

WATER SUPPLY & SANITATION

Schemes providing water supply and sewerage facilities, anti flood works and storm water drainage, desilting of nallahs and sewers in Delhi are included under this Sector. The Delhi Jal Board of Govt. of Delhi is entrusted with the responsibility of production and distribution of water and treatment and disposal of sewage in Delhi. It provides water in bulk to NDMC and Cantonment Board for re-distribution in their respective areas. Similarly, the sewerage is received in bulk from these two authorities for final, conveyance and disposal by Delhi Jal Board. In the areas under the jurisdiction of MCD, Delhi Jal Board is responsible for distribution of water and collection and disposal of sewage.

NDMC is implementing water supply & sewerage, anti flood work and covering of Nallah Schemes in its area.

DELHI JAL BOARD

Delhi Jal Board is responsible for production of water in Delhi and its distribution in the area under the control of Municipal Corporation of Delhi. The Board also supplies water in bulk to N.D.M.C. and Delhi Cantonment. Besides, the Board is responsible for collection, treatment and disposal of sewage in Delhi.

Delhi's share in the Yamuna water was decided and an MOU was signed on 12.5.1994 between the basin states of Haryana, Uttar Pradesh, Himanchal, Rajasthan and Delhi. The allocation for Delhi is not sufficient to meet the raw water requirements. Delhi has been making efforts for procuring additional raw water to meet the growing requirement. Efforts include arrangement of water from Tehri Dam, pursuing the Government for expediting the process of clearances for construction of Renuka, Kishau and Lakhwar Vyasi Dams on the tributaries of river Yamuna.

To make up the shortage, Delhi Jal Board took recourse to a number of schemes like recycling of waste water at Water Treatment Plants, optimization of water production, exploitation of ground water in the Flood Plains of the river Yamuna, rain water harvesting and conservation of water etc.

Scheme-wise details for Annual Plan 2008-09 are given below:-

A WATER SUPPLY SCHEMES

1. Providing water supply in unauthorized colonies (Rs.10000.00 lakh)

At present Delhi Govt. has identified 1409 nos. of unauthorized colonies existing in Delhi. DJB being the sole agency responsible to provide drinking water to all citizens is expected to lay necessary infrastructure and distribution network in planned as well as un-planned / unauthorized colonies. Where-ever it is technically feasible. DJB will provide water through pipe network and where it is not, water for drinking purposes shall be continued to be supplied by deployment of tankers

service. Considering the present scenario and future commitments of supply of raw water from neighboring states, DJB is required to provide the water supply distribution network in unauthorized colonies in the coming years.

An outlay of Rs.10000.00 lakh has been provided in Annual Plan 2008-09.

2. **Replacement of old distribution system and strengthening of trunk transmission networks (Rs.8000.00 lakh)**

In addition to the replacement of old distribution system, which is being carried out at an average rate of about 200 Kms per year, about 25 UGRs / BPSs are being constructed in various parts of Delhi other than East and South Delhi. Out of these, two UGRs / BPSs are already complete and ready for commissioning; another 10 UGRs / BPSs are at various stages of construction. Most of these 10 UGRs / BPSs are likely to be completed during the financial year 2008-09. The work orders have been issued in respect of another 4 UGRs / BPSs. The construction of these UGRs / BPSs shall continue during this financial year and the UGRs / BPSs are scheduled to be completed in financial year 2009-10. Tender process is under progress for another 2 UGRs / BPSs. In case of remaining 7 number UGRs / BPSs, land is yet to be allotted.

An outlay of Rs.8000.00 lakh has been provided in Annual Plan 2008-09.

3. **Improvement of existing Water Works (Rs. 5000.00 lakh)**

It is proposed to take up special works of up-gradation of existing water works during the coming financial year. Also the following recycling plants shall remain under progress during the financial year & next financial year

- a) 11 MGD WTP at Wazirabad is under construction. Raw water for this plant is collected from process waste of existing 3 x 40 MGD treatment plants located in the Wazirabad complex. The plant is expected to be completed by May, 2008.
- b) Construction of 10 MGD recycling WTP at Bhagirathi Water Works is in advance stage & about 83 % completed so far. The work is likely to be completed within financial year 2008-09.
- c) Construction of 8 MGD process waste water recovery plant at Chandrawal WW-I & II is in progress and about 23 % work has been completed so far. There is no treatment section in this work as the recovered water will be used in existing WTP. It is expected that work shall be completed within the financial year 2008-09
- d) **Renovation of WTP at Chandrawal WW.**

Work has been awarded and expected to be completed by Feb. 2010.

