WATER SUPPLY & SANITATION

- 1. Delhi Jal Board is responsible for procurement and treatment of allocated raw water to Delhi. Delhi Jal Board makes bulk supply of treated potable water to Delhi Cantonment Board and NDMC for distribution in their areas of jurisdiction respectively. In the area of Municipal Corporation 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 Ranney 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, Punjab 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 ₹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 are 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 concern on this scenario of very fast depleting ground water level in Delhi. Delhi Govt. prepared draft Delhi Water Board (Amendment) Bill 2006 which is yet to be approved by Delhi Legislative Assembly.
- 7. On sewerage front NDMC and Delhi Cantonment Board, the two local bodies are responsible for providing sewerage facilities in their respective areas. For the area under jurisdiction of MCD, 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 installed capacity of all 20 treatment plants is 604 MGD. However, actual treatment capacity utilization is around 330 MGD of sewage only.

Major Achievements made during the year 2013-14

- Improved financial management made it possible for DJB to meet its operation cost from its own resources.
- At the old existing WTPs 8 to 10% water used to go waste in the treatment process. To save water losses, DJB had constructed 4 nos recycling waste water treatment plants at Bhagirathi, WAzirabad, Haiderpur and Chandrawal WTPs. Now about 40 MGD potable water is being produced constantly from the process waste water flows.
- By optimizing all the resources the water production has been augmented by 15-18 MGD and this year a record production of 837 MGD based on surface and ground water resources have been achieved due to which DJB has been able to meet the rise in demand comfortably this summer.
- Works of complete rehabilitation of 100 MGD capacity WTP at Bhagirathi and Chandrawal raw water pump house were successfully accomplished thus peaking the water production efficiency of these plants.
- DJB has implemented the new Revenue Management System (RMS). The new billing system has made it easier to upload recorded meter readings electronically, on the spot generation of water bills as well as acceptance of bill payment and issue of receipts on the spot. All the consumer/bill data can be accessed by the consumers on DJB website. The billing mechanism under RMS is much more consumer friendly.
- This year pipe water facility was further extended to cover 50 more U/A colonies.
 As on date out of 1639 U/A colonies, now 847 U/A colonies in Delhi are having piped water supply. By extending the pipeline water distribution network in new areas now more than 81% population of Delhi living both in planned and unplanned areas has access to potable water supply.

Key Initiatives/ Major Plan Programs proposed to be taken up/continued in Annual Plan 2014-15:

• Externally Aided Project- Improvement of Water Supply system in Chandrawal and Wazirabad Water Treatment Plant Command Area (through JICA/ADB loan funding).

To achieve equitable and continuous supply of Water, Chadrawal and Wazirabad WTP command Area serving a population of about 48 Lakh persons, projects are being taken up with estimated cost of ₹4000 crore through Loan from JICA and ADB supplemented by budgetary resources by GNCTD of Delhi. This will involve comprehensive rehabilitation and improvement of water production and supply network with focus on creation of DMAs and automation through distribution SCADA.

• Expansion of piped water to unauthorized colonies

This year 50 more unauthorized colonies will be covered with filtered water pipeline thus benefitting about 2 lakh people.

• <u>Augmentation of Water Resources by recycling, rehabilitation and automation</u>

Based on a study carried out through WAPCO, a project will be taken up in Palla region of Delhi to augment the supply from existing tubewells and Ranney wells by 15 MGD by automating and rehabilitating the whole system.

DJB is also working on another project for construction of 40 MGD tertiary treatment plant with the help of Singapore Government to produce treated effluent which will be as good as raw water.

• Commissioning of new reservoirs with pumping stations

In 2014-15, five new reservoirs at Sultanpur Dabas, Qutab Garh, Kirari, Ramlila Ground, Sangam Vihar and near ESI Hospital will be commissioned augmenting the storage capacity by 17 million gallons and benefitting about eight lakh population by way of equitable distribution and improvement in water pressure.

• Installation of water dispensing machines in water deficient areas

Based on the success of its pilot project for RO based water dispending machines(ATMs), ten more such decentralized RO based plants shall be installed in resettlement colonies. DJB plans to replicate the model in other water deficient areas of Delhi where around 500 ATMs supported with ground water/tanker services shall be set up in 2014-15. Hyderabad based Administrative Staff College of India has been engaged as consultant.

• Displacing use of potable water

In addition to existing use of around 142 MGD of treated effluent for non potable purposes like irrigation, horticulture, power plant and flushing etc., 10 MLD Tertiary Treatment Plan at Okhla STP shall be commissioned by December this year for using treated water for bus washing and industrial use thus the conserving potable water.

