

GOVERNMENT OF ANDHRA PRADESH
MUNICIPAL ADMINISTRATION & URBAN DEVELOPMENT (K) DEPARTMENT

Letter No.1282446/K(A2)/2020

Dated: 24.04.2023

From
The Deputy Secretary to Government,
MA&UD Department,
AP Secretariat, Velagapudi

To
The Secretary,
Ministry of Jal Sakti,
MoHUA., Government of India,
New Delhi.(w.e.)

Sir,

Sub:-MA & UD Department - National Green Tribunal – Orders of the National Green Tribunal Principal Bench, New Delhi in OA No.673/2018 - Monthly Progress Report for the month of March, 2023 - Furnished – Regarding.

Ref:-Orders of the National Green Tribunal Principal Bench, New Delhi in OA No.673/2018, dated.24.09.2020.

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In compliance to the directions of the Hon'ble National Green Tribunal Principal Bench, New Delhi in the reference cited, I herewith enclose the Monthly Progress Report in the prescribed format for the month of March, 2023 for taking further necessary action.

Yours faithfully,



For Deputy Secretary to Government

Copy to:

The Commissioner & Director of Municipal Administration, Mangalagiri

National Mission for Clean Ganga
Format for submission of Monthly Progress Report for Month of March 2023 in the
NGT Matter OA No. 673 of 2018(in compliance to NGT order dated
24.09.2020)

For the State of Andhra Pradesh

Overall status of the State:

I. Total Urban Population :@1.5 Crore

II. Estimated Sewage Generation (MLD) : 1503.20 MLD

III. Details of Sewage Treatment Plants:

- Existing STPs and Treatment Capacity (15 ULBs) : 610.95 MLD (48Nos)
- Present Gap in Treatment Capacity in MLD : 892.25
- Quantity of Sewerage Treated : 498.90 MLD
- Capacity of under construction STP's (32 ULBs) :426.17.MLD (57 Nos)
- Quantity of Reuse of Treated water : 119.90 MLD
- No of STPs Under Construction at APTIDCO Houses : 117.05 MLD (129 Nos)
(0.20 to 3.70 MLD)
- Gap after completion of above STPs : 348.33 MLD
- STPs Proposed Under SBM 2.0
(below 1 lakh population) : 569.08 MLD (66ULBs&
107 STPs)
- STPs Proposed Under AMRUT 2.0 : 353.27MLD (27 ULBs)
For Rs. 1687.16Crs. Submitted to Government of India.

III (A) Details of each existing STP in the State:

Sl. No	City / Town	Location of STP	Date of Commissioning	Existing STP Capacity (in MLD)	Utilization capacity (in MLD)	Operational Status of STP	Compliance Status of STP
1	GVMC	Old town	05/2019	38.00	38.00	Operational	Complied
2		Appughar	09/2010	25.00	25.00	Operational	Complied
3		Mudasarlova	04/2008	13.00	13.00	Operational	Complied
4		Narava	08/2001	54.00	54.00	Operational	Complied
5		Anakapalle	04/2018	15.00	15.00	Operational	Complied
6		Madinabagh	2018	2.00	2.00	Operational	Complied
7		Yathapalem Colonies	04/2008	2.50	2.50	Operational	Complied
8		Srinagar	04/2008	0.50	0.50	Operational	Complied
9		Karnavanipalem	12/2019	5.00	0.0	Operational	Complied
10		Mantripalem	04/ 2008	1.00	1.00	Operational	Complied
11		Aganampudi	12/2015	6.00	6.00	Operational	Complied
12		RathiCheruvu	09/ 2019	2.00	2.00	Operational	Complied
13		Kommadi / Madhurawada	08/2018	4.00	4.00	Operational	Complied
14		Bakkannapalem	08/ 2011	1.00	1.00	Operational	Complied
15		Marikavalasa	12/ 2012	2.00	2.00	Operational	Complied
16		Vambay Colony	08/ 2011	3.00	3.00	Operational	Complied
17		YSR Nagar	08/ 2011	2.00	2.00	Operational	Complied
18		Boyapalem	08/ 2011	1.00	1.00	Operational	Complied
19		Narava	10/2022	54.00	15.00	Operational	Complied
			Sub Total	231.00	187.00		

Sl. No	City / Town	Location of STP	Date of Commissioning	Existing STP Capacity (in MLD)	Utilization capacity (in MLD)	Operational Status of STP	Compliance Status of STP
20	Rajamahendravaram	Hukumpeta	01/2009	30.00	30.00	Operational	Complied
21	Vijayawada	Ajith Singh Nagar-1	05/2011	40.00	40.00	Operational	Complied
22		Ajith Singh Nagar-2	05/2012	20.00	20.00	Operational	Complied
23		Ramalingeswar Nagar-1	06/2012	20.00	20.00	Operational	Complied
24		Ramalingeswar Nagar-2	10/2006	10.00	10.00	Operational	Complied
25		Autonagar -1	03/2005	10.00	10.00	Operational	Complied
26		Autonagar -2	12/2018	10.00	10.00	Operational	Complied
27		Jakkampudi	07/2017	20.00	20.00	Operational	Complied
			Sub Total	130.00	130.00		
28	Tirupathi	Thukivakam	09/2018	50.00	33.00	Operational	Complied
29	Kadapa	Nanapally	08/2012	20.00	10.00	Under Rehabilitation	-
30	Pulivendula	Rotarypuram	10/2022	10.00	4.00	Operational	Complied
31	Tadipatri	Gannevaripalle	10/2010	3.50	3.50	Operational	Complied
32			10/2010	8.00	8.00	Operational	Complied
			Sub Total	11.50	11.50		
33	Puttaparthi	1.Sai Nagar	07/2001	0.50	0.50	Operational	Complied
34		2. Gokulam	07/2001	0.50	0.20	Operational	Complied
35		3. Prasanthi Gram	07/2001	0.50	0.0	Under Rehabilitation	-
			Sub Total	1.50	0.70		
36	Narsaraopeta	CPT Road	02/2018	15.55	9.50	Operational	Complied
37	Nellore	Janardhan Reddy Colony	-	5.00	5.00	Operational	Complied
38		Allepuram	-	55.00	55.00		
39		Drivers Colony	-	11.00	0.00	Operational	Complied
			Sub Total	71.00	60.00		
40	Kurnool	Jammichettu	03/2019	0.80	0.80	Operational	Complied

41		SankalBagh	03/2019	0.80	0.80	Operational	Complied
42		Tungabhadra PumpHouse	03/2018	0.80	0.80	Operational	Complied
			Sub Total	2.40	2.40		
43		Mahanadu-1	12/2018	0.20	0.20	Operational	Complied
44	Tadepalli	Mahanadu-2	12/2018	0.20	0.20	Operational	Complied
				0.40	0.40		
45		Security Colony	12/2021	0.80	0.40	Operational	Complied
46	Kondapalli	Security Colony	01/2023	2.00	0.00	Under Trail Run	-
				2.80	0.40		
47	Yemmiganuru	Soganur Road	06/2022	19.80	5.00	Operational	Complied
48	Ongole	Koppolu	10/2022	15.00	15.00	Under Trail Run	-
	15	Grand Total		610.95	498.90		

III (B) Details of Under Construction STPs in the State:

S. No.	Location	Scheme Name	No. of STP	Capacity of the plant (in MLD)	Physical Progress in %	Completion Timeline	Status
1	Kakinada	AMRUT	1	5.00	72%	Aug -2023	In Progress
2	Srikakulam	AMRUT	1	10.00	45%	-	Proposals submitted to the Govt for re tenders
3	Vizianagaram	AMRUT	1	5.00	54%	-	Proposals submitted to the Govt for re tenders
4	Rajamahendravaram	AMRUT	1	5.00	65%	Aug - 2023	In Progress
5	Eluru	AMRUT	1	5.00	99%	May- 2023	In Progress
6	Bhimavaram	AMRUT	1	5.00	76%	Aug - 2023	In Progress
7	Tadepalligudem	AMRUT	1	5.00	10%	Dec - 2023	In Progress
8	Machilipatnam	AMRUT	1	5.00	48%	-	Proposals submitted to the Govt for retenders
9	Gudivada	AMRUT	1	5.00	75%	Aug - 2023	In Progress
10	Vijayawada	JNNUR M	1	20.00	92%	Aug - 2023	In Progress
11	Tenali	AMRUT	1	10.00	82%	Aug - 2023	In Progress

		14 FC	1	2.00	30%	-	Work stopped due to court case
12	Chilakaluripeta	AMRUT	1	5.00	30%	Dec -2023	In Progress
13	Kavali	AMRUT	1	15.00	93%	June -2023	In Progress
14	Nellore	HUDCO	1	20.00	85%	-	In Progress
			1	14.00	0%		The site issue resolved, work Grounded
15	Tirupati	Smart City	1	25.00	72%	Aug - 2023	In Progress
16	Srikalahasti	AMRUT	1	7.00	46%	Dec2023	In Progress
17	Madanapalle	AMRUT	1	5.00	22%	March 2024	In Progress
18	Kadapa	AMRUT	1	20.00	-	March-2024	Work Grounded
19	Anantapuramu	AMRUT	1	10.00	-	March-2024	Agreement Concluded work will be Grounded
20	Dharmavaram	AMRUT	2	8.00	-	March-2024	Agreement Concluded work will be Grounded
21	Guntakal	AMRUT	1	8.00	2%	-	A.S. Accorded, Re Tender to be floated
22	Kurnool	AMRUT	1	2.00	92%	June -2023	In Progress
		AMRUT	1	10.00	25%	March - 2024	In Progress
23	Nandyal	AMRUT	1	10.00	41%	March - 2024	In Progress
24	Adoni	AMRUT	1	5.00	30%	March - 2024	In Progress
25	Guntur	OTSFA	1	10.00	70%	Dec -2023	-
			1	20.00	60%	Dec -2023	-
			1	42.00	51%	Dec -2023	-
			1	28.00	51%	Dec -2023	-
			1	23.00	0%	March - 2024	The site issue resolved, Work will be Grounded
26	Pulivendula	PLAN	1	1.50	97%	May-2023	In Progress
			1	1.50	80%	Aug -2023	In Progress
			5	2.50 (0.50	40%	May-2023	In Progress

				MLD x 5 Nos)			
			1	0.02	5%	May- 2023	In Progress
			1	0.07	5%	May- 2023	In Progress
			1	0.08	5%	May- 2023	In Progress
			1	0.10	5%	May- 2023	In Progress
27	Rayachoti	PLAN	5	6.90	5%	Dec -2023	In Progress
			1	15.50	2%	Dec -2023	In Progress
28	Kanigiri	AIIB	1	6.00	2%	March - 2024	Sites handed over, Designs under finalization
29	Sullurpet	AIIB	3	8.00	4%	March - 2024	Sites handed over, Designs under finalization
30	Allagadda	AIIB	1	5.00	2%	March - 2024	Sites handed over, Designs under finalization
31	Nandikotkur	AIIB	1	5.00	0 %	March - 2024	Site to be handed over
32	Madakasira	AIIB	1	5.00	2%	March - 2024	Sites handed over, Designs under finalization
	Grand Total		57	426.17			

III C) Details of Under Construction STPs in APTIDCO Houses:

Sl. No	Name of the ULB	Name of the Location	Capacity in MLD	Physical Progress in %	Completion Timeline
1	2	3	4	5	6
1	Srikakulam	Patrunivalasa	2.10	Completed	Under Trail Run
2	Vizianagaram	Saripalli	1.50	95%	May -2023
3	GVMC	Satyanarayanapuram	1.50	82%	May -2023
4	GVMC	Parawada	0.50	70%	May -2023
5	TadepalliGudem	a. Kondruprolu-I	2.00	69%	July -2023
6		b. Kondruprolu-II	0.75	69%	July -2023
7	Palakollu	Penukulapadu	3.50	69%	July -2023

