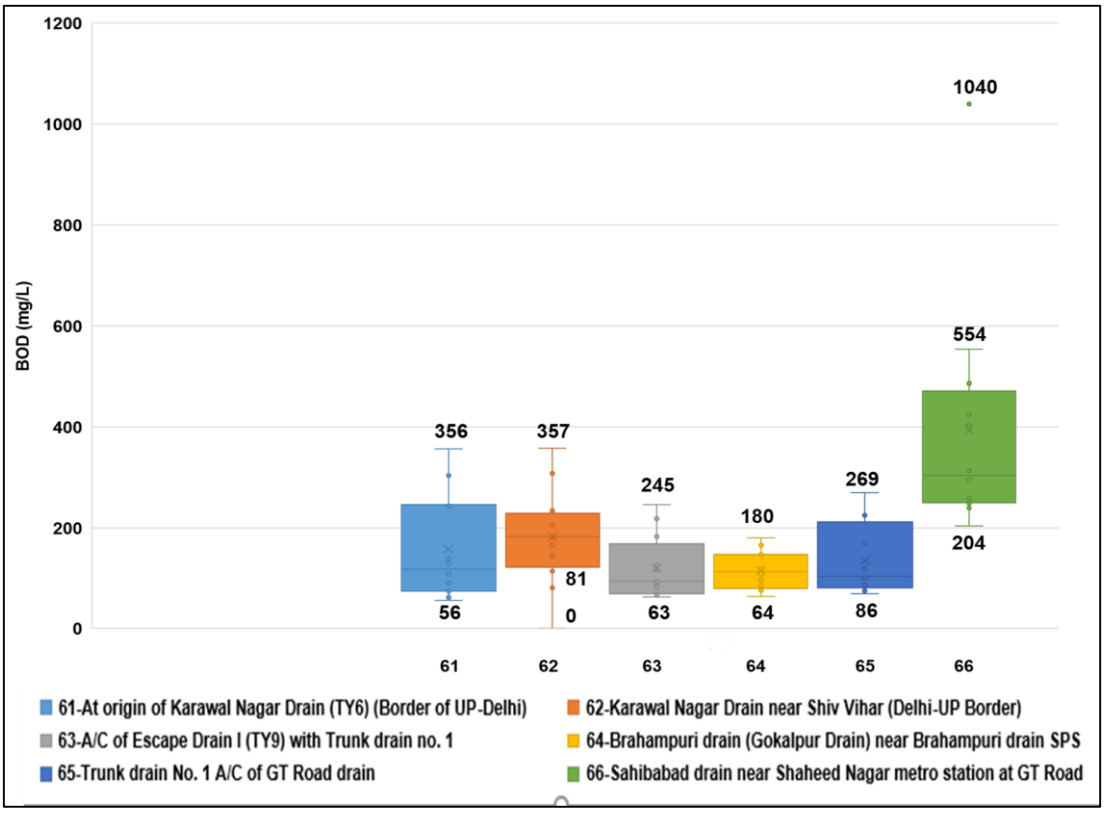


Figure. 4.17: BOD distribution at 06 locations on Interstate drains of Shahdara drain

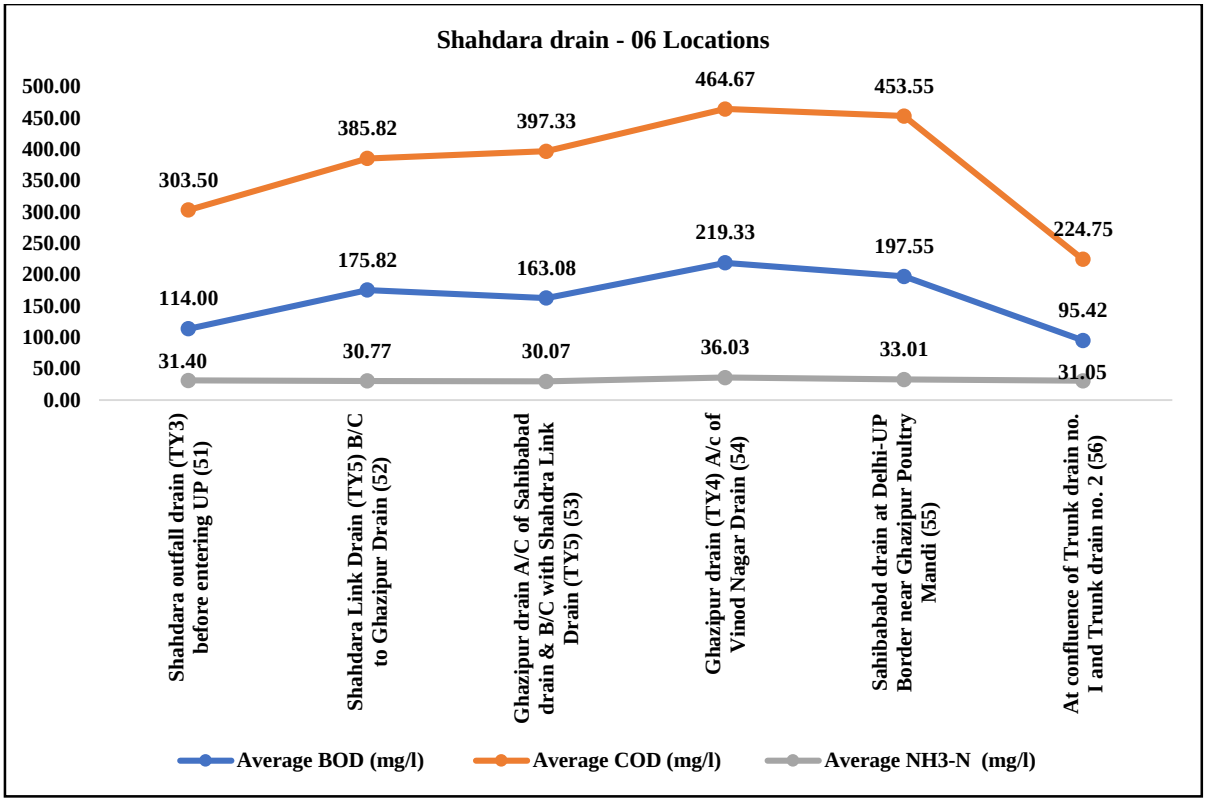


Figure. 4.18: Average BOD, COD and ammoniacal nitorgen at 06 monitoring locations at Shahdara drains

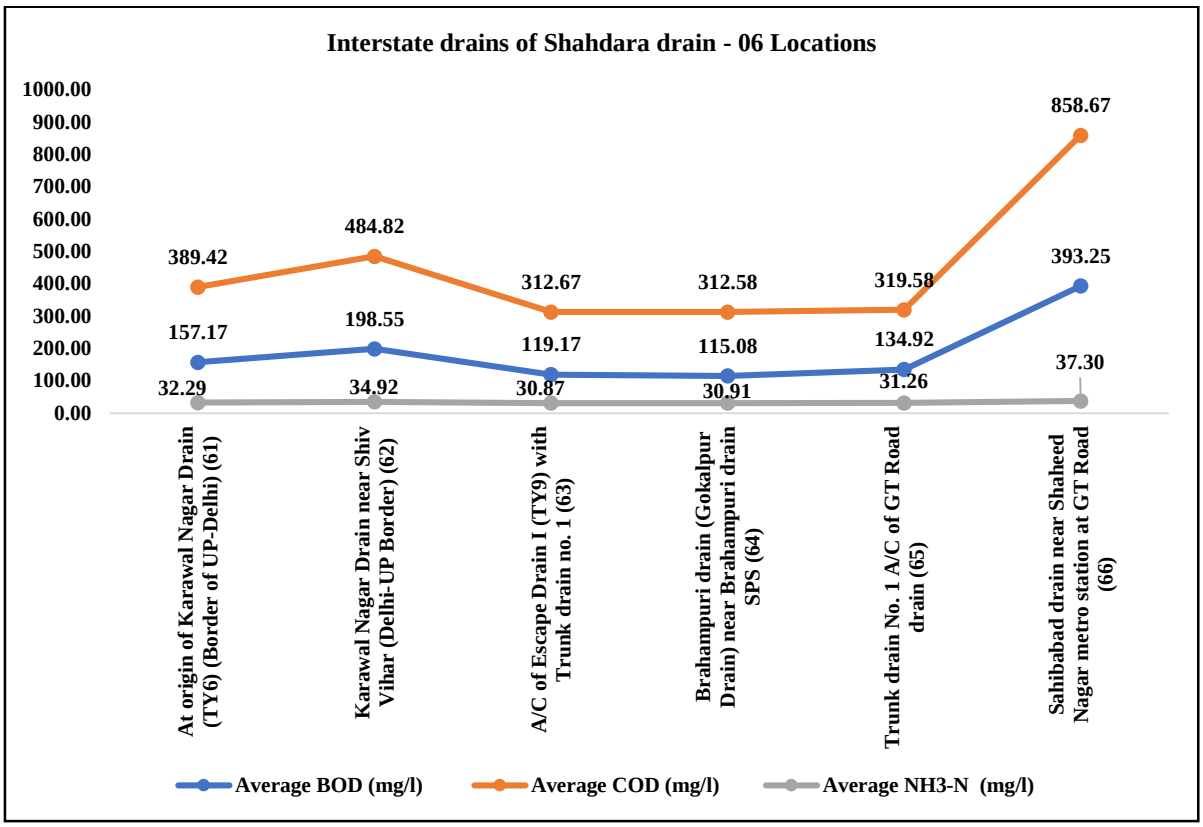


Figure. 4.19: Average BOD, COD and ammoniacal nitorgen at 06 monitoring locations at interstate drains of Shahdara drains

4.2.3.2.2 Solid waste dumping along the drains

Solid waste dumping along the drains was observed as another significant concern during monitoring program at 32 drains.

4.2.3.2.3 Tapping provisions

Tapping provisions were found to be inadequate or non-functional for several months at 11 locations of drains as per **Table 4.11**.

Table 4.11: List of drains with inadequate Tapping provision at 11 locations

Sr. No.	Location Code	Location Name	Monitoring team Observations
1.	45	New Drain (AB7) B/C to Supplementary Drain	Non-functional (overflow)
2.	31	Palam drain (NB2)	Submerged and Non-functional
3.	32	Pankha road drain (NB7)	Functional but screens installed are non-operational and Solid waste observed all over the tapping point
4.	33	Ramesh nagar Drain	Non-functional (bypass) Also, bar screens choked with solid waste
5.	34	Kirari Suleman Nagar Drain (KB12)	Functional but overflow observed. Also, huge sludge deposited upstream of tapping arrangement and screens broken
6.	35	Nagloi Drain (KB10)	Functional but inadequate due to overflow observed in June, September, October, November 2025 and January 2026
7.	36	JJ Colony Drain	Non-functional
8.	38	Outfall of Driali Nala in Sahibi River	Tapping arrangement constructed but not handed over to DJB. And, now defunct and submerged. Also, Mechanical screens installed were non-functional
9.	61	At origin of Karawal Nagar Drain (TY6) (Border of UP-Delhi)	Non-functional (by-pass)
10.	62	Karawal Nagar Drain near Shiv vihar (Delhi-UP border)	Non-functional (by-pass)
11.	64	Brahampuri drain (Gokalpur Drain) near Brahampuri drain SPS	Non-operational



Dhansa at regulator (Location code-1)
Entry point of Sahibi river in Delhi



Leg 1 drain (Location code: 30 C)
Untapped Major drain of Sahibi river



Drain no. 6 (Delhi-Haryana Border near Narela)
(Location code- 43) Solid waste dumping
(Interstate drain of Sahibi river)



A/C of Toe Drain (AB17) and Jagatpur Link Drain (AB13) (Location code: 26)
(Supplementary drain of Sahibi river)



At Ghazipur drain A/C of Sahibabad drain & B/C with Shahdara Link Drain (TY5) (Location code: 53) Shahdara drain



Sahibabad drain near Shaheed nagar metro station at GT Road, Uttar Pradesh (Location code: 66) (Interstate drain of Shahdara)

Figure 4.20: Some representative photographs of drain monitoring locations discharging into river Yamuna in Delhi-NCR stretch

4.2.3.3 Conclusion

1. Two major (first order) drains were identified —the Sahibi River (Najafgarh Drain) and the Shahdara Drain—for monitoring, along with their associated second-, third- & fourth-order drains comprising 19 drains discharging into Sahibi river and 06 drains discharging into Shahdara drain encompassing a total of 52 sampling locations.
2. Highest average values were observed:
   i. BOD: 393.25 mg/l; COD: 858.67 mg/l and TSS: 533.92 mg/l at Sahibabad drain near Shaheed Nagar metro station at GT Road (Interstate drain of Shahdara drain) due to discharge from non-confirming industrial area and dumping of solid wastes and silt/sludge along the bank of drains.
   ii. NH_3-N: 43.8 mg/l at Nagloi drain (KB10) (Major drain of river Sahibi) due to discharge from local dairies and animal sheds.
   iii. Faecal Coliform: 2 x 10^{15} Mandauri Drain (upstream of Mungeshpur drain near Auchandi Border) (interstate drains of river Sahibi) due to discharge from local dairies and animal sheds.
3. The top polluting drains were identified as below:

Sr. No.	Drain Name	Location Code	Average Value (BOD / COD / TSS / NH_3-N / FC)	Observations
1	Leg-1 Drain	30 (c)	160.43 / 393.86 / 280.29 / 38.08 / 2.30x 10^{13}	Predominantly municipal sewage and commercial wastewater discharge; Animal waste
2	Palam Drain (NB-2)	31	123.67 / 306.17 / 101 / 364.67 / 2.95 x 10^{12}	Non-functional tapping (Pappankalan STP); sewage bypass, solid waste dumping and overflow observed.
3	Ramesh Nagar Drain	33	140.25 / 341.5 / 194.75 / 29.64 / 8.45 x 10^{13}	Tapping inadequate; untreated sewage bypassing directly into Sahibi River; solid waste choking bar screens
4	Nagloi Drain (KB-10)	35	134.17 / 331 / 180.17 / 43.80 / 3.38 x 10^{13}	Untreated sewage, industrial effluent and overflow from tapping arrangements.
5	Outfall of New Moti Nagar Drain	40	232.4 / 551.8 / 243.6 / 30.06 / 1.84 x 10^{14}	Severe municipal & industrial pollution observed.
6	Drain No. 6	43	78.67 / 228.67 / 144.17 / 31.77 / 2.08 x 10^{10}	Interstate drain with village sewage, industrial discharge and solid waste dumping.
7	New Drain (AB-7)	44	104.55 / 288.27 / 306.64 / 26.29 / 9.2 x 10^{13}	Industrial wastewater, vehicle washing, hospitality units; nutrient enrichment observed.
8	Mandauri Drain (upstream of Mungeshpur drain near Auchandi Border)	47	247.56 / 594.56 / 291.22 / 25.29 / 2.0 x 10^{15}	Metallic colour, oil & grease, acidic water indicating industrial contamination.

9	Shahdara Link Drain (TY-5)	52	175.82 / 385.82 / 234.18 / 30.77 / 1.02 x 10^{14}	Domestic sewage, industrial wastewater, C&D waste and animal carcass disposal observed.
10	Shahdara Drain	54	219.33 / 464.67 / 338.33 / 36.03 / 3.65 x 10^{11}	Mixed industrial discharge; sludge deposition and solid waste accumulation.
11	Trunk Drain no. 1	63	119.17 / 312.67 / 493.08 / 30.87 / 1.62 x 10^{13}	Yamuna vihar STP discharge; small scale units working in dyeing & washing, PVC granules and e-waste recycling
12	Sahibabad Drain near Shaheed nagar metro station at GT Road	66	393.25 / 858.67 / 533.92 / 37.30 / 3.97 x 10^{12}	Textile/dyeing industries, slaughterhouse & poultry waste major pollution contributors.

4. Solid waste dumping was observed at 32 locations.
5. Tapping arrangements were observed as inadequate for 11 drains (non-functional at 07 drains, non-operational at 01 drain and functional but overflowing at 03 drains), of which, 08 drains are on Sahibi river network and 03 drains are on Shahdara drain network.

4.2.3.4 Follow-up Actions

1. Pursuant to the directives of the Hon'ble Home Minister, Government of India, a High-Level Committee has been constituted under the chairmanship of the Hon'ble Chief Minister, Government of the National Capital Territory of Delhi to periodically review the progress of works being carried out for the rejuvenation of the River Yamuna. CPCB also issued letters to HSPCB and UPPCB vide letter dated 03.06.2026 to provide various information on efforts being undertaken/action plan formulated to reduce pollution in the drains/River Yamuna.
2. DPCC issued directions dated 05.02.2026 to MCD, I&FCD, CPWD, PWD GNCTD, DDA, NDMC, UDD GNCTD, DSIIDC and Delhi Cantonment Board, to submit the ATR w.r.t. the solid waste removal at the various locations. However, action taken report from any concerned agencies yet not received.
3. A detailed mapping of the drains originating from Haryana and UP, may be carried out by HSPCB and UPPCB, to identify the possible reasons for severe pollution in the drains and to assess the effectiveness of pollution control measures being taken so far.
4. HSPCB & UPPCB directed to intensify monitoring of interstate drains and industrial pollution sources.

SECTION 5: WATER QUALITY STUDY IN RIVER GANGA AND YAMUNA

CPCB has undertaken various initiatives to monitor the water quality status of the River Ganga and its tributaries. These initiatives include:

1. Manual water quality monitoring of River Ganga through the concerned SPCBs at 112 locations;
2. Manual water quality monitoring of River Yamuna through the concerned SPCBs at 33 locations;
3. Real time water quality monitoring of river Ganga and its tributaries through sensor-based system at 40 locations; and
4. Half-yearly biomonitoring (pre- and post-monsoon) of River Ganga, River Yamuna and their tributaries.

5.1 Manual water quality monitoring in river Ganga

Central Pollution Control Board (CPCB) carried out monitoring for assessment of water quality of River Ganga at 112 locations from 2023 onwards on main stem of river Ganga (Uttarakhand-19, Uttar Pradesh-41, Bihar-33, Jharkhand-04 and West Bengal-15) through SPCBs of Uttarakhand, Uttar Pradesh, Bihar, Jharkhand, and West Bengal. Manual monitoring locations on river Ganga are shown in **Figure 5.1.**

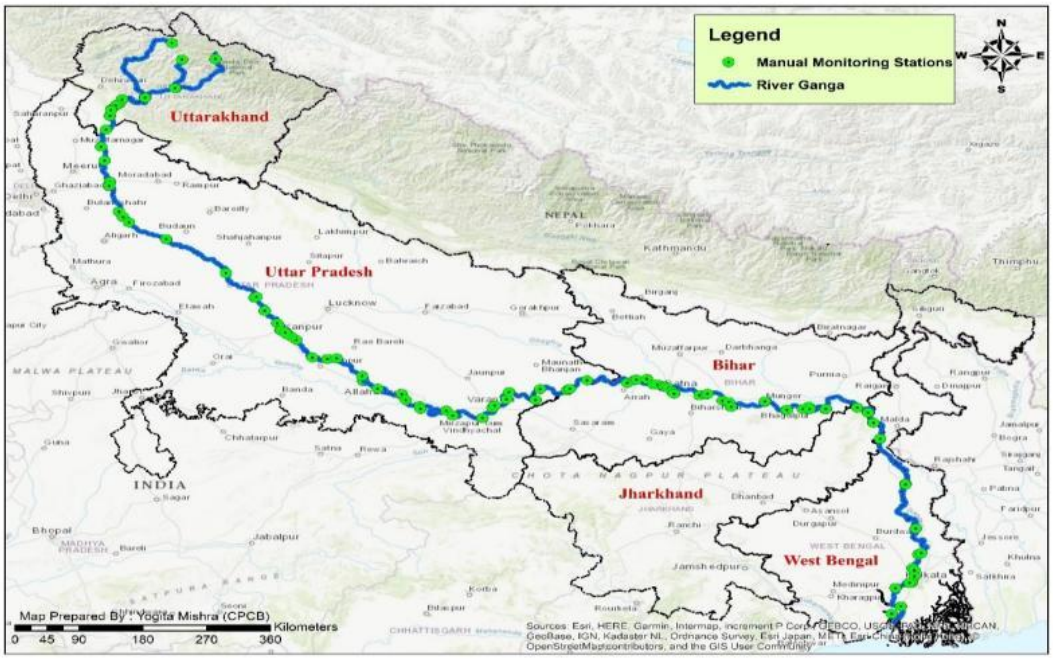


Figure 5.1 Manual monitoring locations on river Ganga

Frequency of monitoring in Upper Ganga reaches i.e. at Gangotri, Kedarnath & Badrinath is on annual basis, from Rudraprayag to Devprayag on quarterly basis and thereafter remaining stretch i.e. from Swarg Ashram (Uttarakhand) to Ganga at Patikali (West Bengal) on fortnightly basis (except bindughat, Haridwar on monthy basis). Water samples are analysed by respective SPCBs. The state-wise distribution of monitoring stations is given in **Table 5.1.**

Table 5.1 Monitoring frequency and state-wise distribution of water quality monitoring stations

State	Monitoring stations	Manual monitoring network				Monitoring agency
		Monitoring frequency				
		Yearly	Quarterly	Monthly	Bi-monthly	
Uttarakhand	19	3	6	1	9	UKPCB
Uttar Pradesh	41	-	-	-	41	UPPCB
Bihar	33	-	-	-	33	BSPCB

State	Monitoring stations	Manual monitoring network				Monitoring agency
		Monitoring frequency				
		Yearly	Quarterly	Monthly	Bi-monthly	
Jharkhand	4	-	-	-	4	JSPCB
West Bengal	15	-	-	-	15	WBPCB
Total	**112**	**3**	**6**	**1**	**102**	

Water samples have been analysed for up to 65 parameters viz. field observations-7 (fortnightly), core parameters-11 (fortnightly), general parameters-19 (fortnightly), trace metals-9/toxic substance-1 (twice in a year), pesticides-15 (twice in a year), biomonitoring-3 (on need basis). The detailed list of parameters along with monitoring frequency is shown in **Table 5.2.**

Table 5.2 Details of parameters monitored on river Ganga

Parameters	Present Frequency
Field Observations (7) Weather, Approximate depth of main stream/depth of water table, Colour and intensity, Odor, Visible effluent discharge, Human activities around station, station detail.	Fortnightly
Core Parameters (11) Temperature, pH, Conductivity DO, BOD, Nitrate -N, ammonia- N, Total coliform, Fecal Coliform, Fecal Streptococci & *E. coli*	Fortnightly
General Parameters (19) COD, TKN, Ammoniacal -N, Total Dissolved Solids, Total Fixed Solids, Total Suspended Solids, Turbidity, Hardness, Fluoride, Boron, Chloride, Sulphate, Total Alkalinity, P-Alkalinity, Phosphate, Sodium, Potassium, Calcium, Magnesium	Fortnightly
Trace Metals (9) Arsenic, Nickel, Copper, Mercury, Chromium, Cadmium, Zinc, Lead, Iron	Twice in a year (April and October)
Pesticide (15) Alpha BHC, Beta BHC, Gama BHC (Lindane), OP DDT, PP DDT, Alpha Endosulphan, Beta Endosulphan, Dieldrin, Carboryl (Carbamate), 2.4D, Aldrin, Malathian, Methyl Parathian, Anilophos, Chloropyriphos	Twice in a year (April and October)

5.1.1 Data Generation and Salient Findings

Monitoring data of manual monitoring stations (112 locations out of 112 sanctioned manual monitoring stations) is submitted through Environmental Water Quality Data Entry System (EWQDES). Thereafter, the data is compiled, verified, validated, communicated to NMCG, also shared with National Water Informatics Centre (NWIC) since 2018 by CPCB, and is being made available in public domain on India Water Resources Information System (India-WRIS).

5.1.2 Water Quality Status

River water quality is assessed for notified primary water quality criteria for bathing water w.r.t parameters pH (6.5-8.5), Dissolved Oxygen (DO≥ 5 mg/l), Biochemical Oxygen Demand (BOD≤ 3 mg/l), Fecal Coliforms (FC≤ 2500 MPN/100 ml) and Fecal Streptococci (FS≤ 500 MPN/100 ml) ***(Appendix 5.1).***

Water quality data of River Ganga for water quality parameters, specifically pH, DO, BOD, FC and FS, for the period January-December, 2025 was analysed based on the median values (central tendency of the data) to identify river stretches/locations which are not conforming the primary water quality criteria for bathing waters for the mentioned set of parameters. However, in terms of pH the water quality of river Ganga observed to be meeting primary water quality criteria for bathing at all monitoring locations during all occasions.

There is a significant variability in the values on various parameters, viz. pH, DO, BOD and FC for the samples taken from the same location on different dates. The values of the parameters also vary at different locations for the samples collected on the same day. The present data represents a snapshot of water quality at a specific location and time and may vary significantly depending upon factors such as upstream anthropogenic activities, rate of flow, depth of sampling, time of sampling, river current and mixing of currents, sampling location and such other multiple factors. As a result, these values reflect water quality parameters at the exact time and place from where these water samples were collected and may not fully represent the overall characteristics of the river, therefore, not necessarily reflecting the overall river water quality throughout the river stretch.

5.1.3 Status of water quality of River Ganga during 2024 vs 2025 (Jan-Dec)

For assessment of river water quality during 2024 vs 2025 (Jan-Dec), Median values which is simply a measure of central tendency of parameters such as Dissolved Oxygen (DO), Biochemical Oxygen Demand (BOD) and Faecal Coliform (FC) of year 2024 and 2025 (Jan-Dec) (fortnightly data) are compared in ***Appendix 5.2*** and following observations have been made:

A. pH

1. pH (Median) has been observed to be meeting water quality criteria for bathing at all the compared locations during 2024 & 2025 (110 locations compared).

B. BOD

1. BOD (Medain) has been observed to be meeting water quality criteria for bathing at all locations exept for three stretches/locations from (i) Farrukhabad to Purana Rajapur, Kanpur, (ii) Dalmau, Raebareli, and (ii) d/s of Mirzapur to Tarighat, Ghazipur (However, BOD (median) at two locations- U/s of Varanasi & U/s of Ghazipur of this stretch met water criteria for bathing) in Uttar Pradesh during 2025. ***(Appendix 5.2, Figure. 3)***.
2. Non- Compliance observed in 2025 as compared to 2024:
    - Dalmau, Raibareilly in Uttar Pradesh during 2025
3. BOD (Median) has improved at 67 locations, out of 110 locations compared.

C. Dissolved Oxygen

DO (Median) has been observed to be meeting water quality criteria for bathing at 110 locations in 2025 as compared to 2024.

1. DO (Median) has improved at 91 locations at 110 compared loctions.

D. Faecal Coliform

1. Compliance observed in 2025 as compared to 2024:
    - Entire stretch of Bihar except U/s Munger, Patna in Bihar.
2. Non-Compliance observed in 2025 as compared to 2024:
    - Gorabazar, Behrampore and Shitlatala Palta in West Bengal.
3. FC (Median) has been improved at 65 locations, out of 110 locations compared.

E. Faecal Streptococci

1. Non-Compliance observed in 2025 as compared to 2024:
    - U/s Vindhyachal & U/s Varanasi in Uttar Pradesh
2. FS (Median) has been improved at 50 locations, out of 100 locations compared.

5.2 Manual water quality monitoring in river Yamuna

Manual water quality monitoring of River Yamuna is carried out by CPCB through SPCBs/PCCs at 33 locations across Uttarakhand (4), Himachal Pradesh (4), Haryana (6), Delhi (7), and Uttar Pradesh (12). Manual monitoring locations on river Yamuna are shown in **Figure 5.2**.

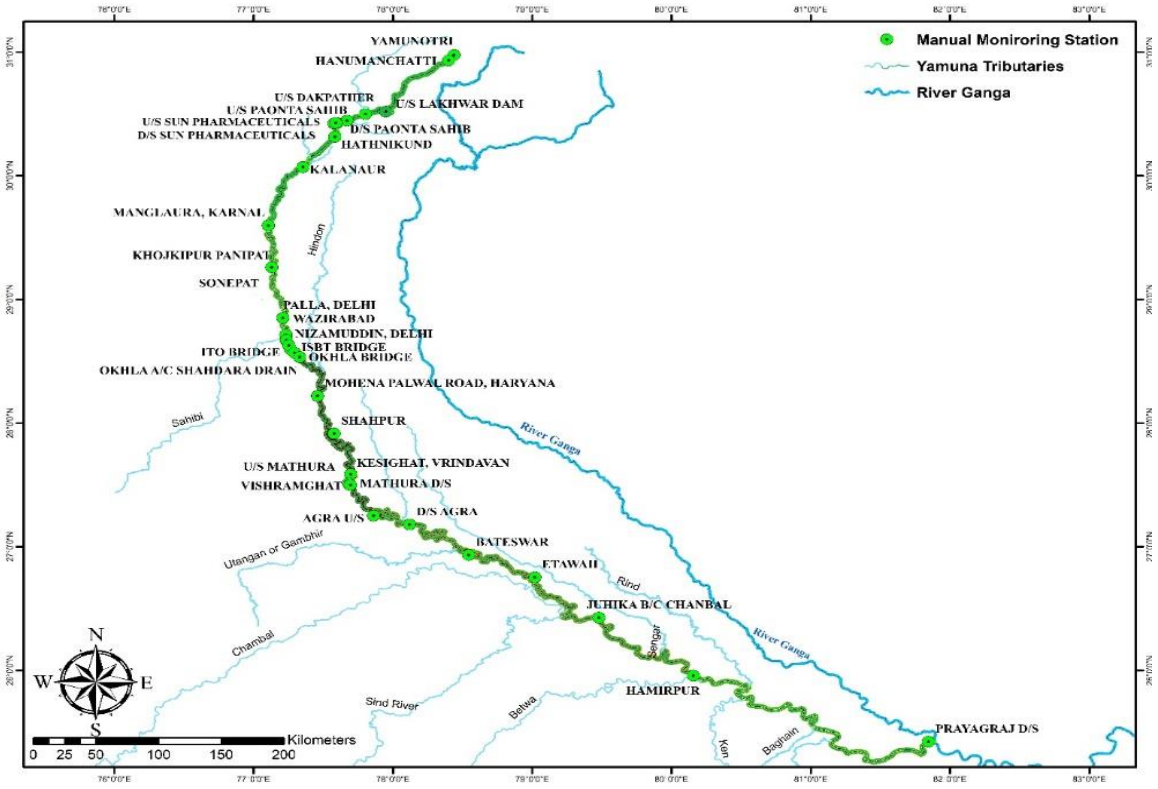


Figure 5.2 Manual monitoring locations on river Yamuna

The state-wise distribution of monitoring stations is given in **Table 5.3.**

Table 5.3 Monitoring frequency and state-wise distribution of water quality monitoring stations

State	Monitoring stations	Monitoring frequency		
		Yearly	Quarterly	Monthly
Uttarakhand	4	2	2	-
Himachal Pradesh	4	-	-	4
Haryana	6	-	1	5
Delhi	7	-	-	7
Uttar Pradesh	12	-	-	12
Total	**33**	**2**	**3**	**28**

5.2.1 Data Generation and Salient Findings

Monitoring data of manual monitoring stations (33 locations) is submitted through Environmental Water Quality Data Entry System (EWQDES). Thereafter, the data is compiled, verified, validated, and communicated to NMCG.

5.2.2 Water quality status

River water quality is assessed for notified primary water quality criteria for bathing water w.r.t parameters pH (6.5-8.5), Dissolved Oxygen (DO≥ 5 mg/l), Biochemical Oxygen Demand (BOD≤ 3 mg/l), Fecal Coliforms (FC≤ 2500 MPN/100 ml) and Fecal Streptococci (FS≤ 500 MPN/100 ml) (***Appendix 5.1***).

There is a significant variability in the values on various parameters, viz. pH, DO, BOD and FC for the samples taken from the same location on different dates. The values of the parameters also vary at different locations for the samples collected on the same day. The present data represents a snapshot of water quality at a specific location and time and may vary significantly depending upon factors such as upstream anthropogenic activities, rate of flow, depth of sampling, time of sampling, river current and mixing of currents, sampling location and such other multiple factors. As a result, these values reflect water quality parameters at the exact time and place from where these water samples were collected and may not fully represent the overall characteristics of the river, therefore, not necessarily reflecting the overall river water quality throughout the river stretch.

