

REPORT ON ACTION PLAN
FOR CLEAN-UP OF
POLLUTED STRETCH OF
MUTHA RIVER

March, 2019

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MUTHA RIVER (Shivaji Nagar to Khadakwasla Dam)

1.1 Executive Summary

Sr. No.	Description of Item	Details					
1.	Name of the identified polluted river and its tributaries	:	Khadakwasla to Shivajinagar Tributaries- Ambi river, Mosi river				
2.	Is river is perennial and total length of the polluted river	:	Non- perennial Length- 16 Km				
3.	Revised priority as per Jan. to Dec.2018 Analysis results	:	Priority II				
4.	No of drains contributing to pollution and names of major drains	:	6 major drains: 1) Warje nalla 2)vadgaon bk nalla 3) Hingne nalla 4) Erandwana nalla 5) Nagzari nalla 6) Ambil odha nalla				
5.	Major Towns on the banks of the river with population	:	Nanded City, Vagaon (Bk), Anand Nagar, Shivane, Waraje, Kothrud, Vithalwadi, Shivaji Nagar, these are the major residential area in Pune Municipal Corporation Pune : Population : 40 Lacs				
6.	a. Sewage generation & Treatment in MLD	:	Total Water consumption of PMC - 1222 MLD Total Sewage generation - 744 MLD				
	b. Total no. of existing STPs and the total capacities in MLD	:	On River Stretch: One with capacity 18 MLD at Bopodi. Presently 13 to 14 MLD sewage is received. In PMC – 10 having capacity 477 MLD. 11 proposed STPs having capacity having capacity 396 MLD and one proposed by Pune Cantonment with capacity 20 MLD.				
	c. Gaps in sewage treatment in MLD and no. of towns not having STPs	:	Total Sewage generation - 744 MLD Actual sewage treatment - 477 MLD Gaps in treatment - 267 MLD				
7.	Major industrial estates located with total no. of industries	:	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Industrial Estate</th> <th style="text-align: center;">No. of Industries</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">3 small</td> <td style="text-align: center;">113</td> </tr> </tbody> </table>	Industrial Estate	No. of Industries	3 small	113
Industrial Estate	No. of Industries						
3 small	113						
	a. Total water consumption and total industrial effluent generation in MLD	:	Industries are generating industrial effluent 48.2 CMD in this river stretch. However no industry is allowed to release effluents in river.				
	b. No. of industries having captive ETPs and their treatment capacity in MLD	:	2 Nos MPCB does not permit treated/untreated industrial				

			effluent discharge into the River.
	c. No of CETP's and their treatment capacity	:	No CETP in the catchment area of the river
	d. Gaps in treatment of industrial effluent	:	No gap in effluent treatment.
8.	Waste Management	:	
	a. Solid Waste Generation & processing	:	Total generation of MSW – 2100 MT/Day. The composition of waste is as follows. 1. Wet Waste :- 523 MT/day 2. In organic / Mixed Waste :- 600 MT/day 3. Untreated :- 750 MT/day MSW Treatment – 1078 MT/day through Composting, Vermicomposting, RDF,25 Bio-Methanation plant, Waste to Energy. Pune Municipal Corporation has MSW dumping ground at Urali Devachi – Fursungi where generated MSW is dumped partly and over all 48 MSW processing plants at various location are in operation in PMC area. PMC has proposed 10 New plants for processing of Mixed Waste. The waste quantity will be treated in these new plant to tune of 1600 MT/day.
	b. Biomedical Waste Generation & treatment	:	Hospitals are joined to CBMWTSDF-PASCCO Environmental Solution ltd. Total collection and treatment: 4948.5 Kg/day
	c. E-Waste Management Generation & treatment	:	E-waste generated by industries is sent to MPCB authorized E-waste reprocessor.
	d. Hazardous waste Management	:	HW generated from industry is disposed through CHWTSDF. Maharashtra Enviro Power Ltd. MIDC, Ranjangaon, Dist. Pune Capacity – Landfill – 60000 TPA Incinerable – 20000 TPA Lifespan – 20 years
9.	Action plan includes mainly covering aspect such as (Proposal for utilisation of sewage, ground water recharging or rain water harvesting,	:	RRC has already communicated to Water Resource Dept, GoM for maintaining minimum E-flows and water shed management, plantation on both sides of the river, setting up of bio-diversity parks.

	measures for regulating ground water use, protection and management of flood plain zone, maintaining minimum E-flows and water shed management, plantation on both sides of the river, setting up of bio-diversity parks etc., as per Hon'ble NGT Orders dated 20.09.2018 and 19.12.2018)		
10.	Min. and Max. required time period for implementation of action plans		Min - 2022 Max - 2023
11.	Total estimated budget in crores towards implementation of proposed action plans with break-up (e.g. No. of STPs, capacity, total cost; No of CETPs, total capacity, Cost towards interception and diversion of sewage/effluent to STPs/CETPs etc.,)	:	Budget Received from Central Govt. 57.74 Cr. Provision by PMC in the budget 2019-20 Rs.80.00Cr Details in Table 4.
12.	Whether 'River Rejuvenation Committee (RRC) constituted by the State Govt./UT Administration and If so, Date of constitution of 'RRC'.	:	River Rejuvenation Committee (RRC) constituted as per the Maharashtra Government G.R. issued by the Environment Dept, GoM vide No. NGT 2018/PC-2/TC-3 dtd.13.12.2018.
13.	Responsible Organisation (s) for implementation of proposed action plans (Please enclose details as annexure)	:	1. Water Resource Department, GoM 2. Urban Development Department 3. Pune Municipal Corporation
14.	Expected deliverables w r to achieving Goals	:	1. To achieve 100% sewage collection and treatment 2. To achieve 100% MSW collection, transportation and treatment. 3. To achieve river water quality of Bathing standards by 2022. 4. Augmentation of River Flow and restoration of water quality-2022
15.	Initiatives taken by Govt. of Maharashtra and MPCB.	:	<ul style="list-style-type: none"> • Maharashtra Government through it's forest department has announced The Plantation Program in 2016 with the aim of planting 2 crore & planted 2.82 crore saplings. Forest Department has set the target of plantation of 4Crore, 13Crore and 33Crore saplings under the mission of 50Crore plantation which shall be accomplished in the three consecutive years viz. 2017, 2018 and 2019. • GOM, announced 'Namami Chandrabhaga Abhiyan' in year 2016. It is an initiative taken to revive and rejuvenate the river Chandrabhaga and to restore its historic glory. Government of Maharashtra has prepared a comprehensive plan for cleaning of the river on the lines of 'Namami Gange'. The aim of the mission is to make the Chandrabhaga river pollution free and conserve its purity and sanctity up to year 2022.

		<ul style="list-style-type: none"> • MPC Board will provide financial & technical assistance to villages in next three years to comply with sewage & waste management. • MPC Board has issued Direction to the local bodies to make 25% budgetary provision for scientific treatment and disposal of Sewage and Solid Waste. Accordingly, Municipal Corporations have passed resolution in their General Body meeting and reserved the funds. These funds are reserved and made mandatory to utilise for preparation of DPR, establishing treatment facility, O & M of treatment facility etc. The review of the same is taken from time to time by the Board. • MPC Board has issued directions to 08 Municipal Corporations to penalize to the tune of 1pais/litre of sewage generation under 'Polluter pays principle'. • MPC Board has issued directions to non-complying CETPs to penalize to the tune of 2 paisa/litre for remediation & upgradation to comply with the consented standards.
	<p>Budget Estimates & Pooling of Resources from Local Bodies, State Pollution Control Board, State Government & Central Government</p>	<ul style="list-style-type: none"> • The Pune Municipal Corporation has sanctioned fund of Rs. 990.26Cr; out of which Central Government has component of 841.72Cr. & Pune Municipal Corporation has component 148.54Cr for management of sewerage systems & STPs; which will be completed by 2022. • Maharashtra Government has already received proposal of Rs. 1104.54Cr. Under State River Conservation Program & form this amount State Government will provide necessary funds in next 3 years i.e. by 2022 for Sewage management • The Maharashtra Pollution Control Boards has also reserved Rs. 461.42Cr. for preparation of action plan for abetment & Control of Pollution of River Water due to sewage & solid waste disposal from B & C Municipal Councils (342Nos of Urban Local Bodies.), Nagar Panchyat & Gram Panchayat for reducing polluted stretches in compliance with Hon'ble NGT, principal bench directions w.r.t. "More River Stretches are now Critically Polluted". The said funds will be used for DPR preparation, development of infrastructure for sewage collection

			<p>& treatment & development of infrastructure for Solid Waste Management. The DPR preparation & implementation of the same will be completed by year 2022 (i.e in next 3 years).</p> <ul style="list-style-type: none">• The Maharashtra Government through Urban Development Department has approved DPR of all 388 Urban Local Bodies for Solid Waste Management. The funds for the same amounting to Rs. 2560.0Cr has been already approved by Government & the said DPRs will be implemented & Solid Waste Management issues will be resolved by December'2019.
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Preamble -

In the matter of OA No. 673 of 2018-"More river stretches are critically polluted now: CPCB", the Hon'ble NGT has passed order dated 20.09.2018 for constitution of River Rejuvenation Committee (RRC) and Special Environment Surveillance Task Force (SESTF). The report comprises 351 polluted river stretches in India out of which 53 polluted river stretches are in Maharashtra. In the state, 9 polluted stretches in priority I & 6 polluted stretches in priority II. It has been mandated to prepare Action Plan for River Stretches and make them pollution free. In compliance of the orders of the Hon'ble NGT, the State Government has constituted RRC.

River Rejuvenation Committee (RRC) constituted as per the Maharashtra Government G.R. issued by the Environment Dept, GoM vide No. NGT 2018/PC-2/TC-3 dtd.13.12.2018 with 5 members under the guidance of Principal Secretary for preparation of action plans and to monitor the implementation of these action plans. The members of RRC are as mentioned under:

1. Commissioner / Director, Directorate of Municipal Administration
2. Chief Executive Officer – Maharashtra Industrial Development Corporation
3. Director (Environment)
4. Director (Industries)
5. Member Secretary – Maharashtra Pollution Control Boards- Member & Co-ordinator of RRC

Further State Government also constituted District Level Special Task Force comprising of the following:

1. Representative of District Collector
2. Representative of District Superintendent of Police
3. Representative of Regional Officer, MPCB
4. Representative of the District Judge of the concerned District

Meetings of the Committee:

- 1st Meeting of River Rejuvenation Committee (RRC) convened on 14.12.2018. RRC reviewed draft action plans of polluted river stretches of Priority I prepared by Maharashtra PCB. It was decided by the all the committee members, to take review of local bodies and accordingly to communicate the outcomes of the meeting to the Hon'ble NGT, Principal Bench. Maharashtra PCB submitted nine draft action plans of polluted river stretches of Priority I to CPCB along with minutes of 1st meeting of RRC and submitted progress report of polluted river stretches to Hon'ble NGT on 15.12.2018

- 2nd Meeting of River Rejuvenation Committee (RRC) convened on 09.01.2019.
RRC reviewed draft action plans of polluted river stretches of Priority II prepared by Maharashtra PCB. It was decided in the meeting to add in the draft action plans funding details like source, name of scheme, timeline etc for proposed STPs by concern local bodies.
- 3rd Meeting of River Rejuvenation Committee (RRC) convened on 23.01.2019.
RRC reviewed and finalised draft action plans of polluted river stretches of Priority I, II, III, IV and V prepared by Maharashtra PCB. RRC also decided to call the local bodies and review the timelines proposed in action plans from time to time.
- Maharashtra PCB submitted 53 draft action plans of polluted river stretches of Priority I, II, III, IV and V to CPCB along with minutes of 2nd & 3rd meeting of RRC and submitted progress report of polluted river stretches to Hon'ble NGT on 31.01.2019.
- CPCB Task Team on Polluted River Stretches called MPCB to give presentation on Action Plan for Priority-I & II polluted river stretches on 12.02.2019. Accordingly, the presentations were reviewed by Task team & few improvements in the action plan were suggested.
- 4th Meeting of River Rejuvenation Committee (RRC) held on 16/02/2019 & it was decided to communicate with Water Resource Department to maintain e-flow in the rivers of Maharashtra adopting good irrigation practices, protection & management of flood plain zone (FPZ), rain water harvesting, ground water charging, plantation on both sides of river, Setting up of biodiversity parks on flood plains by removing encroachments and Urban Development department communicated to take necessary steps to provide adequate funds to urban local bodies for installation of sewage treatment & MSW processing facilities in a time bound manner so as to comply with the Hon'ble

Achievable goal:

The objective/goal of the action plan is that the quality of river water should meet with the required value as given under:-

Quality Parameter	Standard to be achieved
BOD	3.0 mg/l.
Dissolved Oxygen (DO)	More than 5.0 mg/l.
Faecal Coliform	Less than 500 MPN/100ml.

1.2 Background

The Mutha River in Pune Region; originates in the Western Ghats and flows eastward for about 21 km when it merges with the Mula River in the city of Pune. Mutha river has been dammed twice, first at the Panshet Dam (on the Ambi River), used as a source of drinking water for Pune city and irrigation. The water released here is dammed again at Khadakwasla and is an important source of drinking water for Pune. One more dam has been built later on the Mutha River at Temghar. After merging with the Mula River in Pune, it flows on as the Mula-Mutha River to join the Bhima River at Sangameshwar. All along its journey in Pune city it receives raw sewage and garbage and is one of the most polluted rivers. Pune takes about 1000 MLD water for drinking from Mutha River through closed pipes and discharges about 750 MLD of its sewage into Mula River.



Figure 1 Stretch of Mutha River

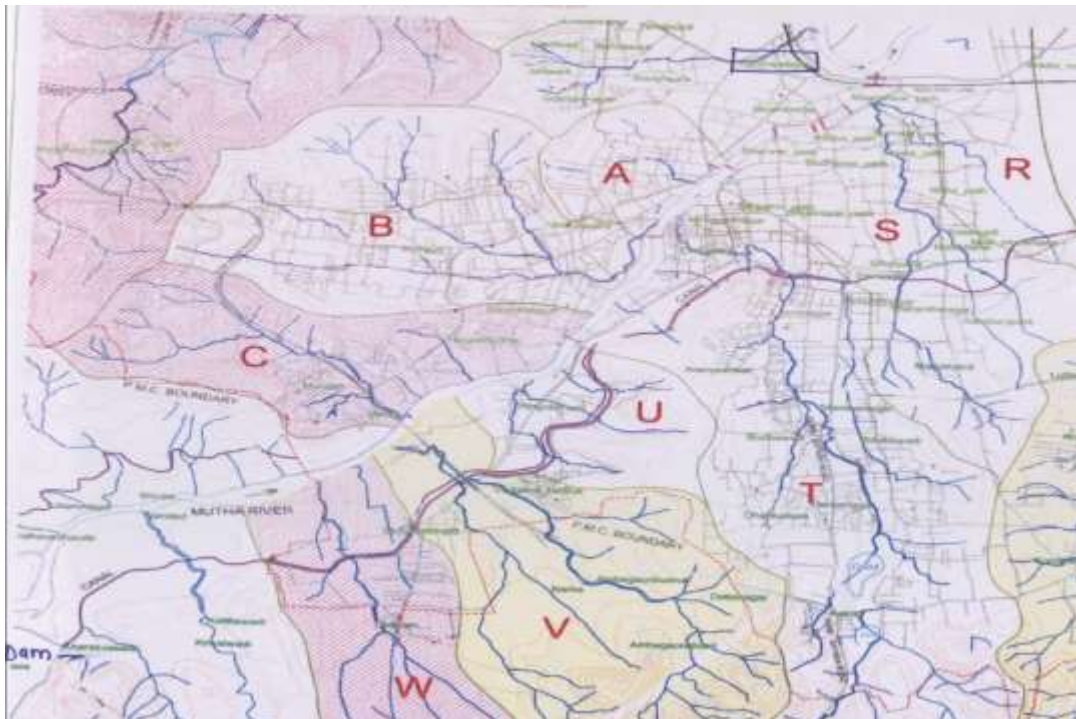


Figure 2 Map Showing Stretch of Mutha River

The river is non-perennial in nature and the steady flow is attributed to the release of water from Khadakwasla dam.

The river stretch extends from Khadalwasla dam to Shivajinagar where it meets Mula river. Thereafter it flows as Mula-Mutha river. Length of the stretch is approximately 12 Km. The river flows through the residential areas of Nanded City, Vadgaon (Bk), Anand Nagar, Shivane, Waraje, Kothrud, Vithalwadi, Shivaji Nagar situated in Pune Municipal Corporation. The population of Pune is 40 Lacs as per the 2011 Census.

River water is used only for irrigation and drinking water to Pune is supplied through 4 dams namely:

- a. Khadakwasla Dam
- b. Panshet Dam
- c. Warasgaon Dam
- d. Temghar Dam

The current status of the river as per the monthly sampling conducted between January to December 2018 reveals that water quality of the river falls in Priority II i.e. max BOD 24 mg/l.

Table 1 Introduction of river stretch

Sr. No.	Description of item	Details
1	Approx. length of stretch	12 Km
2	Major Towns located on the bank along with Population	Nanded City, Vadgaon (Bk), Anand Nagar, Shivane, (PMC area) Waraje, Kothrud, Vithalwadi, Shivaji Nagar. These are the major residential area in Pune Municipal Corporation. Population: Pune: 40 Lacs
3	Stretch of River Perennial or Non Perennial	Non Perennial. River flow due to discharge of Khadakwasla Dam.
4	Water usage in the stretch	Water used for irrigation. Water for potable purpose is supplied through a pipeline directly from the dams.
5	Current status of polluted river stretch (Jan – Dec 2018)	Priority II

1.3 Status of Sewage Generation & Treatment

Pune city generates about 744 MLD sewage. There are 10 Sewage Treatment Plants installed by Pune Municipal Corporation with capacity of 567 MLD. At present nine of them are in operation with effective treatment capacity of 477 MLD. The gap in treatment is about 267 MLD. PMC plans to bridge the gap in sewage treatment by installing 11 sewage treatment plants of capacity 396 MLD at different locations. One 20 MLD plant is also proposed by Pune Cantonment Board which will be operational by 2022.