Sl. No	Name of the ULB	Name of the Location	Capacity in MLD	Physical Progress in %	Completion Timeline
8	Kavali	Maddurupadu	1.50	Completed	Under Trail Run
9	Atmakur	Nellorepalem	1.00	Completed	Under Trail Run
10	Gudur	Gandhinagar	3.70	Completed	Under Trail Run
11	Kurnool	Jagannadhagattu	0.50	90%	August -2023
12			0.50	90%	August -2023
13			1.00	90%	August -2023
14			1.50	90%	August -2023
15			2.00	90%	August -2023
16	Nandyal	SRBC Colony	1.00	85%	August -2023
17			1.00	85%	August -2023
18		Nandhamuri Nagar	1.00	60%	August -2023
19			1.00	60%	August -2023
20	Adhoni	Siriguppa Road	1.00	85%	August -2023
21			1.00	85%	August -2023
22	Peddapuram	Valuthimmapuram	2.00	93%	August -2023
23	Mandapeta	Gollapunta	3.00	73%	August -2023
24	Pithapuram	Gorsa	0.50	81%	August -2023
25	Ramachandrapuram	Kothuru (Ph-I)	0.75	74%	August -2023
26	Amalapuram	Bodasukurru	1.00	55%	August -2023
27	Rajamahendravaram	Bommuru-I	1.50	93%	August -2023
28	Rajamahendravaram	Torredu	0.50	76%	August -2023
29	Samalkota	Jaggamvaripeta	0.50	83%	August -2023
30	Samalkota	Uppuvarisatram	0.50	83%	August -2023
31	Tenali	Chinaravuru	0.60	Completed	Under Trail Run
32	Ponnuru	Nidubrolu	1.25		
33	Chilakaluripeta	Purushothapatnam	2.80		
34	GVMC	Dabbanda	0.90	74%	June -2023
35	GVMC	Aganampudi (Tri Junction)	1.10	61%	June -2023

Sl. No	Name of the ULB	Name of the Location	Capacity in MLD	Physical Progress in %	Completion Timeline
36	Vijayawada	Jakkampudi I (A)	0.90	90%	June -2023
37	Vijayawada	Jakkampudi II (B)	0.60	86%	June -2023
38	Vijayawada	Jakkampudi III (C)	0.90	88%	June -2023
39	Vijayawada	Jakkampudi IV (D)	0.90	88%	June -2023
40	Gudivada	Mallayapalem I	1.60	80%	July -2023
41	Gudivada	Mallayapalem II	2.70	82%	July -2023
42	Machilipatnam	Gosangam II	0.50	85%	July -2023
43	Machilipatnam	Rudravaram II	0.70	79%	July -2023
44	Mangalagiri	RGK Colony -I	0.80	Completed	Under Trail Run
45	Guntur	Vengalayapalem I & II	1.50	95%	Sep -2023
46	Repalle	Repalle II	0.60	50%	Sep -2023
47	Piduguralla	Kondamodu II	1.30	80%	Sep -2023
48	Macherla	Gorrilamandhi-II	0.50	80%	Sep -2023
49	Srialahasthi II	S.W. Hostel -II	0.90	86%	June -2023
50	Chittoor	Murukumbattu -II	1.30	96%	June -2023
51	Puttur	Nandimangalam -II	0.20	83%	June -2023
52	Punganur	Ethuru -II	0.70	90%	June -2023
53	Madanapalli	Venkappakota -II	0.90	91%	June -2023
54	Srialahasthi I	Rajiv Nagar -I	1.00	87%	June -2023
55	Kakinada	Kakinada(Paralovapeta)	1.50	25%	Aug -2023
56	Rajahmundry	Bommuru-II	1.50	34%	Aug -2023
57		Namavaram	0.75	43%	Aug -2023
58	Ramachandrapuram	KothuruIII	1.00	28%	Aug -2023
59	Naidupeta-II	Biradawada	0.90	82%	Aug -2023
60	Sullurupeta-II	Mannrupoluru	0.80	83%	Aug -2023
61	Venkatagiri-II	Chevireddypalli	0.80	83%	Aug -2023
62	Nellore	Akkacheruvupadu-II	1.60	84%	Aug -2023
63	Nellore	Kallurupalli-II	1.10	84%	Aug -2023

Sl. No	Name of the ULB	Name of the Location	Capacity in MLD	Physical Progress in %	Completion Timeline
64	Nellore	Kondlapudi II&III	1.20	84%	Aug -2023
65	Kandukur	Uppucheruvu-I	1.40	57%	Aug -2023
66	Markapur	Pedanagulavaram Road -I	0.50	39%	Aug -2023
67	Vizianagaram	Sonia nagar	0.50	90%	June - 2023
68	Nellimarla	Nellimarla	0.30	90%	June - 2023
69	Rajam	Kancharam	0.20	20%	June - 2023
70	Amadalavalasa	Byrsastrulla-pet	0.30	90%	June - 2023
71	Bobbili	Bobbili	0.80	77%	June - 2023
72	Saluru	Saluru	0.60	74%	June - 2023
73	Parvathipuram	Parvathipuram	0.40	75%	June - 2023
74	Tanuku	Indiramma Colony	0.20	Yet to be Start	Sep - 2023
75	Tanuku	BalaBalaji	0.30	Yet to be Start	Sep - 2023
76	Jangareddygudem	Markandeyapuram -II	0.40	Yet to be Start	Sep - 2023
77	Nidadavolu	Tirugudem -II	0.50	Yet to be Start	Sep - 2023
78	Kovvuru	Pedathallapunta -II	0.30	Yet to be Start	Sep - 2023
79	Eluru	Ponangi road	2.50	Yet to be Start	Sep - 2023
80	Eluru	Kotturu road	0.20	Yet to be Start	Sep - 2023
81	Vinukonda	Vellaturu road II	0.70	Yet to be Start	Sep - 2023
82	Kanigiri	Chakirala -III	0.50	Yet to be Start	Sep - 2023
83	Giddaluru	Modempalli -III	0.60	Yet to be Start	Sep - 2023
84	Addanki	Singarakonda -III	0.50	Yet to be Start	Sep - 2023
85	Nuziveedu	M.R. Apparao colony II	1.30	Yet to be	Sep - 2023

Sl. No	Name of the ULB	Name of the Location	Capacity in MLD	Physical Progress in %	Completion Timeline
				Start	
86	Tiruvuru	PT Kotturu I	0.40	Yet to be Start	Sep - 2023
87		PT Kotturu II	0.40	Yet to be Start	Sep - 2023
88	Jaggaihpeta	Gurukulapathasala II	1.60	Yet to be Start	Sep - 2023
89	Nandigama	Hanumanthupalem II	0.20	Yet to be Start	Sep - 2023
90	Vuyyuru	Gemini School -II	0.90	Yet to be Start	Sep - 2023
91	Vuyyuru	Gandigunta -II	0.30	Yet to be Start	Sep - 2023
92	Vuyyuru	Raghava estates -II	0.10	Yet to be Start	Sep - 2023
93	Adavitakkilapadu (Guntur)	Adavitakkilapadu	2.00	Completed	Under Trail run
94	Kadapa	Chinnachowk -I	1.00	62%	Aug - 2023
95	Kadapa	Chalamareddypalli -II	1.00	62%	Aug - 2023
96	Jammalamadugu	Gudemcheruvu -II	1.00	48%	Aug - 2023
97	Rayachoti	Sibyala -II	0.50	47%	Aug - 2023
98	Yerraguntla	Yerraguntla road -II	1.00	62%	Aug - 2023
99	Nandyal	Alyyalurimitta	1.00	42%	Aug - 2023
100	Allagadda	Chinthakuntla Village-III	0.60	42%	Aug - 2023
101	Tadipatri I &II	Gannavaripalli -I&II	2.75	33%	Sep - 2023
102	Dharmavaram	Regatipalli-II	0.75	56%	Sep - 2023
103	Hindupur	Kotipi-II	0.70	55%	Sep - 2023
104	Kadiri	Hindupur road-II	0.60	57%	Sep - 2023
105	Puttaparthi	Karnataka nagepalli-II	0.25	46%	Sep - 2023
106	Ananthapur	Pandameru-3	1.25	54%	Sep - 2023
107	Guntakal	Dhonimukkala-3	1.25	55%	Sep - 2023

Sl. No	Name of the ULB	Name of the Location	Capacity in MLD	Physical Progress in %	Completion Timeline
108	Raydurgam	Mallapuram-3	0.60	55%	Sep - 2023
109	Ichapuram	Ichapuram	0.10	1%	Sep - 2023
110	Palasa	Palasa	0.40	6%	Sep - 2023
111	GVMC	Appikonda	0.40	8%	Sep - 2023
112	GVMC	Mulagada	0.20	9%	Sep - 2023
113	GVMC	Nadipur	0.50	10%	Sep - 2023
114	GVMC	Sangivalasa	0.30	9%	Sep - 2023
115	GVMC	Kondakoppaka	0.20	8%	Sep - 2023
116	GVMC	Sirasapalli	0.30	60%	Aug- 2023
117	GVMC	AtchauLova-1	1.00	60%	Aug- 2023
118	GVMC	AtchauLova-2	1.00	60%	Aug- 2023
119	Yelamanchili	Yelamanchili	0.20	66%	Aug- 2023
120	Narsipatnam	Narsipatnam-1	0.60	57%	Aug- 2023
121		Narsipatnam-2	0.30	60%	Aug- 2023
122	CRDA	Ananthavaram	0.20	95%	June - 2023
123		Dondapadu	0.50	95%	June - 2023
124		Thulluru	0.20	95%	June - 2023
125		Manadadam	0.20	95%	June - 2023
126		Inavolu	0.30	95%	June - 2023
127		Nowluru	0.30	95%	June - 2023
128		Penumaka	0.30	95%	June - 2023
129		Nidamaruru	0.30	95%	June - 2023
			117.05		

III D) STATUS OF STPs UNDER RIVER STRETCHES

- Total Estimated Sewage Generation (in MLD) 2022 :302.00 MLD
- Existing no. of STP with Treatment Capacity (11 Nos):162.40 MLD
- Present Gap in Treatment Capacity (in MLD) : 139.60 MLD
- Capacity of under Construction STPs (in MLD) : 57.00 MLD
- Gap after completion of ongoing Projects : 82.60 MLD

S. No	Name of River Stretch	Name of the ULB	Ongoing STP Capacity (in MLD)	Status of Ongoing Works	Status of DPRs
1.	Tungabhadra	Kurnool	10 MLD	25%	Government have accorded administrative sanction vide G.O.Ms.No.12, dated 20-01-2023 for an amount of Rs.131.84 Crs under AMRUT 2.0 Tranche-1 for construction of 3 Nos of STPs 35.60 MLD Capacity in Kurnool.
			2 MLD	92%	
2	Kundu	Nandyal	10 MLD	41%	1. Government have accorded MA&UD (UBS) Deptadministrative sanction vide G.O.Ms.No.12, dated 20-01-2023 for an amount of Rs.27.47 Crs under AMRUT 2.0 Tranche-1 for construction of 5.0 MLD capacity STP in Nandyal. 2. The Apex Committee (Central) has sanctioned an amount of Rs.74.00 Cr to Nandyal Municipality for the construction of 21.0 MLD capacity of STP under AMRUT 2.0 Tranche-2 and Administrative Sanction from the GoAP is awaited.

S. No	Name of River Stretch	Name of the ULB	Ongoing STP Capacity (in MLD)	Status of Ongoing Works	Status of DPRs
1.	Nagavali	Srikakulam	10 MLD	45%	Government have accorded administrative sanction vide G.O.Ms.No.12, dated 20-01-2023 of MA & UD Dept., for an amount of Rs.53.66Cr under AMRUT 2.0 Tranche-1 for construction of 5.0MLD capacity STP..
2.	Godavari	Rajamahendravaram	5 MLD	65 %	DPR on Comprehensive UGD scheme with additional STP's of capacity 50.60 MLD for an amount of Rs.95.50 Crs has been submitted to the Govt. for Administrative Sanction, which is awaited from the State Govt.
3.	Krishna	Vijayawada	20 MLD	92%	Government have accorded administrative sanction vide G.O.Ms.No.12, dated 20-01-2023 of MA&UD Dept., for an amount of Rs.136.95 Crs under AMRUT 2.0 Tranche-1 for rejuvenation and upgradation of existing STPs.

III E) Status of STPs & NSTPs in Below 1 Lakh Population ULBs:

State Level Technical Committee and State High Power Committee Approved the following Details regarding construction of STPs in below 1 lakh population cities on 07.06.2022 and 10.06.2022 respectively.

- Proposed STPs (below 1 lakh population) : 74 ULBs
- Proposed Capacity for the year 2040 : 659.00 MLD
- Total Project Cost : 1445 Cr

As mentioned above, CSAPs and DPRs for 74 ULBs were completed and submitted to SBM, Director and CPHEEO, Director – New Delhi upon approval from SLTC and SHPC for release of funds.

Note: In the above-mentioned 74 ULBs

- a. Puttaparthi is having 3 existing STPs, therefore excluded as requested by the Municipal Commissioner vide Roc. No.20/2020-E1, Dt:18.08.2022.
- b. 5 ULBs (Sullurpet, Nandikotkur, Allagadda, Madakasira and Kanigiri) are funded under Asian Infrastructure Investment Bank (AIIB) for construction of STPs.
- c. Pulivendula and Rayachoti are funded under State Special Grants.

