

## **Water Supply & Sanitation**

1. Delhi Jal Board is responsible for procurement and treatment of allocated raw water to Delhi. Delhi Jal Board makebulk supply of treated potable water to Delhi Cantonment Board and NDMC for distribution in their areas of jurisdiction respectively. In the area of the three Municipal Corporations of Delhi, Delhi Jal Board is responsible for supply of drinking water with its own trunk, peripheral and distribution network.
2. Raw water is being made available to Delhi from Ganga River (240 MGD), Yamuna River (310 MGD), Bhakhra Beas Management Board (140 MGD). About 115 MGD of ground water is being explored through Rainy Wells and Tube Wells of Delhi Jal Board.
3. As per Yamuna Water Sharing Agreement signed in 1994, among the Northern Region States of Himachal Pradesh, Haryana, Uttar Pradesh, Rajasthan and Delhi, 0.724 BCM Yamuna water was allocated to Delhi. Uttrakhand was part of the Uttar Pradesh at that time. This share is divided into 3 blocks period of the year i.e. July to October, November to February and March to June. Delhi may get its full share of 0.724 BCM (808 Cusecs consumptive) only after construction of 3 new reservoirs in the upper Yamuna Basin Area. These 3 new proposed reservoirs are : Renuka Dam on River Giri, a tributary of Yamuna in Sirmaur District of Himachal Pradesh, Kishau Dam on river Tons, also a tributary of Yamuna river in Uttrakhand and Lakhwar-Vyasi Dam on river Yamuna near Lakhwar village in District Dehradun of Uttrakhand.
4. Govt. of Delhi paid an amount of Rs.215 Cr. to the HP Govt. for land acquisition for Renuka Reservoir. The DPR of the project has already been prepared and approved. Earlier entire cost of the construction of Renuka Reservoir was to be financed by Delhi Govt. Now Renuka Reservoir project has been declared as a national project and as such the Govt. of India will finance the cost of its construction. However, construction work of this project could not be started as clearance from Ministry of Environment and Forest is still awaited. About 275 MGD raw water will be made available to Delhi on construction of this reservoir.
5. The construction of Kishau Dam through Tehri Hydro Development Corporation and Lakhwar-Vyasi Dam through National Hydro Power Corporation is also yet to be started.
6. The ground water, the only resource available to fill the gap between drinking water requirement of the National Capital Territory and the raw water available is in a very critical condition as the pace of ground water recharge is far behind the pace of ground water exploration. Delhi Jal Board is very much concerned on this scenario of very fast depleting ground water level in Delhi. To regulate use of ground water Delhi Govt. prepared a draft Delhi Water Board (Amendment) Bill 2006 which is yet to be approved by Delhi Legislative Assembly.
7. The NDMC and Delhi Cantonment Board, the two local bodies are responsible for providing sewerage facilities in their respective areas. For the remaining area under the jurisdiction of 3 Municipal Corporations, DJB is responsible for providing sewerage

facilities. Since more than 95% of the total area is within the jurisdiction of DJB, the total sewage treatment is being taken care of by DJB.

8. At present, the sewage treatment capacity of all 17 treatment plants is 512 MGD. However, actual treatment capacity utilization is around 300-320 MGD of sewage only.

### **11<sup>th</sup> Five Year Plan (2007-12)**

1. Two new Water Treatment Plants are under construction at Okhla of 20 MGD and Dwarka of 40 MGD. One more 20 MGD Water Treatment Plant constructed at Bawana is also yet to be utilized due to non-availability of raw water.

2. The construction of Pucca Parallel Channel was assigned to Irrigation Department of Haryana Govt. at a cost of Rs.314 Cr. in the year 2006. Now Govt. of Haryana has requested for release of additional amount of about Rs.160 Cr. with the plea that cost of construction of this Channel has increased.

3. Waste water recycling plants have already been made operational at Haiderpur, Wazirabad and Bhagirathi water treatment plants thereby adding 37 MGD of water available for the further treatment. The 4<sup>th</sup> waste water recycling plant at Chandrawal is nearing completion and will be made functional shortly.

4. Sonia Vihar Water Treatment Plant with 140 MGD capacity has already been made functional which has contributed in improving the water supply in East & South Delhi to a great extent.

5. Out of 53 new proposed UGRs, 33 UGRs already commissioned, and 3 UGRs are targeted for completion during the current financial year and six will be commissioned by Dec 2013 and for 4 UGRs DDA is yet to allocate suitable land.