An outlay of Rs.5000.00 has been provided for the Annual Plan 2008-09.

4. **Rainey wells and Tube wells (Rs.5100.00 lakh)**

New Tube wells/allied works are proposed to be constructed and re-boring of tube wells in the year 2008-09 subject to feasibility of potable ground water and approval of Central Water Ground Water Board. It is proposed to commission 240 Tubewells and re-boring of 331 defunct Tubewells.

Repair Maintenance & Operation will continue to be undertaken by the E&M Wing of D.J.B.

An outlay of Rs.5100.00 lakh has been provided for the Annual Plan 2008-09.

5. **Staff Quarters and office accommodation (Rs.600.00 lakh)**

Staff quarters at various places and office accommodation will be constructed during the year 2008-09. Renovation and improvement works at various staff quarters at plants will also be undertaken during the year 2008-09.

An outlay of Rs.600.00 lakh has been provided for the Annual Plan 2008-09.

6. **Laying of water mains in regularized/unauthorized colonies (Rs.1000.00 lakh)**

For providing water supply in regularized/unauthorized colonies, where development charges as per revised policy are to be deposited by the beneficiaries and for works of augmentation of water supply in these colonies shall be taken up.

Unauthorized/regularized colonies and 1409 unauthorized colonies which are under the consideration of regularization will also be provided water supply in phased manner.

During the year 2008-09 water mains are to be laid in left out portions/lanes in regularized unauthorized colonies.

An outlay of Rs.1000.00 lakh has been approved for the Annual Plan 2008-09.

7. **Raw Water arrangement for additional needs (Rs.20000.00 lakh)**

- i) Funds are required for payment to Haryana Govt. for completing Carrier Lined Channel from Munak to Haiderpur. Against a project requirement of about Rs. 340 crores, Rs. 267 crores have already been paid. The canal is expected to be completed during the financial year 2008-09 and it is likely that about Rs. 50 crores are required to be paid to Haryana Govt. on this account.
- ii) Payment to Govt. of U.P. as share cost of Tehri Dam is yet to be released. Central Water Commission has worked out the share cost as Rs. 170 crores. U.P. Govt. is not willing to accept the payment in

absence of settlement of issue of signing of MoU for supply of drinking water to Sonia Vihar WTP. It is expected that with the intervention of Govt. of India, Ministry of Power, the issue is resolved. However, in case the issue is not decided, a part payment of Rs. 50 crores may be required during the year 2008-09.

- iii) Likely payment to Himachal Pradesh Govt. for Renuka Dam – Rs. 50 crores.
- iv) Construction of link from Haiderpur to Wazirabad: - Works are already awarded; approximate cost is Rs. 270 crores. Most of the work is likely to be executed in 2008-09.

An outlay of Rs. 20000.00 lakh has been approved for Annual Plan 2008-09.

8. **Distribution mains and reservoirs for IInd 100 MGD WTP Haiderpur (Rs.17300.00 lakh)**

The following works will be taken up during the year 2008-09:-

- i) Construction of distribution mains and UGRs for all plants and laying of peripheral water main for command tank and de-silting of distribution mains.
- ii) Construction of peripheral water lines for GR&BPS at Vishwa Karma Park, Sangam Vihar, Sarai Kale Khan, Shashtri Park II and Chhattarpur.
- iii) Construction of GR/BPS at Sarai Kale Khan, Sangam Vihar, Shashtri Park II and Chhattarpur.
- iv) Allied works for above reservoirs in Trans Yamuna Area & South Delhi.

An outlay of Rs.17300.00 lakh has been approved for the Annual Plan 2008-09.

9. **140 MGD WTP at Sonia Vihar and its distribution mains & reservoirs (Rs.900.00 lakh)**

28 UGRs / BPSs were planned to be constructed in East and South Delhi for optimum utilization of water from Bhagirathi and Sonia Vihar WTPs. Total of 20 UGRs / BPSs were completed during financial year 2007-08 and the remaining 8 UGRs / BPSs will continue to be under construction during the year 2008-09.

An outlay of Rs.900.00 lakh has been approved for Annual Plan 2008-09.