- d. For the remaining **66 ULBs**, formed into **13 clusters** and tenders were invited on 04.11.2022 to establish STPs for **569 MLD** with due date of receipt of tender is on 17.01.2023. As bids were not received in the first call, second call tenders were floated on 2nd February, 2023 and due date of receipt of tenders is 1-05-2023.

Cluster-Wise Abstract for 66 ULBs:

Sl.No.	Description	No. of ULBs	Proposed STP capacities (MLD)	Cost of Total STPs (crores)
1	Cluster 1	06	45.381	76.074
2	Cluster 2	06	47.174	78.979
3	Cluster 3	07	45.650	75.401
4	Cluster 4	06	45.062	74.479
5	Cluster 5	06	50.050	82.864
6	Cluster 6	05	49.705	82.266
7	Cluster 7	04	35.944	59.385
8	Cluster 8	05	47.986	79.286
9	Cluster 9	04	31.100	51.623
10	Cluster 10	05	43.600	72.390
11	Cluster 11	04	41.600	68.640
12	Cluster 12	04	43.012	71.247
13	Cluster 13	04	42.816	71.078
	Total	66	569.080	943.712

Cluster 1 Details:

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
Srikakulam	Amadalavalasa	STP 01	2.100
		STP 02	1.200
		STP 03	1.000
		STP 04	1.000
		NSTP 01	0.049
		NSTP 02	0.142
		NSTP 03	0.061
		NSTP 04	0.391
		NSTP 05	0.180
		NSTP 06	0.186
		NSTP 07	0.101
		NSTP 08	0.277
		NSTP 09	0.077
		NSTP 10	0.208
		NSTP 11	0.279
	Ichapuram	STP 01	4.800

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
		NSTP 01	0.778
		NSTP 02	0.371
		NSTP 03	0.451
	PalasaKasibugga	STP 01	10.068
		NSTP 01	0.645
		NSTP 02	0.014
		NSTP 03	0.014
Manyam	Palakonda	STP 01	5.000
	Parvathipuram	STP 01	7.400
		NSTP 01	0.185
		NSTP 02	0.130
		NSTP 03	0.284
		NSTP 04	0.126
		NSTP 05	0.161
		NSTP 06	0.112
		NSTP 07	0.092
	Salur	STP 01	7.500
2	6	33	45.381

Cluster 2 Details:

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
Vizianagaram	Rajam	STP 01	4.600
		STP 02	1.500
		STP 03	1.500
		NSTP 01	0.159
		NSTP 02	0.134
		NSTP 03	0.160
		NSTP 04	0.174
		NSTP 05	0.146
		NSTP 06	0.169
		NSTP 07	0.157
	Bobbili	STP 01	3.500
		STP 02	2.500
		STP 03	2.500
		NSTP 01	0.151
		NSTP 02	0.157
		NSTP 03	0.062
		NSTP 04	0.203
		NSTP 05	0.065
		NSTP 06	0.066
	Nellimarla	STP 01	4.000
Anakapalli	Narsipatnam	STP 01	4.800

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
		STP 02	4.500
		NSTP 01	0.182
		NSTP 02	0.244
		NSTP 03	0.105
		NSTP 04	0.071
	Yellamanchali	STP 01	4.000
		NSTP 01	0.295
		NSTP 02	0.131
		NSTP 03	0.441
		NSTP 04	0.102
		NSTP 05	0.109
		NSTP 06	0.161
		NSTP 07	0.500
		NSTP 08	0.138
		NSTP 09	0.301
		NSTP 10	0.091
		NSTP 11	0.400
Kakinada	Tuni	STP 01	8.700
3	6	39	47.174

Cluster 3 Details:

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
Kakinada	Samalkot	STP 01	8.600
	Pithapuram	STP 01	1.100
		STP 02	1.000
		STP 03	1.000
		STP 04	1.000
		STP 05	1.000
		STP 06	1.000
		STP 07	1.000
		STP 08	1.000
	Peddapuram	STP 01	7.300
		NSTP	0.350
	Gollaprolu	STP 01	3.900
	Yeleswaram	STP 01	4.700
East Godavari	Nidadavole	STP 1	3.700
		STP 2	3.000
	Kovvur	STP 01	4.000
		STP 02	2.000
2	7	17	45.650

Cluster 4 Details:

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
Konaseema	Amalapuram	STP 01	7.400
		NSTP 01	0.256
		NSTP 02	0.306
	Ramachandrapuram	STP 01	6.700
	Mandapeta	STP 01	4.700
		STP 02	4.000
	Mumidivaram	STP 01	4.100
West Godavari	Palacole	STP 01	5.100
		STP 02	4.000
	Narsapur	STP 01	4.600
		STP 02	3.900
2	6	11	45.062

Cluster 5 Details:

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
West Godavari	Tanuku	STP 01	10.700
		NSTP 01	0.066
		NSTP 02	0.071
Eluru	JangareddyGudem	STP 01	5.00
		STP 02	4.50
	Nuzivid	STP 01	5.200
		STP 02	4.600
		NSTP 01	0.228
Krishna	Pedana	STP 01	2.400
		STP 02	1.600
		NSTP 01	0.345
	Vuyyuru	STP 01	4.000
		STP 02	3.000
NTR District	Tiruvuru	STP 01	5.000
		STP 02	2.800
		NSTP 01	0.150
		NSTP 02	0.150
		NSTP 03	0.240
4	6	18	50.050

Cluster 6 Details:

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
NTR	Jaggiahpeta	STP 01	5.400
		STP 02	5.000
	Nandigama	STP 01	3.091
		STP 02	2.770

		STP 03	1.850
Palnadu	Macherla	STP 1	9.900
	Sattenapalli	STP 1	9.470
	Piduguralla	STP 1	5.900
		STP 2	5.200
		NSTP 01	0.534
		NSTP 02	0.590
2	5	11	49.705

Cluster 7 Details:

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
Palnadu	Vinukonda	STP 1	5.700
		STP 2	5.500
Prakasam	Markapur	STP 01	12.400
		NSTP 01	0.344
	Giddalur	STP 1	6.100
	Chimakurthy	STP 1	5.900
2	4	6	35.944

Cluster 8 Details:

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
Baptla	Repalle	STP 1	5.600
		STP 2	2.400
	Bapatla	STP 01	3.000
		STP 02	5.000
		STP 03	2.180
	Chirala	STP 01	7.120
		STP 02	5.000
	Addanki	STP 01	7.000
		STP 02	2.400
Guntur	Ponnur	STP 01	7.800
		NSTP 01	0.486
2	5	11	47.986

Cluster 9 Details:

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
Nandyal	Dhone	STP 1	11.300
	Atmakur	STP 01	7.200
		NSTP 01	0.586
		NSTP 02	0.181
		NSTP 03	0.253
Kurnool	Gudur	STP 1	3.800

YSR Kadapa	Jammalamadugu	STP 01	7.430
		NSTP 01	0.175
		NSTP 02	0.175
3	4	9	31.100

Cluster 10 Details:

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
YSR Kadapa	Badvel	STP 01	13.900
		NSTP 01	0.243
		NSTP 02	0.654
		NSTP 03	0.447
	Mydukur	STP 01	8.100
	Yerraguntla	STP 01	3.000
		STP 02	2.200
		NSTP 01	0.111
SPS Nellore	Kandukur	STP 01	9.600
		NSTP 01	0.143
	Atmakur	STP 01	4.800
		NSTP 01	0.078
		NSTP 02	0.138
		NSTP 03	0.186
2	5	14	43.600

Cluster 11 Details:

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
Ananthapur	Rayadurg	STP1	10.700
	Gooty	STP1	3.600
		STP2	4.400
	Kalyandurgam	STP 1	8.000
Sri Satya Sai	Kadiri	STP 1	14.900
2	4	5	41.600

Cluster 12 Details:

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
Sri Balaji	Gudur	STP 01	7.400
		STP 02	6.500
		NSTP 01	0.106
	Venkatagiri	STP 01	9.580
		NSTP 01	0.338

	Naidupet	STP 01	7.900
		NSTP 01	0.788
Annamayya	Rajampeta	STP 01	10.400
2	4	8	43.012

Cluster 13 Details:

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
Chittoor	Punganur	STP 1	5.000
		STP 2	4.200
		NSTP 1	0.507
		NSTP 2	0.157
	Palamaneru	STP 1	8.700
		NSTP 1	0.273
		NSTP 2	0.270
	Nagari	STP 01	7.000
		STP 02	6.100
	Puttur	STP 01	4.900
		STP 02	5.000
		NSTP 01	0.709
1	4	12	42.816

IV. Details of Industrial Pollution:

- No. of industries in the State: 9966No's
- No. of water polluting industries in the State: 1445 No's
- Quantity of effluent generated from the industries in MLD: 4542.556

Effluent Break-Up Details:

- Once through Cooling water: 3826.13 MLD
- Trade effluents:412.708 MLD
- Cooling tower/Boiler blow down: 254.14 MLD
- Domestic waste water: 49.578 MLD

From the total waste water generation from the industries, major portion is once through cooling water (about 85%) and temperature to be maintained for discharge of once through cooling system is not more than 5⁰C temperature of intake water.

- ✓ From the Cooling tower/Boiler blow down (about 5.6%).
- ✓ The remaining about 9.4% is generated from Trade effluent & Domestic Discharges.
- ✓ APPCB is not permitting any industry to discharge industrial / trade effluents into the rivers.
- Number of industrial units having ETPs: 1093 No's

- Number of industrial units connected to CETP: 351 No's
 - Existing: 1094 no's ETPs
 - Under construction: Nil
 - Proposed: Nil
- **Compliance status of the ETPs:**
 - ✓ APPCB is regularly monitoring the compliance status of ETPs and action is being initiated for non-compliance industries.
- Number and total capacity of CETPs (details of existing/ under construction / proposed)
 - Existing: 9No's with total capacity of 22.5 MLD
M/s. APIIC Mega Food Park, CETP (Phase-I), Sy.No.11, Mallavalli (V),
Bapulapadu (M), Krishna District (0.3 MLD)
Proposed: 1 no
 - 1.5 MLD at Atchuthapuram SEZ, Visakhapatnam – Under Approval
- **Status of compliance and operation of the CETPs:**

S.No.	Name and Address of the CETP & contact person	Design capacity (in MLD)	Current Operating capacity (in MLD)	Type and No. of member units	Compliance status
1.	Brandix India Apparel City Private Limited, APSEZ, Atchutapuram Pudimadaka Road, Visakhapatnam.	6	4.06	Textile park- 14 units	Complied
2.	Ramky Pharma City (India) Ltd, JN Pharma City, Parawada Mandal, Visakhapatnam.	9.53	5.56	Pharmaceutical & Bulk drugs – 92 units	Complied
3.	Kondapally Envirotech Pvt. Ltd., (KEPL), IDA, Kondapalli (V), Ibrahimpattanam (M), Krishna District.	0.2	0.05	Pharmaceutical & Bulk drugs- 14 units	Complied
4.	Vijayawada Auto Cluster Development Company, Industrial Estate, Auto Nagar, Vijayawada.	0.2	0.025	Food beverages, Herbal pharma, Oil solvents & lubricants - 35 units	Complied
5.	Machilipatnam Imitation Jewellery Park Pvt. Ltd., Jewellery Park, Pothepalli,	0.07	0.002	Electro Plating – 48 Units	Complied

	Machilipatnam.				
6.	Nagari Dyeing Owners Association, Chinthalapatteda (V), Nagari (M), Chittoor District.	4	0.75	Manual Dyeing units - 90 units	Complied.
7.	Atchuthapuram Effluent Treatment Plant, Atchutapuram Visakhapatnam.	1.5	0.85	Pharmaceutical & Bulk drugs- 43units	Complied
8.	M/s. Andhra Pradesh Industrial Infrastructure Corporation Limited (APIIC), MPSEZ, Menakuru (V), Naidupet (M),SPSR Nellore	1.0	0.003	Pharmaceutical – 15 units	Complied.
	Total	22.5	11.30		

V. Solid Waste Management:

- Total Number of Urban Local Bodies: **123** and their Population: **1.5** Crore
- Current Municipal Solid Waste Generation: **6890** TPD for 123 ULBs
- The Source Segregation in the State is 98.17% and 100 % door to door collection in the state.
- Interim Action Plan is implemented to provide immediate solution to Solid Waste Management in all ULBs

Door to Door Garbage collection & Source Segregation

- Total No. of wards in 123 ULBs: 3928
- No. of wards having door to door collection system: 3928
- No. of wards practicing segregation at source: 3856
- 1.21 crores Dustbins in three Colors (3 Bins to each house holds) have been distributed, on free of cost to ensure segregation at household level.