The PMC projects are funded by Central Government grant of 85% and own funds of 15%. For majority of the projects Tendering is in process & Work Order will be issued by end of April 2019 and the plants will be operational by 2022.

Table 2 Status of Sewage Generation in Pune City

Sr. No.	City	Total Sewage Generated (MLD)	STP capacity (MLD)	Total effective Treatment Capacity (MLD)
1	Pune	744	567	477

Table 3 Status of STPs in Pune City

Name of STP	Sewer District	Year of Commissioning	Capacity (MLD)	Present Inflow (MLD)	
1	Mundhawa	SD2	2010	45.0	47.0
2	Bhairoba	SD3	2003	130.0	80.0
3	Naidu Old	SD4	1988	(90.0)	-
4	Naidu	SD4	2010	115.0	100.0
5	Vithalwadi	SD5	2010	32.0	33.0
6	Erandwane	SD8	2004	50.0	52.0

7	Tanajiwadi	SD9	2004	17.0	17.0
8	Bopodi	SD10	2003	18.0	15.0
9	Baner	SD11	2010	30.0	30.0
10	Kharadi	SD15	2012	40.0	42.0
Total		9	2010/2014	477	416

Table 4 Status of Proposed STPs in Pune City

Name and Address of STP	Designed Capacity (MLD)	Source of Funds	Present status of work	Stage of Completion	Target date of Completion
Pune Cantonment Board, Pune	20		Trial Run	Trial Run	2022
Pune Municipal Corporation, Botanical Garden, Pune	10	Central Govt. Grant 85% & PMC Component 15%	Land belongs to agriculture university correspondence done with Govt. Proposal sent to UD & revenue department regarding handover of land.	Proposed	2022
Pune Municipal Corporation, Baner, Pune	25	Central Govt. Grant 85% & PMC Component 15%	Process of Land Acquisition is under process. Total Station survey of land is completed. Land fee deposited to land & record department by PMC on 17/11/2018. Demarcation map of land is available from Land & Record Department.	Proposed	2022
Pune Municipal Corporation, Warje, Pune	28	Central Govt. Grant 85% & PMC Component 15%	For the acquisition of reserved land PMC has deposited the amount of Rs. 14.32 cr. on 24.10.2017. The acquisition process is initiated by special land acquisition officer & it is in progress. Also negotiations with	Proposed	2022

			owners is in process.		
Pune Municipal Corporation, Vadgaon, Pune	26	Central Govt. Grant 85% & PMC Component 15%	Out of 2.5 Ha. Land about 1.26 Ha is Govt. land. Process of handing over of the said land to PMC by collector office is in final stage. For the acquisition of reserved land PMC has deposited the amount of Rs. 5.00 cr. on 01.08.2016 & Rs. 2.9 cr on 24.10.2017 in collector office. The acquisition process is initiated by special land acquisition officer & the same is in progress.	Proposed	2022
Pune Municipal Corporation, Tanaji Wadi, Pune	15	Central Govt. Grant 85% & PMC Component 15%	Bid documents issued to pre-qualified bidders on 29/12/2018. Pre-Bid meeting is scheduled on 21/01/2019 and opening of bids is scheduled on 27/02/2019.	Proposed	2022
Pune Municipal Corporation, Naydu, Pune	127	Central Govt. Grant 85% & PMC Component 15%	Bid documents issued to pre-qualified bidders on 29/12/2018. Pre-Bid meeting is scheduled on 16/01/2019 and opening of bids is scheduled on 25/02/2019.	Proposed	2022
Pune Municipal Corporation, Dhanori, Pune	33	Central Govt. Grant 85% & PMC Component 15%	Bid documents issued to pre-qualified bidders on 29/12/2018. Pre-Bid meeting is scheduled on 21/01/2019 and opening of bids is scheduled on 27/02/2019.	Proposed	2022
Pune Municipal Corporation, Bhairoba, Pune	75	Central Govt. Grant 85% & PMC Component 15%	Bid documents issued to pre-qualified bidders on 29/12/2018. Pre-Bid meeting is scheduled on 16/01/2019 and opening of bids is scheduled on 25/02/2019.	Proposed	2022

Pune Municipal Corporation, Mundhva, Pune	20	Central Govt. Grant 85% & PMC Component 15%	Bid documents issued to pre-qualified bidders on 29/12/2018. Pre-Bid meeting is scheduled on 21/01/2019 and opening of bids is scheduled on 27/02/2019. For the acquisition of reserved land PMC has deposited the amount of Rs. 5.31 cr. on 19.01.2018.	Proposed	2022
Pune Municipal Corporation, Kharadi, Pune	30	Central Govt. Grant 85% & PMC Component 15%	Proposal submitted to the forest dept. on 07.12.2017. Out of 0.70 Ha private land 0.3 Ha land came in possession of PMC in Nov.2018 in lieu of TDR. Regarding Forest Land NOC awaited from Collector Office.	Proposed	2022
Pune Municipal Corporation, Matsyabij Kendra, Pune	7	Central Govt. Grant 85% & PMC Component 15%	Bid documents issued to pre-qualified bidders on 29/12/2018. Pre-Bid meeting is scheduled on 21/01/2019 and opening of bids is scheduled on 27/02/2019.	Proposed	2022

PMC has received grant of Rs. 57.74 cr. under Japan International Cooperation Agency – JICA wherein diversion of nallah work is considered. Drainage system is proposed by Pune Municipal Corporation in rest of the unsewered area.

Proposal for utilization of sewage - The Infrastructure Projects are mandated by MPCB to recycle 60% of treated sewage for secondary use by providing dual pipeline.

The Local Bodies will be encouraged to reuse treated sewage for various purposes including to Thermal Power Plants wherever possible.

e.g. Koradi TPS is receiving 100 MLD of treated sewage from Nagpur city.

Table 5 Domestic sewage aspects on the river stretch

Sr No	Particular	Remarks
1	Details of drainage system/sewerage network present/proposed	<p>Existing drainage network- Map enclosed.</p> <ul style="list-style-type: none"> ➤ PMC area covered with 92% of sewerage network having 2,200 Kms of length.(excluding newly merged 11 villages) <p>Proposed drainage network-</p> <ul style="list-style-type: none"> ➤ PMC has received grant of Rs. 57.74 cr. Under JICA wherein diversion of nallah work is considered. ➤ For collection of untapped sewage – laying of 113.6 Kms of sewers with house connection & laterals in PMC area ➤ Two STP having capacity 50 MLD at Erandavane and Vitthalwadi 32 MLD are in existence. Presently 75 MLD sewage is received for treatment out of 82 MLD. due to weak drainage network.
2	Proposal for utilisation of sewage	<p>The Infrastructure Projects are mandated by MPCB to recycle 60% of treated sewage for secondary use by providing dual pipeline.</p> <p>The Local Bodies will be encouraged to reuse treated sewage for various purposes including to Thermal Power Plants wherever possible.</p> <p>e.g. Koradi TPS is receiving 100 MLD of treated sewage from Nagpur city.</p>
3	Ground water extraction & consumption	<p>Water to the Pune city is provided from dams. Hence ground water extraction is minimum.</p> <p>Water to industrial area is supplied by Maharashtra Industrial Development Corporation.</p>
4	STP sludge management	STP sludge is disinfected and used as manure.
5	Proposal for ground water recharging/rain water harvesting	The EC has mandated rainwater harvesting for projects above 20,000 Sq.m.
7	Adopting good irrigation practices	Water Resource Department is requested for implementation.
8	Protection and management of Flood Plain Zones (FPZ)	Water Resource Department is requested for implementation.
9	Plantation on both sides of the river	Water Resource Department is requested for implementation.
10	Setting up of biodiversity	Water Resource Department is requested for

	parks on flood plains by removing encroachment	implementation.
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1.4 Performance assessment of Sewage Treatment Plants

There are two STPs in the stretch having capacity 32 and 50 MLD at Vithalwadi and Erandwane respectively. Presently sewage is more than existing STP capacity. However PMC has planned to cater the Sewage from this area considering the population till 2027 by adding new STP's having capacity 26 MLD at Vadgaon and 28 MLD at Warje.

Table 6 PMC STP Outlet Sample Analysis results

Sr.No.	Parameters	STP Outlet standard as per consent Dtd. 1.08.2018	STP outlet sample, Vithalwadi STP, PMC STP		Erandwane STP Outlet sample, PMC STP	
			10.7.2018	20.10.2018	11.7.2018	20.10.2018
	Date of collection		10.7.2018	20.10.2018	11.7.2018	20.10.2018
1	pH	6.5-9.0	7.3	7.9	7.1	7.6
2	Dissolved Oxygen	> 4.0	6.1	3.5	5.1	3.2
3	BOD	< 30.0	4.5	8.5	8.5	9.0
4	COD	...	---	24.0	28	28.0
5	SS		---	--	---	8.0
6	Oil & Grease	...	BDL	BDL	BDL	BDL
7	Nitrate	...	1	3.2	6.4	3.8
8	Phosphate	...	BDL	1.53	BDL	2.46
9	Total Coliform	...	900	550	1800+	1800+
10	Feacal Coliform	< 1000.0	250	130	225	550

It is observed from Table 6, the BOD of treated water of STP is in the range of 4.5 to 9.0mg/lit which well within the standard as per consent.

Further in entire Pune region, there are 28 operational STPs out of 36 in this Region with a collective treatment capacity of 1168.89 MLD. The total domestic effluent received at these STPs during the year 2017-18 was 1052.5 MLD while the total quantity of domestic effluent treated was 834.6 MLD. The mean of annual performance and analysis of all STPs provided in Pune Region are represented in Table 07.

Table 7 Mean of Annual Performance of STPs in Pune Region.

Location	Parameters (mg/l)					
	pH		BOD (Mean)		S.S. (Mean)	
	Inlet	Outlet	Inlet	Outlet	Inlet	Outlet
PMC STP at Tanajiwadi	-	6.9	-	14	-	-
PMC STP at New Naidu	-	7	-	9.5	-	-
PMC STP at Old Naidu	-	7	-	4.2	-	-
PMC STP at Vittalwadi	-	7.1	-	8.6	-	-
PMC STP at Erandwana	-	7.1	-	15	-	-
PMC STP at Baner	-	7.3	-	3.8	-	-
PCMC Akurdi	-	7.9	-	11.6	-	10.3
PCMC Charholi	-	7.9	-	19.5	-	29
PCMC Chikhali Phase-I	-	7.4	-	12.4	-	15.2
PCMC Chikhali Phase-II	-	7.7	-	8.9	-	11.6
PCMC Chinchwad	-	7.5	-	17.3	-	12.3
PCMC Kasarwadi -I	-	9.1	-	7.5	-	14.3
PCMC Kasarwadi -II	-	7.3	-	12	-	16.2
PCMC Kasarwadi -III	-	7.6	-	14.7	-	14.9
PCMC Pimple Nilakh	-	7.8	-	10.2	-	32.3
PCMC Ravet	-	7.6	-	10.5	-	13.2
PCMC Sanghavi	-	7	-	5.8	-	11
PCMC Dapodi	-	7.8	-	10.1	-	17
PCMC Bhat Nagar	-	7.6	-	12.7	-	32
Mahabaleshwar Municipal Council-STP No.1- at Compartment No. 79 (City Survey No. 257/1) Behind Karmachari Vasahat, at Mahabaleshwar, Taluka- Mahabaleshwar, District- Satara	-	7.25	-	10.75	-	28
	-	7.65	-	147.5	-	640.5
Panchgani Municipal Council (0.65 MLD)	-	7.65	-	27	-	51
Panchgani Municipal Council (0.35 MLD)	-	7.5	-	8.55	-	27.5
Panchgani Municipal Council (1.5 MLD)	-	7.6	-	78	-	123
Karad Municipal Council	-	7.3	-	32.83	-	31.33
Malkapur City	-	8.5	-	7	-	24
Solapur Municipal Corporation,	-	8.1	-	4.95	-	13

Solapur Kumathe STP						
Solapur Municipal Corporation, Solapur Degaon STP	-	8.1	-	5.5	-	12
Solapur Municipal Corporation, Solapur Pratap Nagar STP	-	8.2	-	4.05	-	11.5
Pandharpur Municipal Corporation, Solapur Pandharpur STP	7.8	7.4	-	85	-	21.25

From **Table 07**, it is observed that the BOD outlet values exceeded the prescribed standard of 20 mg/l at the STP provided by Mahabaleshwar Municipal Council, and those at Panchgani, Karad and Pandharpur. Outlet values of suspended solids were within the prescribed standard of 50 mg/l at all locations except at the STP provided by Mahabaleshwar Municipal Council and at Panchgani.

1.5 Drain out-falling in River Mutha

There are total six nalla that falls into the river. The details and water quality of the same are provided in table below:

- 1) Warje nalla
- 2) Hingne nalla
- 3) Wadgoan khurd Nalla
- 4) Nagzari nalla
- 5) Ambil odha nalla
- 6) Erandwana nalla

Table 8 Details of Drains

Sr no	Location	Name of the drain	Length (km)	Width (m)	Depth (m)	Qty (approx)
1	Warje village	Warje Nallah	Approx. 15.354	Approx. 3.0	Approx. 0.3 -0.4	8.5 MLD
2	Hingane village	Hingane Nallah	Approx. 6.074	Approx. 3.0	Approx. 0.3 -0.4	4.5 MLD
3	Wadgoan khurd village	Wadgoan khurd Nallah	Approx. 15.31	Approx. 3.2	Approx. 0.3 -0.4	6 MLD
4	Zuna Bazar, Kasaba Peth, Pune	Nagzari Nallah	Approx. 8.455	Approx. 10.0	Approx. 0.4 -0.5	7 MLD
5	Navi peth, Pune	Ambil Odha	Approx. 10.0	Approx. 3.5	Approx. 0.6-0.8	3.5 MLD
6	Erandwane village	Erandwane Nallah	Approx. 6-7	Approx. 3.8	Approx. 0.7	8.5 MLD

Table 9 Water Quality of drains which meets River Mutha

Sr. No.	Parameters	Wadgaon Khurd		Warje Nallah		Hingane Nalla		Erandwane nalla		Ambilodha nalla		Nagzari Nalla	
		10.7.18	20.10.18	10.7.18	20.10.18	10.7.18	20.10.18	11.7.18	20.10.18	11.7.18	20.10.18	11.7.18	20.10.18
1	BOD	9.5	75.0	26.5	28.0	32.0	28.0	28.0	22.0	38.0	26.0	32.0	17.5
2	COD	28.0	220.0	88.0	80.0	92.0	84.0	88.0	68.0	104.0	84.0	92.0	52.0

1.6 Status of Water Quality for Mutha River

The monthly status of water quality for the year 2017 & 2018 at two NWMP locations for different parameters such as pH, DO, BOD, FC and TC are provided in the following table:

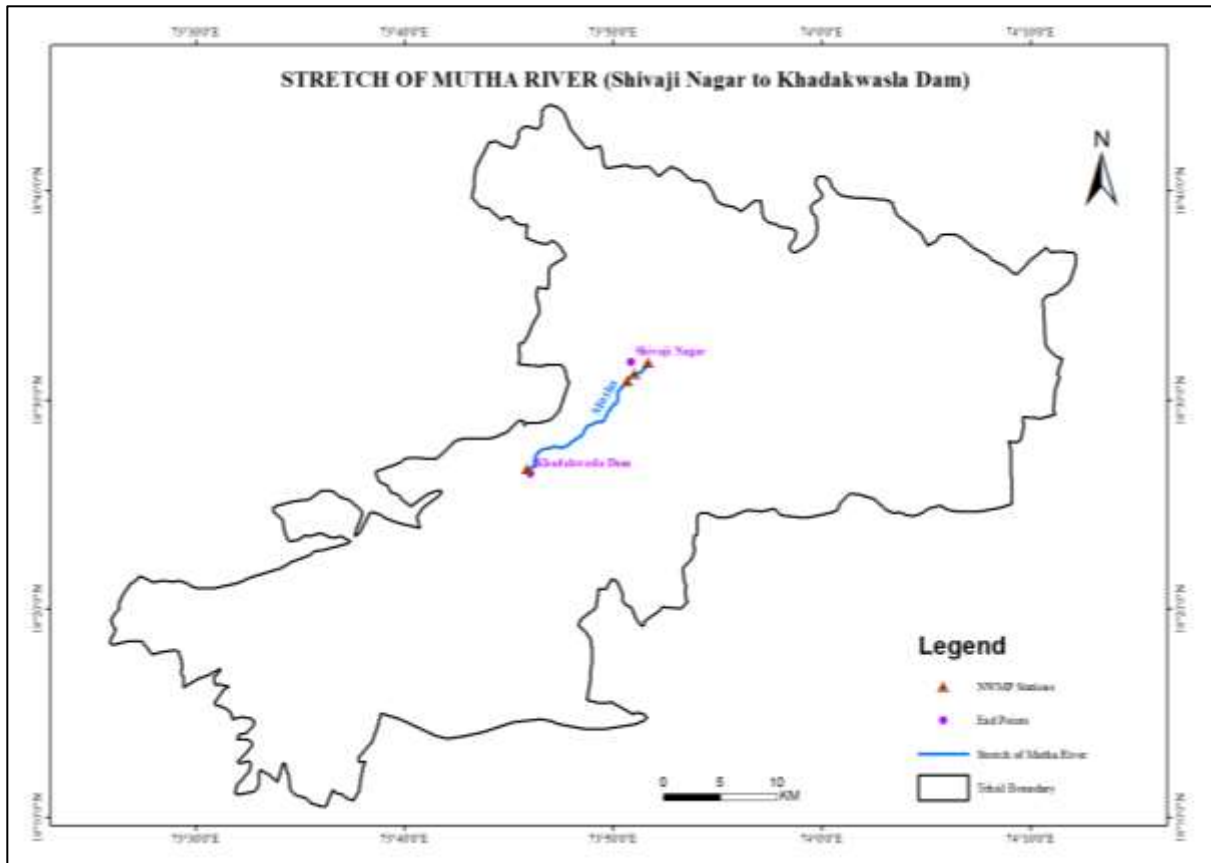


Figure 3 Map Showing NWMP Stations across Mutha River

Table 10 Status of water Quality for Mutha River at Sangam Bridge near Ganpathi Ghat

