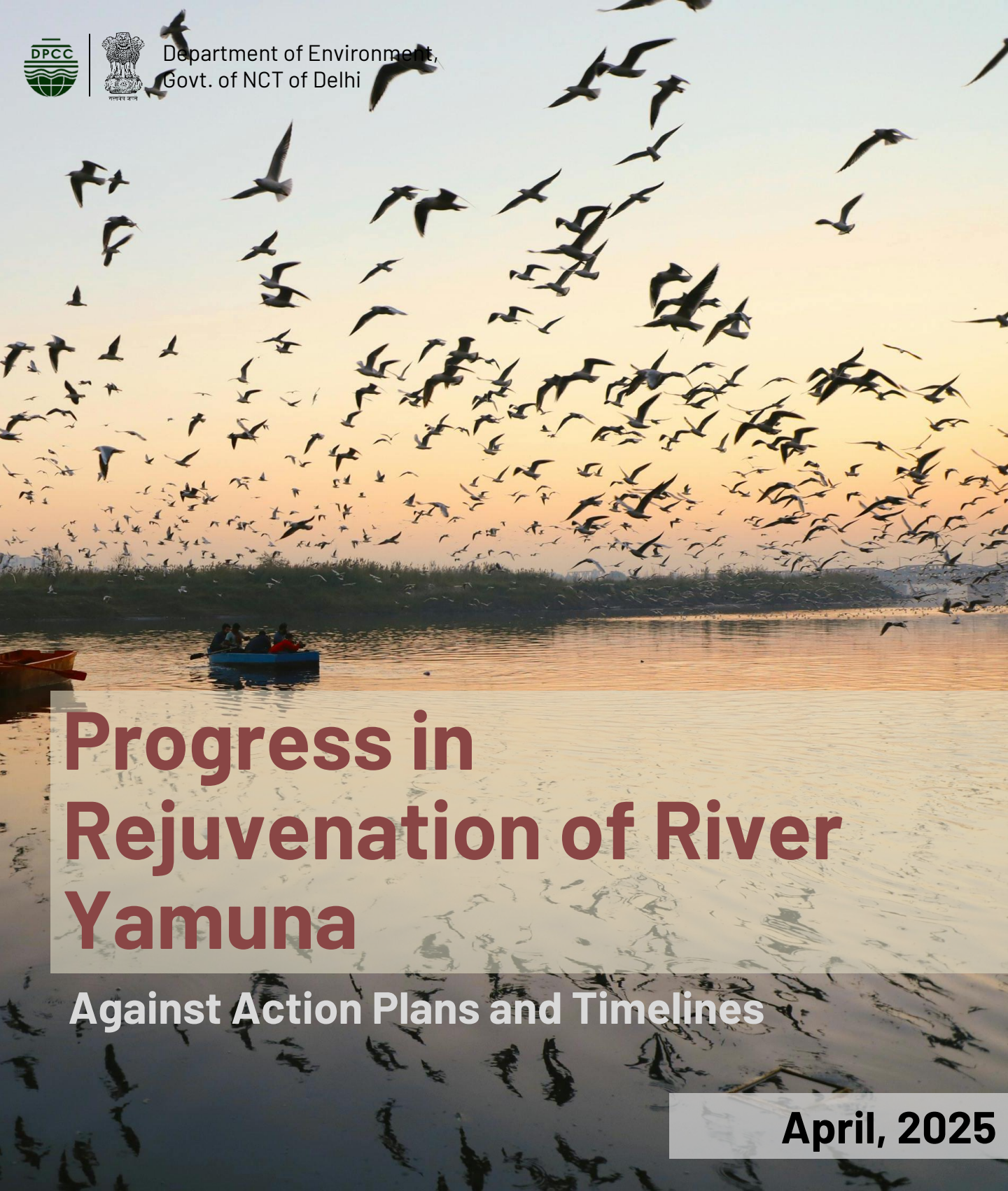




Department of Environment,
Govt. of NCT of Delhi

A large flock of birds, likely migratory waterfowl, is captured in flight over a wide river. The sky is a warm, golden-orange color, suggesting a sunset or sunrise. In the foreground, a small blue boat with several people inside is visible on the water. The overall scene conveys a sense of natural beauty and environmental health.

Progress in Rejuvenation of River Yamuna

Against Action Plans and Timelines

April, 2025



Outline

1. Water Quality Monitoring by DPCC
2. Water Quality of Drains
3. Water Quality of Sewage Treatment Plants
4. Water Quality of Common Effluent Treatment Plants
5. Improvement of Water Quality in Yamuna
6. Action Plan for Rejuvenation of River Yamuna

Water Quality Monitoring

By DPCC





01 Water Quality Monitoring by DPCC

Compliances with prescribed standards



River Yamuna

At 8 locations



22 Drains

Outfalling into
River Yamuna



37 STPs

(Operational)
At 20 locations



13 CETPs

(Operational)

1.1 Water Quality of River Yamuna

Parameters as per Hon'ble National Green Tribunal

As per the directions of Hon'ble NGT, the three parameters to be considered for determining the water quality of River Yamuna are Dissolved Oxygen (DO), Biochemical Oxygen Demand (BOD), and Faecal Coliform (FC).



Dissolved Oxygen

DO is the amount of oxygen available in dissolved form. Fishes can survive at or above DO of 4mg/l

Standards (≥ 5 mg/l): More DO is good



Biochemical Oxygen Demand

BOD is amount of DO required by aerobic microorganisms to decompose organic material present in a water body.

Standards (≤ 3 mg/l) : Less BOD is good



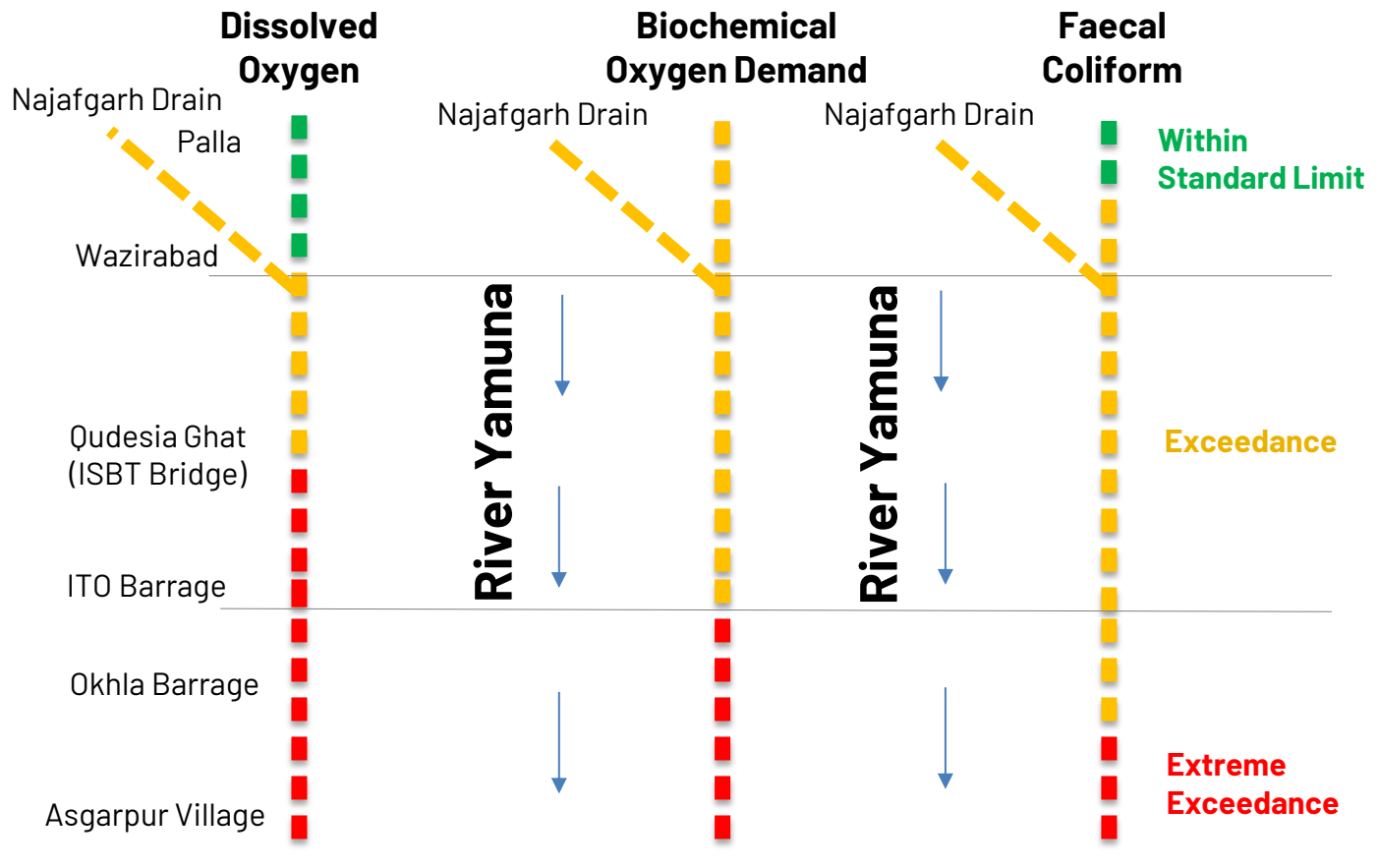
Faecal Coliform

Faecal Coliforms are a group of bacteria present in faeces of humans / homeotherms indicating discharge of untreated sewage in a water body.

Standards: (≤ 500 MPN/100 ml - Desirable | ≤ 2500 MPN/100 ml - Maximum permissible): Less Faecal Coliform is good

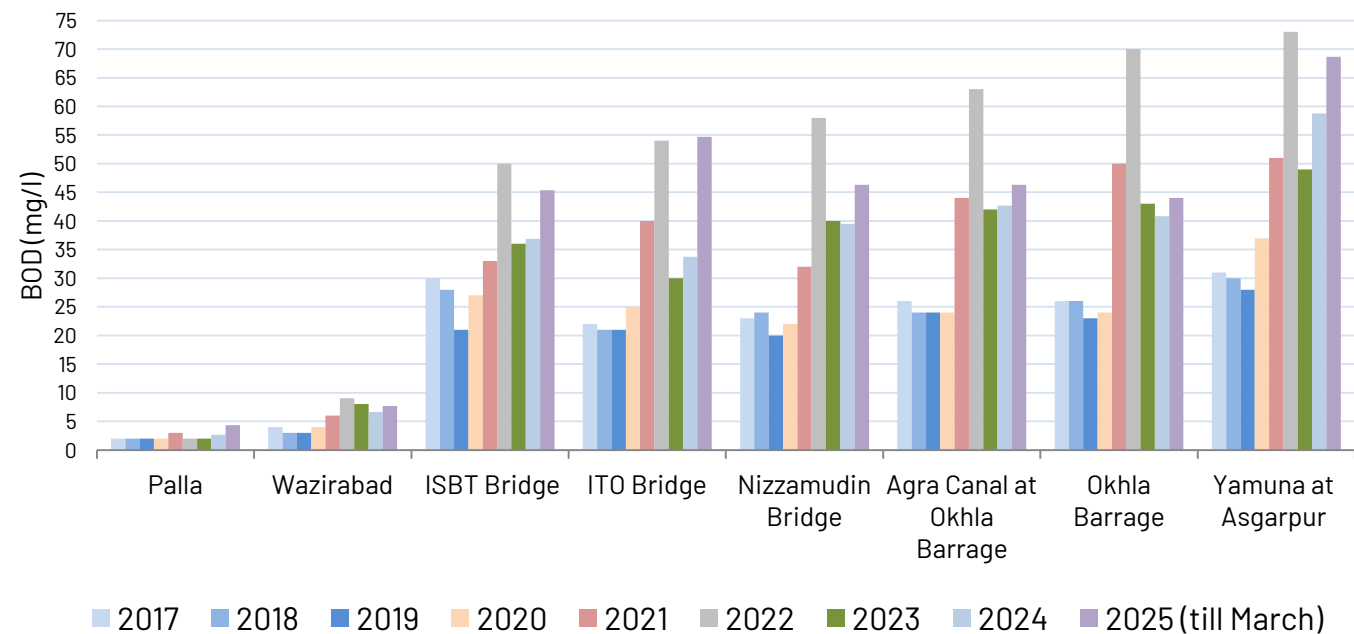
02 Parameters as per Hon'ble National Green Tribunal

