

CHAPTER 13

WATER SUPPLY AND SEWERAGE

Access to safe, adequate and affordable potable drinking water along with accessible and hygienic sanitation are the basic public services that the Government should ensure for its citizens to lead a healthy life. Government has been consistently trying to ensure equitable availability of clean water supply to all households, treatment of both wastewater and solid waste to a high proportion of the volume generated and treatment of all industrial effluents. One of the important Sustainable Goal under SDG-6 is “Availability and sustainable management of water and sanitation for all”.

1.1 The Delhi Government ensured free lifeline water upto 20 Kiloliters to every household having functional metered water connection and around 18.91 lakhs distinct consumers had benefited under this scheme during 2024-2025.

1.2 Further, Board also resolved the following :

- i. Installation charges of water connection shall be divided category wise as per categorization of colonies for property tax by MCDs as under:
 - For domestic connections :

S. No.	Colony Category	New Connection charges for water
1	A, B, C	₹ 4000/-
2	D & E	₹ 2000/-
3	F, G, H & Rural village	₹ 1000/-

- For commercial connection charges shall be double of the domestic charges in respective colony category.
 - ii. Sewer connections will be approved automatically with the approval of water connections. No separate sewer connection charge will be levied.
- 1.3 Board vide Resolution No. 1468, dated 26.09.2025 has reviewed the policy for installation of connection by DJB. The Board has approved that applicants/consumers may get the water connection installed through licensed plumber. After installation of connection and water meter of any of the approved brand, the consumers must upload the meter details online on RMS Consumer portal (<https://djb.gov.in/DJBRMSPortal/>) or submit the same in the office of the ZRO concerned in the prescribed format.
- 1.4 Board vide resolution No. 1466 dated 26.09.2025 had approved the following scheme of Regularization of Unauthorized Connection:
- a. Token penalty amount in place of existing amount of penalty and water bill charges for three years which are normally taken at the time of regularization of unauthorized water/Sewer connection which will be levied during the scheme as under: -

- (i) Domestic Connections : Rs.1000/-
- (ii) Non-Domestic Connections : Rs.5000/-

Besides above penalty, normal water sewer connection charges and Infrastructure (IFC), wherever applicable, will be collected as usual. After the end of the scheme, unauthorized regularization charges will be levied as applicable before the scheme period.

b. The period of Regularization scheme is from 14.10.2025 to 31.8.2026.

1.5 The Board vide resolution No. 1467 dated 26.09.2025 and Resolution No.1557 dated 20-2-2026 had approved the waiver of late payment surcharge (LPSC) schemes as under:

1. LPSC amount against the accounts of consumers as on cutoff date, i.e. 30.09.2025 will be waived off for Domestic Consumers (Category-I) & Non Domestic Consumers (Category-II) if the outstanding principal amount/arrears along with current bill, if any, is cleared during the scheme period as under:

S. No.	Type of Consumer	Period	LPSC Waiver
1	Domestic Consumers (Category-I)	14.10.2025 to 15-08-2026	100%
2	Non-Domestic Consumers (Category-II)	24-02-2026 to 15-08-2026	100%

1.6 DJB has managed to improve upon its working and monitoring vis-à-vis water and sewage management. It has an increased revenue collection despite poor economics as the positive outcomes of good governance. DJB had launched “ m-Seva App” for bill generation, online payments and the resolution of inflated bills to deliver efficient and transparent services and to instill more confidence in the citizens of Delhi. Factors attributable to the increased DJB's revenue are: 10% increase in the price of the non-free water, increase in the number of connections/meters, One-time window to people to clear their previous dues and fixing several water leakages. There were several other revenue- generating measures such as renting out property and tapping solar power, Innovative/new schemes such as water ATMs, and GPS tracking of DJB water tankers.

1.7 About 93.5% households of Delhi now have access to piped water supply. Water production during summer season is being maintained at about 1000 MGD consistently. Water is supplied to about 25 million population of Delhi through existing water supply network comprising of 15700km long pipe lines and more than 123 primary underground reservoirs (UGRs). Approx. 900 Nos. hired tankers and 150 Nos. departmental tankers are being deployed to supplement water supply in water deficit areas.

2. Water Requirement

2.1 DJB considered per capita potable water requirement @ 50 GPCD. Water demand for population of 25 million projected for 2025@ 50 GPCD works out to 1250 MGD. This does not include water requirement for horticulture/gardening/agriculture and industrial process water.

- 2.2 Given the limited availability of raw water to Delhi, water demand of potable water for domestic use needs to be rationalized and progressively reduced to 50 GPCD (225 LPCD) by use of non-potable recycled water of desired quality standard for non-drinking purposes like toilet flushing, etc. Water demand for industrial process & horticulture/gardening/agriculture purposes will need to be necessarily met out from recycling of waste water of desired quality standards. Potable water demand for a population of 30 Million (Projected by DDA for the year 2041) @ 50 GPCD works out to 1500 MGD.

For future Planned Developments availability of potable water is proposed to be restricted to 40 GPCD as per the following details:

STATEMENT 13.1 DETAILS OF POTABLE WATER DEMAND - DJB

Potable Water Demand	Quantity
Residential	135 LPCD
Non-Residential (Commercial/Institutional etc including 5 LPCD for floating population)	20 LPCD
Fire Demand	2 LPCD
Transmission Losses @ 15 %	23 LPCD
Total	180 LPCD (Say 40 GPCD)
Water requirement for toilet flushing purposes in residential developments and non-residential developments (about 75 LPCD) shall have to be met by use of non-potable recycled water of desired quality standard with dual piping system. Water demand for industrial process & horticulture/gardening/agriculture purposes shall also need to be necessarily met out from recycling of waste water of desired quality standards.	

3. Water Supply Capacity

STATEMENT 13.2 INSTALLED CAPACITY OF WATER TREATMENT PLANTS: 2009-2025

S. No	Name of Plants	Capacity(MGD)																
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
1	Chandrawal Water House I&II	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90
2	Wazirabad I, II&III	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
3	Haiderpur	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200
4	North Shahdara (Bhagirathi)	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
5	Bawana	--	--	--	--	--	--	20	20	20	20	20	20	20	20	20	20	20
6	Nangloi	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
7	Sonia Vihar	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140
8	Ranney Wells & Tube Wells	100	100	100	100	80	80	80	80	80	80	85	90	95	117	120	126	135

