

STATUS OF RIVER RESTORATION PROJECTS IN CHENNAI

Restoration of Chennai's major waterways is a top priority for the Government of Tamil Nadu and to this end, river restoration plans of both Cooum and Adyar rivers have been drawn up and are currently under implementation by various line departments such as Chennai Metropolitan Water Supply & Sewerage Board (CMWSSB), Greater Chennai Corporation, Public Works Department (PWD), Commissionerate of Municipal Administration, Directorate of Town Panchayats and Department of Rural Development and Tamil Nadu Slum Clearance Board. Chennai Rivers Restoration Trust is entrusted with coordinating and monitoring the projects. The progress of restoration of the waterways as on 30.06.2021 is detailed below:

INTEGRATED COOUM RIVER ECO-RESTORATION PROJECT

Work on the sub-projects has been initiated by the concerned line departments and are under various stages of progress as detailed below:

1. Public Works Department (PWD):

PWD has been entrusted with the implementation of 9 sub-projects viz., desilting the river to enhance free flow of water during monsoon and, formation of baby canal to maintain minimum ecological flow during the non-monsoon season.

- In the CRZ stretch i.e. from Ch. 700 m to 9677 m and in northern arm desilting has been fully completed. In the non CRZ-stretch from Ch. 9677 m to 27336 m, desilting and formation of Baby canal has been fully completed.
- Within the CRZ stretch i.e., from Cooum river mouth to Napier bridge (Ch.0 m - 700 m), for the continuous opening of river mouth and desilting of the river, Administrative Sanction for Rs.70.00 Crores has been accorded vide G.O (Ms) No.76, Municipal Administration & Water Supply (MC-I) Department, dated 31.07.2020. For this work, CRZ Clearance has to be obtained by PWD. Consultant has been identified and work order was given on 28.10.2020. Preparation of REIA report and Physical model studies by IHH Poondi is under preparation. The report is expected to be completed by 31.08.2021.

2. Greater Chennai Corporation (GCC):

GCC has been entrusted with the implementation of 3 sub-projects. The work components consist of fencing for a length of 23.92 km on both the sides of the river, removal of 81,364 MT of construction and demolition waste and 23,527 MT of Municipal Solid waste alongside

the river and installation of booms at 8 locations to collect the floating waste in the river. The status of the work progress is as follows:

i. Removal of Solid Waste:

The removal of accumulated Solid waste from the banks of the Cooum River has been fully completed.

ii. Installation of Booms:

Trash boom systems have been deployed across the river at 8 locations viz., near C-in-C bridge, Periyar bridge, Choolaimedu, Metha Nagar, near Central Buckingham Canal, behind Madras Medical College, Quaid-e-Millath bridge and near Napier Bridge.

iii. Fencing:

Under this project, fencing work has been fully completed for a length of 13.75 km out of a total length of 23.92 km and work is under progress in the remaining stretches.

3. Chennai Metropolitan Water Supply & Sewerage Board (CMWSSB):

CMWSSB has been entrusted with the implementation of 15 sub-projects. The work components consists of 10 Interception & Diversion systems along the river and 3 Modular Sewage Treatment Plants (STPs) at Chetpet, College Road and Maduravoyal, one 10 MLD sewage treatment plant at Langs Garden and 1 Under Ground Sewerage Scheme (UGSS) at Nerkundram. Work on the 14 sub-projects is in progress as detailed below:

i. Interceptor and Diversion pipelines:

- Package I (Chintadripet) - 100% works completed.
- Package II (Chetpet) – 100% of works have been completed. The outfalls will be plugged after commissioning of the STP.
- Package III (Nungambakkam) – 100% of works have been completed. The outfalls will be plugged after commissioning of the STP.
- Package IV (Metha Nagar) – 84% of work completed. Work is under progress and the scheduled date of completion is 30.09.2021
- Package V (Anna Nagar) – 100% works have been completed and the systems have been commissioned.

- Package VI (Langs Garden Road) - 77% of work completed. Work is under progress and the scheduled date of completion is 30.09.2021.
- Package VII (South Cooum River Road) – 71% of work has been completed. Work is under progress and the scheduled date of completion is 30.09.2021.
- Package VIII (Aminjikai) – 100% of works have been completed.
- Package IX (NSK Nagar) – Shelved due to encroachments existing along the alignment.
- Package X (Anna Nagar) – 100% works have been completed and the systems have been commissioned.

ii. Modular STPs

- For Modular STP (1.0 MLD) near College Road, Chetpet, Civil works are under progress and so far, 92.1% of work has been completed and the scheduled date of completion is 15.06.2021.
- For Modular STP (1.2 MLD) at Nungambakkam, Civil works are under progress and so far, 65% of work has been completed and the scheduled date of completion is 30.06.2021.
- For Modular STP (0.6 MLD) at Maduravoyal – Work site finalized in February, 2020 and Civil works are under progress and so far, 14% of work has been completed and the scheduled date of completion is 18.12.2021.
- For the 10 MLD STP (TTUF) at Langs Garden - Civil works are under progress and so far, 30.7% of work has been completed and the scheduled date of completion is 16.05.2022.

iii. Under Ground Sewerage System (UGSS):

- For UGSS Nerkundram, Pipe laying and construction of Sewage Pumping Station works are in progress. 32% of work has been completed and the remaining works are under progress, is scheduled to be completed by 23.06.2022.

