

**SECOND INTERIM REPORT OF THE
MONITORING COMMITTEE**

**constituted by the Hon'ble National Green Tribunal
vide Order Dated 30/08/2018 in O. A. No. 496/2016 titled
“Tribunal on its own motion v. Government of NCT of
Delhi and others”**

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Dated 31st July 2019

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INTRODUCTION

Pursuant to the directions vide order dated 30th August 2018 in O.A. No. 496/2016 titled “*Tribunal on its own motion v. Government of NCT of Delhi and ors.*” the Monitoring Committee had submitted its first interim report dated 18th February 2019. The Hon'ble NGT was pleased to take the said interim report on record vide order dated 19th February 2019.

The Monitoring Committee has held **21 meetings** till date. The Monitoring Committee also visited various places to have first hand information of the water bodies. The Minutes of meetings and the inspection notes have been uploaded on the website of Delhi Jal Board from time to time.

Delhi is an urbanized city state having a population of about 20 millions which is expected to increase to 23 million by the year 2021. Present total water requirement for domestic purposes for population of 20 million @ 60 GPCD works out to 1200 MGD. Present average potable water production by Delhi Jal Board is about 936 MGD and includes about 80-85 MGD of ground water. Thus there is a gap of 204 MGD. Only 81.3 households have piped water supply. DJS supplies water to 1153 of 1650 unauthorized colonies in Delhi. The current resource of 936 MGD consists of 110 MGD of sub surface well. As per the Central Ground Water Board assessment of 2017, total ground water extraction in NCT of Delhi for domestic usage was estimated to be 24457 Ham (147 MGD) including ground water extraction by Delhi Jal Board. Primary requirement of water for Delhi is for domestic usage, while it also has requirement for irrigation/horticulture and industrial purposes. Major requirement for irrigation /horticulture and industrial purposes is met from ground water resources. As per the assessment of Central Ground Water Board for 2017, annual ground water usage in NCT of Delhi for irrigation and industrial purposes is about 11,534 Ham (69 MGD).

Ground Water Resources in Delhi are over-exploited as per the assessment of

Central Ground Water Board. As per the assessment for 2017, ground water development (i.e. extraction of-35990.3 Ham) is about 1.19 times the total net ground water recharge (30090.5 Ham). Out of the 34 units (Tehsils) in 11 Revenue districts, 22 are over exploited (dark blocks), 2 are critical, 7 are semi critical and 3 are in safe category. Over use of groundwater for drinking, irrigation and domestic purposes has resulted in rapid depletion of groundwater in various regions leading to lowering of water table and drying of wells. In Delhi where water table used to be around 30 feet before independence has shokingly dropped to more than 300 feet in many areas. South Delhi was found to be the one where the depletion was the most. Water was found to be as deep as 79 meters bgl in Kapashera, where it is 78 meter bgl in Gadaipur village in Mehrauli. North, West, North-west and South-West districts are in the “semi-critical” zone. In 15% areas of Delhi, the groundwater was found to be below 40 meters bgl.

The whole world is concerned about water including developed countries such as USA. Water will become a challenge for our country too. In India there is 65% dependence on underground water. As our population is growing, water requirements are also increasing.

The most important step to overcome water crises is harvesting rain water. It can be carried out through storage of rain water or its percolation, which will then help recharge ground water. The next step is to have judicious use of water. Domestic and industrial use of water only account for 11% of the total consumption. 89% is in agricultural; our use of agricultural is most unproductive. We use 5600 liters of water to produce one kg of rice whereas China uses only 350 liters of water. Though we have technology but we do not value water so it is being misused. Reuse of water both in domestic and industrial sectors is essential. Around 150 billion liters of sewage water is produced in India annually. 70% of Singapore drinks treated sewage water. In India, the government has taken a programme to treat and reuse all sewage water in villages, either in agriculture or at least for groundwater recharge. Treated

water can also be used in the gardens, toilets etc. Kitchen water can be made potable or re-useable by spending just 10% of the money. 90% of water used in India is fresh water, whereas, in China and Brazil it is 64% and 60% respectively.

Government of India has recently set up the Jal Shakti Ministry, combining the erstwhile Ministry of Drinking Water and Sanitation and Ministry of Water Resources, River Development and Ganga Rejuvenation. The Jal Shakti Mission, which includes plans for water conservation and provision of piped water connections to every household by 2024 is the government's big flagship programme. The government has identified 250 districts that are water stressed, over exploited or critical. Teams of joint secretary level officers, hydrologists and engineers have been sent to these districts to prepare plans on ground water recharge, motivate and educate people and to prepare plans to revive traditional water bodies.

Recycle and reuse will be the focus of Jal Shakti Abhiyan in urban areas where much of the used water is dumped into rivers and other water bodies while in rural areas, the target will be to promote conservation and harvesting rainwater. Other focus activities would include renovation of traditional and other water bodies/tanks; reuse bore-wells recharge structures; water shed development; intensive afforestation; intensive campaign and integration of government programmes. In its first Mann ki Baat, the Hon'ble Prime Minister called for a national effort to protect and augment India's water resources.

Recently, Delhi Government has made it mandatory for rainwater to be harvested in all Delhi Government buildings. Heads of all departments have been directed to ensure that all buildings have RWH systems installed. The decision is likely to conserve a huge amount of rain water.

Delhi government plans to build a 1000 acre underground reservoir on the Yamuna floodplain in North-west Delhi's Palla to store an estimated 37000 million gallons of rainwater to meet summer water supply shortfall. Delhi gets 580 million

cubic liters of rainwater every monsoon season but 280 MCM is lost because there is no way to store it. The Palla reservoir is being conceived as storage for the seasons precipitation. It is proposed that the selected site, a 200-600 meter wide stretch lying between Yamuna river bank and the bunds made by irrigation and flood department is currently being used for agriculture. The government intends to take it on lease. The flood plain has a very high percolation rate of 6-9 meter per day and arrangements are proposed to be made to hold the water for a few hours. The numerous craters will serve the purpose of exposing the sand bed and enhancing the percolation. The project has been conceived in the backdrop of city's fast depleting water table. The committee has recently recommended Rs. 77000 annually per acre for land leased for the project. For the time being, ponds will be created between Palla and Wazirabad where the water quality is comparatively better. The project is spread over 1000 acres of land but the pilot will be done in an area of around 5200 acres. The work on the project could start anytime.

As per news in Times of India dated 28th July 2019, under the Jal Shakti Abhiyan, District-wise Nodal Officers have been assigned for 10 of the 11 districts in Delhi, with each officer responsible for ensuring that rainwater harvesting and other groundwater conservation techniques are followed extensively. The Monitoring Committee shall co-ordinate with the Nodal Officers.

Ministry of Housing and Urban Affairs, GOI has issued guidelines for Urban Water Conservation under Jal Shakti Abhiyan. Thrust areas include Rain Water Harvesting (RWH), Reuse of Treated Waste Water, Rejuvenation of Water Bodies and Plantation. For Rain Water Harvesting, the guidelines include that ULBs should ensure that all government buildings (Central/State/ULB) must have RWH structures. If such structures are there and not functional, then they should be made functional. The guidelines also include that ULBs should ensure that in future all building permissions granted must have RWH structures incorporated, as per DDLs, and same should be checked before issuing Occupancy-cum-Completion Certificate (OCC).

Therefore, in urban areas, ULBs have to play major role in ensuring implementation of Rain Water Harvesting Systems.

While Rain Water Harvesting Systems in urbanised areas like, Delhi is important for sustainability of Ground Water Resources, Reuse of Waste Water and Rejuvenation of Water Bodies have major & far greater role for conservation of ground water. Use of adequately treated effluent for gardening and horticulture purposes will not only minimise ground water uses but will also help in recharge. Further use of adequately treated effluent in AC cooling towers, Buses/Trains washing, Thermal Power Plants and other non-potable industrial uses will help in conservation of Ground Water Resources. Similarly use of adequately treated effluent in non-potable purpose like flushing in domestic usage will also contribute in sustainability of Ground Water Resources. Therefore, there is need to draw attention for these two thrust areas for an urban city like Delhi. An NGRI report on the largest depletion in Northern India predicted that drying of the Indo-Gangetic basin comprising some 200 km land may also trigger moderate earth quacks. Worried over the state of groundwater, the government has entrusted NGRI to look for new aquifers in the country.

Measures taken by Delhi Jal Board on Water Conservation and Rain water Harvesting:

- i. Roof top rain water harvesting has been made mandatory for plots size of 100sqm and above as per Building Bye Laws for Delhi, vide notification dated 28.07.2001 issued by the Govt. of India. To promote its implementation Delhi Jal Board has made provisions in its tariff regulations for rebate and penalty in water bills for implementing and non-implementing Rain Water Harvesting Systems. However it is essential that ULBs should ensure implementation of Rain Water Harvesting Systems in building premises.
- ii. Rebate in water bills is given to extent of 10% to the consumers of Delhi

Jal Board and is applicable on plots size of 100sqm and above. Rebate of Rs. 32.57 crores has been given from 1.7.2017 to June 2019.

- iii. Non provision of rain water harvesting by the consumers of Delhi Jal Board having plot area of 500 sqm. and above invite penalties in water bill, which are increased by 1.5 times. 11635 consumers have been penalized and an amount of Rs. 48.68 crores has been imposed as penalty since 1st July, 2017 and upto June 2019.
- iv. 318 installations of DJB have rain water harvesting system. More are being covered in phased manner depending on feasibility.
- v. All Govt. departments have to make provision of RWH in their buildings. As per the Delhi Government Cabinet decision 2709 dated 02.07.2019, Delhi Jal Board has been assigned to implement Rain Water Harvesting Systems in Government Building installations which are not maintained by the PWD. For Delhi Government buildings which are maintained by PWD, the implementation of Rain Water Harvesting System is to be carried out by PWD itself.
- vi. One week long survey was carried out by the field units of Delhi Jal Board to ascertain the provision of Rain Water Harvesting in the government buildings falling in the areas under their jurisdiction. The list of 559 such building premises has been shared with the heads of the government departments and with the request to implement Rain Water Harvesting Systems including in any other government buildings under their control, through a D.O. letter from the CEO, DJB.
- vii. To sensitize the citizens of Delhi a continuous process of disseminating information on Rain Water Harvesting through platforms like print, electronic, visual, workshops, exhibitions seminars, booklets, pamphlets etc. have been done by Delhi Jal Board. Recently interactive workshops on Rain Water

Harvesting have been held at the circle level (Superintending Engineers level) and divisional level (Executive Engineer level) by DJB with the RWAs, across Delhi. More have been scheduled to be held at the level of Executive Engineers of DJB.

viii. In the matter of O.A. 217/2016 before Hon'ble NGT, implementation of rain water harvesting in the school and colleges located in NCT of Delhi, is being monitored by the Committee under the Chairmanship of Member (WS), DJB in terms of Court order. As per the available details, Rain Water Harvesting Systems have been implemented in 3477 Nos. schools/colleges out of the 4804. Further in 594 Nos. schools /colleges the rain water harvesting systems are under construction and in the 532 Nos. schools and colleges action for taking up construction has been initiated.

ix. People are being sensitized for the judicious use of Potable water for the demand side management through public outreach program.