Water Quality of River Yamuna



1.3

Water Quality of River Yamuna Annual Average

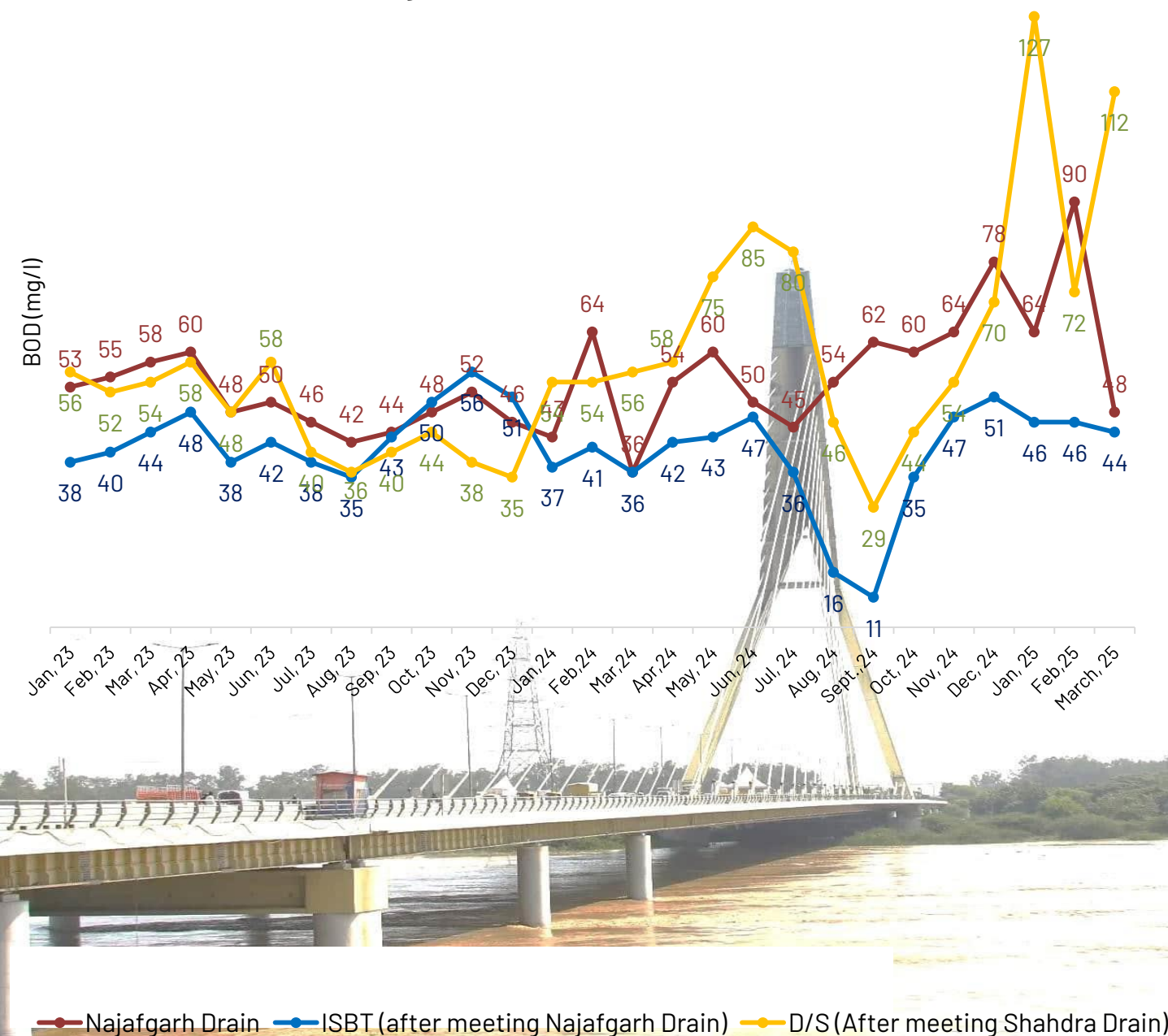


Haryana  U.P.



1.4 Monthly Average Water Quality of River Yamuna

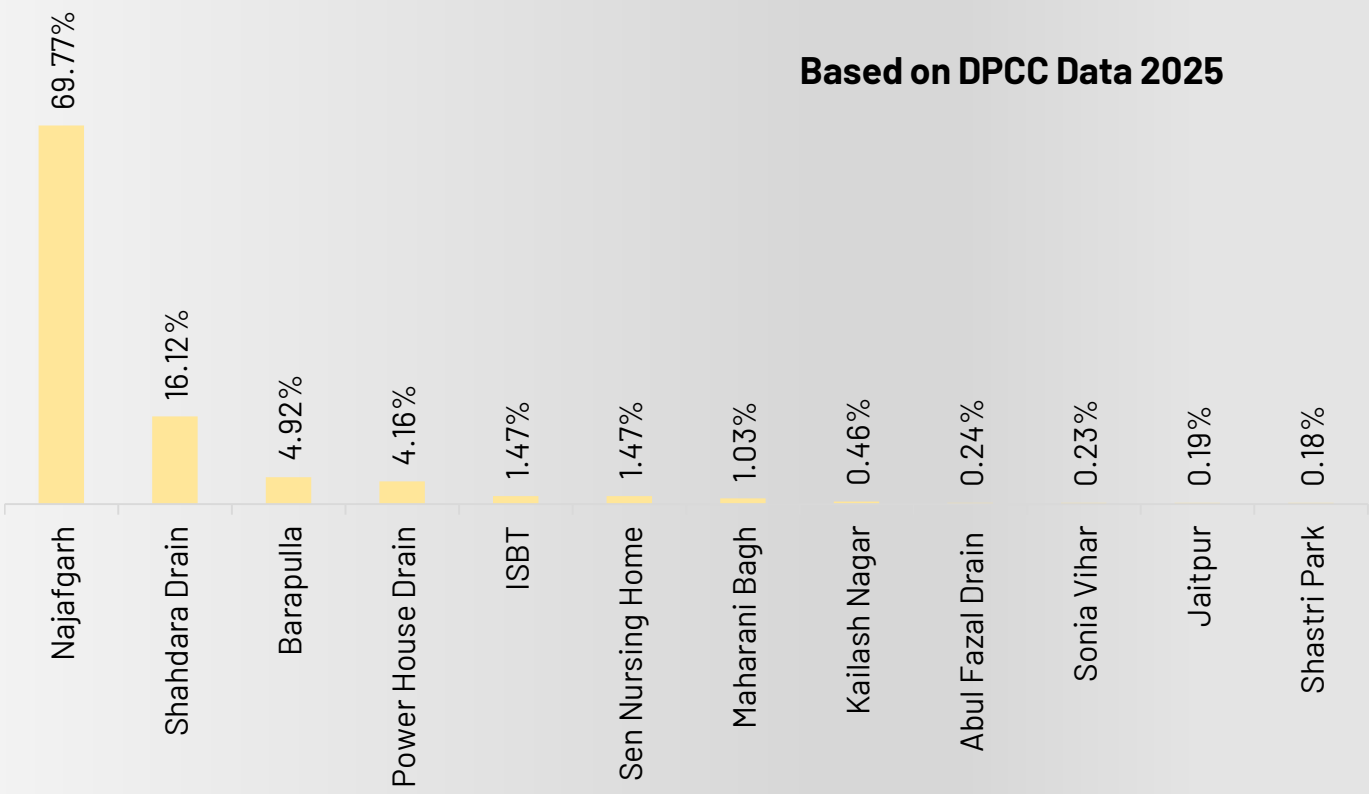
BOD variation : (January, 2023 to March, 2025)