Waste to Energy Projects

- Waste to Energy Plants are being used for final disposal of combustible dry waste collected by the ULBs on daily basis. There are Two Waste to Energy projects established in the State.
- Guntur & Visakhapatnam Waste to Energy Plants with 15 MW capacity each are established & synchronized with grid and running at full load capacity.
- These two plants are processing around 1800 TPD of waste covering 80 ULBs (Visakhapatnam-27 ULBs & Guntur-53 ULBs).
- For Disposal combustible waste, 43 ULBs are mapped to 5 Cement Plants treating 355 TPD.

Wet Waste Processing Plants

- Total 42 Waste to Compostplants, Bio-methanation Plants and ISWM Plants are establishedcovering 51 ULBs. Out of which 29 numbers are Waste to Compost Plants,4 numbers are Bio CNG plants &9 are ISWM plants.
- The installed capacity of these 42 Wet Waste Plants are 1900 TPD and at present treating 1870TPD.
- Total 16Waste to Compost/Bio-methanation Plants (14 Waste to Compost & 2 Bio-methanation) covering 16 ULBs are in progress with an installed capacity of 398 TPD.
- Work orders issued to 37 Agencies for establishment of 37 Integrated Solid Waste ManagementProjects Covering 51 ULBs. Out of these,9 Plants are completed & functional, Covering 10 ULBs.
- Windrow Compost Units are established in 72 ULBs, treating 1920 TPD of Wet Waste as an interim measure till the establishment of ISWM Projects/Waste to Compost Plants for which work awarded.
- Compost produced is being sold to Farmers by Processing Plant Developers & in ULB operated Plants, Compost is being used in Parks, Greenery in Central Medians, Avenue Plantation etc.
- CNG gas produced is being sold to the Commercial establishments like Hotels, Restaurants etc.,

Construction & Demolition Waste Processing Plants

- Construction and Demolition waste processing plants with an installed capacity of 200 TPD are existing at Greater Visakhapatnam Municipal Corporation, Vijayawada Municipal Corporation and Tirupati Municipal Corporation&treating 100 TPD by each plant.
- Construction &Demolition Waste Crushing and Storage Units are established in Kakinada Municipal Corporation and Kurnool Municipal Corporation Treating 20 TPD.

Bio-Remediation of Legacy Waste

- 123 Dumpsites with an area of 1011 Acres are existing in the state.
- Out of 32 ULBs under the category of above 1 Lakh Population, Bio remediation of legacy waste was completed in Vijayawada & Tirupati Corporations.
- Work is under Progress in theremaining 30 ULBs.
- Work commissioned in all 91 ULBs under the category of below 1 Lakh Population.
- So far, 19.41 lakh Tons of Legacy Waste has been treated, outof 85.00 Lakh Tons quantified.
- No Dump sites of legacy waste are within 1 KM buffer of both sides of the rivers in the State.

Material Recovery facilities (MRFs)

- Material Recovery facilities have been established in all 123 ULBs& Processing the dry waste@ 945 TPD.
- Sorted out recyclables are being sold to Identified Recyclers by the ULBs

Status of ULB wise Management of Solid Waste

S. No	Name of the ULB	Waste Generated (TPD)	Wet waste processing	Plant Capacity (TPD)	Capacity Utilization	Dry Waste Processing				
						RDF	Waste Sent in TPD	MRF	Plant Capacity TPD	Capacity Utilization
1	Amudalavalasa	19.00	Existing WtC	11.00	90%	WtEVizag	6.00	Established	2.00	90%
2	Ichchapuram	18.00	Existing WtC	11.00	90%	WtEVizag	6.00	Established	1.00	90%
3	Palasa- kasibugga	28.00	Existing WtC	17.00	90%	WtEVizag	10.00	Established	1.00	90%
4	Rajam	21.00	Existing WtC	12.00	90%	WtEVizag	7.00	Established	2.00	90%
5	Bobbili	29.00	Existing WtC	16.00	90%	WtEVizag	12.00	Established	1.00	90%
6	Salur	24.00	Existing WtC	16.00	90%	WtEVizag	7.00	Established	1.00	90%
7	GVMC	918.00	Existing WtC	519.00	90%	WtEVizag	353.00	Established	46.00	90%
8	Narsipatnam	30.00	Existing WtC	16.00	90%	WtEVizag	12.00	Established	2.00	90%
9	Yellamanchili	23.00	Existing WtC	13.00	90%	WtEVizag	8.00	Established	2.00	90%
10	Adoni	81.00	Existing CNG	23.00	90%	Connected to Cement Factories	14.00	Established	44.00	90%
11	Nuzivid	29.00	Existing WtC	16.00	90%	WtE Guntur	10.00	Established	3.00	90%

S. No	Name of the ULB	Waste Generated (TPD)	Wet waste processing	Plant Capacity (TPD)	Capacity Utilization	Dry Waste Processing				
						RDF	Waste Sent in TPD	MRF	Plant Capacity TPD	Capacity Utilization
12	Tiruvuru	17.00	Existing WtC	9.00	90%	WtE Guntur	6.00	Established	2.00	90%
13	Tenali	80.00	Existing WtC	44.00	90%	WtE Guntur	32.00	Established	4.00	90%
14	Sattenpalle	28.00	CNG - Pidugurala	13.00	90%	WtE Guntur	10.00	Established	5.00	90%
15	Narsaraopet	57.00	CNG - Pidugurala	13.00	90%	WtE Guntur	30.00	Established	14.00	90%
16	Piduguralla	31.00	Existing CNG	13.00	90%	WtE Guntur	12.00	Established	6.00	90%
17	Allagadda	20.00	Existing WtC	11.00	90%	Connected to Cement Factories	4.00	Established	5.00	90%
18	Rayadurgam	30.00	Existing WtC	18.00	90%	Connected to Cement Factories	4.00	Established	8.00	90%
19	Puttaparty	15.00	Existing WtC	8.00	90%	Connected to Cement Factories	3.00	Established	4.00	90%
20	Yemmiganur	46.00	CNG – Adoni	23.00	90%	Connected to Cement Factories	8.00	Established	15.00	90%
21	Anantapur	131.00	Windrow composting	81.00	90%	Connected to Cement Factories	20.00	Established	30.00	90%
22	Atmakur K	22.00	Windrow composting	13.00	90%	Connected to Cement Factories	3.00	Established	6.00	90%
23	Badvel	35.00	ISWM Functional	20.00	90%	Connected to Cement Factories	6.00	Established	9.00	90%

S. No	Name of the ULB	Waste Generated (TPD)	Wet waste processing	Plant Capacity (TPD)	Capacity Utilization	Dry Waste Processing				
						RDF	Waste Sent in TPD	MRF	Plant Capacity TPD	Capacity Utilization
24	Dhone	29.00	Windrow composting	18.00	90%	Connected to Cement Factories	5.00	Established	6.00	90%
25	Markapur	35.00	Existing WtC	19.00	90%	WtE Guntur	14.00	Established	2.00	90%
26	Giddalur	19.00	Existing WtC	11.00	90%	Connected to Cement Factories	3.00	Established	5.00	90%
27	Kanigiri	22.00	Existing WtC	12.00	90%	WtE Guntur	8.00	Established	2.00	90%
28	Chirala	42.00	Existing WtC	25.00	90%	WtE Guntur	15.00	Established	2.00	90%
29	Gudivada	58.00	Windrow composting	32.00	90%	WtE Guntur	23.00	Established	3.00	90%
30	Palamaneru	25.00	Existing WtC	15.00	90%	Connected to Cement Factories	3.00	Established	7.00	90%
31	Punganur	27.00	Existing WtC	16.00	90%	Connected to Cement Factories	4.00	Established	7.00	90%
32	Madanapalle	67.00	Existing CNG	28.00	90%	Connected to Cement Factories	11.00	Established	28.00	90%
33	Sullurpet	22.00	Windrow composting	12.00	90%	WtE Guntur	7.00	Established	3.00	90%
34	Srikakulam	65.00	ISWM Functional	36.00	90%	WtEVizag	26.00	Established	3.00	90%
35	Palakonda	16.00	Windrow composting	8.00	90%	WtEVizag	6.00	Established	2.00	90%

S. No	Name of the ULB	Waste Generated (TPD)	Wet waste processing	Plant Capacity (TPD)	Capacity Utilization	Dry Waste Processing				
						RDF	Waste Sent in TPD	MRF	Plant Capacity TPD	Capacity Utilization
36	Vizianagaram	119.00	ISWM Functional	65.00	90%	WtEVizag	48.00	Established	6.00	90%
37	Parvathipuram	26.00	Clustered with Existing WtC, Bobbili	14.00	90%	WtEVizag	9.00	Established	3.00	90%
38	Nellimarla	14.00	Windrow composting	8.00	90%	WtEVizag	5.00	Established	1.00	90%
39	Gudur N	36.00	Windrow composting	19.00	90%	Connected to Cement Factories	13.00	Established	4.00	90%
40	Guntakal	62.00	Windrow composting	32.00	90%	Connected to Cement Factories	11.00	Established	19.00	90%
41	Jaggaiahpet	26.00	Windrow composting	14.00	90%	WtE Guntur	8.00	Established	4.00	90%
42	Jammalamadugu	22.00	Existing WtC	12.00	90%	Connected to Cement Factories	4.00	Established	6.00	90%
43	Pedana	16.00	Windrow composting	9.00	90%	WtE Guntur	5.00	Established	2.00	90%
44	Vuyyuru	20.00	Windrow composting	11.00	90%	WtE Guntur	6.00	Established	3.00	90%
45	Guntur	363.00	Windrow composting	200.00	90%	WtE Guntur	145.00	Established	18.00	90%
46	Mangalagiri - Tadepalle	70.00	Windrow composting	38.00	90%	WtE Guntur	28.00	Established	4.00	90%

S. No	Name of the ULB	Waste Generated (TPD)	Wet waste processing	Plant Capacity (TPD)	Capacity Utilization	Dry Waste Processing				
						RDF	Waste Sent in TPD	MRF	Plant Capacity TPD	Capacity Utilization
47	Ponnur	29.00	Existing WtC	16.00	90%	WtE Guntur	9.00	Established	4.00	90%
48	Chilakaluripet	49.00	Windrow composting	27.00	90%	WtE Guntur	20.00	Established	2.00	90%
49	Bapatla	34.00	Windrow composting	19.00	90%	WtE Guntur	10.00	Established	5.00	90%
50	Repalle	25.00	Windrow composting	13.00	90%	WtE Guntur	8.00	Established	4.00	90%
51	Vinukonda	30.00	ISWM Functional	16.00	90%	WtE Guntur	9.00	Established	5.00	90%
52	Macherla	28.00	Existing WtC	19.00	90%	WtE Guntur	8.00	Established	1.00	90%
53	Kadapa	167.00	Windrow composting	93.00	90%	Connected to Cement Factories	28.00	Established	46.00	90%
54	Dharmavaram	62.00	Windrow composting	35.00	90%	Connected to Cement Factories	11.00	Established	16.00	90%
55	Kadiri	43.00	Windrow composting	24.00	90%	Connected to Cement Factories	7.00	Established	12.00	90%
56	Gooty	24.00	Windrow composting	13.00	90%	Connected to Cement Factories	4.00	Established	7.00	90%
57	Hindupur	74.00	Windrow composting	40.00	90%	Connected to Cement Factories	13.00	Established	21.00	90%
58	Kurnool	224.00	Windrow composting	128.00	90%	Connected to Cement Factories	36.00	Established	60.00	90%

S. No	Name of the ULB	Waste Generated (TPD)	Wet waste processing	Plant Capacity (TPD)	Capacity Utilization	Dry Waste Processing				
						RDF	Waste Sent in TPD	MRF	Plant Capacity TPD	Capacity Utilization
59	Kalyandurgam	21.00	WtC Functional	11.00	90%	Connected to Cement Factories	4.00	Established	6.00	90%
60	Madakasira	12.00	Windrow composting	7.00	90%	Connected to Cement Factories	2.00	Established	3.00	90%
61	Machilipatnam	89.00	Windrow composting	49.00	90%	WtE Guntur	36.00	Established	4.00	90%
62	Mydukur	22.00	Windrow composting	12.00	90%	Connected to Cement Factories	3.00	Established	7.00	90%
63	Nandigama	22.00	Windrow composting	12.00	90%	WtE Guntur	7.00	Established	3.00	90%
64	Nandikotkur	23.00	Windrow composting	13.00	90%	Connected to Cement Factories	4.00	Established	6.00	90%
65	Gudur K	14.00	Windrow composting	8.00	90%	Connected to Cement Factories	2.00	Established	4.00	90%
66	Nandyal	98.00	Windrow composting	59.00	90%	Connected to Cement Factories	16.00	Established	23.00	90%
67	Proddutur	79.00	Windrow composting	44.00	90%	Connected to Cement Factories	13.00	Established	22.00	90%
68	Pulivendula	32.00	Existing WtC	19.00	90%	Connected to Cement Factories	5.00	Established	8.00	90%
69	Rajahmundry	168.00	ISWM Functional	93.00	90%	WtEVizag	67.00	Established	8.00	90%
70	Rajampeta	23.00	Windrow composting	13.00	90%	Connected to Cement Factories	4.00	Established	6.00	90%