6. Important programmes implemented to reduce the water distribution losses intake laying of new water lines to replace the old water lines, installation of 305 modern bulk meters on all water treatment plants, water distribution mains and UGRs, installation of meters on all non-metered consumer connections and replacement of all defective water meters by new water meters.

7. To promote rain water harvesting, all schools and new institutional buildings are being provided with rain water harvesting system by PWD and other construction agencies of the Govt. DJB is providing subsidy upto 50% of cost of rain water harvesting system upto Rs.1 lakh to Cooperative Group Housing Societies.

8. On the sewerage front, DJB was to complete the projects approved under Yamuna Action Plan Phase-II in during 2011-12. DJB has identified the projects to be taken up under YAP-III costing about Rs.1700 crore.

9. One of the major achievements of 11<sup>th</sup> Five Year Plan is rehabilitation of entire settled and silted trunk sewers by 2011-12. With the rehabilitation of remaining 50 km length of trunk sewer no sewage will be discharged into the storm water drains thereafter.

## **12<sup>th</sup> Five Year Plan (2012-17)**

1. DJB projected to increase water supply capacity from 650 MGD in 2001 to 925 MGD by 2011. DJB estimated to continue this level of water supply capacity of 925 MGD upto 2021 if Renuka Project is not completed.
2. Thus going by the DJB norms of 60 GPCD, the water supply requirement for the population of Delhi in 2011 was 1020 MGD. Taking into account the present water supply capacity of 855 MGD there was a shortfall of 165 MGD at present.
3. Assuming the same population growth, as recorded in 2011 Census, to continue for the next decade, the projected population of Delhi by the end of the 12<sup>th</sup> Five Year Plan i.e. by March 2017 may be around 190 lakhs. Going by DJB norms of 60 GPCD, the water supply requirement in March 2017 for the projected population of 190 lakhs may be around 1140 MGD.
4. In view of the present status of the proposed new reservoirs in Yamuna river Basin for Renuka, Keshau and Lakhwar-Vyasi, there seems to be no possibility of completion of any of these proposed reservoirs by the end of the 12<sup>th</sup> Five Year Plan. In this situation of non-availability of raw water from these proposed reservoirs, another source of raw water may be by developing a system of tube wells in identified potential area of NCR.
5. Central Ground Water Board has also earmarked potential area for 10 MGD from flood plains of river Yamuna in NCT of Delhi along with Okhla Barrage - KalindiKunj through a battery of 25 Tube wells also along Akshardham Mandir and Nizammudin Bridge through a battery of 25 Tube wells.
6. Next measure may be economical and judicious use of available water by laying of Dual Pipe System in limited way for flushing purpose only in all Group Housing Societies and new colonies to be developed in the new urban extension areas by the DDA. Waste water from bathrooms will be collected in a storage tank and pumped to a separate overhead storage tank at the roof and then connected the same with the Cisterns in the toilets for flushing purposes.
7. One of the priority Programme which need due attention is rain water harvesting and ground water recharge to the extent of maximum potential available in the National Capital Territory, if we wish to continue to make use of the ground water for a longer term.
8. The present status of non-revenue water of around 54% in Delhi may not be allowed to continue both from the citizen's point of view as well as DJB's point of view. With such high level of non-revenue water, DJB may not find enough resources to meet the cost of water and sewerage infrastructure required for growing population of the NCT of Delhi on the one hand and its present financial position may affect its operational efficiency also.

9. With the expansion of urbanization process, the water requirement of construction industry in Delhi is increasing. It is estimated that maximum unauthorized exploration of ground water is made by construction industry. Supply of treated waste water at reasonable rate to the Construction Industry, Delhi Metro, Railways, DTC, Major Auto Workshops in Delhi may prove as a better check on unauthorized exploration of the ground water.

10. The project for laying of interceptor sewers along 3 major drains i.e. Najafgarh drain, Supplementary drain and Shahdara drain has been started. Implementation of this project is expected to ensure discharge of only treated waste water and control of pollution in Yamuna River.

11. Minimum flow of fresh water in Yamuna River downstream of the Wazirabad is also equally essential for rejuvenation of river Yamuna in the NCT of Delhi. This minimum flow of fresh water may be ensured only with the construction of proposed 3 new reservoirs in the upper Basin of the Yamuna River.