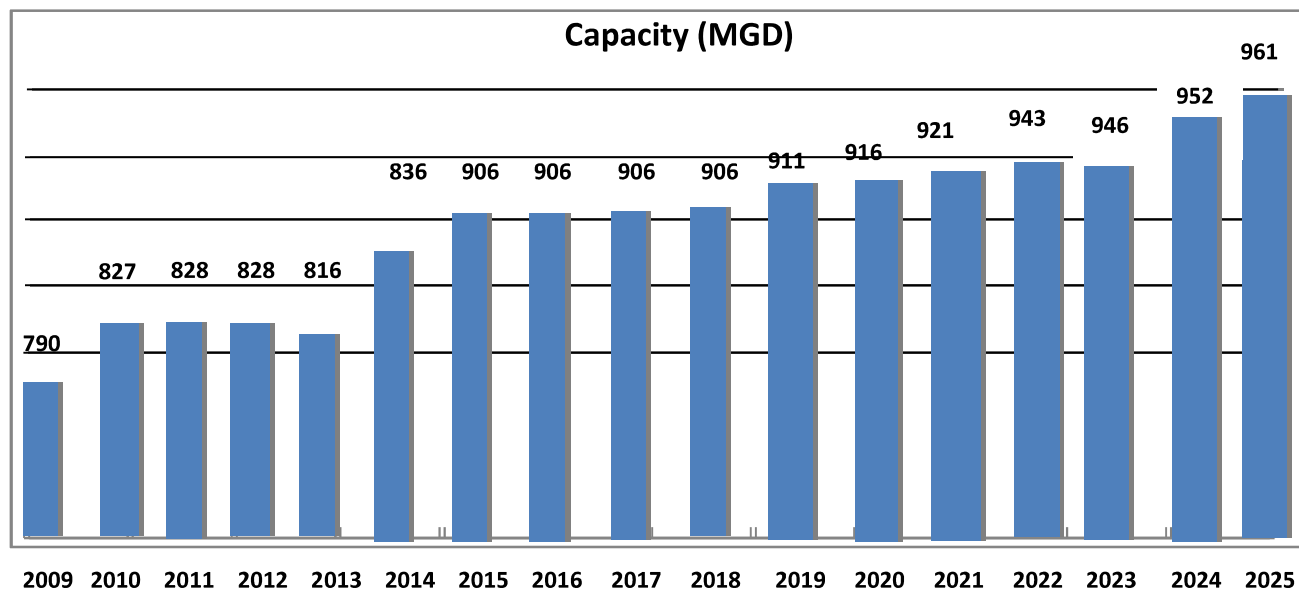
S. No	Name of Plants	Capacity(MGD)																
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
9	Recycling of Water at Bhagirathi, Chandrawal Haiderpur & Wazirabad	--	37	37	37	45	45	45	45	45	45	45	45	45	45	45	45	45
10	Common wealth Games Village	--	--	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	Okhla	--	--	--	--	--	20	20	20	20	20	20	20	20	20	20	20	20
12	Dwarka	--	--	--	--	--	--	50	50	50	50	50	50	50	50	50	50	50
	Total :	790	827	828	828	816	836	906	906	906	906	911	916	921	943	946	952	961

Source: -Delhi Jal Board (MGD- Millions of Gallons Per Day)

The installed treatment capacity of Water in Delhi during 2009-2025 is depicted in Chart 13.2. The installed capacity of DJB has been augmented by 21.64 % during last 17 years. The capacity, which was 790 MGD in 2009, has been increased to 952 in 2024. This has further increased to 961 MGD in the year 2025.

Chart 13.1

INSTALLED TREATMENT CAPACITY OF WATER TREATMENT PLANTS DELHI-2009-2025



Construction of 2nd 50 MGD Dwarka WTP is in advance stage of completion.

4. Water Consumption

Water supplied and billed to various categories of consumers by Delhi Jal Board during 2024-25 is presented in Statement 13.3.

STATEMENT 13.3

CATEGORY-WISE WATER CONNECTIONS, SALES AND % OF SALES

S. No.	Category	Connections (in lakhs)		Sales (in MGD)		% of Sales	
		2023-24	2024-25	2023-24	2024-25	2023-24	2024-25
1	Domestic (Active)	27.53	28.15	451.88*	371.42	93.63	92.15
2	Commercial (Active)	0.82	0.84				
3	Supply to NDMC & MES (Active)	-		30.76	31.61	6.37	7.85
Total				482.64**	403.03	100.00	100.00

Source: Delhi Jal Board

*As provided under report for outcome of Budget

**This includes unbilled supply of water in respect of unauthorized water connections, unauthorized colonies, JJ Cluster, DJB Staff quart etc. which are not in billing net and also against those connections which are in billing net but billing could not be done due to various reasons.

5. Sources of Water Supply

- A. Delhi Jal Board receives raw water from Haryana through CLC, DSB canals and river Yamuna Course as per detailed below:
 1. CLC : 719 cusec releases at Munak/ 683 cusec receipt at Delhi.
 2. DSB: 330 cusec releases at Munak/ 241 cusec at Delhi
 3. Yamuna River Course: 209 cusec

Total = 1133 cusec (612.5 MGD)
- B. Ganga water is supplied through Ganga Canal/Murad Nagar Regulator for Bhagirathi (200 cusec) and Sonia Vihar (270 cusec) water treatment plants.
Total = 470 cusec (254.08 MGD)
- C. 135 MGD ground water is supplied through Ranney Wells/Tubewells installed in Yamuna Flood Plains and other areas at Delhi.

6. Ground Water

- a. To meet increasing demand of water and in view of limited surface water sources, frequent pollution in raw water sources at Wazirabad and increase in dependence on Groundwater sources augmentation of new tube wells is planned by blending Ground water with surface water to achieve the permissible limits for drinking purpose. Quality Control Division of DJB regularly monitors the Ground Water Quality to ensure its fitness for drinking purposes.
- b. Delhi Jal Board has 5900 functional tubewells in various parts in Delhi. In addition, there are 11 Ranney Wells along Yamuna River. The Floodplains of River Yamuna and the area adjacent to Najafgarh Lake are being explored for extraction of water on sustainable basis. Further, the status of in progress and proposal of tube well is as follows:

STATEMENT 13.4

S.No.	Location	No. of TWs	Status of Work
1	Nilothi	74	Work of TW and construction of UGR is in progress.
2	Pappankalan	11	Work of TWs completed and laying of conveyance line is in tendering process.
3	Bhalswa	44	Installation of TW Work is in progress.
4	Yamuna Vihar	15	Installation of TW Work is in progress.
5	Sanjay Lake	26	Tendering process.
6	Smriti Van	20	Tendering process.
7	ITPO	20	Tendering process.
8	Kakrola	12	Tendering process.
9	South Burari	20	Tendering process.
10	Jaitpur	11	Tendering process.
11	Garhi Mandu	37	Tendering process.
12	DND Kalindi Aviral	25	Tendering process.
13	DND Kalindi BDP	12	Tendering process.
14	DND North of NH-24	3	Tendering process.
15	Jagatpur Biodiversity park	20	Tendering process.
16	Palla Area	200	A total of 60 tubewells at Sonia Vihar UGR (51), Sangam (3) & Burari (6) are already been commissioned. Out of remaining 140 tubewells proposed at Palla, 102 tubewells have been bored out of these 102 tubewells, 59 tubewells have been completed in all respects and for the remaining tubewells, the electric connection, E&M works, and the civil works presently under progress.

