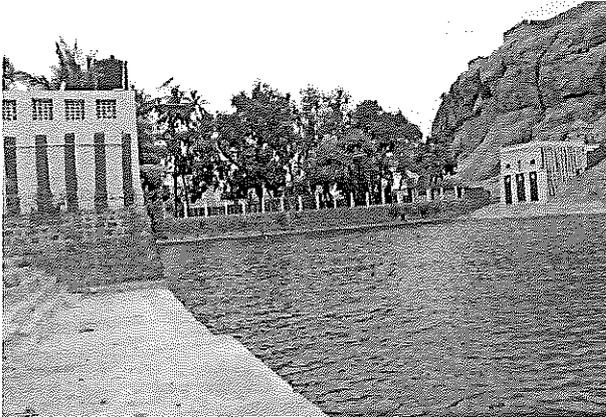
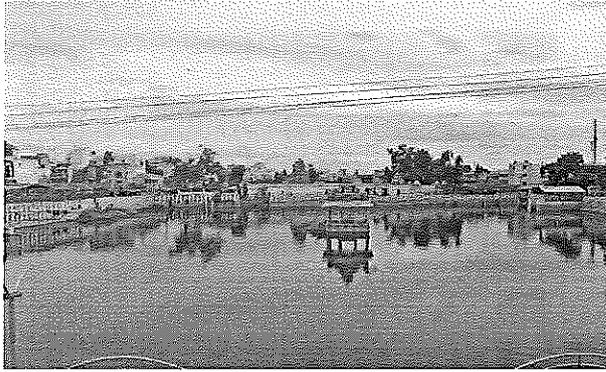