Renovation of traditional and other water bodies:

There are number of water bodies in Delhi which have become defunct due to urbanization. These water bodies are with various land owning agencies in Delhi. Delhi Jal Board and Irrigation and Flood Control Department have initiated the process for revival and rejuvenation of 155 and 95 water bodies respectively which are owned by the revenue department/ other Govt. agencies in Delhi. For revival of these water bodies treated effluent of adequate quality will be utilized with treatment involving by Bioremediation/Phytoid technology.

Delhi Jal Board has also envisaged creating water bodies at vacant land of WWTP at five locations i.e. Dwarka, Pappan Kalan, Nilothi, Rohini and Timarpur.

Reuse of Waste Water:

- DJB is promoting utilization of treated effluent for water conservation. DJB

has installed filling points for treated effluent at its 16 STPs located across Delhi. The land owning agencies can use it in their parks for gardening.

- Decentralized waste water treatment plants may also be set up by tapping the generated sewage within the building premises for utilization of the adequately treated effluent for flushing, AC cooling towers, bus/train washing, gardening and other non-potable purposes or in case of big parks from the manholes of nearby DJB sewerage network.
- Provision of waste water recycling system has been mandated for horticulture purposes in the Building Bye Laws for Delhi, in terms of the notification dated 28.07.2001 issued by the Govt. of India, wherever minimum discharge is of 10,000 liters and above per day from the building premises. As per the Delhi Jal Board Policy use of adequately treated effluent from Waste Water Recycling System for flushing purposes is essential, wherever total assessed average daily water demand is 12,500 liters or more.
- 90% rebate in Sewer Maintenance Charges (sewer maintenance charges are levied @ of 60% of water bills and therefore gets reduced to 6%) is given for installation of decentralized STPs and use of adequately treated effluent for non- potable water purposes like horticulture, flushing, etc. This is in addition to the 15% rebate in water bills on having both RWH and decentralized STPs/WWTP.
- Delhi Jal Board is providing treated effluent to various departments for its usage in horticulture, flushing etc. and such other purposes to the tune of 89 MGD.
- It is essential that other government departments owning parks and gardens should come forward to utilise treated effluent and close their tube wells meant for such purposes.

INSPECTION OF WATER BODIES

The Monitoring Committee visited various water bodies to have first hand information about their condition. The concerned officers were also requested to remain present at the time of inspection of the water bodies. The environmentalists/activists were also associated to get inputs from them.

WATER BODY AT SECTOR – 5, DWARKA



The discovery of this water body was sudden. During a field visit in the area of Dwarka, Monitoring Committee visited the office of DJB at Sector – 5. It was noticed that there was a big water body which was completely dry in one corner inside the park. Inquiries revealed that non-availability of water to the water body was the cause for it to remain dry. Monitoring Committee felt that this water body can be revived without any hassles. It was informed that treated water was being used for horticulture purpose in the park. Instructions were given to DDA to make available the treated water from the STP situated nearby through a pipe. DDA was persuaded to provide treated water to this water body. Finally through a pipe, water was brought to the water body. It is now continuously fed with water and sufficient water has

accumulated in the water body. The water body was visited again by the Monitoring Committee and it was noticed that the water body was having enough water. Birds were chirping near the water body.

The Monitoring Committee felt that the water body can be developed as a picnic spot and morning walkers can enjoy sitting near the water body. Detailed instructions were given to DDA to plant more plants near the water body; to fence the water body properly and to carry out landscaping and beautification work at the earliest on the lines of water body at Rajokri. Subsequently it was informed that 200 number of plants of different species have been planted. The fencing is in progress. Beautification work is expected to be complete by 15.07.2019. (Above photographs will show as to how the water body existed in May 2019). Water samples have been taken on 24.04.2019 to ascertain purity of water. Efforts are being made to make the treated water more pure by rotating it inside the woodland by making channels. The other means involving bio-remediation / phytoremediation technology to make the water purify shall be adopted in due course.

In its 16th Meeting, DDA was directed to start circulating water in the woodland area; to create bioswales within two months.

In the latest report dated 17.07.2019 the DDA has informed that (a) Deputy Director (Horticulture), Dwarka will start diversion of water and beautification work from 11.08.2019, (b) the tender for barbed wire has been received. Work will be started from August 2019. Mr. Lakshmi Narayan, SE Nodal Officer was apprised that the Monitoring Committee would visit the water body at the earliest to have the first hand information. The Monitoring Committee desires that this water body be developed as a tourist spot at the earliest.

The Committee is happy to note that this water body which was a dry place has been completely revived.

WATER BODY AT SECTOR 23, DWARKA



The Monitoring Committee was keeping an eye on this water body from time to time. In its latest status report dated 17.07.2019, it has informed that the renovation work of the old STP and connection of water line with TD-2 is in progress and will be completed by 31st July 2019. (Photos sent by Mr. Diwan Singh revealed that electrical department is laying wires at the spot) It further informed that the work of Vicade Gate will be completed by 31st July 2019 for human entry. Repair and painting of boundary wall has been completed. Security guards have since been deployed. Deputy Director (Horticulture) has already directed to plant minimum 200 saplings in this water body. Mr. Diwan Singh, the activist present in the meeting was fully satisfied with the work carried out by DDA. ***Latest photograph above reveals that the lake is full of water and looks very nice.***

WATER BODY AT SECTOR 20, DWARKA



Measured water level through peizometer on 19.07.19. It is 26 meters bgl.

In its latest status report dated 17.07.2019, DDA has informed that Peizometer has already been installed. To control the back flow gate at TD-2 has been fixed. **Mr. Diwan Singh, environmentalist has sent the above photos of the water body which look very nice.**

WATER BODIES AT ASHOKA PARK, NEW FRIENDS COLONY; SATPULA LAKE NEAR DISTRICT COURTS SAKET; NEELA HAUZ AT ARUNA ASAF ALI MARG AND HAUZ KHAS LAKE IN DEER PARK, HAUZ KHAS.

On 06.06.2019, Monitoring Committee inspected the above water bodies. Officers from DJB, DDA, ASI, local residents, Mr. Ankit Shrivastava, Consultant, Professor CR Babu and Sh. Fiaz A Khudsar were present at the relevant water bodies. Following observations were made during inspection:

Lake in Ashoka Park, inside park at New Friends Colony



Digging and levelling in Ashoka Park in progress

It was noticed that lake is dry and the ground water is being used for horticulture purposes extracted through bore-wells. Mr. Verhean Khanna resident/activist of the area informed that this water body gets water only during rain. The Monitoring Committee felt that this water body can be revived without much

difficulty in a short period. Since the monsoon was nearby, it was felt that the rainy water during monsoon can be collected in this water body to recharge the ground water. Instructions were given to DDA to do the needful at the earliest. It was apprised to the Monitoring Committee that DDA has plan to set up a decentralized STP of about 100 KLD for horticulture purposes in the park with nearby sewer line as source for the proposed STP, so as to substitute ground water usage.

Monitoring Committee directed DDA is to carry out digging and landscaping of the low lying area in Ashoka Park to give proper shape to the lake. Digging is to be based on the trial pits. It was further observed that a proper assessment of flow in the nearby sewer line along with required quality and quantum of the treated effluent is to be assessed for horticulture use and for filling up the lake to deciding capacity and design of the proposed STP. DDA may coordinate with CE (South)/SE (South) and give comprehensive report on their proposal within a week. DDA was directed that till their proposal of setting up the decentralized STP comes to light, they should expeditiously complete the work of digging and landscaping for the lake and explore to use the treated effluent from the nearby STP at Delhi Jal Board at NOIDA by transporting through tankers, in consultation with the concerned officials of DJB after ascertaining quality parameters of the effluent for the purpose.

In the follow up action, it was reported by DDA that excavation work in Ashoka Park has started (The above photographs have been sent for confirmation). It is informed that the proper shape will be given to the water body to enable rainwater to be collected therein during monsoon. It is also informed that the digging and shaping of the lake would be complete and thereafter the water shall be filled at first instance by transporting treated water from Okhla Plant through tankers. In the long term plan, STP shall be set up to provide treated water to the lake.

The Committee is satisfied to note that the digging of the water body has started and is almost complete. In its action taken report, the DDA has intimated that

this water body would be fully revived shortly. In the meantime, the DDA shall install the STP to use the treated water from the nearby area to feed the water body.

The Monitoring Committee noted that there were three tube-wells/bore-wells being used to extract ground water for horticulture purposes. The Monitoring Committee emphasized that DDA should set up STP of sufficient capacity to use treated water for horticulture purposes and at the earliest to stop use of borewells to save groundwater. The DDA has informed STP of 100 KLD capacity shall be set up shortly. The Monitoring Committee directed to expedite the work of construction of decentralized waste water treatment plant and stop of of three tubewells for extracting groundwater.

Satpula Lake in District Park, near District Court Saket

The Satpula, or the seven arched bridge was reportedly constructed around mid 1300s and acted as a dam or a weir. The monument, next to the lake falls under the Archaeological Survey of India (ASI). Presently it is a dried up lake. The land owning agency is DDA. DDA Officials informed that they have already given NOC to DJB for rejuvenating the water body which has the area of about 4.84 acres. Further they have planned for setting up of de-centralized STP for use of effluent for the horticulture purposes. The waste water from the nearby drain will be the source for the purposed de-centralized STP. DDA further informed the tender for the work has already been invited. Monitoring Committee observed that a demarcation plan of the lake/water body is to be furnished by DDA to DJB and DJB is to make an assessment of the capacity of the de-centralized STP that is required for filling up the lake in addition to the assessment of the quantity of treated effluent required for the horticulture purposes in the District Park and share with DDA. The exercise along with finalization of quality parameters for the treated effluent for the intended purposes is required to be completed in a week time mutually by DDA and DJB. Since NOC has been given by DDA to DJB for revival and rejuvenation of the water

body, DJB shall carry out the additional works including setting up additional decentralized STP of appropriate capacity and quality parameters. DDA shall take requisite measures for protection and safe guard of the water body/lake. DDA and DJB were instructed to provide details of their development plans to ASI and shall seek necessary permissions, if required.

It was observed that there is an open amphi-theater facing the water body and an over bridge for the dried up water body/lake. It was also observed that the historical monument also needs conservation. An officer of ASI was instructed to prepare and carry out the conservation plan for the historical monuments.