- c. Delhi Jal Board had carried out rejuvenation of 37 numbers of Water Bodies. Now DJB has returned the rejuvenated water bodies to the respective water body owning department i.e. DDA and the proposed 25 no. works under AMRUT 2.0 have also been shelved. The work of creation of water body at Timarpur oxidation pond, Dwarka, Pappankalan, Rohini, Nilothi, revival of Roshanara Lake has been completed.
- d. The aim of the prestigious project of rejuvenation of water bodies is to clean the existing Water Bodies, restoring its Ecological values and putting in management regimes that are sustainable for long term.

7. Parallel Channel from Munak to Haiderpur

About 30-50 per cent of the raw water discharged from Tajewala Head works got lost through seepage during transit in the present water carrier system comprising of Western Yamuna Canal system and River Yamuna. To minimize the en-route losses, a parallel carrier lined channel (CLC) has been constructed from Munak to Haiderpur by the Haryana Govt as a deposit work on behalf of Govt, of Delhi. Commissioning of CLC has resulted in increased availability of 180 cusec raw water for Delhi within the existing releases at Munak and WTP at Dwarka (50 MGD) and Bawana (20 MGD) & Okhla (20 MGD) have been commissioned.

7.1 Upstream Storages on River Yamuna-Renukaji, Lakhwar-Vyasi & Kishau Dam Projects:

Delhi Jal Board has planned for augmentation of water resources for Delhi. A twin-pronged strategy has been adopted, which focuses on the augmentation of both, ground-water and river (surface)-water resources, while also emphasizing the need for enhanced water conservation measures, rainwater harvesting initiatives, restoration of water bodies etc. While augmentation of ground water resources are in the hands of Delhi only, outcome of initiatives/proposals for augmentation of river (surface) water resources by Delhi is entirely dependent on cooperation and constructive collaboration from the neighboring states and the Union Government. Additional availability of raw water to the National Capital from the Upstream Storages on the river Yamuna is paramount for its planned and orderly development

Three upstream storages namely, Renukaji, Lakhwar and Kishau Dam Projects are proposed to be constructed on the river Yamuna and its tributaries. These multipurpose dam projects have been declared as National Projects. Renukaji Dam is to be constructed on river Giri, a tributary of the river Yamuna, at Dadhau in Sirmour District in Himachal Pradesh. Kishau Dam is proposed to be constructed on river Tons, also a tributary of the river Yamuna, in Dehradun District of Uttarakhand & Sirmour District of Himachal Pradesh. Lakhwar Dam is being constructed on River Yamuna in Dehradun District of Uttarakhand.

Delhi is pursuing for early and time bound implementation of the upstream storage projects. Since these projects have been declared as national projects, the central government will bear 90% of the water component costs in these projects and basin states have to bear only 10% of the water component costs for these projects in proportion to their annual water allocations in the Yamuna water as per the MOU of 12.05.1994.

Annual and interim seasonal allocations of Yamuna water to each basin state as per the MOU of 12.05.1994 are given here under and are governed as per the provisions in the MOU

STATEMENT 13.5

S.No.	States	Allocation (BCM)			Annual Allocation (BCM)
		July to Oct.	Nov. to Feb	March to June	
1.	Haryana	4.107	0.686	0.937	5.730
2.	Uttar Pradesh	3.216	0.343	0.473	4.032
3.	Rajasthan	0.963	0.070	0.086	1.119
4.	Himachal Pradesh	0.190	0.108	0.080	0.378
5.	Delhi	0.580 (1926 cusec)	0.068 (232 cusec)	0.076 (255 cusec)	0.724 (809 cusec)
Total		9.056	1.275	1.652	11.983

Source: MOU of 12th May, 1994.

Note:- Out of annual allocation of 4.032 BCM earmarked for Uttar Pradesh, tentative annual allocation among the States of Uttar Pradesh and Uttarakhand is 3.575 BCM and 0.457 BCM respectively. (BCM: Billion Cubic Meters)

The MOU of 12th May 1994 provides that, in a year when the availability is less than the assessed quantity, first the drinking water allocation of Delhi will be met and the balance will be distributed amongst the other basin states in proportion to their allocations and also include that allocation for drinking purposes is for consumptive drinking water requirement.

The Status is as under:

A. Renukaji Dam Project:

- The interstate agreement on Renukaji MPP Dam Project was signed on 11.01.2019.
- Delhi's total share cost would be about Rs. 220.16 crores at Price Level (PL) of December, 2019, wherein share in the Water Component Cost is about Rs. 40.16 crores and about Rs.180 crores towards share in the Power Component Cost. Delhi has already paid Rs. 214.84 crore to HPPCL.
- As per MoU 1994, Delhi share in Yamuna water is 6.042% and this MoU is due for revision after 2025. This project has live storage of 514 MCM or 300 MGD. Allocation of Delhi is yet to be decided by UYRB.
- The present progress is 12.46%

B. Lakhwar Dam Project:

- The agreement for construction of Lakhwar Dam was signed on 28.08.2018.
- The physical & financial progress of the project is 11.87% and 14.82% respectively.

- Delhi has paid Rs.34.642 Cr. as 1st installment of the water component cost for Lakhwar Dam. It is expected to be completed by December, 2031.
- As per MoU 1994, Delhi share in Yamuna water is 6.042% and this MoU is due for revision after 2025. This project has live storage of 330 MCM or 198 MGD. Allocation of Delhi is yet to be decided by UYRB.

C. **Kishau Dam Project:**

- The project is a storage scheme located on river Tons in Dehradun District of Uttarakhand and Sirmour District of Himachal Pradesh.
- A draft agreement for implementation of this project was shared amongst basin states. Delhi has conveyed its consent for the draft agreement and deposited Rs.8.1 Cr. in March, 2018 as seed money. It has been reported that the DPR of the project is under approval.
- As per MoU 1994, Delhi share in Yamuna water is 6.042% and this MoU is due for revision after 2025. This project has live storage of 1324 MCM or 794 MGD. Allocation of Delhi is yet to be decided by UYRB.