Water Quality of Drains

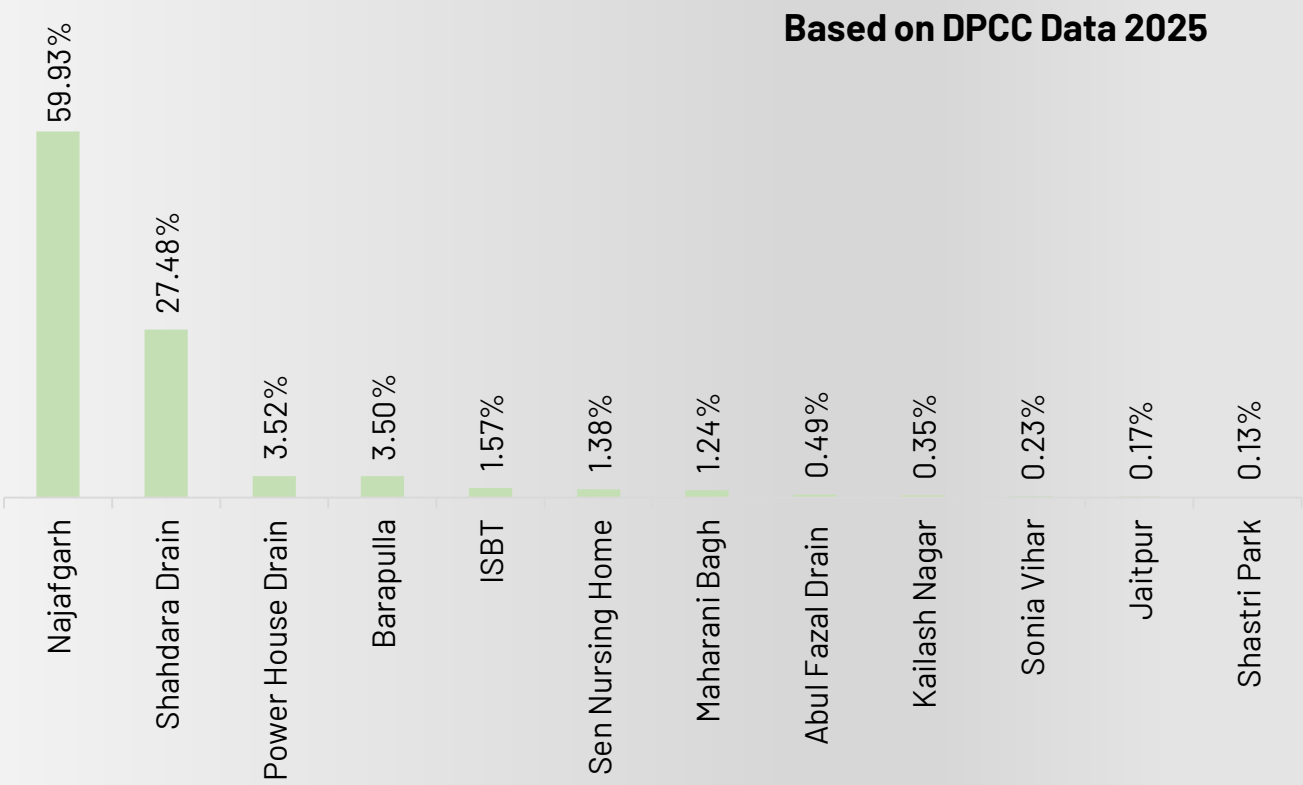


02 Discharge of wastewater from major drains Into River Yamuna at Delhi



2.1

Discharge of BOD load from Major Drains Into River Yamuna at Delhi



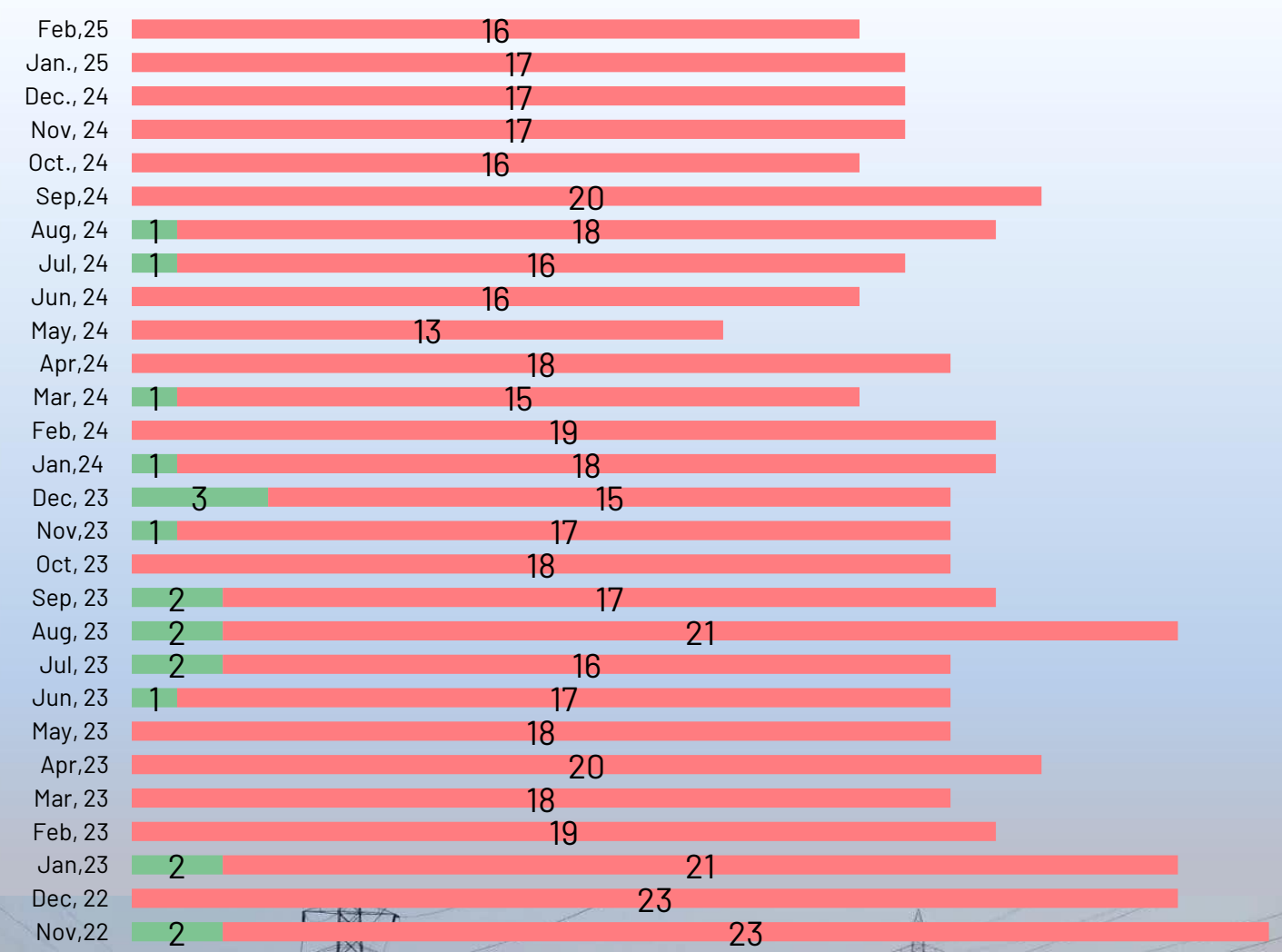
2.2

27 Drains

Water Quality Monitoring

Compliance with prescribed standards BOD (30 mg/l)

No flow observed in 10 drains on March,2025



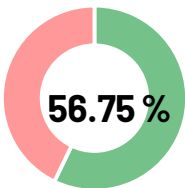
Water Quality of Sewage Treatment Plants



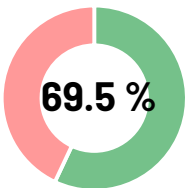
03

37 Sewage Treatment Plants
Water Quality Monitoring

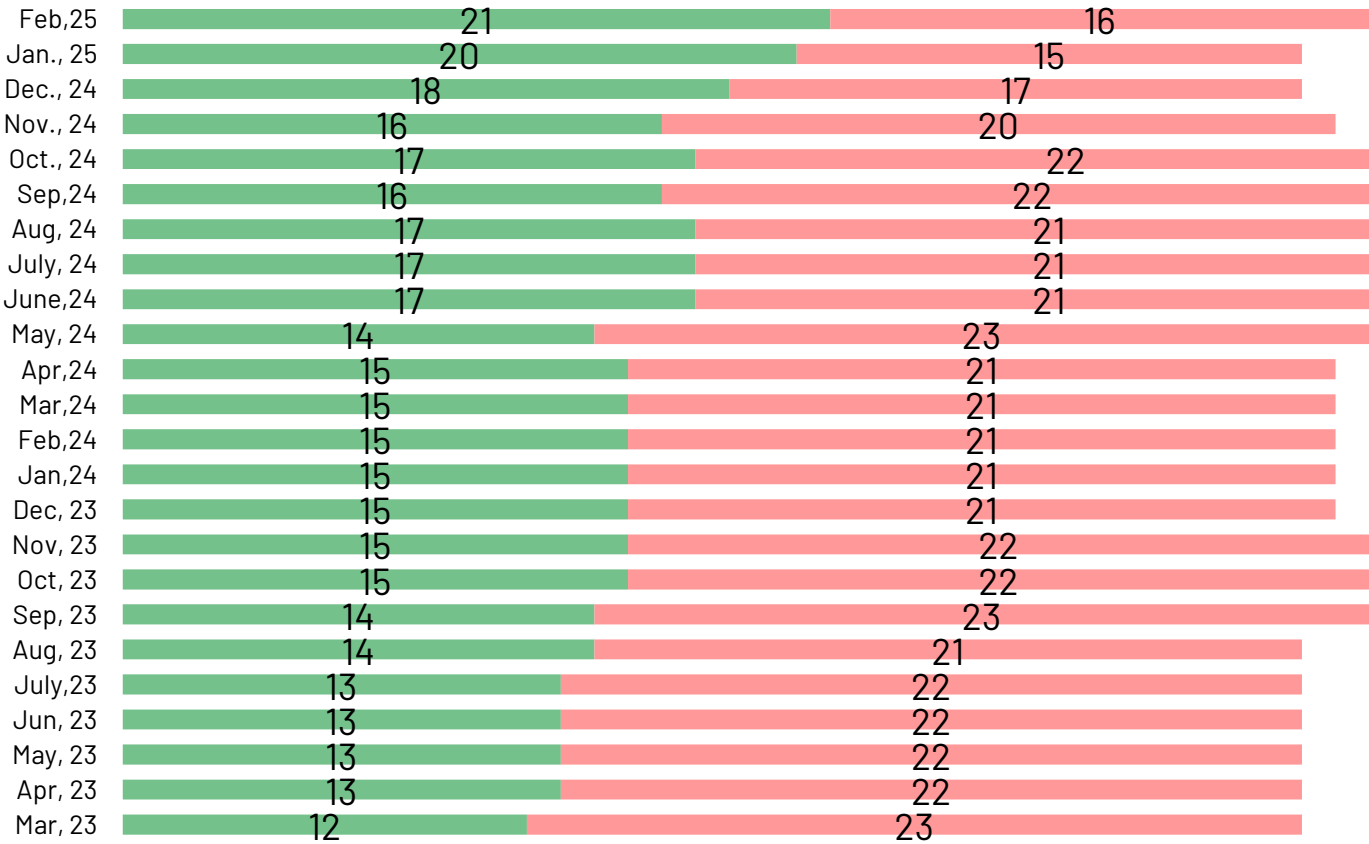
Compliance with prescribed standards BOD:TSS (10:10)



21/37 STP



531 /764 MGD



No. of STPs

Water Quality of Common Effluent Treatment Plants



04

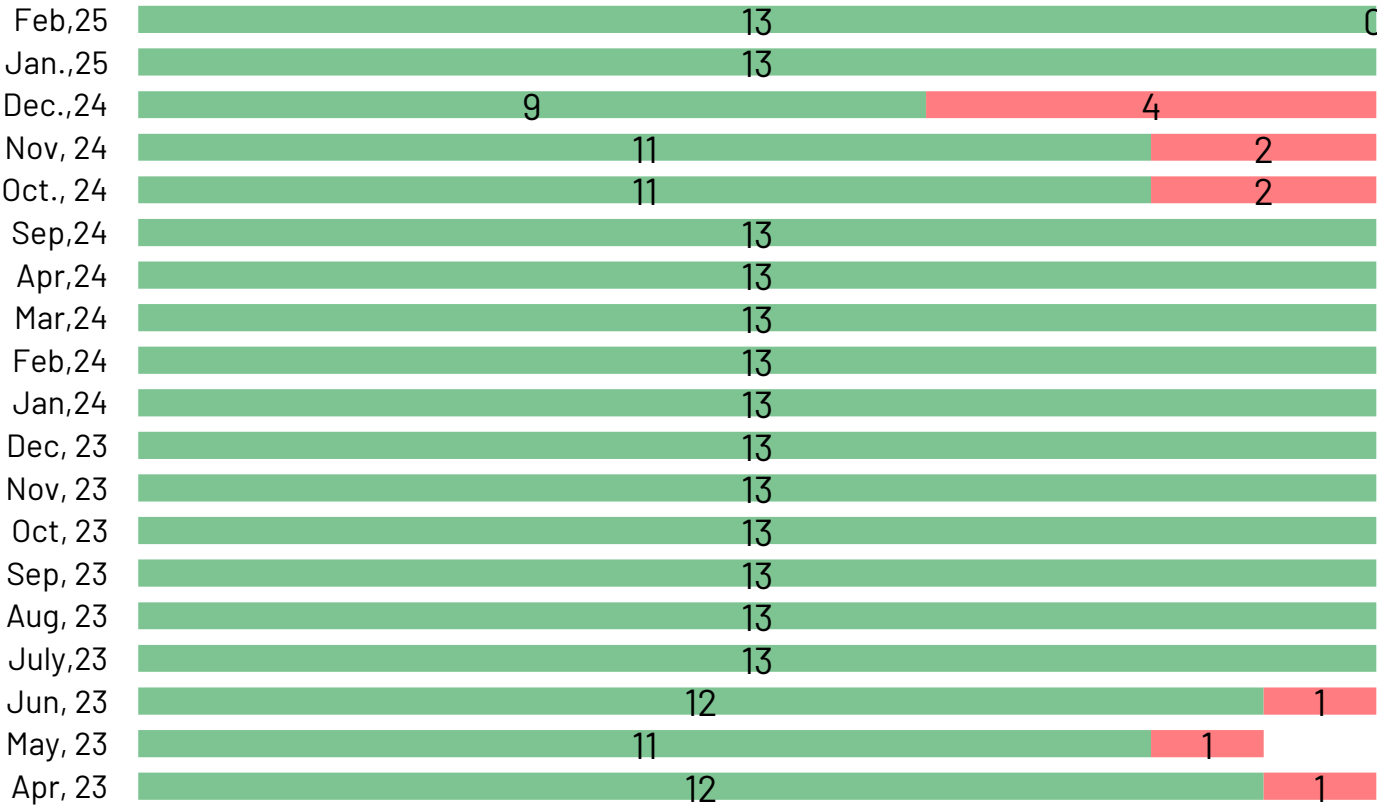
13 Common Effluent Treatment Plants
Water Quality Monitoring

CETP: Treatment systems specifically designed for collective treatment of effluent generated from small-scale industrial facilities in an industrial cluster.