S. No	Name of the ULB	Waste Generated (TPD)	Wet waste processing	Plant Capacity (TPD)	Capacity Utilization	Dry Waste Processing				
						RDF	Waste Sent in TPD	MRF	Plant Capacity TPD	Capacity Utilization
71	Rayachoti	44.00	ISWM Functional	26.00	90%	Connected to Cement Factories	7.00	Established	11.00	90%
72	Tadipatri	53.00	Existing WtC	31.00	90%	Connected to Cement Factories	9.00	Established	13.00	90%
73	Tirupati	208.00	Existing CNG	110.00	90%	Connected to Cement Factories	35.00	Established	63.00	90%
74	Ongole	123.00	Windrow composting	68.00	90%	WtE Guntur	49.00	Established	6.00	90%
75	Chimakurthy	17.00	Windrow composting	9.00	90%	WtE Guntur	5.00	Established	3.00	90%
76	Addanki	20.00	Existing WtC	11.00	90%	WtE Guntur	6.00	Established	3.00	90%
77	Kandukur	28.00	Windrow composting	14.00	90%	WtE Guntur	10.00	Established	4.00	90%
78	Kakinada	159.00	ISWM Functional	87.00	90%	WtEVizag	64.00	Established	8.00	90%
79	Vijayawada	507.00	Existing WtC	279.00	90%	WtE Guntur	203.00	Established	25.00	90%
80	Gollaprolu	11.00	Windrow composting	6.00	90%	WtEVizag	3.00	Established	2.00	90%
81	Pithapuram	25.00	Windrow composting	13.00	90%	WtEVizag	8.00	Established	4.00	90%
82	Peddapuram	24.00	Windrow composting	13.00	90%	WtEVizag	7.00	Established	4.00	90%

S. No	Name of the ULB	Waste Generated (TPD)	Wet waste processing	Plant Capacity (TPD)	Capacity Utilization	Dry Waste Processing				
						RDF	Waste Sent in TPD	MRF	Plant Capacity TPD	Capacity Utilization
83	Samalkota	28.00	Windrow composting	16.00	90%	WtEVizag	8.00	Established	4.00	90%
84	Yeleswaram	16.00	Windrow composting	9.00	90%	WtEVizag	5.00	Established	2.00	90%
85	Ramachandrapuram	21.00	Windrow composting	12.00	90%	WtEVizag	6.00	Established	3.00	90%
86	Mandapeta	26.00	Windrow composting	14.00	90%	WtEVizag	8.00	Established	4.00	90%
88	Tuni	12.00	Clustered with Existing WtC, Narsipatnam	6.00	90%	WtEVizag	4.00	Established	2.00	90%
88	Mummidivaram	26.00	Windrow composting	14.00	90%	WtEVizag	8.00	Established	4.00	90%
89	Amalapuram	26.00	Windrow composting	14.00	90%	WtEVizag	8.00	Established	4.00	90%
90	Eluru	106.00	Windrow composting	59.00	90%	WtE Guntur	42.00	Established	5.00	90%
91	Tadepalligudem	51.00	Windrow composting	28.00	90%	WtE Guntur	20.00	Established	3.00	90%
92	Tanuku	44.00	Windrow composting	24.00	90%	WtE Guntur	13.00	Established	7.00	90%
93	Palakollu	33.00	Windrow composting	18.00	90%	WtE Guntur	10.00	Established	5.00	90%

S. No	Name of the ULB	Waste Generated (TPD)	Wet waste processing	Plant Capacity (TPD)	Capacity Utilization	Dry Waste Processing				
						RDF	Waste Sent in TPD	MRF	Plant Capacity TPD	Capacity Utilization
94	Narsapuram	29.00	Windrow composting	16.00	90%	WtE Guntur	9.00	Established	4.00	90%
95	Bhimavaram	69.00	Windrow composting	38.00	90%	WtE Guntur	28.00	Established	3.00	90%
96	Nidadavole	21.00	Windrow composting	12.00	90%	WtE Guntur	6.00	Established	3.00	90%
97	Kovvur	19.00	Clustered with Rajahmundry ISWM	10.00	90%	WtEVizag	6.00	Established	3.00	90%
98	JangareddyGudem	26.00	Windrow composting	14.00	90%	WtE Guntur	8.00	Established	4.00	90%
99	Chittoor	92.00	Windrow composting	55.00	90%	Connected to Cement Factories	16.00	Established	21.00	90%
100	SriKalahasti	39.00	Windrow composting	23.00	90%	Connected to Cement Factories	7.00	Established	9.00	90%
101	Nagari	30.00	Windrow composting	17.00	90%	Connected to Cement Factories	6.00	Established	7.00	90%
102	Puttur	26.00	Windrow composting	15.00	90%	Connected to Cement Factories	5.00	Established	6.00	90%
103	Nellore	300.00	Windrow composting	165.00	90%	WtE Guntur	120.00	Established	15.00	90%
104	Venkatagiri	25.00	ISWM Functional	13.00	90%	WtE Guntur	8.00	Established	4.00	90%
105	Yerraguntla	17.00	Windrow composting	10.00	90%	Connected to Cement Factories	4.00	Established	3.00	90%

S. No	Name of the ULB	Waste Generated (TPD)	Wet waste processing	Plant Capacity (TPD)	Capacity Utilization	Dry Waste Processing				
						RDF	Waste Sent in TPD	MRF	Plant Capacity TPD	Capacity Utilization
106	Naidupet	22.00	Windrow composting	12.00	90%	WtE Guntur	7.00	Established	3.00	90%
107	Atmakur N	15.00	Windrow composting	8.00	90%	WtE Guntur	5.00	Established	2.00	90%
108	Kavali	51.00	Windrow composting	28.00	90%	WtE Guntur	20.00	Established	3.00	90%
109	Kondapalli	21.00	ISWM Functional	12.00	90%	WtE Guntur	6.00	Established	3.00	90%
110	Akiveedu	11.00	Windrow composting	6.00	90%	WtE Guntur	2.00	Established	3.00	90%
111	Dachepali	11.00	Clustered with Existing Bio CNG Piduguralla	6.00	90%	WtE Guntur	3.00	Established	2.00	90%
112	Gurazala	9.00	Clustered with Existing WtC, Macherla	5.00	90%	WtE Guntur	3.00	Established	1.00	90%
113	Darsi	12.00	Windrow composting	6.00	90%	WtE Guntur	4.00	Established	2.00	90%
114	BuchireddyPalem	12.00	Windrow composting	6.00	90%	WtE Guntur	4.00	Established	2.00	90%
115	Penukonda	10.00	Clustered with Existing WtC, Puttaparthi	5.00	90%	Connected to Cement Factories	2.00	Established	3.00	90%
116	Bethamcharla	14.00	Windrow composting	9.00	90%	Connected to Cement Factories	2.00	Established	3.00	90%

S. No	Name of the ULB	Waste Generated (TPD)	Wet waste processing	Plant Capacity (TPD)	Capacity Utilization	Dry Waste Processing				
						RDF	Waste Sent in TPD	MRF	Plant Capacity TPD	Capacity Utilization
117	Kamlapuram	7.00	Windrow composting	4.00	90%	Connected to Cement Factories	1.00	Established	2.00	90%
118	Kupam	15.00	Windrow composting	9.00	90%	Connected to Cement Factories	3.00	Established	3.00	90%
119	Y.S.R. - Tadigadapa	29.00	Clustered with Existing WtC, Vijayawada	19.00	90%	WtE Guntur	9.00	Established	1.00	90%
120	Chintalapudi	4.00	Windrow composting	2.00	90%	WtE Guntur	1.00	Established	1.00	90%
121	Podili	6.00	Clustered with Existing WtC, Kanigiri	3.00	90%	WtE Guntur	2.00	Established	1.00	90%
122	Alluru	9.00	Windrow composting	5.00	90%	WtE Guntur	3.00	Established	1.00	90%
123	B.KothaKota	6.00	Windrow composting	3.00	90%	Connected to Cement Factories	1.00	Established	2.00	90%

VI. Bio-medical Waste Management:

- Total Bio-medical waste generation: 16.50Tones/ day
- No. of Hospitals and Health Care Facilities: 13,512 Nos.

Status of Treatment Facility/ CBMWTF	:	Presently, there are 12 Nos. of Common Bio-medical Waste Treatment and disposal Facilities (CBMWTFs) operating in the State of Andhra Pradesh for treatment and for disposal of Bio-Medical waste as per the BMW Management Rules 2016.
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VII. Hazardous Waste Management:

- Total Hazardous Waste generation is about: 51,197.79Tones during the month of March, 2023 and cumulative quantity (April 2022 to March,2023) is approximately 5,13,173.243Tones.
- No of industries generating Hazardous Waste:2748 Nos as per Hazardous Waste inventory, 2021 -22.
- **For the month of March, 2023, the Quantity of Hazardous Waste Treated & Disposed is as follows:**
 - i) Utilizable waste is34093.24TPM (suitable to use as raw material or as alternative fuel viz. Co-processing in Cement Plants so as to conserve the resources),
 - ii) Recyclable waste is3785.644 TPM (suitable for recycling /recovery of material viz. oil reclamation units, lead and zinc recovery units).
 - iii) Incinerable waste is 389.297 TPM (not suitable for any recycling / reuse and having high calorific value i.e. > 2500 K cal/kg) and
 - iv) Land fillable waste is 12812.13TPM (not suitable for any recycling / reuse and having low calorific value i.e. < 2500 K cal/kg) is reaching and treated at the TSDFs in Visakhapatnam and Nellore.

Note: The above data is obtained from the APEMC online portal. The above data may vary during verification of annual returns submitted by the industry.

- **Details of on-going or proposed TSDF:**

Two TSDF are existing in the State of Andhra Pradesh

- ✓ M/s Coastal Waste Management Project Unit-1, Parwada, Visakhapatnam.
- ✓ M/s Coastal Waste Management Project Unit-2 a division of Mumbai Waste Management Limited, S.P.S.R. Nellore District.

VIII. Plastic Waste Management:

Total plastic waste generation	36620.101 TPA (As per Annual Report for the F.Y. 2021-22).
Implementation of Plastic Waste Management Rules, 2016 in Urban Local Bodies	• 120 Nos of Producers and 52 Nos of plastic waste processors are registered in the EPR Portal of CPCB. The total EPR Target for the registered PWP units is 5,51,932.6300 TPA • The State has issued G.O.Ms.No.349, dated 29.10.2018 for implementation of Plastic Waste Management Rules, 2016 in the ULBs. • The State has released G.O.Ms.No.81, dated 29.11.2022 for implementation of identified Banned Single Use Plastic (SUP) by designating enforcement authorities and stipulating penalties for effective enforcement of PWM Rules. • The plastic waste in Urban Local Bodies is being collected through the Public Health Workers of the ULBs. The segregated plastic waste, which is recyclable, is sent to recyclers i.e., from MRFs and the segregated plastic, which is not suitable for recycling is sent to nearby Cement Plants and also being used in road construction in some ULBs. 43 ULBs have so far, tied up with nearby Cement Plants to send non-recyclable Plastic Waste. • The manufacture, sale & usage of plastic carry bags of below 120 microns' thickness is banned in the State of Andhra Pradesh. Teams of PCB are making inspections and surprise raids to ensure no sale & usage of banned plastic carry bags. • About 238.80 Tons of SUP is seized during SUP inspection drives during the month of March and imposed fine an amount Rs. 58,750/- • In Visakhapatnam, Vizianagaram, Vijayawada, Kurnool & Tirupati, under extended producer responsibility, Plastic Waste Collection system has been established. • Instructions issued to the Municipal Commissioners of Head Quarter ULBs to conduct stakeholders' meetings under the Chairmanship of the District Collectors to ensure setting up collection centers under EPR in Municipal Corporations & bigger ULBs. • In Visakhapatnam, Vijayawada, Tirupati, Rajamahendravaram, Kakinada & Amalapuram Plastic Waste is being used in construction of Roads and the details are as follows:

Sl. No.	Name of the ULB	Length of Road Constructed	Quantity of Plastic Waste utilized for constructions of Road
1	Visakhapatnam	8.0Kms	14.5 Tons
2	Vijayawada	5.0Kms	5.0 Tons
3	Tirupati	0.9Kms	0.9 Tons
4	Rajamahendhravaram	3.0Kms	4.2 Tons
5	Kakinada	1.2 Kms	2.0 Tons
6	Amalapuram	1.0 Km	0.2 Tons