8. **Water Accounting and Auditing**

- 8.1 Equitable water supply & NRW Reduction: To improve water supply and more efficient management of water supply system in Delhi, the works for Design, finance, Construction, rehabilitation, Operation, Maintenance; Management of Water Supply Networks will be continued till desired level of NRW up to a maximum of 15% is achieved in whole Delhi. For these works Delhi will be divided into following three parts and the works will be executed for each part separately:
- Chandrawal WTP Command areas (JICA Assisted); Out of total 6 Packages, the work under 4 packages (1,2,3 & 4) have been awarded and are in progress. NRW to be reduced from 46% present to 15% in a phased manner
 - Wazirabad WTP Command Areas (ADB Assisted): Works in planning stage. NRW to be reduced from 50% present to 15% in a phased manner
 - Rest of the Delhi: Hiring of Consultant for Infrastructure improvement, Operation, Maintenance, SCADA for water supply network, reducing NRW, formation of District Metered Areas (DMAs); Management of Water Supply Networks including UGRs; BPSs, billing and collection of revenue etc. and all other services related to consumers. The command area of proposed contracts is extended from inlet of Primary UGRs up to House Service Connections. These works are targeted to reduce NRW upto a maximum of 15% which will provide additional availability of clean drinking water, without need of construction of WTP/UGRs/conveyance/distribution system.
- 8.2 Delhi Jal Board has initiated projects of installation of flow meters for water auditing. There are about 3007 Nos. of flow meters have been installed by DJB to take care of water supply and its accounting. One Data/SCADA Center has been established at Jhandewalan, where online data is being received on real time

- basis. This is helping in real time monitoring and optimum distribution of water.
- 8.3 Delhi Jal Board has streamlined its system for metering of unmetered supply of water. The existing system of supply of water meter along with sanction of water connection has been amended and now consumers can purchase water meters of approved specifications from the open market. The consumers having Delhi Jal Board's defective meters have been allowed to get the defective meter replaced with private water meter and have been given option either to get the refund of meter security or get the same adjusted towards water charges in future.
- 8.4 As on 1st April 2024, there were 1.09 Lakh un-metered connections. As per existing provisions if no functional water meter is installed, the bill will be raised taking minimum consumption of water as 25 Kiloliters per month per dwelling unit or as assessed by ZRO, whichever is higher till a meter is installed on such connection.

9. Water Tariff

- 9.1 The tariff is based on the principle of 'use more pay more'. Present water tariff policy acts as a deterrent for consumers consuming excessive water or having wastage of water. DJB has collected Rs. 1702.63 crore during 2024-25 (including 20 KL subsidy reimbursement amount Rs.485.33 Crore)
- 9.2 DJB has provided Rain Water Harvesting in its 594 installations. The Rain Water harvesting cell of DJB provides technical assistance to individuals/ institutions for providing Rain Water Harvesting. DJB has provided the information regarding Rain Water Harvesting on its website for public facilitation.
- 9.3 As per DJB amended tariff Regulations (March 2016) rebate of 10% in the water bills is provided for having functional RWH system and non-provision will increase water bills by 1.5 times till functional RWH System is installed. These provisions are applicable for plots of 100 Sqm. and above.
- 9.4 Salient features of existing water tariff are as hereunder:

Existing water tariff has two parts. One is Service Charge and other Volumetric Water Consumption Charge applicable w.e.f. 01.12.2004 and 01.04.2005 respectively. 60 per cent of water consumption charges are recoverable towards Sewerage Maintenance Charge from such colonies/areas where sewerage services have been provided / maintained by the Delhi Jal Board.

In case of bulk connection for a colony / group housing society serving a number of residential premises, water charges will be worked out as per residential unit-wise at the domestic rates applicable from time to time.

9.5 Water Tariff w.e.f. 01.02.2018 is as under: -

CATEGORY –I (DOMESTIC CONNECTIONS)

Monthly Consumption (in Kilolitre)	Service Charge (in ₹)	Volumetric Charge (Per KI in ₹)
Upto 20	146.41	5.27
20-30	219.62	26.36
>30	292.82	43.93
Plus Sewer Maintenance Charge: 60% of water volumetric charge		

CATEGORY –II (NON- DOMESTIC CONNECTIONS- COMMERCIAL/INDUSTRIAL)

Monthly Consumption (in Kilolitre)	Service Charge (in ₹)	Volumetric Charge (Per KI in ₹)
0-06	146.41	17.57
06-15	292.82	26.35
15-25	585.64	35.14
25-50	1024.87	87.85
50-100	1171.28	140.56
>100	1317.69	175.69
Plus Sewer Maintenance Charge: 60% of water volumetric charge		

9.5.1 Simplification of procedure for sanction of New Water Connection

Procedure for sanction of new Water/ Sewer Connection in all areas of Delhi has been simplified. Now, water / sewer connection may be sanctioned easily. Only last 3-month Electricity Bill is required along with one Identity Proof and self-declaration/ undertaking for domestic connections if applicant don't have other property ownership documents. Further, only online applications for water & sewer connection are being accepted w.e.f. 06.10.2020

9.5.2 Provision of Rainwater Harvesting / Waste Water Recycling System

- Ground water resources in many parts of the city are over exploited. The extent of replenishment of ground water is much less than what the city as a whole is withdrawing due to its rapid urbanization. There is need to preserve ground water resources and to take effective measures for its sustainable availability.
- Therefore, Rain Water Harvesting is considered as a simple, viable and eco-friendly method of conservation of water and a simple solution for ground water recharge. Ministry of Urban Development and Poverty Alleviation (Delhi Division), Government of India has made rain water harvesting mandatory in all new buildings on plots of 100 Sqm. and above and Waste Water Recycling System for horticultural purposes, in buildings having a minimum discharge of 10000 Ltrs. and above per day.

- iii. To ensure proper implementation of Rain Water Harvesting and Waste Water Recycling norms, following amendments in Regulation No. 50 of Delhi Water and Sewer (Tariff & Metering) Regulations 2012, have been approved by the Board vide Resolution No.829 dated 19-08-2019 for plots/properties of size 100 sqm. to less than 500 sqm.
- iv. It will be mandatory for plots/properties having area of 100 Sq. Mtrs. or more to have functional Rain Water Harvesting System, even if the property is constructed prior to 28-07-2001. Such plot/property owning consumers would be required to install functional Rain Water Harvesting System within one year from the date of issue of Public Notice in this regard i.e. up to 25.09.2020 (Public Notice issued on 19.09.2019 and 26.09.2019). In case consumers whose construction was before 28-07-2001, fails to comply with the aforesaid mandatory provision within the time limit prescribed, the tariff as applicable for the respective consumer category will be increased by 1.5 times, till the system is installed and intimated to the respective Zonal Revenue.
- v. Further, in case of properties having area of 100 sqm. or more, constructed after 28.07.2001 who have not intimated about the Rain Water Harvesting provision made to the respective area ZRO, may also inform the area ZRO by 31st March 2020 which was extended up to 30.09.2022 & 30.09.2023 and now further has been extended till 31.03.2024 failing which, tariff as applicable for the respective consumer category will be increased by 1.5 times, till the system is installed and intimated to the respective Zonal Revenue.
- vi. Besides (iv) & (v) above, Board may disconnect water connection of all consumers who fail to install functional Rain Water Harvesting System or intimate area ZRO within prescribed time limit. This provision will, however, be applicable in case of all properties having area of 100 sqm. and above but after timelines provided in both the aforesaid cases is over.
- vii. New water/sewer connection to the existing and newly constructed properties having installation of functional Rain Water Harvesting System. Functionality/Adequacy shall be checked by Zonal Office and thereafter Adequacy certificate shall be issued by the Rain Water Harvesting Cell.
- viii. New water/ sewer connection to newly constructed properties/ buildings having a minimum discharge of 10000 Ltrs. and above per day will be sanctioned by the respective Maintenance Division.
- ix. Implementation of (vii) above for plots/properties having area of 100 Sqm and above but below 500 Sqm. would be applicable after timelines provided in (iv) and (v) above are over.
- x. In cases where installation of Rain Water Harvesting System is not technically feasible, for any reason, CEO, DJB may take appropriate decision in respective case, on merits.