Utilization Capacity (Feb, 2025):
65.161 MLD / 212.3 MLD (30.7%)

13/13 CETP



No. of CETPs

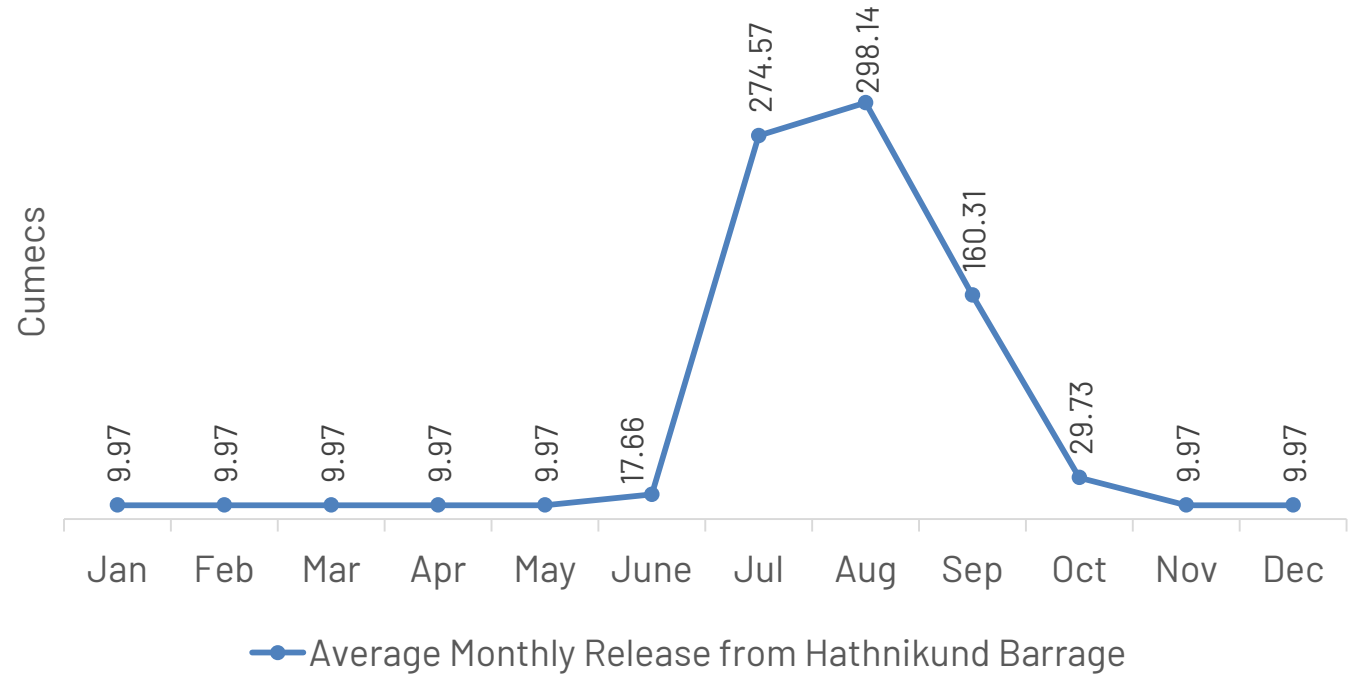
Improvement of **Water Quality in Yamuna**



05

Minimum Environmental Flow (e-flow)

E- Flow :Minimum quantity of flow of water that a river must have in order to preserve its ecosystems.



Minimum e-flow for dilution of polluted water in river Yamuna in Delhi is required to meet desired water quality levels in river Yamuna for bathing purpose i.e. $BOD \leq 3 \text{ mg/l}$ & $DO \geq 5 \text{ mg/l}$.

To assess minimum required e-flow of river Yamuna for stretch between Hathini Kund to Okhla, a comprehensive study was assigned by NMCG to National Institute of Hydrology (NIH), Roorkee on 24.12.2018.

5.1 Minimum Environmental Flow (E-flow)

- As per Final Draft Report submitted by NIH to NMCG. E-flow of 23 Cumecs (437 MGD) in lean season (May) has been recommended in NIH study.
 - Points : Hathnikund to Okhla Barrage
 - Present E flow: Approx. 10 Cumecs (190 MGD)
 - **Gap : Approx. 13 Cumecs (247 MGD)**
- **Possibilities:** Early construction and completion of below mentioned dams/Canals.
 - Renuka Dam project (Gol) - Approx. 13 Cumecs (Expected drinking water share of Delhi)
 - Lakhawar Dam project (Gol)
 - Kishau Dam project (Gol)
- Water sharing agreement of 1994 among riparian states of Uttarakhand, HP, UP, Haryana, Rajasthan and NCT Delhi is due for revision only in 2025.
- **Under E-flow of 23 Cumecs, BOD would come from 25 to 12 mg/l (Ideal BOD : 3 mg/l)**
- **Bathing standards of BOD 3 mg/l - E-flow required is more than 390 Cumecs (7410 MGD).**

Hathnikund Barrage

Okhla Barrage



Okhla
Barrage

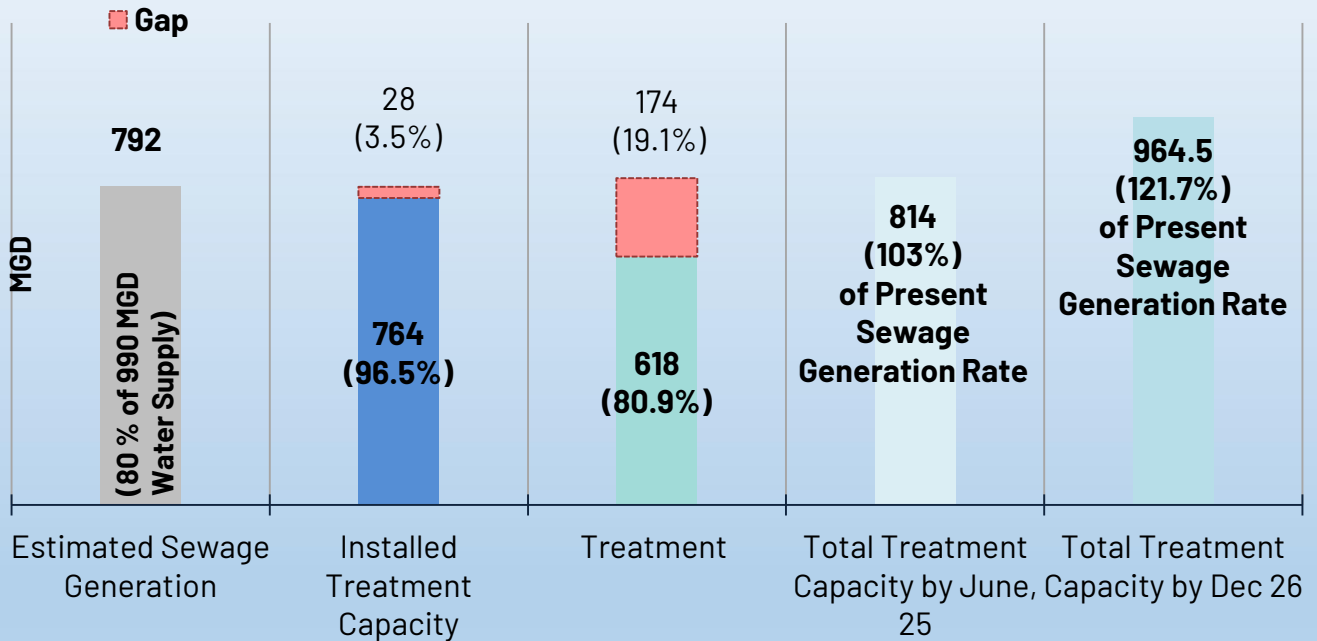
Action Plan for **Rejuvenation of River Yamuna**



06

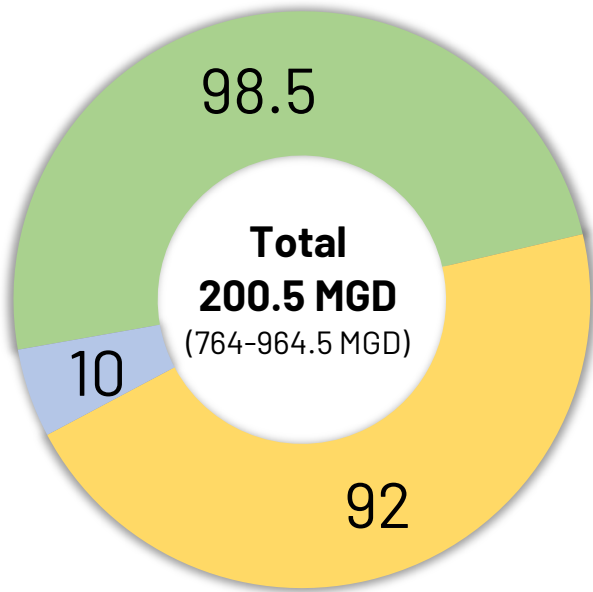
Augmentation & Rehabilitation of Sewage Treatment Plants

Generation, Treatment and Gap in Sewage Treatment



6.1 Augmentation & Rehabilitation of Sewage Treatment Plants

Focus Areas for Enhancing Sewage Treatment Capacity



- **Upgradation and increasing capacity of existing STPs (11)**
- **Construction of 40 New DSTPs**
- **Construction of New STPs at Delhi Gate**



6.2 Progress in Construction of 3 new STPs

Capacity Addition: 47 MGD

Focus Areas for Enhancing Sewage Treatment Capacity

Physical Progress (%)	Timeline: 12 months and matter of allotment of land		
	Completed & commissioning	Commissioned & under stabilization	Land is to be allotted by DDA/ MOHUA
	Okhla (overall 124 MGD)(Adll. 30 MGD)	Sonia Vihar (7 MGD)	Delhi Gate (10 MGD)

DDA/ MoHUA has allotted the land however yet to be handed over to DJB).