4. Commissionerate of Municipal Administration (CMA):

CMA has been entrusted with the implementation of 2 sub-projects. The work components consist of removal of 1648 MT of solid waste along the river side in Thiruverkadu Municipality and fencing for a length of 6.7 km.

- Accumulated solid waste along the banks of the river has been fully removed within Thiruverkadu Municipality limits.
- In Phase I, fencing has been fully completed for a length of 1.65 km and the work has been fully completed.
- In Phase II, fencing has been fully completed for a length of 1.74 km and the work has been fully completed.
- In Phase III, fencing has been fully completed for a length of 3.31 km and the work has been fully completed

5. Department of Rural Development (DRD):

DRD has been entrusted with the implementation of 6 sub-projects. The work components consist of removal of 4582 cubic metre of solid waste alongside the river, fencing for a length of 1.92 km in 3 village panchayats (Seneerkuppam, Adayalampattu and Vanagaram) and plantation at Vanagaram.

- The accumulated solid waste has been fully removed from the banks of the Cooum river within the DRD areas viz., Senneerkuppam, Adayalampattu and Vanagaram Village Panchayats.
- Fencing works have been fully completed in all 3 Village Panchayats viz., Vanagaram, Adayalampattu & Senneerkuppam.

6. Tamil Nadu Slum Clearance Board (TNSCB)

- Tamil Nadu Slum Clearance Board (TNSCB) has been entrusted with the Resettlement & Rehabilitation (R&R) of 14257 identified Project Affected Families (PAFs) and 458 commercial establishments. So far, TNSCB has allotted 12302 tenements. To resettle the remaining 1955 PAFs, 985 tenements are ready for allotment now, another 540 tenements will be ready by August, 2021 and remaining 430 tenements will be ready by September, 2021.

7. Chennai Rivers Restoration Trust (CRRT):

CRRT is entrusted with plantation of mangroves, mangrove associates and terrestrial plants alongside the river.

- Regarding the Plantation along the banks of the Cooum River for a length of 60 km (both the banks), agreement was executed on 30.09.2020. Thus far 24,973 nos of plants has been planted and the work is expected to be completed by August 2022.
- Under Community Education Programme, Regular Community Sensitization Programmes for NGC & Eco-Clubs of Schools, NSS & Enviro Clubs of Colleges, ULBs, PRIs, NGOs, CBOs, RWAs & CSOs have been conducted by CRRT and thus far 6837 stakeholders covered.

ADYAR RIVER RESTORATION PROJECT FROM ORIGIN TO MOUTH

Work on various sub-projects of the Adyar River Restoration Project were initiated by all the line departments in 2018 and are under various stages of progress.

1. Public Works Department (PWD)

PWD has been entrusted with the implementation of 7 sub-projects - desilting and widening the river for 16.18 km; construction of flood protection walls for 1.556 km and river mouth opening and its maintenance. The work progress is detailed below:

- For the package 1, i.e., from River mouth to Thiru. Vi. Ka Bridge, PWD has to get CRZ Clearance. The proposal was placed in the 257th EAC meeting held on 05.03.2021, MoEF&CC. The proposal has been deferred and requested to come back after completing the study undertaken by NIOT for sustainable river mouth opening (Package 7).
- For package 2, i.e., from Thiru. Vi. Ka. bridge to Kotturpuram bridge, desilting is fully completed for a length of 2353 m.
- For package 3, i.e., from Kotturpuram bridge to Saidapet road bridge, desilting is fully completed for a length of 2892 m.
- For package 4, i.e., from Saidapet road bridge to Jafferkhanpet road bridge, flood protection wall for a length of 650 m and desilting for a length of 2498 m are fully completed.
- For package 5, i.e., from Jafferkhanpet Road bridge to Manapakkam Check dam, desilting is fully completed for a length of 3334 m and flood protection wall for a length of 500 m is also fully completed.