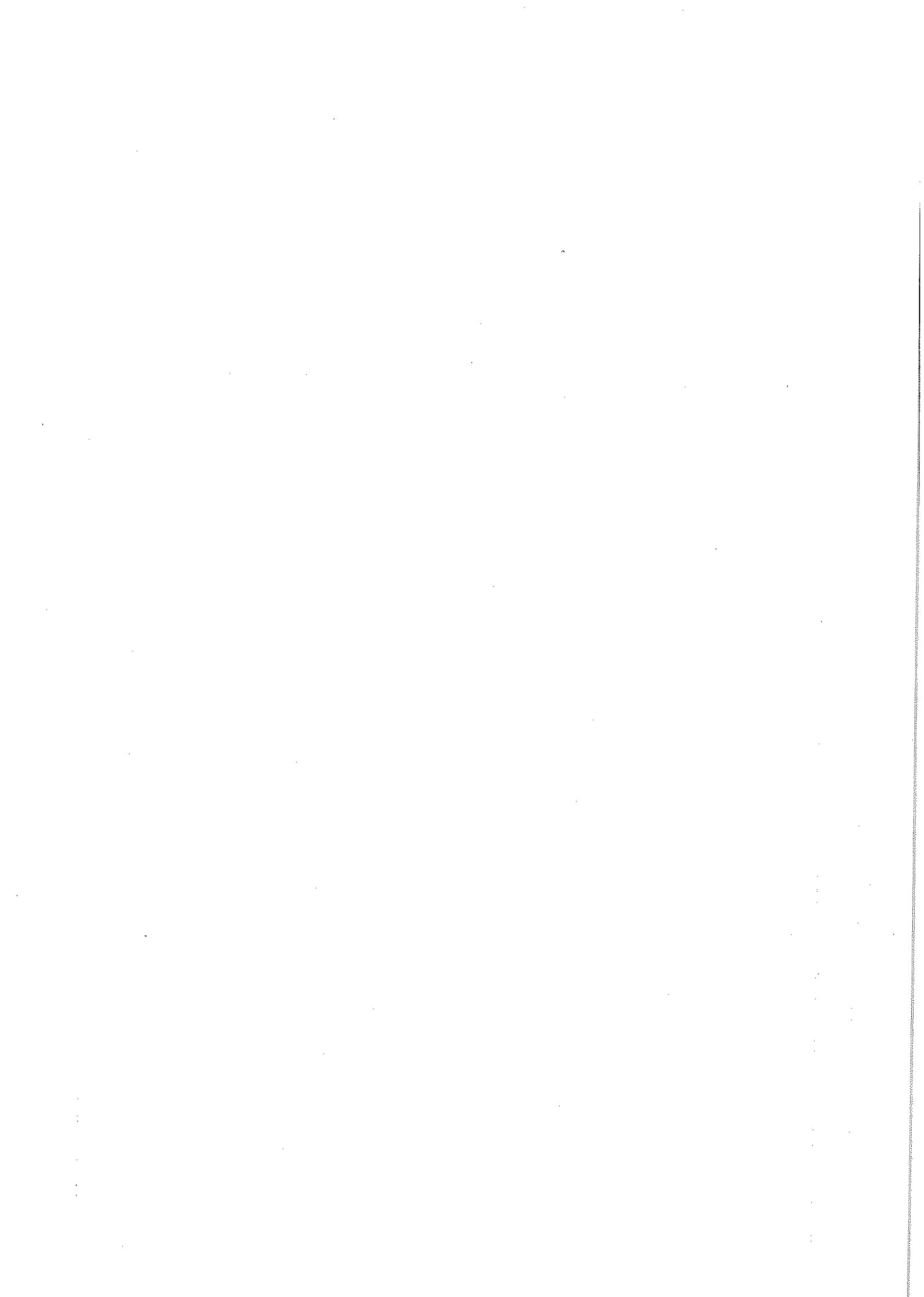


Government of Tamil Nadu



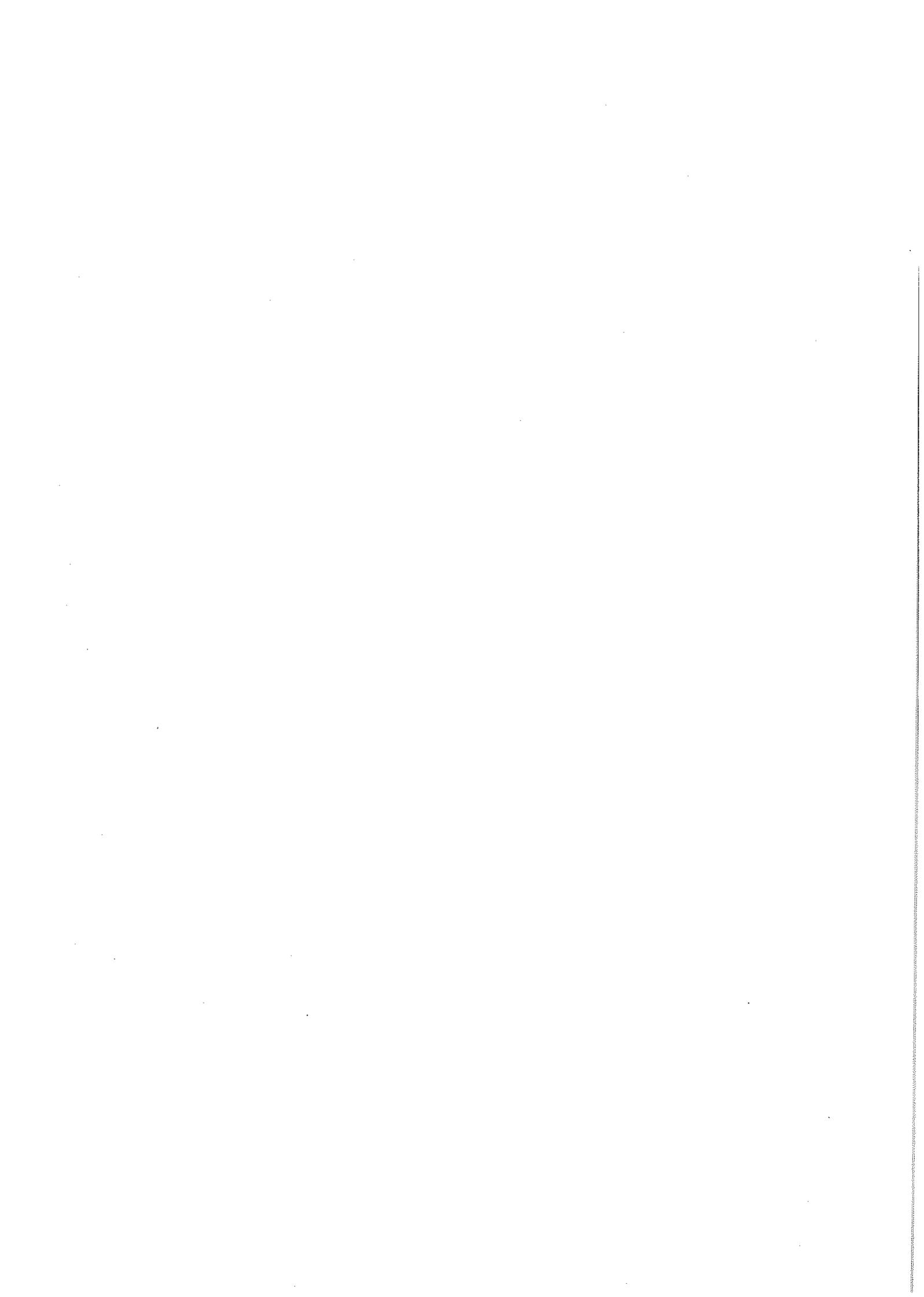
Action Plan on Restoration of Water Bodies