10. Construction of 40 MGD WTP at Dwarka (Rs.4000.00 lakh)

Work for construction of 40 MGD Dwarka WTP has been initiated in anticipation of getting water from Carrier Lined Channel which is expected to be completed by December,2008.Consultants have been appointed and pre-qualification of bidder has been completed. During financial Year 2008-09 it is proposed to award and take-up the works of construction of plant and other supporting works like construction of pumping station and laying of transmission main.

An outlay of Rs.4000.00 lakh has been approved for the Annual Plan 2008-09.

11. Construction of 20 MGD WTP Okhla (Rs.6500.00 lakh)

A new 20 MGD WTP is proposed at Okhla. The raw water to the plant is to come from the enroute savings after completion of parallel lined canal from Munak to Haiderpur, being constructed by Haryana Irrigation Department as a deposit work of DJB. The canal is expected to be completed during the year 2008-09. The tenders for the WTP have already been invited and it is expected that work will progress during the year 2008-09. For carrying raw water to this plant, work of laying of feeder main from Wazirabad to Okhla is already awarded and is under progress.

An outlay of Rs.6500.00 lakh has been approved for the Annual Plan 2008-09.

12. Augmentation of water supply in urban villages (Rs.500.00 lakh)

Delhi Jal Board is providing water supply in 135 urban villages. These villages are expending vertically and also commercialization is taking place, which is causing extra burden on the water supply system. For improvement and strengthening of water supply system in these villages, more tube wells, deep bore hand pumps, laying of water mains and construction of Under Ground Reservoirs, Booster Pumping Stations are being done.

The water demand in these villages is being met through piped water supply wherever available, boring of Tubewells, DBHPs and construction of underground reservoirs etc.

An outlay of Rs.500.00 lakh has been approved for the Annual Plan 2008-09.

13. Augmentation of water supply in Resettlement Colonies (Rs.500.00 lakh)

Delhi Jal Board is providing water in 44 resettlement colonies. For augmentation of water supply system in Resettlement Colonies, more tube wells, underground tank, Booster Pumping Station, Deep Bore Hand Pumps and water mains are proposed to be provided in 2008-09.

An outlay of Rs.500.00 lakh has been approved for the Annual Plan 2008-09.

14. Augmentation of water supply in JJ Clusters (Rs.800.00 lakh)

The water supply services in JJ Clusters were handed over to the then Delhi Water Supply & Sewage Disposal Undertaking now Delhi Jal Board in June, 1992. Water supply services are being provided in these clusters.

The population in these clusters is increasing day by day. Re-allocation of many JJ clusters is being done. Besides maintenance of existing water supply system to meet the increasing demands, Delhi Jal Board is carrying out augmentation works like providing additional Tubewells, deep bore hand pumps and public water hydrants in these clusters and also supply water through departmental as well as additional tankers on hire. Purchase of additional trailer tankers is also proposed to be made.

An outlay of Rs.800.00 lakh has been approved for the Annual Plan 2008-09.

15. Trans Yamuna Area Development Board (Rs.2000.00 lakh)

The maintenance works like replacement of old lines, laying of new lines, boring of Tubewells, installation of DBHPs on the recommendation of Trans Yamuna Area Development Area will be taken up in trans Yamuna area during the annual plan 2008-09.

An outlay of Rs. 2000.00 lakh has been approved for the Annual Plan 2008-09.

16. IT Infrastructure/Capacity Building (Rs.120.00 lakh)

Training of officers, staff and skill upgradation and upgradation of I.T. Infrastructure connectivity and digitalization of mapping data etc. are proposed under the scheme. Details of modalities of the scheme is being worked out by DJB.

An outlay of Rs.120.00 lakh has been approved for the Annual Plan 2008-09.

17. Special Scheme for Grant-in-Aid for Development of Sewerage and water supply in Assembly Constituencies (Rs.3500.00 lakh)

Under this scheme MLAs can suggest works for water supply and sewerage improvements to the extent of Rs.50.00 lakh in their Assembly Constituencies.

An outlay of Rs.3500.00 lakh has been approved for the Annual Plan 2008-09.

18. Common Wealth Games (Rs.600.00 lakh)

Delhi Jal Board has been entrusted with the work of construction of 1 MGD Water Treatment Plant at Games Village as well as strengthening of peripheral for various stadia where events are to take place. Bid documents have been issued to the bidders on 07.03.08.

An outlay of Rs.600.00 lakh has been approved for the Annual Plan 2008-09.