Water quality data of River Yamuna for water quality parameters, specifically pH, DO, BOD, FC and FS, for the period January-December, 2025 was analysed based on the median values (central tendency of the data) to identify river stretches/locations which are not conforming the primary water quality criteria for bathing waters for the mentioned set of parameters.

5.2.3 Status of water quality of River Yamuna during 2025 (Jan-Dec):

i. The river is conforming with bathing criteria for pH (median) throughout the monitored stretch (***Appendix 5.3***).
ii. DO (median) is conforming the bathing criteria at all locations except Nizamuddin to Okhla after Shahdara drain (Delhi), Mohena Palwal Road (Haryana), and Shahpur (Uttar Pradesh).
iii. BOD (median) is conforming in Uttarakhand, Himachal Pradesh, four locations in Haryana (Hathnikund, Yamunanagar to Manglaura, Karnal and Sonepat), and Prayagraj D/s (Uttar Pradesh); non-conforming at Khojikpur, Panipat & Mohena Palwal Road (Haryana); Wazirabad to Okhla after Shahdara drain (Delhi), and Shahpur & Kesighat Vrindavan to Hamirpur (Uttar Pradesh).
iv. FC (median) is conforming in Uttarakhand, Himachal Pradesh, two locations in Delhi (Wazirabad & Palla), Haryana, and Hamirpur to Prayagraj D/s (Uttar Pradesh), while non-conforming the criteria from Nizamuddin to Okhla after Shahdara drain (Delhi), Mohena Palwal Road (Haryana), Shahpur, and Kesighat Vrindavan to Juhika before Chambal confluence with Chanbal, Etawah (Uttar Pradesh).
v. FS (median) complied throughout Uttarakhand and Himachal Pradesh, with exceedance observed at Mohena Palwal Road (Haryana).

5.3 Real time water quality monitoring of river Ganga and its tributaries

CPCB, in Phase I under the National Ganga River Basin project, established a network of 36 Real Time Water Quality Monitoring (RTWQM) stations, based on data purchase model for five years' duration. The project commenced on 11.03.2017 and ended on 11.09.2023.

In Phase II, the network of RTWQM stations was further expanded by setting up additional 40 RTWQM stations on River Ganga and its tributaries, based on same model (i.e. data purchase model). The project was awarded to the eligible firm for five-years duration. Data commencement from 40 RTWQM stations commenced from 14th February 2022. Of the 40 RTWQM stations, 17 stations are on river Ganga (17), and 23 stations on tributaries, namely, Yamuna (06), Damodar (04), Kali-East (02), Hindon (02) and one station each at River Kosi, Ramganga, Ghaghra, Gandak, Koshi, Punpun, Burhi Gandak, Sone and Sai River. State-wise distribution of 40 RTWQM stations is given below: Twelve water quality parameters are monitored uniformly at all 40 stations, namely, BOD, DO, COD, TOC, Chloride, Water level, Water depth, pH, Conductivity, Nitrate, Turbidity and Temperature and provides data on hourly basis. List of 40 RTWQM stations is attached at ***Appendix 5.4.***

Table 5.4: State-wise distribution of 40 RTWQM stations

State	Stations
Uttarakhand	05 (All on River Ganga)
Haryana	01 (Tributary-01)
Uttar Pradesh	15 (Ganga-03, Tributaries-12)
Bihar	10 (Ganga-04, Tributaries-06)
West Bengal	06 (Ganga-03, Tributaries-03)
Jharkhand	03 (Ganga-02, Tributary-01)
Total	**40**

Table 5.5: River wise distribution of 40 RTWQM Stations

River	No. of Stations
River Ganga	**17**
Tributaries	**23**
• Yamuna	06
• Hindon	02
• Kali East	02
• Damodar	04
• Ramganga	01
• Koshi	01
• Kosi	01
• Ghaghara	01
• Burhi Gandak	01
• Gandak	01
• Sone	01
• Punpun	01
• Sai	01
Total	**40**



Road bridge on Burhi Gandak, Khagaria



Fafamau, Lord Curzon Bridge, Allahabad



Marhapur, Auraiya



D/s of Har Ki Pauri, Dam Kothi, Haridwar



Durgapur barrage, Road Bridge



D/s of Bhagalpur, Road Bridge on River Ganga

Figure 5.3: 40 RTWQM stations (both fixed and floating stations)

5.3.1 Field Visits undertaken to witness calibration check of RTWQM stations

As per contract conditions, calibration is required to be performed at every 14 days for all the RTWQM stations. For 40 RTWQM stations, the calibrations of the sensors are witnessed by representatives of DQSC at every 14 days, which are carried out by the representatives of the Data Service Provider (DSP). A field visit mobile app has been developed and provided to the field technicians of DQSC for capturing important data during site visits for witnessing calibration checks. As part of the data qualification process, all sensors are subject to self-audit by the DSP. DQSC's responsibility is to witness all self-audits and document the audits/calibration checks as part of the data qualification process. The details of the required calibration and calibration performed during January to December 2025 are tabulated below:

Table 5.6: Actual visits performed for Calibration checks

S. No.	Period	Actual visits performed for Calibration checks
1.	January-March, 2025	266
2.	April-June, 2025	247
3.	July-September, 2025	279
4.	October-December, 2025	257
	Total	**1049**

Samples for the parameters such as BOD, COD and TOC - validation of which cannot be done at site using a portable instrument, are collected, preserved and analysed in the laboratory. The laboratories for this purpose has been set up by the DSP. Based on the data qualification, hourly, daily and monthly data qualification reports are generated automatically through the WISKI software, developed by the DQSC. The automatic reports are further reviewed by the DQSC for modifications, if any, as per the ground realities and contract conditions.

5.3.2 Analysis of RTWQM data availability & qualification

The RTWQM data generated at all the locations is transmitted initially to the Data Service Provider's dedicated server, placed at the CPCB's data centre. The data is then transferred to the CPCB server, for onward transmission and validation by the DQSC.

The data availability for the period January-December 2025 for 40 RTWQM project reveals that the total data received was maximum in February, 2025 (284640 hrs, i.e. 88.2%) followed by May, 2025 (314780 hrs, i.e., 88.2 %) whereas minimum data was received in August, 2025 (278187 hrs, i.e., 77.9 %) followed by October, 2025 (278966 hrs, i.e., 78.1%). The total data received from the operational stations is 82.1 % (excluding stations under Force Majeure Conditions (FMC).

Table 5.7: Month-wise availability of RTWQM data from January 2025 to December 2025

Months	Total Targeted Data (TTD)	Total received Data (TRD)	% of Received Data: TTD	Qualified Data (QD)	% of Qualified data: Received Data	Disqualified Data (DD)	% of Dis-Qualified data: Received Data
Jan-25	357120	280807	78.6	271520	96.7	9287	3.3
Feb-25	322560	284640	88.2	274480	96.4	10160	3.6
Mar-25	357120	313804	87.9	310215	98.9	3589	1.1
Apr-25	345600	286750	83.0	280400	97.8	6350	2.2
May-25	357120	314780	88.1	313233	99.5	1547	0.5
Jun-25	345600	280464	81.2	276475	98.6	3989	1.4
Jul-25	357120	289281	81.0	287801	99.5	1480	0.5
Aug-25	357120	278187	77.9	272371	97.9	5870	2.1
Sep-25	345600	271761	78.6	266227	98.0	5534	2.0
Oct-25	357120	278966	78.1	270574	97.0	8392	3.0
Nov-25	345600	277416	80.3	270424	97.5	6992	2.5
Dec-25	357120	292344	81.9	276319	94.5	16025	5.5
TOTAL	**42,04,800**	**3449200**	**82.1**	**3370039**	**98.0**	**79215**	**2.0**

5.3.3 Data generation and salient findings

5.3.3.1 RTWQM data for stations set up on main stem of River Ganga for the period Jan-Dec, 2025

Of the total 40 RTWQM stations, 17 stations are located on the main stem of River Ganga and 23 stations on tributaries. All 17 stations were found operational and generated data on regular basis. The data for the important parameters is tabulated below:

Table 5.8 Average value of important parameters from 17 RTWQM stations on River Ganga for the period 01.01.2025 to 31.12.2025

S. No	Station Code	Station Name	DO (mg/l)	BOD (mg/l)	COD (mg/l)	pH
1	UK51	Rudraprayag	9.5	0.5	5	8.1
2	UK52	Tehri Garhwal	9	0.5	5	8.09
3	UK53	Tehri	8.1	0.5	5	7.7
4	UK54	Dehradun	8.8	0.5	5	8.09
5	UK55	D/s of Har Ki Pauri, Dam Kothi, Haridwar	8.8	0.5	5	8.2
6	UT64	Fafamau, Lord Curzon Bridge, Allahabad	8.4	3.3	14.8	8.4
7	UT65	Balu ghat bridge, Chunar	7.7	3.5	16	8.2
8	UT66	Ghazipur	8.4	3.9	16.9	8.4
9	BH72	River Ganga at Chausa, U/s of Buxar	7.6	2.4	11	7.9
10	BH74	Road bridge on River Ganga, D/s of Buxar	7.4	2.5	11.1	8.1
11	BH75	D/s of Bhagalpur, Road Bridge on River Ganga	7.8	1.9	9.09	8.2
12	BH77	U/s of Patna city, Khurji	7.8	2.3	10.8	8.1
13	JH83	Sahebganj	6.9	2.3	10.4	8.09
14	JH84	Rajmahal at Malgodam	7.1	1.8	8.6	8.06
15	WB86	Farakka Barrage, Road Bridge	7.2	1.6	8.3	7.9
16	WB87	Nabadwip Bathing Ghat	7.6	1.8	12.4	8.1
17	WB88	Chinsura, Near Hooghly, Road Bridge	6.9	1.9	9.5	8.1

5.3.3.2 Assessment of Real Time water quality data for DO, BOD, pH and COD average values compliance in terms of bathing criteria.

a. Dissolved Oxygen (Primary water quality criteria for bathing: DO ≥ 5 mg/l)

Dissolved Oxygen was found complying with primary water quality criteria for bathing at all 17 locations during the period from January'25 to December'25. The maximum value for DO was reported as 9.5 mg/l at

Rudraprayag (UK-51), and the minimum value was reported at Bhagalpur Road (D/s) as 6.9 mg/l (JH-83 & WB-88).

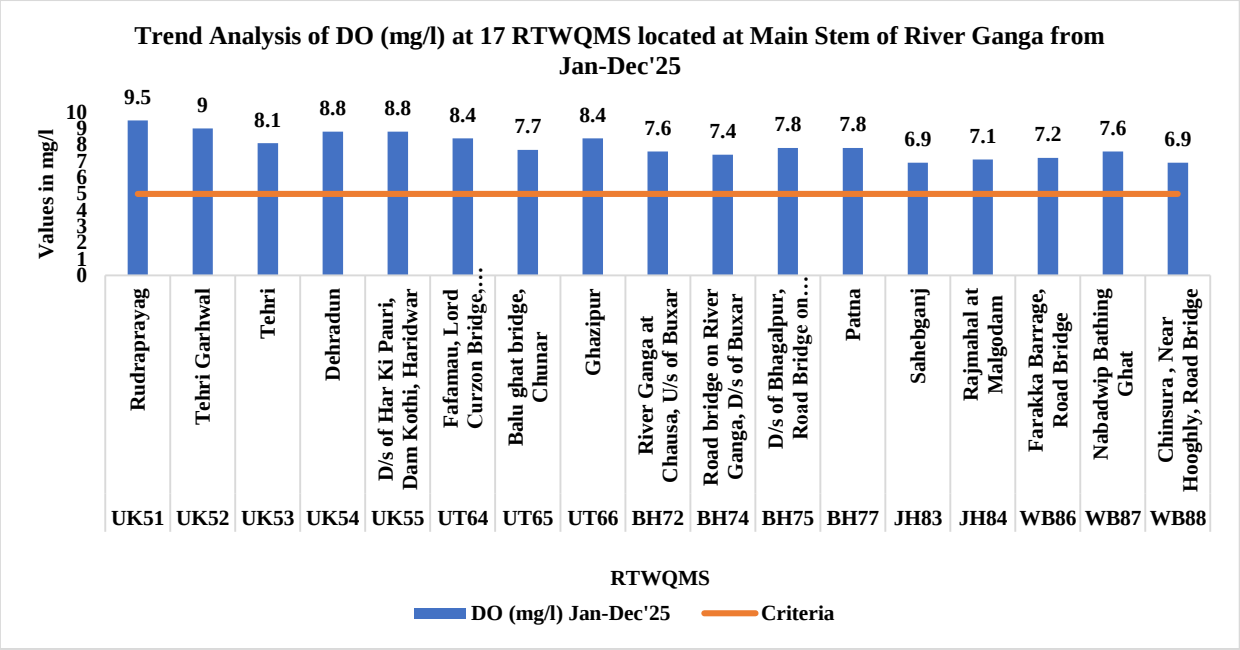


Figure 5.4: Average DO (mg/l) at 17 RTWQMS located at Main Stem of River Ganga from January'25 to December'25

b. Biochemical Oxygen Demand (Primary water quality criteria for bathing: BOD ≤ 3mg/l)

BOD values were found meeting the criteria for bathing at 14 RTWQM stations, while 3 stations were found non-complying, namely Fafamau, Lord Curzon Bridge (UT-64), Balu Ghat Bridge Chunar (UT-65) and Ghazipur (UT-66). The maximum value for BOD was reported as 3.9 mg/l at Ghazipur, while the minimum value was observed at all the stations in Uttarakhand as 0.5 mg/l.

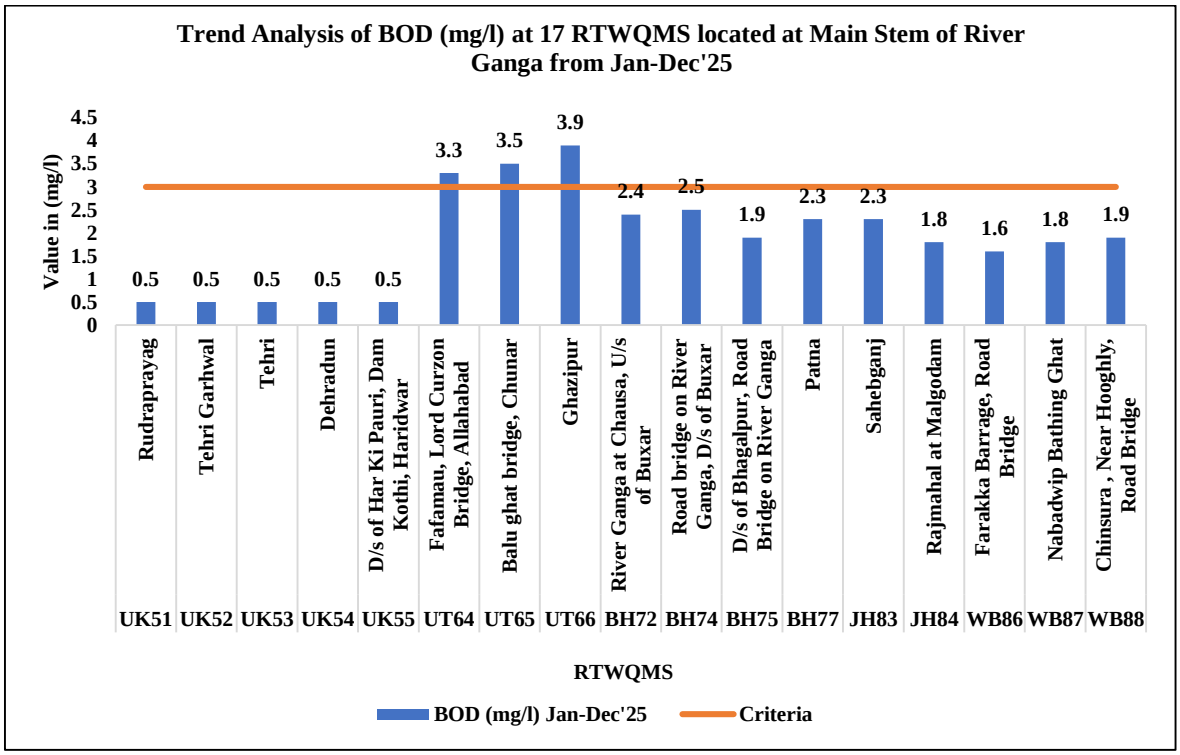


Figure 5.5: Average BOD (mg/l) at 17 RTWQMS located at Main Stem of River Ganga from January'25 to December'25

a. pH (Primary water quality criteria for bathing 6.5 to 8.5)

pH was found complying at all 17 RTWQM stations during the said period located on the main stem of River Ganga. The maximum value of pH was observed as 8.4 at UT-64 and UT-66, while the minimum value of pH was observed as 7.7 at Tehri (UK-53).

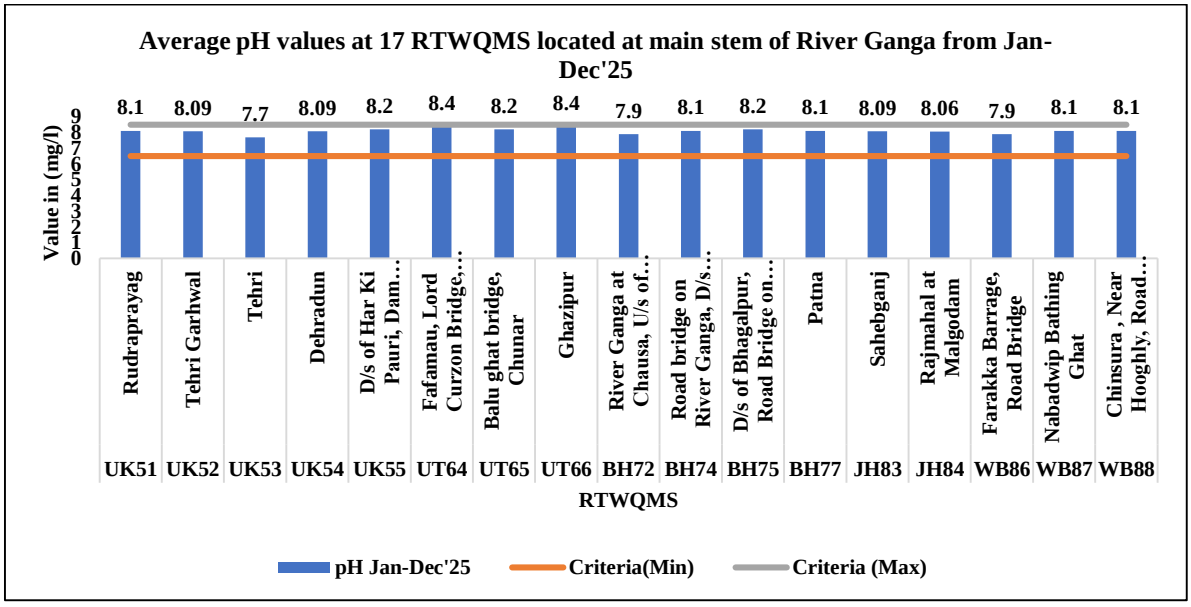


Figure 5.6: Average pH at 17 RTWQMS located at Main Stem of River Ganga from January'25 to December'25

c. Average COD (mg/l) during the period January-December 2025.

The COD values varied between 5 mg/l to 16.9 mg/l. The minimum COD value of 5 mg/l was observed at all the stations in Uttarakhand and the maximum value was observed at Ghazipur (UT-66).

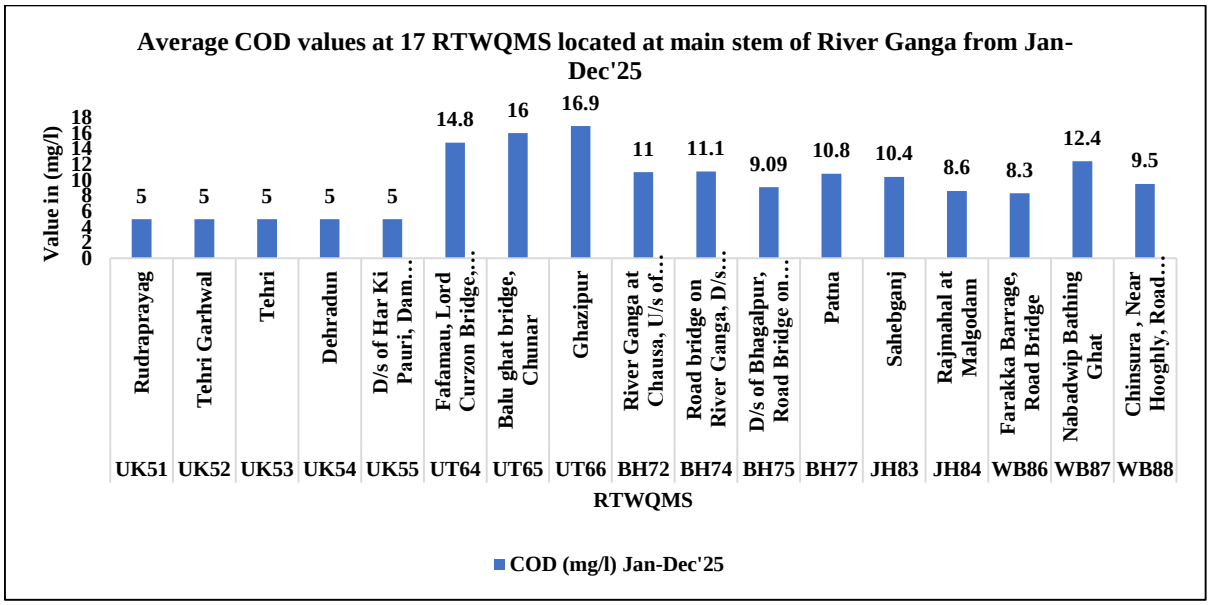


Figure 5.7: Average COD at 17 RTWQMS located at Main Stem of River Ganga from January'25 to December'25

5.3.3.3 Comparative Analysis of water quality data January 2024- December 2024 v/s January 2025 –December 2025

a. Dissolved Oxygen

During the period from Jan-Dec 2024 and Jan-Dec 2025, 15 stations, out of 17 stations on main stem of River Ganga were found operational. Comparative analysis reveals that DO values were higher or equivalent at all stations except UK-52, UK-53, UK-54, UK-55, UT-65, JH-84 and WB-88. Furthermore, the DO values at all stations met the primary water quality standards for bathing (DO $\geq$ 5 mg/l).

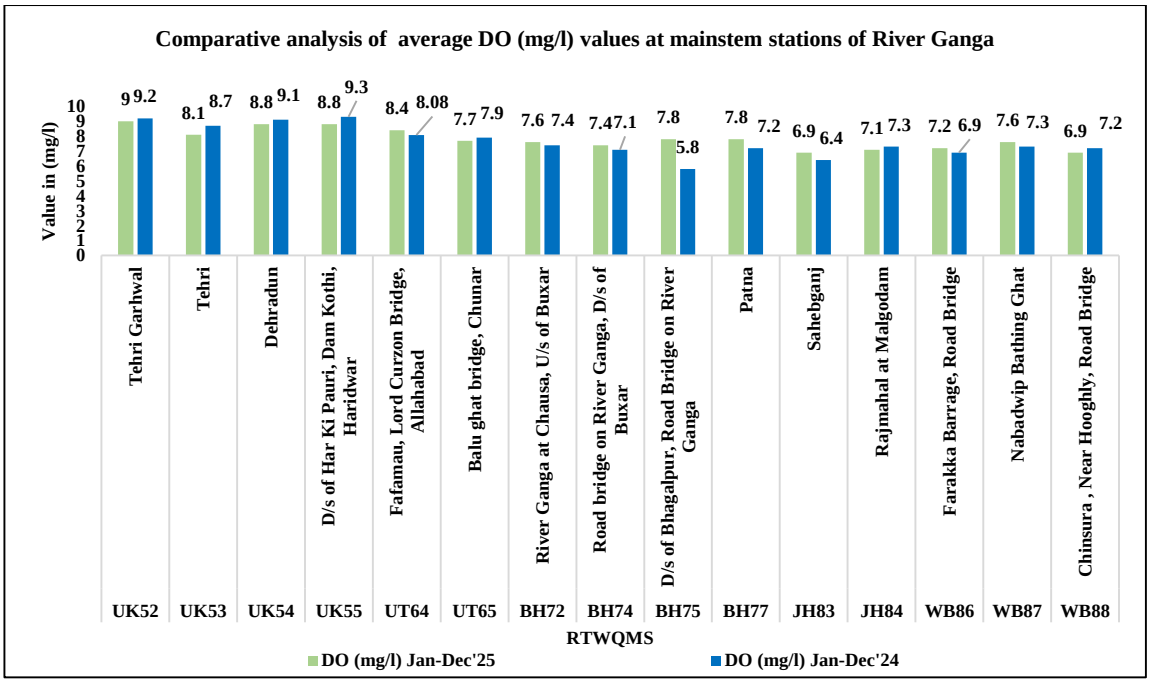


Figure 5.8: Comparative Analysis of average DO (mg/l) values at 15 main stem stations of River Ganga

b. Biochemical Oxygen Demand (BOD)

Data analysis reveals that during the period between Jan-Dec 2024, BOD values varied in the range 1.04 mg/l to 5.8, whereas during the period Jan-Dec 2025, BOD values varied in the range 0.5 mg/l to 3.5 mg/l. During the period Jan-Dec 2024, BOD values exceeded the bathing water quality criteria of BOD $\leq$ 3mg/l at 02 stations, whereas during the period between Jan-Dec 2025 the values exceeded the criteria limits at 02 locations.

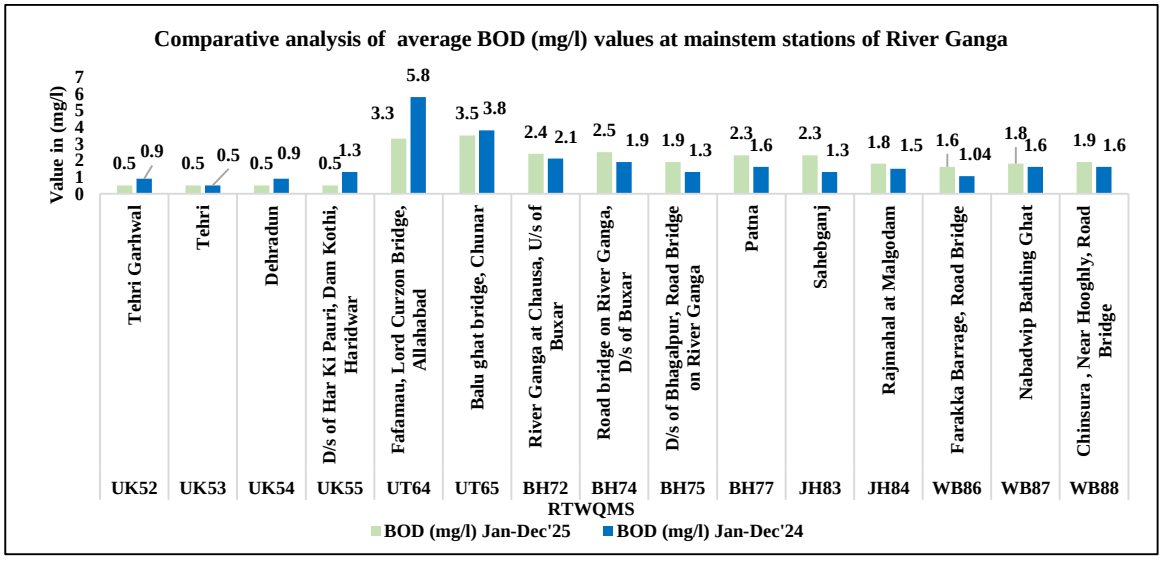


Figure 5.9: Comparative Analysis of average BOD (mg/l) values at 15 main stem Stations of River Ganga

5.3.3.4 Display of RTWQM data from 40 locations in public domain

The real time water quality instant data has been placed in public domain through CPCB website [rtwqmsdb1.cpcb.gov.in/#/].

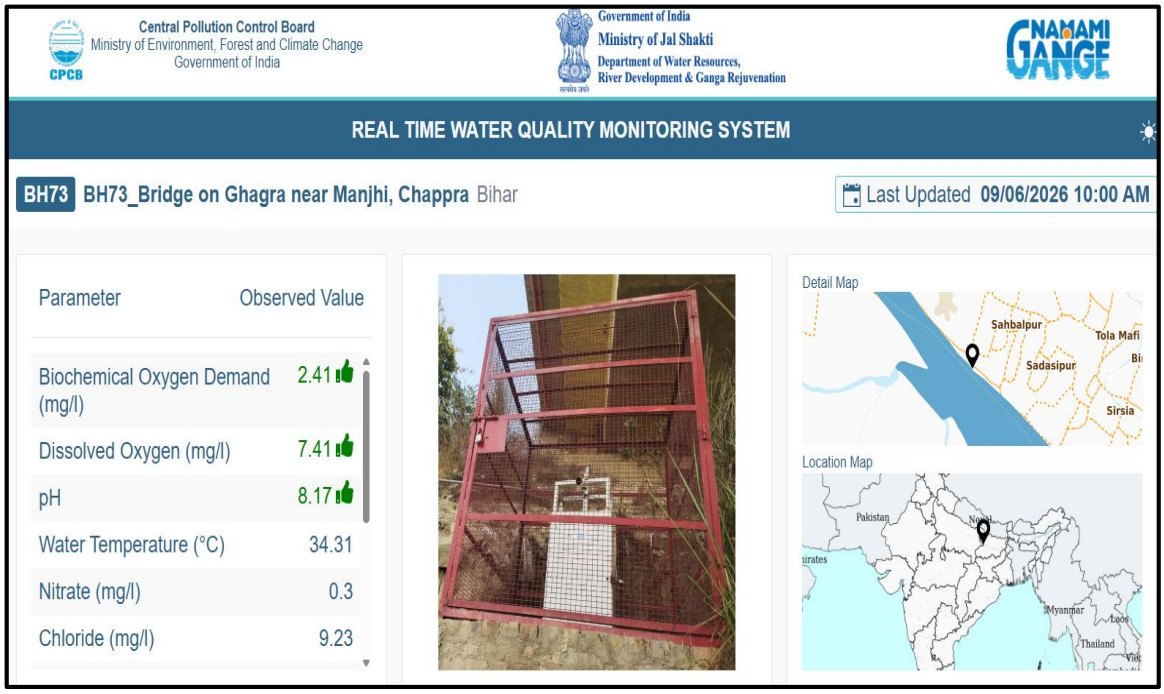


Figure 5.10: Screenshot of RTWQM data display at CPCB website

5.4 Biomonitoring

5.4.1 Work accomplished during 2025

Choice of Bio-indicators- The dynamism of the river ecosystems provide habitat to a wide range of organisms from viruses and bacteria (microscopic), to invertebrates, fishes, amphibians, reptiles and mammals (macroscopic). Each group of organisms can indicate the anthropogenic impact on the ecosystem characteristics in one way or another but a specific approach makes the bio-monitoring study more relevant. The ecologists always quest for the ideal indicator organisms, the monitoring of which can represent the impact of environmental conditions and pollutants on the entire inhabiting biota. An ideal indicator organism should have two main attributes:

1. It should be macroscopic (clearly visible to naked eyes); and
2. It should be non-migratory (should not migrate with the impact of pollution).

The members of the phyla Platyhelminthes, Annelida, Arthropoda and Mollusca are both macroscopic and spend one part or the entire life attached to the substratum of the river, thus, qualify as the **ideal indicators** for the purpose of bio-monitoring of lotic ecosystems. These organisms are collectively referred to as the **benthic macro-invertebrates** (**Figure 5.11).** Macro-invertebrates visible to the naked eyes and retained on a US standard no. 30 sieve of mesh size 595-600 µm **(APHA, 2017)**.