(Prepared as per the direction of NGT in M.P.26/2019 of O.A 325/2015 dated 10.05.2019)



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Action Plan on Restoration of Water Bodies

1. Preamble

Tamil Nadu is the most urbanized State in India with 48.5% of its population living in urban areas. The projected percentage of the urban population for Tamil Nadu for the year 2030 has been estimated at 67% which will be the highest in the country. Even with such rapid urbanization, the State is at the forefront in providing urban amenities to its citizens. In order to sustain this status, attention needs to be focused in providing water supply to the present generation and to preserve the water source to the future generation.

In this scenario, there can be no dispute that the water bodies play significant role in recharge of ground water, prevention of soil erosion and harvesting rain water. Most of the gains registered by the State were due to their restoration of surface water bodies, watershed development activities and rural water supply provision.

Lakes and ponds are an intrinsic part of the eco system. A lake or pond is the Water Body which holds certain volume of water generally in all seasons of the year. Lakes and ponds have traditionally served the function of meeting water requirements of the people for drinking, household uses like washing, for agriculture, fishing and also for religious and cultural purposes. Apart from these functions, which involve direct use of the lake water, lakes, ponds are also known to recharge groundwater, channelize water flow to prevent water logging and flooding. Lakes are also host to a wide variety of flora and fauna. Urban Water Bodies are a very important feature in the landscape. They are vital in easing out the hydrological severe conditions like drought and floods; they influence the micro-climate as well as enhance the aesthetic beauty of the landscape and offer various recreational opportunities. The Water Bodies in urban areas provide a

diversity of values and uses ranging from ecological goods and services to direct production values. These are essentially relevant social benefits. Therefore, the need to initiate efforts to restore, conserve, manage and maintain the lakes and ponds as an inseparable part of the whole ecosystem cannot be undermined.

2. Overview on Water Resources in Tamil Nadu

Tamil Nadu constitutes 4 percent of India's land area and is inhabited by 6 percent of India's population, but has only 2.5 percent of India's water resources. The demand for water in Tamil Nadu is increasing at a fast rate both due to increasing population and also due to larger per capita needs triggered by economic growth. The per capita availability of water resources however, is just 900 cubic meters when compared to the national average of 2,200 cubic meters. Agriculture is the largest consumer of water in the State using 75 per cent of the State's water resources.

The State is heavily dependent on monsoon rains. The annual average rainfall is around 930 mm (47 percent during the north east monsoon, 35 percent during the south west monsoon, 14 percent in the summer and 4 percent in the winter).

There are 17 major river basins in the State with 61 reservoirs and about 41,948 tanks. The utilizable groundwater recharge is 22,423 MCM. The current level of utilisation expressed as net ground water draft of 13,558 MCM is about 60 per cent of the available recharge, while 8875 MCM (40 per cent) is the balance available for use.

2.1 Rain Water Harvesting Scheme

Tamil Nadu stands as a pioneer State in strictly implementing the Rain Water Harvesting Scheme. Due to the successful implementation of the scheme during the years 2001-2006, the ground water table had considerably increased in all corporation and Municipal areas.

To begin with, the implementation of the scheme was initiated as per G.O.138, MA&WS Department dated 11.2.2002. Further, to implement the scheme in an effective manner, a legal perspective was added vide Tami Nadu Government Law 4/2003 and it was notified in Government gazette dated 19.7.2003 as Part IV- section 2.

Intensive and widespread public awareness campaigns through rallies, dramas and advertisements are organised for people to emphasize and ensure that all the buildings are compulsorily provided with Rain water harvesting structures. Provisions have also been made to disconnect water supply connection to the buildings without Rain water harvesting structures.

For the new buildings that are under construction, planning permission is given only to those buildings which have made provisions of Rain water harvesting structure and this is being enforced strictly. Also, caution deposit amount is collected to ensure the provision of Rain water harvesting structures in new buildings.