19. Construction of 31 MGD Iron Removal Plant at Palla (Rs.100.00 lakh)

Construction of WTP is to be taken up for treatment of raw water extracted through high yield wells constructed in the flood plain areas of river Yamuna at Palla area. The ground water is having excessive iron contents, which are not acceptable for direct consumption. Besides the water treatment plant, UGRs along with its feeder and peripheral mains are to be constructed.

An outlay of Rs.100.00 lakh has been approved for the Annual Plan 2008-09.

20. Water Quality Control (Rs.100.00 lakh)

It is proposed to undertake large scale testing of water for ensuring supply of quality water to the resident of Delhi. For this purpose, latest water testing equipments will be purchased and existing laboratory will be renovated.

An outlay of Rs.100.00 lakh has been approved for the Annual Plan 2008-09.

21. Metering and Leak Management (Rs.900.00 lakh)

With the objective of reducing water losses and increasing revenue of Delhi Jal Board, it is proposed to install 305 bulk meters at underground reservoirs and distribution mains. It is also proposed to install domestic meters on non-metered connections. Leak management will be another priority area for which consultant has been engaged and a survey has been conducted.

An outlay of Rs.900.00 lakh has been approved for the Annual Plan 2008-09.

22. Construction of barrage at Palla (Rs.50.00 lakh)

It is proposed to construct a barrage at Palla. The details are being worked out by Delhi Jal Board. A token provision of Rs.50.00 lakh has been made in Annual Plan 2008-09.

23. Environmental Greenery and Landscaping (Rs. 200.00 lakh)

In order to improve the environmental at existing water treatment plant and pumping station, it is proposed to landscape the area and also plant trees grass etc. to increase the greenery.

An outlay of Rs.200.00 lakh has been approved for Annual Plan 2008-09.

24. Rural Water Supply (Rs.1050.00 lakh)

DJB is providing potable drinking water to 219 rural villages. The population of these villages is increasing every year thereby creating additional demand of water. Under the special component plan, 413 Harijan Basties have also been

covered. Under this scheme water supply is also provided to land less laborers (house sites) allotted by Delhi Administration and to extended abadies under MNP under 20 Point Programme, out of 57 such colonies. 20 nos. has been provided with water supply and the remaining are being provided. Water supply is also being extended in the extended Lal Dora of the villages. Provision has been made for improving, stabilizing and strengthening the rural water supply distribution system besides providing more filtered water in Kanjawala and Najafgarh Blocks where ground water is increasingly becoming saline. The outlay also includes Rs.5.00 crore for execution of works recommended by Rural Area Development Board for providing, improvement of water supply in rural areas. To overcome the problem of low voltage at tube wells, voltage stabilizer and transformers are proposed to be provided.

An outlay of Rs.1050.00 lakh has been approved for the Annual Plan 2008-09.

B. SEWERAGE AND DRAINAGE

1. WATER AND WASTE WATER GENERATION

The installed capacity for water treatment in Delhi is 815 MGD. At present, the water supply in Delhi is being maintained at around 770 MGD.

- 2 According to the CPHEEO "Manual of Sewerage and Sewerage Treatment" about 80% of water supply through pipes can be expected to reach the sewers. The sewage generated in Delhi is thus approx. 616 MGD (80% of 770 MGD). Ground water, extracted by the residents of Delhi through their private Tube wells/ Bore wells, generates approximately 100 MGD of sewage. Hence the total domestic waste water, currently generated in Delhi, is around 716 MGD. The report of NEERI estimates industrial waste water generated in Delhi to be approx. 40 MGD, taking the total sewage generation to 755 MGD.

3 STPS, SPSS AND ANCILLARY WORKS

Delhi Jal Board currently has installed capacity to treat 512.4 MGD of domestic waste water at 17 Sewage Treatment Plants. A study conducted by Tata Consulting Engineers Ltd. has estimated waste water generation of 806 MGD by 2011. Another study, conducted by Price Water House Coopers, in association with DHP Consultants, Netherlands and TCE consulting Engineers, has projected waste water generation of 820 MGD by 2011, reaching 950 MGD by 2021. DJB has examined the reports and after assessing the availability of raw water in Delhi for treatment, it has planned future additions to the sewage treatment capacity.

Delhi Jal Board has proposed to augment the treatment capacity by 100 MGD through construction of 3 STPs at Okhla, Kondli & Yamuna Vihar by Dec. 2009 raising the installed capacity to 612.4 MGD.