The statement showing Plan Outlay for Annual Plan 2013-14 and 2014-15:

[₹ In crore]

Particulars	Revised Outlay	Funds Released	Approved		
	2013-14		Outlay 2014-15		
Urban Water Supply	765.90	750.90	1239.20		
Rural Water Supply	5.00	5.00	10.00		
Urban Sanitation	507.40	507.40	363.00		
Rural Sanitation	10.00	10.00	2.50		
TYADB	3.00	3.00	2.00		
YAP-III	17.00	17.00	25.00		
JNNURM	256.50	256.50	358.30		
Total	1565.00	1550.00	2000.00		
Total Outlay	14700.00	14700.00	16700.00		
% w.r.t. Total Outlay	10.64%	10.63%	11.97%		

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

WATER SUPPLY

1. PROVIDING WATER SUPPLY IN UNAUTHORIZED COLONIES

Annual Plan Outlay 2014-15 : ₹ 18000 Lakh

Piped Water Supply network has been extended in 847 unauthorized colonies. To give immediate relief to public inpockets/ areas with water shortage, additional tubewells 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. It is proposed to provide piped water supply in 50 more unauthorized colonies during the year 2014-15.

2. REPLACEMENT OF OLD DISTRIBUTION AND TRUNK TRANSMISSION SYSTEM

Annual Plan Outlay 2014-15 : ₹ 21000 Lakh

DJB has undertaken major works for replacement of critical stretches of water main in leakage prone portions especially of pre-stressed concrete (PSC) in a length of approx. 20 Km of various sizes. It is proposed to lay 220 km of new water lines and replace 170 km of old water lines in 2014-15. An amount of $\rat{70.00}$ crore is kept under Revenue head & $\rat{140}$ crore under Loan head.

3. IMPROVEMENTS OF EXISTING WATER WORKS

Annual Plan Outlay 2014-15 : ₹ 35500 Lakh

The renovation of coagulation and filtration system at Chandrawal Water Works no.1 and renovation of Bhagirathi Water Works are in progress. Three pilot projects i.e. Mehrauli & Vasant Vihar, Malviya Nagar and Nangloi are in progress for improvement of water service delivery based on PPP Model. A proposal for rehabilitation and augmentation of Raw Water Main of P&V series ranney wells is undertaken. An amount of ₹ 205 crore is kept under Revenue head & ₹ 150 crore under Loan head.

4. RANNEY WELLS & TUBE WELLS IN URBAN AREAS

Annual Plan Outlay 2014-15 : ₹ 2000 Lakh

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

5. STAFF QUARTERS & OFFICE ACCOMMODATION

Annual Plan Outlay 2014-15 : ₹ 1000 Lakh

The work of Construction of Customer Care Centre (CCC) at G.K.-I is in progress. The work of CCC at DJB office at Jal Sadan is proposed to be taken up in this year.

6. LAYING OF WATER MAINS IN REGULARIZED-UNAUTHORIZED COLONIES

Annual Plan Outlay 2014-15 : ₹ 100 Lakh

A provision of $\mathbf{7}$ 1 crore has been kept for lying of water mains in regularized unauthorized colonies.

7. RAW WATER ARRANGEMENTS

Annual Plan Outlay 2014-15 : ₹ 7000 Lakh

a) To bridge the gap of around 300 MGD in raw water needs, DJB has been pursuing the matter of construction of 3 upstream storage dam projects (Renuka, Kishau and Lakshwarvyasi) 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 ₹ 214.83 crore to Himachal Pradesh for conducting initial studies and for land acquisition. All the 3 projects have been declared National Projects by the Government of India. An amount of ₹ 50 crore is earmarked for Renuka dam Project.

- 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 sites. Such barrage will store monsoon period flows apart from being an anti flood measure.
- c) A parallel lined Canal from Munak to Haiderpur (102 Kms) is being constructed through Irrigation Department, Government of Haryana at a cost of ₹ 520 cr (as projected by Haryana). This saved water will enable Delhi to run the WTPs at Bawana (20 MGD) Dwarka (40 MGD) and Okhla (20 MGD). DJB released ₹ 414 crores upto date to Haryana. DJB is pursuing the matter with Haryana for commissioning of CLC to achieve savings in seepage losses to the tune of 80 MGD enroute.
- d To increase the pondage at river Yamuna on up Stream of Wazirabad Bridge, the work of dredging of silt from River Yamuna is in progress.
- e) A payment of ₹ 15.72 Crore has already been made on account of Hathnikund Barrage Project by the state as per agreement.