Timeline: December, 2026



13

Construction of 40 New DSTPs

Capacity Addition: 92 MGD

Focus Areas for Enhancing Sewage Treatment Capacity

Timeline : December, 2026

Sr. No.	Name of STP	Capacity (MGD)	Status as on 04.04.2025
1.	Mitraon	10.89	Tenders re-invited on EPC Model after receiving of AA&ES from UD Department , GNCTD
2.	Ghewra	0.44	
3	Kair	1.1	
4	Kakrola	2.64	
5	Khanganneri	0.77	
6	Dichaon Kalan	1.98	
7	Punjab Khor	0.22	
8	Jat Khor	0.22	
9	Qutubgarh	0.66	
10	Auchandi	0.88	
11	Mohammadpur Majri & Karala	2.86	
12	Kanjhawala & Ladpur	1.1	
13	Nizampur and Sawda	1.32	
14	Garhi Rindhala	0.22	
15	Jaunti	0.44	
16	Khera Khurd	0.6	
17.	Zindpur	15	
18.	Sarangpur Village	1.32	
19.	Galibpur Village	0.55	
20	Kazipur Village	0.55	

Sr. No.	Name of STP	Capacity (MGD)	Status as on 04.04.2025
21	Jafarpur Village	1.32	Tenders re-invited on EPC Model after receiving of AA&ES from UD Department, GNCTD
22	Khera Dabar Village	0.55	
23	Hasanpur Village	1.32	
24	Shikarpur Village	0.66	
25	Chandanhola Satbari	0.44	
26	Tajpur Pahari	10	
27	Jauna Pur-I	3.18	
28	Jauna Pur-II		
29	Dera Mandi , Bhati		
30	Fatehpur Beri & Asola		
31	Salapur Majra	1.38	
32.	Bajitpur Thakran	2.2	
33	Palla (Sungarpur)	1.1	
34	Tajpur	0.66	
35	Rangpuri	5	



13

Construction of 40 New DSTPs
Capacity Addition: 92 MGD

Sr. No.	Name of STP	Capacity (MGD)	Status as on 04.04.2025
36	Chattarpur Extension	0.38	1525.25 sqm land allotted on 05.03.2024 out of 4 Bigha 4 Biswa. Payment done, Possession of land is yet to be handed over by DDA.
37	Maidan Garhi (Rajpur Khurd)	0.95	Land is yet to be allocated by DDA
38	Nayabans	4.4	
39	Tajpur Khurd	7.92	Land handed over on 21.06.2024. Estimates being prepared. Tenders shall be invited on EPC Model after receiving of AA&ES from UD Department, GNCTD as per guidelines issued from the UD Department, GNCTD.
40	Tikri Kalan	1.32	Land handed over on 01.07.2024. Estimates being prepared. Tenders shall be invited on EPC Model after receiving of AA&ES from UD Department, GNCTD as per guidelines issued from the UD Department, GNCTD.

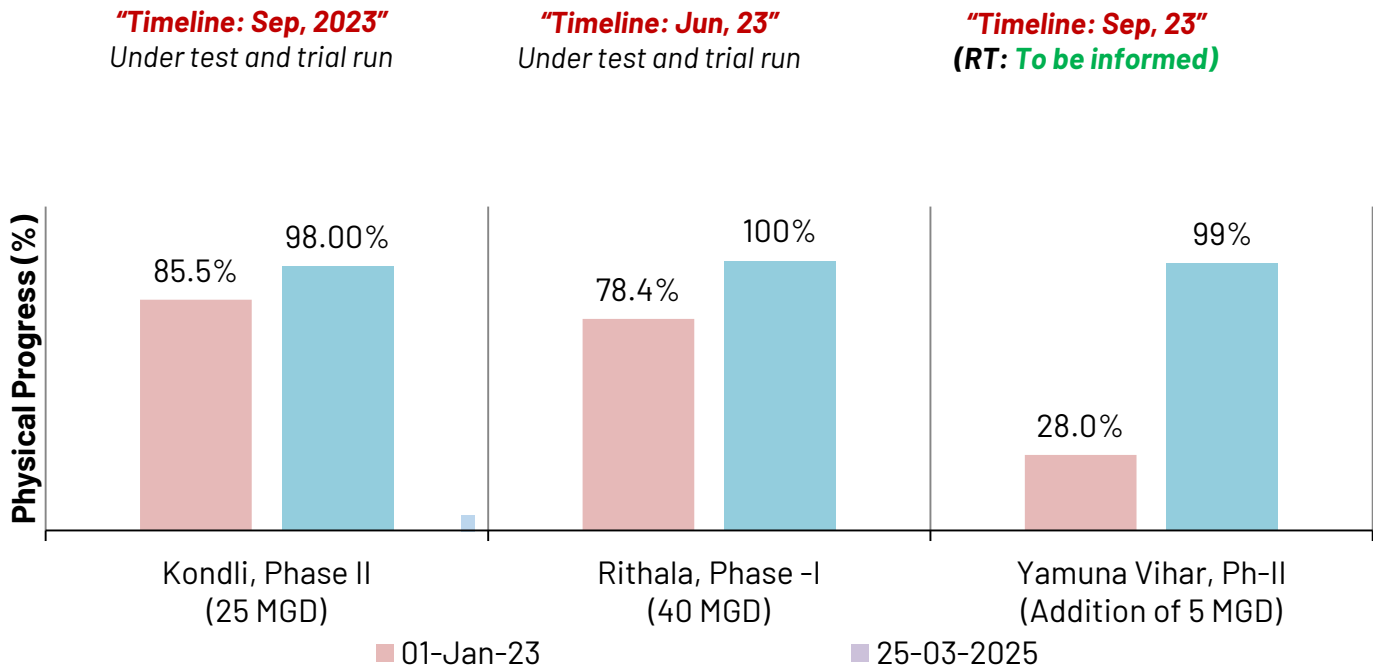


6.4 Rehabilitation of Existing 3 STPs

Capacity Addition: 70 MGD

Focus Areas for Enhancing Sewage Treatment Capacity

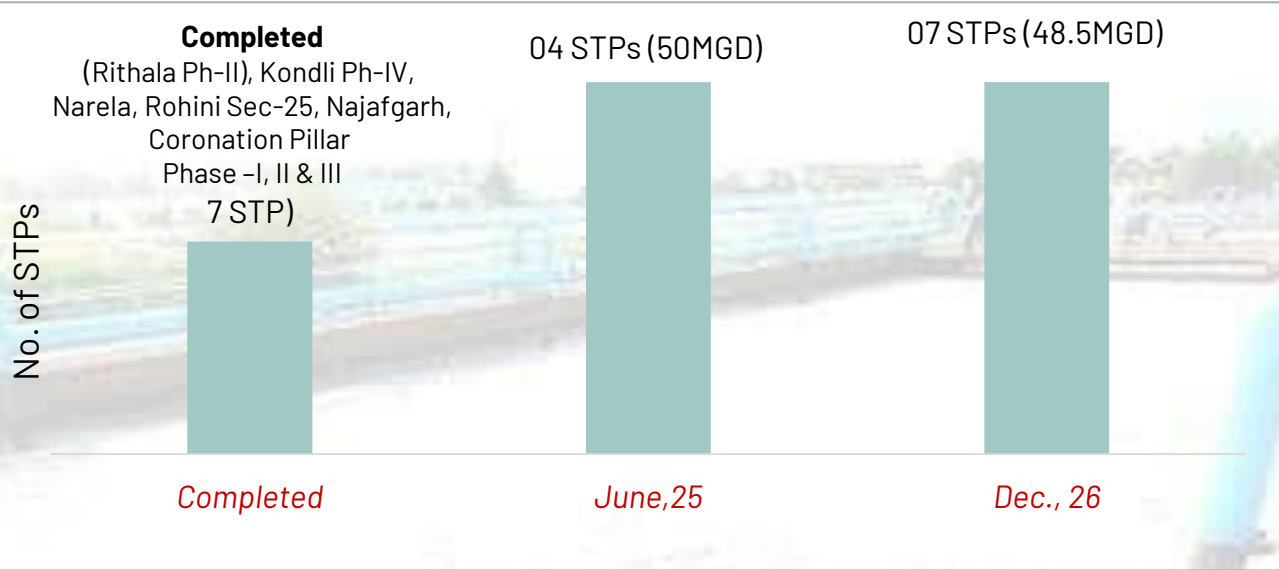
Revised Timeline: Completed (under test and trial run)



6.5 Upgradation of Existing 18 STPs

Capacity Addition: 113.5 MGD

Focus Areas for Enhancing Sewage Treatment Capacity



Sr. No.	Name of STP	Existing Capacity	Enhanced Capacity (In MGD)	Status as on 25th Mar, 25	Timelines
1.	Rithala Phase -II	40	40	100%	Completed
2.	Kondli Phase-IV	45	45	98.5%	Completed

6.5 Upgradation of Existing 18 STPs

Capacity Addition: 113.5 MGD

Focus Areas for Enhancing Sewage Treatment Capacity

Sr. No.	Name of STP	Existing Capacity	Enhanced Capacity (In MGD)	Status as on 25th Sept, 23	Status as on 25th Mar, 25	Revised Timelines
3	Rohini Sector 25	15	25	25 %	98%	Completed & Under Trial Run
4	Narela	10	15	25 %	98%	
5	Najafgarh	5	5	27%	100%	
6	Coronation Pillar Phase -I & II	20	20	25 %	98%	
7	Coronation Pillar Phase-III	10	10	25 %	98%	
8	Pappan Kalan Phase - I	20	30	21 %	71 %	June, 2025
9	Nilothi Phase -I	40	60	21%	53%	
10	Keshopur Phase -II	20	20	27 %	95%	
11	Keshopur Phase-III	40	60	27 %	93%	
12	Okhla Phase- V	16	16	tender yet to be invited	Proposal under process under EPC Model	December, 2026
13	Mehrauli	5	7.5			
14	Ghitorni	5	7.5			
15	Vasant Kunj	5	7.5			
16	Yamuna Vihar Phase - I	10	15			

6.5 Upgradation of Existing 18 STPs

Capacity Addition: 113.5 MGD

Focus Areas for Enhancing Sewage Treatment Capacity

Sr. No.	Name of STP	Existing Capacity	Enhanced Capacity (In MGD)	Status as on 6th Oct, 23	Status as on 25th Mar, 25	Timelines
17.	Keshopur Phase- I	12	18	File sent to competent authority for approval work at earliest	Tender re-invited	Dec, 2026
18.	Yamuna Vihar Phase - III	25	55	File has been sent to competent authority for administrative approval of Estimate.	Proposal under process under EPC Model	Dec, 2026



6.6 Tapping of Drains

22 Major Drains

drains tapped out of 22 major drains , 02 are partially tapped

S.No	Drain	Status
1	Metcalf House Drain	Tapped
2	Khyber Pass Drain	
3	Sweeper Colony Drain	
4	Magazine Road Drain	
5	Tonga Stand Drain	
6	Moat Drain (Vijay Ghat)	
7	Drain No. 14	
8	Tehkhand Drain	
9	Civil Mill Drain	
10	Tuglakabad Drain (Kalka Ji Drain merged in this drain)	

S.No	Drain	Status
11	Sen Nursing Home Drain	Partially Tapped
12	Delhi Gate Drain / Power House Drain	
13	Najafgarh Drain	Work in Progress
14	Barapulla Drain	
15	Maharani Bagh Drain	
16	ISBT Drain (Qudsia Bagh/ Mori Gate Drain)	
17	Sonia Vihar Drain (On Eastern Bank of Yamuna)	
18	Shahdara Drain	

S.No	Drain	Status
19	Kailash Nagar Drain (On Eastern Bank of Yamuna)	To be tapped
20	Shastri Park Drain (On Eastern Bank of Yamuna)	
21	Jaitpur Drain	
22	Abul Fazal Drain	