Scheme wise details are given below:-

1. TRUNK SEWERS (Rs.11700.00 lakh)

1.1 Desilting & Rehabilitation of existing Trunk Sewers:

The existing sewerage conveyance system is a large network of branch, peripheral and trunk sewers of around 6318 kms. in length.

The trunk sewers sizes range from 700 mm dia to 2400 mm dia with a total length of about 154 Km. The balance length of the sewerage conveyance system comprise the peripheral sewers and internal sewers of smaller sizes.

The trunk sewers have been laid over the years at different stages, some of these trunk sewers are as old as 40-60 years, where as other trunk sewers are comparatively new. The condition of the trunk sewers especially the older ones, has deteriorated as a result of silting and settlements. The level of siltation in these sewer varies between 30—70%.

In view of the above to give relief to local areas substantial quantity of the sewage, which is otherwise required to be conveyed to the respective STPs, is discharged in to the open drains. It is estimated that about 101 kms of trunk sewers need desilting and rehabilitation including repair of settlement. 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. The work for desilting/ rehabilitation in 50 km length has already been completed. The works of rehabilitation of balance 51 Kms. have already been awarded.

1.2 New Trunk Sewers:

New Trunk Sewers are also required to be laid to extend sewerage facilities to new areas (Unauthorized/ Regularized Colonies, Urban Villages etc.) and cope up with the increased waste water generation due to increase in population and water supply. Some of these are Trunk Sewer along Wazirabad Road in East Delhi, East Punjabi Bagh. Work for Dabri Trunk Sewer and Sagarpur Trunk Sewer, Uttam Nagar Trunk Sewer & Najafgarh Trunk Sewer etc. Suction – cum – jetting machines and super suckers etc. are being procured for maintaining the trunk sewers silt free.

An outlay of Rs.11700.00 lakh has been approved for the Annual Plan 2008-09.

2. SEWAGE TREATMENT PLANTS AND ANCILLIARY WORKS (Rs.6640.00 lakh)

2.1 On-going STPs:

The treatment capacity of various treatment plants including oxidation ponds as on today stays at 512.40 MGD. Present utilization is about 370 mgd. Efforts are

being made to increase the capacity utilization. The existing plants have been designed to achieve BOD of 20 mg/l and TSS of 30 mg/l in treated effluent. There is no facility of further coliform reduction.

2.2 New STPs:

Work for construction of 25 MGD STP at Yamuna Vihar is in progress. The work of construction of 45 MGD STP at Kondli, 25 MGD STP at Yamuna Vihar and 30 MGD STP at Okhla is also planned.. Thus, additional capacity of 100 MGD will be created by 2009. Sewage Treatment Plants at Delhi Gate, Delhi Cantt. Pappan Kalan & Nilothi have been proposed which shall be completed by 2010 increasing additional capacity of 65 MGD. Besides above, disinfection facilities are also to be provided to tackle pollution on account of coliform.

2.3 Ancillary Works:

With the setting up of the new sewage treatment plants of additional capacity of 100 MGD, additional Pumping Stations at various places will also be required to be set up as per the reports of the consultants. Construction of Sewage Pumping Station (50 MGD) at Yamuna Vihar 15.5 MGD at Jeewan Park & 7 MGD at Punjabi Bagh are in progress.. Effluent pumping station at Yamuna Vihar (90 MGD) is in progress. There are 3 nos. of gravity Ducts leading to Okhla STP from Kilokri/ Ring Road Pumping Station. One of the Gravity Ducts does not function in full capacity. It is planned to take improvement works and also fencing to avoid encroachment of land.

An outlay of Rs.6640.00 lakh has been approved for the Annual Plan 2008-09.

3. RESIDENTIAL ACCOMMODATION, STORES, LAB, GO-DOWN ETC. (Rs.500.00lakh)

Many staff quarters are quite old and require rehabilitation and renovation besides construction of new offices, go-downs, store& laboratories at various STPs & SPSs.

An outlay of Rs.500.00 lakh has been approved for the Annual Plan 2008-09.

4. RENOVATION OF EXISTING PLANTS AND PUMPING STATIONS (Rs.4800.00 lakh)

Sewage Treatment Plants at Keshopur (12, 20 & 40 MGD), Okhla Old (30+12+45+37 MGD), Kondli (10 MGD) and 25 MGD Balance work, Coronation Pillar (10+20 MGD), Rithala (40 MGD) are quiet old. Similarly, the Sewage Pumping Stations at Kilokri, Ring Road, Keshopur, Haiderpuri, Jagriti and Preet Vihar etc. are quiet old and require renovation. The buildings of these Sewage Pumping Stations and Sewage Treatment Plants require renovation and refurbishment.