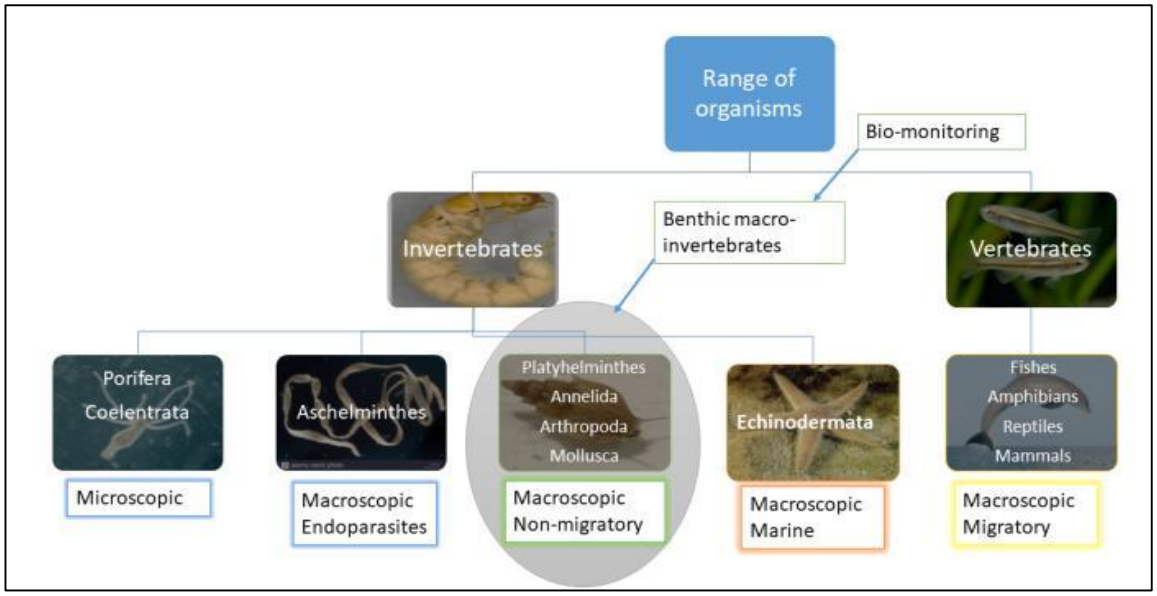


Figure 5.11 Choice of Bio-indicators in Bio-monitoring

CPCB is regularly conducting bio-monitoring of two major rivers of the country with study area spread along 2525 kms of River Ganga and 1370 kms of River Yamuna. During the period, total 126 bio-monitoring events were conducted in 2 rounds of bio-monitoring at 42 locations of River Ganga and at 26 locations of River Yamuna, as presented in **Table 5.9** below:

Table 5.9 Study area with Bio-monitoring events

Rivers	From Origin	To Confluence	Locations No.		Sampling Frequency	Bio-monitoring events
			Main Stream	Tributaries		
River Ganga	Gangotri (Uttarakhand)	Garden Reach (West Bengal)	42*	08**	(Twice a year)	100
River Yamuna	Yamunotri (Uttarakhand)	Prayagraj (Uttar Pradesh)	26#	08##	×2	68
Total Events (Ganga + Yamuna) = 168						

Locations coordinates are listed as Appendix 5.5 for river Ganga
#Locations coordinates are listed as Appendix 5.6 for river Yamuna
*****Locations coordinates are listed as Appendix 5.7 for tributaries of river Ganga***
##Locations coordinates are listed as Appendix 5.8 for tributaries of river Yamuna

** During second round, at 02 locations viz., Gangotri and Harshil, monitoring could not be conducted due to flooding condition. At Varanasi d/s during first round and at Haridwar barrage, Jagjeetpur U/S and Jagjeetpur D/S, during second round, biological water quality could not be evaluated due to insufficient sample collection.*

*** During first round, Biological water quality at river Ramganga Farukkabad and river Pandu at Kanpur could not be assessed as sufficient number of macroinvertebrates were not observed. During second round, at 02 locations namely River Pandu (Kanpur) & River Varuna, the BWQ couldn't be determined due to insufficient collection of Benthic macroinvertebrates.*

#During the round, Biological Water Quality (BWQ) of 2 locations (Yamunotri and Syana Chetti,) could not be assessed due to weather conditions and 2 locations (Dak Pathar A/c and Okhla D/s) because of insufficient sample collection.

##During both the rounds, the Saprobic score at River Bata and Hindon could not be evaluated due to insufficient sample and this may be caused by the discharge of wastewater, also at river Bata insufficient collection might be due to unavailability of proper substratum.

Each bio-monitoring event typically lasted for 1-2 days and involved 3-4 team members including Scientists, Scientific Assistants, Researchers and Attendants.

5.4.2 Sample collection and analysis

a. Sampling procedure:

Benthic macro-invertebrates sampling was carried out using the standard procedure mentioned in American Public Health Association (APHA), 2017 and International Standard ISO 16665: 2014. The sampling process was standardized according to the nature of substratum. Benthic macro-invertebrate collected by kick-net method and picking up insects from stones using forceps. In the sandy river bed, D-net (mesh size 0.6mm) was placed firmly on the river bed against the water current and organisms were collected from the sieve (mesh size 0.6 mm) after washing. Locations, where river bed consisted of clay and silt, grab samples are picked up by the shovel. The collected organisms were preserved in 4% formalin/70% Ethanol and transported to the laboratory for further analysis.

b. Sample analysis:

The collected organisms were washed using sieve in the laboratory to remove excess preservative and used for the calculation of diversity and saprobic scores. Diversity Score is being evaluated using Sequential Comparison Index (SCI) method. It ranges from 0.02 to 1, where, low score indicates less diverse macro-invertebrate community and high score indicates highly diverse community. The method involves pair–wise comparison of sequentially encountered individuals. The organism similar to the previous one is scored as '0' and different are scored as '1' run. The formula for calculation of diversity score is as below:

$$\boldsymbol{Diversity\ Score} = \frac{\boldsymbol{Total\ number\ of\ runs}}{\boldsymbol{Total\ number\ of\ organisms}}$$

Saprobic score is a qualitative method which is calculated after identification of organisms upto family level. The identification is done using a stereo zoom microscope and taxonomic keys. Saprobic Score/ASPT is based on the Biological Monitoring Working Party (BMWP) scoring chart. All the families are classified on a BMWP score scale of 1 to 10 according to their preference for saprobic water quality. The families which are most sensitive to pollution are getting a score of 10 & 9 while the pollution-tolerant families are getting a score of 1 and 2. The remaining intermediately sensitive families are placed in between the scoring scale of 3 to 8. The formula for Saprobic score calculation is as below:

$$\textit{Saprobic value} = \frac{\boldsymbol{Grand\ total\ multiplied\ score}}{\boldsymbol{Grand\ Total\ number\ of\ families\ encountered}}$$

Where, Multiplied Score = No. of families encountered in a particular group × BMWP score of that group.

5.4.3 Data Generation and Salient Findings

To assess the biological health of water bodies, CPCB has derived a Biological Water Quality Criteria (BWQC). This is based on the range of Saprobic Score values of taxonomic groups of benthic macro-invertebrate families with respect to water quality. The water quality is classified into five different classes from Very Good to Severe and evaluated with corresponding Saprobic Score range from 1 to 10 (**Table 5.10**).

Table 5.10 Biological Water Quality Classification

Saprobic Score	Biological Water Quality Class (BWQC)
7.0 to 10.0	Very Good
5.0 to 6.9	Good
3.0 to 4.9	Moderate
1.1 to 2.9	Poor
1.0	Severe

5.4.3.1.1 River Ganga (Pre-monsoon, first round)

- The saprobic scores at locations of river Ganga in Pre-monsoon season are given in **Figures 5.14 & 5.15**. Biological water quality map of river Ganga in pre-monsoon season is given in **Figures 5.12.** Out of 42 locations in main stream of river Ganga, Very Good biological water quality was observed at 02 locations, Good was observed at 25 locations, while Moderate was observed at 12 locations. At 03 locations, biological water quality could not be evaluated due to insufficient sample collection None of the locations showed poor or severely polluted biological water quality.
- In Uttarakhand state, the stretch from Gangotri to Jagjeetpur D/S, Very Good of BWQ was observed at Gangotri and Harshil with saprobic scores 7.7 and 7.3 respectively, with the presence of pollution sensitive families (Heptageniidae, Leuctridae, Capniidae and Perlodidae) having BMWP score 10. BWQ Good was observed at 03 locations namely, Uttarkashi U/S, Uttarkashi D/S and Haridwar barrage with saprobic score values 5.6, 6.1 and 6.4 correspondingly. At Jagjeetpur U/S and Jagjeetpur D/S, biological water quality could not be evaluated due to insufficient sample collection in view of high water flow from barrage.
- In Uttar Pradesh state, river stretch from Madhya Ganga barrage to Kacchla ghat, Good biological water quality was observed at Anupshahr and Kacchla ghat while Moderate was observed at Madhya Ganga Barrage and Narora. This might be due to the stress caused by obstruction and/or sudden discharge of water from the reservoir of barrages affecting benthic macro-invertebrates' colonization. In Kanpur stretch, from Panchal Ghat Farrukhabad to Deorighat Kanpur, BWQ of river Ganga was observed in Good at 05 locations viz., Kannauj D/S, Ganga barrage U/S Kanpur, Shuklaganj, Jajmau and Deorighat Kanpur while Moderate was observed at 02 locations namely, Panchal Ghat Farrukhabad and Bithoor. In Prayagraj-Varanasi stretch, Good was observed at 04 locations viz., Asni village Fatehpur, Sirsa Tamas D/S, Varanasi U/S and Rajwari while Moderate was observed at 02 locations namely Prayagraj D/S and Bridge on GT Road Prayagraj. At Varanasi D/S, biological water quality could not be evaluated due to insufficient sample collection.
- In Bihar stretch of river Ganga, at 06 locations, BWQ was found to be in good category while in Jharkhand stretch, both monitoring stations showed moderate BWQ. Presence of high BMWP score (8) families such as Libellulidae and Coeagrionidae and absence of low BMWP score or tolerant families indicated Good BWQ while at Jharkhand, presence of Moderately tolerant families having low BMWP score (5 to 6) were observed which indicated Moderate BWQ.
- In West Bengal stretch, out of 09 locations, BWQ was found to be in good category at 05 locations namely, Khiddirpur bridge, Behrampore d/s, Belghoria, Ballykhal and Garden reach and Moderate was observed at Behrampore u/s, Serampore, Khardakhal and Howrah. Moderate BWQ was indicated by the presence of Families such as Lubricidae and Lumbriculidae from Oligochaeta group with BMWP score 1. The macroinvertebrates having BMWP score 1 to 6 was found to be the predominant group in West Bengal stretch of river Ganga. The presence of such families may be attributed to localized stagnation of water due to dense aquatic vegetation. The moderate BWQ values observed at specific locations could be associated with limited water flow, anthropogenic pressures, organic enrichment, and nearby construction activities contributing to localized degradation of water quality.

5.4.3.1.2 Tributaries of River Ganga (Pre-monsoon, first round)

- The saprobic scores at 07 locations on tributaries of river Ganga in Pre-monsoon season are given in **Fig. 5.16.** Out of 07 locations, Good biological water quality was observed at 01 locations, namely, river Kali at Khudaganj, with Saprobic Score of 5.2 while Moderate was observed at 04 locations (river Saloni (Shukratal Ghat) at Muzaffarnagar, river Ramganga at Moradabad D/S, river Varuna and river Gomti at Varanasi with respective Saprobic Score values of 4.9, 4.7, 3.2 and 4.8. Biological water quality at river Ramganga Farukkabad and river Pandu at Kanpur could not be assessed as sufficient number of macroinvertebrates were not observed.

5.4.3.1.3 River Ganga (Post-monsoon, second round)

- The saprobic scores at locations of river Ganga in Post-monsoon season are given in **Figures 5.14 & 5.15.** Biological water quality map of river Ganga in post-monsoon season is given in **Figures 5.13.** Out of 42 locations in main stream of river Ganga, Very Good biological water quality was observed at 02 locations, Good was observed at 20 locations, while Moderate was observed at 15 locations. None of the locations showed poor or severely polluted biological water quality. At 02 locations viz., Gangotri and Harshil, monitoring could not be conducted due to flooding condition. At 03 locations viz., Haridwar barrage, Jagjeetpur U/S and Jagjeetpur D/S, insufficient collection of benthic macroinvertebrates due to high water level.
- In Uttarakhand state, the stretch from Gangotri to Jagjeetpur D/S, Very Good of BWQ was observed at Uttarkashi U/S and Uttarkashi D/S with saprobic scores 7.3 and 7.0 respectively with the presence of pollution sensitive families (Heptageniidae, Leptoceridae, Brachycentridae and Glossosomatidae) having BMWP score 10. At Gangotri and Harshil, monitoring could not be conducted due to flooding condition. At Haridwar barrage, Jagjeetpur U/S and Jagjeetpur D/S, biological water quality could not be evaluated due to insufficient sample collection in view of high water flow from barrage.
- In Uttar Pradesh state, river stretch from Madhya Ganga barrage to Kacchla ghat, Good biological water quality was observed at Madhya Ganga barrage, Anupshahr and Kacchla ghat (Badaun) with presence of pollution-intermediate families (Palaemonidae, Atyidae, Belatomatidae and Corixidae etc.) having BMWP score 5-6 while Moderate BWQ was observed at Narora. This might be due to the stress caused by obstruction and/or sudden discharge of water from the reservoir of barrages affecting benthic macro-invertebrates' colonization. In Kanpur stretch, from Panchal Ghat Farrukhabad to Deorighat Kanpur, BWQ of river Ganga was observed in Good at 03 locations viz., Panchal Ghat Farrukhabad, Jajmau and Deorighat Kanpur while Moderate BWQ was observed at 04 locations namely, Kannauj D/S, Bithoor, Ganga barrage U/S Kanpur and Shuklaganj. In Prayagraj-Varanasi stretch, Good BWQ was observed at 05 locations viz., Asni village Fatehpur, Prayagraj D/S, Bridge on GT Road Prayagraj, Sirsa Tamas D/S and Rajwari A/C Gomti while Moderate was observed at 02 locations namely Varanasi U/S and Varanasi D/S.
- In Bihar state, out of 06 locations, BWQ fluctuated from Good to Moderate class in the river stretch from Buxer U/S to Kewala ghat. D/s (**Figure 5.15**). Saprobic score varied from 4.7 to 5.3 where minimum score observed at Buxer d/s and maximum observed at Digha ghat. Good biological water quality observed at Buxer U/S, Dighat ghat u/s and Kangan ghat with saprobic scores 5.2, 5.3 and 5.25 respectively. Moderate BWQ was observed at Buxer d/s, Gandhi ghat and Kewala ghat with saprobic scores, 4.7, 4.8, 4.8 respectively. Moderate class may be attributed to various anthropogenic activities, construction activities, solid waste dumping etc. Good BWQ was indicated by the presence of families having high BMWP score (8) Benthic Macro Invertebrates i.e. Odonata group.
- In Jharkhand state, out of 02 monitoring locations, Good BWQ was observed at Sahebganj with saprobic score 6.0 and Moderate BWQ at Rajmahal with saprobic score 4.3 (**Figure 5.15**). The high number of low BMWP score (2 & 3) families from Mollusca, Hirudinea and Diptera group indicated Moderate class of BWQ which is due to solid waste dumping and open defecation. Whereas, absence of low score families from Diptera group indicated Good BWQ at Sahebganj.
- In West Bengal, out of 09 locations from Balighat to Garden reach, BWQ was found to be Good at 5 locations namely, Behrampore D/S, Khardakhal, Belgharia, Ballykhal and Howrah Bridge while Moderate class was observed at 04 locations namely, Balighat, Behrampore u/s, Serampore and Garden reach. Presence of low BMWP scored families (2 & 3) such as chironomidae, syrphidae and psychodidae indicated Moderate BWQ which might be due to solid waste dumping at most of the locations (**Figure 5.15**).

5.4.3.1.4 Tributaries of River Ganga (Post-monsoon, second round)

- The saprobic scores at 06 locations on tributaries of river Ganga in Post-monsoon season are given in **Fig. 5.16.** Out of 08 locations, Good biological water quality was observed at 01 location namely, River

Saloni (Shukratal Ghat) at Muzaffarnagar with Saprobic Score of 5.0 while Moderate was observed at 04 locations (River Kali at Khudaganj, River Ramganga at Moradabad D/S and River Ramganga (Farukkabad) and River Gomti (Varanasi) with respective Saprobic Score values of 4.9, 4.1, 4.6 and 4.7. At 02 locations namely River Pandu (Kanpur) & River Varuna, the BWQ couldn't be determined due to insufficient collection of Benthic macroinvertebrates.

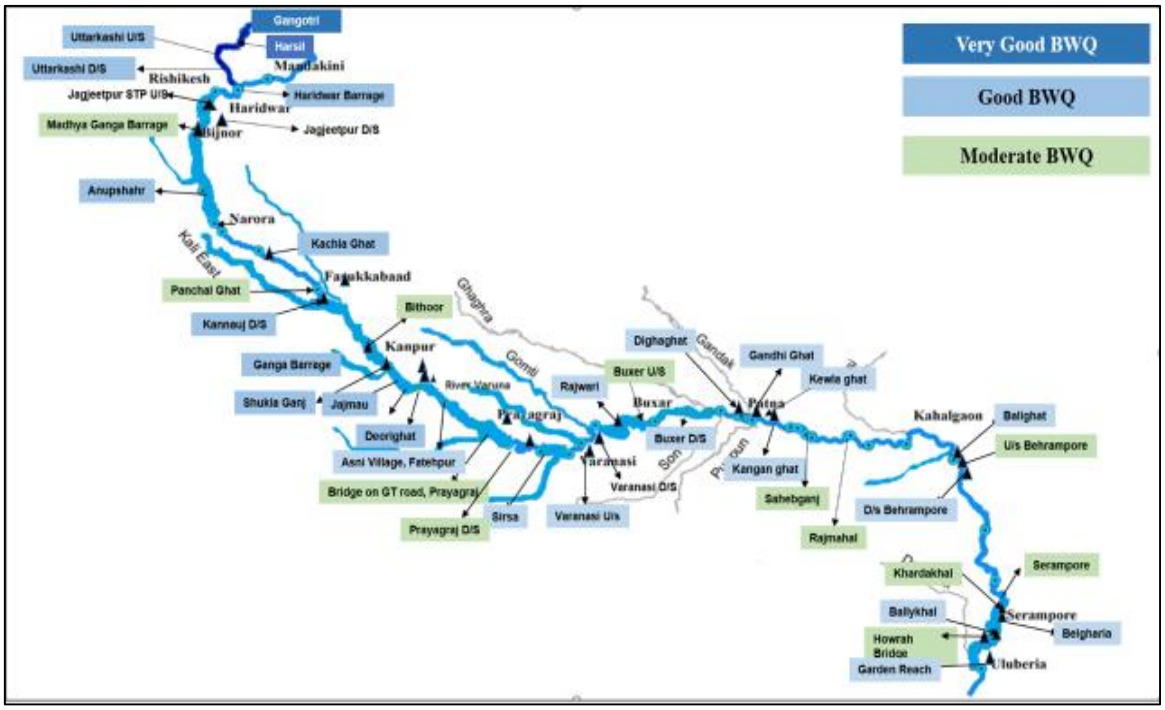


Figure 5.12 Biological water quality map of River Ganga (Pre monsoon)

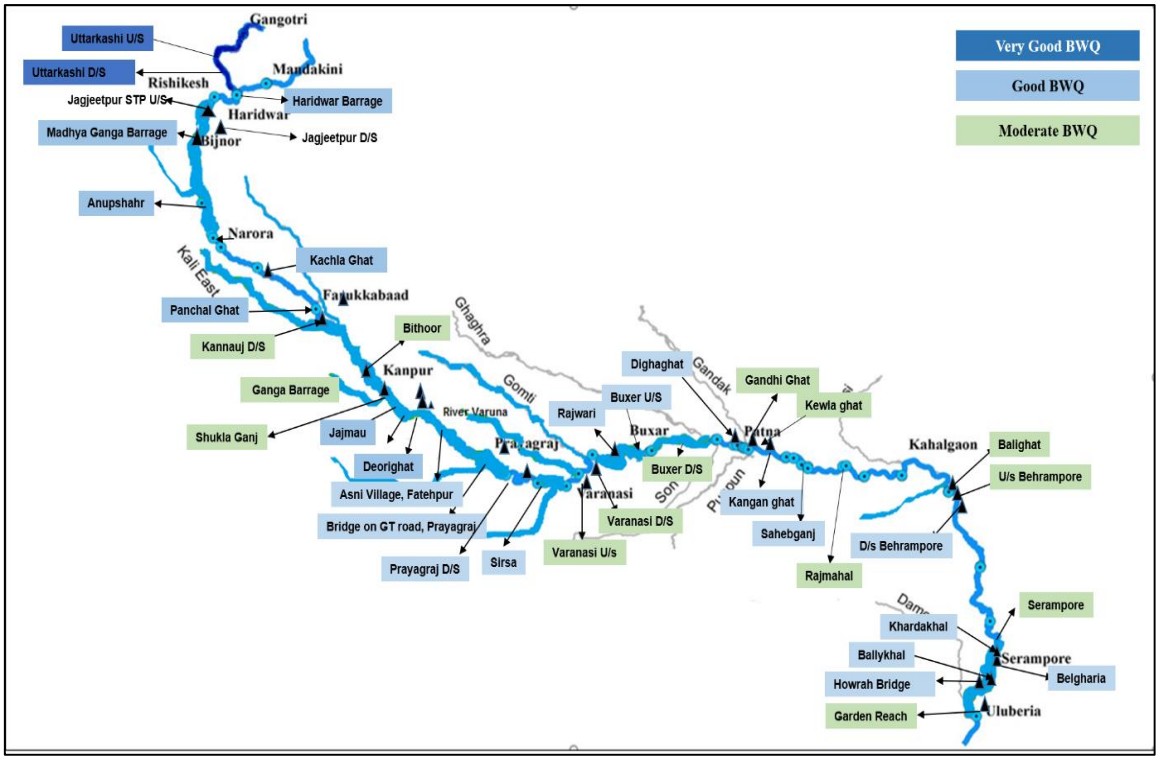
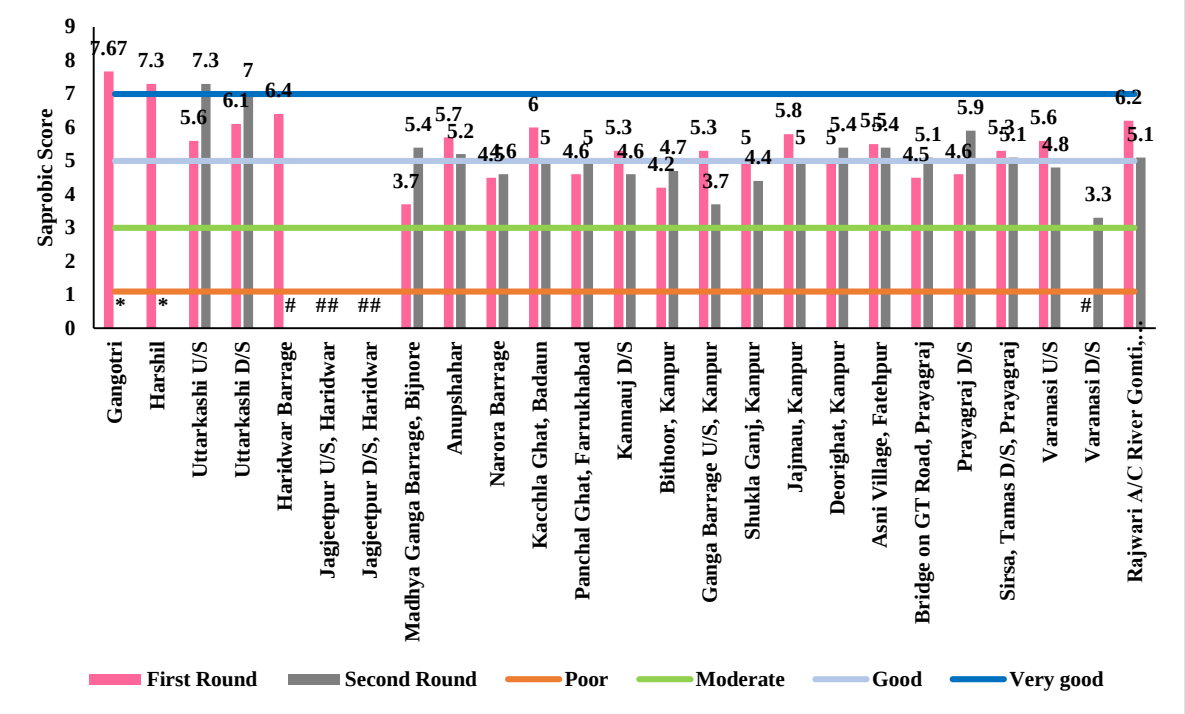


Figure 5.13 Biological water quality map of River Ganga (Post monsoon)

The data collected during all the events are meticulously documented and analysed. Below are some key metrics:



**Monitoring could not be conducted due to flooding condition*
#Insufficient collection of benthic macroinvertebrates at Haridwar barrage, Jagjeetpur U/S, Jagjeetpur D/S due to high water level

Figure 5.14 Saprobic Score at locations of River Ganga (Gangotri to Varanasi)

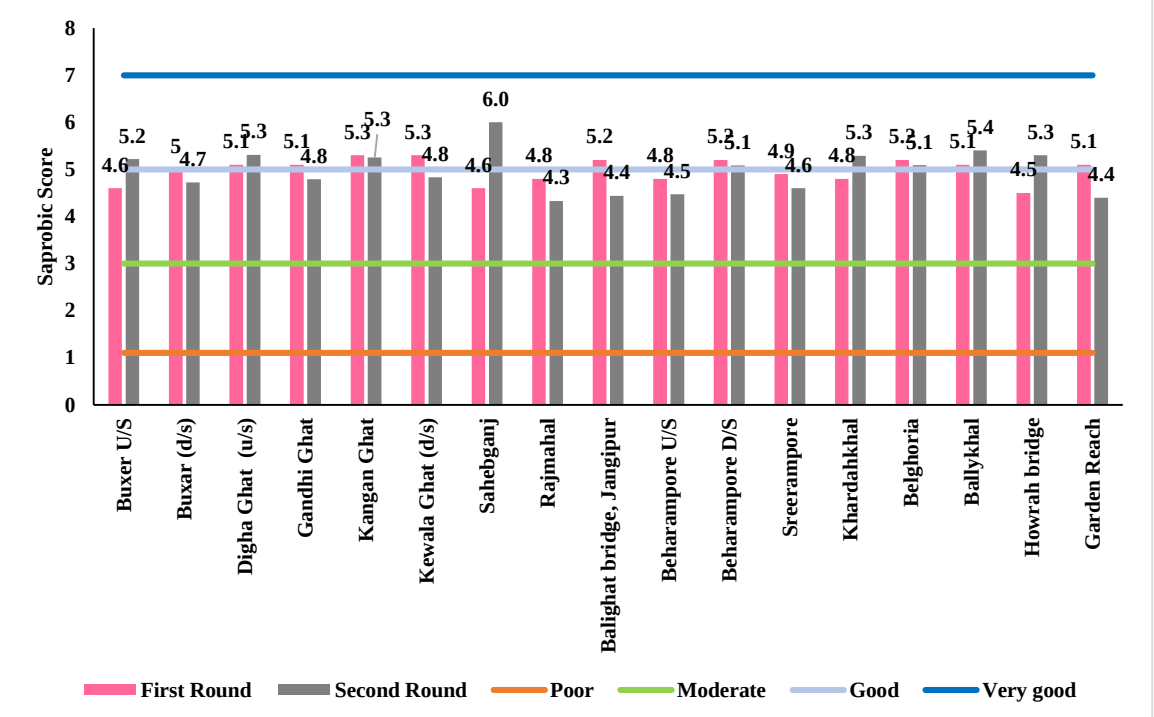
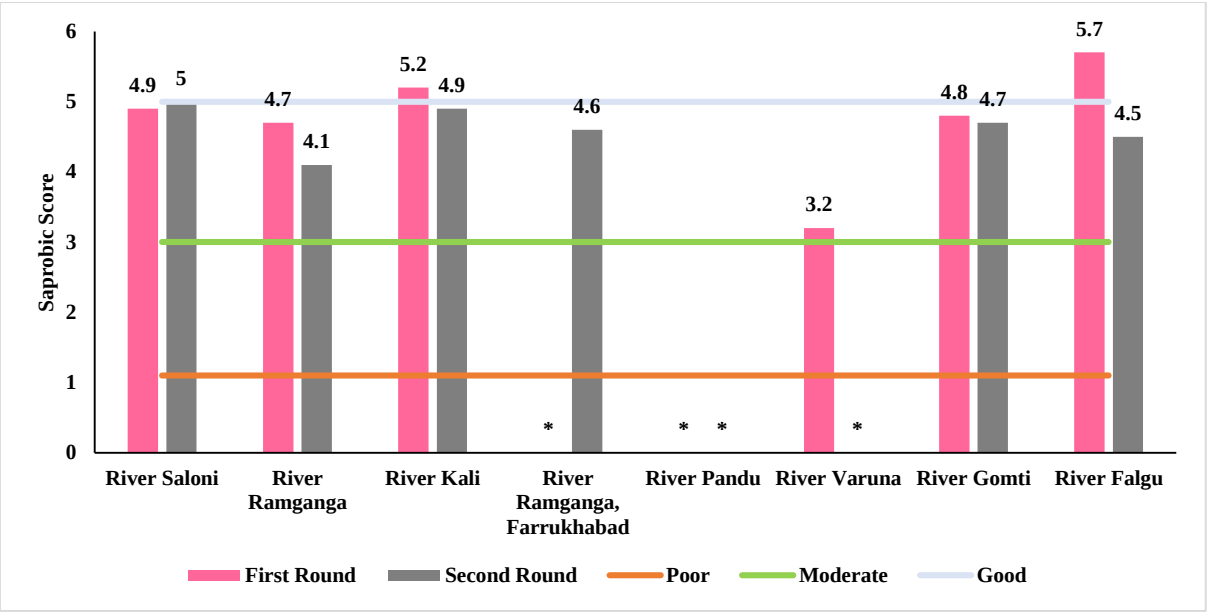


Figure 5.15 Saprobic Score at locations of River Ganga (Bihar to West Bengal)



**Insufficient collection of benthic macroinvertebrates*

Figure 5.16: Saprobic Score at Tributaries of River Ganga

5.4.3.2.1 River Yamuna (Pre-monsoon, First round)

- The saprobic scores of all the 26 locations of river Yamuna are given in **Figure 5.19**, followed by the BWQ map of the River Yamuna during the studied period is displayed in **Figure 5.17**. Out of 26 locations on main stream of river Yamuna, 'Very Good' BWQ was observed at 02 locations, 'Good' BWQ at 09 locations, while 'Moderate' quality was observed at 15 locations. None of the locations showed poor or severely polluted BWQ.
- In Uttarakhand state, the BWQ in the stretch from Yanumotri to Dak pathhar, varies between 'Very Good' and 'Good' category. The observed saprobic score was maximum at Syanachetti (7.4) indicated by presence of 05 pollution sensitive families namely Glossosomatidae, Lepidosomatidae, Ephemerelidae, Taeniopterigydae and Heptagenidae. Minimum score was observed at Yamunotri (6.0) which is indicated by the presence of more intermediately tolerant families (Psychodidae, Limoiidae, Chironomidae etc.) in comparison to other locations. It may be due to the ongoing anthropogenic activities at the time of sample collection. At Dakpathhar, saprobic score increased after confluence of river Tons from 6.3 to 7.0.
- In Himachal Pradesh, at Paonta Sahib location the BWQ observed was 'Good' with 5.2 saprobic score. Decline in richness among high BMWP (score 9 and 10) families and abundance of intermediately tolerant families (BMWP scores 2,3 & 8) reflects decline in the saprobic score. Absence of macrophytic vegetation might indicate this decline, as this substratum is an excellent source or rich diversity of BMIs.
- In Haryana, a total of 6 locations were monitored, with a BWQ as 'Moderate' in the upper stretch from Hathnikund to Panipat U/S, while it improved to 'Good' at Panipat D/S and Sonepat. This may be attributed to reduced human influences observed at the time of sampling at these locations compared to the previous locations. As the human, ecological influences increased, the biological water quality again declined to 'Moderate' at Palwal.
- In the Delhi stretch, saprobic score declined as the river flows from Palla, Nizamuddin to Okhla D/s with the saprobic scores 4.7, 4.0 and 3.4 respectively. This decline in BWQ may be attributed to the anthropogenic activities along the river stretch in Delhi. At Nizamuddin and Okhla D/S, abundance of pollution-tolerant families like Chironomidae, Psychodidae, Ephydridae and Syrphidae was observed indicating high organic load due to river bed farming.
- In Uttar Pradesh, the upper stretch of the river starting form Mathura U/s to Auraiya the BWQ was found to be consistently 'Moderate' with an exception at Agra U/S where it was 'Good' with saprobic score 5.3. The presence of macrophytic vegetation at Agra U/s, providing a suitable substratum, may have

contributed to the increase in the saprobic score. In the lower stretch of River Yamuna starting from Hamirpur to Bainda Ghat the BWQ again improved to 'Good' except at Chilla ghat and Bainda ghat where it declined to 'Moderate', this may be due to absence of high BMWP score families indicating high organic load due to river bed farming. The improvement in BWQ at Hamirpur may be attributed to rich, diverse and abundant collection of Benthic macroinvertebrates with a BMWP score as high as 8, which otherwise is contrary to the locations upstream of Hamirpur. Additionally, the BWQ is improved in the lower part of Uttar Pradesh due to dilution of river water with tributaries. At Prayagraj where River Yamuna confluences with river Ganga, the BWQ found to be Good indicating presence of sensitive organisms at this location and moderately tolerant organisms (BMWP score between 3-6).