- For package 6, i.e., from Thiruneermalai to Outer Ring Road, desilting is fully completed for a length of 3000 m and flood protection wall for a length of 406 m is also fully completed.
- For package 7 (maintenance of river mouth for 4 consecutive years), NIOT has taken up the multi-seasonal study and have requested a period of 12 months for submission of the report and the report is expected to be completed by November 2021. The application to CRZ will be submitted after the study has been completed.

2. Greater Chennai Corporation (GCC)

GCC has been entrusted with the implementation of 19 sub-projects. The work components consist of boat jetties at 2 locations, fencing for a length of 24.67 km on both the sides of the river, solid waste removal alongside the river, levelling and compacting the solid waste at dumpsite, booms to collect the floating waste in the river, beautification of bridges and plantations alongside the river course.

- Under this project, out of a total 24.67 km, fencing work has been fully completed for 9.84 km and for remaining length works are in progress. The expected date of completion is December, 2021.
- Under Solid waste removal works, so far, 8891 MT out of a total 50664 MT of debris and 3505 MT out of a total 16826 MT of garbage have been cleared from the banks of the Adyar River. Right now PWD has completed widening, desilting, levelling and formation of bund, hence in these stretches, there is no scope for debris and garbage removal at present.
- For the trash boom systems which are to be installed at 3 suitable locations across the Adyar River, viz., Kotturpuram Bridge, Maraimalai Adigalar Bridge & Jafferkhanpet Causeway. One location in Jafferkhanpet Causeway has been completed and in other two locations work is under progress.
- Regarding the work on beautification of bridges, work has been completed on all the three bridges being maintained by GCC (South Buckingham Canal Bridge near Kotturpuram Railway Station, Thiru. Vi. Ka Bridge and Alandur Bridge) and on one bridge being maintained by State Highways Department i.e., Maraimalai Adigalar Bridge (Saidapet Bridge). All the bridge beautification works have been fully completed.
- For the Park near Kotturpuram, 15% of work has been completed and the balance work is expected to be completed by 31.10.2021.

3. Chennai Metropolitan Water Supply & Sewerage Board (CMWSSB)

CMWSSB has been entrusted with Interception and Diversion pipelines & Modular STPs and the status of works is as follows:

i. Interceptor and Diversion Pipelines:

- Package I- Adyar & Kotturpuram – 37% works has been completed so far and the scheduled date of completion is 31.12.2021.
- Package III - Nandanam Extension, Turn Bulls Road & Radhakrishnapuram Slum - 50% works has been completed so far and the scheduled date of completion is 30.09.2021.
- Package IV – Mambalam Canal - 33% works has been completed so far. Work is in progress and the scheduled date of completion is 30.09.2021.
- Package V - Guindy & Ekkattuthangal - 80% works has been completed thus far and the scheduled date of completion is 30.09.2021.
- Package VI – Samiyar Thottam, Jafferkhanpet & MGR Drain – 59% works has been completed so far and the scheduled date of completion is 19.12.2021.

ii. Modular STP:

- Package VIII – 11% works has been completed so far and the scheduled date of completion is 09.06.2022.
- Package X - 32% works has been completed so far and the scheduled date of completion is 30.04.2022.
- Package - XI - Alternative proposal has been finalised and tender under evaluation.
- Package – XV – DPR has been revised as per current SoR and the tender has been floated on 17.02.2021 by fixing the due date as 24.03.2021. Now the tender is under evaluation.

4. Commissionerate of Municipal Administration (CMA)

CMA has been entrusted with the implementation of sub-projects viz., solid waste removal alongside the river; fencing for a length of 3.54 km; community toilet at 1 location and plantation alongside the river.

- Under solid waste removal, 522 MT of garbage has been removed and the work is fully completed.

- The construction of community toilet in Anakaputhur Municipality has been fully completed and opened to public.
- In Anakaputhur Municipality, under Phase 1, out of a total length of 1.52 km, fencing fully completed for a length of 0.3 km and work is in progress for a length of 0.335 km. Fencing could not be taken up for a length 0.885 km due to formation of bund in Patta land. The ongoing work is expected to be completed by July, 2021.
- Under Phase II for a length of 1.72 km, fencing will be taken up after the removal of encroachments (4 slums – 676 PAFs).
- In Pammal Municipality, out of a total length of 0.3 km, PWD has constructed flood protection wall for the entire length of 0.3 km and hence fencing is not required.
- Regarding UGSS for Anakaputhur and Pammal Municipalities, LoA has been issued on 25.02.2021 and Preliminary work is under progress. The expected date of completion is May 2023.
- The vegetation planting works with CMA limits will be taken up under the scope of CRRT.

5. Directorate of Town Panchayats (DTP)

DTP has been entrusted with solid waste removal alongside the river, fencing for a length of around 13.719 km, and plantation alongside the river.