8. DISTRIBUTION MAINS AND RESERVOIRS

Annual Plan Outlay 2014-15 : ₹ 22500 Lakh

For ensuring optimal utilization of available water and its equitable distribution, DJB planned to construct 53 additional underground reservoirs (UGRs). Out of these, 37 UGRs are already commissioned. 9 UGRs will commissioned during the year 2014-15 subject to availability of additional water from Haryana. The work of 1 UGR has been awarded in 2013-14. 3 UGRs will be awarded in 2014-15. For balance 2 UGRs, DJB is liasioning with DDA and DC offices for provision of adequate plots of land. 1 UGR at Mundaka comes under PPP. An amount of ₹ 105 crore is kept under Revenue head & ₹ 120 crore under Loan head.

9. EAP FUNDING- REHABILITATION OF WTP AT WAZIRABAD

Annual Plan Outlay 2014-15 : ₹ 1000 Lakh

To achieve equitable distribution of water in Wazirabad WTP Command Area by Improvement of WTP, Water Supply Network including Service connection and Reducing Non-Revenue Water, a Project has been envisaged with tentative cost of ₹2243 Crores and proposed to be funded through Loan from Asian Development Bank (ADB). 70% of the Project cost will be financed through Loan from ADB and the remaining 30% will be funded by GNCT Delhi. The old WTP constructed in three phases will be renovated/rehabilitated/reconstructed along with comprehensive rehabilitation and improvement of water network with focus on creation of DMAs, distribution SCADA

and continuous Water Supply thereby leading to the ultimate objective of upgrading citizen's living standard. The project has been cleared by Screening Committee of Department of Economic affairs (DEA) Govt. of India. Project Preparatory Technical Assistance (PPTA) has been extended by ADB and the appointment of Project Management Consultant (PMC) is in process. The loan agreement is proposed to be signed in the First Quarter of 2015. All procurement and consulting service are being undertaken through advance contracting actions that will be retroactively financed by ABD loan.

10. WATER SUPPLY IN URBAN VILLAGES

Annual Plan Outlay 2014-15 : ₹ 1500 Lakh

Tenders for the work of construction of 6 ML capacity UGR at Mahipalpur and its feeder and peripheral main are proposed to be taken up in 2014-2015.

11. WATER SUPPLY IN RE-SETTLEMENT COLONIES

Annual Plan Outlay 2014-15 : ₹ 400 Lakh

A provision of ₹ 4crore has been kept for improvement in water supply in 44 Resettlement Colonies.

12. AUGMENTATION OF WATER SUPPLY IN J. CLUSTER

Annual Plan Outlay 2014-15 : ₹ 100 Lakh

A provision of ₹ 1crore has been kept for water supply in 643 J Cluster.

13. INFORMATION TECHNOLOGY INFRASTRUCTURE/CAPACITY BUILDING

Annual Plan Outlay 2014-15 : ₹ 300 Lakh

A provision of ₹ 3crore has been kept for improvement of Revenue Management System through Information Technology.

14. CONSTRUCTION OF 31 MGD WATER TREATMENT PLANT AT PALLA

Annual Plan Outlay 2014-15 : ₹ 4000 Lakh

The total Estimated cost of the project is ₹ 370 crore. It is proposed to augment supply from a series of tubewells installed earlier by CGWB and operated by DJB, at Palla from 10 MGD to 35 MGD. The studies are being carried out by WAPCOS. The work is to be taken up in the year 2014-2015.

15. WATER QUALITY CONTROL

Annual Plan Outlay 2014-15 : ₹ 300 Lakh

A provision of ₹ 3.00 crore has been kept for testing of Quality of Water for which testing operator have been appointed.

16. METERING AND LEAKAGE MANAGEMENT

Annual Plan Outlay 2014-15 : ₹ 6000 Lakh

The work of installation of 3 lac Automatic Meter Reading (AMR) and 1 lac non AMR meters under phase -I is in progress. Tenders have been invited for Phase-II comprising of procurement and installation of 3 lacs domestic AMR Water Meter and 1 lac non AMR Water Meters. The work under Phase-I is likely to be completed by 2015.

17. ENVIRONMENTAL GREENERY & LANDSCAPING

Annual Plan Outlay 2014-15 : ₹ 200 Lakh

A provision of \ge 2.00 crore has been kept for maintenance of plants and filling of land scaping.