Month	Year	pH	DO (mg/L)	BOD (mg/L)	FC MPN /100ml	TC MPN /100ml	Water Quality
January	2017	8.3	NIL	19			Non Complying
	2018	7.1	3.2	13	95	900	Non Complying
February	2017	7.2	2.9	17.5			Non Complying
	2018	8.0	3.9	17	170	900	Non Complying
March	2017	7.2	NIL	20			Non Complying
	2018	7.8	4.2	13.5	170	1600	Non Complying
April	2017	7.1	1	32	80	550	Non Complying
	2018	7.9	3.2	23.5	250	1600	Non Complying
May	2017	8.2	0.7	20	110	1600	Non Complying
	2018	8.42	3.6	18	225	1600	Non Complying
June	2017	7.9	NIL	19.5	170	900	Non Complying
	2018	7.7	5.0	12.5	170	1600	Non Complying
July	2017	7.3	4.4	14.2	195	900	Non Complying
	2018	7.0	3.4	20.5	200	1800+	Non Complying
August	2017	8.2	3.0	19	195	900	Non Complying
	2018	7.9	3.4	9.5	225	1800+	Non Complying
September	2017	7.5	3.8	12.6	275	1600	Non Complying
	2018	7.6	2.3	10.8	900	1800+	Non Complying
October	2017	7.5	4.1	14	65	550	Non Complying
	2018	7.7	2.9	8.6	200	1600	Non Complying
November	2017	8.2	3.9	16	225	1600	Non Complying
	2018	7.0	1.8	10.5	275	1800+	Non Complying
December	2017	8.2	3.9	16	225	1600	Non Complying
	2018	7.81	1.7	8.8	250	1600	Non Complying

Table 11 Status of water quality for Mutha River near Veer Savarkar Bhavan

Month	Year	pH	DO (mg/L)	BOD (mg/L)	FC MPN /100ml	TC MPN /100ml	Water Quality
January	2017	8.2	NIL	18.5			Non Complying
	2018	7.2	3.6	11.5	275	1800	Non Complying
February	2017	7.3	2.3	18			Non Complying
	2018	7.8	4.0	15	275	1800+	Non Complying
March	2017	7.3	NIL	18			Non Complying
	2018	7.9	4.4	13	250	1800+	Non Complying
April	2017	7.1	1.6	30	110	900	Non Complying
	2018	8.0	3.3	23	250	1800+	Non Complying
May	2017	8.1	1.3	18	80	900	Non Complying
	2018	8.36	3.8	17	275	1800+	Non Complying
June	2017	8.0	NIL	15	275	1800+	Non Complying
	2018	7.6	3.0	20	250	1800+	Non Complying
July	2017	7.2	4.3	16	170	1600	Non Complying
	2018	7.0	3.6	16.5	250	1800+	Non Complying
August	2017	8.2	3.1	20	275	1800+	Non Complying
	2018	7.8	3.6	6.8	250	1800+	Non Complying
September	2017	7.4	4.8	7.8	350	1800	Non Complying
	2018	7.4	NIL	12.5	1600	1800+	Non Complying
October	2017	7.4	3.8	16	275	1800+	Non Complying
	2018	7.7	2.4	10.5	275	1800+	Non Complying
November	2017	8.2	4.3	12.5	250	1800+	Non Complying
	2018	7.1	2.4	9	425	1800+	Non Complying
December	2017	7.6	3.4	15	275	1800+	Non Complying
	2018	7.67	1.4	11.5	275	1800+	Non Complying

Table 12 Status of water quality for Mutha River at Deccan Bridge

Month	Year	pH	DO (mg/L)	BOD (mg/L)	FC MPN /100ml	TC MPN /100ml	Water Quality
January	2017	8.2	NIL	17.0			Non Complying
	2018	7.2	3.8	16.5	250	1800	Non Complying
February	2017	7.3	2.2	17.5			Non Complying
	2018	8.1	4.2	13	275	1800+	Non Complying
March	2017	7.3	1	17.0			Non Complying
	2018	7.7	4.2	13.5	200	1600	Non Complying
April	2017	7.0	1.9	24.0	275	1600	Non Complying
	2018	8.0	3.0	24	195	1600	Non Complying
May	2017	7.9	NIL	19.5	225	1800	Non Complying
	2018	8.28	3.4	19	250	1800+	Non Complying
June	2017	8.2	NIL	16.5	250	1800+	Non Complying
	2018	7.7	3.2	20	275	1800+	Non Complying
July	2017	7.3	4.7	14.0	195	1600	Non Complying
	2018	7.1	3.4	25.5	275	1800+	Non Complying
August	2017	8.1	2.9	22.0	250	1800+	Non Complying
	2018	7.5	3.2	8	275	1800+	Non Complying
September	2017	7.0	2.2	22.0	275	1800	Non Complying
	2018	7.4	NIL	11	1600	1800+	Non Complying
October	2017	7.4	3.6	19.0	250	1800+	Non Complying
	2018	7.6	2.7	9.5	350	1800+	Non Complying
November	2017	8.2	4.4	12.5	275	1800+	Non Complying
	2018	7.0	2.1	8.5	350	1800+	Non Complying
December	2017	7.6	3.4	18.0	275	1800+	Non Complying
	2018	7.63	1.8	11	275	1800+	Non Complying

Table 13 Status of water quality for Mutha River at Khadakwasla Dam Pune

Month	Year	pH	DO (mg/L)	BOD (mg/L)	FC MPN /100ml	TC MPN /100ml	Water Quality
January	2017	8.1	6.5	4			Non Complying
	2018	7.7	6.5	2.4	4	14	Complying
February	2017	7.8	6.1	4			Non Complying
	2018	8.2	6.8	2.6	14	45	Complying
March	2017	7.2	5.9	4.5			Non Complying
	2018	7.9	6.7	2.4	6	17	Complying
April	2017	8.1	5.9	4			Non Complying
	2018	7.9	6.4	2.6	12	350	Complying
May	2017	8	5.9	4.5	13	70	Non Complying
	2018	7.31	6.6	2.4	6	120	Complying
June	2017	7.6	6	5	20	195	Non Complying
	2018	8.5	6.1	3.4	8	200	Non Complying
July	2017	7.5	6.6	3.2	4	14	Non Complying
	2018	7.2	6.2	2.5	9	225	Complying
August	2017	8.2	7.0	3.8	2	6	Non Complying
	2018	8.1	6.8	2.2	2	20	Complying
September	2017	8.0	7.2	2.8	4	45	Complying
	2018	7.8	6.8	2.2	2	35	Complying
October	2017	7.9	6.7	3.2	140	900	Non Complying
	2018	8.0	6.2	2.4	10	200	Complying
November	2017	8.0	6.5	2.6	6	40	Complying
	2018	7.9	6.4	2.2	7	170	Complying
December	2017	8.2	6.2	2.6	4	20	Complying
	2018	7.51	6.6	2	6	250	Complying

It is observed from above analysis, that most of the location are not complying to the bathing standards of 3mg/lit of BOD. That is due to non-availability of the dilution water at disposal location in the river bed. The necessary dilution will be achieved by way of discharging necessary water quantum required to maintain e-flow from dam in a periodical manner. The usual water cycle of the release of water is mostly for irrigation and domestic purposes from interval of 21 days to 45days. The continuous e-flow will be achieved subject to availability of the water in the dam.

BOD is observed to be <20mg/lit at all locations monitored in 2018 except two above 20mg/lit at Deccan Bridge & Sangam Bridge. The levels of BOD are due to discharge from unsewered areas in Pune & there was no dilution available at the time of sampling. Pune Municipal Corporation has proposed STPs & sewerage system for such unsewered areas & after completion of the same & up gradation of the existing STPs with maintenance of the e-flow, the results will be brought down to the conformity of bathing standard of 3mg/lit in a time-bound manner.

1.7 Status of Ground Water Quality

Maharashtra Pollution Control Board (MPCB) regularly monitors the water quality across 250 Water Quality Monitoring Stations (WQMS) for both surface (155 on rivers, 34 on sea/creeks, 10 on drains, 1 dam) and ground water (24Borewells, 24Dugwell, 1 Handpumps, 1 Tubewell) under two programs of NWMP (National Water Monitoring Programme) project titled GEMS (Global Environment Monitoring System) and MINARS (Monitoring of Indian National Aquatic Resources). Surface water samples are monitored every month whereas the ground water samples are monitored every six months.

WQI for ground water

MPCB monitors ground water quality once in six months. Based on the stringency of the parameters and its relative importance in the overall quality of water for drinking purposes each parameter has been assigned specific weightage by CPCB. These weights indicate the relative harmfulness when present in water. Nine parameters (pH, Total Hardness, Calcium Hardness, Magnesium Hardness, Chloride, Total Dissolved Solids, Fluoride, Nitrate, Sulphate) are considered for calculating Water Quality Index of ground water.

Water Quality Index - Ground Water		
WQI	Water Quality	Colour Code
<50	Excellent	
50-100	Good Water	
100-200	Poor Water	
200-300	Very Poor Water	
>300	Water Unsuitable for drinking	

Table 14 Water Quality Index for 156 locations (surface water & ground water) during January – 2019

WQI Category	WQI	Number of WQI values in different category	
		No. of WQI	% of WQI
Good to Excellent	63-100	98	73.68
Medium to Good	50-63	12	9.02
Bad	38-50	9	6.77
Bad to Very Bad	38 and less	14	10.53
Total WQI values		133	100

Summary:

1. 110 WQI values or 82.70 % values are in category of Good to Excellent and Medium to Good.
2. 9 WQI values or 6.77 % are in category of Bad.
3. 14 WQI values or 10.53 % are in category of Bad to Very Bad.

Table 15 Ground water quality of dug well at MSW site Moshi, Dist. Pune

STN Code	Location Name		
1992	Dug well at MSW Site, owned by Shri. Dattu Kondiba Borate at Borate Vasthi, Village- Moshi, Pimpri Chinchwad, Taluka- Haweli, District- Pune.		
Sampling Date	4/5/2018	Drinking Water Standards	Water Quality bathing criteria
Dissolved O2	6.5	6	5 or more
pH	8.4	6.5 – 8.5	6.5 - 8.5
BOD	2.6	0	3 or less
Total Coliform	425.0	Should not be detectable in any 100ml sample	500 or less
Heavy metals like Nickel, Cadmium , Copper, Lead, Chromium, Mercury & pesticides like Alpha BHC, Beta BHC, OPDT, PPDDT, DDT_DDE_DDD, Endosulphan, Aldrin are observed to be Below Detectable Limits			

National Rural Drinking Water Programme										
Ministry of Drinking Water and Sanitation										
Format E21- Block Quality Profile For FTK Testing										
S.No.	Block	Total Sources Tested	Tested Sources Not Found Contaminated	Nos. of sources with Single Chemical Contaminants						
				Iron	Fluoride	Salinity	Nitrate	Arsenic	Other	
Total		25,446	24,994	0	0	0	0	0	0	0
1	Ambegaon	2,069	2,066	0	0	0	0	0	0	0
2	Baramati	2,452	2,444	0	0	0	0	0	0	0
3	Bhor	1,620	1,617	0	0	0	0	0	0	0
4	Dahanu	2,502	2,223	0	0	0	0	0	0	0
5	Havali	1,722	1,719	0	0	0	0	0	0	0
6	Indapur	1,339	1,281	0	0	0	0	0	0	0
7	Junnar	2,515	2,502	0	0	0	0	0	0	0
8	Khed	3,435	3,435	0	0	0	0	0	0	0
9	Maval	2,422	2,422	0	0	0	0	0	0	0
10	Mulshi	1,296	1,296	0	0	0	0	0	0	0
11	Purandhar	853	852	0	0	0	0	0	0	0
12	Shirur	2,302	2,230	0	0	0	0	0	0	0
13	Velha	589	587	0	0	0	0	0	0	0
Total		25,446	24,994	0	0	0	0	0	0	0

Above Figure shows there is no contamination of metals in above mentioned blocks in Pune district as per the published data of NRDWP, Ministry of drinking water and sanitation.

1.8 Status of Industrial Effluent Generation & Treatment

Maharashtra is one of the most highly industrialized states in India. With a rise in industrial estates in the State, areas like Mumbai, Thane, Navi Mumbai, Kalyan, Nashik, Pune and Pimpri-Chinchwad that have a large number of pollution-prone industries are facing chronic industrial pollution. In order to maintain a safe distance between industrial units and rivers to avoid discharge of effluent into water bodies, the State has its policy which also states that no industry will be allowed to establish along a river bank. Industries are being encouraged to recycle and reuse waste.

This region mostly harbors multi facet forms of industries ranging from IT & Biotech parks to complicated process & manufacturing industries Industrial Statistics in Pune region is demonstrated as follows;

Pune		
LSI	MSI	SSI
493	291	7101
1270	563	4608
1323	322	3637
White - 203		

There are 3 small Industrial Estate having 113 industries in the catchment area of river and adjoining areas. Maharashtra Pollution Control Board does not allow any industry to discharge treated/untreated effluent to the river.

The brief details about these industries are as under:

Table 16 Particulars of Industries in Pune District

Sr No	Particular	Remarks	
1	Particulars of Industries in Pune District	Orange	3782
		Red	3633
		Majorly domestic pollution from Pune Municipal Corporation area. MPCB do not allow any industry to discharge effluent to the river. Industries along the stretch:	
		Industrial Estate	No. of Industries
		3 small	113
2	No. of Directions issued to Industries	Nil	
3	Total water consumption and total industrial effluent generation	Total effluent generation by Industries in this river stretch is 48.2 CMD. MPCB does not permit treated/untreated industrial effluent discharge into the River.	
4	No. of industries having captive ETPs and their treatment capacity in MLD	2 Units	
5	No. of CETPs existing in the catchment of the polluted river stretch and the treatment capacity	No CETP located in this area	
6	No. of Industries that are members of the CETPs	No CETP located in this area	
7	Gaps in treatment of industrial effluent	No Gap in Treatment	
8	OCEMS installation Status by Industries	Nil	

To monitor compliance of Consent conditions, performance of ETP, ECS and other measures, the Board officials inspect industries regularly. There are 489 industries identified under “Highly Polluting Industries”. Table 5.33 shows region-wise details of these highly polluting industries.

Table 17 Highly Polluting Industries as on 31/3/2018

Industry	Amravati	Aurangabad	Chandrapur	Kalyan	Kolhapur	Mumbai	Nagpur	Nashik	Navi Mumbai	Pune	Raigad	Thane	Grand Total

Cement	-	-	5	-	1	-	1	-	-	-	-	-	7
Distillery	1	15		-	17	-	1	22	-	36	-	-	92
Dyes and Dye-intermediates	-	-	2	3	2	-	1	-	1	-	7	2	18
Fertilizer	1	2	-	-	-	1	1	4	-	1	3	-	13
Integrated Iron and Steel	-	-	1	-	1	-	4	-	-	1	2	-	9
Oil Refinery	-	-	-	-	-	2	-	-	-	-	-	-	2
Pesticide	-	-	-	1	5	-	-	1	3	-	3	3	16
Pharmaceuticals	-	13	-	12	4	-	-	2	15	9	14	23	92
Pulp & Paper	-	-	1	-	-	-	-	-	-	1	-	-	2
Sugar	1	55	2	-	41	-	5	35	-	63	-	-	202
Tannery		1	-	-	-	-		-	-	-	-	-	1
Thermal Power Plant	2	1	7	-	2	1	12	3	-	-	-	1	29
Petro-chemical	-	-	-	-	-	-	-	-	1	-	5	-	6
Grand Total	5	87	18	16	73	4	25	67	20	111	34	29	489

Further in entire Pune region, there are 5 operational CETPs in Pune Region. Their collective treatment capacity is 12.5 MLD. The total industrial effluent generated in this Region during the year 2017-18 was 379.62 MLD. Data on the quantity of effluent treated by these CETPs during this year is not currently available. The minimum SD. was found at Greenfield CET Plant P. Ltd. while the maximum SD. was found at Kurkumbh Environment Protection Co-op. Society. The performance of these CETPs is shown in Table 18.

Table 18 Statistical Analysis Data for CETP Performance in Pune Region

Parameters (mg/l)			Location				
			Kurkumbh Environment Protection Co-op. Society	Ranjangaon CETP	Greenfield CET Plant P. Ltd	Hydro Air Tectonics (PCD)	Akkalkot CETP
Inlet	BOD (mg/l)	Min.	52	2	70	11	88
		Max.	1200	2650	490	1550	865
		Mean	660	475	138	135	335
		SD.	341	321	68	92	151
	COD (mg/l)	Min.	504	44	132	32	264
		Max.	3520	8240	1488	620	2592
		Mean	2067	1416	392	378	967
		SD.	1370	941	202	275	431
Outlet	BOD (mg/l)	Min.	17	13	11	32	38
		Max.	80	775	130	450	320
		Mean	54	111	32	159	95
		SD.	30	71	26	68	65
	COD (mg/l)	Min.	56	36	40	100	116
		Max.	272	2192	328	1360	952
		Mean	163	250	101	465	282
		SD.	88	229	80	187	189

From above table it is evident that the CETP at Kurkumbh Environment Protection Co-op. Society is performing very well at about 92% efficiency. The CETP at Hydro Air Tectonics (PCD) had the lowest performance with about 38% efficiency. The remaining CETPs were performing at about 71% efficiency in BOD and COD reduction. The discharge limit for BOD was being met at all CETPs and the limit for COD was being attained at all CETPs except Akkalkot CETP.

1.9 Waste Management

1.9.1 Solid Waste Management

In the state of Maharashtra there are total 271 local bodies , comprising of 27 Municipal Corporations, 16- 'A' Class Municipal Council, 54- 'B' Class Municipal Council, 154- 'C' Class Municipal Council, 14- Nagar Panchayat, 06-Cantonment Board generating about 22897.83 MT of municipal solid waste every day, of which the Contribution in terms of percentage by the corporation is 84.72 % , by A class council is 4.25 % , by B class council is 5.04 % , by C Class Council is 5.07 % and by Others is 0.96 % . The overall percentage of treatment is 34.70 % i.e.

7945.544 MT/day quantity is treated and the remaining is disposed in an unscientific manner. Out of 27 Municipal corporations, 24 Corporations have obtained Authorization from MPCB for 22 Nos of approved sites having processing & disposal facilities and same are in operations. 109 Nos. of Municipal Councils having partially processing & disposal facilities.