As per rule 63 of the Tamil Nadu Combined Development and Common Building Rules 2019 published vide G.O. (Ms) No.18, MA&WS Department, dated 06.02.2019, provisions have been made to ensure that Rain water harvesting structures are provided in all the buildings. Besides this, illustrations for developing the Rain water harvesting infrastructures have been enclosed as Annexure-XXII in the Tamil Nadu Combined Development and Common Building Rules, 2019.

Of the total number of 46.10 lakh buildings existing in 14 Corporations (excluding GCC) and 121 Municipalities, RWH structure has been provided in 39.40 lakh buildings (39.10 Private buildings and 30331 Government Buildings). All possible efforts are being taken to implement water harvesting techniques in all the water bodies. Under **Jal Shakti Abhiyan** by the Government of India major thrust is being given to creation and

maintenance of Rain Water Harvesting structures before the onset of North East Monsoon.

3. Summary of Action Taken in the past five years, to preserve the water bodies

As a progressive State, the Government of Tamil Nadu takes effort to rejuvenate the water bodies periodically as well as amend the required acts in time to time. Total available 90,048 Numbers of water bodies are being maintained by the Public works Department(PWD), Rural Development and Panchayat Raj Department (RD&PR), Hindu Religious and Charitable Endowment Department (HR & CE), Municipal Administration Department (CMA), Greater Chennai Corporation (GCC) and Directorate of Town Panchayats (DTP).The details are as below :

Owners	No. of water bodies available	No. of water bodies Rejuvenated in the past five years	No. of water bodies which are under Rejuvenation at present
Greater Chennai Corporation	210	22	84
Municipal Administration Department (CMA)	585	237	38
Directorate of Town Panchayats (DTP)	2186	586	1
Public Works department(PWD)	14341	2713	1674
Rural Development Department (RDD)	70367	1200	-
Hindu Religious and Charitable Endowment department (HR & CE)	2,359	849	9
Total	90,048	5607	1806

The actions taken by various Departments to restore, rejuvenate and maintain on sustainable manner are highlighted.

3.1 Greater Chennai Corporation

Greater Chennai Corporation has identified 210 water bodies in jurisdiction which are under its own control. Out of these, restoration of 22 water bodies have been completed at an amount of Rs.11.91 crore. The restoration work carried out, includes widening of the tank and deepening of the tank, bund formation, inlet and outlet arrangements, walkway.

The Restoration and Rejuvenation of 63 water bodies are being carried out under Chennai smart city fund and the works are in progress. During execution of the work the illegal sewer connection let into the tank are plugged and the works are in progress. Restoration of Villivakkam tank is being carried out in 25 acres. The storage capacity of the tank will increased five times.

Further restoration of 21 water bodies have been tied up with various corporate companies and welfare organizations at an amount of Rs.4.07 crore through the CSR funds. So far totally 4061 families have been identified as encroachers. Action is being taken for resettlement and rehabilitation of these families enumeration and biometric survey of these families is in progress. Further funds have been tied up for restoration of 53 water bodies under CMCDM scheme at an estimated amount of Rs.109.54 crore. The Commissioner of Greater Chennai Corporation has conducted a meeting with major companies on 30.07.2019 for fund tie up for restoration of balance 51 ponds, with this all 210 ponds will get restored maximum over a period of 9 months.

3.2 Chennai Rivers Restoration Trust

Chennai Rivers Restoration Trust has undertaken both wetland and water body restoration projects in the following manners.

3.2.1 Ecological Restoration of Adyar Creek

A pioneering urban wetland conservation initiative was taken up by the Government of Tamil Nadu in the degraded 358 acres of Adyar Creek and Estuary. The Ecological restoration activities in Phase-I were undertaken in the 58 acres of Adyar Creek, which was once a place for disposal of sewage, municipal solid waste and construction debris and which had completely led to the severe degradation of surface and ground water quality and destruction of habitats of avian, fauna, reptiles and fishes. The major restoration activities undertaken are: (i) increasing the water spread and tidal interaction area; (ii) plantation of native plants such as Tropical Dry Evergreen Forest species, mangroves and its associates, reeds, etc., (iii) landscaping for interactive environmental programmes.

Adyar Eco-Park is now functioning as a Centre for Environmental Education and Research. Students from various schools and colleges across the city regularly attend the environmental awareness programmes which impart knowledge on the coastal wetland ecosystem.

In continuation of the Ecological restoration of Adyar Creek in 58 acres, an extent of 300 acres of Adyar creek, estuary, islets, mudflats and surrounding areas was taken up for restoration under Phase-II. This creek and estuary area was infested with exotic species like *Prosopis juliflora*, with indiscriminate disposal of sewage, solid waste and debris, all of which had contributed to the severe degradation of the estuarine ecosystem and which subsequently resulted in the shrinking of the water spread area, reduced tidal interaction and degradation of biodiversity.