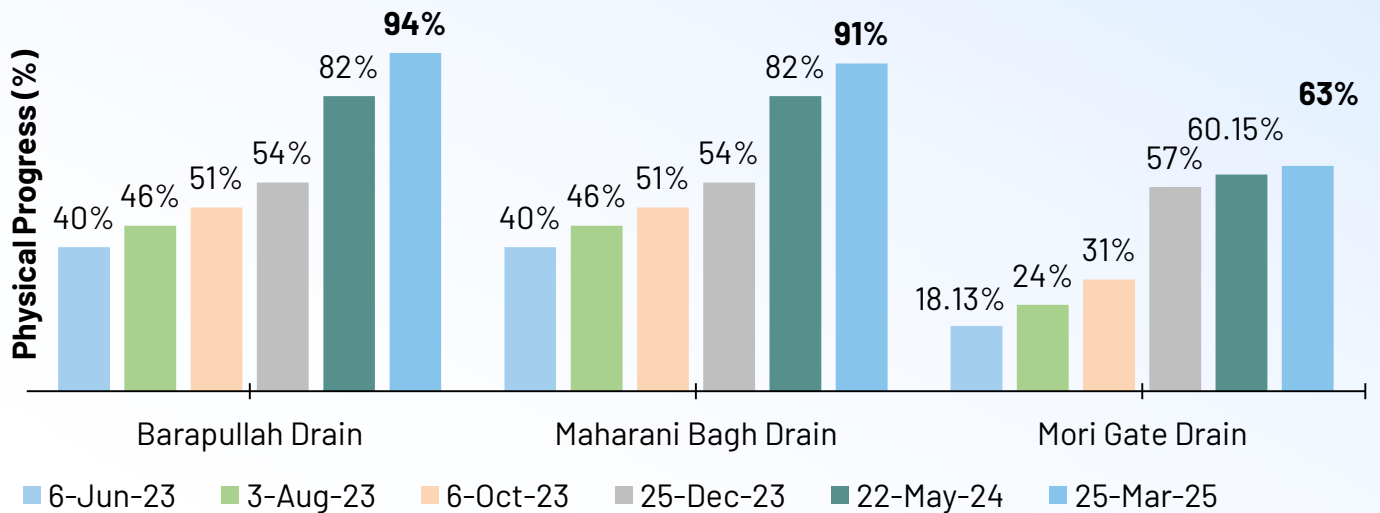
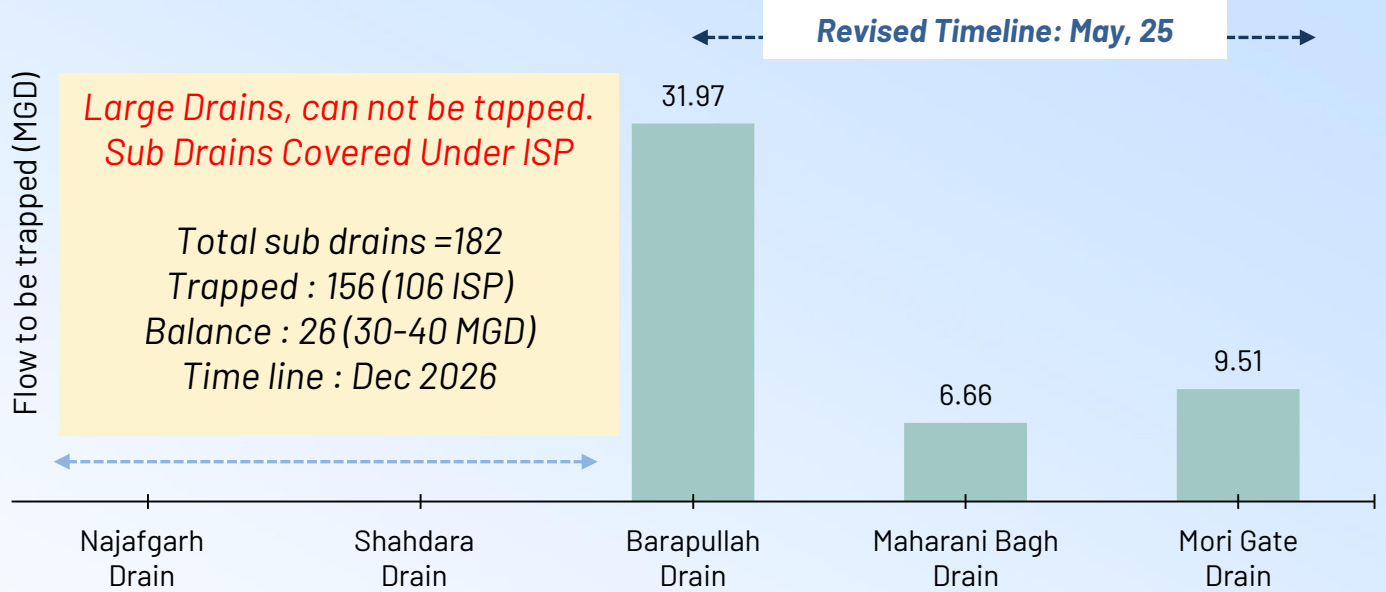


Tapped	10
Partially Tapped	2
Work in progress	6
To be tapped	4

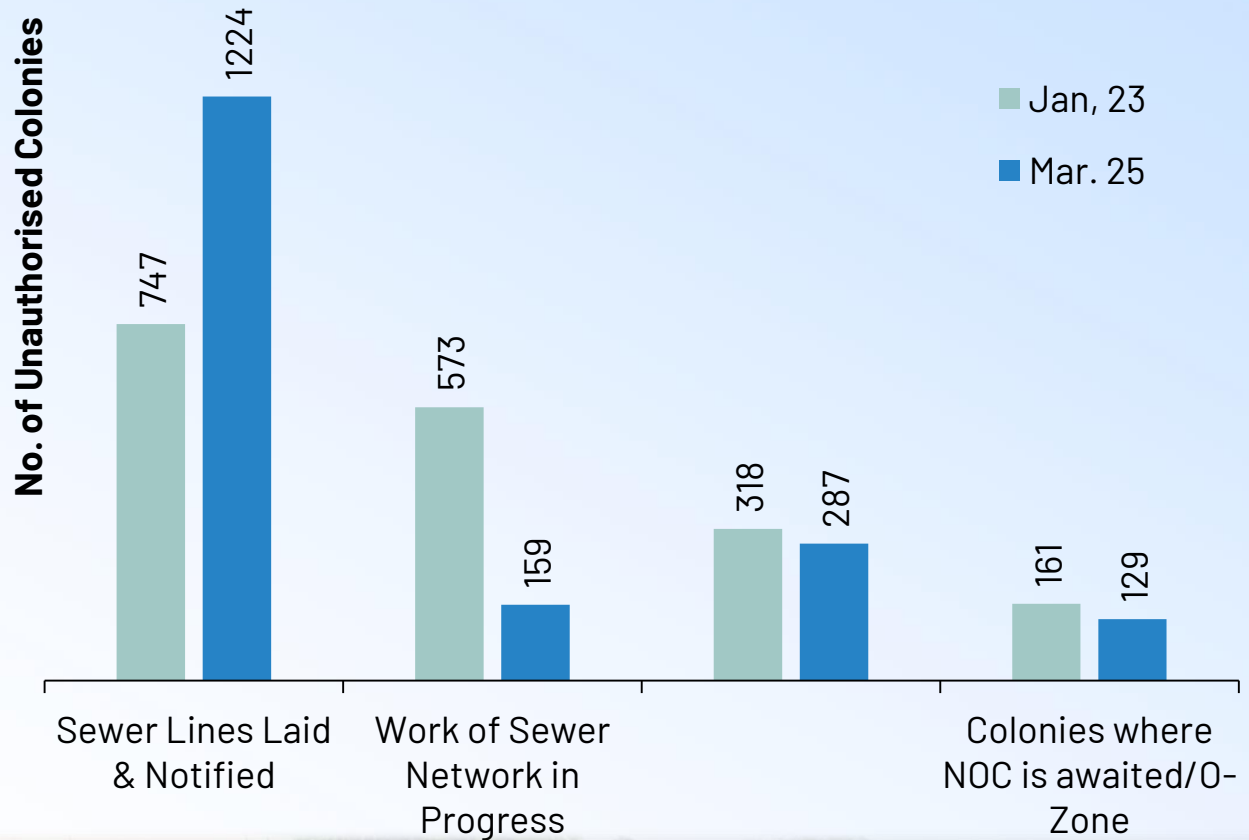
6.6 Tapping of all Drains

Remaining 03 untapped major drains

Total Flow to be Trapped: 48.14 MGD



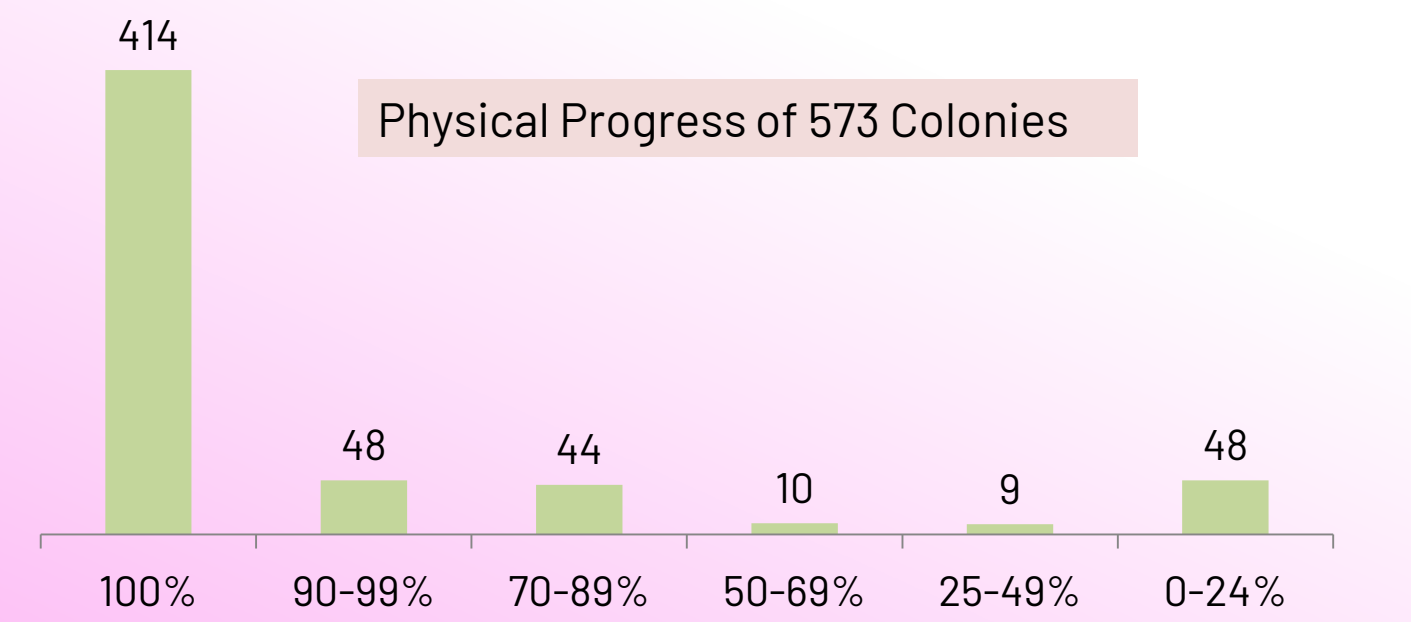
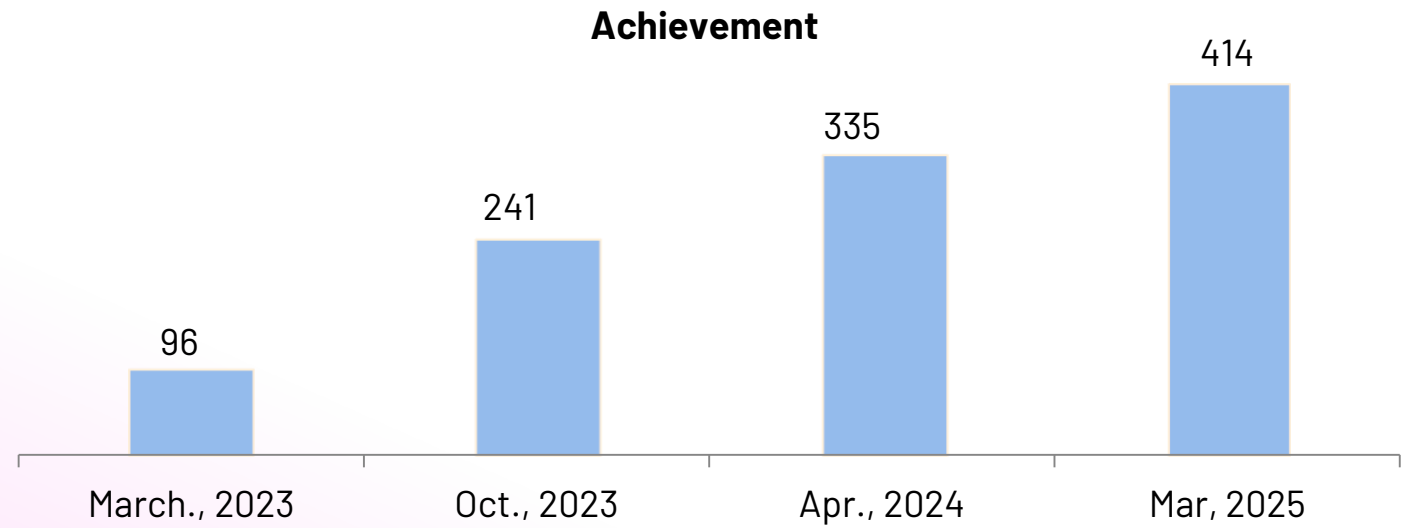
6.7 Sewerage Network in Unauthorized Colonies (1799)