Water Tariff for Un-metered Connections in JJ Resettlement Colonies and Rural Areas:

All domestic consumer of Delhi Jal Board consuming water up to 20 KL Per month and having functional water meters are being given 100% subsidy and fully exempted from payment of water bill components namely, water charges, sewerage maintenance charge, service charges, meter rent (wherever applicable) w.e.f. 01.01.2014 to 31.03.2014 and thereafter w.e.f. 01.03.2015 onwards.

10. Rain Water Harvesting

10.1 Ministry of Housing and Urban Affairs, Government of India has issued guidelines for Urban Water under Jal Shakti Abhiyan. Thrust areas include Rain Water Harvesting (RWH). For Rain Water Harvesting, the guidelines include that ULBs should ensure that all government buildings (Central/State/ULB) must have RWH structures. The guidelines also include that ULBs should ensure that in future all building permissions granted must have RWH structures incorporated, as per building bye laws, and same. Therefore, in urban areas, ULBs have to play major role in ensuring implementation of Rain Water Harvesting systems.

10.2 Roof top rain water harvesting has been made mandatory for plots size of 100 sqm. and above as per notification issued by the Govt. of India. To promote its implementation Delhi Jal Board has made provisions in its tariff regulations for rebate and penalty in water bills for implementing and non-implementing Rain Water Harvesting Systems.

10.3 The following provisions have been made in the Delhi Water & Sewer Tariff and Metering Regulations, July' 2012 for promoting Rain Water Harvesting:

Regulation 8 (d) of Chapter II provides that for category the consumers, the following rebate is given in tariff for provision of Rain Water Harvesting, Waste Water Recycling or both:

1. Such plot/properties which have an area of 100 square meter or more and having installed functional rain water harvesting system, shall be granted rebate of 10% in the total bill amount and 15% if both rain water harvesting and waste water recycling systems have been set up and functional.
2. If the Rain Water Harvesting system is adopted by a society then the individual member of that society will be entitled to above mentioned rebate in water bill.
3. Functionality inspection of every rain water harvesting system will be conducted by the Zonal Engineers before reviewing the certificate every two years.
4. Delhi Jal Board has implemented rain water harvesting system in all of its 594 Nos. premises wherever feasible and more are being targeted for implementation of rain water harvesting. Rain Water Harvesting Systems have been implemented in 4343 schools/colleges out of the 4861(Data of schools/colleges has been Kendriya vishayalaya Sangathan gave report of RWH in KVS schools

in duplicate). Further in 181 schools /colleges the rainwater harvesting systems are either under construction or are being taken up for implementation and in the 337 schools and colleges, implementation of RWH system is not feasible due to various reasons i.e. shallow ground water level up to 5.0m or non-availability of space etc.

5. People are being sensitized for the judicious use of Potable water for the demand side management through public outreach program. There is a dedicated Rain Water Harvesting cell in DJB which is providing technical assistance to facilitate the public in implementation of Rain Water Harvesting system.
6. Delhi Jal Board has been assigned to implement Rain Water Harvesting Systems in Government Building installations which are not maintained by the PWD, GNCTD. For Delhi Government buildings which are maintained by PWD, GNCTD, the implementation of Rain Water Harvesting System is to be carried out by PWD, GNCTD itself.
7. To sensitize the citizens of Delhi a continuous process of disseminating information on Rain Water Harvesting through platforms like print, electronic, visual, workshops, exhibitions, seminars, booklets, pamphlets etc. have been done by Delhi Jal Board. Jal Shakti Kendras have been created in each Revenue District of Delhi where anyone can visit for information/guidelines regarding the implementation of Rain Water harvesting system in their area. These Jal Shakti Kendras are manned by technical persons for the facilitation of the public at large regarding information on various initiatives taken by DJB for the implementation of rain water harvesting system and penal provision in case of non-implementation. Details of the Jal Shakti Kendras are available on DJB website.
8. Delhi Jal Board also empaneled the service providers /consultants for facilitation of the public /people for implementation of rain water harvesting system. The list of the service providers /consultants is available on DJB website.

10.4 Incentive:

- i. Such Plot/properties having functional installed Rain Water Harvesting System (RWH), rebate in water bills is given to the extent of 10% to the consumers of Delhi Jal Board and is applicable on plots size of 100 sqm. and above. Year wise rebate is given as under:-

S.No.	Period	Amount (₹ in Cr.)
1.	01.07.2017 to 31.03.2018	13.6
2.	01.04.2018 to 31.03.2019	21.44
3.	01.04.2019 to 31.03.2020	23.32
4.	01.04.2020 to 31.03.2021	27.88
5.	01.04.2021 to 31.03.2022	20.22
6.	01.04.2022 to 31.03.2023	47.45
7.	01.04.2023 to 31.03.2024	48.71
8.	01.04.2024 to 31.03.2025	27.76
	Total	230.38

- ii. Functionality inspection of every rain water harvesting system will be conducted by the Zonal Engineering Wing before reviewing the certificate in every two years.

10.5 Penalty:

For all the consumers irrespective of their consumer category Rain Water Harvesting penalty as enhanced tariff of 1.5 times will be applicable if they have plot area 100 sq. meter and above and do not have a functional rain water harvesting facility w.e.f. 01.07.2017 (in case of Dwarka sub-city, penalty on account of non-provision of RWH system is applicable w.e.f. 01.11.2018). Rain Water Harvesting penalty was deferred till 31.03.2024 as per Instructional Order issued by engineering wing on dated 01.03.2024.

10.6 Exceptions:

RWH through artificial ground water recharge structures is not recommended where post monsoon ground levels are shallower than 5m. Penalties as per the Delhi Water and Sewer (Tariff & Metering) Regulation, 2012 will not be levied on DJB consumers for non-provision of RWH System in such areas. However, in such areas Rain Water Storage for its use in non-potable purposes after required treatment may be carried out as a voluntary option.