Bund stabilization, removal of debris and plastics and other restoration activities enhanced the tidal interaction and increased the water spread in the degraded Creek and Estuary. Around 57000 mangroves and 35000 terrestrial saplings have been planted. All this has increased the bio-diversity of the Adyar Creek and Estuary ecosystem.

3.2.2 Integrated Cooum River Eco-Restoration project

The Government of Tamil Nadu had granted Administrative Sanction of Rs.604.77 crore for implementation of the activities in the first phase of restoration of the Cooum River and works commenced in September 2015.

All the line departments have commenced the execution of the sub-projects entrusted with them, viz., De-silting and river widening by Public Works Department; Solid waste removal, fencing, boom deployment and developing parks by the Greater Chennai Corporation; Removal of solid waste and fencing along the banks by Commissionerate of Municipal Administration, Directorate of Town Panchayats and Directorate of Rural Development and Panchayat Raj in their respective area, Laying of interceptor pipelines & installing modular sewage treatment plants by Chennai Metropolitan Water Supply and Sewerage Board, Resettlement & Rehabilitation of Project Affected Families (PAFs) by the Tamil Nadu Slum Clearance Board are under various stages of progress and the status of the progress as on 11.07.2019 is detailed below:

Under the sub project entrusted to Public Works Department (PWD) desilting of Cooum River has been completed thus far for a length of 22.27 km out of the total 29.5 km and the formation of Baby Canal has been completed for 14.54 km out of 17.66 km. De-silting and widening works are under progress in the remaining stretches.

Under the sub project entrusted to Greater Chennai Corporation under this project, de-silting of Cooum River has been completed thus far for a length under this project, fencing work has been fully completed for a length of 8 km and work is under progress for another 1.45 km out of a total length of 23.92 km. 76,430 MT of debris have been removed so far, out of a total quantity of 86,477 MT. Further 16,824 MT of garbage have been cleared from the banks of the Cooum River out of a total 18,144 MT. Trash Boom Systems have been deployed across the river at 8 locations viz., near C-in-C

bridge, Periyar bridge, Choolaimedu, Mehta Nagar, near Central Buckingham Canal, behind Madras Medical College, Quaid-e-Millath bridge and near Napier Bridge and thus far, a total quantity of 29500 MT of floating waste has been removed from these trash booms.

Under this sub project 12 Interception & Diversion (I&D) works and 3 Modular STP works have been entrusted to Chennai Metropolitan Water Supply & Sewerage Board (CMWSSB) and all these works are in progress.

Out of a total identified 14257 Project Affected Families (PAFs) within the river boundary and 458 commercial establishments under Auto Nagar Scheme, 8166 Project affected families have thus far been resettled through Tamil Nadu Slum Clearance Board (TNSCB) Commercial establishments encroached upon the Cooum River under Auto Nagar Scheme have been fully evicted.

Within CMA limits, out of a total length of 10.78 km, thus far fencing work has been fully completed for a length of 2.66 km through Commissionerate of Municipal Administration (CMA) and work is under progress for the remaining length of 8.12 km. A total quantity of 1648 MT of accumulated solid waste along the banks of the river has been fully removed within Thiruverkadu Municipality.

4582 cu.m of the accumulated solid waste has been fully removed from the banks of the Cooum River within the DRDA area and 1.52 km of length fencing work has been completed out of 3.30 km through the DRD.

CRRT is entrusted with the plantation of mangroves, mangrove associates and terrestrial plants along the river. The plantation work will be commenced after the completion of desilting and stabilization of bunds by PWD and in certain stretches, after laying of Interception & Diversion (I&D) works by CMWSSB.

3.2.3 Adyar River Restoration Project from origin to mouth

The Government has accorded Administrative Sanction of Rs.555.46 crore for the implementation of Adyar River Restoration from origin to the river mouth and works commenced in 2018.

All the line departments have commenced the execution of the subprojects entrusted with them, viz., Desilting and river widening by Public Works Department; Solid waste removal, fencing, boom deployment, developing parks, community toilets and beautification of bridges by the Greater Chennai Corporation; Removal of solid waste and fencing along the banks by Commissionerate of Municipal Administration, Directorate of Town Panchayats and Directorate of Rural Development and Panchayat Raj in their respective areas, Laying of interceptor pipelines & installing modular sewage treatment plants by Chennai Metropolitan Water Supply and Sewerage Board, Resettlement & Rehabilitation of Project Affected Families (PAFs) by the Tamil Nadu Slum Clearance Board.

