

# CITY WATER BALANCE PLAN

## Basic Details

### ULB Information



City  
KOCHI



District

ERNAKULAM



State

KERALA



Existing AMRUT City

Yes

	Name	Designation	Landline No.	Mobile No.	E-mail ID
<b>Nodal Officer</b>	Ms Smitha P J	Executive Engineer	4842369011	8606019999	tenderce@gmail.com
<b>Mayor.Pre</b>	M AnilKumar	NA	4842369007	9846118975	cochinmayor@gmail.com
<b>Municipal.C/C.Ofc</b>	Babu Abdul Khadir	NA	4842369007	9446483404	kochicorpsecretary@gmail.com
<b>Head,W.S/S.De</b>	Rajesh S	NA	4842364685	9400067878	projectdivisionkochi@gmail.com
<b>HOD/P.H.de</b>	Wilson C J	NA	04842369007	9446476775	kmhealthwing@gmail.com

### Parastatal Agency

Any parastatal agency engaged? : **Yes**

No. Of Parastatal Agency : **1**

#	Organization name	Nodal officer name	Designation	Landline no.	Mobile no.	E-mail ID
1	Kerala Water Authority	Sajeev Ratnakaran	Superintending Engineer	4842364685	9496044422	phcircle.kochi@gmail.com

### City profile as per FY 2021-22

City population(Census 2011)	602046	Households (Census 2011)	148653	City area (sq. km.)	94.88
Wards in city	74	Slum settlements (No.)	101	Industries (No.)	2900
Industrial clusters	00	Population survey conducted in the last five years ?	No	Survey year	NA
Survey city population	NA	City population in 2021	722455	Households in 2021(no.)	178384
Population density	7614	Slum population in 2021	72587	Slum households 2021	17923





### Future Projection

City population in 2025	780251	Households in 2025	192655	Slum households in 2025	19357
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**Engineering College/ Organization/ Experts Working in Water Sector in the ULB**

#	Type	Entity name	Nodal officer name	Landline no.	Mobile no.	E-mail ID
1	Engineering College	Cochin University of Science and Technology	Dr K S Beena	4842556187	4842550952	beenavg@gmail.com
2	Engineering College	SCMS Water Institute	Sunny Joseph	4842439033	7034780079	swi@scmsgroup.org
3	Engineering College	Mar Athanasius College	Dr Elson	4852822512	9656283263	ma@macollege.in

**Uploaded Images**

#	Type	Name	Uploaded image(s)
1	Sewage Treatment Plant/ Water Treatment Plant	Water treatment plant Maradu and Aluva and Elamkulam STP	
2	Women Self Help Group	NHG	
3	Park	Jawahar Nagar Park and St Johns park	
4	Water Body	Thevara Perandoor Canal	

## Water Supply

### Major Water Sources Details

#	Type	Name / Location	No. of water tapping points	Quantity of water tapped in MLD	Location outside	Distance in km.
1	River	Periyar River Aluva	3	158	Yes	20
2	River	Muvattupuzha RiverPazhoor	1	42	Yes	30

### Water Treatment Plants (WTP)

#	Location of WTP	Designed capacity in MLD	Operational capacity in MLD	Water supply source	Technology used for automatic monitoring
1	Aluva	158	158	Periyar River Aluva	Other(Mechanical)
2	Maradu	42	42	Muvattupuzha RiverPazhoor	Other(Mechanical)

### Water Connections

#	Water connections type	No. of tap connections provided	No. of households	Water supplied in MLD
1	Residential / Households	137617	137617	100
2	Commercial Establishments	27969	NA	26
3	Industries	278	NA	4
4	Slums	0		0

### Present Water Supply to Residential/Households incl. Slums

Piped water supply in MLD	100	Water supply directly through tankers in MLD	2.60	Water supply through tubewell & borewell in MLD	00
Treated water supply in MLD	0	Total water supply in MLD	102.6	Average per capita water supply in LPCD	179.421

### Estimated Future Water Demand in 2025 (in MLD)




Residential/ Households including slums	173	Commercial establishments	25	Industries	20
Institutional establishments	20	Slums	10.88	Total	238
Are you going to met the 100% future demand through subsurface water source?	Yes	How much future demand in MLD will be met through subsurface water source?	NA		

## WB Rejuvenation & RWH

### Rainwater Harvesting (RWH)

Is rainwater harvesting included in bylaws?	Yes	Status	Implemented	No. of water tanks at religious places in your city	40
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### Water Source Quality Assessment

#	Type	Name	Area	Photograph	Site latitude & longitude	Water quality assessment	Has the source rejuvenated
1	Water Body	Thevara Perandoor Canal	0.178		9.944402 - 76.2941	Bad	No
2	Water Body	Pashnithodu	0.05		9.913582 - 76.285079	Bad	No
3	Water Body	Karanakodam	0.028		9.984829 - 76.302285	Bad	No

## Used Water

### Sewerage Coverage

Household connected to sewer network					
No. of households covered	1758	Sewage generated in MLD	82.08	Sewage treated through STP in MLD	3.25

Household not connected to sewer network					
No. of households covered	00	Sewage generated in MLD	00	Sewage treated through STP in MLD	00

### Septage Coverage

No. of households covered	87600	Sewage generated in MLD	82.08	Sludge treated through FSSM in KLD	200	Grey water recycled in MLD	00
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### Sewage Treatment Plants (STP)

#	Location of STP	Designed capacity in MLD	Operational capacity in MLD	Reused capacity in MLD	Reuse purpose	Revenue from reused water	Automatic monitoring?	Technology used
1	Elamkulam	5	3.25	0.05	Others(Nil)		No	NA

## City Water Balance Plan Summary

Current Infrastructure assets/supply FY21-22 (A)		Projected consumption/demand FY25-26 (B)		Estimated gap FY25-26 (C)= (B)-(A)	
<b>Water Supply</b>					
Water supplied to households	102.6	Water demand	238	Gap in water supply	135.4
Water treatment capacity	200	Water to be treated	238	Gap in water treatment	38
Households with tap connections in slums	0	Total slum households	19357	Gap in household tap connections	19357
Households covered with Tap connections (City)	137617	Total households including slums	192655	Gap in households tap connections including slums	55038
<b>Used Water</b>					
Used water being treated	3.25	Used water generation	138.4	Gap in used water treatment	135.15
Used water being recycled	0.05	Used water to be recycled (20%)	27.68	Gap in used water recycling	27.63
Sewer connections provided (including coverage with septage management)	89358	Total households	192655	Gap in household sewer connections/ coverage with septage management	103297