10.7 Water Conservation in Water Supply system.

- i. Delhi has a network of about 15700 Kilometers of water supply mains. Normally, water losses are calculated by water billed or consumed subtracted from the water produced. In case of Delhi, water billed or consumed and leakage losses therefore cannot be calculated exactly as a majority of houses do not have working meters.
- ii. New Water Lines laid/Replacement of old/outlived water lines for prevention of wastage of precious filtered water and reduction of contamination possibilities with improvement of water pressure :
 - Transmission Lines (major dia. Pipe lines) = 12.7 Km
 - Distribution Network = 172 Km
- iii. Delhi Jal Board formulated a programme for recycling of backwash water at Haiderpur, Bhagirathi, Chandrawal, Wazirabad and Nangloi water treatment plants. On commissioning of recycling plant at Haiderpur, Bhagrathi, Wazirabad, Chandrawal and Nangloi about 47 MGD has been added water supplies without any additional raw water from these five plants. Work of construction of Recycling Plant for 2 MGD at Bawana is in advance stage of completion.

11. Sewage Treatment Capacity

- 11.1 Adequate sanitation is essential for the protection & promotion of individual's and community health. Various schemes are being implemented by the DJB to improve sanitation conditions. Sewage treatment capacity of Delhi Jal Board increased from 402.40 MGD in 31st March 2001 to 764 MGD in 31st March **2025**. The information regarding the sewerage treatment capacity and percentage of utilization is presented in Statement 13.6.

STATEMENT 13.6

SEWERAGE TREATMENT CAPACITY AND ITS UTILIZATION

(MGD)

S. No.	Name of Sewerage Treatment Plants (STPs)	Capacity (MGD)		Actual Treatment as on 31.3.2025	% of Utilization
		31.3.2001	31.3.2025		
1	Okhla	140.00	170.00	140.00	82.35
2	Keshopur	72.00	72.00	71.40	99.17
3	Coronation Pillar	46.00	100.00	75.00	75.00
4	Rithala	40.00	80.00	78.00	97.50
5	Kondli I, II, III, IV	45.00	90.00	60.00	66.67
6	Yamuna Vihar I,II	10.00	50.00	55.00	110.00 [#]
7	Vasant Kunj	5.00	5.00	3.39	67.80
8	Ghitorni	5.00	5.00	4.53	90.60
9	Pappankalan	20.00	40.00	41.00	102.50 [#]
10	Narela	10.00	15.00	13.00	86.67
11	Najafgarh	5.00	5.00	5.00	100.00
12	Delhi Gate	2.20	17.20	18.92	110.00 [#]
13	Sen Nursing Home	2.20	2.20	3.00	136.36 [#]
14	Rohini	-	25.00	20.00	80.00
15	Nilothi	-	60.00	41.46	69.10
16	Mehrauli	-	5.00	5.00	100.00
17	CWG Village	-	1.00	0.15	15.00
18	Molarband	-	0.66	0.54	81.82
19	Kapashera	-	5.00	5.00	100.00
20	Chilla	-	9.00	9.00	100.00
21	Sonia Vihar	-	7.00	0.82	11.71
Total		402.40	764.06	650.21	85.08

Some Delhi Jal Board STPs are treating sewage beyond their designed capacity due to higher sewage inflow from the catchment area. However, STPs are designed to handle up to 10% additional flow during peak hours only.

11.2 It is evident from the above statement that the percentage of utilization of sewerage treatment plant in Delhi as on 31st March **2025** was about **85 percent**. The sewerage treatment plants are not functioning up to their optimum level due to various reasons such as low flow of sewerage to STPs, trunk and peripheral sewer lines still to be connected to these STPs, Rehabilitation of Silted and settled Trunk Sewer Lines yet to be completed, etc. The sewage generation, at present, is estimated to be around **800 MGD = (1000 water production x 0.8)** and treatment is around **650 MGD** only.

11.3 Delhi Jal Board has a network of branching, peripheral sewers of about **11,040 kms**. Also there is network of **200 kms** of trunk sewers. The rehabilitation/desilting of trunk sewer and peripheral sewer is in progress.

11.4 The estimated water supply requirement and waste water generation for Delhi is presented in Statement 13.7.

STATEMENT 13.7

WATER SUPPLY REQUIREMENT AND WASTE WATER GENERATION ESTIMATED

S. No	Details	Volumes (MLD)					
		2004	2005	2006	2011	2024	2025
1.	Total water demand	2685	3763	4090	5181	5891	5625
2.	Total net water supply	2265	2362	2461	3573	4540	4540
3.	Waste water generated	1812	3010	3272	4144	3632*	3632*
4.	Treated at CETP	200	217	234	346	Does not pertain to DJB	Does not pertain to DJB
5.	Proportion not sewered	14%	13%	13%	10%	18%	17%
6.	Outside sewered area	254	302	302	294	210	210
7.	Net generated waste water	1358	1722	1798	2218	3632	3632
8.	Infiltration	518	518	518	518	908	908
9.	Gross Wastewater to treatment	1876	2240	2316	2736	4540	4540

* 80% of net water supply as per CPHEEO norms.

STATEMENT 13.8

EXPENDITURE INCURRED ON WATER SUPPLY AND SEWERAGE PROGRAMMES

(₹ in Crore)

S. No.	Details	Water Supply	Sewerage	Total #
1	Approved Outlay (2007-2012)	4361.50	3132.50	7494.00
2	Fund Released			
	a. 2007-08	962.01	383.96	1345.97
	b. 2008-09	1015.17	441.73	1456.90
	c. 2009-10	1080.35	568.55	1648.90
	d. 2010-11	1080.14	527.93	1608.07
	e. 2011-12	1033.02	528.02	1561.04
	Total (a+b+c+d+e)	5170.69	2450.19	7620.88
3	Approved Outlay (2012-17)	6087.00	4913.00	11000.00
4	Fund Released			
	a. 2012-13	964.97	752.4	1717.37
	b. 2013-14	796.77	753.23	1550.00
	c. 2014-15	854.5	934.5	1789.00
	d. 2015-16	646.5	1077.43	1723.93
	e. 2016-17	850.15	534.5	1384.65
	Total (a+b+c+d+e)	4112.89	4052.06	8164.95
5	Approved Outlay 2017-18 - BE	939.00	816.00	1755.00
6	Fund Released 2017-18	999.50	730.50	1730.00