Total generation of MSW from Pune city is about 2100 MT/Day. Out of which 1078 MT/day waste is treated through Composting, Vermicomposting, RDF, Bio-Methanation plants & Waste to Energy.

Pune Municipal Corporation has MSW dumping ground at Urali Devachi where MSW generated in Pune City is dumped partly and over all 48 MSW processing plants at various location are in operation in PMC area.

1.9.2 Bio-medical waste Management

Total Bio-medical waste generation in Pune is 4948.5 Kg/day. 100% waste is collected, transported and treated at CBMWTSDF-PASCCO located at Sangamwadi, Pune. The CBMWTSDF has installed capacity of Incinerator 150 Kg/Hr and Autoclave 200 litre/cycle

1.9.3 E-Waste management

- Maharashtra Pollution Control Board awarded work order to M/s. IRG Systems South Asia Pvt. Ltd. to carry out inventorisation of E-Waste generation in the State of Maharashtra.
- Interim inventorisation report is submitted to MPCB and final report will be ready within one month.
- As per the Interim inventory report submitted to MPCB, the E-Waste generation for the year 2015 is approx. 6,46,509 MT.
- **Number of authorized dismantlers/ recyclers in the state of Maharashtra**

Present Status of E-Waste dismantling and recycling capacity			
1	E-Waste Dismantlers	70	77525 MTA
2	E-waste Recyclers	08	
	Total	78	

- E-Waste Treated (Recycled/Dismantled)
 - Year 2015-16 : 4041.72 MT
 - Year 2016-17 : 6720.69 MT
 - Year 2017-18 : 7031.5 MT

- CPCB has approved EPR of 261 producers for Maharashtra. The list of the producers is enclosed here.
- Annual report for the year 2017-18 is submitted.

Action Taken by MPCB

- MPCB is undertaking regular monitoring of EPR Authorization conditions and regular inspection of the collection points/ centers mentioned in EPR Plan.
- MPCB has issued Directions u/s 5 of the Environment (Protection) Act, 1986 read with E-waste (Management) Rules, 2016 to all Municipal Corporations in Maharashtra on 06/12/2018 for provision of collection centres.
- Co-ordination with Various State Government Departments
- Co-ordination with Urban Local Bodies (Municipal Committee /Council /Corporation).
- Awareness through Public Notice

Constraints:

- Channelization E-waste from informal sector to formal sector.
- Awareness about impact of E-waste on Environment and Rules of E-waste is required.
- Authorized collections and Segregation centers are required to be established by Local Bodies.

1.9.4 Hazardous Waste Management

The state of Maharashtra has four Common Hazardous Waste Treatment, Storage and Disposal Facilities. These facilities are located at MIDC Taloja, Trans-Thane Creek Industrial Area, MIDC Ranjangaon, Pune and MIDC Butibori, Nagpur. These facilities collectively handle 340,847 MT of Hazardous waste per annum.

There are 993 Hazardous waste generating industries in Pune district. These industries generated about 61596 MT of Hazardous waste in year 2017-18. The HW from Pune district is scientifically disposed through CHWTSDF - Maharashtra Enviro Power Ltd MIDC, Ranjangaon, Dist. Pune having capacity – Landfill – 60000 TPA, Incinerable – 20000 TPA and Lifespan of the facility is 20 years.

Out of the 61596 MT generation in 2017-18, 32873 MT was Landfillable, 11428 MT was Incinerable, 10670 was Recyclable and 6625 was utilizable.

Table 19 Status of Waste Management in Pune city

Sr. No	Particular	Remarks
1	Total MSW Generation	Total generation of MSW – 2100 MT/Day. The composition of waste is as follows. 4. Wet Waste :- 523 MT/day 5. In organic / Mixed Waste :- 600 MT/day 6. Untreated :- 750 MT/day
2	Existing MSW treatment and disposal facilities	MSW Treatment – 1078 MT/day through Composting, Vermicomposting, RDF,25 Bio-Methanation plant, Waste to Energy. Pune Municipal Corporation has MSW dumping ground at Urali Devachi – Fursungi where generated MSW is dumped partly and over all 48 MSW processing plants at various location are in operation in PMC area. PMC has proposed 10 New plants for processing of Mixed Waste. The waste quantity will be treated in these new plant to tone of 1600 MT/day.
3	Bio-medical waste Management	Hospitals are joined to CBMWTSDf-PASCCO Environmental Solution ltd. Total collection and treatment: 4948.5 Kg/day
4	E-Waste management	E-waste generated by industries is sent to MPCB authorized E-waste reprocessor.
5	Hazardous Waste Management	HW generated from industry is disposed through CHWTSDf. Maharashtra Enviro Power Ltd. MIDC, Ranjangaon, Dist. Pune Capacity – Landfill – 60000 TPA Incinerable – 20000 TPA Lifespan – 20 years

1.10 Dream Project of Government of Maharashtra (GOM), Namami Chandrabhaga

GOM, has announced Namami Chandrabhaga Abhiyan on 18/03/2016 in the Budgetary Assembly Session of 2016-17. Namami Chandrabhaga is an initiative taken to revive and rejuvenate the river Chandrabhaga and to restore its historic glory. Considering the religious, social and economic importance of the river Chandrabhaga, the Government of Maharashtra has decided to prepare a comprehensive plan for cleaning of the river on the lines of 'NamamiGange'. Hon'ble Finance Minister, GOM, directed to issue the GR about finalization of working System of the Abhiyan, vide letter dt. 07/04/2016. The aim of the Namami Chandrabhaga Abhiyan is to make the Chandrabhaga river pollution free and conserve its purity and sanctity up to year 2022 and others are as mentioned below:

- To maintain the permanent minimum continuous flow of water in the river bed.
- To construct weirs in the river bed for maintaining water level.
- To maintain & keep minimum environmental flow of water.
- To make available sufficient public bathrooms & toilets as well as mobile bio-toilets to the publics during Pandharpur yatras.
- To install STP's for treatment of domestic wastes and scientific disposal facilities for solid waste generated from the villages & cities located on the bank of Chandrabhaga river.
- To carry out the beautification & forestation of river banks.
- To make reuse/recycle of treated industrial water generated from the industries and industrial estates located in the catchment area of chandrabhaga river.
- As per the local need to work for public participation and development of pilgrimage area.

“Namami Chandrabhaga Pradhikaran”

Established under the Chairmanship of Hon'ble Chief Minister, GoM & Co-Chairmanship of Hon'ble Finance Minister, GoM, having Divisional Commissioner, Pune as Member Secretary.

“High Power Committee”

Established under the Chairmanship of Hon'ble Chief Secretary, GoM of Maharashtra having Divisional Commissioner, Pune as Member Secretary.

In this context, the Government has identified CSIR National Environmental Engineering Research Institute (CSIR-NEERI) as 'Nodal Technical Expert Agency' the project. Bhimariver originates in Bhimashankar in Pune district. But when it reaches Pandharpur, it appears like a crescent moon, thus deriving the name Chandrabhaga. It flows in a 370-km stretch between Pune and Solapur districts. CSIR-NEERI was already involved by the Maharashtra Government to

provide technological solutions for sanitation and sewage treatment at important cities and pilgrim centers like Nashik and Pandharpur. Furthermore, is retained CSIR-NEERI for technological interventions during the execution of the Project ‘Namami Chandrabhaga’. The Maharashtra Government intends to cleanse and make the holy river Chandrabhaga pollution free by the year 2022.

Similarly, on the line of Namami Chandrabhaga Maharashtra Government is in process of undertaking various projects for clean-up of other rivers in the State.

1.11 Involvement of Civil Society/Creation of awareness

For sustainable development it is necessary to promote and create environmental awareness among communities, businesses and governments. Therefore the Board organizes various environmental awareness programs across the State of Maharashtra. During the year 2017-18 the following programs on environmental awareness were conducted by the Board.

Month	Subject	Details
22nd April 2017	World Earth Day	Public awareness messages published in leading newspapers namely Dainik Samna, Sakaal, Divya Marathi, Loksatta, Indian Express, Lokmat, Maharashtra Times of India, DNS, Hindustan Times and Midday on the occasion of World Earth Day.
5th June 2017	World Environment Day celebration	The main event was organized at the Yashwantrao Chavan Auditorium, Mumbai on 5th June, 2017 on occasion of World Environment Day. Hon’ble Chief Minister of Maharashtra, Shri Devendra Fadnavis, Hon’ble Minister of Environment, Shri Ramdas Kadam and Member Secretary of MPCB, Dr. P. Anbalagan attended this event. During this event, award ceremony for Vasundhara Award competition organized for industries, municipal corporations and CETPs was carried out. On the occasion of World Environment Day, Vasundhara Short Film Competition based on the environment was announced by Hon’ble Chief Minister of Maharashtra at the main event. This competition will be organized for professionals as well as amateurs. During this event, the award ceremony for Photothon 2017 took place. This ceremony was presented by Member Secretary of MPCB, Dr. P. Anbalagan. Villages which had participated in the water conservation activity ‘Jalsanvardhan Panchayat – Ek Lok Chalwal’ organized by Maharashtra Pollution Control Board, Vanrai Pune and Zee 24 Taas were awarded at the

hands of Hon'ble Chief Minister of Maharashtra for their exceptional performance. During this event, a short film festival related to the environment was organized for three days at Yashwantrao Chavan Centre, Mumbai with assistance from Enviro-Vigil and as a joint effort by MPCB and Environment Department, Government of Maharashtra. A large number of environmentalists attended this festival. At this time, discussion sessions with directors, producers, environment experts and analysts were also organized.



Hon'ble Shri Devendra Fadnavis, Chief Minister, GoM lighting the lamp during inauguration of the World Environment Day program held at Y. B. Chavan Auditorium, Mumbai on 5th June 2017.

Hon'ble Shri Ramdasji Kadam, Minister for Environment, GoM, Shri Sumit Mallik (IAS), Chief Secretary, GoM and Dr. P. Anbalagan (IAS), Member Secretary graced the occasion with their august presence.



On the eve of World Environment Day on 5th June 2017, Hon'ble Shri Devendra Fadnavis, Chief Minister, GoM giving away Vasundhara Awards to the entrepreneurs who have introduced best environment-friendly practices in their industry, at Y. B. Chavan Auditorium, Mumbai.

5th June 2017	World Environment Day	On the occasion of World Environment Day (5th June, 2017) public awareness messages were published in Maharashtra Times, Time of India, Loksatta, Indian Express, DNA, Hindustan Times, Midday (Gujarati, Urdu and English), Lokmat, Dainik Sakaal, Samna, Divya Marathi and in other leading newspapers. Information about various control measures adopted for pollution control was published in this section on behalf of MPCB.
5th June 2017	World Environment Day	On the occasion of World Environment Day (5th June, 2017) public awareness programs related to the environment, canvas paintings with messages about the environment, brainstorming on public awareness and various other activities were organized by We Love India on 5th June, 2017 at Bandra. Famous movie artists, sportspersons and Hon'ble Environment Minister for State were present during these activities.
4th July 2017	'Paryavaranachi Vaari Pandharichya Daari'	An environmental public awareness campaign namely 'Paryavaranachi Vaari Pandharichya Daari' was organized on the occasion of Aashadhi Ekadashi and the foot pilgrimage to Pandharpur. As environmental issues are equally detrimental to urban and rural areas, fundamental messages such as plastic waste removal, proper use of water, electricity and natural resources, use of limited electrical power for agriculture, use of

organic fertilizers, proper waste management of wet waste and dry waste were spread among the 10 lakh devotees who had gathered for the Pandharpur pilgrimage. These messages were made public through folk art, popularly known as Kirtan, Bharud, and Povada. In this 15 day long pilgrimage, Sangeet Natak Academy award winner, Smt. Chandabai Tiwari, famous Shahir Shree Devanand Mali and Hari Bhakta Parayan Shri Dnyaneshwar Maharaj Wabale created public awareness through Bharud, Povada and Kirtan respectively. This year's Pandharpur pilgrimage was inaugurated at Pune by Hon'ble Minister of State of Environment, Shri Ramdas Kadam. Honorable dignitaries such as Member Secretary of MPCB, Dr. P. Anbalagan and Hon'ble Mayor of Pune were present at this event. Guidance for this pilgrimage was sought from Dr. Prakash Khandge, a well-known researcher of folk arts. The conclusion of this pilgrimage was organized on the eve of Aashadhi Ekadashi in the presence of Hon'ble Chief Minister, Shri Devendra Fadnavis, Mrs. Amruta Fadnavis, Cabinet Minister (Solapur), Shri Vijay Deshmukh, Minister of Water and Sanitation, Shri Babanrao Lonikar, Senior Cabinet Minister, Shri Mahadev Jankar, Member Secretary of MPCB, Dr. P. Anbalagan and other honorable dignitaries.



Hon'ble Shri Devendra Fadnavis, Chief Minister addressing pilgrims on the eve of environment public awareness campaign at Pandharpur on 4th July 2017, in the presence of Dr. P. Anbalagan (IAS), Member Secretary, GoM.

August 2017	92.7 Big FM Big Green Ganesha	The Big Green Ganesha activity was co-organized by 92.7 Big FM and MPCB in the city of Mumbai. During this activity, the Big Green Ganesha van encouraged citizens at various
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		locations to celebrate an eco-friendly Ganesh festival and to donate newspaper scrap for the even. During Ganesh festival a special studio was set up at Lalbaghcha Raja in Mumbai city for 10 days. At this time, Hon'ble Chief Minister of Maharashtra, Hon'ble Minister for Environment, Hon'ble State Minister for Environment and film celebrities spread messages for public awareness.
August 2017	Zee 24 Taas Eco-Friendly Household Ganesh Festival Competition	The Household Eco-friendly Ganesh Festival Competition was organized at the state level as a joint venture by MPCB and Zee 24 Taas. This competition has a large number of participants. Citizens celebrating household in a unique way had participated in this competition from all over the state. Response to this competition has been increasing over the years.
August 2017	ABP Maza Eco-Friendly Ganesh Festival Competition	A special public awareness campaign regarding celebrating an eco-friendly Ganesh festival in housing societies in major cities in the State was organized by MPCB and ABP Maza, a news channel. News about eco-friendly Ganesh festival celebrated in housing societies at cities such as Mumbai, Pune, Nashik and Nagpur was broadcast through the channel. Special programs on eco-friendly Ganesh festival celebrations at housing societies were also broadcast on the ABP Maza television channel. Well-known celebrities from Marathi film industry, Sayali Sanjeev and Rushi Saxema advertised the competition organized for celebrating an eco-friendly Ganesh festival through promos. Winners in this competition were awarded certificates by MPCB and Prasad. Public relations officer of MPCB was present at this time. These celebrities visited MPCB's Mantralaya. Special news regarding the event was broadcast by ABP Maza television channel.
August 2017	Household Eco-Friendly Ganesh Festival Competition 2017 organized by Loksatta and MPCB.	Eco-friendly household Ganesh festival decoration competition was organized jointly by MPCB and Loksatta at 6 divisions of Loksatta newspaper at Mumbai, Pune, Nashik, Nagpur, Ahmednagar and Aurangabad. More than 2000 people competed in this event. Prize distribution of this competition took place at Yashwantrao Chavan Pratishthan at the hands of Hon'ble Minister for Environment, Shri Ramdas Kadam, State Minister for Environment, Shri Pravin Pote-Patil and Member Secretary of MPCB, Dr. P. Anbalagan. A special column regarding this event was published in all editions of Loksatta

		newspaper.
August 2017	Eco-Friendly Ganesh Festival UFO Digital Movies financial assistance.	Public awareness messages by celebrities from Marathi and Hindi film industry were publicized at 205 digital theatres by UFO Digital Movies for two weeks to promote an eco-friendly Ganesh festival.
August 2017	Financial assistance for DNA Eco Ganesha public awareness campaign organized by DNA and MPCB.	To celebrate an environment friendly Ganesh festival, eco-friendly Ganesh idols based on the five natural elements were installed in selected malls in Mumbai city on behalf of the MPCB and DNA. MPCB played the role of co-convener in this campaign organized by DNA. Prominent celebrities from the Hindi film industry participated in this campaign.
August 2017	Financial assistance for public awareness activity, Times Green Ganesha.	Eco-Green Ganesha competition was organized jointly by Environment Department of MPCB, Government of Maharashtra and Times of India group for public Ganesh festival organizations and housing societies in Mumbai and Pune. During this campaign, public awareness activities were conducted in various malls, movie theatres and colleges. Eco-friendly Ganesh festival workshops were conducted for school students. Various activities and cleanliness campaigns were conducted by college students for the eco-friendly Ganesh ambassador during Ganesh idol immersion at Girgaon Chowpati, Juhu beach and Versova beach at Mumbai. This campaign was launched by popular actor, Vidhut Jammwal and Hollywood Director, Chuck Russel at Lala Lajpat Rai College. A special film for public awareness had been created by Times group for this campaign. A dedicated column for this campaign was published for 10 consecutive days in the newspaper, Times of India.
August 2017	Eco-Ganesha Public awareness campaign organized by Dainik Samna and MPCB.	Eco-friendly public Ganesh festival was organized at Mumbai, Pune and Aurangabad with assistance from the newspaper, Dainik Samna. The prize distribution event was conducted in the presence of Hon'ble Minister for Environment, Shri Ramdasbhai Kadam and Member Secretary, MPCB, Dr. P. Anbalagan.



Hon'ble Shri Ramdasji Kadam, Minister for Environment, GoM giving away prizes to the participants on the eve of Eco-friendly Ganesh Public awareness campaign in the presence of Dr. P. Anbalagan (IAS), Member Secretary, MPCB

August 2017	Public awareness messages about eco-friendly Ganesh festival displayed on Times OOH BEST bus stop shelters.	Public awareness message of 'Celebrate a pollution-free Diwali' by Hon'ble Chief Minister, Hon'ble Minister for Environment and Hon'ble State Minister for Environment were displayed on bus stops in Mumbai city for a period of 15 days.
August 2017	Eco-friendly Dahi Handi 2017.	Eco Friendly Dahi Handi Festival 2017 was organized in association with IDEAL Book Company and MPCB. In this program, anti-noise pollution awareness rally was organized by famous Marathi film industry celebrities on the Open Deck Bus Service of Best Transport Service. Notable film and TV celebrities were present at this rally. On the eve of Dahi Handi, this rally was organized in the presence of street-play celebrities in Dadar, Lalbagh area. Eco-friendly Dahi Handi was smashed in the presence of young celebrities from Zee TV and ETV. At the time, in front of Chhabildas High School in Dadar, the noise-free eco-friendly Dahi Handi was smashed along with celebrities from the film and theatre industry. Public Relations Officer, MPCB was present during this event.