12. Water bodies in the NCT of Delhi have been affected with the rapid urbanization process. The preservation and development of all water bodies shall be taken up to improve the ground water level and rain water harvesting.

13. Storage of flood water in Yamuna River Basin may be done through construction of a Barrage near Palla. It will be a source of additional raw water supply to Delhi during the lean period.

During 11th FYP, an Outlay of Rs. 9126.00 Crore was kept against which an estimated expenditure of Rs. 7621.00 Crore has been incurred which is 83.50% of the Outlay. The reasons for shortfall in expenditure over Outlay are due to under utilization of funds against Sewerage System in regularized un-authorized colonies/un-authorized colonies and in Trans Yamuna area .

The statement showing Outlay and Anticipated Expenditure 2007-12, An Outlay for 2012-13 and for 12th FYP (2012-17) is given hereunder:-

[Rs. In Crore]

Sector	11 <sup>th</sup> Five Year Plan (2007-12)		12 <sup>th</sup> Five Year Plan (2012-17)	
	Approved outlay	Provisional Expenditure	Plan outlay 2012-17	Plan Outlay 2012-13
Urban water Supply	5261.94	4774.18	6015.00	1008.00
Rural Water Supply	45.67	66.06	70.00	10.00
Urban Sanitation	3519.93	1674.24	2566.00	339.75
Rural Sanitation	182.66	193.30	500.00	20.00
YAP-II	42.62	310.75	50.00	50.00
YAP-III	-	-	260.00	25.00
JNNURM	Nil	456.30	1487.00	338.70
Others	73.07	146.05	52.00	8.55
<b>Total</b>	<b>9125.89</b>	<b>7620.88</b>	<b>11000.00</b>	<b>1800.00</b>
<b>Total Outlay</b>	<b>54799.15</b>	<b>--</b>	<b>90000.00</b>	<b>15000.00</b>
<b>% w.r.t. Total Outlay</b>	<b>6%</b>	<b>--</b>	<b>8.18%</b>	<b>8.33%</b>

The Scheme-wise details of Water Supply & Sanitation Sector are given below: -

## **WATER SUPPLY**

### **1. PROVIDING WATER SUPPLY IN UNAUTHORIZED COLONIES**

#### **Plan Outlay**

**XII FYP :** Rs.80000 Lakh

**Annual Plan 2012-13 :** Rs.9630 lakh

Piped Water Supply Network has been laid in 776 Un-authorized colonies. To give immediate relief to public in pockets/ areas with water shortage, additional tube-wells have been bored/re-bored and about 900 water tankers will be deployed for supplying potable water to far-flung areas, JJ Clusters, rural villages; re-settlement Colonies, unauthorized colonies and deficit prone areas.

### **2. REPLACEMENT OF OLD DISTRIBUTION AND TRUNK TRANSMISSION SYSTEM**

#### **Plan Outlay**

**XII FYP :** Rs.70000 Lakh

**Annual Plan 2012-13 :** Rs.10000 lakh

DJB has undertaken major works for replacement of critical stretches of water main in leakage prone portions especially of pre-stressed concrete (PSC). It is proposed to lay 40 km of new water lines and replace 120 km of old water lines for which a provision of Rs 100 crore have been kept. DJB will take up selected projects under the program improvement with rationalization of water distribution system for revamping of existing water supply, transmission, and distribution networks under PPP during 2012-13.

### **3. IMPROVEMENTS OF EXISTING WATER WORKS**

#### **Plan Outlay**

**XII FYP :** Rs.41500 Lakh

**Annual Plan 2012-13 :** Rs.15000 Lakh

The renovation of coagulation and filtration system at Chandrawal WW no 1 is in progress and const. of boundary wall at proposed WTP at palla will be taken up. Further, three pilot projects are proposed i.e. Vasant Vihar, Malviya Nagar and Nangloi WTP for improvement of water service delivery based on PPP Model.

### **4. RANNEY WELLS & TUBE WELLS IN URBAN AREAS**

#### **Plan Outlay**

**XII FYP :** Rs.9800 Lakh

**Annual Plan 2012-13 :** Rs.1500 lakh

About 115 MGD of ground water is being explored through Rainy Wells and Tube Wells of Delhi Jal Board.