18. EAP FUNDING - REHABILITATION OF CHANDRAWAL WTP & ITS COMMAND AREA

Annual Plan Outlay 2014-15 : ₹ 3000 Lakh

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 of 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 ₹2018 Crore. The project cost will be funded through Official Development Assistance (ODA). The loan from Japan International Co-operation (JICA) to the tune of 85% and the balance 15% cost will be shared by the Govt. of NCT of Delhi (GNCTD). M/s Tokyo Engineering Consultant Co. Ltd. and Consortium has been appointed as project management consultant for the project.

The work of providing consultancy services for JICA assisted Delhi water supply improvement project in Chandrawal Treatment Plant command area has commenced from 22.11.2013. The budget provision for the year 2014-15 has been kept as ₹30 Crore which includes ₹ 25.50 Crore through JICA and ₹ 4.50 Crore from GNCTD.

19. RURAL WATER SUPPLY

Annual Plan Outlay 2014-15 : ₹ 1000 Lakh

A provision of ₹ 10.00 crore has been kept for supply of water through tankers/pipe line in rural areas.

20. WATER CONSERVATION MISSION

Annual Plan Outlay 2014-15 : ₹ 20 Lakh

A provision of ₹ 20 lakh has been kept for Water Conservation Mission. The objective of the Scheme is to promote rain water harvesting in Delhi for which a subsidy of ₹ 1 Lakh or 50% of the cost of system, whichever is less, is being given to RWA/Housing Societies commissioning rain water harvesting system in their areas.

B. Sewerage Sector

Present Status:

DJB has 20 wastewater treatment plants (604 MGD installed capacity) which will be increased to 683.72 MGD during 2014-15 after commissioning of Yamuna Vihar (25MGD), Chilla (9MGD), Nilothi (20MGD), Pappankalan (20MGD) and Delhi Gate (15MGD). 20 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 CWG village, Molarband, Bakkerwala and Mehrauli. Oxidation ponds have also been made at Timarpur. The industrial wastewater generation is 40 MGD.

DJB has a network of 7000 km of sewers with 192 km of trunk network and about 1508 km of peripheral network. There are 42 major SPSs across Delhi. As the estimated wastewater generation is $680\ MGD$, ever since inception, DJB has strived to augment sewage treatment capacity which has increased from 334 MGD in 1998 to 604 MGD at present.

The existing 20 sewerage treatment plants (STP) are not currently being utilized to their optimum capacity due to blockage of sewers, settlement of old and deteriorated sewers and extensive unsewered areas. Only about 55 % of the population is connected to the sewerage network. Thus of the estimated 640 MGD of wastewater generation, only 330 MGD is getting treated at 20 wastewater treatment plants which have installed capacity of 604 MGD.

In recent times, the sewerage services have been under strain in wake of explosive unplanned population growth. 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.

PREPARATION OF SEWERAGE MASTER PLAN FOR 2031: A sewerage Master Plan is being prepared by an International Consultant M/s AECOM for 2031 year to assess and map the condition of the existing drainage infrastructures, suggest for creation of additional infrastructures to cater to the sewage discharge in future & preparation of

estimates for providing sewage net work in un-sewered areas. The draft of Master Plan has been submitted.

Proposed Indicator	Benchmark	Status	
Coverage of Waste Water Network Services	100%	55 %	
Collection Efficiency of Waste Water Network	100%	65 %	
Adequacy of waste water treatment capacity	100%	89%	
Quality of waste water treatment	100%	94.6 %	
Extent of recycling of treated waste water	20%	15 %	
Efficiency in redressal of customer complaints	80%	80 %	
Efficiency in collection of sewerage charges	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.

Major Achievements made during the year 2013-14

- Around 100 Kms of Trunk sewers and 30 Kms of Peripheral sewer lines have been rehabilitated desilted till 2014 resulting into more sewage at Sewage Treatment Plants.
- DJB has augmented sewage treatment capacity from 514 to 604 MGD by commissioning of Okhla (30MGD), Kondli(45 MGD), Kapashera (5MGD), Chilla(9 MGD).
- Utilization of STPs has been increased from average 310 to 360 MGD after rectification of sewer lines and removing temporary trolleys diverting sewage from S.W. drains to STPs.
- The laying of Interceptor sewer line has been completed to the extent of 60%.