The existing Sewage Treatment Plants of 512.4 MGD capacity also require up-gradation as per the new norms laid by Ministry of Environment and Forests / CPCB / DPCC. The existing plants are designed for achieving treated effluent parameters of BOD 20 mg/l and TSS of 30 mg/l. New norms laid-down by DPCC are BOD 10 mg/l, TSS of 15 mg/l and coliform count of 2500 MPN per 100 ml. The cost of up-gradation of existing STP is of the order of Rs. 80 lac per MGD. Therefore, this particular head will require sufficient budget provision.

An outlay of Rs. 4800.00 lakh has been approved for the Annual Plan 2008-09.

5. LAYING OF INTERANAL SEWERS IN UNAUTHORIZED/ REGULARIZED COLONIES (BRANCH SEWERS) (Rs.4500.00 lakh)

The Sewerage services as per present policy are not being provided in unauthorized colonies and JJ Clusters. The present status of sewerage services in unauthorized/ regularized colonies are as under:

Out of 567 unauthorized/ regularized colonies sewer lines have been laid in 517 colonies upto March, 2007. It is proposed to provide sewerage facilities in another 26 colonies by 2008-2009. For balance unauthorized/ regularized colonies sewerage system shall be laid in a phased manner subject to technical feasibility.

An outlay of Rs.4500.00 lakh has been approved for the Annual Plan 2008-09.

6. SEWERAGE FACILITIES IN URBAN VILLAGES (Rs.600.00 lakh)

There are 135 urban villages and water supply exists in all of them. Sewer lines have been laid in 107 urban villages upto 2007-08. It is proposed to provide sewerage facilities in another 8 villages by 2008-2009. In case of villages where it is not technically feasible to lay sewer lines, appropriate sewage management system will be put.

An outlay of Rs.600.00 lakh has been approved for the Annual Plan 2008-09.

7. SEWERAGE FACILITIES IN RESETTLEMENT COLONIES (RS.250.00 LAKH)

There are 44 Resettlement Colonies in Delhi and water supply exists in all the colonies. Sewer lines have been laid in all the 44 colonies.

An outlay of Rs.250.00 lakh has been approved for the Annual Plan 2008-09.

8. TRANS YAMUNA DEVELOPMENT AREA BOARD (TYDAB) (Rs.400.00 lakh)

Govt. of NCT of Delhi vide notification dated 4.3.94 constituted Trans Yamuna Area development Board to monitor the progress of work in Trans Yamuna Area. For

execution of development works, the works are taken up with the approval of the TYADB.

An outlay of Rs.400.00 lakh has been approved for the Annual Plan 2008-09.

9. INFORMATION TECHNOLOGY INFRASTRUCTURE/CAPACITY BUILDING (Rs.120.00 LAKH)

For upgradation of IT infrastructure and training to staff and still upgradation, an outlay of Rs. 120.00 lakh has been provided for Annual Plan 2008-09.

10. YAMUNA ACTION PLAN phase-II (YAP-II) (Rs.500.00 lakh)

As a Centrally sponsored scheme of YAP-I, DJB had taken up & completed 2.2 MGD STPs each at Delhi Gate Nallah and Dr. Sen Nrusing Home Nalla. In extended phase of YAP-I UV disinfection facility was set up at Dr. Sen Nursing Home STP.

JBIC has now agreed for another phase of Yamuna Action Plan (YAP-II). Following works of DJB are included in the scheme :-

- a) Rehabilitation of Ring Road Trunk Sewer –90.05 crore
- b) Rehabilitation /replacement of Bela Road Turk Sewer – Rs.17.47 crore
- c) laying of Noth of Wazirabad Trunk Sewer Rs.64.20 crore
- d) Renovation of 72 MGD Keshopur STP – Rs.66.36 crore
- e) Construction of 30 MGD Okhla STP – Rs.85.27 crore

In addition studies for use of treated effluent for irrigation, horticulture & industrial uses and ground water recharge, STP on Najafgarh drain, decentralized STPs, Nalla STP etc. area Iso to be taken under YAP-II. An outlay of Rs.500.00 lakh has been approved for the Annual Plan 2008-09.