IX. Details of Alternate Treatment Technology being adopted by the State

Details of Faecal Sludge Treatment Plants:

No. of Completed FSTPs	:	5 (75 KLD)
No. of In-progress FSTPs	:	60 (905 KLD)
No. of FSTPs Tenders stage	:	26 (365 KLD)

IX(A): Details of Completed FSTPs:

S.No.	Name of ULB	Capacity (in KLD)	Operational Status of FSTP
1	Narsapur	15	Operational
2	Rajam	15	Operational
3	Palamaneru	15	Operational
4	Bobbili	15	Operational
5	Vinukonda	15	Operational

IX(B): Details of In-Progress FSTPs:

S.No	Name of the ULB	Plant Capacity (in KLD)	Expected Date of Completion
1	Dhone	20	95 % of Work Completed April - 2023
2	Gooty	15	August -23
3	Jammalamadugu	15	August -23
4	Kadiri	25	August -23
5	Kalyanadurgam	10	August -23
6	Madakasira	5	August -23
7	Pulivendula	20	August -23
8	Puttaparthi	10	August -23
9	Rayachoti	25	August -23

S.No	Name of the ULB	Plant Capacity (in KLD)	Expected Date of Completion
10	Rayadurg	20	August -23
11	Allagadda	10	June -23
12	Atmakur (K)	15	August - 23
13	Badvel	25	June -23
14	Gudur (K)	5	August - 23
15	Mydukuru	15	June -23
16	Nandikotkur	15	August - 23
17	Yelamanchili	15	August - 23
18	Punganur	15	May -23
19	Rajampeta	15	June -23
20	Yerraguntla	10	August - 23
21	Atmakur (N)	10	May -23
22	Giddalur	10	June -23
23	Gudur (TPT)	20	May -23
24	Kandukur	20	August - 23
25	Kanigiri	15	May -23
26	Markapur	20	95 % of Work Completed, April - 2023
27	Nagari	20	May -23
28	Naidupet	15	August - 23
29	Puttur	15	May -23
30	Sullurpeta	15	May -23
31	Venkatagiri	15	May -23
32	Addanki	10	June -23
33	Bapatla	25	70% work Completed May - 2023
34	Chimakurthy	10	June -23
35	Chirala	25	80% work Completed April- 23
36	Macherla	15	May -23
37	Mangalagiri	25	June -23
38	Piduguralla	15	June -23
39	Ponnur	15	70% work Completed May - 2023
40	Repalle	15	June -23
41	Sattenapalli	15	August - 23
42	Salur	15	August - 23
43	Amalapuram	15	August - 23
44	Gollaprolu	5	August - 23
45	Kovvur	10	June -23
46	Mandapeta	15	August - 23
47	Mummidivaram	10	August - 23
48	Peddapuram	15	May -23
49	Pithapuram	15	May -23
50	Ramachandrapuram	15	May -23
51	Samalkota	15	May -23

S.No	Name of the ULB	Plant Capacity (in KLD)	Expected Date of Completion
52	Tuni	15	June -23
53	Yeleshwaram	10	June -23
54	Amudalavalasa	10	June -23
55	Parvathipuram	15	August - 23
56	Ichapuram	10	June -23
57	Narsipatnam	20	June -23
58	Nellimarla	10	August - 23
59	Palakonda	10	August - 23
60	Palasa-Kasibugga	15	June -23
		905	

IX (C) Details of FSTPs Tenders floated:

S.No	Name of the ULB	Capacity of Plant (KLD)	Status
1.	Jangareddigudem	15	Tender floated on 31 st January 2023, tender were opened on 27 th February, 2023 evaluation is in progress.
2.	Nidadavolu	15	
3.	Palacole	25	
4.	Pedana	10	
5.	Tadepalli	30	
6.	Tanuku	20	
7.	Vuyyuru	10	
8.	Jaggaiahpetta	15	
9.	Nandigama	15	
10.	Nuzividu	20	
11.	Tiruvuru	10	
12.	Akiveedu	10	
13.	Kondapalli	20	
14.	Dachepali	10	
15.	Gurazala	10	
16.	Darsi	10	
17.	BuchireddyPalem	10	
18.	Penukonda	10	
19.	Bethamcharla	10	
20.	Kamalapuram	10	
21.	Kuppam	15	
22.	Y.S.R. -Tadigadapa	25	
23.	Chintalapudi	10	
24.	Podili	10	
25.	Alluru	10	
26.	B.KothaKota	10	
Total		365	

- X.** Identification of polluting sources including drains contributing to river pollution and action as per NGT order on insitu treatment:
- A total 32 No's of outfall points of the major disposal drains have been identified which are contributing to River Pollution. All the above 32 No's of outfall points are provided with Meshes/Screens to prevent solid waste from falling in to the Rivers.
- XI. Details of Nodal Officer appointed by Chief Secretary in the State/UT:**
- Commissioner & Director of Municipal Administration has been appointed as a Nodal Officer for Polluted River stretches as per G.O.Rt.No.103 EFS&T Department Dated: 25-11-2020.
- XII.** Details of meetings carried under the Chairmanship of Chief Secretary in the State/UT:
- XIII. Latest water quality of polluted river, its tributaries, drains with flow details:**
- APPCB has been monitoring the 5 polluted river stretches at 27 locations on monthly basis and the data is being uploaded in RRC Website <https://rrc.ap.gov.in/Views/Monitoring.aspx> every month. The monitoring of water quality data for the month of March, 2023 is enclosed.
 - As per the analysis of samples collected at 27 locations in the month of March, 2023 the B.O.D value is less than 3.0 mg/lit. (**Annexure-I**)
- XIV. Ground Water Regulation:**

The main objective of the Ground Water and Water Audit Department is to monitor Groundwater regime, scientific development and management of Groundwater Resources in the State. In view of repeated droughts and alarming depletion in groundwater resources, the Andhra Pradesh State Government laid emphasis on efficient water conservation and management. One such measure is the enactment called Andhra Pradesh Water, Tree Act (APWALTA) in 2002. This act is a comprehensive act covering surface and groundwater resources. The act aims to promote water conservation, enhance tree cover and regulate the exploitation and use of ground and surface water. The act empowered the State Government to appoint a State Level Authority viz., Andhra Pradesh Water, Land and Tree Authority. The Authority has the mandate to promote water conservation, enhance tree cover, regulate exploitation of ground and surface water, make regulations for the functioning of the authorities at District and Mandal Level (administrative units

within Districts). The department is providing necessary technical inputs to the authority whenever requested for effective implementation of the Act.

➤ **Periodic Assessment of Groundwater Resources:**

Ground Water Resources Assessment is being carried out periodically under the guidelines of the State Level Committee (SLC) on Groundwater Assessment at State Level and under the overall supervision of the Central Level Expert Group based on the norms and guidelines of the GEC-2015 methodology. Such exercise has been taken up recently for the year 2021-22. The assessment involves comparing of annual extractable Groundwater Resources, total annual Groundwater extraction and the % of utilization with respect to annual extractable resource i.e. stage of development for all 18,380 villages, 670 mandala and 748 micro basins in the State. Out of all the states in the country only Andhra Pradesh and Telangana states are doing this assessment taking village as basic assessment unit rest of the states are doing the exercise taking Mandal as basic assessment unit. Based on the computation assessment units ie villages are categorized as Over Exploited where the groundwater extraction is > 100%, critical where the extraction between 90-100%, semi-critical where the extraction is 70- 90 % and Safe where the extraction is <70%.

After every periodic assessment the Government come up with a notification listing over exploited villages and ban further exploitation of Groundwater and sand mining in these villages. The below given table gives the region wise classification of these villages in the State. That implies no new permissions to drill bore wells be entertained in these villages.

Number of mandals and villages notified as Over Exploited in Andhra Pradesh (as per GEC-2021-22).

Region	No. of Over Exploited Mandals	No. of Notified OE Villages
Costal	2	64
Rayalaseema	4	82
Total	06	146

XV. Good Irrigation practices being adopted by the State:

The Ground Water and Water Audit Department is not directly involved in execution of the Water Conservation and rainwater harvesting in the state. However,

the inferences drawn from the activities of the Ground Water and Water Audit Department are disseminated to the line departments, planners, stake holders for taking appropriate management measures for optimal utilization and sustainable development of Groundwater Resource.

- **Groundwater Quality:**

The Ground Water and Water Audit Department collect Pre and Post monsoon water samples from the permanent monitoring stations and analyze the samples for major cations and anions as to assess irrigation suitability. The Rural Water Supply (RWS) department is having the appropriate laboratory equipment to analyze all parameters at regional level as the department is specialized in dealing with the issues related to drinking water Parameters. The Pollution Control Board possess the requisite equipment to analyze all the parameters to know the major pollution hotspots and to study the periodical variations, particularly in industrial area.

- **Groundwater Charging:**

Not charging any Groundwater extraction charges as per present policies and legislations. However the process of implementation of Groundwater extraction charges for industrial use is under process.

XVI. Rain Water Harvestings:

XVII. Demarcation of Floodplain and removal of illegal encroachments:

XVIII. Maintaining minimum e-flow of river:

XIX. Plantation activities along the rivers:

XX. Development of Biodiversity Parks:

The A.P. State Biodiversity Board have approved a vision plan and perspective plan in its meeting held on 28.07.2020 wherein it has agreed to set up Biodiversity Parks and Digital Museums in 7 districts out of 13 districts in the State to showcase the ecosystems, fauna and flora of Andhra Pradesh and to bring awareness and interest on the ecology and conservation of biodiversity among the general public especially for the student community.

Out of 7 parks proposed the Government have permitted the District Collector, YSR District, Kadapa to handed over 6 Acres of land at Chinnachowk Village, Kadapa Rural Mandal. The A.P. Greening & Urban Beautification Corporation is taking up the works of Biodiversity Park, remaining 6 parks are in process.

As a part of establishment of Biodiversity Digital Museums, the A.P. State Biodiversity Board have entered into an agreement with M/s. KELTRON, Tiruvananthapuram a Government of Kerala Undertaking for supply of Digital Kiosks of 32" 2nos and 42" 1no to each digital museum which displays the world biodiversity, Indian Biodiversity and State Biodiversity in particular to that area in two languages i.e., English and Telugu. It also provides Play Station, Quiz and Other child interested games related to Ecology. Further, the A.P. State Biodiversity Board have also designed and ordered models and wall panels to display the Andhra Pradesh Ecology Systems in FRP made along with a 10 x 6 size display table and clear acrylic box and wall panels reflecting fauna and flora of A.P, Biodiversity acts printed on Vinyl with lamination, pasting of Vinyl to ACP panel and framing including computer design of 5' x 3' size of 10nos to each museum. All the 7 museums were located in Government buildings identified by concerned Municipal Corporations within the city limits.

Conservation Activities:

1) Home Herbal Garden:

The National Medicinal Plant Board, New Delhi have sanctioned projects on conservation of Nurseries namely, Home Herbal Garden (HHG) and other one nursery activities. The APSBB have procured and raised nurseries for supply of plants as proposed by the NMPB to supply to the households about 7,80,000 plants are proposed for 13,000 household beneficiaries in 13 districts of A.P. Each district is selected 10 Mandals and in each Mandal 10 villages and in each village 10 beneficiaries totalling to 13,000 beneficiaries as in 1st phase. Till now, 5,89,300 plants were distributed to the beneficiaries.

2) Nurseries:

The National Medicinal Plant Board, New Delhi have sanctioned nursery project to APSBB for raising 7,80,000 bag plant nurseries in 13 districts of Andhra Pradesh out of 13 districts nurseries raised in 11 districts, each nursery consisting of 60,000 bag plants which are to be distributed to the identified beneficiaries of the GramaSabhas. About 1,50,000 nursery plants were distributed till now under the scheme.

3) Other Nurseries:

The APSBB have raised and procured bag plants of 1,14,000 with ABS funds available and out of the scheme 51,000 bag plants were distributed so far to the identified beneficiaries.

4) Awareness programmes:

The APSBB have created massive awareness programmes to the BMCs, Officials and general public (especially targeting student community) in the past 2.5 years through physical and virtual mode. Most of the programmes are virtually organised due to Covid pandemic and created awareness among all sections of public. It also taken up printing of leaflets, brochures, knowledge material and widely distributed through BMCs of all the levels and also by conducting awareness programmes for all stakeholders.

The APSBB have also produced documentary films under the series a window to the A.P. State Biodiversity, about 7 films on wetlands, dry lands, Mada forests, grass lands and Forest Ecology also on HHG, the experiences of biodiversity conservers in the society.