## **5. STAFF QUARTERS & OFFICE ACCOMMODATION**

### **Plan Outlay**

**XII FYP :** Rs.10000 Lakh  
**Annual Plan 2012-13 :** Rs.1000 lakh

A provision of Rs 10 crores has been kept for construction of 475 quarters at Chandrawal as well as training and consumers centers.

## **6. LAYING OF WATER MAINS IN REGULARIZED UNAUTHORIZED COLONIES**

### **Plan Outlay**

**XII FYP :** Rs.3100 Lakh  
**Annual Plan 2012-13 :** Rs.200 Lakh

A provision of Rs 2 crore has been kept for laying of water mains in 1600 provisionally regularized unauthorized colonies.

## **7. RAW WATER ARRANGEMENTS**

### **Plan Outlay**

**XII FYP :** Rs.44000 Lakh  
**Annual Plan 2012-13 :** Rs.30000 Lakh

a) To bridge this gap of around 200 MGD in raw water needs, DJB has been pursuing the matter of construction of 3 upstream storage dam projects (Renuka, Kishau and Lakhwarviasi) on River Yamuna in close cooperation with other basin states. Of these, the Renuka dam project which will provide Delhi around 275 MGD of water as per 1994 MoU. The project awaits environmental clearance and DJB paid Rs. 214.83 cr to Himachal Pradesh for conducting initial studies and for land acquisition. All the 3 projects have been declared National Projects recently by the Government of India

b) CWC has submitted the pre-feasibility report (PFR) for additional barrage at Palla. This work will be taken up for projectization through consensus among all basin states. Such barrage will store monsoon period flows apart from being an anti flood measure.

c) A parallel lined Canal from Munak to Haiderpur (102Kms) is being constructed through Irrigation Department, Government of Haryana at a cost of Rs. 525 cr (as projected by Haryana. This saved water will enable Delhi to run the WTPs at Bawana (20MGD), Dwarka (50MGD) and Okhla (20MGD). DJB released Rs. 414 crores upto date to Haryana. DJB is also pursuing the matter of release of additional supply of raw water accrued on account of saving of 80 MGD enroute seepage losses through Munak Canal with Haryana. On completion of the pucca parallel channel from Munak to Haiderpur, the raw water saved will be made available to new water treatment plants at Dwarka and Okhla which are at the stage of completion, so as to improve the water supply position in Dwarka and other South Delhi localities.

d) Further provision of Rs 300 crores has been kept for payment of Delhi share of Hathnikund Barrage and payment of raw water as well as raw water mains from from WZD to Okhla, Link mains of Haiderpur & WZD and Twin water main to Dwarka.

## **8. DISTRIBUTION MAINS AND RESERVOIRS**

### **Plan Outlay**

**XII FYP :** Rs.100000 Lakh

**Annual Plan 2012-13 :** Rs.10000 Lakh

For ensuring optimal utilization of available water and its equitable distribution, DJB planned to construct 53 additional underground (UGRs). Out of these, 33 UGRs are already commissioned. Three will be commissioned by March, 12. Four will be commissioned during the year 2012-13. Six will be commissioned by Dec, 13. Four UGRs will be awarded in 2012-13. For balance 3, DJB is liaising with DDA and DC offices for provision of adequate plots of land. In 2012-13 provisions of Rs 100 crore have been kept.

## **9. CONSTRUCTION OF 40 MGD WATER PLANT AT BAKARWALA**

### **Plan Outlay**

**XII FYP :** Rs.2500 Lakh

**Annual Plan 2012-13 :** Rs.2500 Lakh

Total estimated cost of the project is Rs. 210.00 Crore the project was started in Oct. 2008. 86% work has been completed till Dec. 2011. The project will be completed in 2012-13; a provision of Rs. 25.00 Crore has been made in 2012-13 to complete the project.

## **10. CONSTRUCTION OF 20 MGD WATER PLANT AT OKHLA**

### **Plan Outlay**

**XII FYP :** Rs.1500 Lakh

**Annual Plan 2012-13 :** Rs.1500 Lakh

Total estimated cost of the project is Rs. 85.00 Crore the project was started in Nov. 2008. 89% work has been completed till Dec. 2011. The project will be completed in 2012-13; a provision of Rs. 15.00 Crore has been made in 2012-13 to complete the project.

## **11. WATER SUPPLY IN URBAN VILLAGES**

### **Plan Outlay**

**XII FYP :** Rs.2000 Lakh

**Annual Plan 2012-13 :** Rs.300 Lakh

A provision of Rs 3.00 crore has been kept for water supply in Urban Villages.