<u>Key Initiatives/ Major Plan Programs proposed to be taken up/ continued</u> in Annual Plan 2014-15:

- Yamuna Cleaning: The ambitious project of Interceptor sewer shall be completed by June, 2015 in a phased manner. After completion of the project, majority of sewage from unsewered areas discharging into major drains and finally into Yamuna shall be trapped and taken to the nearest STPs for proper treatment, thus reducing the pollution level in river water. Action plan for remaining drains is also being prepared and will be implemented in a phased manner.
- Augmentation of Sewage Treatment Capacity: Sewage treatment capacity shall be augmented from 604 MGD in 2013-14 to 684 MGD by the end of this year commissioning of plant at Yamuna Vihar, Nilothi, Pappankalan Phase-II and Delhi Gate in 2014-15.

- Extension of Sewerage system in Unsewered areas: Sewerage system in another 95 unauthorized colonies shall be laid by the end of this financial year.
- Rehabilitation of existing sewage infrastructure under YAP-III: The work for rehabilitation of old STPs at Okhla, Kondli & Rithala shall be initiated this year under YAP-III to enable sewage treatment up to tertiary level i.e. BOD<10 and SS<10 PPM with Power generation.
- **Rehabilitation of Trunk/ Peripheral sewer lines**: Work of rehabilitation of 168 Kms. of Peripheral sewer shall be initiated during this year.

1. TRUNK SEWERS

Annual Plan Outlay 2014-15 : ₹ 3000 Lakh

There is a network of 192 km of trunk sewers in Delhi of which 50 km trunk sewers was desilted and partly rehabilitated. Sewer rehabilitation work of around 55 km of trunk sewer and 25 km of peripheral sewer was taken up in 2008. All the sewers have been commissioned. Sewer rehabilitation work of Pitampura, Shakurbasti, C.V. Raman Marg and Rohatak Road etc., is under progress. In phase-II, the remaining peripheral sewer lines have been taken up for rehabilitation.

Following work of rehabilitation of Trunk sewer will be started in 2014-15:

- Trunk Sewer No.5 & Jhilmil Colony sewer sizes varing from 1600-2100mm dia in Kondli Zone.
- Trunk Sewer No.4 & Narwana Road, Anand Vihar & Vikas Marg Sewer of sizes varing 450-1600mm dia in Kondli Zone.

2. SEWAGE TREATMENT PLANTS

Annual Plan Outlay 2014-15 : ₹ 12000 Lakh

As estimated wastewater generation is 680 MGD, DJB is augmenting capacity by 89 MGD through 9 MGD at Chilla, 25 MGD STP at Yamuna Vihar , 20 MGD at Pappankalan & Nilothi each & 15 MGD at Delhi Gate by 2014 and thereby raising the installed capacity to 683.72 MGD. About 87% of Construction work at Chilla STP, 96% work at Yamuna Vihar STP, 70% at Nilothi STP, 75% at Pappankalan & 55% at 15 MGD STP Delhi Gate has been completed. Work at 10 MLD Tertiary Treatment Plant has been completed to the extent of 30%.

3. RENOVATION OF EXISTING PLANTS & PUMPING STATIONS

Annual Plan Outlay 2014-15 : ₹ 6500 Lakh

99% work of construction of SPS at Possengipur has been completed. 71% at Preet Vihar SPS & 19% work at Kalyanpuri SPS have also been completed.

4. SEWERAGE SYSTEM IN REGULARIZED UN-AUTHROZED COLONIES

Annual Plan Outlay 2014-15 : ₹ 9000 Lakh

Out of 567 colonies regularized unauthorized colonies 541 colonies have been provided sewer facilities. provision of $\stackrel{?}{\stackrel{?}{\sim}}$ 90 crore has been kept for improvement in sewerage facilities in these colonies.

5. SEWERAGE FACILITIES IN URBAN VILLAGES

Annual Plan Outlay 2014-15 : ₹ 250 Lakh

Urban Villages: Out of 135 Urban Villages, 129 villages have been provided sewerage facilities till December, 2013.

6. SEWERAGE FACILITIES IN RESETTLEMENT COLONIES

Annual Plan Outlay 2014-15 : ₹ 300 Lakh

A provision of ₹ 3.00 crore has been kept for improvement in sewerage facilities in 44 resettlement colonies.

7. SEWERAGE FACILITIES IN UNAUTHORIZED COLONIES

Annual Plan Outlay 2014-15 : ₹ 5250 Lakh

A provision of ₹ 52.50 crore has been kept for sewerage facilities in 895 unauthorized colonies regularized in Sept. 2012. Out of which the work in 100 colonies has been completed. Laying of sewer lines in 95 colonies shall be taken up in current year.