5) CAAP and ICAAP Activities:

As a part of Operationalization of BMCs the APSBB have designed a programme namely Core Activities Action Plan (CAAP) In all BMCs in the State by identifying 15 core activities and selected 551 Mandal Biodiversity co-ordinators out of 661 mandals and organized to open Local Biodiversity fund (LBF) accounts in BMCs on joint operation mode.

To make a model BMCs an Intensive Core Activities Action Plan (ICAAP) with 10 core activities in 78 Mandalsof 661 Mandalsby taking 20 villages in each Mandal to operate the ICAAP. The 78 Mandalswere divided into 26 clusters consisting of 3 Mandalsin each cluster to implement the ICAAP activities. In IACCP activities raising nurseries of 1 lakh bag plants in each cluster, establishment of Mandal Biodiversity Park/RaasiVanam/ NakshatraVanam/ Butterfly Park/SmruthiVanam etc., of 1 Acre in each Mandal. Promotion of Organic farming and land races, cultivation

of Wild variety crops, Promotion of unique animal breed, Identification of BHS etc., are included in the ICAAP.

XXI. Reuse of Treated Water:

9 ULBs Utilizing Re–Use of Treated Waste Water

S.No	Name of the ULB	Installed Capacity (in MLD)	Qty of treated sewage utilised
1	2	3	4
1	Visakhapatnam	177.00	39.00
2	Rajamahendravaram	30.00	20.00
3	Tirupathi	50.00	33.00
4	Narsaraopeta	15.55	8.50
5	Tadipatri	11.50	6.50
6	Puttaparthi	1.50	0.30
7	Kurnool	2.40	0.096
8	Kadapa	20.00	10.00
9	Pulivendula	6.50	2.50
	Total in MLD	314.45	119.90

XXII. Model River being adopted by the State & Action Proposed for achieving the bathing quality standards:

2 River stretches are identified as Modal Rivers.i.e. Under Category - IV River Tungabhadra & under Category – V River Krishna. **(Annexure-II)**

XXIII. Status of Preparation of Action Plan by the 13 Coastal States:

XXIV. Regulation of Mining Activities in the State/UT:

XXV. Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring.

Water Quality Status of Polluted River Stretches in Andhra Pradesh – 2023**I. River Godavari:**

Andhra Pradesh Pollution Control Board is monitoring water quality of river Godavari at the following locations. Data pertaining to important parameters like, pH, Dissolved Oxygen, BOD, Total Coliform, Fecal Coliform and TDS for the year, 2023 is as follows:

S.No.	Code	Location Point
1	4367	Koundinyamukti(Kukunur) border point between Andhra Pradesh & Telangana States, West Godavari Dist.
2	4359	After confluence with Sabari at Kunavaram(waddigudem), East Godavari Dist.
3	0014	Polavaram, West Godavari Dist.
4	1218	Upstream of Rajahmundry at Kumaradevam
5	2370	At Rajahmundry Upstream of Nalla channel
6	2371	At Rajahmundry Downstream of Nalla channel
7	1219	Downstream of Rajahmundry at Dhawaleswaram
8	4365	Upstream of Narasapuram town before confluence with sewage, West Godavari Dist.
9	4366	Downstream of Narasapuram town after confluence with town sewage, West Godavari Dist.
10	4358	Near GMC Balayogi bridge, Gopalanka, East Godavari Dist.

Month-wise data of water quality of river Godavari, 2023																
Parameter	Code	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Standard		
														Class A	Class B	Class C
pH	4367	8.12	7.89	8.4										6.0 - 8.5	6.0 – 9.0	
	4359	8.3	8.34	8.01												
	0014	7.9	8.29	7.89												
	1218	7.91	8.3	7.89												
	2370	8.01	7.71	7.37												
	2371	8.07	7.61	7.48												
	1219	8.32	7.5	7.41												
	4365	8.25	8.31	8.42												
	4366	7.65	7.5	8.02												
	4358	7.92	7.62	7.57												
DO	4367	6.5	7.2	6.3										6.0	5.0	4.0
	4359	7.8	7.0	6.8												
	0014	6.8	7.2	7.4												
	1218	6.9	7.1	7.2												
	2370	7.1	7.0	6.8												
	2371	6.8	6.1	6.2												
	1219	6.9	6.6	6.4												
	4365	6.4	6.8	7.4												

	4366	6.3	6.5	7.2												
	4358	6.8	6.0	6.2												
BOD	4367	2	2.1	1.4										2.0	3.0	3.0
	4359	1.8	1.8	2.0												
	0014	1.6	2.0	2.4												
	1218	1.8	2.1	2.2												
	2370	2	2	2.2												
	2371	2.2	2.2	2.4												
	1219	2.2	2.2	2.2												
	4365	2	1.8	2.1												
	4366	2.2	2	2.6												
	4358	2.4	2.2	2.4												

Total Coliform	4367	150	150	120										50	500	5000
	4359	39	21	64												
	0014	120	120	150												
	1218	75	75	150												
	2370	210	150	210												
	2371	210	210	240												
	1219	120	93	120												
	4365	240	120	210												
	4366	210	240	240												
	4358	240	150	150												
Fecal Coliform	4367	7	4	3										---	500	---
	4359	9	3	4												
	0014	7	14	7												
	1218	9	9	9												
	2370	11	7	11												
	2371	4	20	14												
	1219	14	15	9												
	4365	21	14	11												
	4366	15	7	14												
	4358	7	7	9												
TDS	4367	168	141	94										500 - 2000		
	4359	63	50	44												
	0014	165	158	104												

	1218	168	160	108										
	2370	227	152	125										
	2371	180	146	128										
	1219	172	160	124										
	4365	168	124	96										
	4366	21648	27456	30120										
	4358	196	23496	30332										
Note:(1) All values are expressed in mg/L except pH & Total Coliform value. Total Coliform is expressed in MPN count / 100 ml.														
Remarks: BOD & fecal coliform values found to be within the standard limits stipulated for bathing at all the locations except at U/S & D/S of Narsapuram town. High TDS values at Narsapuram & GMC Balayogi bridge, Govalanka could be attributed to the intrusion of backwaters of Bay of Bengal.														

2. River Krishna:

Andhra Pradesh Pollution Control Board is monitoring water quality of river Krishna at the following locations. Data pertaining to important parameters like, pH, Dissolved Oxygen, BOD, Total Coliform, Fecal Coliform and TDS for the year, 2023 is as follows:

S. No.	Code	Location point
01	1175	Sangameswaram, Kurnool Dist.
02	3083	Srisailam, Kurnool Dist.
03	4381	After confluence with river Musi at Vadapalli, Guntur Dist.
04	1786	Vedadri, Krishna Dist.

05	1787	Amaravathi, Guntur Dist.
06	0025	Prakasham barrage, Vijayawada, Krishna Dist.
07	4375	Pavitrasangamam at Ibrahimpatnam, Krishna Dist.
08	1782	Hamsaladeevi, Krishna Dist.

Month-wise data of water quality of river Krishna, 2023:

Parameters	Code	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	*Standard		
														Class A	Class B	Class C
PH	1175	6.9	7.4	8.2										6.0 - 8.5	6.0 – 9.0	
	3083	7.1	7.9	6.9												
	4381	7.89	7.80	7.88												
	1786	7.92	7.91	7.83												
	1787	7.83	7.94	7.96												
	0025	7.53	8.08	7.87												
	4375	7.60	7.74	7.67												
	1782	7.63	8.18	7.92												

DO	1175	5.6	5.7	5.4										6.0	5.0	4.0
	3083	5.8	5.8	5.6												
	4381	7.3	7.6	7.5												
	1786	7.4	7.3	7.6												
	1787	7.3	6.9	7.2												
	0025	7.1	7.3	7.4												
	4375	7.1	7.5	7.2												
	1782	6.9	6.4	6.3												
BOD	1175	2.0	1.8	2.0										2.0	3.0	3.0
	3083	1.5	1.5	1.7												
	4381	2.8	2.9	2.8												
	1786	2.8	2.8	2.7												
	1787	2.8	2.6	2.8												
	0025	2.6	2.6	2.7												
	4375	2.7	2.8	2.6												
	1782	2.7	2.7	2.8												
Total Coliform	1175	659	756	921										50	500	5000
	3083	689	921	816												
	4381	420	470	460												

	1786	470	470	240												
	1787	260	440	460												
	0025	470	460	460												
	4375	440	460	470												
	1782	120	380	210												

Fecal Coliform	1175	102	149	102										---	500	---
	3083	214	343	267												
	4381	14	14	15												
	1786	12	15	7												
	1787	14	15	21												
	0025	11	4	15												
	4375	11	14	14												
	1782	4	10	7												
TDS	1175	468	739	1069										500 - 2000		
	3083	378	401	515												
	4381	594	576	588												
	1786	520	560	530												
	1787	424	432	464												
	0025	468	458	422												
	4375	464	476	478												
	1782	15600	16620	15100												
Note: All values are expressed in mg/L except pH, Total Coliform value & Fecal Coliform. Total Coliform & Fecal Coliform is expressed in MPN count / 100 ml.																
Remarks: BOD & fecal coliform values found to be within the standard limits stipulated for bathing at all the locations. High TDS values at Hamsaladeevi could be attributed due to the intrusion of backwaters of Bay of Bengal.																

3. River Tungabhadra:

Andhra Pradesh Pollution Control Board is monitoring water quality of river Tungabhadra at the following locations. Data pertaining to important parameters like, pH, Dissolved Oxygen, BOD, Total Coliform, Fecal Coliform and TDS for the year, 2023 is as follows:

S. No.	Code	Location point
01	1785	Manthralayam, Kurnool Dist.
02	1174	Bhavapuram, Kurnool Dist.
03	4388	U/S of Kurnool town B/C with domestic sewage & A/c of Rayalaseema alkalies industries at Gondiparla, Kurnool.
04	4389	D/S of Kurnool town A/C with domestic sewage at Gondiparla, Kurnool.

Month-wise data of water quality of river Tungabhadra, 2023

Parameters	Code	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	*Standard		
														Class A	Class B	Class C
pH	1785	7.7	7.3	7.6										6.0 – 8.5		6.0 – 9.0
	1174	7.5	7.4	8.1												
	4388	7.1	7.0	7.8												
	4389	7.2	7.2	7.0												
DO	1785	5.7	5.5	5.5										6.0	5.0	4.0
	1174	5.9	5.6	5.6												
	4388	5.4	5.4	5.6												
	4389	5.3	5.1	5.4												
BOD	1785	2.0	1.7	2.2										2.0	3.0	3.0
	1174	2.2	2.2	2.5												
	4388	1.8	1.5	2.5												
	4389	2.2	2.5	2.8												
Total Coliform	1785	1046	1300	1414										50	500	5000
	1174	1120	1046	1120												

	4388	1203	1046	1414												
	4389	1414	1733	1986												
Fecal Coliform	1785	615	320	343										---	500	---
	1174	479	437	403												
	4388	549	437	368												
	4389	525	575	629												
TDS	1785	820	866	813										500 - 2000		
	1174	887	991	950												
	4388	953	1165	1065												
	4389	796	930	1120												
Note: All values are expressed in mg/L except pH, Total Coliform value& Fecal coliform. Total Coliform& Fecal Coliform is expressed in MPN count / 100 ml.																
Remarks: BOD & fecal coliform values found to be within the standard limits stipulated for bathing at all the locations. However, the DO values found to be between 4.0 and 5.0 mg/lit. at certain instances at U/S & D/S of Kurnool town. Hence, they may be categorized as Class – C at these points.																

4. River Nagavali:

Andhra Pradesh Pollution Control Board is monitoring water quality of river Nagavali at the following locations. Data pertaining to important parameters like, pH, Dissolved Oxygen, BOD, Total Coliform, Fecal Coliform and TDS for the year, 2023 is as follows:

S. No.	Code	Location point
01	4351	River Nagavali at Kureru, Vizianagaram Dist.
02	1448	Thotapally, Vizianagaram Dist.
03	4346	River Nagavali U/S of Srikakulam town.
04	4347	River Nagavali D/S of Srikakulam town.