In the follow up action, DDA has informed that map of Satpula Lake has been made available to DJB. DDA has issued NOC to rejuvenate the lake. Mr. Lakshmi Narayan, SE, Nodal Officer, further informed that 50 KLD capacity of STP is being set up to use treated water for horticulture purposes in the park surrounding Satpula Lake. DJB officers informed that more than 1000 kiloliters of water per day (KLD) will be pumped out from a drain running adjacent to the location to fill a depth of about 2 meters of the lake. The DJB estimates that 15% of this water would percolate into the ground. Water in the drain already passes through a sewage treatment plant 4 k.m. before the lake. DJB informs that to provide treated water to the lake, STP of the required capacity shall be set up nearby the lake shortly. It is informed that entire project will take around 8 months to complete. ***DJB has been directed to carry out the work expeditiously in consultation with the officers of ASI so that the water body is revived without any delay.***

The process of implementation of proposal of Satpulla lake is under approval. The proposal is likely to be approved in July 2019.

Neela Hauz Lake at Aruna Asif Ali Marg



The Neela Hauz Lake, a natural depression next to Sanjay Van was a dumping ground before it was revived 3 years ago. Neela Hauz Biodiversity Park is spread over 10 acres. Centre for Environmental Management of Degraded Eco-system (CEMDE) had started reviving the lake in 2015 and finished a constructed wetland system which naturally purifies the water reaching the lake. About 1 million liters of raw sewage per day mixed with STP treated water passes through the wetland. Different gradients levels as well as microbes from aquatic plants naturally improve the quality of the water before it enters the lake.

During visit of the Monitoring Committee, we met Prof. C. R. Babu and Faiyaz Khudsar. DDA officials apprised that the lake is maintained by NGO headed by Sh. C.R.Babu. It was explained to the Monitoring Committee that waste water in the drain, which has a BOD of about 40 PPM is drawn for bio-remediation. This after going through the process results into effluent having BOD of about 4 PPM which is used for filling the water body. As the lake lies on Aruna Asif Ali Marg, commuters just park their vehicles on the side of the road and dump waste directly into the water body. This ranges from municipal solid waste, plastic bags and bottles, glass, pooja material etc. A boat has been procured recently to collect waste. It was apprised to the Monitoring Committee that there is need to put barriers on the fly over so as to restrict the throwing of solid waste into the water body by the people. DDA apprised that letter has been written to the PWD on 24/05/2019 for appropriate action in the matter.

The Monitoring Committee observed that there is accumulation of some scum on the periphery of the water body which needs to be addressed by the maintaining agency. Further it was directed that samples of the water be collected from the inlet point of the bio-remediation plant and from the water body to ascertain the quality. DDA was instructed to call the concerned officials of the PWD not below the rank of Chief Engineer in the next meeting of the Monitoring Committee along with the status report on the action taken for installation of barricades on the fly over in response to the letter dated 24/05/2019 of DDA.

In the subsequent meetings, officers from PWD were called and instructed to provide mechanism like net or some sort of fencing to stop dumping of solid waste in the water body by passersby while standing on the flyover/road. ***SE (PWD) assured to take up the matter with the Department and provide necessary protection to the water body.***

He was further asked to submit list of buildings maintained by PWD and status of RWH Systems therein.

Hauz Khas Lake in Deer Park, Hauz Khas



Collection of water sample

It was observed that the lake has enough water but its quality is required to be improved upon. It was directed that CPCB shall collect samples to ascertain the quality of the water in the lake and at its source point(s). DJB in coordination with DDA will submit a report on required works for improving and maintaining the quality of water in the lake. The Official of ASI department present during the

meeting was asked to provide status report on their conservation plan for the historical monuments.

In the subsequent action, water samples were collected by the staff of DTQC, DJB and its report has been received. There is mismatch in the report Sh. Markandey, Member of the Monitoring Committee has been requested to collect the samples to ascertain the quality of water in the lake.

It is a beautiful lake and is being visited by large number of people all the times. It is informed that the water body is rich in fishes; it has a beautiful island. It is surrounded by historical monuments where young couple were seen roaming. If properly developed, this water body can be a good tourist spot, being inside the huge park. DDA has issued NOC to DJB to revive Hauz Khas lake.

During our visit, individuals from Times Group were seen taking photographs. They informed that survey was being conducted of the water bodies and the Times Group intends to adopt certain water bodies for rejuvenation and development. They were asked to remain in touch with the Monitoring Committee for further progress in the matter. ***Mr. Ankit Shrivastava later informed that Times Group is ready and willing to adopt some water bodies for development at their expenses. In due course, the concerned persons from the management shall be requested to attend the meeting to work out the modalities.***

WATER BODY AT VILLAGE AMBERHAI, SECTOR 19, DWARKA



Water body converted into park



One Ramwati along with her son Mr. Manoj Kumar and Mr. Diwan Singh, Environmentalist attended the meeting of Monitoring Committee at IIC on 29.04.2019. They informed that the water body in Sector 19 has been encroached upon and if no timely steps were taken, it would be completely damaged. She disclosed to have filed O.A. 537/18 titled “*Rampati v. Union of India and ors*” before Hon'ble NGT and it was disposed of vide order dated 11.09.2018 as the subject matter stood covered in view of the order in application No. 26/2017 titled “*Diwan Singh v. Union of India*”. The Monitoring Committee was directed to deal with her representation. The Committee assured that a field visit will be made by Monitoring Committee to make assessment at the spot.

Soon thereafter, the Monitoring Committee visited the water body. The officers of DDA were also present. This is a very beautiful water body surrounded by residential houses inside the village. It has also a beautiful park and panchayat ghar. At the spot, the Monitoring Committee noticed that in the name of beautification, the water body has been fully converted into a park. It was informed that the DDA had

given “no objection” to SDMC to beautify the spot/water body/park. ***Seemingly due to influence of local individual, the water body was completely converted into park at the spot, huge pakka constructions of a panchayat ghar was in progress.*** The board outside the park/water body described the spot “Johar” (photo attached) but there was no trace of any water body. Ramwati informed that the water body space was being used to perform religious functions. The Monitoring Committee decided that this water body must be revived. In the subsequent meeting, the concerned officers from DDA and SDMC were called. SHO Mr. Santan Singh was called in the meeting and was directed to ensure that the water body is not encroached upon and no religious functions should be allowed at the surface of the water body. The DJB officer informed that the treated water for which the DDA has laid network in the area of Dwarka can be used to make available the water in the water body and 10 points exist in Sector 19 from where treated water can be tapped. Mr. Arvind Kumar, JE (SDMC) informed that points have been left at the water body through which the water can be filled by connecting it with the treated water pipelines. Instructions were given to DDA to make available water in the water body by connecting the water body with the network nearby. In the subsequent meeting, DDA expressed reluctance contending that the treated water was not pure and gave foul smell and can't be used for the water body. In the next meeting, another excuse was taken that DDA had no sufficient treated water in the area to fill the water body. The Monitoring Committee after having detailed discussions with Mr. R. K. Singh, SE, Dwarka felt that DDA was not interested to revive the water body, may be due to local influence. Mr. R. K. Singh finally agreed to give “no objection” to DJB to lay a pipe to make the treated water available in the water body and its expenses shall be borne by DJB.

DJB has been directed now to do the needful and make the water body revive at the earliest. It was made clear to DDA and DJB that if the water body was not revived due to influence of someone, request shall be made to the Hon'ble NGT to issue necessary directions for the purpose. It is relevant to note that huge amount has

the rainwater can be accumulated in it during monsoon. The Monitoring Committee instructed DJB to explore technical feasible option of bringing treated water to the lake from various sources as (a) treated water from STP of Roshanara Lake, (b) intercepting and treating sewage of local residential area, (c) treatment at Bharat Nagar SPS and laying treated water line to the lake (d) check availability of any other treated water line/STPs existing in the nearby area.

In follow up action, on 15.05.19, Deputy Director (Horticulture), North DMC Mr. Nahar Singh informed that the lake has been cleared of bushes and shrubs. North DMC was directed to confirm the area of lake so that DJB could take up work of revival of the lake after receipt of NOC from North DMC. DJB was directed to submit report source of treated water for the lake.

On 20th May 2019 in its 16th Meeting Mr. S.L. Bairwa, EE(MCD) informed that as per topography survey done earlier, area of lake came out to be 22050 m² /5.44 acres. The Monitoring Committee enquired about status of source of water for Roshanhara Lake. Consultant (Hydraulics & Water Bodies) informed that it will be cost effective to source treated water from (a) Sewer line after installation of STP (b) Roshanhara Club STP. He also informed that while option (a) will take time but (b) can be immediately done. DJB (SE) informed that DJB staff had gone to Roshanhara Club to check STP capacity and it was informed that 144 KLD was the volume available at STP which was currently discharged into Rain Water Harvesting pit.

Consultant (Hydraulics) informed that he would need (i) sewer line map from DJB around Roshanhara Lake area to identify Interception points of sewage, (ii) MCD to provide NOC for construction of STP, (iii) details of STP & Water Quality parameters functional in Roshanhara Club.

The Monitoring Committee instructed to provide the above information immediately and to ensure that steps are taken to make water available from Roshnara club

On 21.06.2019, in its 19th Meeting, DJB informed that NOC was yet to be received for installation of STP in woodland area. North DMC was directed to take the matter on priority and issue NOC at the earliest. Concerned officers from DJB and DPCC were directed to instruct the management of Roshanara Club to treat the waste water/sewage so that it may be utilized for maintaining the park and filling the water body which is lying dry. The required result is awaited and the matter has been brought to the notice of CEO, DJB in its 20th meeting held on 28th June 2019. ***It was impressed that Roshanara Lake is to be revived on priority either by rain water collection during monsoon or by use of treated effluent.*** He assured to take up the necessary steps shortly.

NAINI LAKE



After the visit of Roshanara Lake, the Monitoring Committee went to visit Naini Lake at Model Town. Many officers from corporation (North) were already present there. Several activists/residents were eagerly waiting for the arrival of the Monitoring Committee at the spot. They informed the Monitoring Committee regarding the pathetic condition of Naini Lake. The Monitoring Committee took round of the lake. It is a natural water body having an island. A comprehensive report for revival of Naini Lake has already been prepared by Prof. C. R. Babu. The fountain in the lake was not functioning properly. The following issues were discussed:

a) MCD officials apprised the Monitoring Committee that work order of desilting of water body was issued but it could not be completed due to opposition of residents. The Monitoring Committee instructed MCD to share details of the work orders and

related file notings to the Monitoring Committee.

b) Three bore-wells were being used to fill water in the lake and the groundwater was available at 40-60 feet. Residents informed that snakes/fishes/turtles are there in the lake but there have been incidents of fish death; foul odour was there due to deteriorating water quality.

c) During inspection few points were observed where strong water drain was punctured and waste water was flowing into the water body. The Monitoring Committee instructed MCD officials to repair the drain and broken walls. DJB was instructed to ensure that no sewage should enter into the storm water drain.

d) Consultant WB informed that coronation STP was available in the close vicinity and could be used as source of water for the lake.

MCD was directed to submit desilting estimates

The matter was taken up for further action in its 15th Meeting held on 15.05.19. Representative of North DMC informed that report on revival of Naini Lake was prepared by Prof. C.R. Babu. Tenders were invited, but kept pending due to intervention of local residents. Ultimately the tenders were closed and it was decided to take up the work after elections. Cost of project was Rs. 1.31 crore. Monitoring Committee directed NDMC:

- (a) to demolish the dilapidated room being used for obscene activities;
- (b) clean the lake;
- (c) carry out repair work and;
- (d) clean the drains surrounding the lake on priority before the on-set of monsoon.