## **12. WATER SUPPLY IN RE-SETTLEMENT COLONIES**

### **Plan Outlay**

<b>XII FYP:</b>	Rs.1700 Lakh
<b>Annual Plan 2012-13 :</b>	Rs.200 Lakh

A provision of Rs 2.00 crore has been kept for water supply in Urban Villages.

## **13. AUGMENTATION OF WATER SUPPLY IN JJ CLUSTER (Rs. 300.00 lakh for 2012-13 and Rs. 3200.00 lakh for 2012-17)**

### **Plan Outlay**

<b>XII FYP :</b>	Rs.3200 Lakh
<b>Annual Plan 2012-13 :</b>	Rs.300 Lakh

A provision of Rs 3.00 crore has been kept for water supply in JJ Cluster.

## **14. INFORMATION TECHNOLOGY INFRASTRUCTURE/CAPACITY BUILDING**

### **Plan Outlay**

<b>XII FYP :</b>	Rs.1000 Lakh
<b>Annual Plan 2012-13 :</b>	Rs.500 Lakh

A provision of Rs 5.00 crore has been kept for Information Technology Infrastructure/Capacity Building.

## **15. CONSTRUCTION OF 31 MGD IRON REMOVAL PLANT AT PALLA (Rs. 2500.00 lakh for 2012-13 and Rs. 30000.00 lakh for 2012-17)**

### **Plan Outlay**

<b>XII FYP :</b>	Rs.30000 Lakh
<b>Annual Plan 2012-13 :</b>	Rs.2500 Lakh

Total estimated cost of the project is Rs. 370.00 Crore. This is a new Project for which land acquisition process is in progress. The target date of completion of project is 3 years. A provision of Rs. 25.00 Crore has been made in 2012-13 to start the project.

## **16. WATER QUALITY CONTROL**

### **Plan Outlay**

<b>XII FYP :</b>	Rs.1800 Lakh
<b>Annual Plan 2012-13 :</b>	Rs.650 Lakh

A provision of Rs 6.50 crore has been kept for Water Quality Control.

## **17. METERING AND LEAKAGE MANAGEMENT**

### **Plan Outlay**

<b>XII FYP :</b>	Rs.80000 Lakh
<b>Annual Plan 2012-13 :</b>	Rs.10000 Lakh



DJB has started installation of latest technology based bulk meters on all raw water mains and on water distribution mains going out of the WTPs. DJB installed 86 meters at all WTPs. Further, DJB is vigorously proceeding with supply and installation of 305 bulk meters at the inlet and outlet points of all the existing UGRs as well as on the direct tapping from the rising mains upto colony level. All the 305 bulk meters have been procured and of these 282 bulk meters have been installed. DJB has also taken initiative for providing GSM technology based bulk consumer meters. Tenders for procurement and installation of the same are likely to be invited shortly. A provision of Rs 100 crores has been kept.

DJB will emphasize on full domestic metering and streamlining of internal revenue processes. Further administrative approval for supply, installation and maintenance of 7 years for 8 lacs domestic meters in 2 phases has been accorded by the Board. Tenders have been invited for phase-I comprising of procurement and installation of 4 lacs domestic AMR water meters .It is likely to complete the metering of all domestic and commercial meters by 2014.

## **18. ENVIRONMENTAL GREENERY & LANDSCAPING**

### **Plan Outlay**

**XII FYP :** Rs.1400 Lakh  
**Annual Plan 2012-13 :** Rs.320 Lakh

A provision of Rs 3.20 crore has been kept for Environmental Greenery & landscaping.

## **19. TRANS YAMUNA AREA DEVELOPMENT BOARD**

### **Plan Outlay**

**XII FYP :** Rs.8000 Lakh  
**Annual Plan 2012-13 :** Rs.1700 Lakh

A provision of Rs 17.00 crore has been kept for Trans Yamuna Area Development Board.