S. No.	Details	Water Supply	Sewerage	Total #
7	Approved Outlay 2018-19 - BE	1258.00	1092.00	2350.00
8	Fund Released 2018-19	1271.37	1044.61	2315.98
9	Approved Outlay 2019-20 - BE	1463.4	906.6	2370.00
10	Fund Released 2019-20	1340.65	1018.85	2359.50
11	Approved Outlay 2020-21 - BE	1624.4	2379.6	4004.00
12	Fund Released 2020-21	1319.40	2264.60	3584.00
13	Approved Outlay 2021-22 - BE	1251.42	1700.01	2951.43
14	Fund Released 2021-22	769.50	1123.26	1892.76
15	Approved Outlay 2022-23 - BE	3183.86	3160.64	6344.50
16	Fund Released 2022-23	1501.23	1670.21	3171.44
17	Approved Outlay 2023-24 - BE	1,507.11	3,406.49	4,913.60
18	Fund Released 2023-24	948.29	2,061.48	3,009.77
19	Approved Outlay 2024-25 - BE	1,926.00	2,368.99	4,294.99
20	Fund Released 2024-25	533.62	671.28	1,204.90
21	Approved Outlay 2025-26 - BE	2010.00	★ 3982.97	5992.97

★ The amount of Rs. 3057.68 cr. in the head Capital Project GIA and Loan are also included in sewer sector

Note : The Central Share scheme like Namami Gange and YAP-III have been excluded from the above fund received (income) and expenditure. Provision has been made by Govt. of NCT of Delhi for Revolving fund for Rs. 100 cr. for JICA

11.5 It may be observed from Statement 13.8 that the fund released for water supply and sanitation to DJB increased from 1346 Crore. In 2007-08 to 5992.97 Crore in 2024-25.

12 Re-use of Waste Water

12.1 The major reuse of treated waste water in and around the city is for irrigation, horticulture and industrial use. There is demand for use of treated waste water for cooling in the power stations. Other options include ground water recharge, return to be raw water source, and the treatment and reuse of treated waste water, for flushing of toilets, i.e. use for non-potable purposes like washing of Railways, Buses, Construction industry.

12.2 Presently, Delhi Jal Board supply about 117 MGD of treated waste water to the Irrigation Department, Power Plants and for irrigation purposes by CPWD and in Rohini area by DDA & Flood Control and Irrigation Department. Efforts are being made to increase the treated waste water supply from 117 MGD in subsequent years. Treated water supply to various purposes in Delhi is presented in Statement 13.9.

STATEMENT 13.9

TREATED WASTE WATER SUPPLY FOR VARIOUS PURPOSES

S. No.	Details	Units (MGD)
1.	Treated effluent supplied from Keshopur STP for Irrigation, horticulture purposed	5.50
2.	From Okhla STP to CPWD and Irrigation department for horticulture/ Irrigation purpose	37.37
3.	From Coronation Pillar STP for DDA Golf Course at Bhalswa, Gammon India for construction purposes. Minor Irrigation Department at Palla	21.52
4.	From Rithala STP to PPCL for their plant at Bawana and NDPL for their owner plant at Rohini, DDA for horticulture	9.15
5.	From Vasant Kunj to Sanjay Van	3.40
6.	From Mehrauli STP to Garden of Seven Senses	3.40
7.	From Delhi Gate and Sen Nursing Home STP to PPCL	4.80
8.	From Nilothi STP to Flood Control & Irrigation Deptt. For Irrigation purposes	10.50
9.	From Papankalan STP for Irrigation purposes to DDA	7.83
10.	From Commonwealth Games Village STP to DDA horticulture	0.18
11.	From Yamuna Vihar to STP's horticulture	0.50
12.	From Narela to Pvt. Agency for washing of vehicle	0.05
13.	From Najafgarh to WTP Dwarka for Horticulture	0.07
14.	From Chilla STP to Internal Horticulture of STP	0.20
15.	From Kondli STP to DDA, PPCL & Horticulture	13.00
	Total	117.47

12.3 Delhi Development Authority is responsible for 4,451 hectares of open spaces, all of which are irrigated via tube wells. There are also irrigation open spaces of Delhi Municipal Corporations, Central Government properties, private properties, road verges, sports stadiums etc. The information regarding the green areas being maintained by the various agencies is presented in Statement 13.10.

STATEMENT 13.10

GREEN AREAS MAINTAINED BY VARIOUS AGENCIES

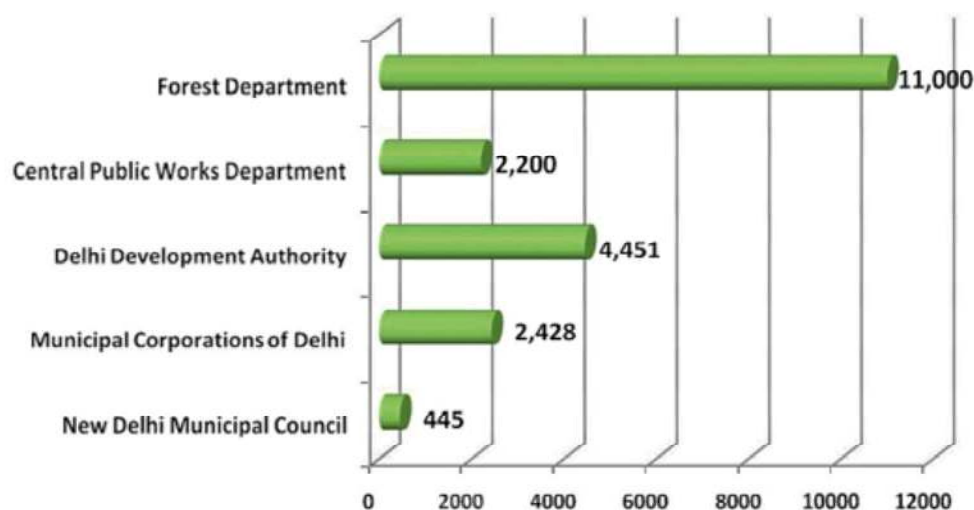
S. No.	Agencies	Green Areas (in Hectares)	% age
1.	New Delhi Municipal Council	445	2.17
2.	Municipal Corporations of Delhi	2,428	11.83
3.	Delhi Development Authority	4,451	21.69
4.	Central Public Works Department	2,200	10.71
5.	Forest Department	11,000	53.60
	Total	20,524	100.00

Source: Delhi Jal Board

The green areas maintained by various agencies in Delhi are depicted in Chart 13.2.

CHART 13.2

GREEN AREAS MAINTAINED BY VARIOUS AGENCIES



12.4 The Interceptor Sewer Project (ISP) has been conceptualized to reduce pollution in the River Yamuna by intercepting untreated sewage before it enters major drains and diverting it to Sewage Treatment Plants (STPs). The system comprises interceptor sewers along the Najafgarh, Supplementary, and Shahdara drains, supported by infrastructure such as intercepting chambers, sewage pumping stations, and rising mains. Under the ISP, 108 drains have been trapped, enabling the interception of approximately 243.88 MGD of sewage flow. Against the proposed 243.88 MGD, provisions for trapping 238 MGD have already been created. Although the physical works under the ISP are nearly complete and the infrastructure for trapping 238 MGD is in place, the current trapping is only about 170 MGD due to insufficient treatment capacity at the Pappankalan, Nilothi, Rithala, and Yamuna Vihar STPs. The full treatment of the intercepted sewage will be achieved after augmentation of capacities at these STPs.