- In Kundrathur Town Panchayat, under phase I, fencing work has been completed fully for a length of 1.20 km. Under phase II, for a length of 1.39 km, AE, PWD has informed that, Adyar river widening work is proposed in this particular river stretch as per the instruction of District Collector Kancheepuram. Hence the Tender process is stopped now.
- In Perungalathur Town Panchayat, out of a total length of 7508 m, fencing has been fully completed for a length of 2211 m and work is in progress at various stages of completion for a length of 2921 m. Fencing could not be taken up for a length 1000 m due to encroachments and for 120 m due to the confluence point of Pappan Channel. These works are expected to be completed by August, 2021.
- In Thiruneermalai Town Panchayat, out of a total length of 3621 m, fencing has been completed fully for a length of 626 m and work is in progress at various stages of completion for a length of 1756 m. Fencing is not required for a length of 500 m as PWD has constructed a flood protection wall and hence the 500 m stretch shall

be dropped. For a length of 200 m, Bridge work is being carried out by Highways department and fencing in this stretch will be taken up after completion of bridge work by Highways department. These works are expected to be completed by August, 2021.

- For solid waste removal, 6290 cu.m of legacy waste has been removed out of 8600 cu.m through bio-mining. The work is expected to be completed by July, 2021.
- The vegetation planting works with DTP limits will be taken up under the scope of CRRT.

6. Directorate of Rural Development and Panchayat Raj (DRD)

DRD has been entrusted with the implementation of 4 sub-projects - solid waste removal alongside the river; fencing for a length of 35.1 km, community toilet and plantation along the river bank.

- Under solid waste removal, 8275 MT of accumulated solid waste along the river banks has been fully removed.
- In Kancheepuram District, fencing work is proposed for a length of 21.019 km. Out of this, fencing is fully completed for a length of 7.09 km and work is in various stages of completion for a length of 11.224 km. Scheduled date of completion is October, 2021. For the additional proposal in Kundrathur block for a length of 2.923 km, tender opened on 10.02.2021 and it is under evaluation after lifting off Model Code of Conduct which was in force due to elections for Legislative Assembly.
- In Chengalpattu District, fencing work is proposed for a length of 11.07 km. Out of this, fencing is fully completed for a length of 2.26 km and work is in various stages of completion for a length of 8.34 km. Scheduled date of completion is October, 2021. For the additional proposal of 630 m fencing work in St. Thomas Mount block, work order has been issued and preliminary work is in progress.
- For Community toilet, the proposal has been dropped as the Pozhichalur village is adjoining the Chennai city, toilet facilities were provided in all the households and the area has been declared Open Defecation Free.
- The vegetation planting works with DRD limits will be taken up under the scope of CRRT.

7. Tamil Nadu Slum Clearance Board (TNSCB):

- Out of a total 9539 Project Affected Families (PAFs) identified on the banks of the Adyar River, so far, 4462 PAFs have been resettled and remaining 5077 PAFs have to be resettled. In order to resettle the remaining PAFs, 80 allotment orders have been issued out of which 64 PAFs have been relocated in February, 2021. 250 tenements will be ready by August, 2021 (Moolakothalam & Vyasarpadi - TT Block), 770 tenements will be ready by September, 2021 (Kargil Nagar), 200 tenements will be ready by October, 2021 (Gowthamapuram), another 1324 tenements will be completed by December, 2021 and remaining 2517 tenements will be ready by June, 2022.

Way Forward

Restoration of Buckingham Canal & its associated drains and waterways that drains into Cooum & Adyar Rivers

The Member Secretary, CRRT informed that CRRT has submitted the proposal for the Restoration of Buckingham Canal & its Drains and Cooum & Adyar Drains for Rs.1370.84 crs to the Government for seeking Administrative Sanction. In G.O (D) No.419, MA&WS (MC1) Department, dated: 03.12.2020, Orders have been issued accordingly for Administrative Sanction to the tune of Rs.1281.88 crs.

Mitigation of Sewage Outfalls in Adyar & Cooum Drains and Buckingham Canal and its Drains

The Government has accorded Administrative Sanction for a total project cost of Rs.2371 crore for sanitation projects in Buckingham Canal and its drains, Cooum Drains and Adyar Drains. Under Phase-I, sanction was accorded for Rs.1001 crore vide G.O. (Ms) No.107, MA&WS (MW1) Department, dated: 20.08.2019.

The Managing Director, CMWSSB informed that, out of Rs.1001 crore, Notice Inviting Tender (NIT) has been called for 52 works. Work order has been issued for 34 works and NIT will be issued in phases for the remaining works.

Date: 02.07.2021



Project Officer

Chennai Rivers Restoration Trust

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