North DMC assured that cleaning of drain and demolition of room will be done in 15 days and technically/feasible work will be taken up on priority. Sapling will be planted in the first week of June, 2019. Dr. Farooqi informed that the source of entry of sewage into drains, surrounding the lake has been repaired. At present there is no entry of sewage into the lake.

The Monitoring Committee desired to remove the problem of rodents. DJB will submit report on availability of treated effluent from nearby WWTP. Two rival groups have contradictory opinions on desilting of the lake. Monitoring Committee directed to call both RWAs in the next meeting on 20.5.2019 at 11. 00 am, to ascertain their views.

Again the matter was discussed in the 16th Meeting held on 20.05.19. Representatives of two Resident Welfare Associations working in the area attended the meeting. One association was represented by Mr. Mukesh Agarwal, General Secretary, LARA Association. The other association was represented by group of residents from the area. (Names & Details are in the attendance sheet). Mr. Rajesh Wadhwa, S.E. Informed that temporary room in the lake area has been demolished and pest control has been done to check rodent menace. Mr. Mukesh Agarwal, LARA, RWA informed that lake was with DTTDC from 1991 -2015 after which O&M of the lake came back to MCD. After 2015, water quality in the lake has deteriorated. He proposed that lake should be handed over to DTTDC for proper O&M; Musical Dancing Fountain be made functional; ETP should be installed; Security Guards be deployed.

Monitoring Committee asked both the associations their opinions on desilting of Naini Lake. Mr. Mukesh Aggarwal expressed apprehension that de-silting would cause leakage of water in their basements; hence it should not be done at all. Monitoring Committee inquired if there was any technical basis or report for the apprehension of Mr. Mukesh Agarwal, LARA, on which he could not reply & countered saying that affidavit should be submitted by officers proposing desilting of lake that it would not affect foundations of buildings adjacent to Lakes; to find out expert view on desilting and its extent, let the expert be called in next meeting; Mr. Ankit Srivastava was requested to submit report about source of water to Naini Lake. Mr. Rajesh Wadhwa (SE) informed that two points in the storm water drains from where sewage was over-flowing into the lake have been de-linked & storm water

drain has been cleaned. Residents however informed that leakage was still happening from inlet at E-Block side. Chairman, instructed MCD to confirm the status by next meeting 28th May 2019.

In the 17th Meeting held on 28.05.19, North DMC official informed that Prof. C.R. Babu and Dr. Faiyaz were not available this week due to prior engagements. They were requested to be present at in the next meeting. In the meantime North DMC was asked to ascertain upto what extent de-silting can be done. Mr. Nahar Singh ADH, MCD informed that plantation is being done at the site. EE informed that leakage in storm drain has been repaired and at present, no water enters from the said water pipe in the lake. Mr. Nahar Singh ADH, informed that insecticides have been used for rodent menace and number of rodents have died. Regarding fountain, EE informed that fountain is under Defect Liability Period and contractor has been called to repair and soon fountain will be made functional. Broken boundary will be repaired soon. Report of Naini Lake water quality has been received

Residents informed that leakage is still there. Room has been symbolically demolished and “Malba” is still there. Mr. Sahni, DJB was directed to take up the matter with concerned officer.

In 18th Meeting held on 10.06.2019, Dr. Faiyaz A. Khudsar, reported that as directed by Monitoring Committee he had inspected the lake its depth was found to be varying from 2.5 to 7.5 ft. Water for this lake is sourced from the tube-wells and quality of lake water needs to be addressed. He expressed that de-silting work of this lake can be done with depth of de-silting not exceeding 3 feet. Officials from the horticulture wing of North DMC informed that about 250 saplings have been planted and actions for rodent menace have also been taken. They also informed that there is still waste water inflow at 2-3 places from the adjacent storm water drains. Monitoring Committee asked Dr. Faiyaz to have consultation with Sh. C.R. Babu and give comprehensive report within 10 days on permissible depth for de-siltation in the

lake without endangering adjoining buildings/their basements and measures required to improve the quality of lake water. Officials from North DMC were directed to ensure stoppage of waste water inflow into the lake from the storm water drains. Matter should be taken up with DJB counterparts to ascertain the root cause of waste water flow in the storm water drains.

In the 19th meeting, Prof. C.R Babu, and Dr. Faiyz A. Khudsar attended the meeting. Many activists including Ms. Juhi Chaudhary were also present from the locality. Dr. Ashish Priyadarshan, Dir.(Hort.) and Sh. S.L. Bairwa, EE(Pr.) from North DMC were also present.

Prof. C.R. Babu furnished report regarding the extent to which desilting can take place in the Naini Lake without having any harm or danger to the basements of adjoining buildings. Prof. C.R. Babu informed that if desilting takes place from 1.5 to 2.5 feet, there would be no risk of seepage of water to cause any danger to the buildings of the residents residing adjacent to the Naini Lake. He further informed that Mr. Mukesh Aggarwal, (LARA) had contacted him on telephone and he had discussed the report with him.

Prof. C.R. Babu further informed that after discussing the report Mr. Mukesh Aggarwal was fully satisfied and had no objection to the de-silting of the Naini lake upto the extent of 1.5 to 2.5 feet. Copy of the report given by Prof. C.R. Babu, was handed over to the officers of North MCD and Ms. Juhi Chaudhary.

Sh. S.L. Bairwa, EE(Project), North MCD stated that he will discuss with senior officers and furnish a detailed report by 25/06/2019 regarding the steps to be taken for cleaning and de-silting of the Naini lake in terms of report of Prof. C.R. Babu. He was asked to furnish the report to the Monitoring Committee positively on or before 25/06/2019 so that it may be taken up for consideration on 28/06/2019 in the next meeting.

Mr. Nahar Singh, Dy.Dir.(Horti.) DMC informed that the saplings have been planted at the spot. Sewage is stated to be still flowing in the Naini Lake from nearby

drain. Monitoring Committee directed the officers of North DMC to ensure that the leakage is completely stopped and the drain is to be repaired. DJB was instructed to identify the source of sewage flow into the municipal drain and take remedial measures for stoppage of the sewage flow into the drain. Some 'malba' was also stated to be lying at the spot after demolition of the room. The North DMC shall ensure that same is removed immediately.

The sample reports of the water lifted from the lake have been received which are as under:

Sample Report

S. No.	pH	TDS (mg/l)	TSS (mg/l)	COD (mg/l)	BOD (mg/l)	Sulfate (mg/l)	Phosphate as P (mg/l)	NO ₂ -N (mg/l)
Sample near main gate	7.8	2242	64	74	12	247	BDL	BDL
water entering into lake	7.3	2140	19	11	3.5	170	BDL	BDL

The sample reports indicate sample 1 is having high TDS, COD and Sulfate content. The feed water (sample 2) also has high TDS and sulfate.

The Monitoring Committee is eager to revive this wonderful natural lake which has a beautiful island and fountain. Earlier the lake was used by DTDC and children used to enjoy boating therein. Seemingly, due to influence of some individuals in the rival group, the authorities are reluctant to revive the water body. It has been made clear that if there is any lapse on the part of any individual for any reason in revival of the water body, Hon'ble NGT would be requested to issue necessary directions.

TIKRI KHURD LAKE



From Naini Lake, the Monitoring Committee went to visit Tikri Khurd Lake where many officials from DDA and I&FC were present. The Monitoring Committee had long discussion with them. The Monitoring Committee that it is a huge wetland and requires immediate protection. Dr. Markandey took sample of the water. Following issues were discussed with the officials:

- DDA officials informed that the area of lake is around 50 acres and few drains originating from nearby residential areas carrying sewage fall in the lake.
- The Monitoring Committee enquired about encroachment inside the lake. DDA officials informed that alleged encroachment was not part of DDA revenue records.
- The Monitoring Committee instructed to remove the solid waste, C&D waste, repair broken patches of wall, put fences like barbed wire etc. to stop dumping of waste into the lake.

The Monitoring Committee enquired about nearest source of water which could be used to fill the water body. Consultant (Hydrolics) informed that Narela STP was situated close to the lake and has existing pumphouse from where line could be laid directly to feed the lake.

It was observed that some parts of the lake were dry due to creation of bunds. DDA was directed to increase the water retention area and maximize the land utilization for water holding and groundwater recharge. DJB was directed to ensure

that no untreated sewage should go into the lake. Interim arrangement should be made in case DJB scheme of laying sewer line was going to take time.

In the follow up action, on 15.05.19, Mr. S. K. Sinha, EE, DDA informed that estimate for repair of boundary wall has been prepared. Removal of solid waste and repair of boundary wall will start by 15th June 2019. Monitoring Committee directed DDA to submit action plan for revival of the lake. Mr. Ankit Shrivastava informed that source of treated effluent for lake was available at Narela STP near to the lake.

In its 20th Meeting held on 28.06.19, Monitoring Committee directed DDA to submit layout plan showing demarcation of Tikri Khurd lake. Representatives from DDA were directed to remain present in the next meeting to submit report on measures taken to stop dumping of waste/clearance of lake area, repair of boundary wall etc as instructed during spot visit.

Sample Report

S. No.	pH	TDS (mg/l)	TSS (mg/l)	COD (mg/l)	BOD (mg/l)	Sulfate (mg/l)	Phosphat e as P (mg/l)	NO2-N (mg/l)
Sample near main gate	8.3	2008	135	293	45	216	1.48	BDL

The analysis report shows high level of TDS, COD, BOD, sulfate content of the water, making it unfit for any type of consumption. ***As per latest status report, DDA informed that NOC has been issued to DJB for revival of the water body vide office letter dated 17.05.19.***

GHOGHA DRAIN



On 23.03.2019, the Monitoring Committee conducted inspection at “Wetland System based on SWAB (Scientific Wetland with Activited Biodigester) technology on left bank of Bhawana Escape drain to treat 1MLD of waste water of Ghogha Drain.” Many officers from Delhi Jal Board, I&FC, CGWB, GOI Mr. Ankit Shrivastava were present at the spot. Following observations were made:

Superintending Engineer (FC-II) informed that this project was taken up as pilot project to treat 1 MLD waste water of Ghoga Drain by using wet land system based on SWAB Technology. The project has been physically completed with an expenditure of Rs. 181.88 lacs and commissioned on 07.06.2018 with following salient features of completed project:

- a) 5 check dams of 0.50 M high with stone boulders within an interval of 1Km each in the Ghoga drain.
- b) Regulator at outfall of Ghoga drain to control the flow of water at intake point to wet land system.
- c) Covered Sedimentation tank cum Bio-digester of size 38mX 5m with RCC of M-25 grade.
- d) 4 open wet land RCC chambers of size 28m X 5m with provision of river pebbles/gravels having different sizes.
- e) Natural wet land having size of 30 m X 5m with the provision of brick lined side slope filled with pebbles/gravels.
- f) RCC recharge well of size 7m X 5m.
- g) Wet land and natural wet land are planted with aquatic plants namely-Cana Indica, and Cyprus.