5.4.3.2.2 Tributaries of River Yamuna (Pre-monsoon, First round)

- The BWQ observed in tributaries of river Yamuna during Pre-Monsoon 2025-26 is depicted in **Figure 5.20** below. Out of 8 locations, 6 were found to be in 'Good' BWQ with a saprobic score in the range of 5.5-6.8. A maximum saprobic score (6.8) was found at river Hanuman Ganga (Uttarakhand) and a minimum value (5.1) was observed in river Ken (Uttar Pradesh) however, overall a declining trend was observed. The Saprobic score at River Bata and Hindon could not be evaluated due to insufficient sample and this may be caused by the discharge of wastewater, also at river Bata insufficient collection might be due to unavailability of proper substratum.

5.4.3.2.3 River Yamuna (Post Monsoon, Second round)

- The saprobic scores of all the 26 locations of river Yamuna are given in **Figure 5.19**. The BWQ map of the River Yamuna during the studied period is displayed in **Figure 5.18**. Biological Water Quality (BWQ) of 2 locations (Yamunotri and Syana Chetti,) could not be assessed due to weather conditions and 2 locations (Dak Pathar A/c and Okhla D/s) because of insufficient sample collection. 'Good' BWQ was observed at 12 locations, 'Moderate' quality was observed at 10 locations. None of the locations showed Very good, poor or severely polluted BWQ.
- In Uttarakhand Stretch, out of the 4 locations the BWQ could only be determined at Dak Pathar B/c, where the saprobic score was calculated to be 6.4 and the BWQ fell in the 'Good' category. The observed saprobic score is indicated by the presence of families of EPT taxa (Heptageniidae, Leptophlebiidae, Caenidae and Stenopsychidae). This is evident because of very less anthropogenic activities in the adjoining areas.
- In Himachal Pradesh, at Paonta Sahib location the BWQ observed is 'Good' with 6.4 saprobic score. A similar saprobic score as compared to the previous location is indicated by the presence of families of EPT taxa. This is evident because a high dissolved oxygen was observed at the time of sampling that supports the survival of such families.
- In Haryana, a total of 6 locations were monitored, where BWQ observed 'Good' in the upper stretch from Hathnikund to Sonepat. As the human, ecological influences increased downstream, the biological water quality again declined to 'Moderate' at Palwal.
- In the Delhi stretch, saprobic score declined as the river flows from Palla to Nizamuddin with the saprobic scores 5.5 and 4.4 respectively. This decline in BWQ may be attributed to the anthropogenic activities along the river stretch in Delhi. At Nizamuddin, abundance of pollution-tolerant (Chironomidae) and intermediate families (Pleidae, Corixidae, Dytiscidae and Hydrophilidae) in the BMWP range of 2-5 were observed indicating high organic load due to river bed farming. Also, massive construction activity in the adjoining area could have contributed to a less diverse sample.
- In Uttar Pradesh, the upper stretch of the river starting form Mathura U/s to Hamirpur the BWQ was found to be consistently 'Moderate'. In the lower stretch of River Yamuna starting from Patrioda Danda to Bainda Ghat the BWQ improved to 'Good'. The improvement in BWQ at Patrioda Danda may be attributed to rich, diverse and abundant collection of Benthic macroinvertebrates with a BMWP score as high as 8, which otherwise is contrary to the locations upstream of this point. Additionally, the BWQ improved in the lower part of Uttar Pradesh due to dilution of river water with tributaries like Betwa. At Prayagraj, where River Yamuna confluences with river Ganga, the BWQ was found to be 'Good'.

5.4.3.2.4 Tributaries of River Yamuna (Post Monsoon, Second round)

- The BWQ observed in tributaries of river Yamuna during Post-Monsoon 2025-26 is depicted in **Figure 5.20** below. Out of 5 locations, 4 were found to be in 'Good' BWQ with a saprobic score in the range of 5.2-6.8. A maximum saprobic score (6.8) was found at river Tons (Uttarakhand) and a minimum value (4.7) was observed in river Asan (Uttarakhand) however, overall a declining trend was observed. The Saprobic score at River Bata and Hindon could not be evaluated due to insufficient sample and this may be caused by the discharges of wastewater, might be due to unavailability of proper substratum.

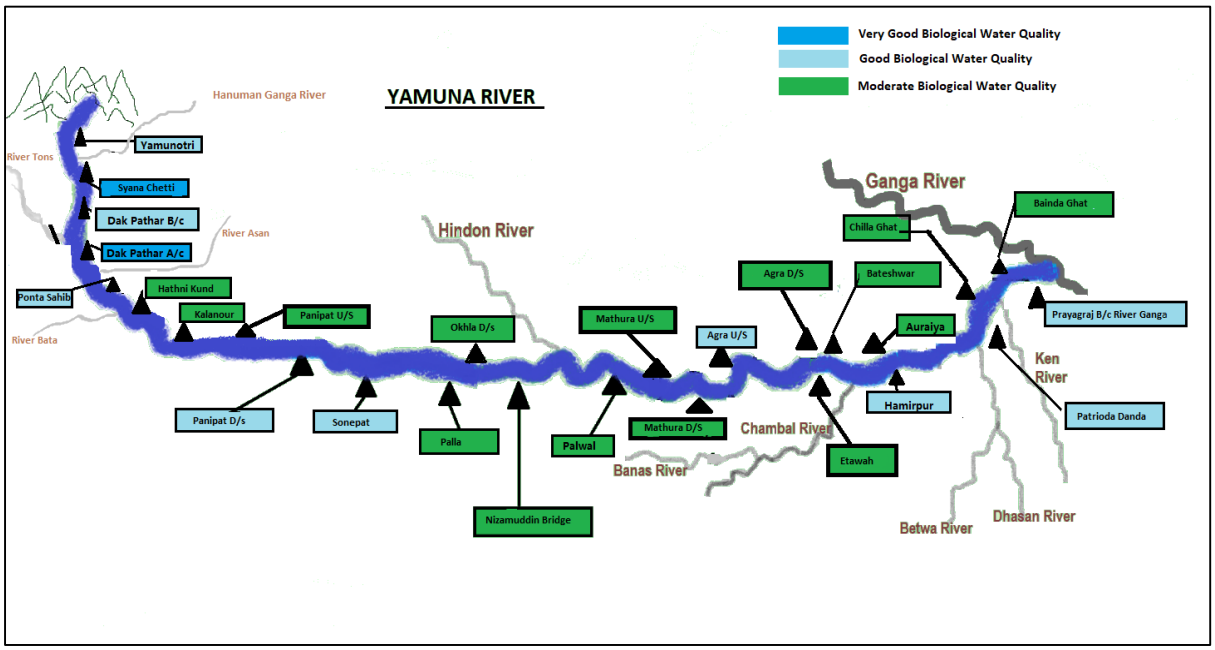


Figure 5.17 Biological water quality map of River Yamuna (Pre monsoon)

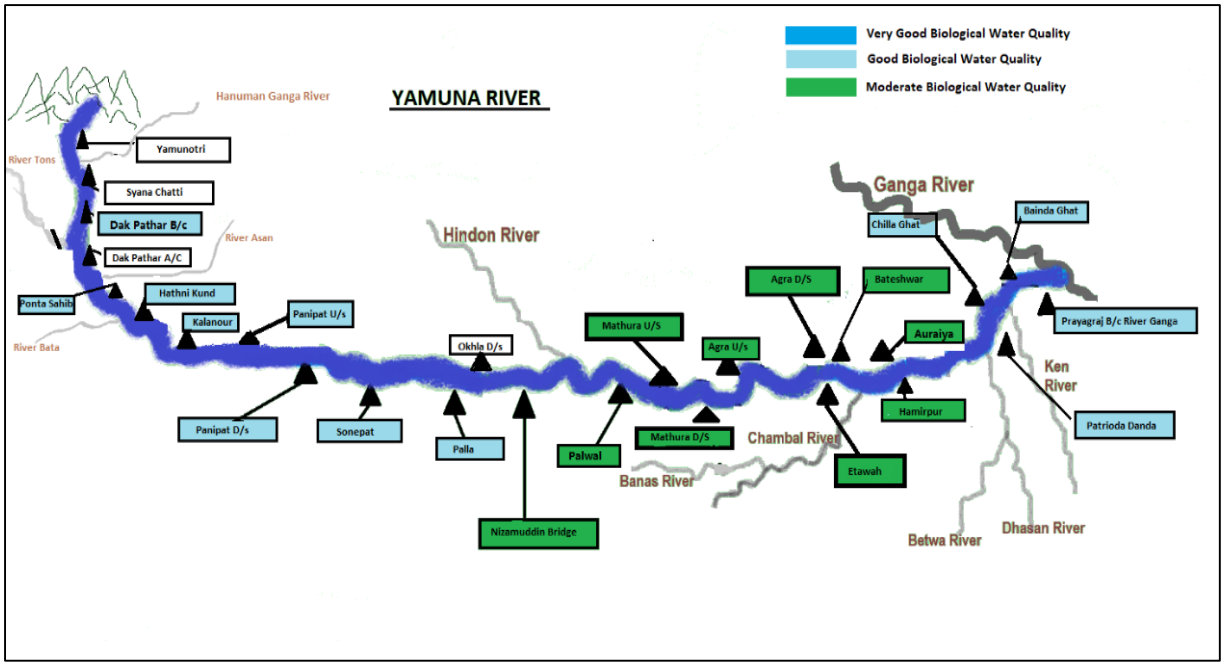


Figure 5.18 Biological water quality map of River Yamuna (Post monsoon)

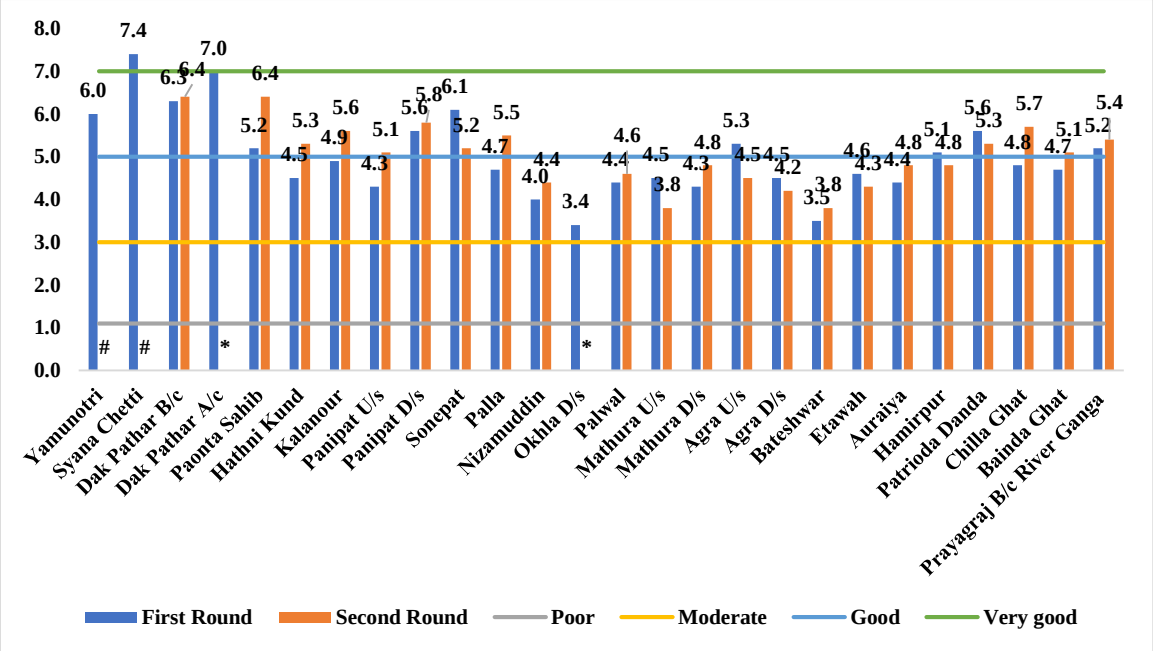


Figure 5.19 Saprobic Score at locations of River Yamuna

Sampling could not be carried out due to heavy flooding at Yamunotri and Syana Chatti in Uttarakhand
#Insufficient collection at Dak Pathar A/c (Uttarakhand) and Okhla D/s in Delhi

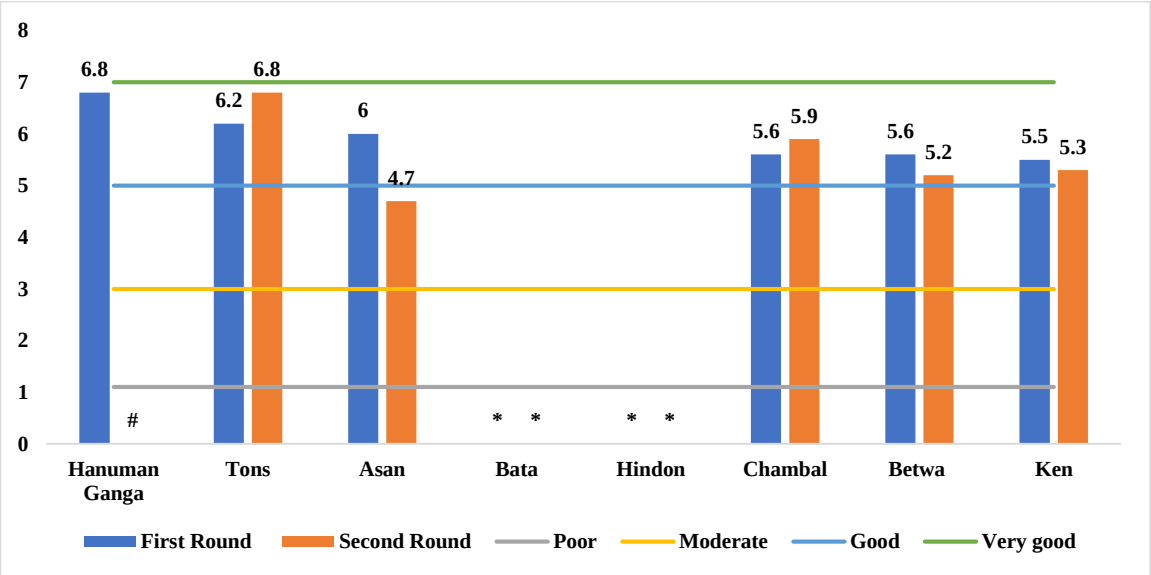


Figure 5.20 Saprobic Score at locations of River Yamuna (Tributaries)

#Sampling could not be carried out due to heavy flooding at Hanuman Ganga in Uttarakhand
Insufficient collection at Bata in Himachal Pradesh and Hindon in Delhi

5.4.4. Biological water quality trend of River Ganga and Yamuna

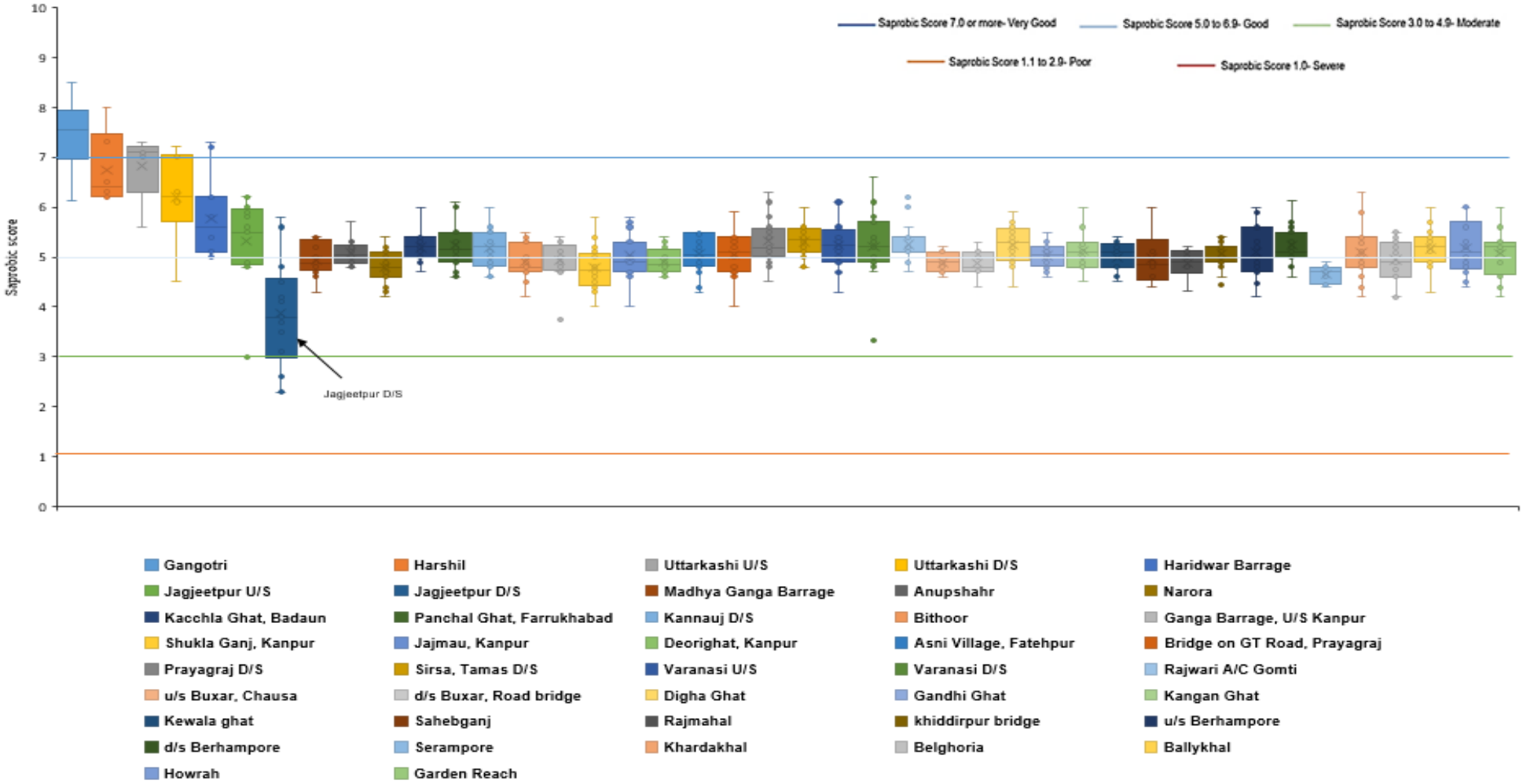
5.4.4.1 River Ganga (from 2017-18 to 2025-26)

- In Uttarakhand stretch, the BWQ trend during 2022-23 to 2025-26 at 4 locations in upper mountainous stretch of Uttarakhand i.e. Gangotri, Harshil, Uttarkashi U/s and Uttarkashi D/s remain between Very Good to Good category. The overall BWQ during past 8 years (from 2017-18 till 2024-25) indicated Good quality at Haridwar Barrage and Upstream of Jagjeetpur, while Moderate at Downstream of Jagjeetpur. However, the biological water quality has improved from Poor to Moderate at D/s of Jagjeetpur location.

- In Uttar Pradesh stretch, out of 18 locations, the overall BWQ has been in Good class at 7 locations viz. Anupshahar, Kachla Ghat, Prayagraj D/s, Sirsa Tamas D/s, Varanasi U/S, Varanasi D/s and Rajwari A/c River Gomti while Moderate class at remaining 11 locations. The trend in Bihar stretch shows that the biological water quality at 1 location, Digha ghat remained in Good quality while fluctuates from Good to moderate at remaining 5 locations. In Jharkhand stretch, BWQ trend indicated Moderate quality. In West Bengal stretch, BWQ data trend indicated Good quality at 3 locations viz. Khiddirpur bridge, D/S Behrampore and Ballykhal while Moderate category atSerampore and BWQ at remaining locations fluctuates between Good to moderate category. (**Figure 5.21**).

5.4.4.2 River Yamuna (from 2019-20 to 2025-26)

The BWQ in the upper stretch of River Yamuna from Syana Chatti to Dak Pathar A/c remains between 'Very good' to 'Good' class, with an exception of Yamunotri where it falls in the 'Good' class. As, the river moves down from Paonta Sahib to Palla the BWQ has been observed to majorly fall in the 'Good' class with an exception of Panipat D/s, Panipat U/s and Palla where it falls between 'Moderate' to 'Good' class. From Nizamuddin in Delhi onwards till Etawah in Uttar Pradesh, the BWQ has been observed in the 'Moderate' class except at Bateshwar where it falls between 'Moderate' to 'Good'. Before the confluence of River Yamuna with River Ganga at Prayagraj, from Auraiya to Prayagraj B/c river Ganga the BWQ was consistently found in the 'Good' class BWQ (**Figure 5.22**).



Note: The biological water quality trend at 2 locations in Bihar stretch namely Buxar U/s & D/s and 2 locations of Jharkhand stretch compared from the year 2022-23 and 2024-25.

Figure 5.21 Biological Water quality trend of River Ganga since 2017-18

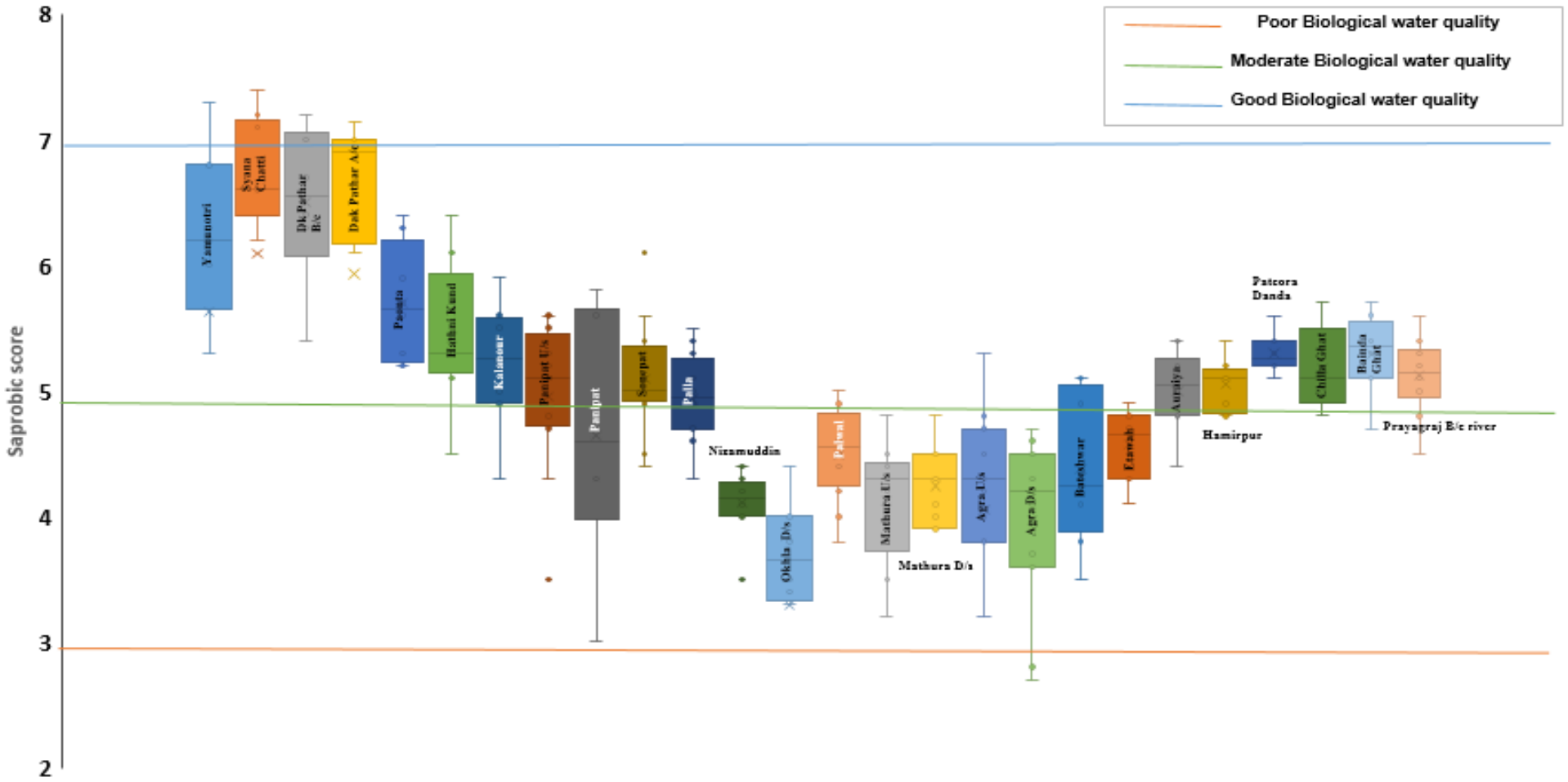


Figure 5.22 Biological Water quality trend of River Yamuna since 2019-2025

CHAPTER 6: GOVERNANCE INTERFACES: RTI, PUBLIC GRIEVANCES, VIP REFERENCES & PARLIAMENTARY MATTERS

Transparency, accountability, and responsiveness are the keystones of good governance in a democracy. In this context, the mechanisms of the **Right to Information (RTI)**, **Public Grievance Redressal Systems**, **VIP References**, and **Parliamentary Matters** play a critical role in ensuring effective communication between the State and its stakeholders. While RTI empowers citizens to demand information, grievance redressal platforms provide a formal avenue to resolve issues. VIP references reflect the concerns raised by Members of Parliament, State legislators, and other dignitaries on matters of public importance. Parliamentary matters, such as questions, assurances, and committee recommendations, reinforce the accountability of the executive to the legislature. These mechanisms collectively strengthen transparency, accountability, and responsiveness in public administration.

Status of governance and public interface handled during the year 2025-26 and covering primary areas including Right to Information (RTI) applications, Public Grievances, VIP References, and Parliamentary Matters are as under:

Table 6.1: Status RTI, Public Grievances, VIP References & Parliamentary Matters handled during the FY 2025-26

Type	Description / Key Points	Status
Right to Information (RTI)	• RTI Act, 2005 empowers citizens to seek information from public authorities, ensuring transparency and accountability. • Replaced the Freedom of Information Act, 2002; fully operational from 12 October 2005. • Administered by DoPT under Ministry of Personnel, Public Grievances & Pensions. • RTI Portal Gateway provides centralized access to PIOs, FAAs, and disclosures by public authorities. • Public authorities must respond within 30 days, or 48 hours if the request concerns life or liberty.	RTI Applications Received/ disposed – 101/79 Remaining 22 RTIs disposed of during April, 2026
Public Grievances / Public Complaints	• Public grievance redressal is essential for good governance and citizen satisfaction. • CPGRAMS acts as a single-window online portal for lodging, monitoring, and resolving complaints. • Tracks actions taken at various administrative levels for timely resolution.	Grievances Received/ disposed – 72/72 Appeal Received/ disposed – 08/08
VIP References	• Pertains to communications from MPs, MLAs, and other dignitaries on public matters. • Such references are prioritized and processed systematically. • Must be addressed within 7 days of receipt.	VIP References Received/ disposed – 14/14
Parliamentary Matters	• CPCB handles Parliamentary Questions (Starred/Unstarred), Assurances, and Committee References. • Provides Draft Reply Material to MoEF&CC and other Ministries. • Parliament sessions: Budget (Feb–May), Monsoon (July–Sep), Winter (Nov–Dec); special sessions may be held. • Zero Hour: immediately after Question Hour; MPs raise urgent matters without prior notice. • Rule 377 (Lok Sabha): Allows MPs to raise matters of public importance in brief written form.	Parliamentary questions – 60 Matters raised under Rule 377 – 03

APPENDICES

Appendix 1.1

Three projects sanctioned by NMCG are under implementation by CPCB. A summary of these projects along with major activities undertaken therein are tabulated as under:

Sr. No.	Projects	Sanctioned on	Expenditure 2025-26 (Rs. In Crore)	Major Activities
1	Pollution Inventorization, Assessment and Surveillance (PIAS)	24.05.2023 for 3 years	27.42	1. Annual inspection of GPIs 2. Tri-annual monitoring of Sewage Treatment Plants (STPs) & Common Effluent Treatment Plants (CETPs) 3. Half-yearly monitoring of drains
2	Strengthening of Environmental Regulators (SER)	07.05.2025 for 3 years	5.47	4. Half-yearly monitoring of drains in River Yamuna 5. Tri-annual monitoring of STPs in River Yamuna 6. Manual water quality monitoring of river Ganga & Yamuna on fortnightly/monthly basis 7. Training programme of staff and infrastructure development
3	Water Quality Monitoring (WQM)	20.06.2020 for 6 years (extended)	10.54	8. Real-time water quality monitoring of river Ganga with data consultancy. 9. Bio-monitoring of river Ganga and its tributaries

Appendix-3.1

Status of STPs monitored during December, 2025 to March, 2026

S. No.	Name of STP	Ganga Front Town	District	State	Latitude (in decimal)	Longitude (In decimal)	Treatment Technology	Designed Capacity (MLD)	Utilized capacity (MLD)	Under capacity	Overcapacity	Weak Sewage	Operational Status	Compliance w.r.t. MoEF &CC norms dt. 13.10.2017	Non-Complying parameter
1	Gangotri	Gangotri	Uttarkashi	Uttarakhand	30.995	78.935	SBR	1.00	-	-	-	-	Not Monitored	-	-
2	Badrinath	Badrinath	Chamoli	Uttarakhand	30.742	79.493	SBR	1.00	-	-	-	-	Not Monitored	-	-
3	Badrinath	Badrinath	Chamoli	Uttarakhand	30.744	79.491	MBBR	0.01	-	-	-	-	Not Monitored	-	-
4	Badrinath	Badrinath	Chamoli	Uttarakhand	30.742	79.491	SBR	0.26	-	-	-	-	Not Monitored	-	-
5	Old Suspension bridge	Chamoli	Chamoli	Uttarakhand	30.406	79.331	EC	0.05	0.02	TRUE	-	-	Operational	Non-Complying	BOD,FC
6	Chamoli Ghat	Chamoli	Chamoli	Uttarakhand	30.401	79.330	EC	0.76	0.07	TRUE	-	-	Operational	Non-Complying	BOD,FC
7	Vivekanand Colony STP (Leesa Bend)	Gopeshwar	Chamoli	Uttarakhand	30.403	79.339	EC	1.19	0.20	TRUE	-	-	Operational	Non-Complying	BOD,FC
8	Pokhari Band	Gopeshwar	Chamoli	Uttarakhand	30.412	79.326	EC	1.25	0.09	TRUE	-	-	Operational	Non-Complying	BOD,TSS, FC
9	Deen Dayal Uppadyay Park	Gopeshwar	Chamoli	Uttarakhand	30.416	79.313	EC	1.12	0.09	TRUE	-	-	Operational	Non-Complying	BOD,FC
10	Pokhri	Joshimath	Chamoli	Uttarakhand	30.558	79.577	SBR	1.08	0.20	TRUE	-	TRUE	Operational	Complying	-
11	Marwari	Joshimath	Chamoli	Uttarakhand	30.565	79.552	SBR	2.70	1.34	TRUE	-	TRUE	Operational	Complying	-
12	Forest Nala	Nandprayag	Chamoli	Uttarakhand	30.329	79.320	EC followed by Ozonation)	0.10	0.02	TRUE	-	-	Operational	Non-Complying	BOD,FC
13	Sangam Nala	Nandprayag	Chamoli	Uttarakhand	30.331	79.319	EC followed by Ozonation)	0.05	0.01	TRUE	-	TRUE	Operational	Non-Complying	pH , BOD,FC
14	Near Police Chowki STP 01	Karanprayag	Chamoli	Uttarakhand	30.264	79.215	EC followed by Ozonation)	0.05	0.04	-	-	TRUE	Operational	Complying	-
15	Old Bridge STP 02	Karanprayag	Chamoli	Uttarakhand	30.261	79.217	Electrocoagulation	0.10	0.05	TRUE	-	TRUE	Operational	Non-Complying	pH, BOD, TSS
16	Near Ward 1 & 3 STP 05	Karanprayag	Chamoli	Uttarakhand	30.261	79.218	Electrocoagulation	0.10	0.10	-	-	-	Operational	Non-Complying	FC
17	BRO Bridge STP 04	Karanprayag	Chamoli	Uttarakhand	30.263	79.216	EC followed by Ozonation)	0.05	0.02	TRUE	-	-	Operational	Non-Complying	BOD,FC
18	Subhash Nagar STP 03	Karanprayag	Chamoli	Uttarakhand	30.256	79.221	EC followed by Ozonation)	0.05	0.04	-	-	-	Operational	Non-Complying	FC