## **20. EAP FUNDING – REHABILITATION OF CHANDRAWAL WTP & ITS COMMAND AREA**

### **Plan Outlay**

**XII FYP :** Rs.10000 Lakh (Revenue) and Rs.50000 Lakh  
**Annual Plan 2012-13 :** Rs.2400 Lakh (Loan) and Rs.600 Lakh (Revenue)

A provision of Rs 30.00 crore has been kept for EAP Funding – Rehabilitation of Chandrawal WTP & its command area. **EXTERNAL AIDED PROJECT (LOAN FROM JICA).** DJB, through JICA Technical study, has framed Master Plan for water supply 2021 based on water demand of all areas The Master Plan has been developed for extension or rehabilitation of water supply facilities (new reservoirs, Treatment Plants, new command areas and transmission network) by considering three water availability scenarios. Further rehabilitation of Chandrawal WTP command area has been proposed which includes rehabilitation of treatment plant, transmission/distribution mains, service pipes and meters. The project cost is around Rs. 2018.17 Crore for which

funding from JICA is being sought. 85 % (Rs. 1704.40 Crore) of the project cost will be funded by JICA and balance 15 % (Rs. 313.76 Crore) by GNCT of Delhi. The requirement of funds for 2012-13 is assessed Rs. 30.00 Crore of which Rs. 24.00 Crore (Loan) will be provided by JICA & Rs. 6.00 Crore (Revenue) by GNCTD of Delhi. The loan agreement is expected to be signed by March, 2012. Therefore tenders for appointment of consultant to prepare DPR, tender evaluation as well as project monitoring will be invited.

## **21. RURAL WATER SUPPLY**

### **Plan Outlay**

**XII FYP :** Rs.7000 Lakh

**Annual Plan 2012-13 :** Rs.1000 Lakh

A provision of Rs 10.00 crore has been kept for Rural water Supply.

## **B- SEWERAGE SECTOR**

**Present Status:** DJB has 18 wastewater treatment plants (514.4 MGD installed capacity). Sewage treatment plants (STPs) are at Okhla, Keshopur, Coronation Pillar, Kondli, Rithala, Vasant Kunj, Yamuna Vihar, Ghitorni, Narela, Pappan Kalan, Najafgarh, Delhi gate nallah, Sen Nursing Home nallah, Rohini, Nilothi, Commonwealth Game Village and Mehrauli. Oxidation ponds have also been made at Timarpur. The industrial wastewater generation is 40 MGD.

DJB has a network of 6500 km of sewers with 150 km of trunk network and about 1500 km of peripheral network. There are 42 major Sewerage Pumping Stations (SPS) across Delhi. As the estimated wastewater generation is 680 MGD, ever since inception, DJB has strived to augment sewage treatment capacity from 334 MGD in 1998 to 514.4 MGD by 2010-11.

The existing 18 sewerage treatment plants (STP) are not currently being utilized to their optimum capacity due to blockage of sewers, settling of old and deteriorated sewers and extensive unsewered areas. Only around 54 % of the population is connected to this sewerage network. Thus of the estimated 640 MGD of wastewater generation, only 360 MGD is getting treated at 18 wastewater treatment plants which have installed capacity of 514.4 MGD.

In recent times, the sewerage services have been under strain in wake of explosive unplanned population growth and growing water resource scarcity. The obvious manifestations are the increasing generation - treatment gap, poor quality of treatment and low quality of water in river Yamuna. This is also manifested in the Service Level Benchmarks.

<b>Proposed Indicator</b>	<b>Benchmark</b>	<b>Status</b>
<b>Coverage of Waste Water Network Services</b>	100%	54 %
<b>Collection Efficiency of Waste Water Network</b>	100%	62 %
<b>Adequacy of waste water treatment capacity</b>	100%	89%
<b>Quality of waste water treatment</b>	100%	94.6 %
<b>Extent of recycling of treated waste water</b>	20%	30.05 %

<b>Efficiency in redressal of customer complaints</b>	80%	70 %
<b>Efficiency in collection of sewerage charges</b>	90%	85 %

*\* SLB Handbook of Ministry of Urban Development*

As is apparent, the sewerage services need to be enhanced by improving network coverage, transmission and treatment efficiencies and metering / zonal data. Hence DJB is further working on following initiatives for better sewerage facilities for the capital:-