It was informed that on completion and commissioning of this pilot project, BOD levels of effluent has been reduced from 339ppm to 32ppm.

Superintending Engineer (FC-II) also informed that when the project was conceived, it was decided that if the parameters of the treated waste water come within the permissible limit, the treated water will be utilized to recharge & rejuvenate the dry water body on the DSIIDC land which is 1.20 km downstream of the wet land system. It was apprised that the system was commissioned on 07.06.2018 and on testing the parameter of treated waste water, it was decided that with further polishing by using carbon filters, the treated waste water can be taken to the dry water body by laying 450 mm dia NP-4 class RCC pipes. Accordingly, a scheme of “Providing and laying of 450 mm dia NP-4 class RCC pipe conduit for carrying out treated water from wet land system RD 9920 M to Pond at RD 11150M on left side of Bawana Escape Drain” has been approved in 41st TAC & work has also been awarded after completing all the codal formalities with stipulation date of start and completion as 24.03.2019 & 23.07.2019 respectively.

During inspection it was observed that presently there is no effective utilization of the treated effluent, which is going back into the drainage system. Further with the depth of water level in the outflow pipes, it appeared that presently the system is not running to its optimum installed capacity. I&FC Department, GNCTD was directed to ensure that the system should run to its designed optimum capacity and matter should be taken up with DSIIDC for landscaping of the water body which is to be developed by utilizing the treated effluent from this pilot project. Also the matter should be taken up with DSIIDC for tapping the industrial waste flowing into the Bawana Escape Drains and their officials be called in the Monitoring Committee Meeting alongwith status report at their end.

The Monitoring Committee also visited the water body under reference. It is spread in a large area and presently is lying almost dry. I&FC, Department officials expressed that, it can be utilized as a water body for 'Chath Puja' too and can be a good place to sit. I&FC informed that if DSIIDC gives NOC, the water body will be revived and land scaping will be done at the own expenses of I&FC, Department.

The I&FC was asked to send letter to DSIIDC for issuance of NOC and apprise status to the Monitoring Committee who will take up the matter with DSIIDC, if required.

In the follow-up action in the subsequent meetings, concerned officers from I&FC and DSIIDC were called and progress in the work was monitored. It was informed that the work of laying down pipe from Ghogha Drain to the water body has already been started and is expected to be completed by August 2019. DSIIDC has since made available NOC to I&FC to carry out landscaping and beautification at the water body at its own expenses. Officers from I&FC have informed that the beautification work is in progress and is expected to be completed soon. It is expected that this water body which is huge in length and breadth, can be utilized as a good tourist spot where the villagers can also perform Chatt Puja. The revival of this water body would add to the beauty of the village and utilize the treated water at Ghogha Drain. During monsoon, rain water can be collected in this water body.

OTHER WATER BODIES UNDER JURISDICTION OF IRRIGATION AND FLOOD DEPARTMENT

The officers from I&FC have been regularly called in the meetings to impress upon revival of the water bodies under its jurisdiction. Detailed discussion has also taken place with Mr. Neeraj Kumar, CEO, Delhi Jal Board, who happens to head the I&FC. Letter dated 17th June 2019 was written to I&FC to furnish detailed status report. As per status report dated 11.07.2019, it is informed that 95 water bodies have been taken up for revival and rejuvenation by I&FC. Consultant has been appointed for 59 water bodies. Out of 59 water bodies, DPR has been received for 33 water bodies and for remaining 26 water bodies, the DPR is yet to be received. Detail abstract of status of 95 water bodies has been attached along with the status report showing the action plan and the time lines by which these water bodies are expected

to be revived. Mr. Saxena present in the meeting was impressed to expedite the revival of the water bodies at the earliest and reduce the time lines given in the status report. He assured to comply the order.

WATER BODIES AT VILLAGE SIRASPUR, VILLAGE IBRAHIMPUR, VILLAGE KHADIPUR AND VILLAGE HIRANKI

On 17.06.2019, Monitoring Committee went to have first hand information about the water bodies in the above said villages. These water bodies have been taken up for revival along with other bodies described in the previous report dated 18.02.2019. Officers from Delhi Jal Board, DDA, Concerned DM and SDM/BDOs were also present at specific places.

Following observations and directions were made after inspecting the water bodies and having detailed interaction with the local residents who had gathered in large numbers at various water bodies.

Three Water Bodies in Village Siraspur:



Water body adjacent to DDA Flats

There is a wet water body adjacent to DDA Flats maintained by EE, ND-10, DDA, in Pocket-A, Narela Phase-II, Siraspur Village. The condition of the water body is very shabby. The water body is filled with sewage discharge from the surrounding area. Revenue Department, GNCTD was directed to get demarcation

done and provide demarcated area of the water body to the Monitoring Committee, Delhi Jal Board and Wetlands Authority constituted vide notification dated 23.04.2019 issued by Department of Environment, Forest and Wildlife, GNCTD. Revenue record will be produced by DM/BDO(NW). Measures be taken to block the sewage flowing into the water body. DJB was directed to provide timelines for call of tenders, award of work and commissioning of the rejuvenated water body to the Monitoring Committee. Details on estimated cost of the work and assessed ground water recharge potential shall also be provided.



Water body located in Dada Sheesh Ram Park

The second water body located in Dada Sheesh Ram Park is known as “Gol Chattriwala Talab”. This water body is completely dry, wherein civil development work has been carried out by the Irrigation and Flood Control (I&FC) Department, GNCTD. It was observed that the very purpose of water body is not served, if it remains dry after spending huge amount of money.



Water body adjacent to village Firmi Road

The third water body in the village is adjacent to the village Firni Road. Its area is stated to be 11 Bighas 9 Biswas. It was reported by local residents that major portion of the water body has already been encroached and godowns have been built thereon. They emphasized that boundary wall be constructed to prevent encroachments and malba/earth dumping. It was directed that BDO concerned will follow up the matter regarding construction of boundary wall and to ensure that encroachment of the water body shall not take place. Revenue Department, GNCTD was directed to get the demarcation done and provide demarcated area of the water bodies to the Monitoring Committee, Delhi Jal Board and Wetlands Authority. Delhi Jal Board has to identify source of water for all the water bodies and formulate a proposal to revive the water bodies in consultation with the I&FC Department, GNCTD.

In the follow-up action, the concerned DM and BDO were called in the meeting to ascertain the progress. Status report dated 17.07.2019 has been filed by BDO giving the information as under:

- i. Khasra No. 162(14) – 10: Acquired by government and as per revenue record is in the name of Sarkar Daulat Madar
- ii. Khasra No. 759(10) – 3: Civil development work has been carried out by I&FC department and now is dry.
- iii. Khasra No. 625/3 min (11-9): The demarcation by TSM has been done and the executive engineer has been requested to construct the boundary wall immediately.

Two Water Bodies in Village Ibrahimpur:



There is a water body near a Temple, located within boundary wall. The water body is dry and is covered with bushes wherein civil development work has been carried out by Rural Development Board or by Irrigation and Flood Control (I&FC) Department, GNCTD. Its area is stated to be 3 Bighas 10 Biswas.



Second water body in the village has boundary wall and is surrounded by the residential houses. Presently, it is being used for dumping waste. It is also dry.

Revenue Department, GNCTD will get demarcation done and provide demarcated area of both the water bodies to the Monitoring Committee, Delhi Jal Board and Wetlands Authority. Delhi Jal Board has to identify source of water for the

water bodies and formulate a proposal to revive the water bodies in consultation with the I&FC Department.

DJB will provide timelines for call of tenders, award of work and commissioning of the rejuvenated water body to the Monitoring Committee. Details on estimated cost of the work and assessed ground water recharge potential shall also be provided. Report to the Monitoring Committee be submitted in 15 days time.

In the follow-up action, the status report dated 17.07.2019 filed by Block Development Officer (North) mentions:

- i. Khasra No. 90 (4-9): Civil work has been carried out by I&FC and surrounded by residential area.
- ii. Khasra No. 113/2 (3-10): Civil work has been carried out by I&FC and a temple exists within the boundary wall. Rejuvenation of the water body is to be done by DJB.

Water Body known as Khushak Lake, Kushak, Kadipur Village:



The water body is dry, wherein civil development works were reported to have been carried out by Irrigation and Flood Control (I&FC) Department, GNCTD. It was

observed that very purpose of water body is not served, if it remains dry after spending money on it. Further, civil development works are not to be meant to reduce storage capacity of the water body. Most of the area has been converted into Pacca structure with CC flooring and huge number of steps have been made without any purpose.

Officials from the Revenue department informed that this water body has an area of 10 Beegha 7 Biswa in Khasra No. 56/2. Concerned Responsible Officer of the Revenue Department, GNCTD was directed to provide demarcated area of the water body to the Monitoring Committee, Delhi Jal Board and Wetlands Authority.

Delhi Jal Board was directed to identify source of water for the water body and formulate a proposal to revive the water body.

In the follow-up action, BDO (North), in its status report dated 17.07.2019 informs:

Khasra No. 56/2(10-7): As per revenue record, from this khasra number, area (0-10) was left for public utility by the order of the then Secretary (Revenue) Sh. Satish Chandra. This water body is developed by I&FC and now is dry. The I&FC in its report dated 10.07.19 informed that no record about this water body has been found. Mr. Saxena was asked to look into the matter.

Water Body in Hiranki Village:



The water body is dry and is reported to be located in Khasra No. 535, wherein civil development works are reported to have been carried out by Irrigation and Flood Control (I&FC) Department.

Revenue Department, GNCTD will get demarcation done and provide demarcated area of the water body to the Monitoring Committee, Delhi Jal Board and Wetlands Authority.

Again, DJB will provide the timelines for call of tenders, award of work and commissioning of the rejuvenated water body to the Monitoring Committee. Details on estimated cost of the work and assessed ground water recharge potential shall also be provided.

In the subsequent meetings, the concerned officers have been called in the meeting to produce the relevant record and comply with the directions.

In the follow-up action, status report dated 17.07.2019 filed by BDO (North) states that this water body was developed by I&FC and is now dry. It falls in Khasra No. 534(7-8), 535 (5-5). I&FC in its status report dated 10.07.19 states that the two water bodies bearing khasra No. 543, 535 and 56/2 are under process of tendering and work shall be awarded by 30th September 2019.

62 WATER BODIES AT 51 LOCATIONS

In the previous report dated 18.02.2019 filed by the Monitoring Committee, Hon'ble NGT was informed that at first instance 62 water bodies detailed therein have been identified to be taken first for revival. The time line for rejuvenation of the water bodies was fixed to be nine months. It is relevant to note that Model Code of Conduct came into force and Delhi Jal Board expressed inability to float tenders for these water bodies. Request was made to the Election Commission for exemption, however, the necessary exemption was not granted. It is further pertinent to note that at first instance, no contractor came forward and the tenders opened in the first and

second phase had to be re-tendered. It caused a delay of around one month.