6.7 Sewerage Network in Unauthorised Colonies (1799)

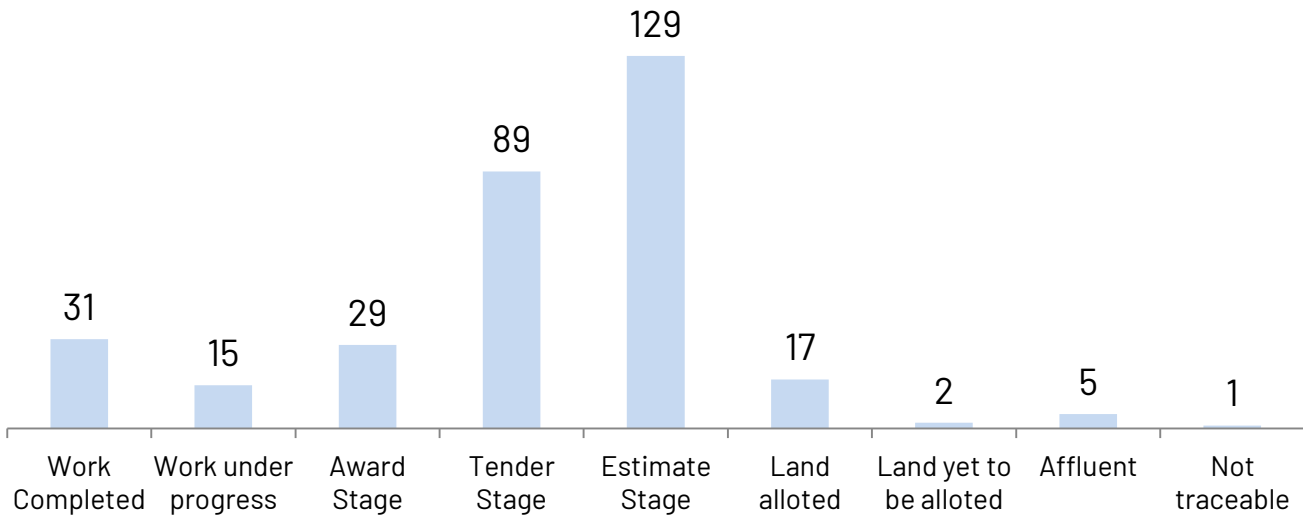
573 Colonies where laying Sewer Network in progress

“Timeline: December, 26”

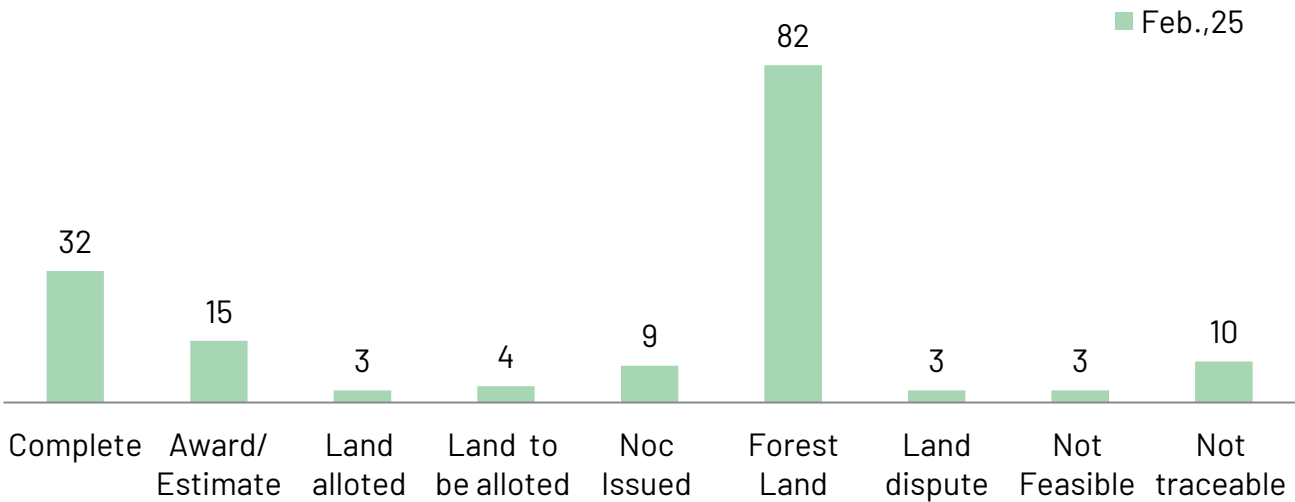


6.7 Sewerage Network in Unauthorised Colonies (1799)

318 Colonies where sewerage network is to be laid along with Decentralized STPs

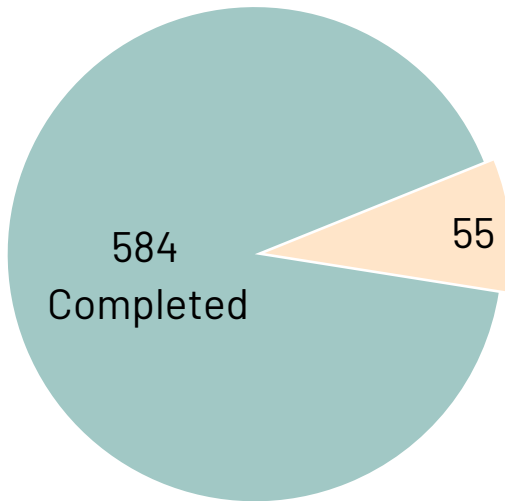


161 colonies where NOC is awaited/O-Zone



6.8 Connection of Drains/ Drainage system of JJ Clusters (639 Nos) with sewerage network

Connection of storm water drain at outfall points/ points of JJC's into nearest DJB sewerage system. **Timeline: December, 2026**



Total JJC's : 639

Remaining 55 JJC's
(Total discharge: 2 MGD)



6.9 Management of Faecal Sludge (Septage)

- **Delhi Water Board Septage Management Regulations 2018 dated 12.11.2018** for collection, transportation and disposal of waste of septic tanks (Septage).
- Necessary action to be taken by DJB , District Magistrates & Local Bodies
- DM - authorized to ensure enforcement as well as compliance of these regulations. License issued by DJB to vendors for Collection, Transportation & Disposal at designated SPSs/STPs
- Septage Management Committees headed by concerned District Magistrates
- Divisional Commissioner taking review meetings with DMs on weekly basis

17.19 Total Amount of Environmental
Lakhs Compensation Imposed & 17.19 Lakhs received

153

Total No. of Meetings of Septage Management Committees held

64

No. of Vehicles/ Tankers found unauthorizedly discharging septage into Drains etc.

63

No. of Vehicles/ Tankers impounded

57

No. of Challans/notices issued

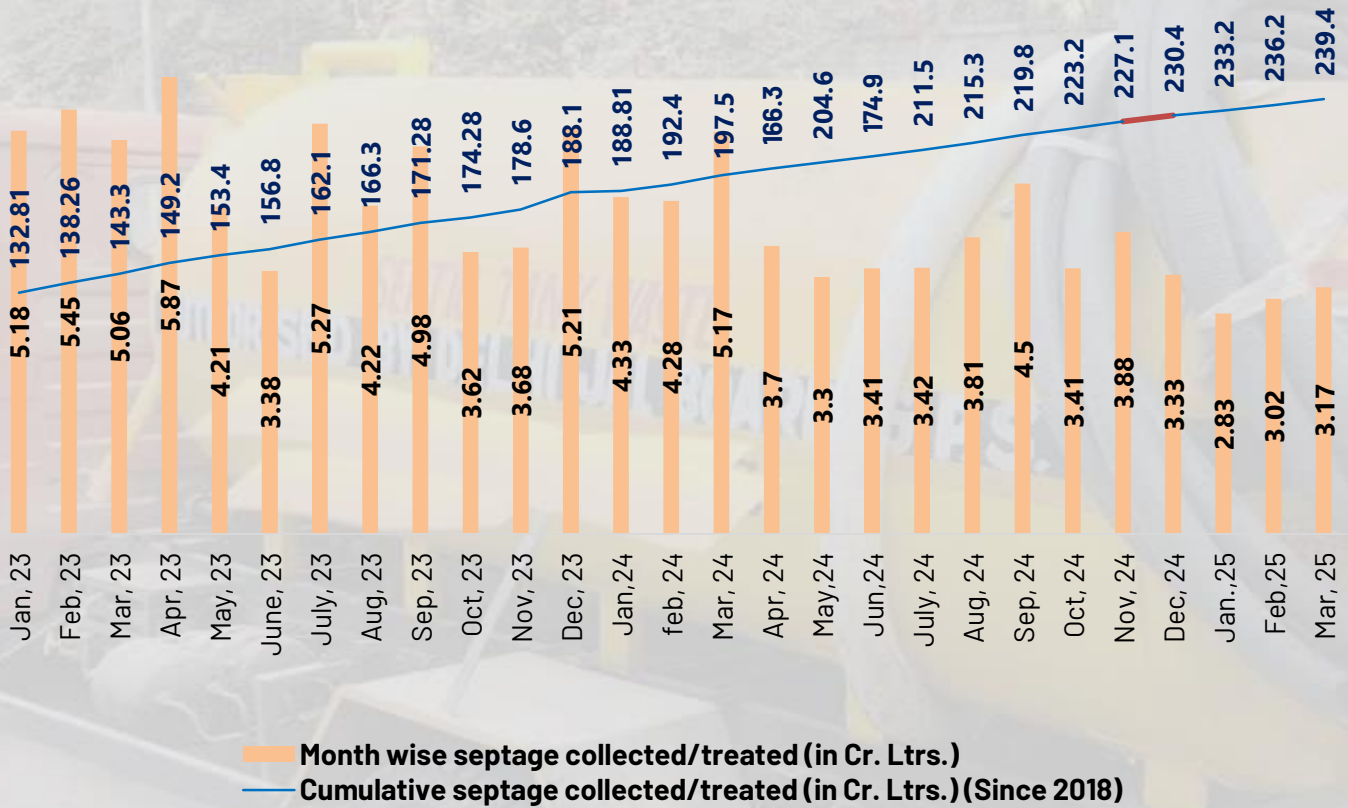
DPCC: Direction issued u/s 33(A) of Water Act on 27.03.2023

- Penalty for deposit of septage by unauthorized (unlicensed) entity: 50,000/-
- Penalty for disposal of Septage at places other than designated places: 50,000/-
- Penalty on person who uses services of unlicensed vendor/vehicles: 10,000/-