8. SEWERAGE FACILITIES IN RURAL VILLAGES

Annual Plan Outlay 2014-15 : ₹ 250 Lakh

For providing sewerage facilities in the 189 rural villages, sewerage works in 34 villages have been completed. & in remaining villages, the estimate/tenders were under process where land for SPS/STP will be made available by land owing department. M/s AECOM will prepare the scheme while preparing the Master Plan

9. TRANS YAMUNA AREA DEVELOPMENT BOARD

Annual Plan Outlay 2014-15 : ₹ 200 Lakh

A provision of ₹ 2 crore has been kept for Trans Yamuna Area Development Board.

10. JNNURM PROJECTS

Annual Plan Outlay 2014-15 : ₹ 35830 Lakh

(a) REHABILITATION OF TRUNK SEWER

Annual Plan Outlay 2014-15 : ₹ 1410 Lakh

The project - Rehabilitation of Trunk Sewer has been completed. The provision has been made against Agency share.

(b) INTERCEPTOR SEWER

Annual Plan Outlay 2014-15 : ₹ 29120 Lakh

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 sewer along the Najafgarh Drain, Supplementary Drains and Shahdara Drain (total length 59 kms). The interceptor sewer 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 ₹ 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.

The work was awarded to M/s Engineers India Ltd. To complete the work in a time bound manner, the project has been divided into six packages. All the six packages of the project have been awarded to three different agencies at the total cost of $\stackrel{?}{\sim}$ 1976 crore which includes 10 years 0&M also. The project has been funded under JNNURM. 60% work has been completed.

(c) MODIFICATION OF SEWERAGE PROJECTS- NILOTHI & PAPPANKALAN

Annual Plan Outlay 2014-15 : ₹ 5300 Lakh

Construction of 20MGD STP at Nilothi, Const. of 20MGD STP at Pappan kalan and Const. of 11 MGD SPS at Possingi Pur work is in progress. Sewer line from Janak Puri Distt. Centre to Keshav Pur STP is under process. Work award, P/L/J 2000 M.M. diameter. Sewer Line from Sunil Bakshi Marg to Najaf Garh Drain work awarded,

permission of road cutting awaited, P/L/J 1400 M.M. dia sewer Line from Kirti nagar Metro Stn. to Sunil Bakshi Marg permission for road cutting being perused.

The project wise details of project cost, ACA received & fund released upto March 2014 is given in the following table:-

(₹ in crore)

S. N o.	Name of Project	Cost approved under JNNURM funding	Funding of Cost		Total	Fund Released				
			GOI share 35%	State share 15%	Agency share 50%	ACA Receiv ed upto March 2014	ACA includin g advance amount	State Share	DJB Share releas ed a loan	Fund release d upto 2013-14
1	Rehablitation of Trunk Sewer	253.37	88.68	38.01	126.69	79.81	88.68	38.01	112.50	239.19
2	Interceptor Sewerage	1357.71	475.20	203.66	678.86	118.80	257.40	183.75	166.30	607.45
3	Modification of sewerage project - Nilothi Pappankalan etc.	245.44	85.90	36.82	122.72	34.36	85.91	9.20	92.60	187.71
	TOTAL	1856.52	649.78	278.48	928.26	232.97	431.99	230.96	371.40	1034.35

11. YAMUNA ACTION PLAN PHASE- III

Annual Plan Outlay 2014-15 : ₹ 2500 Lakh

MODERNIZATION & REFURBISHMET OF STP / SPS - The STPs at Okhla, Kondli, Coronation Pillar and Rithala as also the SPSs at Kilokri, Ring Road, Haiderpuri, Jagriti and Preet Vihar are quite old. Refurbishment & modernization of existing sewer network and Sewerage Treatment Plants for improving conveyance efficiency of sewer network and for enhancing treatment effectiveness and quality is being taken up in 3 sewerage zones of Kondli, Okhla and Rithala under YAP − III. The STPs at Kondli, Okhla and Rithala for which a proposal of ₹1656 crore has already been approved with JICA funding to the tune of 85% consultants for the project have been appointed who are working on various aspects to that the works can be taken up. Existing STPs will be upgraded as per the norms laid by Ministry of Environment & Forests / CPCB / DPCC. The following projects under YAP-III are to be started:

- Construction of New Okhla phase-I Waste Water Treatment Plant (WWTP) of 136 MLD & power generation on turnkey basis & then demolition of existing Phase-I WWTP
- Rehabilitation & Up gradation of Okhla Phase-II (55MLD), phase-III(205MLD) & Phase-IV(168MLD) WWTPs