**(i) TRUNK SEWERS**

**Plan Outlay**

**XII FYP :** Rs.70000 Lakh

**Annual Plan 2012-13 :** Rs.6000 Lakh

There is a network of 150 km of trunk sewers in Delhi of which 105 km trunk sewers needed rehabilitation/ desilting. Of these, 50 km of Trunk sewers have been desilted/ rehabilitated. **To rectify the silted / settled trunk sewers and ensure optimal utilization of all STPs, DJB has already undertaken rehabilitation (desilting and relining) of its critical trunk sewerage network in different packages.** Some of the important trunk sewers in this category are Ring Road, University, North, West Delhi Relieving Trunk Sewer, Punjabi Bagh, Jail Road and Bela Road Sewer which have either been rehabilitated or nearly completion. New Trunk Sewers are required to be laid to extend sewerage facilities to new areas (Unauthorized/ Regularized Colonies, Urban Villages etc.). Some of these are Trunk Sewers along Wazirabad Road in East Delhi, East Punjabi Bagh and Raja Garden. **Most of these works will be completed in this year and this will have positive impact on capacity utilization of all STPs, especially in North and West Delhi.**

**(ii) SEWAGE TREATMENT PLANTS**

**Plan Outlay**

**XII FYP :** Rs.70000 Lakh

**Annual Plan 2012-13 :** Rs.12500 Lakh

As estimated wastewater generation is 680 MGD, DJB is augmenting capacity by 105 MGD through 45 MGD STP at Kondli, 25 MGD STP at Yamuna Vihar and 30 MGD at Okhla, 5 MGD STP at Kapashera by 2012 and thereby raising the installed capacity to 619.4 MGD. **About 74% of Construction work of Yamuna Vihar STP, 91% at Kondli and 92% at Okhla has been completed.** Work for construction of 50 MGD capacity SPS and construction of 90 MGD Effluent Pumping Station at Yamuna Vihar is in advance stage of completion. **Construction of 1 MGD STP for CW Games was commissioned before CWG -2010.**

**(iii) RENOVATION OF EXISTING PLANTS & PUMPING STATIONS**

**Plan Outlay**

**XII FYP :** Rs.35000 Lakh

**Annual Plan 2012-13 :** Rs.5000 Lakh

Construction of **15.5 MGD at Jeewan Park & 7 MGD at Punjabi Bagh** have been Completed. STPs at Delhi Gate, Delhi Cantt., Coronation Pillar, Pappan Kalan & Nilothi

have also been proposed. The works of construction of 20 MGD Pappankalan & nilothi, each have been awarded. Whereas the tenders for Delhi Gate have been received and are under process of award.

**(iv) SEWERAGE SYSTEM IN REGULARIZED UN-AUTHORIZED COLONIES**

**Plan Outlay**

**XII FYP :** Rs.50000 Lakh

**Annual Plan 2012-13 :** Rs.5000 Lakh

- a) Regularised Colonies: **Out of 567 earlier Unauthorized/Regularized Colonies, 541 colonies have been provided sewerage facilities till Dec. 2011.**

**(v) SEWERAGE FACILITIES IN URBAN VILLAGES**

**Plan Outlay**

**XII FYP :** Rs.1700 Lakh

**Annual Plan 2012-13 :** Rs.325.00 Lakh

Urban Villages: **Out of 135 Urban Villages, 111 villages have been provided sewerage facilities till Dec. 2011.**

**(vi) SEWERAGE FACILITIES IN RESETTLEMENT COLONIES**

**Plan Outlay**

**XII FYP :** Rs.1000 Lakh

**Annual Plan 2012-13 :** Rs.150 Lakh

A provision of Rs 1.50 crore has been kept for sewerage facilities in resettlement colonies.

**(vii) SEWERAGE FACILITIES IN UNAUTHORIZED COLONIES**

**Plan Outlay**

**XII FYP :** Rs.28900 Lakh

**Annual Plan 2012-13 :** Rs.5000 Lakh

Provisionally Regularised Colonies: Government of NCT of Delhi took decision to provide basic services like water supply, sewerage, sanitation and roads in further 1639 unauthorized colonies. **Out of 1639 colonies, sewerage facility is provided in 98 colonies.**

**(viii) SEWERAGE FACILITIES IN RURAL VILLAGES**

**Plan Outlay**

**XII FYP :** Rs.50000 Lakh

**Annual Plan 2012-13 :** Rs.2000 Lakh

Rural Villages: For providing sewerage facilities in the 189 rural villages. **Sewerage works in 10 villages are completed and in 32 villages are under execution.** Lands at 47 locations of Gram Sabha have been allotted. Further allotment of land for construction of STP/ WSP/ SPS is being pursued with DDA, Revenue & Land & Building departments.