Anti-noise pollution awareness rally on the eve of Dahi-handi (Gopalkala) festival was organized with participation of famous Marathi film industry celebrities on the Open Deck Bus Service of Best Transport Service in the month of August 2017.



Anti-noise pollution awareness rally on the eve of Dahi-handi (Gopalkala) festival was organized with participation of famous Marathi film industry celebrities on the Open Deck Bus Service of Best Transport Service in the month of August 2017.

October 2017	Public Awareness message for Diwali on television.	A public awareness message saying ‘Celebrate a pollution-free Diwali’ by celebrities from the film industry was broadcast by the television channels Zee 24 Taas, ABP Maza, IBN Lokmat,
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		Star Pravah, Mi Marathi, TV9 Maharashtra, Saam TV, Jay Maharashtra and Maharashtra One.
October 2017	Public Awareness message for Diwali on FM radio.	A public awareness message saying 'Celebrate a pollution-free Diwali' was broadcast on leading FM Radio channels in the State.
October 2017	Diwali Bus Stop messages in Mumbai, Pune and Nagpur.	A public awareness message saying 'Celebrate a pollution-free Diwali' by Hon'ble Chief Minister of Maharashtra, Hon'ble Minister for Environment and Hon'ble State Minister for Environment were displayed on bus stops in the cities of Mumbai, Nagpur and Pune for a period of 15 days.
October 2017	Pollution-free Diwali Resolution Campaign Pledge 2017.	Pollution-free Diwali Resolution Campaign Pledge 2017 was organized at Mantralaya to promote celebration of a pollution-free Diwali. A pollution-free Diwali was pledged by students from schools and colleges from the entire State in the presence of Hon'ble Chief Minister of Maharashtra, Shri Devendra Fadnavis. Hon'ble Minister for Environment, Shri Ramdas Kadam, Hon'ble Minister of Water Resources & Irrigation, Shri Girish Mahajan, Hon'ble State Tourism Minister, Shri Jaykumar Rawal, Hon'ble Additional Chief Secretary of Environment Department, Shri Satish Gavai, Hon'ble Chairman of Maharashtra Pollution Control Board, Shri Milind Mhaiskar and Hon'ble Member Secretary of MPCB, Dr. P. Anbalagan attended this event. Students from various colleges
March 2018	Eco-Friendly Holi.	From the last few years, the widespread public awareness campaigns organized by Maharashtra Pollution Control Board to promote the celebration of an eco-friendly Holi have been receiving an increasing response. This year on behalf of the MPCB, eco-friendly colours were distributed for free to employees and officers from MPCB, Hon'ble Ministers from Mantralaya, Hon'ble Secretaries, Hon'ble Chairman, Hon'ble Speaker and Members of Legislative Assembly and Legislative Councils. Messages to promote the celebration of an eco-friendly Holi were broadcast on television and radio channels.

1.12 Greenery Development Plan of Forest Department, Government of Maharashtra

Government of Maharashtra has been instrumental in increasing tree and forest cover all over the State. GOM through its Forest Department has announced The Plantation Program in 2016 with the aim of planting 2Crore trees on 1st July 2016 was a resounding success with the final total reported figure of 2.82Crore saplings planted on a single day. After the successful

implementation of 2Crore plantation program on 1st July, 20 16, the Government of Maharashtra has designed the 50Crore plantation program for 3 consecutive years viz. 4Crore, 13Crore and 33Crore for 2017, 2018 and 2019 respectively. 10% Bamboo, mangrove and medicinal plantation is also incorporated in this plantation drive.

In the Second Phase, though the target was of 4Crore plantation from 1st to 7th July, 2017, actually 5.43Crore seedlings were planted due to overwhelming response of Government employees and people at large. These saplings programs are driven with the involvement of 33 Government Departments along with Students of Schools and Colleges, NSS, NCC, CSR, NGOs, Railways, National Highways, Defense, NABARD and other stakeholders of Society.

"Limca Book of World Records" has taken cognizance of these remarkable achievements of Forest Department relating to plantation in 2016 and 2017 and felicitated with certificates. Thus Maharashtra is the first State in India who acquired the place three years consequently in "Limca Book of Records".

In the Third Phase, against the target of 13Crore plantation in 2018 between the period from 1st to 31st July 2018 we could plant 15.88Crore trees, again exceeding the said target. The response of the public was overwhelming.

GoM continued this good work for the protection, enrichment and secure environment through various Schemes and Programs. In the Fourth Phase, the year 2019 represents the most significant and important step in completing this Mission of 50 crore plantation. In this year it was intended to plant 33Crore saplings throughout Maharashtra. Preparation and Planning for the success of this year's target have been initiated from 3rd August, 2018 i.e. immediately after completion of 13Crore Plantation Program. Forest Officials along with Revenue machinery and all administrative departments are working extremely hard with the active support of all sections of the society. The details of this 2 Crore, 4Crore, 13Crore & 33Crore plantation program are attached as Annexure I, II, III & IV respectively.

In an attempt to boost conservation and protection of forests and wild life in Maharashtra, the State Forest Department has launched a drive aimed at roping in citizens to help the department in their massive 50Crore trees plantation drive. A dedicated website

greenarmy.mahaforest.gov.in has been developed for registration of individuals and organizations as member of Green Army. I am happy to say that up-till now around 60 lakh members have been registered and we hope we could cross the 1Crore membership in near Future.

For maintaining the transparency, accountability and credibility, all the data relating to site selection for plantation with Geo-Tagging, development of Nurseries, digging of pits, availability of manpower, actual plantation and survival of the trees planted etc. is uploaded on the Digital Platform of Forest Department so that people can access the data at any given point of time. This has helped to build confidence amongst the people and their ever increasing participation in the plantation programme.

For the registration of plantation by the individuals, private NGOs and other stakeholders of society the mobile application called "My Plants" has been developed. Similarly, the programs like "Saplings at the Door Step", "Digital visibility on social media", "publicity campaign" are being implemented for greater public participation.

In Marathwada region of the State having low forest cover, a dedicated "Eco-Battalion" has been established at Aurangabad for tree plantation and its protection under the Defense Ministry of GIO considering establishing two more companies of this force at Beed & Latur.

The Forest Department is trying it's level its level best to increase the Forest and Tree cover in the State by various innovative ideas by involvement of people in the plantation & its protection especially on Non-Forest areas as forest area is limited. Massive tree plantation program in urban & rural areas under the scheme "Nurturing Trees is Worshiping Nature" has been launched by the Govt. in line with Ranmala Village in Khed Taluka of Pune District.

The Tree based Agriculture under Mahatma Gandhi National rural Employment Guarantee Scheme (MG-NREGS) Kanya Van Samruddhi Yojana, Bhausaheb Phundkar Horticulture Plantation Programme in co-ordination with Agriculture Department, Sericulture Plantation in coordination with Textile Department, Riverside Plantation are some of scheme initiated for increasing green cover in the Non- Forest areas.

Status report on Forest for 2017 at all India level has been published by “ Forest survey of India” in February 2018 vis-a-vis status of forest & related sectors in 2015. As far as Maharashtra is concerned the findings are as follows:

- Tree cover on non-forest area has increased by 273Km.sq – Maharashtra is a leading state
- Mangrove cover has increased by 82Km.sq - Maharashtra is a leading state
- Water bodies in forest areas has gone up by 432 km.sq – Maharashtra is having higher rank
- Increase in the bamboo plantation area by 4462 km.sq – Eventually Maharashtra is placed highest in the country

1.13 Plan for restoration of water quality

Table 20 Short term action plan for Mutha River

Sr.No.	Activity	Responsibility	Time Frame
1	Organize awareness programs about environment pollution	Pune Municipal Corporation	One Month
2	To prepare quantum of Solid Waste and Sewage generated and provision of MSW treatment facility	Pune Municipal Corporation	6 Months
3	Operate existing STP round the clock in scientific manner & reuse of treated water must be practiced.	Pune Municipal Corporation	Immediately
4	Organize awareness programs about promotion of organic farming on the River bank of villages. Restriction of chemical Pesticide, insecticide, fertilizer etc.	Agriculture Department, Pune, Pune Municipal Corporation	Immediately
5	Common toilets should be constructed in all areas to be covered. Stop open defecation and awareness program should be conducted in these areas	Pune Municipal Corporation	6 months
6	Vehicle, cloths, animal wash should be stopped on the bank of river and awareness program should be	Pune Municipal Corporation	6 months

	conducted in river bank areas		
7	Installation of In-Situ Nallah Cleanup system so as to stop sewage entering to the River Mutha	Pune Municipal Corporation	3 months

Table 21 Long term action plan for Mutha River

Sr. No.	Activity	Responsibility	Time Frame
1	Compulsory application of water meter & installation of online monitoring systems	Pune Municipal Corporation	1 Year
2	Maintaining continuous flow in the river	Pune Municipal Corporation, Irrigation Department	1 Year
3	Underground drainage system should be done in all areas (100%) for wastewater	Pune Municipal Corporation	1 year
4	Up-gradation of existing STPs to meet 10mg/lit BOD Outlet standard	Pune Municipal Corporation	4 Years
5	Exploration, development and augmentation of groundwater resources	Groundwater Surveys & Development Agency (G.S.D.A.)	Continuous
6	Groundwater Monitoring	Maharashtra Pollution Control Board, Ministry of Drinking water & sanitation	Continuous
7	Provision of adequate funds to Local Bodies located at bank of the river	Urban Development Department, Municipal Administration, Rural Development Department	1 Year for planning & 3 years for implementation
8	Tree Plantation in catchment area & banks of the river	Forest Department, Water Resource Department	1 Year
9*	Maintaining e flow of the river, protection of flood plain zone, development of Bio Diversity Park	Forest Department, Water Resource Department	1 Year for planning & 3 years for implementation
10	Prevention of Agricultural run-off to the river	Agriculture Department	1 Year for planning & 3 years for implementation

			tion
11	Up-gradation of existing STPs to meet 10mg/lit BOD Outlet standard	Pune Municipal Corporation	4 Years*

***Note:** All existing STPs needs to be upgraded and modernized for achieving for 10BOD outlet standards as existing STPs are designed way back based on 30 BOD disposal standard i.e. stream standards as per EPA. Up-gradation will be completed in next 4 years as per the draft notification dated 24th November 2015 & directions of CPCB.

1.14 Budget Estimates & Pooling of Resources from Local Bodies, State Pollution Control Board, State Government & Central Government

- The Pune Municipal Corporation has sanctioned fund of Rs. 990.26Cr; out of which Central Government has component of 841.72Cr. & Pune Municipal Corporation has component 148.54Cr for management of sewerage systems & STPs; which will be completed by 2022.
- Maharashtra Government has already received proposal of Rs. 1104.54Cr. Under State River Conservation Program & form this amount State Government will provide necessary funds in next 3 years i.e. by 2022 for Sewage management
- The Maharashtra Pollution Control Boards has also reserved Rs. 461.42Cr. for preparation of action plan for abatement & Control of Pollution of River Water due to sewage & solid waste disposal from B & C Municipal Councils (342Nos of Urban Local Bodies.), Nagar Panchyat & Gram Panchayat for reducing polluted stretches in compliance with Hon'ble NGT, principal bench directions w.r.t. "More River Stretches are now Critically Polluted". The said funds will be used for DPR preparation, development of infrastructure for sewage collection & treatment & development of infrastructure for Solid Waste Management. The DPR preparation & implementation of the same will be completed by year 2022 (i.e in next 3 years).
- For Solid Waste Management, Maharashtra Government has approved DPR of all 388 Urban Local Bodies. The funds for the same amounting to Rs. 2560.0Cr has been already sanctioned by Government & the said DPRs will be implemented & SWM issues will be resolved by December'2019.

***Proposed plans for maintaining e-flow:** River flows only in Monsoon season & whenever dam water is released. The amount of water released from dam is such that it will not over flow form next weir at the downstream.

Recommendations

1. Entry of raw sewage in to the river should be prohibited.
2. Installation of In-Situ Nallah Cleanup system so as to stop sewage entering to the River Mutha

3. Garbage thrown in the form of flowers, garlands, plastic etc. should be stopped. Awareness programs should be carried out.
4. Disinfection system should be provided in existed treatment plants.
5. Evaluation of treatment processes should be taken care of and reuse of treated must be practiced.
6. Installation of online monitoring for water quality.

1.15 Timelines for Implementation of Restoration Plan

Activities/Year	2017	2018	2019	2020	2021	2022	2023
Reconnaissance Survey							
Water Quality Sampling							
Execution (Setting up of STPs)							
<ol style="list-style-type: none"> 1. Botanical Garden, Pune 2. Baner, Pune 3. Warje, Pune 4. Vadgaon, Pune 5. Tanaji Wadi, Pune 6. Naydu, Pune 7. Dhanori, Pune 8. Bhairoba, Pune 9. Mundhva, Pune 10. Kharadi, Pune 11. Matsyabij Kendra, Pune 							
Execution (MSWM system)							
Augmentation of River Flow if any and restoration of water quality							

1.16 Governance and Supervision

1.16.1 Two Tier Monitoring

Monitoring will be done by the concerned Departments/ Agencies, which are executing or responsible for particular activities and it will be their primary responsibility to ensure compliance of the Action Plan. In addition, there will be two level of Committees to review and monitor the status: (i) District Level Task Force (ii) River Rejuvenation Committee

1.16.2 District Level Special Task Force:

The District Level Special Task /force will monitor the Status of implementation of the Action Plan at the district Level.

1.16.3 River Rejuvenation Committee:

The River Rejuvenation Committee will monitor the Status of implementation of the Action Plan at the State Level

Annexure I

Table showing Districtwise Targer v/s Achievement for 2-crore plantation program

S.No.	Revenue Division	District	Forest Department					Non - forest Department					Achievement in %		
			Plantation Target	Plantation Achievement (online)	Plantation Achievement (offline)	Plantation Achievement (Total)	Total Plantation Achievement (%)	Plantation Target	Plantation Achievement (online)	Plantation Achievement (offline)	Plantation Achievement (Total)	Plantation Achievement (%)	Plantation Achievement	Plantation Achievement	Plantation Achievement (%)
A	B	C	1	2	3	4	5	1	2	3	4	5	1	2	3
1	Amravati	Akola	97000	106482	0	106482	109.78	Cumulative target for non-forest departments for all districts put together was 50 lakh	170638	0	170638			277120	
2	Amravati	Amravati	110000	172653	0	172653	156.96		223895	0	223895			396548	
3	Amravati	Buldhana	110000	152000	500	152500	138.64		99162	0	99162			251662	
4	Amravati	Washim	96000	102100	0	102100	106.35		61134	0	61134			163234	
5	Amravati	Yavatmal	1232000	1326600	0	1326600	107.68		368877	0	368877			1695477	
Division Subtotal			1645000	1859835	500	1860335	113.09		923706	0	923706			2784041	
6	Aurangabad	Aurangabad	483000	491500	0	491500	101.76		73918	0	73918			565418	
7	Aurangabad	Beed	603000	613137	0	613137	101.68		71871	0	71871			685008	
8	Aurangabad	Hingoli	345000	348400	0	348400	100.99		124846	0	124846			473246	
9	Aurangabad	Jalna	157000	165000	0	165000	105.10		126963	0	126963			291963	
10	Aurangabad	Latur	368000	374750	0	374750	101.83		28670	0	28670			403420	
11	Aurangabad	Nanded	488000	510000	0	510000	104.51		82043	46062	128105			638105	
12	Aurangabad	Osmanabad	363000	373000	0	373000	102.75		13427	0	13427			386427	
13	Aurangabad	Parbhani	153000	161500	0	161500	105.56		122980	0	122980			284480	
Division Subtotal			2960000	3037287	0	3037287	102.61		644718	46062	690780			3728067	
14	Konkan	Mumbai City	0	0	0	0	0		8020	0	8020			8020	
15	Konkan	Mumbai suburban	0	5000	0	5000	0		4823	0	4823			9823	
16	Konkan	Palghar	116000	531409	2105	533514	459.93		279345	0	279345			812859	
17	Konkan	Raighad	88000	234109	27835	261944	297.66		36780	0	36780			298724	
18	Konkan	Ratnagiri	11000	26847	18425	45272	411.56		16763	142940	159703			204975	
19	Konkan	Sindhudurg	23000	27500	0	27500	119.57		117898	0	117898			145398	
20	Konkan	Thane	148000	656650	0	656650	443.68		287011	0	287011			943661	
Division Subtotal			386000	1481515	48365	1529880	396.34		750640	142940	893580			2423460	
21	Nagpur	Bhandara	424000	684890	0	684890	161.53		109050	0	109050			793940	
22	Nagpur	Chandrapur	1145000	1556787	467580	2024367	176.80		446205	111007	557212			2581579	
23	Nagpur	Gadchiroli	420000	598636	0	598636	142.53		105995	13410	119405			718041	
24	Nagpur	Gondia	552000	828266	0	828266	150.05		2915	0	2915			831181	
25	Nagpur	Nagpur	686000	1002805	0	1002805	146.18		303441	8433	311874			1314679	
26	Nagpur	Wardha	270000	525002	0	525002	194.45		28681	0	28681			553683	
Division Subtotal			3497000	5196386	467580	5663966	161.97		996287	132850	1129137			6793103	
27	Nashik	Ahmednagar	1054000	1591379	0	1591379	150.98		362789	17725	380514			1971893	
28	Nashik	Dhule	305000	515500	0	515500	169.02		178854	9531	188385			703885	
29	Nashik	Jalgaon	950000	1085050	0	1085050	114.22		85113	16400	101513			1186563	
30	Nashik	Nandurbar	869000	1033000	0	1033000	118.87		70199	8820	79019			1112019	
31	Nashik	Nashik	1402000	2492433	17415	2509848	179.02		17910	69744	87654			2597502	
Division Subtotal			4580000	6717362	17415	6734777	147.05		714865	122220	837085			7571862	
32	Pune	Kolhapur	210000	405304	0	405304	193.00		171918	200540	372458			777762	
33	Pune	Pune	1010000	1135510	189392	1324902	131.18		11189	989678	1000867			2325769	
34	Pune	Sangli	230000	332000	0	332000	144.35		168833	0	168833			500833	
35	Pune	Satara	272000	527600	0	527600	193.97		60462	23511	83973			611573	
36	Pune	Solapur	410000	468700	144746	613446	149.62	8718	0	8718			622164		
Division Subtotal			2132000	2869114	334138	3203252	150.25	421120	1213729	1634849			4838101		
Grand Total			15200000	21161499	867998	22029497	144.93	4451336	1657801	6109137			28138634		