The work of revival of water bodies which was earlier undertaken under CE (South) is now being undertaken under close monitoring of Member (WS). The status report of works of revival of water bodies under Delhi Jal Board as on 09.07.2019 is as under:

Delhi Jal Board, in consultation with Govt. of NCT of Delhi has prepared an action plan for rejuvenation of 155 numbers of Water Bodies. The process to implement the proposals has started. M/s CSIR-NEERI- Nagpur (Council of Scientific and Industrial Research- National Environment Engineering Research Institute- Nagpur) has been entrusted the work of development of 83 water bodies. IIT DELHI (Indian Institute of Technology- Delhi) was awarded the work of rejuvenation of 72 water bodies in December 2018, but the firm did not start the work, resulting in slight delay in progress of works. The process of implementation is also delayed due to imposition of Code of Conduct 2019, from 10.03.2019 to 23.05.2019. Initially permission to carry out works was turned down by Election Commission. Later on the permission was granted in the second week of May 2019. Also no response was received during first call of tenders of Phase-I & II consisting of 14 water bodies.

Out of 83 water bodies entrusted to M/S CSIR-NEERI, DPR of 46 water bodies has been received, which are divided into eight phases, depending on nature of water body.

- Tender for phase-I (8 water bodies) are due to be received on 29.07.2019. The work is likely to be awarded in August 2019.
- Tender for phase-II (6 water bodies) have been received on 08.07.2019 and are in the process of approval. The work is likely to be awarded in July 2019.
- Tender for phase-III (6 water bodies) have been received on 28.06.2019 and are in the process of award. The work is likely to be awarded in July 2019.

- Tender for phase-IV (6 water bodies) are due to be received on 02.08.2019. The work is likely to be awarded in August 2019.
- Tender for phase-V (4 water bodies) are due to be received on 08.08.23019. The work is likely to be awarded in August 2019.
- Estimates for phase-VI & VII (7 & 7 water bodies) are under technical sanction. Tender are proposed to be floated in July 2019 and likely to awarded in September 2019.
- Tender for phase-VIII (2 water bodies) are proposed to be floated on 12.07.2019. The work is likely to be awarded in August 2019.
- DPR of 20 water bodies is prepared by M/S CSIR-NEERI and likely to be received in July 2019. The estimates are likely to be approved in October 2019. Tenders are targeted to be floated in November 2019. The work is likely to be awarded in December 2019.
- DPR of 17 water bodies is being prepared by M/S CSIR-NEERI and likely to be received in October 2019. The estimates are likely to be approved in December 2019. Tenders are targeted to be floated in January 2020. The work is likely to be awarded in March 2020.

In order to further expedite the works of remaining water bodies and to compensate the delay caused due to IIT (Delhi) and imposition of Code of Conduct, it is now proposed to carry out the work of remaining water bodies (155–83), in the following ways, to have multiple methods and distribution to different agencies, for speedy execution of work:

- Execution of work of rejuvenation of water bodies through Design-Build-Operate basis.
- Execution of work of rejuvenation of water bodies after award of Consultancy to Govt Organization. A proposal of consultancy for rejuvenation of water bodies is received from Indian Agricultural Research Institute, New Delhi 110 012 (India). The case is being processed for award a work after signing MOU.
- Execution of work of rejuvenation of water bodies after award of Consultancy to specialized consulting firms.

The average time period proposed for execution of work of each water body is about 6 months after award of work, which includes execution, commissioning and trial run period. Work of creation of new water body at Timarpur oxidation pond at

DJB land is processed for implementation on ground. Tenders have been received on 08.07.2019. The work is targeted to be awarded in July 2019. The period of completion is 12 months for execution, 3 months for commissioning and 3 months of trial run period. It is proposed to utilize 5.5 mgd of treated effluent to recharge ground water through lake.

A proposal for landscaping of this water body has been approved by Board in its meeting held on 09.02.2019. The tenders are likely to be floated in July 2019. The completion of work is proposed to be synchronised with completion of revival of lake.

The work of creation of water body at the vacant land of DJB at Dwarka Water Treatment plant has been awarded on 23.04.2018 with completion period of 6 months. The work has been delayed due to delay in finalization of boundaries of proposed WTP at Dwarka. Now it is proposed to construct a part of lake in the remaining portion of Dwarka WTP and another part in the vacant land of Najafgarh WWTP, adjacent to Dwarka WTP. The firm is pursued to start the work. The work is likely to re-start by 15.07.2019.

The work of laying 700 mm dia rising main to carry treated effluent from Pappankalan WWTP to the proposed water body is nearing completion. I&FC department has to construct bridge across Najafgarh drain to carry the rising main across drain. Work Order has been issued by I&FC department and work is likely to start after monsoon is over.

The project is likely to be commissioned by 31.03.2020. It is proposed to utilize 15 mgd of treated effluent to recharge ground water through lake.

Delhi Jal Board has proposed to create new water bodies at the vacant land at Rohini and Nilothi WWTPs. The schemes amounting to Rs. 5384.66 lac and Rs. 2349.59 lac have been approved by Delhi Jal Board. Tenders for the work of creation of lake at Rohini WWTP are due to be received on 16.07.2019. The period of

completion is 12 months for execution, 3 months for commissioning and 3 months of trial run period.

It is proposed to utilize 5 mgd of treated effluent to recharge ground water through lake.

Tenders for the work of lake at Nilothi are likely to be issued by 12.07.2019. The period of completion is 12 months for execution, 3 months for commissioning and 3 months of trial run period. It is proposed to utilize 15 mgd of treated effluent to recharge ground water through lake.

Proposal for the work of creation of water body at the vacant land of WWTP at Pappankalan has been approved. It is proposed to initially execute the work of creation of lake. Estimate for the same is under approval. The tenders are likely to be issued by 23.07.2019 and likely to be received by 23.08.2019. The period of completion is proposed as 31.12.2019. It is proposed to utilize 5 mgd of treated effluent to recharge ground water through lake.

A proposal for creation of lake at the abandoned land of Ash Ponds owned by M/S Indraprastha Gas Power Corporation Ltd has been approved by Delhi Jal Board in its meeting held on 27.05.2019. The cost of project is Rs 36.92 cr. Letter has been issued to Secy (Power) to issue NOC for the same. It is proposed to utilize 15 mgd of treated effluent to recharge ground water through lake.

DJB has received NOC from DDA to carry out rejuvenation of following water bodies:

- (i) Satpulla lake, Saket
- (ii) Tikri Khurd lake
- (iii) Bhalswa Lake
- (iv) Hauzkhas lake
- (v) Sanjay Lake
- (vi) Tihar lake

Survey of water body and Oxidation pond at Mehraulli Archaeological Park is

carried out to revive the same. The proposal is at the initial stage of approval.

WATER BODIES AT JAUNAPUR, AYANAGAR, GHITORNI, CITY PARK (MEHRAULI), NAIB SARAI, MAIDANGARHI, TAJPUR KHURD AND RAJPUR EXTENSION

Members of the Monitoring Committee along with Mr. Mahesh Saxena, activist visited various water bodies located at the above places on 25th March 2019. All these natural water bodies have been turned into untreated sewage and industrial effluent. Total 11 water samples were collected from 8 bodies for further physiochemical analysis. At all the locations (as the photo attached would reflect) sample collection was very risky. The reports of the samples exhibit horrible condition of the quality of water in the water bodies.

Jaunapur Water Body



This water body is located in approximately 8000 M³ area (i.e. around 2 acre). As discussed with the locals, the water body contains sewage and untreated industrial effluent of the locality. Generally, it overflows and gets entry into storm water drain of PWD. During the visit, rain water was not visible. Due to increase in anaerobic environment, large number of trees having height of more than 50 meters were dead. Important to notice was that there is a pumping station of DJB adjacent to the water body, which supplies water to the village for domestic- and industrial use. The nearby

dry land is illegally used for storage of building material.

The water body is under the jurisdiction of the DC, South Avenue. Around two decades back, it was a natural seasonal barsaati nala located in a farm house. In monsoon, rain water generally accumulates into this patch of land. It remains there for about two months and gradually percolates into lower strata and recharges the zone. It is also informed that due to lack of attention of the authorities, it got polluted since 2005.

Since the area is not having sufficient ground water, people bring their handy water lifting pump to collect the polluted contaminated untreated sewage and industrial effluent and use it for certain domestic and agricultural purpose.

Aya Nagar



The whole water body is surrounded by village and is generally used as dump site for disposal of untreated effluent, sewage and domestic and industrial solid waste. Through interaction with the people, who came to see the sampling and were curious about the face lifting of the water body, informed that there was no control of any agency to look into the well being of this body. People were free to dispose any amount of industrial waste, municipal solid waste and many a times, even biomedical waste. Encroachers do not hesitate to dispose off dead small cows and buffalos, pigs, dogs etc. As informed by the locals, more than 55 lakhs were wasted by Irrigation and Flood control Department to construct boundary wall around the water body but at

the time of inspection, it was found totally broken from many ends for easy entry of trespassers. The locals also informed that Irrigation and Flood Control Department spends about Rs.15 to Rs.20 lakhs every year for maintaining the boundary wall of the water body. The body becomes stinky in the rainy season and the area becomes inhabitable.

Ghitorni water body



Similar observations were made at this water body too. Here total untreated sewage and industrial effluent enters into the water body through a well constructed drain line, making it foul and putrid. At one time, it was a natural water body fostering the drinking water demand of the village, now totally rotten.

City Park , Mehrauli



This park belongs to DDA and extends in 47 acre of land. At one time, this park was an example of natural beauty maintaining sustainable environment.

Park and Garden department introduced wastewater and sewer line here through which sewage and effluent of Mehrauli entered into the parkland through a trunk line, around 2-2.5 km. long. Presently, due to passive response of DDA and SDMC, the sewage line is broken at many places and around 2 acre of park area at extreme end has turned into a sewage collecting body resulting in the death of more than 100 trees of 50-60 feet height. Due to continuous presence of contaminated water and effluent, chances of contamination of groundwater increases. ***DDA in its latest status report informed that NOC to revive the water body has been issued to SE (South), DJB by EE (SD-3) vide office letter dated 14.05.2019.***

Neb Sarai



This natural water body, which receives untreated wastewater and sewage from area near IGNOU University and Indira Enclave is super saturated and receives untreated effluent and sewage beyond its storage capacity. Untreated effluent and sewage can also be seen on the main road creating pathetic conditions. The sample collected from this locality showed more than 1000 mosquito larvae freely suspended in the water body

Chhatarpur Enclave- Maidangarhi



It is a water body under the direct control of DDA. Untreated sewage and effluent of Maidangarhi village is directly poured into it without prior treatment. As informed by the locals, it is around 3 meter deep and extends in around 3 acre of land. It is also observed that its extension gives appearance of natural water body.

Rajpur Khurd Village



It is a plot of 3 acre under the direct control of DDA. It was a vacant plot which has been turned into an artificial sewage and wastewater storage facility for the last 10 years. Surrounding Maidangarhi village and other unauthorized colonies dispose off rubbish without hesitation.