3.3 Municipal Administration Department

There are 14 Corporations (except Chennai Corporation) and 121 Municipalities being administered with 585 municipal owned water bodies in the various districts of the State. There are 1746 water bodies located within the Municipal/ corporations limit and are being maintained by the concerned Departments. Of the 585 numbers of Municipal owned water bodies, 237 water bodies have been restored by the concerned urban local bodies at an estimated cost of Rs. 56 crore with restoration activities such as De-silting, De-weeding and strengthening of bunds etc., to receive the water during rainy season and to preserve it for recharging the ground water storage as Rain Water Harvesting Structures. Under Smart City funds, 8 lakes in Coimbatore Corporation have been taken for rejuvenation at an estimated cost of Rs.320 crore and the works are in progress. In this connection about 12500 encroachments have been identified of which 10000 encroachments

have been cleared and their families have been rehabilitated in the 14 slum clearance housing colonies. Further in Thanjavur Corporation two ponds have been taken for restoration at an estimated cost of Rs. 10.25 crore under Smart City fund and the works are in progress.

Under the Kfw fund 42 water bodies have been taken up for rejuvenation in 5 urban local bodies at the cost of Rs.38 crore and the works are in progress.

Under Tamil Nadu Sustainable Urban Development Programme 2 water bodies in Pallavaram Municipality has been taken for rejuvenation at an estimated cost of Rs. 14.98 crore and the works are in progress.

3.4 Directorate of Town Panchayats

There are 528 Town panchayats being administered with 3881 water bodies in various districts of the State. Of which 2186 numbers of water bodies are Town panchayats. In the 2186 water bodies, about 586 water bodies have been restored by the concerned urban local bodies at an estimated cost of Rs. 29.96 crore in the last five years. These water bodies are restored with basic restoration activities such as De-silting, De-weeding and strengthening of bunds etc., to receive the water during rainy season and to preserve it for recharging the ground water storage as Rain Water Harvesting Structures.

3.5 Rural Development Department

The Rural Development department is having 21609 numbers of Minor irrigation tank and 48758 numbers of water bodies in various districts of the State. Of the 70367 numbers of water bodies 1200 water bodies have been restored at an estimated cost of Rs.300 crore under Tamil Nadu Village Habitations Improvement (THAI)-II Scheme in the year 2016-2017.

Further the Rural Development Department has planned to restore/renovate 5,000 Micro Irrigation tanks and 25,000 ponds/Ooranies under State funds to the tune of Rs.500 crore, in convergence with

MGNREGS wherein de-silting and deepening of the water bodies and strengthening of bunds will be done by engaging machineries and the reconstruction of appurtenances like Inlets, outlets, sluices, surplus weirs etc., will be done under MGNREGS, to the tune of Rs.750 crore. Hence, totally Rs.1250 crore is allocated for this restoration/renovation activity. The remaining water bodies will be restored in a phased manner in 3 years.

The Rural Development Department has also initiated Detailed Field Survey to assess the condition of the MI tanks and Ponds/Ooranies in conjunction with the revenue records and to assess the nature and extent of encroachment for necessary eviction.

3.6 Public Works Department

The Public works department is having 14341 numbers of irrigation tanks in various districts of the State. Out Of 14341 numbers of water bodies, 2713 water bodies have been restored at an estimated cost of Rs. 774.50 crore under various schemes such as Repair, Renovation and restoration (RRR), Tamil Nadu Irrigation Agriculture Modernization Project (TNIAMP) Phase I, Kudimaramath, De-silting of water bodies for city water supply, De-silting of reservoirs, De-silting by NGO, traditional water bodies and National Bank For Agriculture & Rural Development (NABARD) aided schemes and for 1674 tanks , restoration works are under progress. Encroachment in water bodies so far evicted in 2703 numbers with a total extent of 221.478 hectare.

Further the Public works Department planned to restore/renovate 906 tanks at an estimated cost of Rs. 649.55 crore under TNIAMP (phase II) and 99 tanks at an estimated cost of Rs. 85.16 crore under RRR.

3.6.1 "Nadanthai vaazhi Cauvery"

The Honorable Chief Minister has announced the scheme "Nadanthai Vaazhi Cauvery" on the floor of Legislative Assembly on 20.07.2019. This will be Massive Rejuvenation programme for River Cauvery and its Tributaries. This scheme is similar to Ganga Rejuvenation Project. This scheme was announced to rejuvenate the Rivers Cauvery, Bhavani, Noyyal, Amaravathy, Sarabangha and Thirumanimuthar. This Project will focus to prevent the entry of sewage flow by providing Sewerage Treatment Plants, River-Front Development and also include River Surface Cleaning, Afforestation, Bio-Diversity Conservation, Environmental and Pollution Monitoring, Resettlement and Public Awareness. Necessary Detailed Project Report will be put up by March 2020.