11. COMMONWEALTH GAMES (Rs.800.00 lakh)

1 MGD Sewage Treatment Plant on MBR Technology has been proposed. An outlay of Rs.800.00 lakh has been approved for the Annual Plan 2008-09.

12. SEWERAGE FACILITY IN RURAL VILLAGES (Rs. 2500.00 lakh)

Delhi Jal Board is conducting a detailed survey for providing sewerage services and its treatment facilities in rural villages for which the work of carrying out techno-economic-feasibility study of 189 villages has been completed.

An outlay of Rs.2500.00 lakh has been approved for the Annual Plan 2008-09.

13. ABATMENT/PREVENTION OF POLLUTION OF RIVER YAMUNA (Rs.2800.00 lakh)

For this the possible solution which has been put up before the Govt. of NCT Delhi, as well as Planning Commission is laying of interceptor sewer along the three major drains i.e. Najafgarh Drain, Supplementary Drain and Shahdara Drain as it contribute 60% of the total BOD load in river Yamuna and 70% of the discharge. The interceptor sewers will be laid along these drains below the bed level of the drains and all the drains from both sides will be trapped in it. The sewage thereupon will be taken to the existing sewage treatment plant midway or at the end point. The treatment capacity of existing plant will be augmented once the present capacity is fully utilized. The total estimated cost of the laying interceptor sewers along three drains in a length of around 55 kms. and construction of STP/SPS of appropriate capacity will be around Rs.1500 Crores. The advantage of this will be that treated effluent of the plants will not be retreated and since drains are being trapped in interceptor sewers it will take care of all unsewered areas as well as over flows from the existing system.

The Project Management Consultancy service for implementation of this concept ha already been awarded to M/S Engineers India Ltd. (A Govt. of India Enterprises) @ 9% of the project cost.

An outlay of Rs.2800.00 lakh has been approved for the Annual Plan 2008-09.

14. SEWERAGE FACILITIES IN UNAUTHORISED COLONIES (RS. 20000.00 LAKH)

Govt. of NCT of Delhi has taken a decision to provide basic services like water supply sewerage, sanitation and road etc. in all unauthorized colonies. Delhi Jal Board has already provided water supply in 370 colonies. Consequently, there is also feasibility of providing sewerage facility in those 370 colonies. The technical feasibility is being explored in the balance colonies to provide these services.

An outlay of Rs.20000.00 lakh has been approved for Annual Plan 2008-09.

15. UTILIZATION OF BIO-GAS AT VARIOUS PLANTS (Rs.100.00 lakh)

Vaish Committee has recommended for utilization of Bio-Gas at various Sewage Treatment Plants for generation of electricity which can be utilized for operating the STPs. It is proposed to appoint Consultant to prepare feasibility on the subject.

An outlay of Rs.100.00 lakh has been approved for the Annual Plan 2008-09.

NEW DELHI MUNICIPAL COUNCIL

COVERING OF NALLHAS AND ANTI FLOOD WORKS

1. AUG. THE CAP.OF THE SWD SYSTEM INCLUDING COVERING OF KHUSHAK NALLAH (RS. 130.00 LAKH)

Aims and objectives of the scheme:-

Ground-water recharging through rainwater harvesting and ecological improvements

Approved Outlay for Annual Plan 2008-09 :- Rs.130.00 lakh

Physical targets & Achievements for Annual Plan 2007-08 :-

- a. Ecological Improvement to Khushak Nallah from S.P. Marg to Satya Sadan Ecological Development and rain water harvesting in Khushak Nallah – 100% Completion of Work
- b. Rain water harvesting construction of recharge structure in R-II Division – 100% Completion of Work

Physical targets for Annual Plan (2008-09) :-

Construction of Re-charge structure at :-

- i) Maharaja Ranjeet Singh Marg
- ii) Dr. Zakir Hussain Marg
- iii) C.P. Police Station, BKS Marg
- iv) Mother Teresa Crescent
- v) Kali Bari Marg
- vi) Bhai Veer Singh Marg

2. AUG. OF THE CAP. & IMP.TO ROAD SIDE DRAINS IN NDMC AREA (RS. 365.00 LAKH)

Aims and objectives of the scheme:-

Improvement of road-side drains

Approved Outlay for Annual Plan 2008-09 :- Rs.365.00 Lakh

Physical Targets & Achievements for Annual Plan 2007-08 :-

- a. Improvement & Desilting of SWD Lines at Raisina Road – 100% Completion of Work