Competent Authority : DM, Delhi Police, MCD, IFCD and DJB

6.9 Management of Faecal Sludge (Septage)

Faecal Sludge (Septage) Collection & Treatment



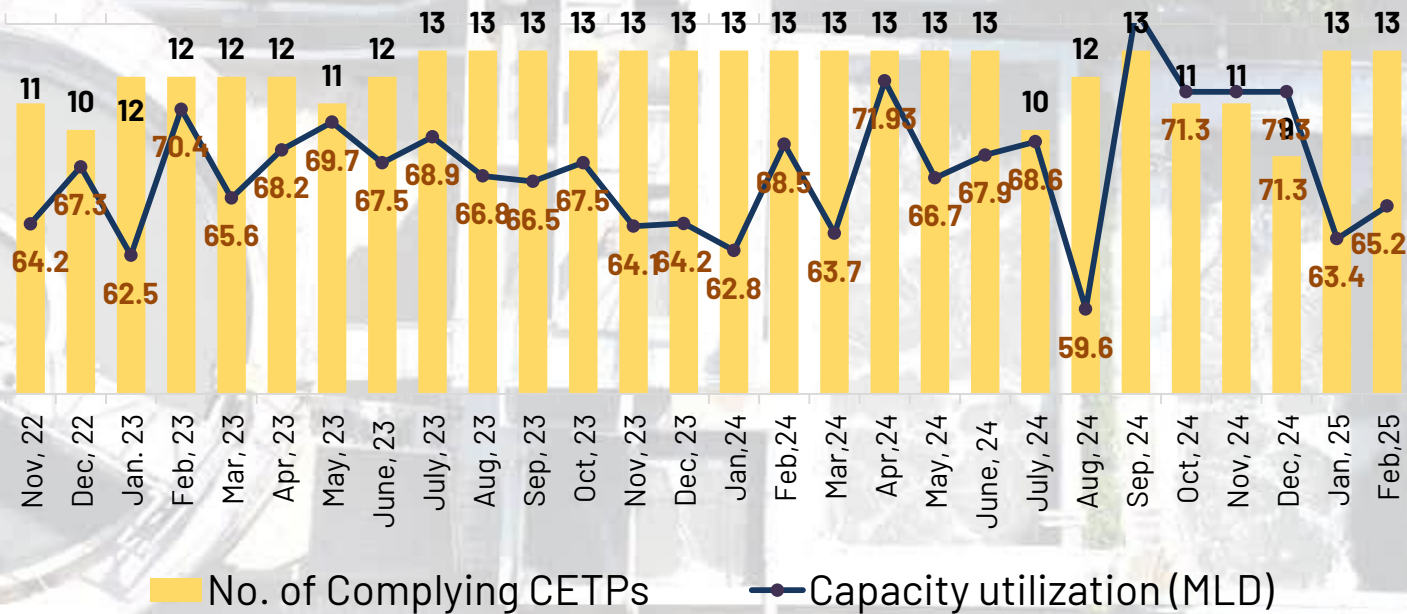
239.4 Crore Litres septage collected/treated till Mar.,25

6.10 Industrial Effluent Management by Common Effluent Treatment Plants (13)

CETPs designed to meet prescribed standards under EP Act (Installed Capacity of all the 13 CETPs: 212.3 MLD).

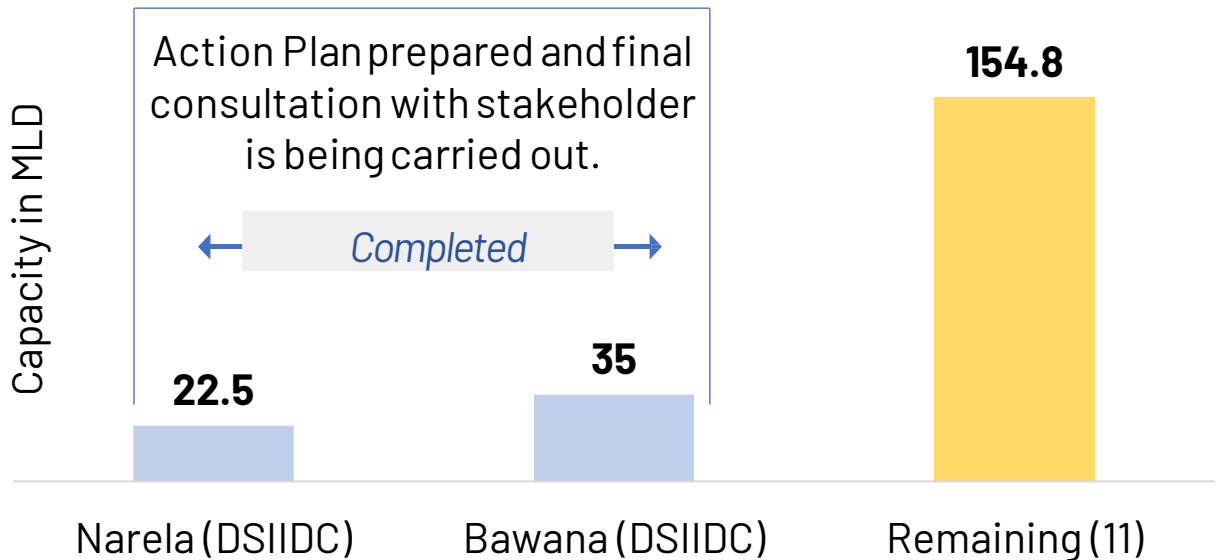
DPCC monitors CETPs on monthly basis.

Total EC Amount of Rupees 19.10 Crores has been imposed by DPCC on the 11 CETP Societies and 2 Operators of CETPs at Narela & Bawana from time to time for violations / not meeting the prescribed standards in the past.



Action taken against Dyeing units in non-conforming areas of Delhi by Joint Team consisting of MCD, DPCC, Revenue Dept., Power Companies, DJB (28.04.2023 to 05.03.2025)

6.11 Upgradation of Common Effluent Treatment Plants (13)



- Narela and Bawana CETPs has been upgraded by DSIIDC.
- Govt. of NCT of Delhi vide notification dated 01.01.2024 has given powers in respect of 11 CETPs presently being operated and maintained by CETPs Societies to DJB

6.12 Regulation of Flood plain Delhi Development Authority



Enforcement

1536 acres of land has been reclaimed since 2 years 3 months

80,713 MT of C&D waste lifted & utilized



Protection Measures

369 Security Guards
90 CCTV cameras at 27 location



Demarcation

1: 25 YEAR FREQUENCY - (206 MSL)

Fencing with 591 bollards 375 Flag Posts
27 Sign Boards

1: 100 YEAR FREQUENCY - (208.66 MSL)



Restoration projects

Landscaping

Wetland construction

Public Utilities-pedestrian Pathways, Cycling Tracks, Bio-toilets, Entrance Plaza, Signages

6.13 Restoration & Rejuvenation of Flood Plains (Status of 10 Projects)



Completed Projects

- ✓ **Asita East (Part A: 90 Ha)**
- ✓ **Asita West (Part A: 93 Ha)**
- ✓ **Asita East (Part B: 107 Ha) Ph-I Completed**
- ✓ **Kalindi Aviral (Part A: 100 Ha)**
- ✓ **Asita West (Part A: 107 Ha)**
- ✓ **Ghat Area (Part A: 16 Ha)**
- ✓ **Yamuna Vanasthali (Ph-I) : 236.5 Ha**
- ✓ **Amrut Bio Diversity Park- (Part A: 90 Ha)**



Projects in Advance Stage

- **Asita East (Part B: 107 Ha) Ph-II in Progress**
- **Kalindi Aviral Extension 163 Ha**
- **Kalindi Biodiversity Park : 115 Ha**



Projects in initial stage

- ❖ **Ghat Area (Part B/C/Yamuna Bazar: 50 Ha)**
- ❖ **Amrut Bio Diversity Park- (Part B/C 26.5 Ha)**
- ❖ **Mayur Nature Park (Part A/B): 397.75 Ha**
- ❖ **Hindan Sarovar (Part A/B) : 45 Ha**
- ❖ **Eco-Tourism area: (Part A & B: 30Ha)**

6.14 Utilization of Treated Wastewater

Action Plan by DJB (611 MGD)

125 (90+35) MGD

Being used in Horticulture and Lake Rejuvenation & water Bodies etc.

267 MGD

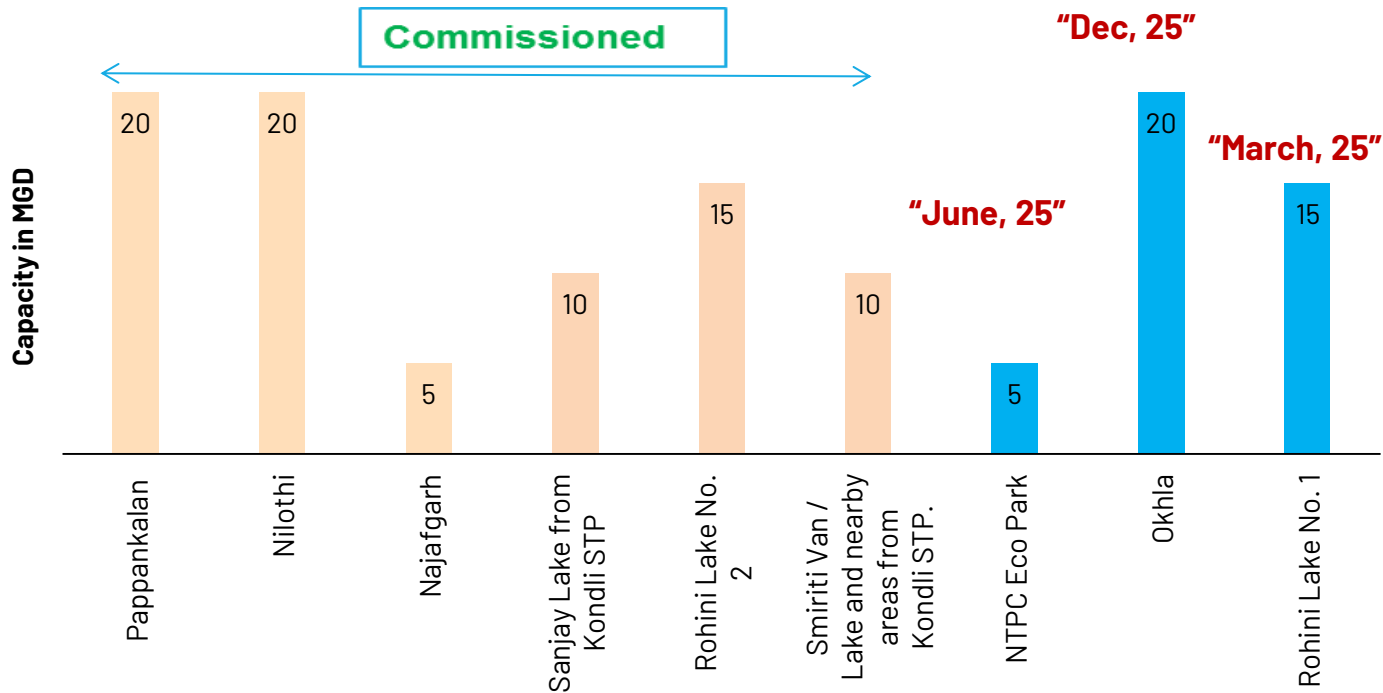
Mandatory Return Flow in Yamuna



6.14 Utilization of Treated Wastewater

Progress of work for Utilization 120 MGD Treated Wastewater

In progress 40 MGD



DJB is also exploring the possibility of using treated STP Water in other usages like in Farm houses, Golf courses, Construction activities etc. and have already made available treated water at its STPs @ Rs 7/ Kilolitres.





Department of Environment,
Govt. of NCT of Delhi