3.7 Hindu Religious and Charitable Endowment Department

Temple tanks have been an integral part of ancient Tamil settlements. There are 2,359 tanks maintained by the temples under the control of the HR&CE Department. The temple tanks are being protected by clearing the encroachments in and around the temple tanks, constructing compound wall, de-silting the tanks, relaying the steps of the tanks and by providing facility for the inflow of rainwater and overflow channels for surplus water.

Out of these 2,359 tanks, 1068 tanks were identified for renovation while remaining 1,291 tanks are in good conditions. During the past 8 years this department has repaired, renovated and rejuvenated 849 temple tanks at a cost of Rs.4.69 crore. The Encroachment on temple tanks dumping of garbage and debris, illegal settlement on temple tanks bunds, blockage of inflow of water, mixing of sewage water are some of the several hurdles that need to be overcome while taking up restoration and renovation of temple tanks.

3.8 Rejuvenation of polluted river stretches

Tamil Nadu has identified Six River stretches namely Sarabangha, Thirumanimutharu, Vasista, Cauvery Bhavani & Thamirabarani based on the level of BOD-Priority I to V has been fixed.

As per the Hon'ble NGT (PB) directions to prepare action plans to bring all the polluted river stretches to be fit at least for bathing purposes . River Rejuvenation Committee (RRC) was constituted in Tamil Nadu vide G.O.(D) No.372, E&F (EC1) Department, dated 26.12.2018 comprising with the members Industries Commissioner, Commissioner of Municipal Administration and the Director of Environment and Member Secretary, Tamil Nadu Pollution Control Board.

The revised action plans for the four polluted river stretches in priority-I (River Sarabangha, Vasista, Thirumanimutharu & Cauvery) were prepared including gap analysis and submitted to CPCB, Delhi on 18.04.2019 after the approval of the River Rejuvenation Committee (RRC) and the same was recommended with conditions by the CPCB Task Team in the 5th review meeting held on 24.04.2019. Also, the revised action plans for the two polluted river stretches in priority-IV & V (River Bhavani & Thamirabarani) were also prepared and submitted to CPCB, Delhi on 29.05.2019 before the Hon'ble NGT (PB).The same is under consideration of CPCB, Delhi.

4. Comprehensive Action Plan on Restoration of Water Bodies

The Government of Tamil Nadu is taking continuous effort to protect the water bodies to sustain the ground water resource to fulfill the water requirement of present generation and future generation. The Honorable National Green Tribunal, Delhi also emphasis the need of restoration of water bodies in view of the depletion of ground water sources in all over India and directed all the States and UTs to submit Action Plan on Restoration of Water Bodies (vide NGT Order dated 10.05.2019 in M.A.No. 26/2019 in OA.No. 325 of 2015) to CPCB within the period of three month.

In compliance to the NGT order the Central Pollution Control Board published the indicative Guidelines for Restoration of Water Bodies in June 2019.

The Government of Tamil Nadu has already taken initiatives to conduct survey to map all the minor irrigation tanks with the support of Government of India and the survey for mapping is expected to be completed before February 2020. It is planned to use the survey results for mapping the minor irrigation water bodies, and planned to designate the best use of water bodies by conducting water sample test and by conducting the reconnaissance survey to overcome the influence of Sewage disposal, Industrial effluent disposal, Solid Waste, Plastic Waste and Construction Debris disposal. Accordingly a comprehensive Action Plan is proposed for the effective and earlier completion of Restoration of Water bodies in Tamil Nadu.

5. Abstract of the Indicative Guidelines for Restoration of Water Bodies – Framed by the Central Pollution Control Board

The Central Pollution Control Board has framed indicative guidelines for restoration of water bodies to ensure compliance of the order of NGT and with the following objectives,

- (i) to make pollution free water bodies and to meet the desired water quality criteria;
- (ii) to preserve excess water during monsoon,
- (iii) to restore and augment storage capacities of water bodies
- (iv) to serve and enhance ground water recharge;
- (v) increased availability of water for different intended purposes etc.,

The major activities involved in restoration are envisaged under five prominent phases, namely;

I. Recognition Phase

The activities involved are;

- Collection and maintenance of historical information relating to the water bodies.
- Collection of geographical details of the water body.
- Collection of Hydrological details of the water body.
- Catchment Description of the water body.
- Digital mapping of all the collected information.