Online - District Wise Forest & Non-Forest Details as on 9 th July 2017

Sr. No.	District	Total Target as per distributed by CCF(T) for Forest Departments	FOREST						Non Forest Agencies											
			No. Of Site Registered	Site Area (in Ha.)	No of Seedlings to be planted (As per Data Filled up by Forest department till Date)	No. Of Pits Dug (As per Data Filled up by Forest Department till Date)	No of Seedlings planted	Plantation % Achivement Against Target of Forest Department	Plantation % Achivement Against no of Pits dug of Forest Department	Total Target as per distributed by District Collector for Non Forest Departments	No of participants	No. Of Site Registered	Site Area (in Ha.)	No Seedlings to be planted(As per Data Filled up by all Agencies till Date)	No. Of Pits Dug(As per Data Filled up by all Agencies till Date)	No of Seedlings planted	Plantation % Achivement Against Target of Forest Department	Plantation % Achivement Against no of Pits dug of Forest Department	No of participants	Grand Total of Forest and Non Forest No of Seedlings planted
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	Ahmednagar	2228200	222	2784.82	2221323	2219923	2219935	99.63	100.00	807403	17,902	1,805	15,928	813824	776587	638607	79.09	82.23	68,140	2858542
2	Akola	283000	67	537	367258	367258	367258	129.77	100.00	357000	16,266	2,044	3,196	346602	346032	317949	89.06	91.88	46,962	685207
3	Amravati	405000	122	699.84	503572	486732	488388	120.59	100.34	565100	10,784	3,926	74,381	630485	504855	419928	74.31	83.18	18,303	908316
4	Aurangabad	510000	70	616.45	510832	510732	510832	100.16	100.02	692104	10,108	2,692	9,097	787484	682734	637178	92.06	93.33	11,524	1148010
5	Beed	448000	72	1253.69	795452	795452	795452	177.56	100.00	564572	5,986	1,673	2,321	551380	433861	488889	86.59	112.68	15,738	1284341
6	Bhandara	890000	103	946.58	1058469	1058469	1048469	117.81	99.06	85000	9,901	1,251	19,412	349841	316362	283914	334.02	89.74	27,009	1332383
7	Buldhana	414000	131	431.3	432100	432100	431100	104.13	99.77	495814	8,197	3,015	2,342	487127	471738	437882	88.32	92.82	10,057	868982
8	Chandrapur	2257883	144	2357.28	3407746	3407746	3357121	148.68	98.51	660000	22,909	4,177	127,491	1456512	1181935	1004395	152.18	84.98	41,274	4361516
9	Dhule	517000	64	977.54	1196873	1196873	1196873	231.50	100.00	285000	3,648	1,209	21,307	277619	263469	247573	86.87	93.97	4,728	1444446
10	Gadchiroli	1452500	94	1672.77	2425548	2425548	2351675	161.91	96.95	259732	23,311	1,360	20,841	284890	258175	211191	81.31	81.80	24,851	2562866
11	Gondia	1145000	125	934.15	1193385	1193385	1187896	103.75	99.54	151000	41,396	3,870	143,813	414624	414124	337925	223.79	81.60	43,499	1525821
12	Hingoli	438000	76	823.82	703840	703840	686700	156.78	97.56	328850	3,545	1,046	5,465	326225	323532	319249	97.08	98.68	26,198	1005949
13	Jalgaon	1440000	103	1656.45	1715981	1715981	1715981	119.17	100.00	649049	5,899	5,763	111,548	794952	651012	536564	82.67	82.42	26,621	2252545
14	Jalna	260000	56	367.94	260000	260000	260000	100.00	100.00	590250	10,907	1,386	3,564	603904	590513	595988	100.97	100.93	29,449	855988
15	Kolhapur	500000	77	660.5	562222	562222	555722	111.14	98.84	342000	14,934	4,025	106,084	378429	327394	357051	104.40	109.06	59,205	912773
16	Latur	310000	88	478.59	453820	400118	404512	130.49	101.10	583362	10,303	2,436	11,488	661810	642492	639028	109.54	99.46	41,926	1043540
17	Mumbai City	0	0	0	0	0	0	0.00	0.00	0	0	54	550	4,730	4,392	4037	0.00	91.92	653	4037
18	Mumbai Suburban	0	1	1	500	0	500	100.00	100.00	0	100	256	3,806	23,899	5,715	14411	100.00	252.16	2,591	14911
19	Nagpur	763000	143	865.68	1024915	1024915	1024915	134.33	100.00	276000	4,729	5,773	42,237	673895	661305	560967	203.25	84.83	52,998	1585882
20	Nanded	710000	167	1764.75	1217300	1217300	1211050	170.57	99.49	535576	7,150	1,395	3,786	552358	545289	544708	101.71	99.89	40,779	1755758
21	Nandurbar	712000	79	598	712370	712270	712270	100.04	100.00	346535	6,211	5,639	6,357	921850	821758	910922	262.87	110.85	40,986	1623192
22	Nashik	2635300	194	2970.28	3490475	3489475	3487790	132.35	99.95	777810	17,864	4,416	556,270	1225548	923890	856375	110.10	92.69	35,406	4344165
23	Osmanabad	250000	120	571.08	534180	534180	532180	212.87	99.63	472900	56,730	1,954	48,531	578209	446815	563453	119.15	126.10	94,935	1095633
24	Palghar	1125000	144	1860.98	1647756	1639160	1634296	145.27	99.70	495000	17,916	2,281	169,544	757911	547671	528322	106.73	96.47	22,437	2162618
25	Parbhani	350000	40	538	309600	309600	309600	88.46	100.00	372260	2,746	2,999	4,148	414549	404125	413312	111.03	102.27	86,294	722912
26	Pune	797000	117	1185.02	1016063	1014713	1011063	126.86	99.64	1413000	14,967	3,463	505,320	1514091	1375085	1266379	89.62	92.09	70,363	2277442
27	Raigad	551000	158	573.71	728580	728580	728580	132.23	100.00	483000	14,690	2,098	122,918	451212	359128	389537	80.65	108.47	28,579	1118117
28	Ratnagiri	33487	58	77.37	51832	51832	38500	114.97	74.28	209025	2,142	1,851	108,842	345093	312397	300577	143.80	96.22	34,156	339077
29	Sangli	464000	81	921.31	504606	504606	504606	108.75	100.00	461000	17,155	1,510	18,969	486208	457206	410057	88.95	89.69	9,801	914663
30	Satara	552000	110	861.03	678796	678796	650983	117.93	95.90	225000	15,750	1,072	45,508	319468	278952	235173	104.52	84.31	2,754	886156
31	Sindhudurg	71000	27	165.21	65219	65219	65219	91.86	100.00	188100	2,888	2,178	7,246	551804	531276	537136	285.56	101.10	22,424	602355
32	Solapur	400000	62	498	447400	447400	447400	111.85	100.00	534000	11,444	1,256	3,824	433549	410291	397190	74.38	96.81	45,279	844590
33	Thane	825000	177	1227.43	947484	947484	944326	114.46	99.67	1003000	18,966	4,600	23,496	693843	559774	363329	36.22	64.91	10,749	1307655
34	Wardha	684000	155	897.27	706770	706770	693189	101.34	98.08	399500	16,534	1,307	34,545	620904	573596	544952	136.41	95.01	16,122	1238141
35	Washim	189000	43	259	227810	227810	225880	119.51	99.15	318500	8,417	944	63	397914	351189	341592	107.25	97.27	31,661	567472
36	Yavatmal	1563000	169	2365.07	2310225	2280416	2280758	145.92	100.01	816000	32,895	3,874	43,170	845905	684777	650791	79.75	95.04	50,281	2931549
	TOTAL	26173370	3,659	35,399	34430302	34316905	34081019	130.21	99.31	16742442	4,85,290	90,598	24,27,408	20978648	18439446	17306531	103.37	93.86	11,94,732	51387550

Table - 4 (Districtwise : Online data including no of sites of Forest and Non Forest Department)							
13-Crore Plantation Drive (1st-31st July 2018)							
Districtwise Final Detail Report Online							
Sr. No.	District	No. of Site Registered (As per Data Filled up by all Agencies Forest and non Forest)	Target Seedling (As per Data Filled up by all Agencies Forest and non Forest)	No. of Pits Dug (As per Data Filled up by all Agencies Forest and non Forest)	No. of Seedling Planted	No of Participants	Plantation % Achivement Against Target (As per Data Filled up by all Agencies)
1	2	3	4	5	6	7	8
1	Ahmednagar	2,772	51,08,370	50,15,315	48,61,408	3,06,543	95.17%
2	Akola	4,144	21,25,903	21,03,510	20,46,069	97,664	96.24%
3	Amravati	5,818	29,04,424	27,29,228	26,75,694	58,189	92.12%
4	Aurangabad	4,732	42,34,736	42,06,668	38,13,300	1,90,465	90.05%
5	Beed	1,678	32,80,561	32,66,578	31,84,650	1,64,332	97.08%
6	Bhandara	1,645	20,69,030	19,52,926	19,26,818	71,189	93.13%
7	Buldhana	4,737	28,66,716	26,20,663	26,15,863	44,262	91.25%
8	Chandrapur	10,624	76,89,774	73,22,882	70,22,285	1,28,804	91.32%
9	Dhule	2,531	44,03,806	40,05,121	39,78,375	23,948	90.34%
10	Gadchiroli	4,520	56,45,700	55,60,998	54,60,676	1,49,207	96.72%
11	Gondia	4,090	35,78,065	35,16,681	31,61,809	1,22,904	88.37%
12	Hingoli	3,474	33,24,604	33,20,524	33,15,847	60,876	99.74%
13	Jalgaon	7,718	46,76,921	43,72,652	43,51,516	1,28,362	93.04%
14	Jalna	4,416	37,71,870	37,46,711	37,28,979	1,48,654	98.86%
15	Kolhapur	4,682	27,29,339	27,14,656	26,99,189	1,74,431	98.90%
16	Latur	4,203	44,25,414	44,14,461	43,75,652	92,248	98.88%
17	Mumbai City	8	1,734	345	125	15	7.21%
18	Mumbai Suburban	21	1,77,239	1,77,104	1,77,054	3,640	99.90%
19	Nagpur	7,578	43,50,575	41,94,072	36,12,600	1,14,443	83.04%
20	Nanded	2,280	78,75,138	78,74,773	78,74,023	1,09,782	99.99%
21	Nandurbar	4,501	48,47,165	48,36,830	48,35,801	1,22,364	99.77%
22	Nashik	10,959	81,12,851	76,07,679	72,34,067	2,20,556	89.17%
23	Osmanabad	4,924	43,65,452	41,94,431	41,73,890	1,68,040	95.61%
24	Palghar	2,511	48,34,917	39,37,411	40,47,309	96,654	83.71%
25	Parbhani	3,035	33,43,340	28,29,588	26,56,513	31,643	79.46%
26	Pune	6,825	53,87,602	47,79,571	46,34,593	1,03,592	86.02%
27	Raigad	6,423	36,33,058	33,03,872	26,30,299	64,730	72.40%
28	Ratnagiri	1,650	12,50,643	11,36,124	11,28,532	24,767	90.24%
29	Sangli	2,136	29,46,189	29,38,110	29,24,149	57,204	99.25%
30	Satara	1,917	27,91,533	27,03,806	25,99,132	51,990	93.11%
31	Sindhudurg	3,890	15,91,404	15,69,542	15,34,156	29,785	96.40%
32	Solapur	1,887	22,25,306	21,31,315	20,89,491	3,21,701	93.90%
33	Thane	4,723	32,39,134	30,98,694	30,76,186	91,623	94.97%
34	Wardha	1,897	38,22,690	23,86,546	23,47,121	38,967	61.40%
35	Washim	1,159	16,79,735	15,21,253	15,17,885	43,832	90.36%
36	Yavatmal	5,575	62,75,861	61,26,193	59,95,076	1,70,267	95.53%
TOTAL		1,45,683	13,55,86,799	12,82,16,833	12,43,06,132	38,27,673	91.68%

शा.नि. क्र.- साववि-2018/प्र.क्र.144/फ-11, दि. 6 सप्टेंबर, 2018 सोबतचे

विवरणपत्र

Revenue - District Wise, Agency wise Plantation Target Distrubution Under 33 Crore Plantation Program 2019

Sr. No.	Implementing Agency Name	Aurangabad	Jalna	Beed	Parbhani	Hingoli	Latur	Osmanabad	Nanded	Aurangabad Revenue division Total
		Target for 2019	Target for 2019	Target for 2019	Target for 2019	Target for 2019	Target for 2019	Target for 2019	Target for 2019	Target for 2019
1	Agriculture Department	997050	1906800	601150	666350	581500	700550	865200	221650	6540250
2	Urban Development Department ** (Except Municipal Corporations)	206850	97100	150350	24950	30000	271550	434450	65000	1280250
3	Municipal Corporations	20700	NA*	NA*	2500	NA*	27150	NA*	6500	56850
4	PWD	138750	100150	28100	70000	23750	34950	120000	2950	518650
5	Water Resources Department	155450	19400	38400	51750	5100	60600	141250	63800	535750
6	Co-operation & Marketing Department	19500	10800	28100	10000	13200	10000	60200	4800	156600
7	Industries Department	119850	18800	25200	15750	25000	59000	31050	47750	342400
8	School Education Department	137700	49650	75000	348200	75300	200000	128400	65800	1080050
9	Sports Department	15000	15000	15000	15000	15000	15000	15000	15000	120000
10	Higher Education Department	24200	24200	24200	24200	24200	24200	24200	24200	193600
11	Technical Education Department	24200	24200	24200	24200	24200	24200	24200	24200	193600
12	Home Department (Police)	13500	34450	20000	8700	25300	3650	48550	16700	170850
13	Home Department (Jail)	21850	2800	5000	5000	5000	4850	9700	550	54750
14	Tribal Development Department	2450	2450	2450	2450	2450	2450	2450	2450	19600
15	Social Justice and Special Assistance	2250	10850	10100	12200	5350	1400	11300	5000	58450
16	VJNT & OBC welfare Department	1800	1800	1800	1800	1800	1800	1800	1800	14400
17	Tourism Department	16300	16300	16300	16300	16300	16300	16300	16300	130400
18	Cultural Affairs Department	1800	1800	1800	1800	1800	1800	1800	1800	14400
19	Public Health Department	9450	2550	53050	33450	4500	14800	18550	550	136900
20	Energy Department	18500	19950	6200	8750	4500	20000	7000	4000	88900
21	Medical education Department	300	300	300	300	300	300	300	300	2400
22	Food and Drug Administration Department	300	300	300	300	300	300	300	300	2400
23	State excise	1000	1000	1000	1000	1000	1000	1000	1000	8000
24	Transport (RTO)	1200	1200	1200	1200	1200	1200	1200	1200	9600
25	Transport (MSRTC)	1850	1850	1850	1850	1850	1850	1850	1850	14800
26	Labor Department	650	650	650	650	650	650	650	650	5200
27	Law and Judiciary Department	650	650	650	650	650	650	650	650	5200
28	Water Conservation Department	29350	19050	19750	10000	10000	4800	10150	10000	113100
29	Skills development and entrepreneurship	1750	1750	1750	1750	1750	1750	1750	1750	14000
30	Revenue Department	3000	29650	20000	29450	10600	22450	9700	20000	144850
31	Women and Child Welfare Department	200	200	200	200	200	200	200	200	1600
32	Water supply and Sanitation	950	950	950	950	950	950	950	950	7600
33	Animal Husbandry Department	3050	350	5000	9250	1700	11600	12000	1850	44800
34	Dairy Department	1000	1700	1000	3000	550	2850	4000	600	14700
35	Fisheries Department	1000	100	1000	3000	550	2850	4000	600	13100
36	Minority welfare department	8700	8700	8700	8700	8700	8700	8700	8700	69600
37	Finance - GST Department	900	900	900	900	900	900	900	900	7200
38	Finance - Accounts and Treasury Department	900	900	900	900	900	900	900	900	7200
39	Rural Development Department (Excluding Grampanchayat)	363000	262400	250700	1297950	38200	363000	14700	4200	2594150
40	Grampanchayat - 3200 Plants each GPs (RDD)	2759250	2493600	3300250	2253500	1802150	2509600	1991000	4190100	21299450
41	Housing Department	1000	300	300	300	300	300	300	300	3100
42	Railway under Gol	1250	1250	1250	1250	1250	1250	1250	1250	10000
43	National Highways under Gol	4500	4500	4500	4500	4500	4500	4500	4500	36000
44	Defence under Gol	300	300	300	300	300	300	300	300	2400
45	Gol offices In State	10550	10550	10550	10550	10550	10550	10550	10550	84400
46	Textiles & Sericulture Department	651700	1282300	1000000	1500000	324450	2181200	2000000	1000000	9939650
	TOTAL	5795450	6484450	5760350	6485750	3108700	6628850	6043200	5854400	46161150

*NA - Not Applicable.

