

JICA Project Sanction Process

- Government of India proposal for Japanese ODA loan for the project in January 2014
- Member Consultant appointed by JICA submitted detailed proposal in September 2014
- Executive Project Committee (EPC) of MOEF & DC sanctioned the investment of JICA-assisted project under NRCP in July 2015
- Administrative Approval & Executive sanction for the project of investment cost of INR 999.32 Crores by MoEF, Govt. of India in January 2016 and loan Agreement was signed between Govt. of India
- In fulfillment of MoU-05 Crs released by MOEF/DC, Govt. in February 2016

Break-up of Sanctioned Cost of Project Under NRCP

Project Components	Cost (Rs. Cr.)	Funding Pattern
Collection Network (Main Sewers) (112.89 Km)	179.50	Government of India - 60.04% (51.20%) Maharashtra Government - 43.14% (37.04%) Pune Municipal Corporation - 15.92% (13.72%)
Sewage Treatment Plants (280 MLD, 11 Phase), augmentation existing Plant (280 MLD) & Centralized SCADA	371.30	
Construction of Community toilets (24 Nos)	5.91	
GIS (IMS)	13.00	
Public Awareness & Capacity Building Activities	8.40	
Land Acquisition, Project Management Costs and Taxes	171.48	
Total	699.59	

Steps in Implementation

- Project Implementation Period - Year 2016 to 2018
- Project to be implemented in 12 packages as follows
 - Package 1 - Collection Network in River & Kolwad area
 - Package 2 & 3 - Main Sewers
 - Package 4 to 6 - 11 STPs, Augmentation of 4 intermittent pumping stations & allied works
 - Package 7 - Central SCADA system
 - Package 8 - Construction of Community Toilets
 - Package 9 & 10 - GIS/IMS & Public Awareness & Capacity Building Activities
- Detailed Work in Project Implementation List (PIL) is issued for timely completion of the project



Impacting beyond just Pune city

100% Sewage treatment of Pune city is our **mission** to revitalize naturally Mula & Mutha river ecosystem but don't let people carry Riverine sewage down to the

Our **vision** is to build a resilient & green city to improve the water quality, environment and reduce river bank siltation downstream, will get clean water, helping millions of citizens in the water-scarce region.

We are committed to make Pune Clean and healthy city



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SMART

Sewerage Management Achieving River ecosystem Transformation



Pollution Abatement of River Mula-Mutha at Pune under

Ministry of Environment, Forest & Climate Change
National River Conservation Plan (NRCP)

Government of India and Government of Maharashtra
Financial assistance from Japan International Cooperation Agency (JICA)

Implemented by
PUNE MUNICIPAL CORPORATION

Background

The water pollution of Mula-Mutha River has been a major concern of the Pune city in recent years. The river with a total length of 80 km, flows through Pune city. Total area of the city is 242.82 Sq.Km, and population of the city is 49.49 lakhs (2011) or about 3.08 crore. The pollution is primarily caused by the PMCO's sewage being discharged into the river without treatment. River Mula & Mutha are also included in the list of polluted river systems (RCS) (Crack & Seep) according to Dept. of Environment, Govt. of Maharashtra.

Existing Sewerage Facilities

Pravara Plant Capacity	- 330 MLD
The generated sewage volume in present	- 720 MLD
Existing Treatment Capacity	- 471 (50.16%)
2017 PMCO sanctioned Plant Capacity	- 250 MLD
Unsanctioned Sewerage treatment in River	- 330 (35.7%)
Total Coverage of Collection Network	- 721 (76.86%)

Existing Recycle and Reuse of Treated Waste Water

Pune Municipal Corporation (PMC) has successfully completed the challenging project of Treatment and Reuse of Treated Waste Water in October 2014. This is in line with the agreement with the Government of Maharashtra to give back 6-30 mgd treated water against supply of 11.30 TMC water. This has done for opening treated waste water in existing right hand side canal of Sakinaka-Mula area. With this project, 6.50 TMC treated waste water is available for reuse in drinking and agricultural purposes. Under this project, following infrastructure is installed:

- Waterpump Well at Sakinaka of River-Mula-Mutha
- intake and discharge with 8 FT pipes, Capacity of water Pump - 60 MGD
- Waterpump of 2700 cfm (44.14) (Total-Cum-MB pipe Length - 2300 ft)

The Government of India (GoI) decided to provide desalination facilities for the water available in the 12th Five Year Plan. The plan policy emphasizes on the reuse of treated sewage and construction of new sewage facilities by taking into account the availability of water supply facilities and the limited water resource available.