II. Restoration Phase / Gap Analysis Phase:

- Identification of "Designated use of the Water body" through assessment of the water quality.
- Identification of sources of pollution, quantification and assessing detailed gap analysis (Sewage Management, Industrial effluent Management, Waste Management).
- Identification of any other associated issues which require attention.

III. Protection Phase / Planning and DPR Preparation Phase:

- Preparation of action plans for waste management.
- De-siltation.
- De-weeding.
- Mechanical and biological control measures.
- Prohibition of discharges or waste disposal or washing activity and action against violators.
- Stabilization of earthen bunds and the drainage channels along with silt and soil erosion control measures.
- Protection of drainage basin.
- Removal of encroachments and blockages.
- Flood control measures.

IV. Improvement Phase/ Planning and DPR Phase:

- Adoption of in-situ techniques for in-situ remediation.
- Drainage Basin Management.
- Creation of Green or buffer zone.
- Creation of Biodiversity environment.

- Monitoring the implementation of action plans.

Tendering and Implementation Phase:

- Phasing out the numbers of water bodies identified for Rejuvenation as per the indicative guidelines provided by CPCB and implementing the same on field following the TTE Act

V. Sustenance Phase/ Monitoring and Evaluation Phase:

- Creation of awareness among citizen's groups, resident welfare associations, local organizations, activist groups, green organizations, political organizations, educational organizations and Government agencies.
- Organizing periodic trainings through identified and reputed institutions.
- Promoting Public participation.
- Dissemination of information.
- Creation of Recreational centres.

6. TIME FRAME / ACTION PLAN

Based on the above guidelines, the Government of Tamil Nadu has formulated an Action Plan with specific time frame for the Restoration of all Water Bodies as detailed below:

S.No.	Key Activities and Components	Proposed Time Frame for Implementation and Completion of activities (Start and End Date)
<i>Recognition Phase</i>		
1.	Collection of Historical, Geographical and geological data for all the Water Bodies	01.08.2019 – 20.02.2020
2.	Collection of catchment and lead channel pollution data, sewage disposal contamination data, industrial effluent disposal data, solid waste, plastic waste, e-waste, hazardous waste and C & D waste disposal data for all the Water Bodies	

S.No.	Key Activities and Components	Proposed Time Frame for Implementation and Completion of activities (Start and End Date)
3.	Digital mapping of all collected information	01.10.2019 – 31.03.2020
Gap Analysis Phase		
1.	Declaring the Designated Best use of water bodies and ascertain the quality of water as per the standard	01.09.2019 – 30.09.2020
2.	Reconnaissance survey to identify the source of pollution and prepare long term preventive measures through Detailed Gap Analysis on Sewage Management, Industrial Effluent Management and Solid waste Management and other associated issues and in-situ facility availability for minimizing the pollution level	01.04.2020 – 30.09.2020
Planning and DPR Preparation Phase		
1.	Preparation of action plan for sewage management, industrial effluent management and solid waste management and other associated issues, dewatering, desilting, protection of drainage basin, channels, stabilization of earthen bunds and preparing cost estimation	01.10.2020 – 31.03.2021
2.	Removal of encroachments and blockades, deciding on flood control measures and preparing cost estimation Also a parallel activity from the beginning	01.04.2021 – 30.06.2021
3	Fund Tieup for the implementation	Parallel activity from the beginning
Implementation of Action Plan Phase		
1.	Tendering and Implementation	01.07.2021 – 30.06.2022

S.No.	Key Activities and Components	Proposed Time Frame for Implementation and Completion of activities (Start and End Date)
Sustenance Phase		
1.	Good Governance, transparency and empowerment of stakeholders, deciding ownership of each water body, creating awareness and training programme for conservation, promoting public participation	After 30.06.2022, Will be carried out periodically
2.	Health impact assessment reports, treatment services to public infected in the catchment due to pollution of water body	

7. Conclusion

Considering the number of water bodies and also considering the fact that the Government has already initiated certain actions, the activities envisaged in the guidelines will be taken up concurrently wherever required and broadly covering the objectives in the guidelines. Further a Technical Advisory Committee will be formed to prepare action plan to protect water bodies on case to case basis so as to facilitate fund tie up and to have effective implementation to sustain the environment adhering the time line framed.

(sd/xxxxxx)
CHIEF SECRETARY TO GOVERNMENT

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