**UDD - Includes Municipal Councils, Nagar Panchayats, CIDCO and Various Pradhikarans Like MMRDA, PMRDA, NIT etc.

Sr. No.	Implementing Agency Name	Nagpur	Wardha	Gondia	Chandrapur	Gadchiroli	Bhandara	Nagpur Revenue division Total
		Target for 2019	Target for 2019	Target for 2019	Target for 2019	Target for 2019	Target for 2019	Target for 2019
1	Agriculture Department	150850	886700	718800	701850	71750	174000	2703950
2	Urban Development Department ** (Except Municipal Corporations)	23750	94000	21500	508400	5750	16150	669550
3	Municipal Corporations	82450	NA*	NA*	96700	NA*	NA*	179150
4	PWD	301300	217650	165750	364800	19500	112200	1181200
5	Water Resources Department	173450	154850	21600	152700	3650	8550	514800
6	Co-operation & Marketing Department	4350	2950	44850	92300	7250	2450	154150
7	Industries Department	112350	51750	18000	58150	1900	7700	249850
8	School Education Department	99750	534050	97950	363500	166250	83250	1344750
9	Sports Department	11100	59350	10900	40400	18450	9250	149450
10	Higher Education Department	4975	56600	850	1500	8900	375	73200
11	Technical Education Department	4975	56600	850	1500	8900	375	73200
12	Home Department (Police)	35050	118950	21750	32300	12350	4650	225050
13	Home Department (Jail)	5600	4400	2000	1400	2300	2800	18500
14	Tribal Development Department	17300	6600	7550	61350	24750	4200	121750
15	Social Justice and Special Assistance	2350	2350	2350	2350	2350	2350	14100
16	VJNT & OBC welfare Department	600	600	600	600	600	600	3600
17	Tourism Department	1000	1000	1000	1000	1000	1000	6000
18	Cultural Affairs Department	1000	1000	1000	1000	1000	1000	6000
19	Public Health Department	2300	30500	10150	40450	13150	17000	113550
20	Energy Department	350	16450	1900	114950	650	2250	136550
21	Medical education Department	1500	1500	1500	1500	1500	1500	9000
22	Food and Drug Administration Department	400	400	400	400	400	400	2400
23	State excise	450	450	450	450	450	450	2700
24	Transport (RTO)	1300	1300	1300	1300	1300	1300	7800
25	Transport (MSRTC)	2000	2000	2000	2000	2000	2000	12000
26	Labor Department	17100	14000	14000	14000	14000	14000	87100
27	Law and Judiciary Department	10050	10700	1550	2200	5000	5000	34500
28	Water Conservation Department	11650	50950	50400	13150	25000	20000	171150
29	Skills development and entrepreneurship	850	2450	3000	15400	1150	4200	27050
30	Revenue Department	9100	28300	17650	28300	2800	14000	100150
31	Women and Child Welfare Department	8750	10400	10000	17750	4100	5050	56050
32	Water supply and Sanitation	13450	42200	20000	17050	20000	20000	132700
33	Animal Husbandry Department	5200	9400	3200	10650	750	3500	32700
34	Dairy Department	1750	3150	1050	3550	250	1150	10900
35	Fisheries Department	1750	3150	1050	3550	250	1150	10900
36	Minority welfare department	8700	8700	8700	8700	8700	8700	52200
37	Finance - GST Department	700	700	700	700	700	700	4200
38	Finance - Accounts and Treasury Department	700	700	700	700	700	700	4200
39	Rural Development Department (Excluding Grampanchayat)	240000	141000	120000	246000	244300	120000	1111300
40	Grampanchayat - 3200 Plants each GPs (RDD)	2506400	1661300	1747750	2647250	1459650	1731750	11754100
41	Housing Department	700	700	700	700	700	700	4200
42	Railway under Gol	1250	1250	1250	1250	1250	1250	7500
43	National Highways under Gol	500	500	500	500	500	500	3000
44	Defence under Gol	8450	10000	14050	18100	10000	25100	85700
45	Gol offices In State	3700	8400	10000	10000	10000	10000	52100
46	Textiles & Sericulture Department	1205050	1452250	0	0	0	550	2657850
	TOTAL	5096300	5762200	3181250	5702350	2185900	2443800	24371800

*NA - Not Applicable.

**UDD - Includes Municipal Councils, Nagar Panchayats, CIDCO and Various Pradhikarans Like MMRDA, PMRDA, NIT etc.

Sr. No.	Implementing Agency Name	Amravati	Akola	Washim	Yavatmal	Buldhana	Amravati Revenue division Total
		Target for 2019	Target for 2019	Target for 2019	Target for 2019	Target for 2019	Target for 2019
1	Agriculture Department	135150	440700	217500	407650	397300	1598300
2	Urban Development Department ** (Except Municipal Corporations)	64100	88500	34850	109550	138850	435850
3	Municipal Corporations	20300	16300	NA*	NA*	NA*	36600
4	PWD	500150	121750	161750	411600	10400	1205650
5	Water Resources Department	67850	35400	24800	182550	4200	314800
6	Co-operation & Marketing Department	7050	18750	5000	5900	7950	44650
7	Industries Department	176050	134750	600	33950	30900	376250
8	School Education Department	151550	49200	24700	70600	317400	613450
9	Sports Department	16850	5450	2750	7850	35250	68150
10	Higher Education Department	3475	350	7625	875	425	12750
11	Technical Education Department	3475	350	7625	875	425	12750
12	Home Department (Police)	17650	19750	6100	5850	28100	77450
13	Home Department (Jail)	27250	4200	400	550	850	33250
14	Tribal Development Department	32500	28100	600	79150	4200	144550
15	Social Justice and Special Assistance	18760	1760	2760	11600	4840	39720
16	VJNT & OBC welfare Department	4690	440	690	2900	1210	9930
17	Tourism Department	1000	1000	1000	1000	1000	5000
18	Cultural Affairs Department	1000	1000	1000	1000	1000	5000
19	Public Health Department	23400	9000	17250	10800	6300	66750
20	Energy Department	3550	14850	13350	7850	7750	47350
21	Medical education Department	500	500	500	500	500	2500
22	Food and Drug Administration Department	500	500	500	500	500	2500
23	State excise	2650	350	550	1100	2800	7450
24	Transport (RTO)	1000	100	1000	2300	1200	5600
25	Transport (MSRTC)	1500	150	1500	3450	1750	8350
26	Labor Department	500	500	500	500	500	2500
27	Law and Judiciary Department	13100	9950	11250	2400	300	37000
28	Water Conservation Department	25300	14050	15000	28150	24650	107150
29	Skills development and entrepreneurship	5450	5600	5000	5350	5600	27000
30	Revenue Department	21500	13500	8550	34550	28100	106200
31	Women and Child Welfare Department	9200	3700	5650	21200	8950	48700
32	Water supply and Sanitation	6350	8600	7950	6250	6000	35150
33	Animal Husbandry Department	11550	5300	2750	5900	8450	33950
34	Dairy Department	3850	1750	900	1950	2800	11250
35	Fisheries Department	3850	1750	900	1950	2800	11250
36	Minority welfare department	8700	8700	8700	8700	8700	43500
37	Finance - GST Department	750	750	750	750	750	3750
38	Finance - Accounts and Treasury Department	750	750	750	750	750	3750
39	Rural Development Department (Excluding Grampanchayat)	48000	15000	1500	9300	2600	76400
40	Grampanchayat - 3200 Plants each GPs (RDD)	2688850	1706150	1571700	3844400	2784850	12595950
41	Housing Department	500	500	500	500	500	2500
42	Railway under Gol	1250	1250	1250	1250	1250	6250
43	National Highways under Gol	4500	4500	4500	4500	4500	22500
44	Defence under Gol	500	500	500	500	500	2500
45	Gol offices In State	500	500	500	500	500	2500
46	Textiles & Sericulture Department	100000	100000	100000	525550	100000	925550
	TOTAL	4236900	2896500	2283500	5864850	3998150	19279900

*NA - Not Applicable.

**UDD - Includes Municipal Councils, Nagar Panchayats, CIDCO and Various Pradhikarans Like MMRDA, PMRDA, NIT etc.

Sr. No.	Implementing Agency Name	Nashik	Ahamadnager	Dhule	Jalgaon	Nandurbar	Nashik Revenue division Total
		Target for 2019	Target for 2019	Target for 2019	Target for 2019	Target for 2019	Target for 2019
1	Agriculture Department	684800	672100	235750	162150	292650	2047450
2	Urban Development Department ** (Except Municipal Corporations)	171300	188750	144300	132500	5600	642450
3	Municipal Corporations	81650	22450	126400	25300	NA*	255800
4	PWD	398100	64150	91700	126700	39600	720250
5	Water Resources Department	158700	62750	20400	138000	350	380200
6	Co-operation & Marketing Department	35550	17000	17500	61050	13000	144100
7	Industries Department	51950	4450	12650	29800	400	99250
8	School Education Department	114850	72400	12450	111400	35550	346650
9	Sports Department	12750	8050	1400	12400	3950	38550
10	Higher Education Department	3075	11150	500	1925	900	17550
11	Technical Education Department	3075	11150	500	1925	900	17550
12	Home Department (Police)	54050	2800	4850	8450	4300	74450
13	Home Department (Jail)	29500	500	500	500	500	31500
14	Tribal Development Department	12350	10000	15950	55150	50900	144350
15	Social Justice and Special Assistance	3000	3000	3000	3000	3000	15000
16	VJNT & OBC welfare Department	700	700	700	700	700	3500
17	Tourism Department	1600	1600	1600	1600	1600	8000
18	Cultural Affairs Department	500	500	500	500	500	2500
19	Public Health Department	3200	3500	1450	46000	500	54650
20	Energy Department	8900	200	500	21300	500	31400
21	Medical education Department	500	500	500	500	500	2500
22	Food and Drug Administration Department	500	500	500	500	500	2500
23	State excise	300	11450	500	500	500	13250
24	Transport (RTO)	4450	650	500	1300	500	7400
25	Transport (MSRTC)	6650	950	500	1900	500	10500
26	Labor Department	15350	87900	500	500	500	104750
27	Law and Judiciary Department	4350	500	300	3250	500	8900
28	Water Conservation Department	35450	4850	11900	4650	24850	81700
29	Skills development and entrepreneurship	100	500	4700	7500	500	13300
30	Revenue Department	3150	45200	5550	14900	3150	71950
31	Women and Child Welfare Department	32350	500	500	1050	13600	48000
32	Water supply and Sanitation	9300	500	2900	1400	500	14600
33	Animal Husbandry Department	8700	13100	4400	3950	4300	34450
34	Dairy Department	2900	4350	1450	1300	1450	11450
35	Fisheries Department	2900	4350	1450	1300	1450	11450
36	Minority welfare department	8700	8700	8700	8700	8700	43500
37	Finance - GST Department	2900	2850	500	500	500	7250
38	Finance - Accounts and Treasury Department	2900	2850	500	500	500	7250
39	Rural Development Department (Excluding Grampanchayat)	60300	5400	2200	18000	18000	103900
40	Grampanchayat - 3200 Plants each GPs (RDD)	4423800	4199700	1731750	3677950	1904600	15937800
41	Housing Department	950	950	950	950	950	4750
42	Railway under Gol	1250	1250	1250	1250	1250	6250
43	National Highways under Gol	500	500	500	500	500	2500
44	Defence under Gol	500	8150	500	500	500	10150
45	Gol offices In State	37700	500	500	500	500	39700
46	Textiles & Sericulture Department	0	0	0	648900	0	648900
	TOTAL	6496050	5563850	2476100	5343100	2444700	22323800

*NA - Not Applicable.

**UDD - Includes Municipal Councils, Nagar Panchayats, CIDCO and Various Pradhikarans Like MMRDA, PMRDA, NIT etc.

Sr. No.	Implementing Agency Name	Ratnagiri	Sindhudurg	Thane	Raigad	Palgher	Mumbai City	Mumbai Suburbab	Kokan Revenue division Total
		Target for 2019	Target for 2019	Target for 2019	Target for 2019	Target for 2019	Target for 2019	Target for 2019	Target for 2019
1	Agriculture Department	738350	573500	366700	348400	238950	0	0	2265900
2	Urban Development Department ** (Except Municipal Corporations)	47000	11250	295800	59650	220200	0	0	633900
3	Municipal Corporations	NA*	NA*	219750	15050	195000	12100	124850	566750
4	PWD	11150	4450	62450	2450	24600	1250	0	106350
5	Water Resources Department	17300	850	500	11100	5700	0	0	35450
6	Co-operation & Marketing Department	20900	16350	500	650	1250	0	0	39650
7	Industries Department	500	500	11250	102450	32850	0	0	147550
8	School Education Department	120850	2600	120800	2600	143300	1900	0	392050
9	Sports Department	13450	300	13400	300	15900	200	0	43550
10	Higher Education Department	500	500	500	500	775	1600	175	4550
11	Technical Education Department	500	500	500	500	775	1600	175	4550
12	Home Department (Police)	2650	700	8150	8650	500	7200	550	28400
13	Home Department (Jail)	500	500	500	500	500	0	0	2500
14	Tribal Development Department	300	500	28100	300	93400	0	0	122600
15	Social Justice and Special Assistance	500	500	500	500	1760	0	0	3760
16	VJNT & OBC welfare Department	500	500	500	500	440	0	0	2440
17	Tourism Department	500	550	500	500	500	0	0	2550
18	Cultural Affairs Department	500	500	500	500	500	0	0	2500
19	Public Health Department	4600	750	23600	70100	250	300	0	99600
20	Energy Department	3000	500	350	8700	7900	50	0	20500
21	Medical education Department	550	500	500	500	500	0	0	2550
22	Food and Drug Administration Department	150	500	500	500	500	0	0	2150
23	State excise	750	500	500	1950	8550	150	0	12400
24	Transport (RTO)	300	100	1350	1750	500	0	0	4000
25	Transport (MSRTC)	450	150	2000	2650	500	0	0	5750
26	Labor Department	550	500	6000	8600	9350	0	0	25000
27	Law and Judiciary Department	500	500	500	500	500	0	0	2500
28	Water Conservation Department	500	500	500	500	500	0	0	2500
29	Skills development and entrepreneurship	500	500	500	500	500	0	0	2500
30	Revenue Department	4050	1500	2000	82200	87350	0	0	177100
31	Women and Child Welfare Department	3850	500	11500	32600	8450	300	0	57200
32	Water supply and Sanitation	100	500	500	7750	8600	0	0	17450
33	Animal Husbandry Department	1500	850	6150	2850	10200	850	0	22400
34	Dairy Department	500	300	2050	950	3400	300	0	7500
35	Fisheries Department	500	300	2050	950	3400	300	0	7500
36	Minority welfare department	8700	8700	8700	8700	8700	8700	8700	60900
37	Finance - GST Department	500	500	8800	500	5200	0	0	15500
38	Finance - Accounts and Tresury Department	500	500	8800	500	5200	0	0	15500
39	Rural Development Department (Excluding Grampanchayat)	40400	199200	42100	764800	95800	0	0	1142300
40	Grampanchayat - 3200 Plants each GPs (RDD)	2711250	1373250	1376450	2583200	1514050	0	0	9558200
41	Housing Department	500	500	500	500	500	500	500	3500
42	Railway under Gol	1250	1250	1250	1250	1250	1250	1250	8750
43	National Highways under Gol	500	500	500	4200	56200	0	0	61900
44	Defence under Gol	500	500	500	500	500	0	0	2500
45	Gol offices In State	500	500	500	500	5700	0	0	7700
46	Textiles & Sericulture Department	0	150000	0	0	0	0	0	150000
	TOTAL	3762900	2358900	2639550	4143300	2820950	38550	136200	15900350

*NA - Not Applicable.

**UDD - Includes Municipal Councils, Nagar Panchayats, CIDCO and Various Pradhikarans Like MMRDA, PMRDA, NIT etc.

Sr. No.	Implementing Agency Name	Pune	Solapur	Satara	Sangli	Kolhapur	Pune Revenue division Total
		Target for 2019	Target for 2019	Target for 2019	Target for 2019	Target for 2019	Target for 2019
1	Agriculture Department	927650	209700	496850	784800	343750	2762750
2	Urban Development Department ** (Except Municipal Corporations)	342600	31550	20350	298300	108500	801300
3	Municipal Corporations	273200	220000	NA*	70250	10900	574350
4	PWD	345600	9250	110500	151700	161500	778550
5	Water Resources Department	136900	48650	21850	23050	35850	266300
6	Co-operation & Marketing Department	38850	1550	500	210950	125050	376900
7	Industries Department	61800	2800	55600	135550	74250	330000
8	School Education Department	104150	2600	46650	33450	102350	289200
9	Sports Department	11550	300	5200	3700	11350	32100
10	Higher Education Department	500	8925	6025	16075	19825	50850
11	Technical Education Department	500	8925	6025	16075	19825	50850
12	Home Department (Police)	22750	5600	500	13400	16650	58900
13	Home Department (Jail)	500	500	150	5900	2800	9850
14	Tribal Development Department	500	1400	500	500	500	3400
15	Social Justice and Special Assistance	500	500	500	22480	6880	29360
16	VJNT & OBC welfare Department	500	500	500	5620	1720	7340
17	Tourism Department	1200	500	500	500	1150	3850
18	Cultural Affairs Department	150	500	500	500	150	1800
19	Public Health Department	8100	11500	500	5150	5500	30750
20	Energy Department	850	500	500	400	500	2750
21	Medical education Department	500	450	500	450	500	2400
22	Food and Drug Administration Department	500	100	500	100	500	1700
23	State excise	1000	11250	500	5600	2400	20750
24	Transport (RTO)	750	500	500	2650	200	4600
25	Transport (MSRTC)	1150	500	500	3950	300	6400
26	Labor Department	500	500	500	500	1400	3400
27	Law and Judiciary Department	300	500	500	150	14050	15500
28	Water Conservation Department	500	500	500	6500	5050	13050
29	Skills development and entrepreneurship	500	500	450	500	3000	4950
30	Revenue Department	395800	500	150	23900	68850	489200
31	Women and Child Welfare Department	14800	500	1000	500	1400	18200
32	Water supply and Sanitation	1350	1700	500	500	4600	8650
33	Animal Husbandry Department	250	850	2150	8050	1200	12500
34	Dairy Department	500	500	500	2000	500	4000
35	Fisheries Department	500	500	500	2000	500	4000
36	Minority welfare department	8700	8700	8700	8700	8700	43500
37	Finance - GST Department	500	550	500	500	1000	3050
38	Finance - Accounts and Treasury Department	500	550	500	500	1000	3050
39	Rural Development Department (Excluding Grampanchayat)	410100	700900	66000	56700	51900	1285600
40	Grampanchayat - 3200 Plants each GPs (RDD)	4478200	3293850	4788700	2237500	3287450	18085700
41	Housing Department	500	500	500	500	500	2500
42	Railway under Gol	1250	1250	1250	1250	1250	6250
43	National Highways under Gol	500	4450	500	500	500	6450
44	Defence under Gol	500	500	500	500	700	2700
45	Gol offices In State	4800	300	500	500	500	6600
46	Textiles & Sericulture Department	0	835700	726150	338500	633450	2533800
	TOTAL	7602800	5432350	6376750	4501350	5140400	29053650

*NA - Not Applicable.