- b. Imp. to Drainage system from St. Thomas School at Peshwa Road Red Light at Mandir Marg – 100% Completion of Work
- c. Imp. to drainage system at Connaught place near palika Bazar and BKS Marg near RML Nursing Hostel – 100% Completion of Work

Physical targets for Annual Plan (2008-09) :-

- 1. Improvement & desilting of SWD surrounding K.G. Marg, Janpath & Tolstoy Marg.
- 2. Imp. to drainage system at Janpath Lane and Mini Market Janpath.
- 3. Imp. to drainage system at Tolstoy Marg
- 4. Imp. to drainage at all roundabouts in Chanakyapuri
- 3. **IMP. TO DRAINAGE SYSTEM IN VARIOUS COLONIES IN NDMC AREA (RS. 50.00 LAKH)**

Aims and objectives of the scheme : Improvement of drainage system

Approved Outlay for Annual Plan 2008-09 Rs.50.00 lakh

Physical targets & Achievements for Annual Plan 2007-08 :

- a. North Avenue – 100% Completion of Work
- b. Various Sectors of DIZ Area – 100% Completion of Work

Physical targets for Annual Plan (2008-09) :-

- 1. Rehabilitation of damage brick arch SWD at Subhramanimh Bharti Marg near Pandara Road T-Point
- 2. Imp. to drainage system at Pandara Park
- 3. Imp. to drainage system at Hailey Lane
- 4. **TECHNICAL REPAIRS OF DESILTING OF SWD SYSTEM IN NDMC AREA (RS. 50.00 LAKH)**

Aims and objectives of the Scheme Desilting of storm water drains

Approved Outlay for Annual Plan 2008-09 Rs.50.00 lakh

Physical targets & Achievements for Annual Plan 2007-08 :-

- A) BKS Marg – 100% Completion of Work
- B) Mandir Marg - 100% Completion of Work
- C) R.K.A. Marg - 100% Completion of Work
- D) Bhai Veer Singh Marg - 100% Completion of Work
- E) SBS Marg - 100% Completion of Work
- F) Talkatora Road - 100% Completion of Work
- G) Park Street - 100% Completion of Work
- H) Shankar Road - 100% Completion of Work

Physical targets for Annual Plan (2008-09) :

1. Desilting & imp. to drainage at Janpath from Tibetan Market at Shangrila Hotel
2. CCTV survey of drainage system No. 9 Rajiv Chowk to Q-Point
3. Survey of SWD system in NDMC area for GIS mapping

UD DEPARTMENT

1. Water Conservation mission (Rs.65.00 lakh)

- a) The water table in NCT of Delhi has gone down considerably with the result the discharge from tube wells is affected. To recharge ground water table, water harvesting projects have been taken up at various installations of Delhi Jal Board. Besides this INTACH was commissioned for preparing a report on ground water recharge strategy for Delhi and they have submitted draft final report on the subject.
- b) Delhi Jal Board in its efforts to augment and enhance the ground water resources has implemented rain water harvesting schemes for 190 installations. Govt. of Delhi also initiated a financial assistance scheme for implementing rain water harvesting schemes in South & South-West districts in December 2002 which was extended for other areas in August 2004. In this scheme grant is given to the registered RWA/CGHS/Institutions to the extent of 50% of the total cost of the Rain Water Harvesting structures or Rs. 1,00,000/- (with effect from 1.2.2007, earlier Rs. 50,000/-) whichever is less. Under this scheme 184 cases have been approved and financial assistance has been released in 116 cases, where works are complete as per approved designs of Central Ground Water Board and maintenance agreement

have been executed by the perspective beneficiaries. During the 11th plan more thrust will be given to Rain Water Harvesting and the target would be to cover areas where the situation is critical.

An outlay of Rs. 65.00 lakh has been approved for Annual Plan 2008-09.

2. YAMUNA RIVER AUTHORITY MEASURES FOR REJUVENATION OF RIVER YAMUNA (Rs.5010.00 lakh)

For Rejuvenation and devitalisation of River Yamuna, a High Power Yamuna River Development Authority under the chairmanship of Lt. Governor, Delhi has been constituted. The Committee will look into the different aspects of the development of river viz. Hydrology, Ecology, and Environment of Pollution, sustainable use of river front and develop an operation plan for implementation of the river action programme.

An outlay of Rs.5010.00 lakh is approved for Annual Plan 2008-09.