S. No.	Name of STP	Ganga Front Town	District	State	Latitude (in decimal)	Longitude (In decimal)	Treatment Technology	Designed Capacity (MLD)	Utilized capacity (MLD)	Under capacity	Overcapacity	Weak Sewage	Operational Status	Compliance w.r.t. MoEF &CC norms dt. 13.10.2017	Non-Complying parameter
19	Near SBI Bank STP	Rudrapraya g	Rudrapra yag	Uttarakhand	30.286	78.983	Electrocoag ulation	0.10	0.04	TRUE	-	-	Operational	Non-Complying	pH, BOD,TSS, FC
20	Near Dart Pull STP	Rudrapraya g	Rudrapra yag	Uttarakhand	30.285	78.982	Electrocoag ulation	0.08	0.03	TRUE	-	TRUE	Operational	Non-Complying	FC
21	Army Bend (Rudra Complex) STP 02	Rudrapraya g	Rudrapra yag	Uttarakhand	30.286	78.979	Electrocoag ulation	0.10	0.08	-	-	-	Operational	Non-Complying (By-pass)	TSS, FC
22	Near Steel Bridge	Rudrapraya g	Rudrapra yag	Uttarakhand	30.287	78.984	Electrocoag ulation	0.13	0.08	TRUE	-	-	Operational	Non-Complying	FC
23	Baleni Road	Rudrapraya g	Rudrapra yag	Uttarakhand	30.286	78.983	Electrocoag ulation	0.05	0.04	TRUE	-	-	Operational	Non-Complying	BOD,FC
24	Gyansu	Uttarkashi	Uttarkash i	Uttarakhand	30.730	78.419	MBBR	2.00	1.94	-	-	-	Operational	Complying	-
25	Tehri Bhagirathipuram	Tehri	Tehri Garhwal	Uttarakhand	30.378	78.465	ASP	5.00	2.45	TRUE	-	-	Operational	Complying	-
26	Junior High School, Srikot	Srinagar (Srikot)	Pauri Garhwal	Uttarakhand	30.225	78.814	FAB FAB	0.08	0.10	-	TRUE	-	Operational	Non-Complying	BOD,FC
27	Taulia STP Srikot	Srinagar (Srikot)	Pauri Garhwal	Uttarakhand	30.221	78.811	FAB FAB	0.05	0.02	TRUE	-	-	Operational	Non-Complying	FC
28	Srinagar Old Bus Stand	Srinagar	Pauri Garhwal	Uttarakhand	30.227	78.784	FAB	3.50	3.56	-	TRUE	-	Operational	Non-Complying	BOD,FC
29	Near ITI, Srinagar,	Srinagar	Pauri Garhwal	Uttarakhand	30.219	78.766	SBR	1.00	0.70	TRUE	-	TRUE	Operational	Non-Complying	FC
30	Kirtinagar	Kirti Nagar	Tehri Garhwal	Uttarakhand	30.214	78.748	FAB FAB	0.05	0.03	TRUE	-	-	Operational	Non-Complying	BOD,TSS, FC
31	Kirtinagar	Kirti Nagar	Tehri Garhwal	Uttarakhand	30.214	78.750	FAB	0.01	0.01	TRUE	-	-	Operational	Non-Complying	BOD,FC
32	Bah Bazar	Devprayag	Tehri Garhwal	Uttarakhand	30.137	78.597	SBT	1.40	0.09	TRUE	-	-	Operational	Non-Complying	BOD,FC
33	Sangam Bazar	Devprayag	Tehri Garhwal	Uttarakhand	30.147	78.598	SBR	0.15	0.10	TRUE	-	-	Operational	Non-Complying	FC
34	Shanti Bazar	Devprayag	Tehri Garhwal	Uttarakhand	30.148	78.597	SBR	0.08	0.02	TRUE	-	-	Operational	Non-Complying	BOD,FC
35	Tapovan	Tapovan	Tehri Garhwal	Uttarakhand	30.134	78.332	SBR	3.50	1.70	TRUE	-	-	Operational	Non-Complying	FC
36	Lakkarghat, Rishikesh	Rishikesh	Dehradun	Uttarakhand	30.059	78.263	SBR	26.00	19.00	TRUE	-	-	Operational	Non-Complying	FC
37	Muni ki Reti (Chorpani)	Muni ki Reti	Tehri Garhwal	Uttarakhand	30.124	78.276	MBBR	5.00	3.60	TRUE	-	-	Operational	Non-Complying	BOD,FC

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38	Chandreshwar STP	Muni ki Reti	Tehri Garhwal	Uttarakhand	30.107	78.308	MBBR	7.50	7.70	-	TRUE	-	Operational	Non-Complying	FC
39	Swarg Ashram	Swargashram	Pauri Garhwal	Uttarakhand	30.116	78.307	SBR	3.00	3.10	-	TRUE	-	Operational	Non-Complying	FC
40	Jagjeetpur	Haridwar	Haridwar	Uttarakhand	29.901	78.137	SBR	27.00	24.86	-	-	-	Operational	Complying	-
41	Jagjeetpur	Haridwar	Haridwar	Uttarakhand	29.899	78.139	SBR	68.00	70.42	-	TRUE	-	Operational	Non-Complying	FC
42	Jagjeetpur	Haridwar	Haridwar	Uttarakhand	29.901	78.138	ASP	18.00	21.24	-	TRUE	-	Operational	Non-Complying	FC
43	Sarai, Jawalapur	Haridwar	Haridwar	Uttarakhand	28.895	78.089	SBR	14.00	16.91	-	TRUE	-	Operational	Complying	-
44	Sarai, Jawalapur STP	Haridwar	Haridwar	Uttarakhand	29.893	78.090	SBR	18.00	18.00	-	-	-	Operational	Complying	-
45	Old Mothrowala	Dehradun	Dehradun	Uttarakhand	30.263	78.042	SBR	20.00	19.25	-	-	-	Operational	Non-Complying	BOD
46	New Mothrowala	Dehradun	Dehradun	Uttarakhand	30.261	78.042	SBR	20.00	15.27	-	-	-	Operational	Complying	-
47	Kargi	Dehradun	Dehradun	Uttarakhand	30.286	78.016	SBR	68.00	23.67	TRUE	-	-	Operational	Non-Complying	FC
48	Jakhan	Dehradun	Dehradun	Uttarakhand	30.358	78.058	SBR	1.00	0.14	TRUE	-	-	Operational	Complying	-
49	Salawala	Dehradun	Dehradun	Uttarakhand	30.341	78.053	SBR	0.71	0.27	TRUE	-	-	Operational	Non-Complying	FC
50	Vijay Colony	Dehradun	Dehradun	Uttarakhand	30.344	78.040	SBR	0.42	0.24	TRUE	-	-	Operational	Non-Complying	FC
51	Indira Nagar	Dehradun	Dehradun	Uttarakhand	30.309	77.997	SBR	5.00	4.50	-	-	-	Operational	Non-Complying	BOD
52	Bajawala, Kaulagarh,	Dehradun	Dehradun	Uttarakhand	30.352	77.991	SBR	3.00	0.91	TRUE	-	-	Operational	Non-Complying	FC
53	Bijnor, Near Hemraj Colony	Bijnor	Bijnor	Uttar Pradesh	29.374	78.103	UASB	24.00	23.50	-	-	-	Operational	Non-Complying	FC
54	Brajghat	Garhmukteshwar	Hapur	Uttar Pradesh	28.750	78.083	SBR	3.00	-	-	TRUE	-	Non-Operational	-	-
55	Garhmukteshwar	Garhmukteshwar	Hapur	Uttar Pradesh	28.776	78.119	UASB	6.00	3.50	TRUE	-	TRUE	Operational	Complying	-
56	Narora NAPS Township	Narora	Bulandshahar	Uttar Pradesh	28.203	78.380	ASP	2.25	1.00	TRUE	-	-	operational	Non-Complying	FC
57	Narora Town	Narora	Bulandshahar	Uttar Pradesh	28.212	78.378	SBR	4.00	2.00	TRUE	-	-	operational	Non-Complying	FC
58	Anupsahar	Anupshahr	Bulandshahar	Uttar Pradesh	28.370	78.263	MBBR	1.50	-	-	TRUE	-	Non-Operational	-	-
59	Anupsahar	Anupshahr	Bulandshahar	Uttar Pradesh	28.369	78.262	WSP	0.81	0.81	-	-	-	Operational	Non-Complying	FC
60	Anupsahar	Anupshahr	Bulandshahar	Uttar Pradesh	28.350	78.271	WSP	1.75	0.88	TRUE	-	-	Operational	Non-Complying	BOD,FC
61	Anupsahar	Anupshahr	Bulandshahar	Uttar Pradesh	28.350	78.271	MBBR	1.00	0.50	TRUE	-	-	Operational	Non-Complying	BOD,FC
62	Jalalpur Amara	Kannauj	Kannauj	Uttar Pradesh	27.075	79.927	SBR	13.00	9.50	TRUE	-	-	Operational	Complying	-
63	Jajmau	Kanpur	Kanpur	Uttar Pradesh	26.417	80.420	ASP	130.00	116.05	-	-	-	Operational	Complying	-
64	Jajmau Knpur	Kanpur	Kanpur	Uttar Pradesh	26.418	80.421	ASP	43.00	28.01	TRUE	-	-	Operational	Complying	-

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65	Jajmau	Kanpur	Kanpur	Uttar Pradesh	26.418	80.421	UASB	5.00	Non-Operational	-	TRUE	-	Non-Operational	Complying	-
66	Bingawan	Kanpur	Kanpur	Uttar Pradesh	26.368	80.317	UASB	210.00	142.50	TRUE	-	-	Operational	Complying	-
67	Pankha	Kanpur	Kanpur	Uttar Pradesh	26.467	80.205	SBR	30.00	30.32	-	TRUE	-	Operational	Complying	-
68	Sajari	Kanpur	Kanpur	Uttar Pradesh	26.367	80.387	ASP	42.00	26.42	TRUE	-	-	Operational	Non-Complying	BOD
69	Old CETP, Jajmau	Kanpur	Kanpur	Uttar Pradesh	26.418	80.421	UASB	36.00	19.00	TRUE	-	-	Operational	Non-complying	BOD, FC
70	Bithoor	Bithoor	Kanpur	Uttar Pradesh	26.612	80.275	Constructed wetland	0.08	0.08	-	-	-	Operational	Complying	-
71	Nandauli Village	Unnao	Unnao	Uttar Pradesh	26.531	80.533	FSTP	0.03	-	-	TRUE	-	Non-Operational	-	-
72	Dakari	Unnao	Unnao	Uttar Pradesh	26.457	80.452	SBR	15.00	Non-Operational	-	TRUE	-	Non-Operational	-	-
73	Salori	Prayagraj	Prayagraj	Uttar Pradesh	25.467	80.202	FAB reactor	29.00	34.60	-	TRUE	-	Operational	Non-complying	FC
74	Salori (Bakshi Bandh)	Prayagraj	Prayagraj	Uttar Pradesh	25.467	80.202	SBR	14.00	13.11	-	-	-	Operational	Complying	-
75	Rajapur	Prayagraj	Prayagraj	Uttar Pradesh	25.491	81.842	UASB	60.00	85.12	-	TRUE	-	Operational	Non-complying	FC
76	Ponghat	Prayagraj	Prayagraj	Uttar Pradesh	25.461	81.759	BTT followed by ASP	10.00	16.37	-	TRUE	-	Operational	Non-Complying	BOD,FC
77	Kodra	Prayagraj	Prayagraj	Uttar Pradesh	25.465	81.776	BTT followed by ASP	25.00	29.10	-	TRUE	-	Operational	Non-complying	FC
78	Naini	Prayagraj	Prayagraj	Uttar Pradesh	25.418	81.854	ASP	80.00	125.23	-	TRUE	-	Operational	Non-Complying	FC
79	New Naini	Prayagraj	Prayagraj	Uttar Pradesh	25.419	81.871	FCR	42.00	46.85	-	TRUE	-	Operational	Non-Complying	FC
80	Numayadahi	Prayagraj	Prayagraj	Uttar Pradesh	25.382	81.781	BTT followed by ASP	50.00	57.60	-	TRUE	-	Operational	Non-complying	FC
81	Phaphamau	Prayagraj	Prayagraj	Uttar Pradesh	25.524	81.851	FCR	14.00	18.22	-	TRUE	-	Operational	Non-complying	FC
82	Jhunsi	Prayagraj	Prayagraj	Uttar Pradesh	24.413	81.911	FCR	16.00	16.28	-	TRUE	-	Operational	Complying	-
83	Mirzapur (Pakka Pokhra)	Mirzapur	Mirzapur	Uttar Pradesh	25.146	82.589	UASB	14.00	13.01	-	-	-	Operational	Non-Complying	FC
84	Vindhyachal,	Vindhyachal, Mirzapur	Mirzapur	Uttar Pradesh	25.161	82.510	SBR	7.00	4.17	TRUE	-	-	Operational	Complying	-
85	New STP, Pakka Pokhra	Mirzapur	Mirzapur	Uttar Pradesh	25.146	82.589	SBR	8.50	7.18	-	-	-	Operational	Complying	-
86	Bisundarpur	Mirzapur	Mirzapur	Uttar Pradesh	25.176	82.598	SBR	8.50	2.09	TRUE	-	-	Operational	Complying	-
87	Chunar	Chunar	Mirzapur	Uttar Pradesh	25.100	82.868	FSTP	0.01	0.01	-	TRUE	-	Non-Operational	-	-
88	Dinapur	Varanasi	Varanasi	Uttar Pradesh	25.346	83.046	TF & ASP	80.00	70.05	-	-	-	Operational	Non-complying	FC

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89	Ramanna	Varanasi	Varanasi	Uttar Pradesh	25.244	83.005	SBR	50.00	50.11	-	TRUE	-	Operational	Non-Complying	FC
90	Near Bairoghat Temple	Farrukhabad	Farrukhabad	Uttar Pradesh	27.402	79.615	ABR	0.03	0.00	TRUE	-	-	Non-Operational	-	-
91	Near Bhairoghat Temple,	Farrukhabad	Farrukhabad	Uttar Pradesh	27.348	79.629	SBR	30.00	28.85	-	-	-	Operational	Complying	-
92	Fatehgarh	Farrukhabad	Farrukhabad	Uttar Pradesh	27.348	79.629	SBR	17.70	16.00	-	-	-	Operational	Complying	-
93	Dinapur	Varanasi	Varanasi	Uttar Pradesh	25.346	83.046	ASP	140.00	111.73	-	-	-	Operational	Complying	-
94	Ramnagar	Varanasi	Varanasi	Uttar Pradesh	25.278	83.023	A2O	10.00	11.30	-	TRUE	-	Operational	Complying	-
95	Bhagwanpur	Varanasi	Varanasi	Uttar Pradesh	25.270	83.005	ASP	8.00	9.40	-	TRUE	-	Operational	Non-complying	FC
96	Goithaha	Varanasi	Varanasi	Uttar Pradesh	25.389	82.997	SBR	120.00	50.30	TRUE	-	-	Operational	Complying	-
97	BLW (former known as DLW)	Varanasi	Varanasi	Uttar Pradesh	25.290	82.965	ASP	12.00	4.50	TRUE	-	TRUE	Operational	Complying	-
98	Bhagwanpur	Varanasi	Varanasi	Uttar Pradesh	25.270	83.006	SBR	55.00	25.79	TRUE	-	-	Operational	Non-Complying	FC
99	Sarai Talfi	Bareilly	Bareilly	Uttar Pradesh	28.356	79.392	Extended Aeration	35.00	17.00	TRUE	-	-	Operational	Non-Complying	FC
100	Girdharipur	Bareilly	Bareilly	Uttar Pradesh	28.419	79.417	SBR	1.00	1.00	-	-	TRUE	Operational	Non-Complying	FC
101	Chaubari	Bareilly	Bareilly	Uttar Pradesh	28.287	79.405	SBR	20.00	19.35	-	-	TRUE	Operational	Non-Complying	FC
102	Harunagla	Bareilly	Bareilly	Uttar Pradesh	28.364	79.486	SBR	42.00	42.76	-	TRUE	-	Operational	Non-Complying	FC
103	Jamuna Deva	Ghazipur	Ghazipur	Uttar Pradesh	25.632	83.569	SBR	21.00	4.62	TRUE	-	TRUE	Operational	Non-Complying	FC
104	Beur New	Patna	Patna	Bihar	25.575	85.097	SBR	43.00	34.00	-	-	-	Operational	Complying	-
105	Karmali Chak	Patna	Patna	Bihar	25.572	85.232	SBR	37.00	34.50	-	-	TRUE	Operational	Complying	-
106	Pahari (New)	Patna	Patna	Bihar	25.580	85.195	SBR	60.00	26.63	TRUE	-	TRUE	Operational	Non-Complying	FC
107	Saidpur	Patna	Patna	Bihar	25.611	85.164	SBR	60.00	56.50	-	-	-	Operational	Complying	-
108	Sonepur	Sonepur	Saran	Bihar	25.702	85.175	SBR	3.50	1.90	TRUE	-	TRUE	Operational	Complying	-
109	Naugachia	Naugachia	Bhagalpur	Bihar	25.383	87.106	SBR	9.00	-	-	TRUE	-	Non-Operational	Not applicable	Not applicable
110	Barh	Barh	Patna	Bihar	25.487	85.717	SBR	11.00	7.00	TRUE	-	TRUE	Operational	Complying	-
111	Sultanganj	Sultanganj	Bhagalpur	Bihar	25.246	86.749	MBBR	10.00	4.33	TRUE	-	-	Operational	Complying	-
112	Chhapra	Chhapra	Saran	Bihar	25.757	84.786	SBR	32.00	8.00	TRUE	-	-	Operational	Complying	-
113	Maner	Patna	Patna	Bihar	25.639	84.897	SBR	6.50	2.50	TRUE	-	TRUE	Operational	Non-Complying	FC
114	Munger	Munger	Munger	Bihar	25.392	86.488	SBR	30.00	16.00	TRUE	-	-	Operational	Complying	-
115	Phulwarishariff	Patna	Patna	Bihar	25.577	85.052	SBR	6.00	3.00	TRUE	-	-	Operational	Complying	-
116	Danapur	Patna	Patna	Bihar	25.647	85.105	SBR	25.00	15.00	TRUE	-	TRUE	Operational	Non-Complying	FC
117	Baktiyarpur	Bakhtiyarpur	Patna	Bihar	25.456	85.531	SBR	10.00	3.00	TRUE	-	-	Operational	Complying	-
118	Fatuha	Fatuha	Patna	Bihar	25.519	85.295	SBR	7.00	-	-	TRUE	-	Non-Operational	-	-
119	Kankarbagh	Patna	Patna	Bihar	25.579	85.195	ASP	50.00	20.67	TRUE	-	TRUE	Operational	Non-Complying	FC
120	Mokama	Mokama	Patna	Bihar	25.058	85.348	SBR	8.00	3.50	TRUE	-	TRUE	Operational	Complying	-

S. No.	Name of STP	Ganga Front Town	District	State	Latitude (in decimal)	Longitude (In decimal)	Treatment Technology	Designed Capacity (MLD)	Utilized capacity (MLD)	Under capacity	Overcapacity	Weak Sewage	Operational Status	Compliance w.r.t. MoEF &CC norms dt. 13.10.2017	Non-Complying parameter
121	Digha	Patna	Patna	Bihar	25.644	85.108	ASP	100.00	33.00	TRUE	-	-	Operational	Non-Complying	FC
122	Bhagalpur	Bhagalpur	Bhagalpur	Bihar	25.248	86.954	FCR	45.00	10.00	TRUE	-	-	Operational (under trial)	Non-Complying	FC
123	Begusarai	Begusarai	Begusarai	Bihar	25.409	86.168	SBR	17.00	-				Non-Operational	Not applicable	Not applicable
124	Rajmahal	Rajmahal	Sahebganj	Jharkhand	25.043	87.844	SBR	3.50	1.10	TRUE	-	-	Operational	Complying	Nil
125	Talbanna	Sahebganj	Sahebganj	Jharkhand	25.242	87.614	SBR	5.00	2.00	TRUE	-	-	Operational	Complying	Nil
126	Channan,Kabutar Khopi	Sahebganj	Sahebganj	Jharkhand	25.244	87.659	SBR	7.00	4.50	TRUE	-	-	Operational	Complying	Nil
127	Titagarh	Titagarh	North 24 Paraganas	West Bengal	22.732	88.379	ASP	4.54	4.54	-	-	-	Operational	Non-Complying	FC
128	Titagarh	Titagarh	North 24 Paraganas	West Bengal	22.732	88.379	Oxidation Pond	4.54	4.54	-	-	-	Operational	Non-Complying	FC
129	Bandipur	Bandipur	North 24 Paraganas	West Bengal	22.727	88.399	WSP	14.10	6.90	TRUE	-	-	Operational	Non-Complying	FC
130	Bansberia	Bansberia	Hooghly	West Bengal	22.987	88.401	WSP	0.30	0.30	-	-	TRUE	Operational	Non-Complying	FC
131	Kamarhati	Kamarhati	North 24 Paraganas	West Bengal	22.648	88.394	ASP	60.00	25.00	TRUE	-	-	Operational	Complying	-
132	Garulia	Garulia	North 24 Paraganas	West Bengal	22.819	88.359	WSP	4.10	3.30	-	-	TRUE	Operational	Non-Complying	FC
133	Bhadreswar	Bhadreswar	Hooghly	West Bengal	22.790	88.318	AL	7.60	5.02	TRUE	-	-	Operational	Non-Complying	FC
134	Baidyabati	Baidyabati	Hooghly	West Bengal	22.790	88.318	AL	6.00	1.20	TRUE	-	TRUE	Operational	Non-Complying	FC
135	Howrah (Arupara)	Howrah	Howrah	West Bengal	22.597	88.297	ASP	65.00	35.00	TRUE	-	-	Operational	Non-Complying	FC
136	Bally-Kona	Bally, Howrah	Howrah	West Bengal	22.628	88.305	ASP + WSP	62.00	27.26	TRUE	-	TRUE	Operational	Complying	-
137	Champadani	Champdani	Hooghly	West Bengal	22.811	88.343	Oxidation Pond	1.00	-				Not Monitored	Not monitored	
138	Panihati	Panihati	North 24 Paraganas	West Bengal	22.699	88.414	WSP	12.00	6.90	TRUE	-	TRUE	Operational	Non-Complying	FC
139	Gayeshpur	Gayeshpur	Nadia	West Bengal	22.960	88.492	SBR	8.33	5.00	TRUE	-	-	Operational	Complying	-

S. No.	Name of STP	Ganga Front Town	District	State	Latitude (in decimal)	Longitude (In decimal)	Treatment Technology	Designed Capacity (MLD)	Utilized capacity (MLD)	Under capacity	Overcapacity	Weak Sewage	Operational Status	Compliance w.r.t. MoEF &CC norms dt. 13.10.2017	Non-Complying parameter
140	Halisahar	Halishahar	North 24 Paraganas	West Bengal	22.929	88.418	SBR	16.00	11.00	TRUE	-	TRUE	Operational	Complying	-
141	Serampore	Serampore	Hooghly	West Bengal	22.744	88.342	TF	18.00	-				Not Monitored	Not monitored	
142	Konnagar	Konnagar	Hooghly	West Bengal	22.693	88.323	WSP	22.00	14.00	TRUE	-	TRUE	Operational	Complying	-
143	Murshidabad	Murshidabad	Murshidabad	West Bengal	24.163	88.269	Oxidation Pond	1.96	-				Not Monitored	Not monitored	
144	Berhampore	Berhampore	Murshidabad	West Bengal	24.104	88.258	WSP	3.70	-				Not Monitored	Not monitored	
145	Jiaganj-Azimganj	Jiaganj-Azimganj	Murshidabad	West Bengal	22.235	88.275	WSP	1.39	-				Not Monitored	Not monitored	
146	Naihati-1	Naihati	North 24 Paraganas	West Bengal	22.893	88.412	ASP	11.56	5.70	TRUE	-	-	Operational	Non-Complying	FC
147	Naihati-2 (Near Ramghat)	Naihati	North 24 Paraganas	West Bengal	22.905	88.407	WSP	6.50	3.70	TRUE	-	-	Operational	Non-Complying	FC
148	Chandannagar	Chandannagar	Hooghly	West Bengal	22.862	88.349	TF + WSP	22.70	5.00	TRUE	-	TRUE	Operational	Complying	-
149	Jaggadal – Bhatpara	Bhatpara	North 24 Paragana	West Bengal	22.852	88.397	FBAS	31.00	16.00	TRUE	-	-	Operational	Complying	-
150	Jagaddal, Bhatpara	Bhatpara	North 24 Paragana	West Bengal	22.852	88.397	ASP	9.50	2.00	TRUE	-	-	Operational	Non-complying	FC
151	Kankinara	Kankinara	North 24 Paraganas	West Bengal	22.874	88.417	WSP	10.00	6.00	TRUE	-	TRUE	Operational	Non-complying	FC
152	Barrackpore-1	Barrackpore	North 24 Paraganas	West Bengal	22.759	88.387	SBR	6.00	3.00	TRUE	-	TRUE	Operational	Non-Complying	pH
153	Barrackpore-2	Barrackpore	North 24 Paraganas	West Bengal	22.752	88.367	SBR	18.00	9.39	TRUE	-	-	Operational	Complying	-
154	Garden Reach	Kolkata	Kolkata	West Bengal	22.522	88.286	ASP	57.50	28.75	TRUE	-	-	Operational	Non-complying	BOD,FC
155	Bangur	Kolkata	North 24 Paragana	West Bengal	22.606	88.415	ASP	52.00	26.00	TRUE	-	-	Operational	Complying	-
156	Haridevpur	Kolkata	KOlkata	West Bengal	22.469	88.331	AL	45.00	23.00	TRUE	-	TRUE	Operational	Non-complying	FC
157	Shyamnagar	Shyamnagar	North 24 Paragana	West Bengal	22.837	88.389	FBAS	10.00	1.46	TRUE	-	TRUE	Operational	Complying	-
158	Baghajatin	Kolkata	Kolkata	West Bengal	22.481	88.390	AL	15.00	8.00	TRUE	-	-	Operational	Non-complying	FC, TSS, BOD
159	Hatisur	Kolkata	Kolkata	West Bengal	22.519	88.394	ALCT	10.00	5.00	TRUE	-	-	Operational	Non-complying	BOD

S. No.	Name of STP	Ganga Front Town	District	State	Latitude (in decimal)	Longitude (In decimal)	Treatment Technology	Designed Capacity (MLD)	Utilized capacity (MLD)	Under capacity	Overcapacity	Weak Sewage	Operational Status	Compliance w.r.t. MoEF &CC norms dt. 13.10.2017	Non-Complying parameter
160	Budge Budge	Budge-Budge	South 24 Paraganas	West Bengal	22.474	88.188	SBR	9.30	5.87	TRUE	-	TRUE	Operational	Complying	-
161	Nabadwip	Nabadwip	Nadia	West Bengal	23.402	88.372	WSP	10.00	-	-	TRUE	-	Non-Operational	-	-
162	Nabadwip	Nabadwip	Nadia	West Bengal	23.396	88.370	ASP	9.50	4.00	TRUE	-	-	Operational	Non-complying	BOD
163	Katwa	Katwa	Nadia	West Bengal	23.652	88.132	WSP	2.50	-				Not Monitored	Not monitored	
164	Kalyani	Kalyani	Nadia	West Bengal	22.976	88.419	TF + WSP	21.00	18.00	-	-	-	Operational	Complying	-
165	Diamond Harbour Near Police Station	Diamond Harbour	South 24 Paraganas	West Bengal	-	-	WSP	2.03	-				Not Monitored	Not monitored	
166	Kanchrapara	Kanchrapara	Nadia	West Bengal	22.952	88.444	AL	18.00	10.00	TRUE	-	TRUE	Operational	Complying	-
167	Chinsurah	Chinsurah	Hooghly	West Bengal	22.880	88.378	SBR	26.50	4.22	TRUE	-	TRUE	Operational	Complying	-

ASP – Activated sludge process; TF – Trickling filter; AL – Aerated lagoon; BT- Biotower; UASB –Up flow anaerobic sludge blanket; OP-Oxidation pond/WSP-waste stabilization ponds/ Aerated lagoon with or without lining; EA - Extended Aeration; BD –Biodigester; SBR – Sequential Batch Reactor; MBR – Membrane Bio Reactor; MBBR/FAB – Moving Bed Bio Reactor/Fluidized Aerobic Bed; SBT- Soil Biotechnology

Appendix 4.1

Pre Monsoon 2025 drains status (60 nos. of Dry/lean flow/meagre flow observed in untapped drains) in river Ganga

State	District	Name of drain (60 drains)
Uttarakhand	Uttarkashi	Dunda-1 and Dunda-2 drain
	Chamoli	Leesa Bend Drain; Stadium drain and Alkapuri drain
	Rudraprayag	Patwari Chowk Drain Vijay Nagar 4 drain, Augustyamuni; Degree Collage Drain , Augustyamuni; BSNL Drain Baniyadi; Anoop Negi Drain, Rudraprayag and Syndicate Bank Drain/ Makari Bazar drain near Indian Oil Petrol Pump
	Tehri Garhwal	Medical college Drain , Srikot; New Drain, Kirtinagar; Police Guest House drain and Omkaranand Public Ghat
	Dehradun	IDPL STP drain, Rishikesh
Uttar Pradesh	Muzaffarnagar	Tikaula drain
	Bijnor	Baheda drain (Milini)
	Farrukhabad	B.B. Ganj Nala
	Kanpur	Airforce Drain
	Raebareli	Bada Math - Chhota Math ke beach ka Nala, Sherandajpur; Busda/ Ghat ka Nala / Barudda Ghat Drain, Sherandajpur; Shukla Ghat ka Nala, Sherandajpur; Pathvari Ghat ka Nala, Tikaitganj and Raja Tiloi Ghat Nala/ Deen shah Gaora Ghat, Mo. Sherndajpur
	Pratapgarh	Prathmik Vidhyalay
	Prayagraj	Shivkuti Drain No. 1; Shivkuti Drain No. 2; Shankar ghat drain-01 and Shankar ghat Colony drain
	Mirzapur	Diwan Ghat New Drain; Bhairamganj East Drain and Tekur Basti South Drain
	Ghazipur	Mahaveer Ghat Drain; Jauhargaj Drain; Khirki Ghat Drain and Drain at left of Pakka Ghat
	Aligarh & Kasganj	Neem nala
Bihar	Patna	Bhadra Ghat Drain
	Munger	ITC Drain
West Bengal	Murshidabad	Ganeshpur More to Ganeshpur Ghat; Jangipur Drain and Shiv Mandir Ghat,W.No.21
	Hooghly	Dunlop Kheya Ghat; From Stand road Khatal; Murgi Patti; Rajbanshipara Ghat; Near Sheoraphuli Fish Market; Neheru Nagar Colony-I and Bose Para Lane
	N24Paraganas	Drain At Daduram Ghat, Naihati and Drain at Biswas Ghat
	Howrah	Jayabibi Road; Gossai Ghat Road Drain; Ramkrishna Mallick Ghat Drain; 101 Foreshore Road Drain; Radhanagar Canel, Uluberia and Kalinga Nagar Drain
	S. 24 Paragana	Budge-Budge Pujali Drain

Post Monsoon 2025 drains status (58 no. of Dry/lean flow/meagre flow observed in untapped drains) in river Ganga