Rajpur Extension



It was an extension near Primary school, SDMC. Locals informed that the property belongs to PUSA. Generally nearby illegal colonies dispose of their untreated wastewater and sewage into this low lying area, which has now turned into permanent waste receiving body and contaminates the ground water of the area.

In the follow up action, notice was issued to DM, (South), Nodal Officer Mr. Lakshmi Narayan was directed to submit report of water bodies. In 15th meeting of the Monitoring Committee, Mr. Yogender Singh, EAA, BDO, South, attended the meeting. Since he was not aware of the facts, DM (South) has been called in the meeting. ADM and BDO were present on 28th May 2019 in 17th Meeting. They were asked to visit the above water bodies at the spot personally and submit status report within 2 weeks. ADM was directed to deploy dedicated staff to prevent dumping of municipal solid waste and to stop further encroachment. ADM assured to take necessary steps.

Till date, DDA and other land owning agencies have not taken effective steps to revive the water bodies. Concerned officers of DDA, I&FC and PUSA shall be called in the meeting for improving the conditions of these water bodies.

BHALASWA LAKE



Originally a horseshoe shaped lake, the Bhalswa is a lake in the Jahangirpuri area of Delhi which has since lost its glory as it is now used as a landfill area. This wetland ecosystem still acts as a wildlife habitat and attracts lot of water birds, including migratory birds. There are number of water sports which attract young people here to enjoy activities like rowing, kayaking and canoeing.

Sample Report

S. No.	pH	TDS (mg/l)	TSS (mg/l)	COD (mg/l)	BOD (mg/l)	Sulfate (mg/l)	Phosphat e as P (mg/l)	NO2-N (mg/l)
Sample near main gate	8.2	4266	202	475	92	118	0.86	1.41
Sample near boat club	8.2	4250	204	467	82	155	1.37	1.76

It can be seen from the above table that all the values show higher range. The high level of TDS, Sulfate, BOD and COD also indicate that water is not fit for any type of consumption.

As per latest status report, DDA informed that SE/CC-8 has issued NOC for revival of water body by DJB.

WATER BODY AT DHOOL SIRAS VILLAGE (BEHIND CREMATION GROUND)

In its latest status report dated 17.07.19, DDA has informed that channel work has been completed. Laying of RCC pipes at two locations of Dhool Siras village will be completed soon. Mr. Diwan Singh, the activist present in the meeting on 18th July 2019 confirmed that the channels have been cleared and RCC pipelines underneath the road are being laid down. *He was satisfied with the work done by DDA regarding this water body.*

OTHER WATER BODIES IN DWARKA

As per status report dated 17.07.19 filed by DDA, it is informed that for the work of installation of STP for water body at Village Pochanpur, Sector 23 (B), Dwarka, the tender has been invited and the work will start within 2 months. Regarding water body at Sector 25, Dwarka, it is informed that ED-12/DDA has been directed by CE Dwarka to install pumps in Sector 16, Sector 24 and Sector 25 to make water body at Sector 25 functional within 3 months.

Recently, the Monitoring Committee on 26th July 2019 had a field visit to water bodies at Tihar Jheel at Hari Nagar, water body at Naraina and at Prasad Nagar. The conditions of all the water bodies was observed and necessary directions were given to the concerned officers of DDA and PWD present. The Monitoring Committee intends to convene a meeting and to call all the concerned officers for improvement and revival of these water bodies in due course.

Copy of letter dated 02.07.2009 by Executive Engineer, Northern division No. 5/DDA to DJB reveals that the competent authority has approved in the 15th meeting of DHUF at Point – V that “the restoration of water bodies is to be undertaken by DJB, the matter regarding revival of Historical Tank in Narela may also be taken up in collaboration of DJB. Apparently, DJB is to take up revival of Historical Tank at Narela.

RAIN WATER HARVESTING

Inspection of Rain Water Harvesting Systems in schools & colleges (23 No) was carried out by members of Monitoring Committee on 28/01/2019, 01/02/2019, 19/02/2019, 27/02/2019 and 07/03/2019. The salient observations of the inspection were:-

- 1) Consumption of water reflected in the water meters was very low in big schools.
- 2) The illegal bore-wells were existing in many schools.
- 3) RWH Systems though in existence were non-functional and inadequate in several schools.

Executive Engineer, RWH/GWC was directed to go through the reports of the inspections carried out by the members of the Monitoring Committee and submit action taken report. On 21.06.2019, in the 19th Meeting, Mr. Harish Chander informed that letters have been issued to the Principals of various schools/colleges inspected by the Monitoring Committee and they have been asked to furnish their status reports within 10 days for rectification of the deficiencies noted by the Monitoring Committee.

Mr. Harish Kumar, EE (RWH/GWC) in its latest report dated 18.07.19 informed that ***in 3496 schools/colleges the Rainwater Harvesting Systems exist.*** In 585 schools/colleges, it is under construction. In 520 schools and colleges, the action is required to be taken or is under process. In 201, it is non feasible to set up RWH System. It was further informed that in 3494 schools/colleges the RWH Systems are functional and in 3495, they are adequate. He informed that people are aware about the orders by the Hon'ble NGT and Monitoring Committee and were eager to set up RWH systems at the earliest.

Mr. R. P. Meena has filed the revised status report dated 18.07.19 showing the status of RWH Systems in the educational institutions under Directorate of Higher

Education. As per the status report, out of 7 State universities RWH is functional in 6. In all the 12 Government colleges (100% funded by DHE) RWH Systems exist in all and in 15 out of 16 Government colleges (5% funded by DHE); in 32 out of 33 Government colleges (affiliated to GGSIPU) and in 78 out of 81 private colleges (affiliated to GGSIPU), RWH Systems exist. In one private college it is under construction. One institution, i.e. Amity School of Engineering and Technology, Bijwasan has shifted to Noida, UP. E-mail dated 18th July 2019 has been received from Ms. Bindu Aggarwal, Faculty/In-charge, Indian Red Cross Society informing that drawing of RWH has been prepared in consultation with DJB, estimates have been sought from CPWD and are awaited.

PWD has filed status report of Rainwater Harvesting Systems under flyovers and other buildings in their jurisdiction. As per the status report, number of buildings/locations is 263 and in 134, there is provision for RWH System. In 114, RWH Systems are functional. The authorities have been directed to ensure that the buildings in which RWH Systems have not been set up should ensure that it is in place at the earliest.

As per news item published in Times of India dated 15th July, 2019 The Housing and Urban Ministry has set the target to put in place Rainwater Harvesting System in all 75 government colonies in Delhi under CPWD in the next 100 days. The deadline is to complete at least 100 such structures to capture maximum rainfall.

The Monitoring Committee considers that some concession/subsidy is required to be given to individuals/institutions who are unable to incur expenses to set up RWH System.

Letters have also been written to CEO, DJB to ensure that rainwater harvesting systems exists in all the offices and buildings in occupation of DJB. Similar requests have been made to the Engineer in chief of PWD to inform as to in how many buildings or offices under its jurisdiction the RWH System is in operation.

All these bodies have been directed to ensure that the RWH System exists and these are functional and adequate. Recently, Delhi Government has also taken a decision in its Cabinet meeting to direct all the government buildings to set up the RWH System.

In due course, the Monitoring Committee shall ensure that all the buildings under the government have RWH System in place. They will be apprised about the value and importance of implementation of the RWH System. In recent news in TOI, it was reported that water table in South Delhi's New Moti Bagh has risen by 2.75 feet in the past year. Officials of NBCC informed that there was zero extraction of groundwater and total harvesting of rainwater was being enforced. Despite having license for three tube-wells, NBCC consciously decided not to extract groundwater since 2013. They have also set up a sewage treatment plant to meet the irrigation needs of the area. On an average, 5.5 lakh liters of treated waste water is used per day for irrigation and other purposes. Six pits to harvest rainwater have been created to ensure that there is no run off of raining water from the compound.

Similarly, Jamia Milia Islamia has managed to increase its groundwater table by over a meter through rainwater harvesting. Rainwater harvesting is done either to recharge groundwater or to stalk-up for use when normal supply runs low. It has harvesting mechanism at 17 locations on its premises. Salinity of water has decreased at certain locations after replenishment of rainwater.

The Monitoring Committee is satisfied with the implementation of the Rainwater Harvesting System in schools, colleges and educational institutions under the Directorate of Higher Education.

BORE-WELLS

The other area of concern of the Monitoring Committee is to prevent use of bore-wells/tube-wells for extraction of groundwater. Drying up of groundwater by using bigger pumps from deeper bore-wells is causing large scale contamination of water. The Hon'ble NGT has already directed the concerned authorities to take strict action to see a legal/unauthorized bore-wells. However, the situation has not improved yet substantially. The Monitoring Committee is in constant touch with the concerned District Magistrates and Sub-divisional Magistrates to initiate sealing of illegal bore-wells/tube-wells. DM/SDM, DM (West) and DM (North-west), Mr. Jatin Goel, SDM, Patel Nagar Sub-division at first instance were called to participate in the meetings. They were directed to seal the illegal bore-wells/tube-wells falling within their jurisdiction. Previously, the DM (West) had expressed inability to seal the illegal bore-wells/tube-wells due to prior engagements in elections. Now the elections are over and the concerned DMs have been impressed upon to take swift action and to report at regular intervals the number of illegal bore-wells/tube-wells sealed by them during the interregnum.

As per status report dated 4th July 2019 upto 4th July 2019, the status was as under:

S. No.	CE concerned	No. of illegal bore-wells surveyed/recommended for sealing			No. of illegal bore-wells sealed		
		Upto previous month	During the month	Cumulative	Upto previous month	During the month	Cumulative
1.	WEST	16941	121	17062	2030	NIL	2030
2.	EAST	596	NIL	596	92	NIL	92
3.	SOUTH	1336	NIL	1336	477	NIL	477
4.	CENTRAL & NORTH	31	NIL	31	31	NIL	31

Summary sealing of illegal borewells 2018/2019 dated 17.07.19 has been filed by the office of SDM (Saraswati Vihar):

Sub-division	List supplied by DJB and others	Site Visited	Bore-well sealed	Site Inspection done by T(SV) and Patwari Bore-well not found
Rohini (2,3,7,8,14)	50	50	34	16
Pitampura, Rani Bagh, Shakurpur	63	63	50	13
Ashok Vihar	54	54	19	35
Shalimar Bagh	32	32	20	12
Tri Nagar, Keshav Puram, Bharat Nagar	30	20	10	10
Wazirpur Industrial Area	94	94	94	0
TOTAL	323	313	227	86

SDM (Kanjhawala) in its status report dated 17.07.19 informed that in Sub-division Kanjhawala, 92 bore-wells have been sealed for the year 2018-19. In Rohini Sub-division, forty two bore-wells have been sealed in between January 2019 to June 2019. In Patel Nagar Sub-division, 118, Rajouri Garden Sub-division 125 and in Punjabi Bagh, 56 bore-wells have been sealed from January 2018 to May 2018.