**UDD - Includes Municipal Councils, Nagar Panchayats, CIDCO and Various Pradhikarans Like MMRDA, PMRDA, NIT etc.

Annexure I

Prioritywise Polluted River Stretches as per CPCB Report September 2018

Priority I (9)	Priority II (6)	Priority III (14)	Priority IV (10)	Priority V (14)	
GODAVARI	BHIMA	GHOD	BINDUSAR	AMBA	
KALU	INDRAYANI	KANHAN	BORI	BHATSA	
KUNDALIKA	MULA-MUTHA	KOLAR (MAH)	CHANDRABHAGA	GOMAI	
MITHI	PAWANA	KRISHNA	DARNA	KAN	
MORNA	WAINGANGA	MOR	GIRNA	MANJEERA	
MULA	WARDHA	PATALGANGA	HIWARA	PANCHGANGA	
MUTHA		PEDHI	KOYNA	PANZARA	
NIRA		PENGANGA	PEHLAR	RANGAVALI	
VEL		PURNA	SINA	SAVITRI	
		TAPI	TITUR	SURYA	
		URMODI		TANSA	
		VENNA		ULHAS	
		WAGHUR		VAITARNA	
		WENA		VASHISTI	

Based on data of 2018 Prioritywise Polluted River Stretches as on January 2019

Priority I (4)	Priority II (4)	Priority III (8)	Priority IV (10)	Priority V (15)	Meeting to Bathing standards (3)
GODAVARI	BHIMA	INDRAYANI	DARNA	AMBA	PANCHGANGA
MITHI	KALU	KANHAN	KOLAR	BHATSA	URMODI
MORNA	KUNDALIKA	MULA	KRISHNA	BINDUSAR	VASHISTI
WAINGANGA	MUTHA	MULA-MUTHA	NIRA	CHANDRABHAGA	
		PAWANA	PANZARA	GHOD	
		PEDHI	PATALGANGA	KOYNA	
		PURNA	PENGANGA	MANZARA	
		WARDHA	RANGAVALI	PEHLAR	
			TAPI	SAVITRI	
			VEL	SURYA	
				TANSA	
				ULHAS	
				VAITARNA	
				VENNA	
				WENA	

Dry river stretches : BORI, GIRNA, GOMAI, HIWARA, KAN, MOR, SINA, TITUR, WAGHUR

Annexure II

Proactive Steps taken by the Board regarding 25% Budget Provision to be kept for the Sewage Management and Solid Wastes Management

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The Maharashtra Pollution Control Board has taken proactive action for protection of Environment under the Environment (Protection) Act, 1986 by issuing Directions u/s 33A of the Water (Prevention and Control of Pollution) Act, 1974 r/w 24, 25/26 of the Water (Prevention and Control of Pollution) act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 with Solid Wastes Management Rules vide letter dated 26.12.2014, 10.10.2016, 21.7.2016, 4.8.2017, 25.10.2018 and 23.1.2019 to the local bodies

Maharashtra state has 27 Municipal Corporations and are generating about 87% domestic sewage and remaining Local Bodies generate 13% domestic sewage. Therefore MPCB has concentrated on these 27 Municipal Corporations. The solid waste and sewage is not scientifically treated and disposed. Majority of the Local Bodies expressed financial incapability to provide waste management facilities. Hence, the Board has issued Direction u/s 33A of the Water (Prevention and Control of Pollution) Act, 1974 directing the local bodies to make 25% budgetary provision for scientific treatment and disposal of Sewage and Solid Waste.

Accordingly Municipal Corporations have passed resolution in their General Body meeting and reserved the funds. The utilisation of the said funds is reviewed from time to time. These funds are reserved and made mandatory to utilise for preparation of DPR, establishing treatment facility, O & M of treatment facility etc. The review of the same is taken from time to time by the Board. The details of Municipal Corporations is enclosed.

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25 % budgetary provision made by Municipal Corporations (in Cr)

Sr. No.	Name of Municipal corporations	Financial Year 2015-16 (Provision)	Financial Year 2015-16 (Expenditure)	Financial Year 2016-17 (Provision)	Financial Year 2016-17 (Expenditure)	Financial Year 2017-18 (Provision)	Financial Year 2017-18 (Expenditure)
1	Ulhasnagar Municipal corporation	174.31	31.5	164	40.94	39.6	26.76
2	Nagpur Municipal corporation	267.47	146.98	248.42	185.57	220.22	12.1
3	Thane Municipal Corporation	175.69	114.32	226.75	111.99	290.3	59.35
4	Mira Bhainder Municipal corporation	156.75	271.78	125.1	173.44	206.33	138.53
5	Vasi Virar Municipal Corporation	141.45	110	163.21	113.17	128.98	12.86
6	Parbhni Municipal Corporation	NIL	NIL	23.75	4.76	5	0.87
7	Pune Municipal Corporation	5600	387	1437	323	498.59	291.79
8	Amravati Municipal corporation	15	Not utilized	15	Not utilized	10	0.5
9	Akola Municipal Corpartion	3 from corporation fund	5.48 (Funds utilized from 13th finance commission)	2	Funds utilized from 14th finance commission	Not Reserved	26.16 Lakh funds utilized from 14th finance commission

10	Sangli Municipal Corporation	15	10.98	22	4.6001	40	0.79
11	Kolhapur Municipal Corporation	54.55	26.32	121	46.62	54.94	7.73
12	Solapur Municipal Corporation	1236.23	27.75	324.3	32.97	309.91	29.52
13	Latur Municipal Corporation	7.6	5.4	8.1	5.81	9.2	8.33
14	Navi Mumbai Municipal Corporation	319.14	203.61	246.65	133.91	473.58	Nil
15	Dhule Municipal Corporation	28.18	21.93	40.7	31.42	28.83	NIL
16	Jalgaoan Municipal Corporation	5	NIL	17.5	0.05	1.87	
17	Chandrapur Municipal Corporation	32lakh	6.73 Lakh	32 Lakh	16.56 Lakh	64.54 Lakh	9.32 Lakh
18	Kalyan Dombavli Municipal Corporation	27.25	8.86	49.5	23.24	50	7.24
19	Ahemednager Municipal Corporation	49.95	6.75	71.11	2.5	15	2.5
20	Bhivandi Municipal Corporation	69	26.88	151.03	30.17	95	78.98
21	Panvel Municipal Corporation	16.19	15.79	33.27	4.11	10.86	3.38
22	Pimpri Municipal Corporation	1000	9.14	297.36	101.46	169.11	152.2
23	Nanded Municipal Corporation	38	4.8	43	62.92	16.9	16.92
24	Aurangabad Municipal Corporation	84.5	26.41	76.85	14.19	50	

25	Nashik Municipal Corporation	174.75	31	136.43	136	150.66	137.53
26	Malegaoan Municipal Corporation	37.37	17.37	31.02	22.52	48.18	53.45
27	Mumbai Municipal Corporation	2970.09	1077.76	3365.17	950.78	2097.42	897

Annexure-III

A SUMMARY STATEMENT ON PROGRESS MADE BY LOCAL BODY IN RESPECT OF SOLID WASTE MANAGEMENT

In the state of Maharashtra there are total 271 local bodies , comprising of 27 Municipal Corporations, 16- ‘A’ Class Municipal Council, 54- ‘B’ Class Municipal Council, 154- ‘C’ Class Municipal Council, 14- Nagar Panchayat, 06-Cantonment Board generating about 22897.83 MT of municipal solid waste every day, of which the contribution in terms of percentage by the corporation is 84.72 %, by A class council is 4.25 %, by B class council is 5.04 % , by C Class Council is 5.07 % and by Others is 0.96 %. The overall percentage of treatment is 34.70 % i.e. 7945.544 MT/day quantity is treated and the remaining is disposed in an unscientific manner. Out of 27 Municipal corporations, 24 Corporations have obtained Authorization from MPCB for 22 Nos of approved sites having processing & disposal facilities and same are in operations. 109 Nos. of Municipal Councils having partially processing & disposal facilities.

Maharashtra Pollution Control Board has prepared a summary statement of all local bodies indicating class, populations, Quantum of Solid Waste generations, status of Authorization and Form-II submission by the local bodies. The Region wise abstract along with summery statement in the state of Maharashtra is enclosed.

The total generation of Solid Waste is **22897.83** MT/day in which terms of total waste generation in the corporation is **84.72 %**, A class council is **4.25 %**, B and C Class Council is **5.04 %** and **5.07 %** respectively and others is **0.96 %**. The Statement of Municipal Solid Waste generation in MT/day in the State is enclosed.

The present status of local bodies in the State of Maharashtra is enclosed.

MAHARASHTRA POLLUTION CONTROL BOARD

STATUS OF ULB's WITH RESPECT TO MSW RULES IN THE STATE OF MAHARASHTRA (REGIONWISE ABSTRACT)

Sr. No.	Name of Region	No. of ULBs
1	Mumbai	01
2	Navi Mumbai	02
3	Thane	06
4	Kalyan	07
5	Raigad	10
6	Kolhapur	26
7	Pune	37
8	Nashik	48
9	Amravati	32
10	Aurangabad	59
11	Nagpur	22
12	Chandrapur	21
	Total	# 271

271 Local Bodies' (251 Corporations / Councils + 6 Cantonment Boards + 14 Nagar Panchayats)

Municipal Solid Waste Generation (MT/day) in the State of Maharashtra.

Region	Corporation	“A” Class	“B” Class	“C” Class	NP/Cant./ other
Mumbai	7500.0	-	-	-	--
Navi Mumbai	750.0	-	-	11.0	--
Thane	1890.0	--	36.0	3.0	--
Kalyan	1560.0	221.0	-	--	14.5
Raigad	90.0	-	28.0	61.96	--
Kolhapur	420.0	140.0	104.0	105.25	15.5
Pune	3315.0	143.0	171.46	175.515	98.0
Nashik	1268	98.0	286.4	174.4	70.78
Amravati	420.0	30.0	164.1	115.4	--
Aurangabad	948.0	188.0	158.03	308.41	21.5
Nagpur	1100.0	112.0	92.0	70.0	--
Chandrapur	140.0	43.0	115.23	121.39	--
Total	19401.0	975.0	1155.22	1146.325	220.28

Corporation : 19,401.0 - 84.72 %
A Class : 975.00 - 04.26 %
B Class : 1,155.22 - 05.04 %
C Class : 1,146.325 - 05.00 %
Others : 220.28 - 00.96 %

Total : 22,897.83 - 100.00%

Municipal Solid Waste Treatment (MT/day) in the State of Maharashtra

Corporation : 6998.0 - 88.07 %
A Class : 187.00 - 02.35 %
B Class : 367.96 - 04.63 %
C Class : 331.124 - 04.16 %
Others : 61.46 - 00.77 %

Total : 7945.544 - 100.00%

Note : Urban Development Department, Government of Maharashtra has approved DPR Plan of 245 Local Bodies and cost of the project is Rs 2650 Crores.

Annexure IV

District-wise Bio-Medical Waste Generation

S.No.	Region	Name of the CBMWTSDF / Union Territory	Bio-Medical Waste Generation (kg/day)	Existing Total Bio-Medical Waste treatment capacity (captive and CBMWTF) (kg/day)	
				Equipmnet	Total
1	Mumbai	MCGM area	22171	Incinerator	250 kg / Hr X 4
				Autoclave	450 litr/Cycle
				Deep Burial	NA
				Any Other	NA
2	Navi-Mumbai and Raigad	Navi Mumbai, Panvel, Khalapur, Mahad, Shriwardhan, Mangaon, Poladpur, Tala and Mhasala, Alibag, Roha, Pali, Mirudjangira, Sudhagad, Karjat	1972	Incinerator	250 Kg/Hr
				Autoclave	600 litr/cycle
				Deep Burial	NA
				Any Other	NA
		Uran	45	Incinerator	NA
				Autoclave	50 litr/Cycle
				Deep Burial	22 kg/day
				Any Other	NA
3	Thane	Thane	2382	Incinerator	50 kg/hr
				Autoclave	50 litr/cycle
				Deep Burial	NA
				Any Other	NA
		Palghar	530	Incinerator	75 kg/hr
				Autoclave	50 litr/cycle
				Deep Burial	NA
				Any Other	NA
4	Kalyan	Kalyan	160	Incinerator	Treated at MWML,Taloja
				Autoclave	
				Deep Burial	NA
				Any Other	NA
6	Pune	Pune	4949	Incinerator	150 Kg/Hr.
				Autoclave	200 litr/cycle
				Deep/Burial	NA
				Any Other	NA
		PCMC	1544	Incinerator	50 Kg/hr
				Autoclave	200 litr/cycle
				Deep/Burial	NA
				Any Other	NA
		Talegaon	900	Incinerator	50 kg/hr
				Autoclave	50 litr/cycle
				Deep/Burial	NA
				Any Other	NA
		Baramati	1400	Incinerator	150 kg/hr
				Autoclave	250 litr/cycle
				Deep/Burial	NA
				Any Other	NA
		Karad	145	Incinerator	30 kg/hr
				Autoclave	50 litr/cycle
				Deep/Burial	NA
				Any Other	NA

7		Satara	1150	Incinerator	100 Kg/Hr
				Autoclave	50 liter/cycle
				Deep Burial	NA
				Any Other	NA
		Solapur	1625	Incinerator	100 Kg/Hr
				Autoclave	50 liter/cycle
	Deep Burial			NA	
	Any Other			NA	
	Nashik	Nashik	3000	Incinerator	250 Kg/Hr
				Autoclave	400 liter/cycle
				Deep Burial	NA
				Any Other	NA
Jalgaon		657	Incinerator	70 Kg/Hr	
			Autoclave	430 liter/cycle	
			Deep Burial	NA	
			Any Other	NA	
Dhule		485	Incinerator	50 Kg/hr	
			Autoclave	60 liter/cycle	
			Deep Burial	NA	
			Any Other	NA	
Nandurbar		503	Incinerator	50 Kg/Hr	
			Autoclave	60 liter/cycle	
			Deep Burial	NA	
			Any Other	NA	
Ahmednagar		1800	Incinerator	200 Kg/hr	
			Autoclave	100 liter/cycle	
	Deep Burial		NA		
	Any Other		NA		
8	Kolhapur	Sindhudurg	245	Incinerator	
				Autoclave	50 liter/cycle
				Deep Burial	244 kg/day
				Any Other	NA
		Kolhapur	1500	Incinerator	50 kg/hr
				Autoclave	50 liter/cycle
	Deep Burial			NA	
	Any Other			NA	
	Ratnagiri & Chiplun	566	Incinerator	50 kg/hr	
			Autoclave	50 liter/cycle	
			Deep Burial	NA	
			Any Other	NA	
	Sangli	973	Incinerator	50 kg/hr	
			Autoclave	50 liter/cycle	
			Deep Burial	NA	
			Any Other		
	Ichalkaranji	386	Incinerator	50 kg/hr	
			Autoclave	50 liter/cycle	
Deep Burial			NA		
Any Other					
9	Aurangabad	Aurangabad	1600	Incinerator	250 Kg/Hr
				Autoclave	400 liter/cycle
				Deep Burial	NA
				Any Other	NA
	Latur	523	Incinerator	100 kg/hr	
			Autoclave	50 liter/cycle	
			Deep Burial	NA	
			Any Other	NA	

		Jalna	1189	Incinerator	50 kg/hr
				Autoclave	50 liter/cycle
				Deep Burial	NA
				Any Other	NA
		Beed & Osmanbad	898	Incinerator	50 kg/hr
				Autoclave	50 liter/cycle
				Deep Burial	NA
				Any Other	NA
		Nanded	904	Incinerator	100 kg/hr
				Autoclave	50 liter/cycle
				Deep Burial	NA
				Any Other	NA
10	Amravati	Amravati	747	Incinerator	100 Kg/Hr
				Autoclave	50 liter/cycle
				Deep Burial	NA
				Any Other	NA
11	Nagpur	Nagpur	3660	Incinerator	100 Kg/Hr
				Autoclave	50 liter/cycle
				Deep Burial	NA
				Any Other	NA
12	Chandrapur	Chandrapur	716	Incinerator	100 Kg/Hr
				Autoclave	50 liter/cycle
				Deep Burial	NA
				Any Other	NA

Captive Incinerator & Deep Burial

13	Pune	Krishna Hospital & Medical Research Center, Karad & KIMSDU. A/P: Dhebewadi road, Malakapur, Tal.: Karad, Dist.: Satara (02164)214555-58 Fax: (02164)242127	287	Incinerator	150 Kg/Hr
				Autoclave	30 liter/cycle
				Deep Burial	NA
				Any Other	NA
14	Nashik	M/s. Shri Bhausheb Hire Govt. Medical College, Surat By Pass Road, Tal. & Dist. Dhule	133	Incinerator	50 Kg/Hr
				Autoclave	30 liter/cycle
	M/s. Jawahar Medical Foundation ACPM Medical College, Dhule	164	Incinerator	45 Kg/Hr	
			Autoclave	25 liter/cycle	
			Deep Burial	NA	
			Any Other	NA	
15	Kolhapur	Bharati Vidyapeeth Deemed University Medical College and Hospital, Sangli – Maharashtra	39	Incinerator	60 Kg/Hr
				Autoclave	30 liter/cycle
				Deep Burial	NA
				Any Other	NA
16	Aurangabad	M/s. MIMSR Medical college and Research Centre, Ambajogai Road, Latur	96	Incinerator	50 Kg/Hr
				Autoclave	12 liter/cycle
				Deep Burial	NA
				Any Other	NA
		PHC's from Nanded District	306	Deep Burial	
17	Nagpur	PHC's from Nagpur District	129	Deep Burial	
18	Amravati	PHC's from Amravati District	1392	Deep Burial	
TOTAL			61918		