State	District	Name of drain (58 drains)
Uttarakhand	Rudraprayag	Hospital drain near PHC, Ukhimath; Patwari Chowk Drain; Talibgarh Ward / Vijay Nagar 1 Drain; Baniyadi Drain; Degree Collage Drain; BSNL Drain, Baniyadi; GIC drain in near Post Office; Drain Near Taxi Stand; Drain Near Ayush Medicos, Tilwara; Anoopnegi Drain and Syndicate Bank Drain/Makari Bazar drain near Indian Oil Petrol Pump
	Chamoli	Stadium drain, Chamoli-Gopeshwar and Sangam Road Nala, Nandparayag
	Tehri Garhwal	New Drain, Kirtinagar and Medical College Drain, Srikot
	Pauri Garhwal	Swarg Ashram/Ved Niketan drain and Alaknanda Vihar Nala, Srinagar
	Uttarkashi	Kailash Ashram Drain; Dunda-1; Dunda-2; Dunda-3, Purana Bazar Khala
	Dehradun	Police guest house drain; Darshan Maha Vidyalaya drain; Boat ghat drain; Omkaranand Public Ghat drain; Khara srot drain and IDPL STP Drain
Uttar Pradesh	Muzaffarnagar	Tikaula drain
	Bijnor	Chandpur drain
	Raebareli	Bada Math - Chhota Math ke beach ka Nala, Sherandajpur; Shukla Ghat ka Nala, Sherandajpur and Raja Tiloi Ghat Nala/Mo. Sherndajpur (Deen shah Gaora Ghat)
	Pratapgarh	Lataar (Taar) Nala; Raja Hela Nala; Prathmik Vidhyalay and Mallahan Tola
	Prayagraj	Bairagiya Drain; Shivkuti Drain No. 1; Shivkuti Drain No. 2; Fort DrainNo.1; Fort DrainNo.2 and Baswar Drain
	Mirzapur	Bhairamganj East Drain; Tambalganj and Nagar Palika Drain
	Moradabad	Vivekananda Hospital (left) drain
	Bulandshahar	Kasai Bada Drain; Chandbhari Drain and Cheel Ghat Drain
	Kasganj	Neem Nala
Bihar	Patna	Krishna Ghat Nala and Mastana Ghat
	Munger	ITC Drain
West Bengal	Howrah	101, Foreshore Road Drain; Garchumuk and Sankrail, near Manikpur ferry ghat
	North 24 parganas	Monirampore -Barrackpore
	Murshidabad	Jangipur Drain and Nashipur Ghosh Para,Ward No-14
	Hooghly	Drain at Tamil para ferry ghat, Chinsura

Appendix 4.2

Status of drains tapped to various STPs (based on Post-Monsoon data in river Ganga)

Ganga States		Name of STP	STP Capacity	No. of Drains of river Ganga Tapped
Uttarakhand	1.	STP, Badrinath	0.26 MLD	1
	2.	STP, Badrinath	1 MLD	4
	3.	Pokhri Bend STP, Joshimath	1.08 MLD	2
	4.	STP, Marwadi, Joshimath	2.7 MLD	3
	5.	Rudra Band STP, Rudraprayag	100 KLD	1
	6.	Dart Pull STP, Rudraprayag	75 KLD	1
	7.	STP-4, Near SBI, Rudraprayag	100 KLD	2
	8.	STP-5, Near Steel Bridge, Rudraprayag	125 KLD	1
	9.	STP No. 6, Belni Bridge, Rudraprayag	50 KLD	1
	10.	Deendayal Upadhyay STP, Chamoli	1.12 MLD	2
	11.	Chamoli Ghat STP	0.76 MLD	4
	12.	Forest Office STP, Nandprayag	100 KLD	2
	13.	Sangam road STP, Nandprayag	50 KLD	1
	14.	STP-5, Ward No. 01 & 03, Karnaprayag	100 KLD	2
	15.	STP-4, Naya Pull, Karnaprayag	50 KLD	2
	16.	STP-1, Police Chowki, Karnaprayag	50 KLD	1
	17.	STP-2, Near Purana Pull, Karnaprayag	100 KLD	1
	18.	Subhash Nagar STP, Karnaprayag	50 KLD	1
	19.	STP, Kirtinagar	50 KLD	1
	20.	STP, Kirtinagar	10 KLD	1
	21.	STP, Srinagar	3.5 MLD	15
	22.	STP, Srinagar	1 MLD	2
	23.	STP, Srikot	50 KLD	1
	24.	Junior High School STP, Srikot	75 KLD	1
	25.	STP, Gyansu, Uttarkashi	2 MLD	6
	26.	STP, Tapovan, Rishikesh	3.5 MLD	4
	27.	STP, Swarg Ashram, Rishikesh	3 MLD	19
	28.	STP, Lakkar Ghat, Rishikesh	26 MLD	4
	29.	STP, Chorpani & Lakkar Ghat, Rishikesh	5 + 26 MLD	8
	30.	STP, Chandreshwar Nagar, Rishikesh	7.5 MLD	3
	31.	Sarai STP, Jwalapur, Haridwar	14 & 18 MLD	2
	32.	Jagjeetpur STP, Haridwar	18, 27 & 68 MLD	18
	33.	Sangam Bazaar STP, Devprayag	150 KLD	2
	34.	Bah Bazar STP, Devprayag	1.4 MLD	1
	35.	STP, Kashipur	10 MLD	2
	36.	STP, Kashipur	500 KLD	2
	37.	STP, Kashipur	1 MLD	1
	38.	STP, Kashipur	18 MLD	1
	39.	STP, Kashipur (near Ganna Ayukt Office, Bazpur Road)	2 MLD	1
	40.	STP, Ramnagar	7 MLD	5
	41.	Pucchdi STP, Ramnagar	1.5 MLD	1
	42.	Kichha STP, Kiccha	3 MLD	3
	43.	STP, Bazpur	10 MLD	1
	1.	4 MLD STP, Narora	4 MLD	2
	2.	30 MLD STP Farrukhabad, Farrukhabad	30 MLD	3
	3.	2.7 MLD STP Fatehgarh, Farrukhabad	2.7 MLD	1
	4.	17.7 MLD STP Fatehgarh, Farrukhabad	17.7 MLD	1
	5.	06 MLD Garhmukteshwar STP, Hapur	06 MLD	1
	6.	80 KLD Constructed Wetland Treatment System, Bithoor, Kanpur	80 KLD	1

Ganga States		Name of STP	STP Capacity	No. of Drains of river Ganga Tapped
Uttar Pradesh	7.	200 MLD STP Jajmau, Kanpur	200 MLD	10
	8.	210 MLD STP, Bingawan, Kanpur	210 MLD	3
	9.	30 MLD STP Pankha, Kanpur	30 MLD	3
	10.	72 MLD Jagriti Vihar STP, Meerut	72 MLD	1
	11.	60 MLD STP Rajapur, Prayagraj	60 MLD	7
	12.	42 MLD New Naini STP, Prayagraj	42 MLD	1
	13.	43 MLD Salori STP	43 MLD	1
	14.	14 MLD Phaphamau STP, Prayagraj	14 MLD	2
	15.	10 MLD STP Ponghat, Prayagraj	10 MLD	2
	16.	25 MLD STP Kodra, Prayagraj	25 MLD	1
	17.	16 MLD Jhusi, Prayagraj	16 MLD	13
	18.	14 MLD STP Mirzapur	14 MLD	1
	19.	8.5 MLD STP Bishundharpur, Mirzapur	8.5 MLD	5
	20.	14+8.5 MLD Pakka pokhra STP STP, Mirzapur	14+8.5 MLD	5
	21.	Vindyachal STP, Mirzapur	07 MLD	5
	22.	29 MLD Salori STP, Prayagraj	29 MLD	1
	23.	10 MLD Ramnagar STP, Varanasi	10 MLD	5
	24.	80 MLD Dinapur STP, Varanasi	80 MLD	22
	25.	50 MLD Ramanna STP, Varanasi	50 MLD	2
	26.	Chaubari STP, Bareilly	20 MLD	1
	27.	Kasganj STP	15 MLD	2
	28.	13 MLD STP Kannauj, Kannauj	13 MLD	3
	29.	25 MLD STP at Chakkar ki Milak, Moradabad	25 MLD	5
	30.	58 MLD STP, Moradabad	58 MLD	2
	31.	140 MLD Dinapur, Varanasi	140 MLD	9
	32.	120 MLD Goithaha, Varanasi	120 MLD	4
Bihar	1.	Chapra STP	32 MLD	1
	2.	Barh STP	11 MLD	5
	3.	Mokama STP	8 MLD	3
	4.	Sultanganj STP	10 MLD	1
	5.	Bakhtiyarpur STP, Patna	10 MLD	1
Jharkhand	1.	STP-1, Ghormarapul, Sahibganj	5 MLD	1
	2.	STP-2, Chanan, Sahibganj	7 MLD	1
	3.	Rajmahal STP, Bendubbi	3.5 MLD	4
West Bengal	1.	Chandannagar (TF+OP), Chandannagar, Hooghly	22.7 MLD	2
	2.	Barrackpur-2 STP, Lathbagan	6.1 MLD	1
	3.	Nabadwip STP, Nadia	9.5 MLD	1
	4.	Naihati ASP, N24Paraganas	11.56 MLD	1
	5.	Naihati, N24Paraganas	6.5 MLD	2
	6.	Bhadreswar STP, Bhadreswar, Hooghly	7.6 MLD	1
	7.	Jagaddal-Bhatpara STP, Bhatpara	31MLD	1
	8.	Chinsurh STP, Chinsurh, Hooghly	26.5 MLD	1
	9.	Garulia STP, Garulia, N24Paraganas	4.1 MLD	1
	10.	Kanchrapara STP, N24Paraganas	18 MLD	1
			Total	**292**

Appendix 4.3

Solid waste found dumped along the drain (Since 2024 - 2025) (in river Ganga and its tributaries)

S No.	Town/city	River	Name of drain
Uttarakhand-15 Drains			
1.	Dunda, Uttarkashi	Bhagirathi	Dunda-1, Dunda-2 drain, Virpur Village, Dunda, Dunda-3 (Purana Bazar Khala)
2.	Chamoli-Gopeshwar	Alaknanda	Alkapuri drain,
3.	Augustmuni	Mandakani	Drain Near Jirwan Footwear - Vijay Nagar, Drain-3, Baniyadi Drain, Talibgarh Ward - Vijay Nagar 1 Drain, SBI / GIC Drain
4.	Kirtinagar	Alaknanda	New Drain,
5.	Srinagar	Alaknanda	Convent School Drain, Tiwari Mohalla drain,
6.	Swarg Ashram	Ganga	Gali No.-1 near Geeta Bhawan
7.	Rudrapur	Gaula	Kalyani drain/river, Rudrapur (Pantnagar
8.	Bazpur	Pilakhar	Ghogha
9.	Kashipur	Dhela	Pachana Drain
Uttar Pradesh - 129 Drains			
1.	Farrukhabad	Ganga	Bhairoghat Drain, Hathikhana Drain, Bargadia Ghat Drain, Cantt Drain
2.	Bithoor	Ganga	Luv-Kush Drain, Bhannu Nala, Peshwa Nala,Brahamawat Ghat, Laxman Ghat Drain, Kalwari Ghat Drain
3.	Kanpur	Ganga & Pandu	Permiya Drain, Ranighat Drain, Sisamau Drain, Tefco Drain, Parmath Drain, Police line Drain, Jail Drain, Gola Ghat Drain, Bhagwatdas Drain, Sattichaura Drain, Dabka-1, 2 & 3 Drain, Sheetla Bazar Drain, Airforce Drain, Budiyaghat, Wajidpur Drain, Ratanpur Drain, Panki Drain, Halwakhanda Drain, Ganda Drain, COD Drain, Arra Drain, Pipauri, Sagar Puri Drain
4.	Shuklaganj	Ganga	Ganga Vishnu Drain, Indira Nagar Drain, Ravidas Nagar, Srinagar Drain
5.	Raebareli	Ganga	Busda/ Ghat ka Nala/Barudda Ghat Drain, Sherandajpur, Sadak Ghat Muroop Nala/Sadak Ghat Drain, Tikaitganj
6.	Manikpur	Ganga	Mallahan Tola
7.	Prayagraj	Ganga & Manshahita	Rasulabad-3 Drain,Rasulabad-2 Drain,Rasulabad-1 Drain, Chuhara Mandir-2 Drain/ Jondhwal Drain,Sadanand Ashram Drain
8.	Gopiganj	Ganga	Jhiriya Drain, Gopiganj
9.	Mirzapur	Ganga	Kachahari Drain, Narghat Drain, Sundar Ghat Drain, Oliyar Drain,Hanuman Ghat Drain,Bisundarpur Drain, Shivpur Drain,Patengra Drain, Parshuram Ghat ,Balughat Kachha Drain ,Balughat Pakka Drain,Chorwa Drain ,Khandwa Drain
10.	Chunar	Ganga & Jargo	Kashi Ram Awas Drain,Balughat Drain,Gangeshwari Nishad Park Drain,Post Office North Drain,Bhairamganj West Drain, Tekur Basti South Drain,Bharatpur Trimohani,Saiddupur Drain,TekurNagarDrain-1
11.	Varanasi	Ganga & Varuna	Asi/ Nagwa Drain,Phulwariya Drain,iSadar Bazar Drain, Raja Bazar Drain,Nakkhi ghat Drain,Narokhar Drain, Nai Basti,Teliya Bagh Drain,Chamrautha Drain, Khajury ColonyDrain,Banaras Drain No.-5,Durga/ Daniyal/Lohtha Drain,Purana Pul Drain
12.	Zamnia	Ganga	Gorwa Drain,Kankarwa Drain
13.	Ghazipur	Ganga	Bada Mahadev /Adarsh Bazar Drain,Pear Nagar Drain, Khirki Ghat Drain,Afeem Factory Colony Drain/ Mahala Basti / Sikandpur Drain,DM Bunglow Drain,Dadri Ghat Drain,Collector Ghat Drain,Maksud Ghat Drain, Gola Ghat Drain,Steamer Ghat Drain,Chetnat Ghat Drain, Anzahi Ghat Drain,Theri bazar Drain,Posta Ghat Drain, Rui Mandi Drain,Shamshan Ghat Drain,Harizan Basti drain, Drain at right of Pakka Ghat
14.	Moradabad	Ramganga & Gagan	Chakkar Ki Milak / Mukrampur,Jigar Colony,Jhabbu Ka Nala,Nawabpura 2, Lalbagh Drain, Daheria / Dateria Drain, Jama Masjid (Left) drain, Barbalan Drain, Katghar Railway Station,Chandaousi road Left Side, Vivekanand Hospital-Right
15.	Meerut	Kali East	Abunallah-1, Abunallah-2, Butcher House / Odian Nala
16.	Hapur	Kali East	Chhoiya drain
17.	Bulandshahar	Kali East	Maman Road drain, D M Colony, Aadil Drain, Nishal Ghat, Faisalabad / Pul Dhameda, Behind Shanidev Temple, Devipura drain, Behind Chamunda Temple
18.	Bhadohi	Morwa & Varuna	Chauri Drain, Barbaspur Drain, BIDA Drain, Mamdevpur Drain, Nai Bazar Drain/ Chaura Drain
Bihar (49 drains)			
1.	Buxar	Ganga	Nath Baba Drain, Tadka Drain,. Sati ghat drain,Sidnath Drain/Hospital Road,Sarinpur Drain/Choti Sarinpur drain
2.	Dighwara	Ganga	Shankarpur Road Nala
3.	Chapra	Ganga	Khanua Nala

4.	Danapur	Ganga	Danapur Cantt Drain
5.	Patna	Ganga	Kurzi Drain, Rajapur Drain, Bans Ghat Drain, Balu Ghat, Ghagha Ghat, Masjid Ghat Drain, Loharwa Ghat Drain, Goshai Ghat Drainix. Gai Ghat Drain, Bhadra Ghat Drain Mahavir Ghat Drain, Nauzar Ghat Drain, Mittan Ghat Drain
6.	Fatua	Ganga	Kalighat, Samaspur, Mastana Ghat, Devanti Ghat, Kataiya Ghat,Makshudpur Drain (West),Makshudpur drain (East)
7.	Baktiyarpur	Ganga	Raghopur Dugar Nala
8.	Barh	Ganga	Pipal Ghat Drain,Salimpur Drain Near Nagar Parisad, Barh, Malinia Ghat Drain, Ward No. 11, Salempur, Barh, Dhobiya ghat,Gauri Shankar Ghat
9.	Munger	Ganga	Lal Darwaja Drain
10	Bhalgalpur	Ganga	Champa Nala-2, Champa Nala-1, Sahebganj Miyabari Nala, STP Nala Bhagalpur, Hathiya Nala near Tilak Manjhi, DN Singh Drain, Saklichand Drain, Koyal Ghat Drain, Khirni Ghat, Kuppa Ghat, Pipalli Dham drain-1, xii. Barari Ghat Drain
11	Kahalgaon	Ganga	Kagzi Nala, Pampu Nala, LCT Drain
West Bengal- 47 Drains			
1.	Jangipur	Ganga	Jangipur drain
2.	Baharampore	Ganga	Shiv Mandir Ghat,W.No.21, Back Side Of Phed, W.No.24
3.	Berhampore	Ganga	Rattala Gorabazar Drain Berhampore
4.	Katwa	Ganga	Sakhipara Ghat Drain , Katwa
5.	NABADWIP	Ganga	Goshpara Drain, Nabadwip
6.	Tribeni	Ganga	Btps Outfall Drain
7.	Kanchrapara	Ganga	Bagher Khal (Fodder Khal)
8.	Bansberia	Ganga	Dhopa Ghat Drain
9.	Halisahar, Kalyani, Kanchapara	Ganga	New Bagher Khal
10	Kanchrapara and Halisahar	Ganga	Drain @ Halisahar Municipality
11	Halisahar	Ganga	Halisahar drain
12	Chinsurah, Bandel	Ganga	Rosbara Khal
13	Chinsurah	Ganga	Chandni Ghat Drain, Chinsurah, Imambara Khal, Chinsurah
14	Naihati	Ganga	Drain at Daduram Ghat, Naihati, Gariffa South Drain, Gariffa North Drain, Thannar Khal, Naihati
15	Bhatpara	Ganga	Bhatpara Open Pukka Drain, Alliance Jute Mill Drain, Bhatpara, Drain Near , Ratapnagar & Rajbari
16	Chandannagar municipality	Ganga	Drain @ Sarishapara, Chandannagar
17	Bhadreswar municipality	Ganga	Gondalpara drain
18	Garulia	Ganga	Debitala Pancha Khal
19	Barrackpore	Ganga	Monirampore – Barrackpore Drain, Balughat Ghat, Manirampore, Pucca Drain, Barrackpore
20	Serampore	Ganga	Bhagirathi drain, serampore
21	Barrckpore	Ganga	Barrackpore drain (adjacent to ramakrishna mission)
22	Titagarh	Ganga	Talpukur
23	Khardah	Ganga	Titagarh drain @ bishalaxmi ghat
24	Rishra, konnagar	Ganga	Bagh Khal, Rishra And Konnagar
25	Konnagar	Ganga	Drain @ Panchu Dutta Ghat
26	Kamarhati	Ganga	Drain Near PB Ghat @ Kamarhati, Kamarhati Drain @ Jute Mill, Kamarhati
27	Kolkata	Ganga	Chitpur Ghat Khal, Dhankheti Khal, Kolkata, Munikhali Khal (Formerly Drain @ Akhra Food Ghar)
28	Bally	Ganga	Dewangazi drain
29	Howrah	Ganga	Ramkrishna Mallick Ghat Drain, Howrah 130 Foreshore Road Drain, Howrah, 101 Foreshore Road Drain, Howrah, Shibpur Burning Ghat, Howrah, Botanical Garden-I
30	Howrah city area	Ganga	Telkal ghat drain, howrah
31	Howrah, Sankrail	Ganga	Nazerganj khal
32	Sankrail	Ganga	Saraswati Khal, Sankrail

Appendix 4.4

Solid waste found dumped along the drain (in river Yamuna)

Town/city	River	Name of drain
Uttarakhand-13 Drains		
Yamunotri	Yamuna	(i) Near Temple, (ii) Near Kund, (iii) Near Hanuman Mandir, (iv) Near Sant Ashram, (v) Near Panda, Samiti Shops, (vi) Near Public toilet,
Janki Chatti	Yamuna	(i) Near Primary School Drain, Narayanpur, (ii) Near Vidhayak Parking drain,
Barkot	Yamuna	(i) Diet Nala, (ii) Taxi stand drain,
Naugaon village	Yamuna	(i) Drain near basic school, (ii) Drain near main market bridge,
Nainbagh	Yamuna	(i) Drain near Barnigad Bazar, Nainbagh
Himachal Pradesh-2 Drains		
Paonta Sahib	Yamuna	(i) Near Shri Dei Ji Sahiba Temple, Devinagar, (ii) near Old SBI
Uttar Pradesh-97 Drains		
Agra	Yamuna	(i) Devri Nala, (ii) Jalma Nala, (iii) Khairati Tola, (iv) Khoja Nala, (v) Indira Memorial Bridge, (vi) Peepal Mandi, (vii) Kachhpura Nala, (viii) Kachhpura Main Nala, (ix) Moti Mahal, Mall Godam, (x) MotiMahal-II, (xi) Moti Mahal-IV, (xii) MotiMahal-V, (xiii) MotiMahal-VII, (xiv) MauNala 1, (xv) K.K. Nagar, (xvi) Jaswant Singh ki Chatri-I, (xvii) Jaswant Singh ki Chatri-II, (xviii) Jaswant Singh ki Chatri-III, (xix) BahadurPur gaon, (xx) Radha Nagar Drain Balkeshwar, (xxi) New Radha Nagar Drain, Trans Yamuna, (xxii) Anurag Nagar, (xxiii) Artoni, (xxiv) Gokul Nagar Drain, (xxv) Seksaria Drain, (xxvi) Dayanand Ashram, (xxvii) Bhairo Nalla, (xxviii) Katra Wajir Khan Nala-I, (xxix) Industrial Area, (xxx) Shaym Lalb Vidya Mandir, (xxxi) Foundary Nagar Drain, (xxxii) Nursery Mandir-II, (xxxiii) Gali Amanat Ram Bagichi-I, (xxxiv) Gali Amanat Ram Bagichi-II, (xxxv) Gali Subedar Nagar, (xxxvi) Krishna Nagar Colony, (xxxvii) Peelakhar, (xxxvii) Chini ka Roza-I, (xxxix) ChinikaRoza-II, (xxxx) Water Works, (xxxxi) Ispat Udhyog, (xxxxii) RamBagh –I, (xxxxiii) RamBagh –III, (xxxxiv) Balkeshwar drain, (xxxxv) Lohia Nagar, (xxxxvi) Lohia Nagar Rathor wali Gali, (xxxxvii) LohiaNagarBankeBihari, (xxxxviii) Naraich, (xxxxix) Budhi Ka Nagla, (xxxxx) Amar Vihar 1, (xxxxxi) Islam Nagar Drain, (xxxxxii) Eklavya/AquaCoolWater treatment, (xxxxxiii) Manoharpur 2, (xxxxxiv) Manoharpur 1, (xxxxxv) Bainpur, (xxxxxvi) Kailash Mandir, (xxxxxvii) Poia Ghat 1, (xxxxxviii) Poia Ghat 2, (xxxxxix) Peelipokhar Nala
Baraut, Malakpur, Bawli, Dhikana, Khempur, Rajpur,	Yamuna	(i) Makhraj Drain
Etawah	Yamuna	(i) Tixi Drain, (ii) Jharna Drain
Hamirpur	Yamuna	(i) Drain Purana Yamuna Ghat, (ii) Drain Pataleshwar
Kalpi	Yamuna	Rayad Road Nala
Mathura	Yamuna	Refinery drain, Aurangabad drain, Amberkhar drain, Masani drain
Prayagraj	Yamuna	(i) Karela Bagh Drain A-1, (ii) Karela Bagh Drain A-2, (iii) Main Ghaghar Nala, (iv) GhagharNala 1-A/Sadiyapur Drain, (v) GhagharNala 1-A1, (vi) Ghaghar Nala 1-B, (vii) Dariyabad Kakahraghat Drain, (viii) Dariyabad Pipalghat Drain, (ix) Dariyabad Jogighat Drain, (x) Chachar Nala, (xi) Emergency Outfall Drain, (xii) Drain at Gate No. 9, (xiii) Drain at Gate No. 13, (xiv) Fort Drain No. 2 (xv) Baluaghat JCC Backside (xvi) Sasurkhaderi Drain (xvii) Mahewa Pasi Tola Drain No. 1 (xviii) Mahewa Pasi Tola Drain No. 2 (xix) Mahewa Pasi Tola Drain No. 3 (xx) Mahewa Pasi Tola Drain No. 4 (xxi) Mahewa Pasi Tola Drain No. 5 (xxii) New Arail Ghat Drain (xxiii) Meduka drain (xxiv) Bargad Ghat Drain
Tundla	Yamuna	Drain at Kothi No-1, Malviya Nagar Drain, Rahana Drain, Naya Bans
Vrindavan	Yamuna	KC ghat

Appendix 4.5

Post- Monsoon 2025 drains status (22 nos. of Dry/lean flow/meagre flow observed in untapped drains) in river Yamuna

State	District	Name of drain
Uttarakhand	Uttarkashi	**1.** Near Temple Yamunotri, **2.** Near Kund Yamunotri, **3.** Near Hanuman Mandir Yamunotri, **4.** Near Sant Ashram Yamunotri, **5.** Near Panda Samiti Shops Yamunotri, **6.** Near Public toilet Yamunotri, **7.** Uphill Road Kharsali drain Kharsali, **8.** Near Shri Sidh Hanuman Mandir Ashram Drain Janki Chatti, **9.** Near Primary School Drain in Narayanpur near BSNL Tower Janki Chatti, **10.** Drain near Bridge / near Vidhayak Parking drain Janki Chatti, **11.** Near Hotel Relax Drain Janki Chatti, **12.** Near Hotel Mandakini Drain Janki Chatti, **13.** Drain near basic school Nungoan
	Tehri Garhwal	**14.** Drain near Barnigad Bazar, Nainbagh
Uttar Pradesh	Agra	**15.** Ambedkar Park, **16.** Gailana, **17.** Belanganj Bridge, **18**. Khemchand Tofee Factory
	Prayagraj	**19.** Fort Drain No. 1, **20.** Fort Drain No. 2, **21.** Baswar Drain
	Firozabad	**22.** Drain at Kothi No-1, (RPF Barrack) Tundla, Firozabad

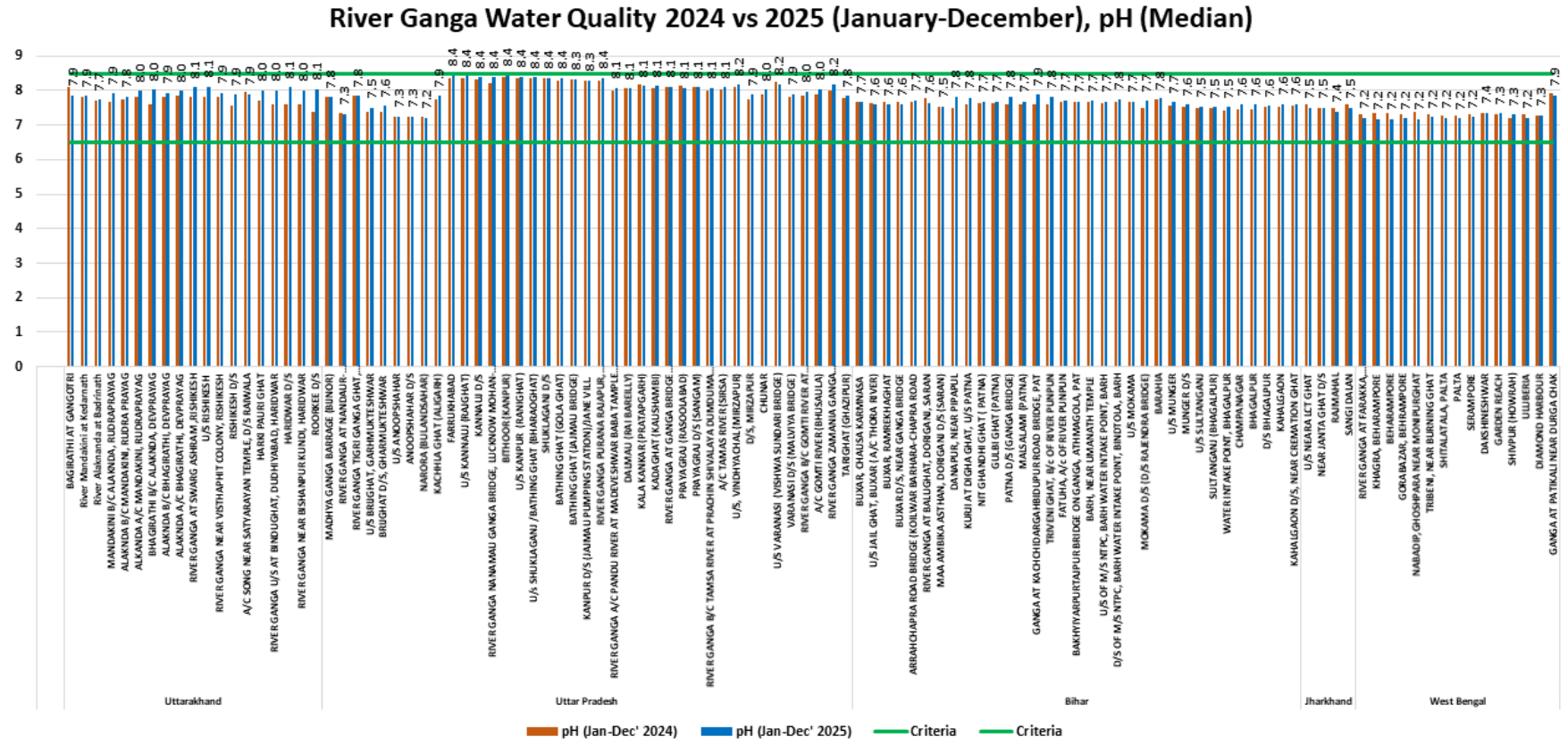
Appendix 5.1

PRIMARY WATER QUALITY CRITERIA FOR BATHING WATER
(Water used for organized outdoor bathing)

CRITERIA		RATIONALE
1. Faecal Coliform (MPN/100 ml)	500 (desirable) 2500 (Maximum permissible)	To ensure low sewage contamination. Faecal coliform and feacal streptococci are considered as they reflect the bacterial pathogenicity.
2. Faecal Streptococci (MPN/100 ml)	100 (desirable) 500 (Maximum Permissible)	The desirable and permissible limits are suggested to allow for fluctuation in environmental conditions such as seasonal change, changes in flow conditions etc.
3. pH	Between 6.5-8.5	The range provides protection to the skin and delicate organs like eyes, nose, ears etc. which are directly exposed during outdoor bathing.
4. Dissolved Oxygen (mg/L)	5 mg/L or more	The minimum dissolved oxygen concentration of 5 mg/l ensures reasonable freedom from oxygen consuming organic pollution immediately upstream which is necessary for preventing production of anaerobic gases (obnoxious gases) from sediment.
5. Biochemical Oxygen Demand (3^{rd} day, at 27˚C) (mg/L)	3 mg/L or less	The Biochemical Oxygen Demand of 3 mg/l or less of the water ensures reasonable freedom from oxygen demanding pollutants and prevent production of obnoxious gases".