STATEMENT 13.11

COLONIES/CATEGORY WISE PROGRESS OF SEWAGE SYSTEM

S. No.	Colonies / categories	Total no. of Colonies	Colonies with Sewerage System
1.	Un-authorized Regularized Colonies	567	557
2.	Urban Village	135	130
3.	Rural Village	219	55
4.	Un-authorized Colonies	1799	1206
5.	Resettlement Colonies	44	44

13. Challenges for Water Supply & Sanitation

13.1 Depletion of Ground Water: The falling groundwater level due to excessive drawing of groundwater in Delhi is a concern. The water level has sunk to 20- 30 metres below the ground level in many places. In a few zones, high level of TDS, Ammonia, Nitrate, Floride, Hardness, Iron, Sulphate etc. more than the recommended limits have been found. All of these are unhealthy for human consumption if used without adequate treatment.

13.2 Treatment and Quality Management

Water sector

For ensuring a smooth supply of wholesome, potable water as per BIS:10500-2012 with latest amendments, there are 09 laboratories working 24x7 in the Water Treatment Plants (WTPs) for water quality monitoring starting from intake of raw water to various stages of treatment. DJB also has 08 zonal laboratories located in the different parts of the capital for surveillance of water quality at consumer end. Survey of River Yamuna Upstream is also being conducted on regular basis. DJB lifts about 1700 water samples daily from source to tap that includes WTPs (all stages), reservoirs, tube wells, Ranney Wells, water tankers, public hydrants, distribution network, households, complaints, water emergencies, hospitals, schools, angan wadies, public hydrants, cholera-diarrhoea-jaundice-hepatitis-typhoid cases etc. for Physical, Chemical & Bacteriological analyses. Essential parameters which are tested in the laboratories are color, odor, pH value, turbidity, Electrical Conductivity, TDS, alkalinity, hardness, ammoniacal-N, nitrate, nitrite, Dissolved Oxygen, Oxygen Absorption, chloride, iron, fluoride, chromium, cyanide, chlorine demand, Residual Chlorine, residual alumina etc.

DJB also gets its water tested (Water Treatment Plants, Ground water sources, Under Ground Reservoirs & Distribution network) through an independent outside Agency i.e. National Environmental Engineering Research Institute (NEERI), CSIR, Ministry of Science & Technology, Gol.

Water samples at consumers end are also regularly collected and tested by the Zonal field staff for residual chlorine to ensure that water reaching to the consumers is properly disinfected.

Water samples are collected and tested by the qualified Quality Control personnel under the supervision of ACWAs/CWAs/Director(T&QC). The percentages of unsatisfactory samples during the last four years are less than 5 % i.e. within the WHO guidelines. According to the WHO classifications, 0-2% comes under “low risk and no remedial action is required”, similarly 3-5% comes under “intermediate risk category and remedial action of low priority is required”.

Delhi Jal Board Laboratories have been upgraded to test elemental analyses including heavy metals with the latest ICP-OES. DJB's 2 laboratory has already been accredited with NABL. 4 Laboratories are ISO 9001:2015 certified. DJB developed “State of Art” Laboratories, one at Wazirabad WTP and another at Okhla STP for water & waste water testing.

Some major initiatives undertaken are:

- (i) Hiring of 08 sampling vans/vehicles for extensive surveillance of drinking water distribution network of Delhi
- (ii) Online IoT based LOH & ROF commissioned at Wazirabad WTP and Haiderpur WTP for proper monitoring of filter beds functioning
- (iii) Online turbidity measurement at all Inspection boxes at Wazirabad & Haiderpur WTPs
- (iv) One “State of Art” Laboratory exclusively for microbiological tests is commissioned at Wazirabad WTP

Waste water sector

Delhi Jal Board is currently doing all possible measures to maintain final effluent quality at STPs. DJB has 08 Quality Control Laboratories for inspection and evaluating raw sewage to final effluent to maintain all parameters as per DPCC norms. Survey of river Yamuna downstream from Wazirabad to Okhla barrage is also being conducted on regular basis.

Extensive survey of major drains in Delhi is also undertaken as & when required by the concerned authorities.

13.3 Unsustainable approaches to Water use: As per Outcome Budget (Q2 of 2023-24) of DJB, the total distribution losses are at about 52.35%. These are quite high as compared to 10-20% in developing countries. There are large water losses at different stages of water supply system in the treatment plants, conveyance systems and distribution systems, apart from leaks and pilferage.

13.4 Wasteful Approaches: People use Reverse Osmosis (RO) systems for water filtration since the tap water is not potable. RO causes water wastage of about 40- 60% of the water used.

13.5 Neglecting Natural Resources: During the rainy season, Delhi experiences water-clogged roads and overflowing sewers. There is little rainwater harvesting, resulting in wastage of a precious resource.

13.6 Public Awareness: Public awareness and their role in water conservation and scientific use are at present unsatisfactory.

CHAPTER AT A GLANCE

➤	The Delhi Government ensured free lifeline water of up to 20 kilolitres to every household having metered water connection and around 18.91 lakhs consumers have benefitted under this scheme since its inception.
➤	About 93.5 % households of Delhi now have access to piped water supply. Approx. 900 Nos. hired tankers and 150 Nos. departmental tankers are being deployed to supplement water supply in water deficit areas.
➤	The installed capacity of DJB has been augmented by 21.64 % during last 17 years. The capacity, which was 790 MGD in 2009, has been increased to 961 MGD in 2025.
➤	Delhi Jal Board had carried out rejuvenation of 37 numbers of Water Bodies. Now DJB has returned the rejuvenated water bodies to the respective water body owning department.
➤	DJB has provided Rain Water Harvesting in its 594 installations.
➤	Delhi Jal Board has set up a leak detection and investigation (LDI) cell to minimize leakage losses which helped to replace about 184.7 km length of the old, damaged and leaking water mains during 2025-26 (upto January, 2026).
➤	Sewage treatment capacity of Delhi Jal Board increased from 402.40 MGD in 31st March 2001 to 764 MGD in 31st March 2025. Delhi Jal Board has a network of branching, peripheral sewers of about 11040 kms. Also, there is network of 200 kms of trunk sewers.
➤	Delhi Jal Board supplies about 117 MGD of treated waste water to the Irrigation Department, Power Plants and for irrigation purposes by CPWD and in Rohini area by DDA & Flood Control and Irrigation Department. Efforts are being made to increase the treated waste water supply from 117 MGD in subsequent years.