Pune Municipal Corporation has decided for sewage treatment infrastructure which is not adequate for treatment of sewage generated in present and for proposed sewage for year 2027. For 100% treatment of sewage generated, Pune Municipal Corporation proposed the Detailed Project Report (DPR) of Pollution Abatement of River Mula-Mutha at Pune and submitted to Ministry of Environment, Forest & Climate Change (MOEF/DC), Govt. of Maharashtra under NRCP.



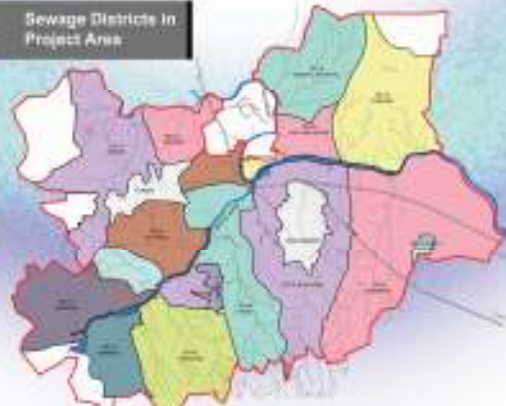
Clean Pune Healthy Pune!

Pune Municipal Corporation has been working & planning towards making our city environment friendly & healthy in every possible way. Sewerage treatment plants are one of the most important aspects of this exercise. This is an effort to introduce you about this project and its planning.

About Project Area

The project area of sewerage improvement includes entire area of Pune Municipal Corporation and equally affecting 33 large villages. The entire project area is divided into 17 Sewerage Districts (SDs) based on the topography, existing main network and locations of the sewerage treatment plants.

Sewerage Districts in Project Area



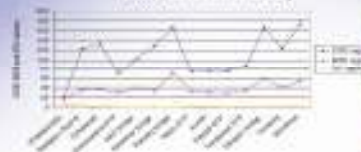
Population Density In Pune City



Population Density Challenge

As per the census 2011 population of Pune is 4,95,000 in 9,24 Sq.Km. Population density is high in the central part of the city which is already developed. Lower density is in surrounding part of the city & in fringe areas. With new developments, future population growth is expected from all developed part of the city and fringe villages.

River Pollution Trend in City



Effluent Discharged Standards for Sewage Treatment

Parameter	Standard for new STPs
pH	6.5-8.5
BOD (mg/l)	10
COD (mg/l)	150
TSS (mg/l)	100
NH ₄ -N (mg/l)	15
N Total (mg/l)	15
Total Chloride (mg/l)	1000

Projected Population and Sewerage Generation

Year	Projected population	Projected Sewerage Generation	Additional treatment capacity required
2027	57.40 lakhs	875 MLD	388 MLD
2032	71.80 lakhs	1074 MLD	282 MLD
2047	85.82 lakhs	1317 MLD	243 MLD

Existing and new locations of STPs



Bopodi - 18 MLD

Botanical Garden PS
Botanical Garden - 18 MLD

Baver - 30 MLD
Baver - 25 MLD

Tanjawadi - 17 MLD
Tanjawadi - 15 MLD

Topkhana PS

Erandwane - 50 MLD

Wajje - 28 MLD

Wadgaon - 28 MLD

Vithalwadi - 32 MLD

New Kaseba PS
Old Kaseba PS

- Existing STPs
- New STPs adjacent to Existing
- New STP locations

Dharoti - 33 MLD

Mental Hospital PS

Kharadi - 40 MLD
Kharadi - 35 MLD

Mundhwa - 45 MLD
Mundhwa - 35 MLD

Mulgaon-Bel Kanhe - 7 MLD

Kalyanmaji PS

Shanoba 130 MLD
Shanoba - 75 MLD

Naidu - 115 MLD
Naidu - 127 MLD