Appendix 5.2

Comparative data of Ganga River Water Quality (2024 Vs 2025)



Total locations- 110

Complying- 110 locations

Figure 1. River Ganga water quality 2024 vs 2025 (Jan-Dec) w.r.t pH (mg/l)

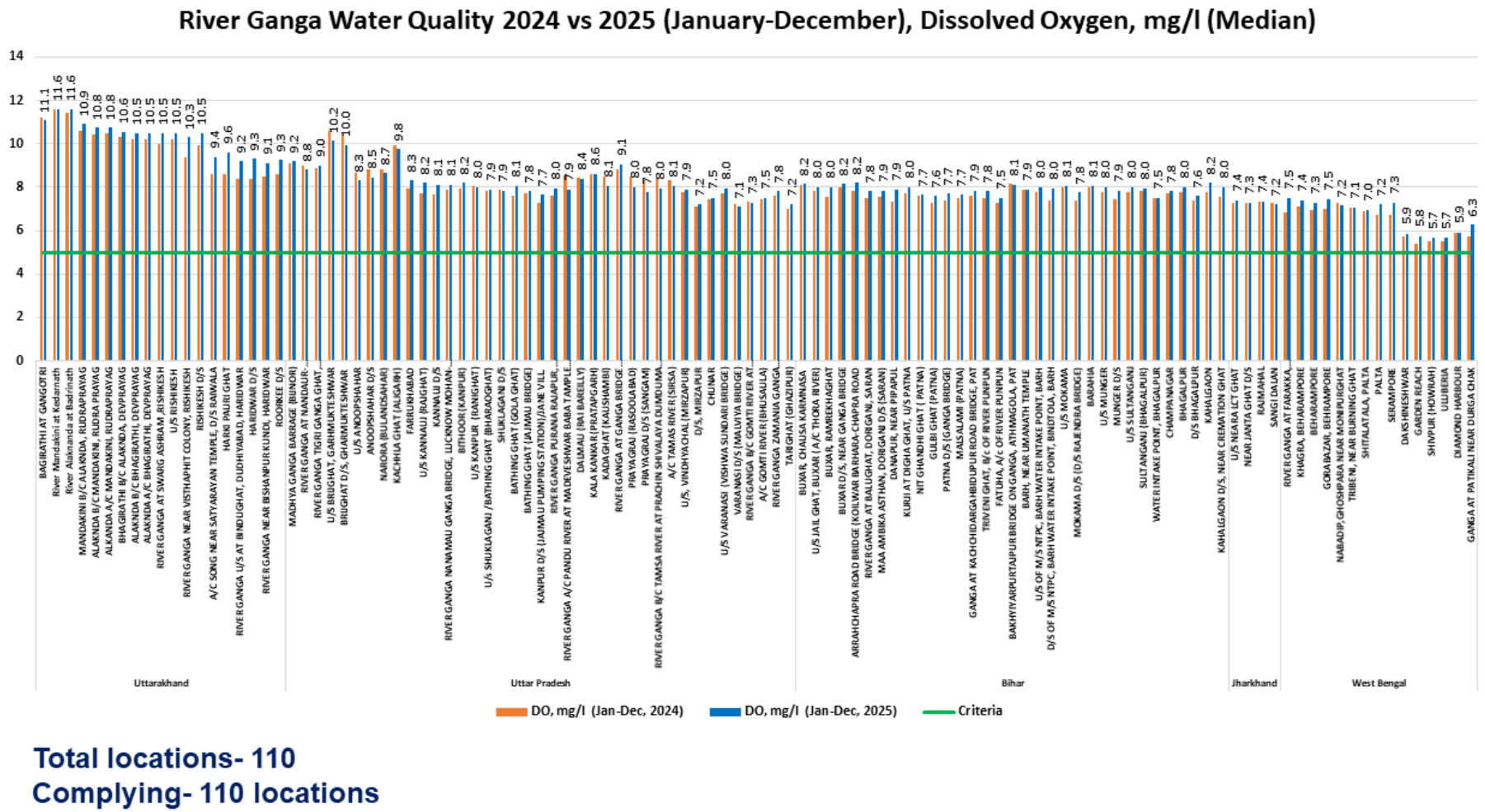
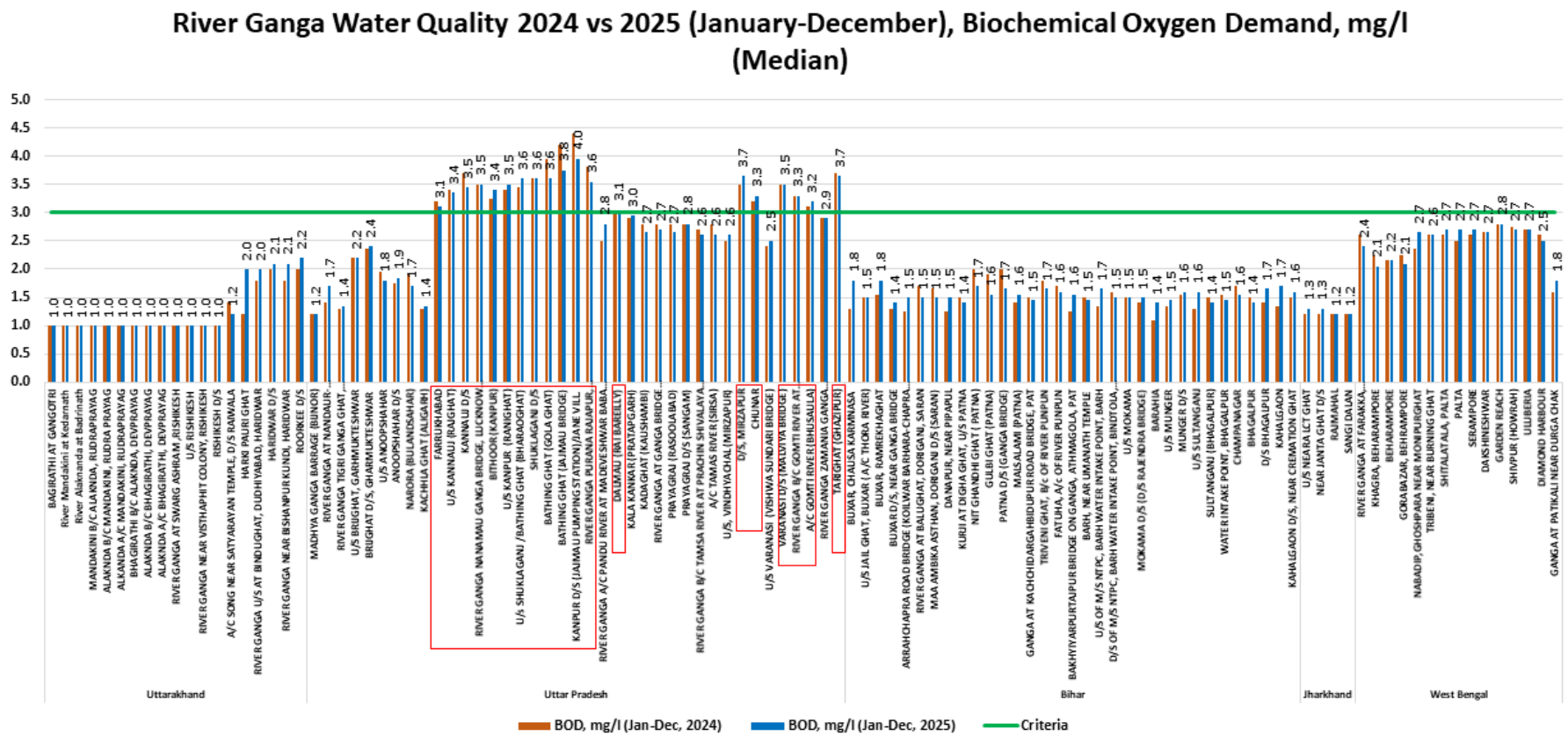
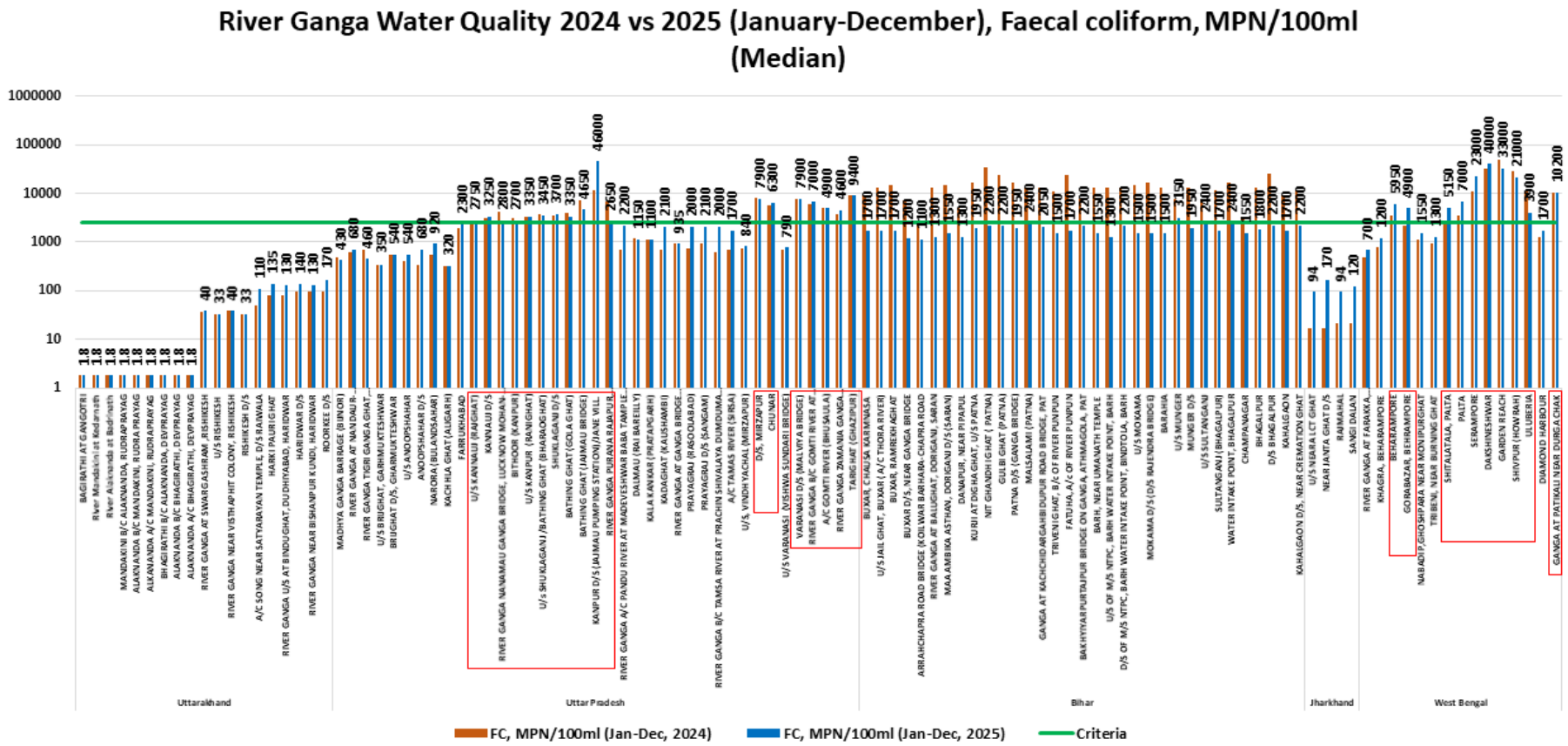


Figure 2. River Ganga water quality 2024 vs 2025 (Jan-Dec) w.r.t Dissolved Oxygen (DO) (mg/l)



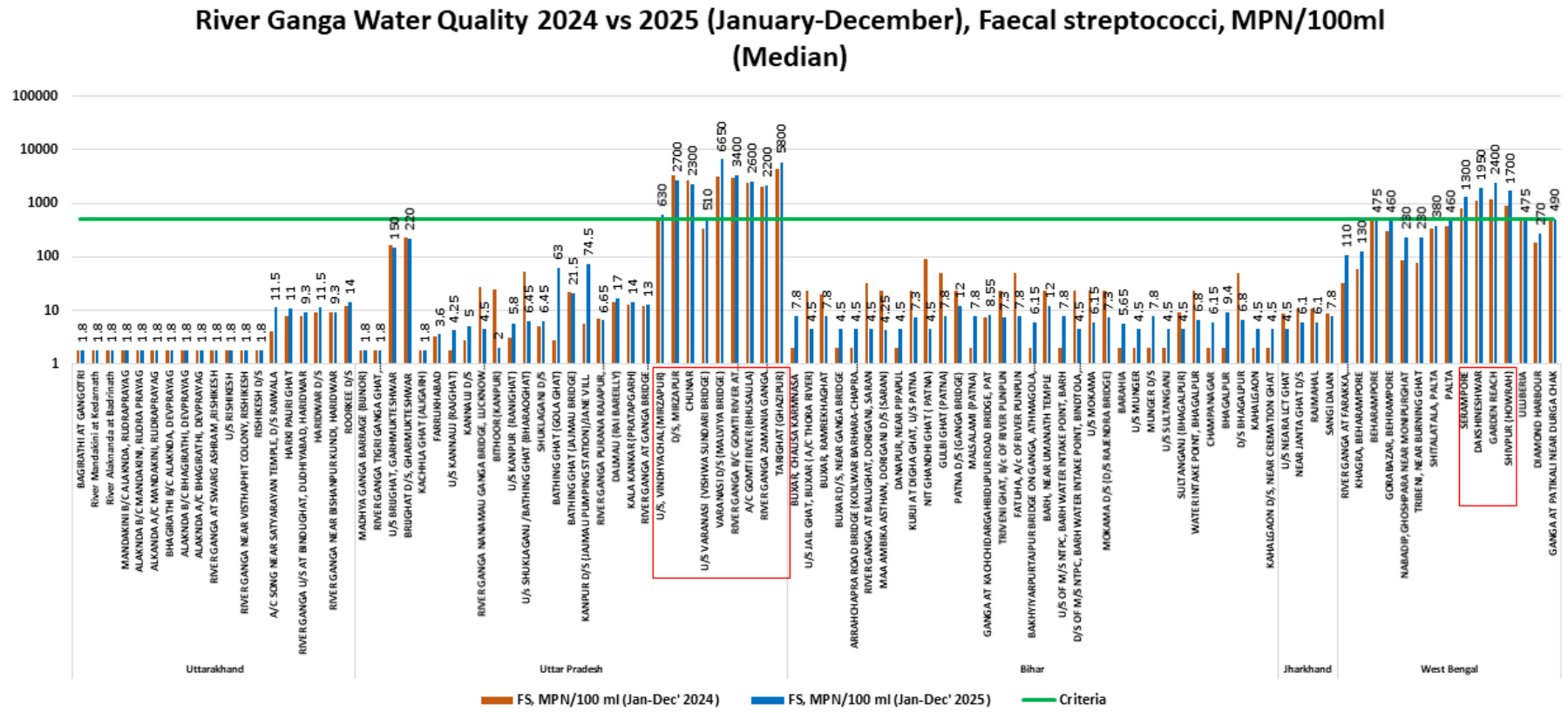
Total locations- 110
Complying- 91 locations
Non-Complying- 19 locations

Figure 3. River Ganga water quality 2024 vs 2025 (Jan-Dec) w.r.t Biochemical Oxygen Demand (BOD) (mg/l)



Total locations- 110
Complying- 81 locations
Non-Complying- 29 locations

Figure 4. River Ganga water quality 2024 vs 2025 (Jan-Dec) w.r.t Faecal Coliform (FC) (MPN/100 ml)



Total locations- 100
Complying- 87 locations
Non-Complying- 13 locations

Figure 5. River Ganga water quality 2024 vs 2025 (Jan-Dec) w.r.t Faecal streptococci (FS) (MPN/100 ml)

Water quality data of river Ganga 2024 vs 2025 (Jan-Dec) (Median)

Station Code	State name	Station name	pH		DO (mg/l)		BOD (mg/l)		FC (MPN/100ml)		FS (MPN/100ml)	
			2024	2025	2024	2025	2024	2025	2024	2025	2024	2025
1491	Uttarakhand	BAGIRATHI AT GANGOTRI	8.1	7.9	11.2	11.1	1	1	1.8	1.8	1.8	1.8
5451		RIVER MANDAKINI AT KEDARNATH	7.8	7.9	11.6	11.6	1	1	1.8	1.8	1.8	1.8
5452		RIVER ALAKNANDA AT BADRINATH	7.7	7.7	11.4	11.6	1	1	1.8	1.8	1.8	1.8
1485		MANDAKINI B/C ALAKNANDA, RUDRAPRAYAG	7.7	7.9	10.6	10.9	1.0	1	1.8	1.8	1.8	1.8
1484		ALAKNANDA B/C MANDAKINI, RUDRA PRAYAG	7.7	7.8	10.4	10.8	1.0	1	1.8	1.8	1.8	1.8
1486		ALKANANDA A/C MANDAKINI, RUDRAPRAYAG	7.8	8.0	10.5	10.8	1.0	1	1.8	1.8	1.8	1.8
1488		BHAGIRATHI B/C ALAKNANDA, DEVPRAYAG	7.6	8.0	10.3	10.6	1.0	1	1.8	1.8	1.8	1.8
1487		ALAKNANDA B/C BHAGIRATHI, DEVPRAYAG	7.8	7.9	10.2	10.5	1.0	1	1.8	1.8	1.8	1.8
1489		ALAKNANDA A/C BHAGIRATHI, DEVPRAYAG	7.9	8.0	10.2	10.5	1.0	1	1.8	1.8	1.8	1.8
5776		RIVER GANGA AT SWARG ASHRAM ,RISHIKESH	7.8	8.1	10.0	10.5	1.0	1	36.5	40	1.8	1.8
1060		U/S RISHIKESH	7.8	8.1	10.2	10.5	1.0	1	32	33	1.8	1.8
5777		RIVER GANGA NEAR VISTHAPHIT COLONY, RISHIKESH	7.8	7.9	9.4	10.3	1.0	1	40	40	1.8	1.8
10147		RISHIKESH D/S	7.6	7.9	9.9	10.5	1.0	1	33	33	1.8	1.8
2725		A/C SONG NEAR SATYARAYAN TEMPLE, D/S RAIWALA	8.0	7.9	8.6	9.4	1.4	1.2	49	110	4	11.5
10148		HARKI PAURI GHAT	7.7	8.0	8.6	9.6	1.2	2	79	135	7.8	11
3997		RIVER GANGA U/S AT BINDUGHAT, DUDHIYABAD, HARIDWAR	7.6	8.0	8.4	9.2	1.8	2	79	130	7.8	9.3
1061		HARIDWAR D/S	7.6	8.1	8.4	9.3	2.0	2.1	94	140	9.2	11.5
5778		RIVER GANGA NEAR BISHANPUR KUNDI, HARIDWAR	7.6	8.0	8.5	9.1	1.8	2.1	94	130	9.2	9.3
2727		ROORKEE D/S	7.4	8.1	8.6	9.3	2.0	2.2	94	170	12	14
10150	Uttar Pradesh	MADHYA GANGA BARRAGE (BIJNOR)	7.8	7.8	9.1	9.2	1.2	1.2	490	430	1.8	1.8
5707		RIVER GANGA AT NANDAUR- HASTINPUR BRIDGE NEAR HASTINPUR	7.3	7.3	9.0	8.8	1.4	1.7	610	680	-	-
5708		RIVER GANGA TIGRI GANGA GHAT, VILLAGE-TIGARI, AMROHA	7.8	7.8	8.9	9.0	1.3	1.35	700	460	1.8	1.8
10149		U/S BRIJGHAT, GARHMUKTESHWAR	7.4	7.5	10.6	10.2	2.2	2.2	350	350	170	150
1062		BRIJGHAT D/S, GHARMUKTESHWAR	7.4	7.6	10.5	10.0	2.4	2.4	540	540	230	220
2488		U/S ANOOPSHAHAR	7.2	7.3	8.7	8.3	2.0	1.8	415	540	-	-
2489		ANOOPSHAHAR D/S	7.2	7.3	8.8	8.5	1.8	1.85	350	680	-	-
1145		NARORA (BULANDSAHAR)	7.2	7.2	8.8	8.7	1.9	1.7	540	920	-	-
2490		KACHHLA GHAT (ALIGARH)	7.8	7.9	9.9	9.8	1.3	1.35	320	320	1.8	1.8
10151		FARRUKHABAD	8.3	8.4	8.0	8.3	3.2	3.1	1950	2300	3.35	3.6
1063		U/S KANNAUJ (RAJGHAT)	8.4	8.4	7.7	8.2	3.4	3.35	2600	2750	1.8	4.25
1066		KANNAUJ D/S	8.3	8.4	7.7	8.1	3.7	3.45	3100	3250	2.8	5

Station Code	State name	Station name	pH		DO (mg/l)		BOD (mg/l)		FC (MPN/100ml)		FS (MPN/100ml)	
			2024	2025	2024	2025	2024	2025	2024	2025	2024	2025
5709		RIVER GANGA NANAMAU GANGA BRIDGE, LUCKNOW MOHAN-HASANGANJ- RASULABAD MARG, KARTI AKBERPUR SENG	8.2	8.4	7.9	8.1	3.5	3.5	4100	2800	28	4.5
1146		BITHOOR (KANPUR)	8.4	8.4	8.0	8.2	3.3	3.4	3200	2700	25	2
1067		U/S KANPUR (RANIGHAT)	8.4	8.4	8.1	8.0	3.4	3.5	3300	3350	3.1	5.8
10154		U/s SHUKLAGANJ /BATHING GHAT (BHARAOGHAT)	8.4	8.4	7.9	7.9	3.5	3.6	3800	3450	52	6.45
10155		SHUKLAGANJ D/S	8.4	8.4	7.9	7.9	3.6	3.6	3500	3700	5.15	6.45
10156		BATHING GHAT (GOLA GHAT)	8.3	8.4	7.6	8.1	4.0	3.6	4000	3350	2.8	63
10157		BATHING GHAT (JAJMAU BRIDGE)	8.3	8.3	7.7	7.8	4.2	3.75	7450	4650	22	21.5
1068		KANPUR D/S (JAJMAU PUMPING STATION)/JANE VILL.	8.3	8.3	7.3	7.7	4.4	3.95	11500	46000	5.6	74.5
5710		RIVER GANGA PURANA RAJAPUR, RAJAPUR, KANPUR	8.3	8.4	7.6	8.0	3.8	3.55	6650	2650	7.2	6.65
5711		RIVER GANGA A/C PANDU RIVER AT MADEVESHWAR BABA TAMPLE DEOMAI	8.0	8.1	8.6	7.9	2.5	2.8	680	2200	-	-
5712		RIVER GANGA MATA GANGA BRIDGE , NH335, LALGANJ ROAD FATEHPUR		8.1		8.7		2.9		1100	-	13.5
1147		DALMAU (RAI BAREILLY)	8.1	8.1	8.5	8.4	3.0	3.05	1200	1150	14	17
2498		KALA KANKAR (PRATAPGARH)	8.2	8.1	8.6	8.6	2.9	2.95	1100	1100	13	14
2487		KADAGHAT (KAUSHAMBI)	8.1	8.1	8.5	8.1	2.8	2.65	680	2100		
5713		RIVER GANGA AT GANGA BRIDGE .NH19, DHEEMI	8.1	8.1	8.8	9.1	2.8	2.7	930	935	12	13
1046		PRAYAGRAJ (RASOOLABAD)	8.2	8.1	8.5	8.0	2.8	2.65	730	2000	-	-
1049		PRAYAGRAJ D/S (SANGAM)	8.1	8.1	8.3	7.8	2.8	2.8	915	2100	-	-
5714		RIVER GANGA B/C TAMSA RIVER AT PRACHIN SHIVALAYA DUMDUMA GHAT	8.0	8.1	8.5	8.0	2.7	2.6	610	2000	-	-
10158		A/C TAMAS RIVER (SIRSA)	8.0	8.1	8.3	8.1	2.8	2.6	680	1700	-	-
2485		U/S, VINDHYACHAL (MIRZAPUR)	8.1	8.2	7.8	7.9	2.5	2.6	745	840	460	630
2486		D/S, MIRZAPUR	7.7	7.9	7.1	7.2	3.5	3.65	8400	7900	3300	2700
10153		CHUNAR	7.9	8.0	7.5	7.5	3.2	3.3	5800	6300	2700	2300
1070		U/S VARANASI (VISHWA SUNDARI BRIDGE)	8.2	8.2	7.7	8.0	2.4	2.5	700	790	340	510
1071		VARANASI D/S (MALVIYA BRIDGE)	7.8	7.9	7.2	7.1	3.5	3.5	7900	7900	3200	6650
5715		RIVER GANGA B/C GOMTI RIVER AT BALUA GHAT BRIDGE, VARANASI	7.9	8.0	7.4	7.3	3.3	3.3	6050	7000	2950	3400
10152		A/C GOMTI RIVER (BHUSAULA)	7.9	8.0	7.5	7.5	3.1	3.2	4900	4900	2400	2600
5716		RIVER GANGA ZAMANIA GANGA BRIDGE , ZAMANIA UP	8.0	8.2	7.6	7.8	2.9	2.9	3800	4600	2000	2200
1073		TARIGHAT (GHAZIPUR)	7.8	7.8	7.0	7.2	3.7	3.65	9400	9400	4450	5800

Station Code	State name	Station name	pH		DO (mg/l)		BOD (mg/l)		FC (MPN/100ml)		FS (MPN/100ml)	
			2024	2025	2024	2025	2024	2025	2024	2025	2024	2025
5717		RIVER GANGA BALLIA D/S AT BEYASI BALLIA BRIDGE	-	8.0	-	7.5	-	3.2	-	4900	-	4900
1074	Bihar	BUXAR, CHAUSA KARMNASA	7.7	7.7	8.1	8.2	1.3	1.8	9450	1700	2	7.8
10113		U/S JAIL GHAT, BUXAR (A/C THORA RIVER)	7.7	7.6	7.8	8.0	1.5	1.5	13000	1700	23	4.5
2551		BUXAR, RAMREKHAGHAT	7.7	7.6	7.6	8.0	1.6	1.8	15000	1700	20	7.8
3113		BUXAR D/S, NEAR GANGA BRIDGE	7.7	7.6	8.0	8.2	1.3	1.4	7450	1200	2	4.5
10162		ARRAHCHAPRA ROAD BRIDGE (KOILWAR BARHARA-CHAPRA ROAD	7.7	7.7	7.9	8.2	1.3	1.5	2300	1100	2	4.5
2564		RIVER GANGA AT BALUGHAT, DORIGANJ, SARAN	7.8	7.6	7.5	7.8	1.7	1.5	13000	1300	33	4.5
10114		MAA AMBIKA ASTHAN, DORIGANJ D/S (SARAN)	7.5	7.5	7.6	7.9	1.7	1.5	15000	1550	23	4.25
3114		DANAPUR, NEAR PIPAPUL	7.5	7.8	7.4	7.9	1.3	1.5	4900	1300	2	4.5
1077		KURJI AT DIGHA GHAT, U/S PATNA	7.6	7.8	7.7	8.0	1.5	1.4	17000	1950	23	7.3
2552		NIT GHANDHI GHAT (PATNA)	7.6	7.7	7.6	7.7	2.0	1.7	35000	2200	94	4.5
10115		GULBI GHAT (PATNA)	7.6	7.7	7.3	7.6	1.9	1.55	24000	2200	49	7.8
1079		PATNA D/S (GANGA BRIDGE)	7.6	7.8	7.4	7.7	2.0	1.65	17000	1950	23	12
3122		MALSALAMI (PATNA)	7.6	7.7	7.5	7.7	1.4	1.55	13000	2400	2	7.8
4297		GANGA AT KACHCHIDARGAHBIDUPUR ROAD BRIDGE, PAT	7.6	7.9	7.6	7.9	1.5	1.45	13000	2050	7.5	8.55
10122		TRIVENI GHAT, B/c OF RIVER PUNPUN	7.6	7.8	7.5	7.8	1.8	1.65	11000	1500	23	7.3
2553		FATUHA, A/c OF RIVER PUNPUN	7.7	7.7	7.3	7.5	1.7	1.6	24000	1700	49	7.8
4301		BAKHYIYARPURTAJPUR BRIDGE ON GANGA, ATHMAGOLA, PAT	7.7	7.7	8.2	8.1	1.3	1.55	7900	2200	2	6.15
3115		BARH, NEAR UMANATH TEMPLE	7.7	7.7	7.9	7.9	1.5	1.45	13000	1550	23	12
10130		U/S OF M/S NTPC, BARH WATER INTAKE POINT, BARH	7.6	7.7	7.8	8.0	1.4	1.65	13000	1300	2	7.8
10131		D/S OF M/S NTPC, BARH WATER INTAKE POINT, BINDTOLA, BARH	7.7	7.8	7.4	8.0	1.6	1.5	13000	2200	23	4.5
1817		U/S MOKAMA	7.7	7.7	8.0	8.1	1.5	1.5	15000	1500	23	6.15
1815		MOKAMA D/S (D/S RAJENDRA BRIDGE)	7.5	7.7	7.4	7.8	1.4	1.5	17000	1500	23	7.3
3123		BARAHIA	7.7	7.8	8.0	8.1	1.1	1.4	13000	1500	2	5.65
3116		U/S MUNGER	7.6	7.7	7.8	8.0	1.4	1.45	7900	3150	2	4.5
1818		MUNGER D/S	7.5	7.6	7.5	7.9	1.6	1.6	13000	1950	2	7.8
3117		U/S SULTANGANJ	7.5	7.5	7.8	8.0	1.3	1.6	7900	2400	2	4.5
2554		SULTANGANJ (BHAGALPUR)	7.5	7.5	7.9	8.0	1.5	1.4	12000	1700	9.5	4.5
4398		WATER INTAKE POINT, BHAGALPUR	7.4	7.5	7.5	7.5	1.6	1.45	17000	2400	23	6.8
10138		CHAMPANAGAR	7.5	7.6	7.7	7.8	1.7	1.55	3300	1550	2	6.15
1819		BHAGALPUR	7.5	7.6	7.8	8.0	1.5	1.4	13000	1800	2	9.4
3118		D/S BHAGALPUR	7.5	7.6	7.4	7.6	1.4	1.65	26000	2200	49	6.8
1816		KAHALGAON	7.5	7.6	7.8	8.2	1.4	1.7	9450	1700	2	4.5
10143		KAHALGAON D/S, NEAR CREMATION GHAT	7.6	7.6	7.6	8.0	1.5	1.6	12000	2200	2	4.5
10144	Jharkhand	U/S NEARA LCT GHAT	7.6	7.5	7.3	7.4	1.2	1.3	17	94	9	4.5

Station Code	State name	Station name	pH		DO (mg/l)		BOD (mg/l)		FC (MPN/100ml)		FS (MPN/100ml)	
			2024	2025	2024	2025	2024	2025	2024	2025	2024	2025
10145		NEAR JANTA GHAT D/S	7.5	7.5	7.3	7.3	1.2	1.3	17	170	11	6.1
1059		RAJMAHAL	7.5	7.4	7.4	7.4	1.2	1.2	21	94	11	6.1
10146		SANGI DALAN	7.6	7.5	7.3	7.2	1.2	1.2	21	120	9	7.8
5162	West Bengal	RIVER GANGA AT FARAKKA, MUSHIDABAD	7.3	7.2	6.9	7.5	2.6	2.4	490	700	33	110
10159		KHAGRA, BEHARAMPORE	7.3	7.2	7.1	7.4	2.3	2.05	790	1200	59.5	130
1080		BEHARAMPORE	7.4	7.2	7.0	7.3	2.2	2.15	3500	5950	460	475
10160		GORABAZAR, BEHRAMPORE	7.3	7.2	7.0	7.5	2.3	2.1	2200	4900	310	460
2511		NABADIP,GHOSHPARA NEAR MONIPURGHAT	7.4	7.2	7.3	7.2	2.4	2.65	1100	1550	86.5	230
2506		TRIBENI, NEAR BURNING GHAT	7.3	7.2	7.1	7.1	2.6	2.6	930	1300	79	230
10161		SHITALATALA, PALTA	7.3	7.2	6.9	7.0	2.6	2.7	2400	5150	330	380
1054		PALTA	7.3	7.2	6.7	7.2	2.5	2.7	3500	7000	380	460
1472		SERAMPORE	7.3	7.2	6.7	7.3	2.6	2.7	11000	23000	790	1300
1053		DAKSHINESHWAR	7.3	7.4	5.8	5.9	2.7	2.65	33000	40000	1100	1950
1470		GARDEN REACH	7.3	7.3	5.4	5.8	2.8	2.8	49000	33000	1200	2400
1471		SHIVPUR (HOWRAH)	7.2	7.3	5.5	5.7	2.8	2.7	29500	21000	890	1700
1052		ULUBERIA	7.3	7.2	5.5	5.7	2.7	2.7	11000	3900	465	475
1469		DIAMOND HARBOUR	7.3	7.3	5.9	5.9	2.6	2.5	1300	1700	185	270
1335		GANGA AT PATIKALI NEAR DURGA CHAK	7.9	7.9	5.8	6.3	1.6	1.8	10200	10200	460	490