**(ix) TRANS YAMUNA AREA DEVELOPMENT BOARD**

**Plan Outlay**

**XII FYP :** Rs.5000.00 Lakh  
**Annual Plan 2012-13 :** Rs.800.00 Lakh

A provision of Rs 8.00 crore has been kept for Trans Yamuna Area Development Board.

**(x) YAMUNA ACTION PLAN PHASE-II**

**Plan Outlay**

**XII FYP :** Rs.5000 Lakh  
**Annual Plan 2012-13 :** Rs.5000 Lakh

Ministry of Environment and Forest with JICA have sanctioned five major projects under Yamuna Action Plan -II amounting to Rs.387.17 cr for DJB :

- a) Rehabilitation of Ring Road Sewer
- b) Reconstruction of Bela Road sewer
- c) Construction of Wazirabad Road sewer
- d) Construction of 30 MGD STP at Okhla
- e) Rehabilitation of Keshopur STP

**All these five projects are in progress and shall be completed by June 2012.** DJB has engaged one PR Agency and six NGOs for developing public awareness on hygienic sanitation and solid waste management practices. DJB liaised with National Council for Science Museums (NCSM) for **developing Water & Waste Water Museum through YAP- II funding.** NCSM has commissioned the Museum on 2000 sqft built up space within NSC complex.

**(xi) INNURM PROJECTS**

**Plan Outlay**

**XII FYP :** Rs.148700 Lakh  
**Annual Plan 2012-13 :** Rs.33870 Lakh

- a) **REHABILITATION OF TRUNK SEWER (Rs. 5853.00 lakh for 2012-13 and Rs. 7500.00 lakh for 2012-17)**
- b) **INTERCEPTOR SEWERAGES (Rs. 16962.00 lakh for 2012-13 and Rs. 115000.00 lakh for 2012-17)**
- c) **MODIFICATION OF SEWERAGE PROJECTS- NILOTHI & PAPPANKALAN (Rs. 11055.00 lakh for 2012-13 and Rs. 26200.00 lakh for 2012-17)**

An innovative solution to deal with the pollution in river Yamuna was evolved by DJB and has been widely endorsed. This involves laying of interceptor sewers along the Najafgarh Drain, Supplementary Drains and Shahdara Drain (total length 59 kms). The interceptor sewers will be laid along these drains below the bed level of the drains and all the drains carrying wastewater from unsewered areas will be trapped and conveyed to the existing STPs. The project has been designed in such a way that the interceptor sewer works as the trunk sewer for the presently unsewered areas in long term. Further DJB has strived to ensure that this project complements with its ongoing and mid-term sewerage projects. **The project was appraised by CPHEEO and recommended to the Ministry of Urban Development for sanction of Rs. 1357.71cr under JNNURM. The Expenditure Finance Committee of the central Government has accorded approval for funding in January, 2010 and CCI has also approved in May 2010. The works of 6 packages have been awarded to three different agencies in July, 2011 with stipulated period of completion of 36 months.**

**(xii) YAMUNA ACTION PLAN PHASE-III (NEW SCHEME)**

**Plan Outlay**

**XII FYP :** Rs.26000 Lakh

**Annual Plan 2012-13 :** Rs.2500 Lakh

The STPs at Keshopur, Okhla, Kondli, Coronation Pillar and Rithala as also the SPSs at Kilokri, Ring Road, Keshopur, Haiderpuri, Jagriti and Preet Vihar are quite old. Refurbishment & modernization of existing sewer network, Sewerage Treatment Plants and Pumping Stations **for improving conveyance efficiency of sewer network and for enhancing treatment effectiveness and quality is being proposed in 3 sewerage zones of Kondli, Okhla and Rithala under YAP – III.** Existing STPs require up-gradation as per the norms laid by Ministry of Environment & Forests / CPCB / DPCC. Once approved by NRCD and JICA, these projects will be taken up in 2012. With the covering of more and more villages and unauthorized colonies by sewerage system, the discharge of untreated waste water in the Yamuna will be checked. With the assistance of the Government of India, DJB has identified projects worth ` 1600 crore to be implemented under YAP-Phase III.

**(xiii) WATER CONSERVATION MISSION**

**Plan Outlay**

**XII FYP :** Rs.200 Lakh

**Annual Plan 2012-13 :** Rs.55 Lakh

A provision of Rs 55.00 lakh has been kept for Water Conservation Mission.