Apparently, the concerned authorities have started initiating action against the use of illegal bore-wells. They have been impressed that the action is too slow and requires to be accelerated as the number of illegal bore-wells as on 30th June 2019 is around 17062 in all the districts. They have been further informed that the illegal bore-wells dug without approval of competent authorities be sealed immediately, particularly where the DJB water supply is regular.

During our field visits to various water bodies, the Monitoring Committee observed that the parks and gardens were having several tube-wells being used for extracting water for horticulture purposes. In Roshanara Bagh, 6 tube-wells, Ashoka Park 3 tube-wells, Tihar Jheel 4 tube-wells, in Satpula Lake 3 tube-wells were being used to extract groundwater for horticulture purposes. The concerned land owning agencies were directed to stop the illegal extraction of groundwater by using tube-wells at the earliest and to make alternative arrangements to use treated/recycled water. It was suggested to the officers of DDA that Ashoka Lake can be filled with treated water from nearby Okhla plant by transporting it through tankers till the regular STP is set up. The response of DDA is still awaited. It shall be endeavour of the Monitoring Committee to ensure that the illegal bore-wells are sealed at the earliest. DJB shall be impressed upon to improve its network for distribution of water so that people should not attempt to indulge in unaccounted use of groundwater by extensive digging of bore-wells. Those who are unconnected to the piped network have to rely on buying water from tankers at exorbitant rates. This leads to increasing use of extraction of groundwater by the tanker mafia.

There are around 400 tube-wells being used in Patparganj Industrial area. The Chief Secretary was directed by the Monitoring Committee to convene meeting of CEO, Delhi Jal Board, and Secretary, DSIDC and the representative of the Patparganj industrial area to solve the dispute so that use of 400 tube-wells/bore-wells is stopped. The Chief Secretary has since convened the meeting and a settlement has been arrived at with all the concerned stakeholders. Its response/implementation is still awaited.

To stop illegal extraction of groundwater, a panel of CBCP has recently suggested environmental compensation ranging from Rs.10,000/- to Rs. 1,00,000/- especially in Delhi and NCR.

FURTHER ACTIVITIES/SUGGESTIONS

1. Hon'ble NGT has recently noted that use of RO's should be restricted. An RO filter wastes 74% percent of water. NGT wants use of RO banned in areas where TDS is less than 500 mg/1. Test run by the Quality Control laboratories of DJB's nine water treatment plants from June 1 to June 10, 2019 determine that the plant at Bhagirathi has the best water in regard to dissolved solids with TDS ranging from 108 mg/1 to 117. At 11 water treatment plants in Delhi, TDS was found well within acceptable limits. The Monitoring Committee shall endeavour to create awareness among public to prevent unnecessary use of RO's and further to reuse waste water so generated for purposes other than drinking.
2. To stop extraction of groundwater by tubewells/borewells by DDA and other government agencies for horticulture purposes in the parks maintained by them and to mandate them to use treated water for this purpose. Monitoring Committee shall ensure that the concerned agencies should make alternative arrangement in a time bound period. Necessary directions in this regard shall be sought from the Hon'ble NGT in case extraction of groundwater through tube-wells/bore-wells in the parks and gardens continues.
3. The Monitoring Committee shall ensure that the dispute pending since long between DSIDC, Delhi Jal Board and representatives of Patparganj Industrial Area over regular supply of water is settled amicably. It will put an end to around 400 tube-wells presently being used by the industrialists to extract water in the industrial area.
4. Revival of the water bodies expeditiously within time frame given in the previous report dated 18th February 2019 shall be adhered to and work of the executing agencies would be monitored regularly. It is also proposed that some of these water bodies are developed as tourist/picnic spots. For this, work of beautification and landscaping shall be carried out.

5. Community's expectation is that the government would do all the rejuvenation work of water bodies. Lack of public participation in the protection and conservation of water bodies in the villages is a huge concern. Without making people realize the importance of their local water bodies, it would be highly difficult to accomplish the task. The Monitoring Committee shall endeavour to encourage public participation in the conservation of water bodies; adoption of different water bodies by individuals/institutions, general awareness in bringing behavioral change to avoid littering the ponds/wells and lakes etc. The Monitoring Committee shall deliberate if committees of respectable local residents can be constituted to take care of water bodies in their respective villages.

6. Experts and environmental activists shall be involved in the revival of water bodies. We have already associated:

- Mr. Diwan Singh (for water bodies in Dwarka),
- Ms. Juhi Chaudhary (for Naini Lake),
- Mr. Anuj Sardana (for Prasad Nagar Lake),
- Mr. Sachin Goel (for Roshanara lake),
- Mr. Verhaen Khanna (for Ashoka Park),
- Ms. Suparna (for Tuglakabad Lake),
- Mr. Mahesh Saxena (for various water bodies),
- Mr. Jagdeep Singh, MLA, Tihar Jail has requested the Monitoring Committee to revive Tihar Jheel at Hari Nagar.
- Mr. Rambir Tanwar, who claims to have revived 10 ponds back to life has approached the Committee to assist in revival of the water bodies.
- Prof. C. R. Babu and Dr. Fiyas Khudsar and others have also been associated for seeking inputs.

7. Though DJB has 1435km pipeline network in supplying water and has extended it to unauthorized colonies, however, many areas in Delhi remain unconnected with piped water. DJB shall be impressed to increase its distribution network as those who are unconnected to the piped network have to rely on buying water from tankers at exorbitant rates. This leads to increasing but unaccounted use of groundwater by extensive digging of bore-wells to meet the demand deficit.

8. In its minutes of meeting dated 01.03.2019, at the time of inspection of Bal Bhawan Public School, Mayur Vihar on 27.02.19, two DJB water connections were found. The total consumption of water in December 2018 was reflected 90 units for 49 days; the school having strength of 3100 plus staff. The bill consumption apparently was too low and Department of Revenue was asked to take appropriate steps. DJB should ensure that there should be adequate metering for the water consumed. All the establishments/homes be brought in the formal metering system. Theft of water in any form should be dealt with as per law promptly.

9. The Monitoring Committee has been informed that subsidy being provided under 20,000 liter free water scheme is misused by several Group Housing Societies. After availing the required quantity of 20,000 liters free of cost, these societies start extracting groundwater by using tube-wells/bore-wells to avoid payment of water tariffs. DJB should take effective steps to prevent this practice.

10. During field visits, Monitoring Committee noticed that polythene, plastic bottles and other material was frequently dumped or thrown in the lakes by the visitors. The authorities concerned shall be directed to install CCTV camera at prominent places to have vigil upon the polluters. Sign boards/banners prohibiting throwing of garbage/waste shall be put up near the lakes warning the polluters of legal action in case of violation. At big lakes, security guards can be deployed to prevent littering. MCD and DJB have courts of Special Metropolitan Magistrates for trial of offenses. Prosecution branch of MCD/DJB shall be activated to prosecute individuals who cause littering in the water bodies.

11. To prevent wastage and misuse of water, the Polluter's Pay Principal to be used who violate the various provisions of Air and Water Acts. Task force is proposed to be constituted to be headed by the local SDM to stop violation of the provisions and to impose environmental compensation.

12. The Monitoring Committee shall ensure that all the government buildings have

adequate and functional Rainwater Harvesting Systems. We have succeeded in implementing the provision of Rainwater Harvesting Systems in schools/colleges to a large extent. Individual letters have now been written to Commissioner of Police, Secretary (Health), Engineer in Chief, PWD, Secretary I&FC and concerned officers of Delhi Metro Rail to ensure that all the police stations, hospitals and buildings in their respective jurisdictions are having Rainwater Harvesting Systems in a time bound manner.

13. New water bodies are being taken up for revival from time to time on the basis of information given by activists or newspaper clippings. Monitoring Committee has visited remote areas/villages to have first hand information about the condition of the water bodies which mostly are lying dry. There is awareness among the people now and Monitoring Committee is getting several requests to visit the neglected water bodies for their revival. Our attention has been drawn recently towards water bodies at Tihar Jheel (Hari Nagar), Prasad Nagar Lake and Tuglakabad Lake. The Monitoring Committee has already visited two of them and plans to visit the other ones shortly. Necessary steps are being taken to improve the condition of these water bodies.

14. The land owning agencies shall ensure prevention of encroachments of the water bodies. For this purpose, they shall demarcate the water bodies and make relevant entries in the revenue records. Unique ID number shall be given to each water body for its identification. The water body shall be secured by constructing boundary walls. The government agencies should on priority start mapping of the small water bodies on GPS platform, monitoring the water quality, penalizing the defaulters and putting high values on these water bodies and give proper weight-age for their protection. Action shall taken against the trespassers. The agencies shall have exclusive dedicated staff to take care of the water bodies. DJB has recently designated Mr. Rakesh Sahni as SE (Water Bodies). Monitoring Committee shall ensure that there is co-ordination between different agencies for better management

of water bodies.

15. The Monitoring Committee considers that by making relevant rules and regulations, specific 'purpose(s)' for which potable water can be used be defined. Use of potable water for any other 'purpose', without prior permission of the competent authority, should invite penalty/fine.

16. Lakes and ponds are especially the victims of Eutrophication. Eutrophication results in the prolific growth of aquatic weeds in lakes and ponds that ultimately disturb and kill the ecology of the water body. The emphasis will be upon the concerned agencies to clear the weeds in time.

17. Misuse of water bodies for cultural or religious festivals is threat to the water bodies. The activities such an immersion of idols, throwing of pooja material in the water bodies contaminate it. Specific places should be ear marked for this purpose. Recently, DPCC has prepared a list of 151 spots across the 11 revenue districts for idol immersion during festival season. Artificial ponds for immersion of idols to reduce pollution in Yamuna is another viable option.

18. The Monitoring Committee is of the considered view that for judicious use of water and to prevent its wastage, at the time of sanction of water connection, on the analogy of electricity connection, the consumer should be asked to declare the probable consumption of water. In case the water consumption is highly excessive, the consumer should be charged with higher tariffs for overuse. “Use More – Pay More” and “More the Consumption – Higher the Tariff” principle should be adopted to discourage wastage. There should be efficient and adequate metering of the water consumed.

19. Use of adequately treated effluents of various STPs, CEPTs and ETPs for gardening and horticulture purposes will not only minimize groundwater uses but will also help in the recharge. Further use of treated effluent in AC cooling towers, buses/trains washing, thermal power plants and other non-potable industrial uses will

help in conservation of groundwater resources. Similarly, use of treated effluent in non-potable purposes like flushing in domestic uses will also contribute in sustainability of groundwater resources. DJB has installed filling points for treated effluents for its 16 STPs located across Delhi. The landowning agencies can use it in their parks for gardening and stop extracting water by using bore-wells/tube-wells. Till the regular STPs are set up by them, the treated water can be transported through tankers. DJB has surplus quantity of treated water. 20 STPs are working only at 72% utilization rate treating only 441 mgd of sewage of the 720 mgd generated.

Submitted please.

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