Status of water quality of River Yamuna during 2025 (Jan-Dec):

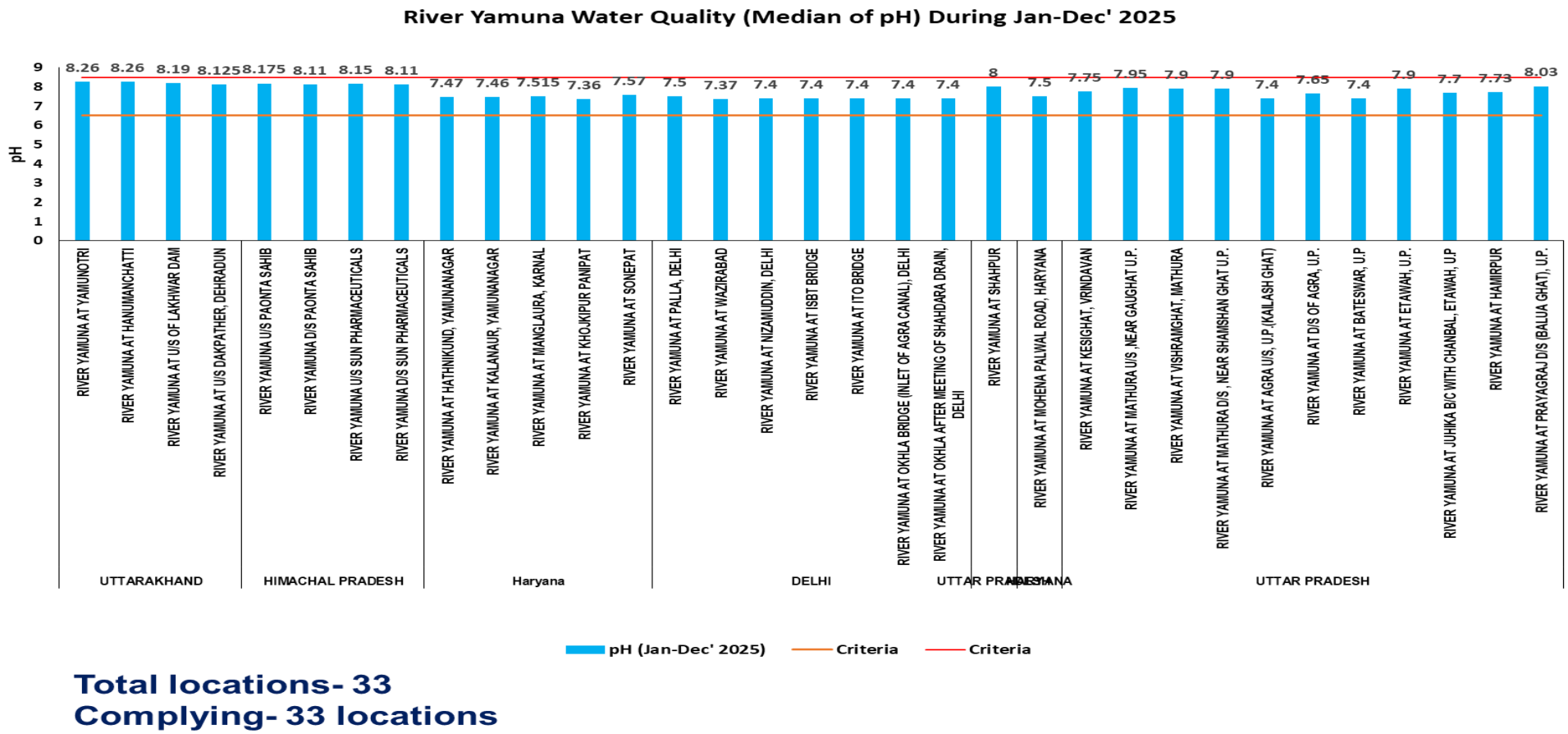


Figure 1. Variation of pH in river Yamuna

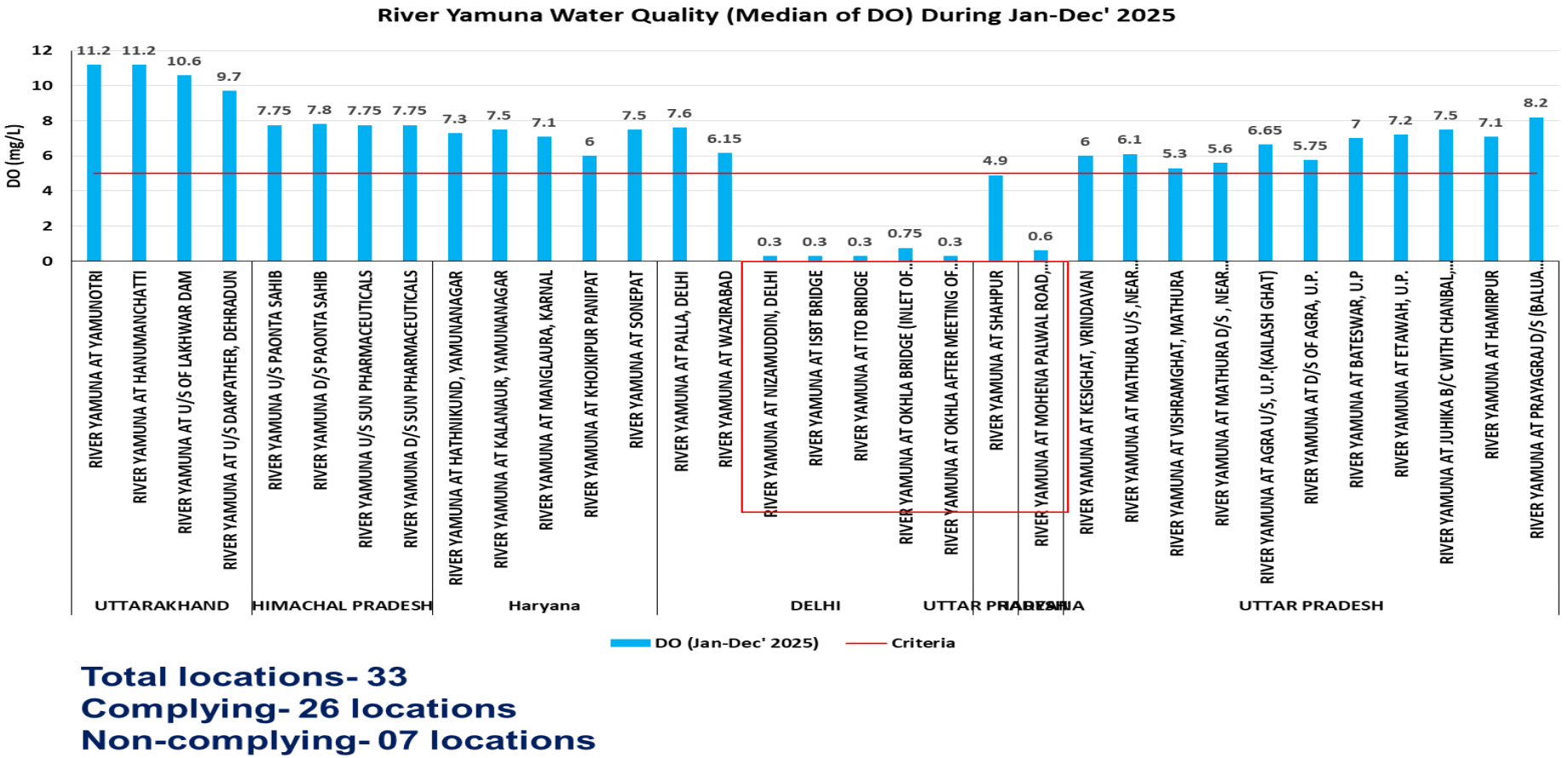
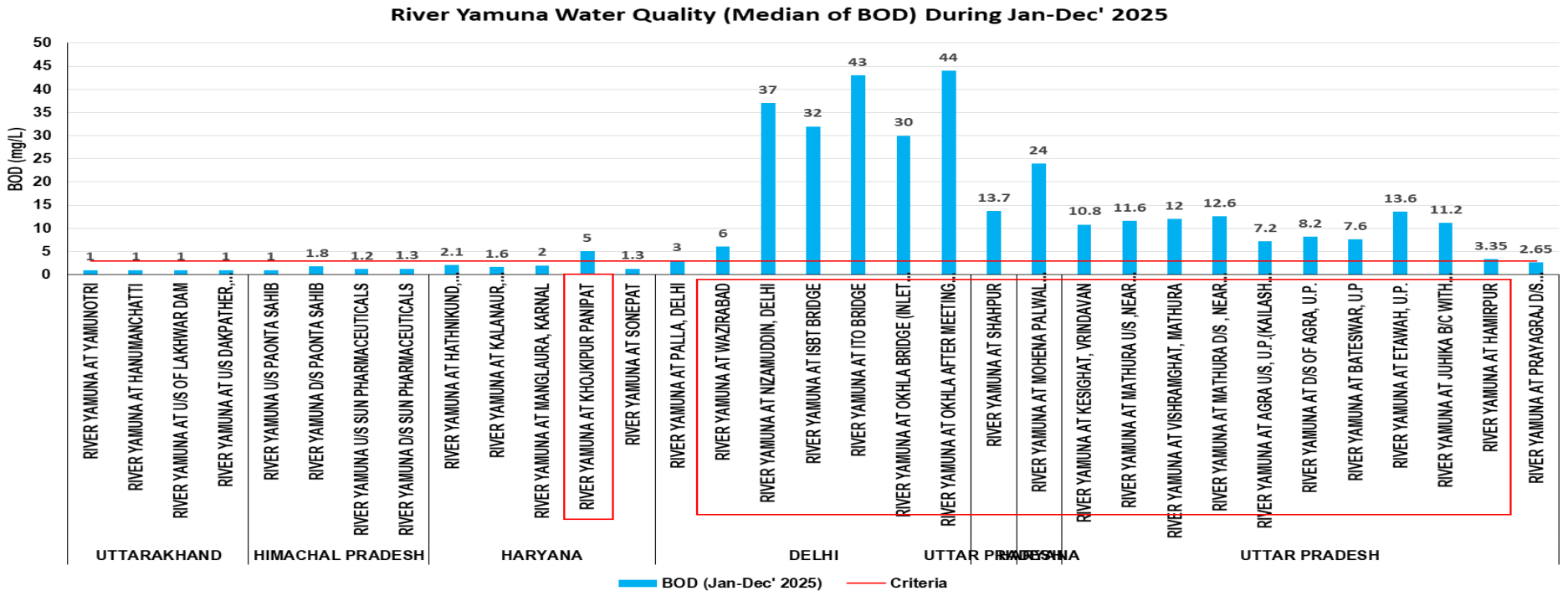


Figure 2. Variation of DO in river Yamuna



Total locations- 33
Complying- 14 locations
Non-Complying- 19 locations

Figure 3. Variation of BOD in river Yamuna

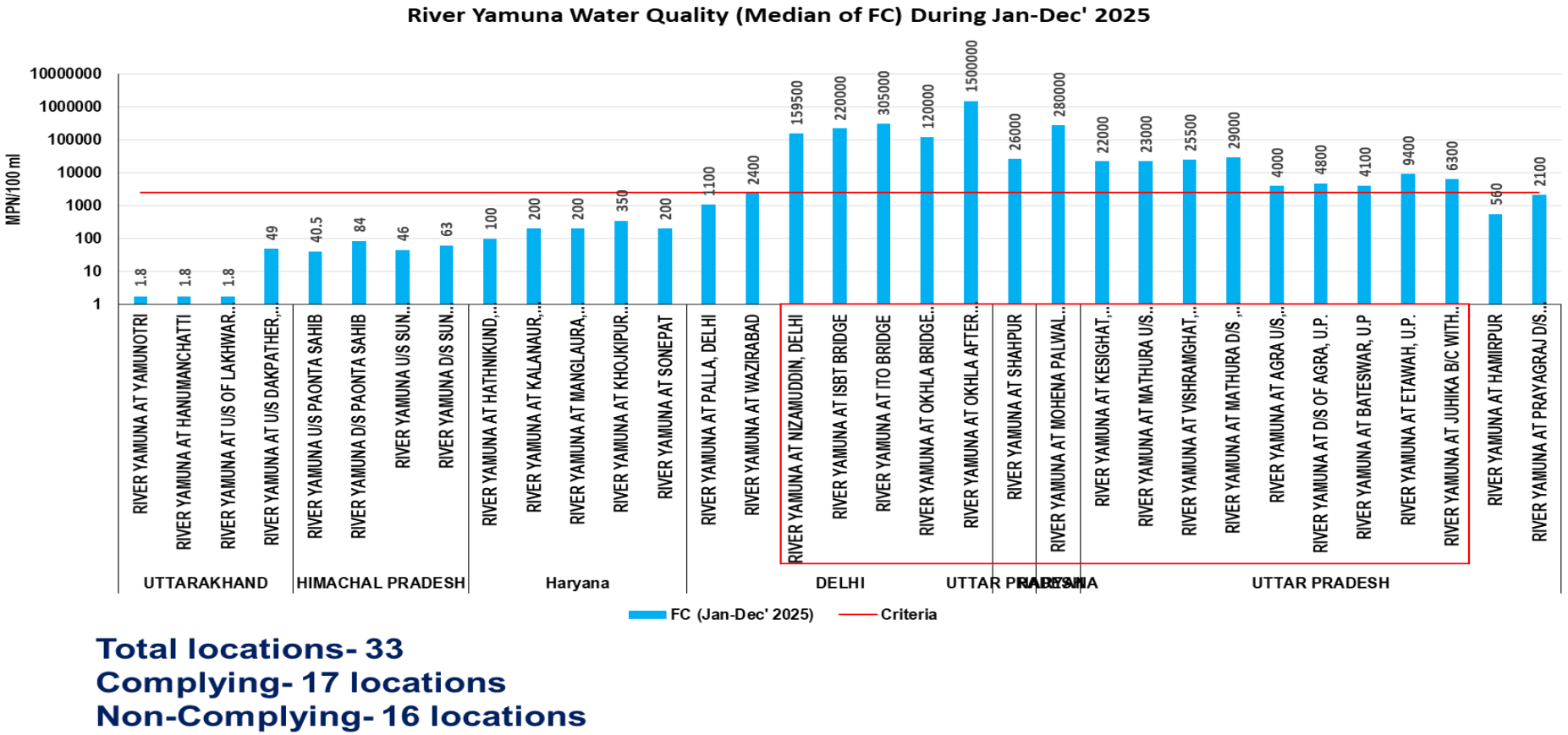
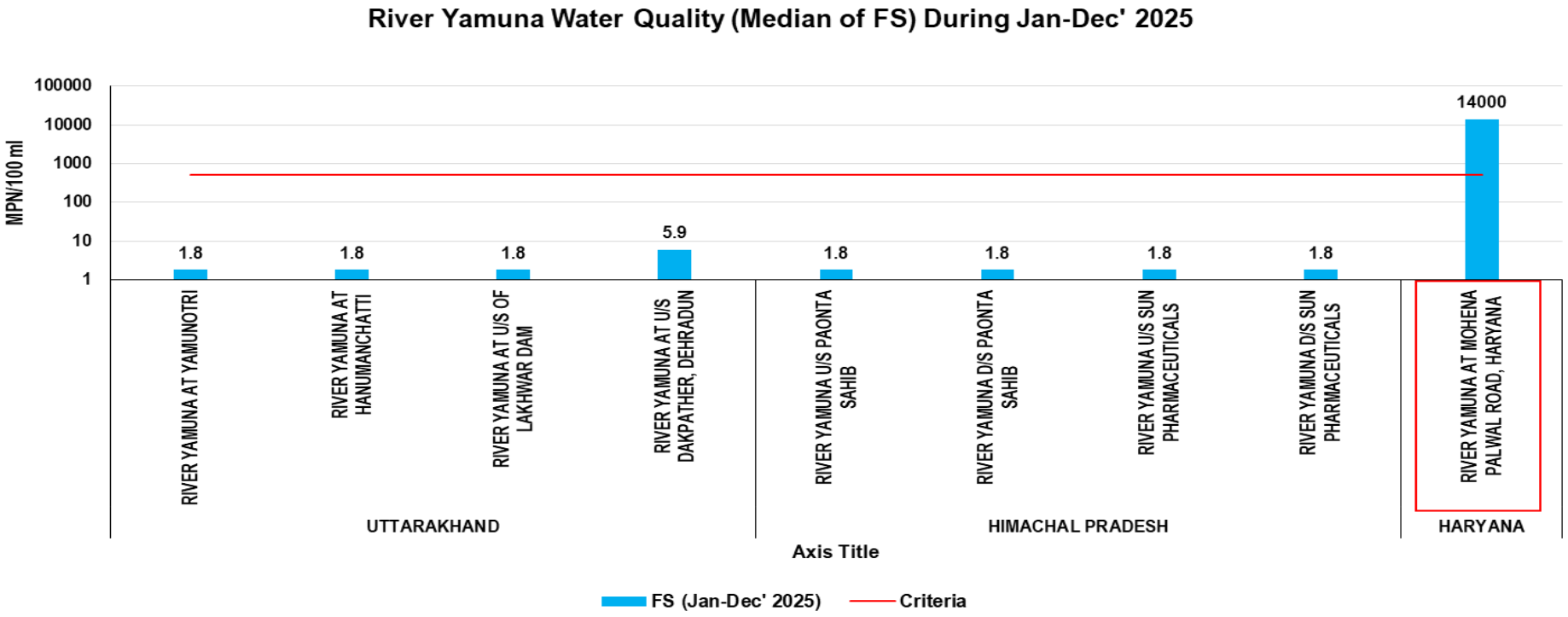


Figure 4. Variation of FC in river Yamuna



Total locations- 09
Complying- 8 locations
Non-Complying- 01 locations

Figure 5. Variation of FS in river Yamuna

Water quality of river Yamuna January to December, 2025 (Median values)

Station code	State name	Station name	pH	DO (mg/L)	BOD (mg/L)	FC (MPN/100ml)
1492	UTTARAKHAND	RIVER YAMUNA AT YAMUNOTRI	8.26	11.2	1	1.8
1493		RIVER YAMUNA AT HANUMANCHATTI	8.26	11.2	1	1.8
1494		RIVER YAMUNA AT U/S OF LAKHWAR DAM	8.19	10.6	1	1.8
1490		RIVER YAMUNA AT U/S DAKPATHER, DEHRADUN	8.125	9.7	1	49
1553	HIMACHAL PRADESH	RIVER YAMUNA U/S PAONTA SAHIB	8.175	7.75	1	40.5
1554		RIVER YAMUNA D/S PAONTA SAHIB	8.11	7.8	1.8	84
4439		RIVER YAMUNA U/S SUN PHARMACEUTICALS	8.15	7.75	1.2	46
4440		RIVER YAMUNA D/S SUN PHARMACEUTICALS	8.11	7.75	1.3	63
1117	Haryana	RIVER YAMUNA AT HATHNIKUND, YAMUNANAGAR	7.47	7.3	2.1	100
1496		RIVER YAMUNA AT KALANAUR, YAMUNANAGAR	7.46	7.5	1.6	200
4914		RIVER YAMUNA AT MANGLAURA, KARNAL	7.515	7.1	2	200
10004		RIVER YAMUNA AT KHOJKIPUR PANIPAT	7.36	6	5	350
1119		RIVER YAMUNA AT SONEPAT	7.57	7.5	1.3	200
1120	DELHI	RIVER YAMUNA AT PALLA, DELHI	7.5	7.6	3	1100
5098		RIVER YAMUNA AT WAZIRABAD	7.37	6.15	6	2400
1121		RIVER YAMUNA AT NIZAMUDDIN, DELHI	7.4	0.3	37	159500
5099		RIVER YAMUNA AT ISBT BRIDGE	7.4	0.3	32	220000
5100		RIVER YAMUNA AT ITO BRIDGE	7.4	0.3	43	305000
1375		RIVER YAMUNA AT OKHLA BRIDGE (INLET OF AGRA CANAL), DELHI	7.4	0.75	30	120000
1812		RIVER YAMUNA AT OKHLA AFTER MEETING OF SHAHDARA DRAIN, DELHI	7.4	0.3	44	1500000
2493	UTTAR PRADESH	RIVER YAMUNA AT SHAHPUR	8	4.9	13.7	26000
30024	HARYANA	RIVER YAMUNA AT MOHENA PALWAL ROAD, HARYANA	7.5	0.6	24	280000
2495	UTTAR PRADESH	RIVER YAMUNA AT KESIGHAT, VRINDAVAN	7.75	6	10.8	22000
1123		RIVER YAMUNA AT MATHURA U/S ,NEAR GAUGHAT U.P.	7.95	6.1	11.6	23000
2494		RIVER YAMUNA AT VISHRAMGHAT, MATHURA	7.9	5.3	12	25500
1124		RIVER YAMUNA AT MATHURA D/S , NEAR SHAMSHAN GHAT U.P.	7.9	5.6	12.6	29000
1125		RIVER YAMUNA AT AGRA U/S, U.P.(KAILASH GHAT)	7.4	6.65	7.2	4000
1126		RIVER YAMUNA AT D/S OF AGRA, U.P.	7.65	5.75	8.2	4800
1498		RIVER YAMUNA AT BATESWAR, U.P	7.4	7	7.6	4100
1127		RIVER YAMUNA AT ETAWAH, U.P.	7.9	7.2	13.6	9400
1499		RIVER YAMUNA AT JUHIKA B/C WITH CHANBAL, ETAWAH, U.P	7.7	7.5	11.2	6300
2283		RIVER YAMUNA AT HAMIRPUR	7.73	7.1	3.35	560
1069		RIVER YAMUNA AT PRAYAGRAJ D/S (BALUA GHAT), U.P.	8.03	8.2	2.65	2100

Appendix 5.4

List of 40 RTWQM STATIONS								
S.No.	**State**	**District**	**No**	**Location**	**River**	**Latitude**	**Longitude**	**Type**
1	Uttarakhand	Rudraprayag	5	Abandoned old bridge	Ganga (Alakananda)	30.2740	78.9610	Fixed
2		Tehri Garhwal		D/s of Srinagar, Kirtinagar (At ghat)	Ganga (Alakananda)	30.2140	78.7464	Fixed
3		Tehri		D/s of Tehri Dam	Ganga (Alakananda)	30.3719	78.4777	Fixed
4		Dehradun		Distributing Canal, Left Bank, Rishikesh	Ganga	30.0741	78.2903	Fixed
5		Haridwar		D/s of Har Ki Pauri, Dam Kothi, Haridwar	Ganga	29.9423	78.1569	Fixed
6	Haryana	Sonipat	1	D/s of Mohana, Sonipat	Yamuna	28.9870	77.2018	Floating
7	Uttar Pradesh	Baghpat	15	Barnawa, Bagpat (Nearly 100 meters from bridge)	Hindon	29.1142	77.4407	Fixed
8		Rampur		River Kosi, D/s of Kashipur, Darhiyal	Kosi	29.0528	79.0196	Floating
9		Budaun		Dandi Village, Near Beladandi Bridge on River Ram Ganga, Budaun.	Ramganga	28.0277	79.4905	Floating
10		Meerut		D/s Meerut city, Kaul village (Nearly 100 meters from bridge)	Kali (East)	28.8606	77.7956	Fixed
11		Mathura		Upstream of Gokul Barrage, D/s of Mathura city	Yamuna	27.4474	77.7135	Fixed
12		Ghaziabad		Road Bridge on Hindon river, Rajnagar Extension	Hindon	28.6856	77.3920	Fixed
13		Bulandshahar		D/s of Bulandshahr (Nearly 400 meters from bridge)	Kali (East)	28.3971	77.8630	Fixed
14		Auraiya		Marhapur, Auraiya	Yamuna	26.4088	79.4909	Floating
15		Mirzapur		Balu ghat bridge, Chunar	Ganga	25.1316	82.8784	Floating
16		Pratapgarh		Kheerveer Bridge, Kishundaspur Road, Pratapgarh	Sai	25.9191	82.0263	Fixed
17		Fatehpur		Mawai Dham, Amauli, Fatehpur	Yamuna	25.9114	80.2896	Floating
18		Fatehpur		Korra Kanak, Asothar, Fatehpur.	Yumuna	25.7800	80.5778	Floating
19		Prayagraj		Fafamau, Lord Curzon Bridge, Allahabad	Ganga	25.5075	81.8658	Floating
20		Prayagraj		U/s to Sangam at Allahabad	Yamuna	25.4281	81.8558	Floating
21		Ghazipur		D/s of Ghazipur, Abdul Hameed Setu on River Ganga	Ganga	25.5884	83.6065	Fixed
22	Bihar	Buxar	10	Chausa, U/s of Buxar (150 Meters Distance)	Ganga	25.5193	83.9007	Floating
23		Saran		Bridge on River Gaghra near Manjhi, Chappra	Ghaghara	25.8232	84.5858	Fixed
24		Saran		Road Bridge on Gandak, Hajipur	Gandak	25.6997	85.1937	Floating
25		Patna		New Bridge, U/s of Patna city, Khurji	Ganga	25.6533	85.0952	Floating
26		Katihar		Road bridge on Kosi, Kursela	Koshi	25.4238	87.2336	Floating
27		Patna		Road bridge at Fathua on Punpun, Patna	Punpun	25.5152	85.2993	Floating
28		Bhojpur		Road bridge on Son, Arrah	Sone	25.5672	84.7961	Floating
29		Bhagalpur		D/s of Bhagalpur, Road Bridge on River Ganga	Ganga	25.2991	87. 0268	Fixed
30		Buxar		Road bridge on River Ganga, D/s of Buxar	Ganga	25.5918	83.9861	Floating
31		Khagaria		Road bridge on Burhi Gandak, Khagaria	Burhi Gandak	25.5010	86.4812	Floating
32	Jharkhand	Dhanbad	3	Birsa Pool, Damodar River Bank, Pathardih	Damodar	23.6670	86.4110	Floating
33		Saheb Ganj		Saheb Ganj	Ganga	25.2489	87.6417	Floating
34		Saheb Ganj		Raajmahal at Malgodam	Ganga	25.0546	87.8381	Fixed
35	West Bengal	Purulia	6	Raghunathpur Thermal power plant Intake well. Salchura. Panchet Reservoir	Damodar	23.6771	86.7425	Fixed
36		Nadia		Nabadwip Bathing Ghat	Ganga (Hooghly)	23.3960	88.3626	Floating
37		Hooghly		Chinsura, Near Hooghly, Road Bridge (Intake well structure)	Ganga (Hooghly)	22.9068	88.4039	Fixed
38		Bardhhaman		Durgapur barrage, Road Bridge	Damodar	23.4801	87.3049	Fixed
39		Ramgarh		Damodar river Intake well pump house at Ramgarh city road	Damodar	23.6468	85.5267	Floating
40		Murshidabad		Farakka Barrage, Road Bridge	Ganga	24.8010	87.9220	Fixed

Appendix 5.5

Bio-monitoring locations of River Ganga

S. No.	Location	State	Latitude	Longitude
1.	Gangotri	Uttarakhand	30.993590	78.945850
2.	Harsil		31.035400	78.751000
3.	Uttarkashi U/S		30.755791	78.464005
4.	Uttarkashi D/S		30.737000	78.352000
5.	Haridwar Barrage		29.971247	78.184200
6.	Jagjeetpur U/S		29.899040	78.141413
7.	Jagjeetpur D/S		29.878530	78.144199
8.	Madhya Ganga Barrage	Uttar Pradesh	29.373889	78.040833
9.	Anupshahr		28.365340	78.278355
10.	Narora Barrage		28.194925	78.403008
11.	Kacchla Ghat, Badaun		27.930736	78.857806
12.	Panchal Ghat, Farrukhabad		27.398415	79.62751
13.	Kannauj D/S		27.010681	79.986332
14.	Bithoor		26.616412	80.273932
15.	Ganga Barrage U/S Kanpur		26.507240	80.317450
16.	Shukla Ganj, Kanpur		26.467560	80.374147
17.	Jajmau, Kanpur		26.432500	80.417777
18.	Deorighat, Kanpur		26.378141	80.490793
19.	Asni Village, Fatehpur		26.057378	80.906673
20.	Bridge on GT Road, Prayagraj		25.437923	81.885484
21.	Prayagraj D/S		25.345649	81.921228
22.	Sirsa, Tamas D/S		25.267700	82.093031
23.	Varanasi U/S		25.255740	83.027717
24.	Varanasi D/S		25.322414	83.034520
25.	Rajwari A/C Gomti		25.537372	83.199939
26.	Buxer U/S	Bihar	25.520400	83.900200
27.	Buxer D/S		25.591800	83.986100
28.	Digha Ghat		25.653310	85.093393
29.	Gandhi Ghat		25.622066	85.171140
30.	Malsalami		25.595747	85.244144
31.	Fatuha		25.509544	85.318221
32.	Sahebganj	Jharkhand	25.248827	87.642486
33.	Rajamahal		25.055257	87.836678
34.	Murshidabad	West Bengal	24.482660	88.056343
35.	Beharampore U/S		24.099475	88.245433
36.	Behrampore D/S		24.062227	88.228161
37.	Srirampore D/S		22.719290	88.364127
38.	Khardakhal D/S		22.722777	88.362222
39.	Ballykhal		22.653221	88.350386
40.	Belgharia		22.670503	88.360044
41.	Howrah Bridge		22.582878	88.348287
42.	Garden Reach		22.551500	88.286244

U/s - Upstream, D/s - Downstream, A/c - After confluence

Appendix 5.6

Bio-monitoring locations of River Yamuna

S. No.	Location	State	Latitude	Longitude
1.	Yamunotri	Uttarakhand	30.998920	78.461917
2.	Syana Chatti		30.905846	78.360220
3.	Dak Pathar B/C		30.504813	77.816621
4.	Dak Pathar A/C		30.498180	77.804000
5.	Paonta Sahib	Himachal Pradesh	30.431554	77.615697
6.	Hathni Kund	Haryana	30.352735	77.595233
7.	Kalanaur		30.067020	77.353307
8.	Panipat U/S		29.385580	77.148696
9.	Panipat D/S		29.254270	77.131625
10.	Sonepat		28.983940	77.200270
11.	Palla	Delhi	28.841447	77.216713
12.	Nizamuddin		28.592880	77.273044
13.	Okhla D/S		28.533295	77.330724
14.	Palwal	Haryana	28.655498	77.294873
15.	Mathura U/S	Uttar Pradesh	27.566949	77.710498
16.	Mathura D/S		27.456360	77.713451
17.	Agra U/S		27.250489	77.861338
18.	Agra D/S		27.179355	78.117263
19.	Bateshwar		26.934660	78.542110
20.	Etawah		26.753720	79.019147
21.	Auraiya		26.427950	79.480519
22.	Hamirpur		25.958850	80.160884
23.	Pateora Danda		25.918600	80.222530
24.	Chilla ghat		25.771905	80.524065
25.	Benda ghat		25.708880	80.605040
26.	Prayagraj B/C River Ganga		25.423350	81.879813

U/s - Upstream, D/s - Downstream, B/C - Before confluence, A/C - After Confluence

Appendix 5.7

Bio-monitoring locations of tributaries of River Ganga

S. No.	Location	Latitude	Longitude
Uttar Pradesh			
1.	River Saloni, Muzaffarnagar	29.491350	77.990090
2.	River Ramganga, Moradabad	28.554944	79.049684
3.	River Kali, Khudaganj	27.177257	79.676694
4.	River Ramganga, Farrukhabad	27.497972	79.696139
5.	River Pandu, Kanpur	26.370381	80.307146
6.	River Varuna, Varanasi	25.341712	83.023748
7.	River Gomti, Varanasi	25.506829	83.140385
West Bengal			
8.	River Falgu	24.504618	88.031789

Bio-monitoring locations of tributaries of river Yamuna

S. No.	Code	Location	Latitude	Longitude
Uttarakhand				
1.	Hanuman Ganga	RY-HG	30.932515	78.3995
2.	River Tons	RT-B/C	30.516215	77.81899
3.	River Asan	RA-B/C	30.430486	77.678996
Himachal Pradesh				
4.	River Bata	RB-B/C	30.429266	77.57831
Delhi				
5.	River Hindon	RH	28.603390	77.424610
Uttar Pradesh				
6.	River Chambal	RC-UD	26.699881	78.936292
7.	River Betwa	RB-HP	25.944834	80.155843
8.	River Ken	RK-CG	25.77278	80.53251

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