Month-wise data of water quality of river Nagavali, 2023																
Parameters	Code	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	*Standard		
														Class A	Class B	Class C
pH	4351	8.2	8.31	8.23												
	1448	8.4	8.23	8.27										6.0 – 8.5		6.0 – 9.0
	4346	7.4	8.35	8.17												
	4347	8.34	8.5	8.14												
DO	4351	7.5	7	7.2										6.0	5.0	4.0
	1448	6.4	6.6	7.3												
	4346	7.6	6.5	6.4												
	4347	8	6.3	6.3												
BOD	4351	1.4	1.4	2.6										2.0	3.0	3.0
	1448	1.2	1.8	2.4												
	4346	2.6	1.3	2												
	4347	2.7	1.5	2.2												
Total Coliform	4351	210	240	240										50	500	5000
	1448	150	120	150												

	4346	240	210	150												
	4347	210	240	210												
Fecal Coliform	4351	20	11	14										----	500	----
	1448	20	7	9												
	4346	7	7	7												
	4347	7	15	11												
TDS	4351	213	176	222										500-2000		
	1448	189	180	224												
	4346	210	245	228												
	4347	219	250	230												
Note:All values are expressed in mg/L except pH, Total Coliform value& Fecal Coliform.Total Coliform& Fecal Coliform is expressed in MPN count / 100 ml.																
Remarks: BOD & Fecal coliform values found to within the standard limits stipulated for bathing at all the locations.																

5.River Kundu:

Andhra Pradesh Pollution Control Board is monitoring water quality of river Kundu at the following locations. Data pertaining to important parameters like, pH, Dissolved Oxygen, BOD, Total Coliform, Fecal Coliform and TDS for the year, 2023 is as follows:

S. No.	Code	Location point
1	2351	At Nandyal, Kurnool Dist.

Month-wise data of water quality of river Kundu, 2023

Parameters	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	*Standard		
													Class A	Class B	Class C
pH	7.1	7.7	7.6										6.0 – 8.5		6.0 – 9.0
DO	5.5	5.2	5.5										6.0	5.0	4.0
BOD	2.3	2.5	2.8										2.0	3.0	3.0
Total Coliform	1290	1414	1733										50	500	5000
Fecal Coliform	501	649	525										---	500	---
TDS	626	742	851										500 - 2000		
Note: All values are expressed in mg/L except pH, Total Coliform & Fecal Coliform value. Total Coliform & Fecal Coliform is expressed in MPN count / 100 ml.															
Remarks: BOD & Fecal Coliform values found to be within the standard limits stipulated for bathing.															

CPCB identified three (3 No's) new rivers based on BOD value during year 2019 & 2021 (BOD > 3mg/L)

In Andhra Pradesh identified following polluted river stretches.

S NO	ANDHRA PRADESH STATE	RIVER NAME	NWMP STN CODE	LOCATION	MAX BOD OBSERVED (mg/L)
1	Priority IV (BOD between 6.1 and 10.0 mg/L)	GOSTANI	4372	RIVER GOSTANI SAMPLE BEFORE CONFLUENCE WITH M/S DELTA PAPER MILL EFFLUENTS, VENDRA, PALAKODERU	8.6
2	Priority V (BOD between 3.1 and 6.0 mg/L)	UPPUTERU	4379	RIVER UPPUTERU BEFORE CONFLUENCE WITH SEA, AT CHINAGOLLAPALEM VILLAGE, KRUTHIVENNU (M)	3.4
3	Priority I (BOD more than 30.0 mg/L)	VASISHTA	4365	RIVER VASISHTA (GODAVARI) UPSTREAM OF NARASAPURAM TOWN BEFORE CONFLUENCE OF TOWN SEWAGE	5.9
4			4366	RIVER VASISHTA (GODAVARI) DOWNSTREAM OF NARASAPURAM TOWN AFTER CONFLUENCE OF TOWN SEWAGE	58.0

6.River Gostani:

Andhra Pradesh Pollution Control Board is monitoring water quality of river Gostani at the following locations. Data pertaining to important parameters like, pH, Dissolved Oxygen, BOD, Total Coliform, Fecal Coliform and TDS for the year, 2023 is as follows:

S. No.	Code	Location point
1	4372	River Gostani Sample before confluence with M/s Delta Paper Mill Effluents, Vendra, Palakoderu.

Month-wise data of water quality of river Gostani, 2023

Parameters	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	*Standard		
													Class A	Class B	Class C
pH	7.45	7.11	7.33										6.0 – 8.5		6.0 – 9.0
DO	0	2	4.3										6.0	5.0	4.0
BOD	12.2	11.4	8.4										2.0	3.0	3.0
Total Coliform	43	75	240										50	500	5000
Fecal Coliform	9	9	11										---	500	---
TDS	1050	2180	1530										500 - 2000		
Note: All values are expressed in mg/L except pH, Total Coliform & Fecal Coliform value. Total Coliform& Fecal Coliform is expressed in MPN count / 100 ml.															
Remarks: Fecal Coliform values found to be within the standard limits stipulated for bathing.															

7.River Upputeru:

Andhra Pradesh Pollution Control Board is monitoring water quality of river Upputeru at the following locations. Data pertaining to important parameters like, pH, Dissolved Oxygen, BOD, Total Coliform, Fecal Coliform and TDS for the year, 2023 is as follows:

S. No.	Code	Location point
1	4379	River Upputeru before confluence with Sea at Chinnagollapalem (V), Kruthivenu (M)

Month-wise data of water quality of river Upputeru, 2023

Parameters	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	*Standard		
													Class A	Class B	Class C
pH	7.83	7.60	7.73										6.0 – 8.5		6.0 – 9.0
DO	6.6	6.7	6.2										6.0	5.0	4.0
BOD	2.9	2.9	2.8										2.0	3.0	3.0
Total Coliform	120	130	210										50	500	5000
Fecal Coliform	11	11	14										---	500	---
TDS	26170	31460	238300										500 - 2000		
Note: All values are expressed in mg/L except pH, Total Coliform & Fecal Coliform value. Total Coliform& Fecal Coliform is expressed in MPN count / 100 ml.															
Remarks: BOD & Fecal Coliform values found to be within the standard limits stipulated for bathing.															

8.River Vasishta:

Andhra Pradesh Pollution Control Board is monitoring water quality of river Vasishta at the following locations. Data pertaining to important parameters like, pH, Dissolved Oxygen, BOD, Total Coliform, Fecal Coliform and TDS for the year, 2023 is as follows:

S. No.	Code	Location point
1	4365	Upstream of Narasapuram town before confluence with sewage, West Godavari Dist.
2	4366	Downstream of Narasapuram town after confluence with town sewage, West Godavari Dist.

Month-wise data of water quality of river Vasishta, 2023

Parameters	Code	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	*Standard		
														Class A	Class B	Class C
pH	4365	8.25	8.31											6.0 – 8.5	6.0 – 9.0	
	4366	7.65	7.5													
DO	4365	6.4	6.8											6.0	5.0	4.0
	4366	6.3	6.5													
BOD	4365	2	1.8											2.0	3.0	3.0
	4366	2.2	2													
Total Coliform	4365	240	120											50	500	5000
	4366	210	240													
Fecal Coliform	4365	21	14											----	500	----
	4366	15	7													
TDS	4365	168	124											500-2000		
	4366	21648	27456													
Note: All values are expressed in mg/L except pH, Total Coliform value& Fecal Coliform.Total Coliform& Fecal Coliform is expressed in MPN count /100 ml.																
Remarks: BOD & Fecal coliform values found to within the standard limits stipulated for bathing at all the locations.																

CPCB Water Quality Criteria for Designated Best Use

Designated-best- use	Class of water	Criteria
Drinking Water Source without conventional treatment but after disinfection.	A	• Total Coli forms Organism MPN/100 ml shall be 50 or less. • pH between 6.5 and 8.5 • Dissolved oxygen 6 mg/l or more. • Biochemical Oxygen Demand 5 days 20°C 2mg/l or less.
Outdoor bathing (Organized)	B	• Total Coli forms Organism MPN/100 ml shall be 500 or less. • pH between 6.5 and 8.5 • Dissolved oxygen 5 mg/l or more. • Biochemical Oxygen Demand 5 days 20°C 3mg/l or less.
Drinking Water Source after conventional treatment and disinfection.	C	• Total Coli forms Organism MPN/100 ml shall be 5000 or less. • pH between 6 to 9 • Dissolved oxygen 4 mg/l or more. • Biochemical Oxygen Demand 5 days 20°C 3mg/l or less
Propagation of Wild life and Fisheries.	D	• pH between 6.5 to 8.5 • Dissolved oxygen 4 mg/l or more. • Free Ammonia (as N) 1.2 mg/l or less • pH 9 between 6.0 to 8.5.
Irrigation, Industrial Cooling, Controlled Waste disposal.	E	• Electrical Conductivity at 25°C micro mhos/cm Max. 2250. • Sodium Absorption ratio Max. 26 • Boron Max.2 mg/l.
	Below -E	Not Meeting A, B, C, D & E Criteria.

Model River Stretch for Rejuvenation of River Tungabhadra

(Priority-IV)

1. Monitoring mechanism proposed for implementation of action plans

The water quality assessment and evaluation of impacts is necessary to understand the river state at various stages of the project implementation and post implementation of the project. Therefore, the water quality assessment and evaluation of the project achievements is essential component for the long term benefit to the project. The monitoring and evaluation is necessary for taking corrective measures at appropriate time. The monitoring and evaluation schedule proposed is as detailed below:

1.1 Water Quality Monitoring Stations (WQMS):

The APPCB is regularly monitoring water quality of River Tungabhadra on monthly basis for the following parameters at the locations mentioned below, which are also NWMP locations:

S No.	Code *	Location	Parameters
01	1785	Manthralayam, Kurnool Dist.	pH Dissolved Oxygen (DO)Bio- Chemical Oxygen Demand (BOD)Total Coli form Fecal Coli form Total Dissolved Solids(TDS)
02	1174	Bhavapuram, Kurnool Dist..	
03	4388	U/s of Kurnool town B/C with domestic sewage & A/c of Rayalaseema alkalies industries at Gondiparla, Kurnool.	
04	4389	D/s of Kurnool town A/C with domestic sewage at Gondiparla, Kurnool.	

*The code relates to NWMP of CPCB.

All the parameters are presently monitored manually and uploaded in the River Rejuvenation Committee (RRC) link <https://rrc.ap.gov.in/Views/Monitoring.aspx>, of APPCB website. There is a scope in future to install continuous water quality monitoring system (CWQMS) for the required parameters.

2. Public Mass awareness etc.

To implement any river conservation project successfully, public awareness is of utmost importance. Unless the public are made aware of the irreversible damage and pollution caused by indiscriminate littering and dumping of waste and garbage in drains and water bodies which leads to Killing of the River. Hence, it should be ensured to conserve the river with the following action points

- To involve the local communities in all the stages of the project cycle, from

conceptualization, preparation, finalization, implementation and finally operation and maintenance (O&M).

- Public Awareness & Public Participation should be the front-end activity of the project.
- The entire programme of River conservation should be conceived, formulated, implemented, monitored and evaluated in close consultation with the stake holding communities.
- Therefore, education and awareness programmes are key to the sustainability of the various components implemented as part of the river conservation/ restoration project.

3. River Rejuvenation Plan

Action Points

Type	Action Points	Authority Responsible
Industrial Pollution	In Kurnool District, there are three (03) No's of industries, viz., M/s Adani Willmar Pvt. Ltd., Manthralayam, M/s TGVSRAC, Ltd., Gondiparla, M/s Sri Rayala seema Hi-Strength Hypo Ltd., Gondiparla. These industries are not discharging their effluents into River Tungabhadra, as these are having Zero liquid discharge facility(ZLD).	SPCB
Interception and treatment of Raw Sewage	a) There are total 03 No. of (Kurnool – 03)Sewage Treatment Plants (STPs) with utilization of 2.4MLD capacity. The untreated raw sewage capacity 41.6MLD is directly discharged into the river. b) Whether the present STPs are sufficient in capacity to treat total sewage generation or not. c) Identify the gaps.	CDMA
Ground Water Assessment	a) Carry out assessment of ground water survey in the catchment area of the identified polluted stretch twice in a year to ensure quality. b) To promote roof top rain water harvesting by individual households.	Ground water dept

Flood Plain Zone	a) Conservation of the river through water shed management. b) Cleaning of the river bed and bank. c) Afforestation on both the banks to prevent soil erosion. d) Recreational activities to be promoted. e) Erection of path way of the river banks. f) Checking encroachment in the flood plain zone of the polluted river stretch g) Prohibition of disposal of municipal, plastic, biomedical and other wastes in the polluted stretch of the river bank. h) Demarcation of the flood plain zone.	Water Resources/C DMA/ Municipal Corporation /Irrigation/Forest/ Tourism/PWD/Local Administration
Monitoring of Action Plan	The plan for the polluted stretches of the river may be implemented in a time bound manner by activities such as: a) Modification of consent conditions for STPs in and around the polluted river stretches. b) Surveillance of sources of pollution in contrast to the norms. c) Assessment of water quality of the polluted stretches on monthly basis. d) The APPCB is regularly (monthly) monitoring the river water quality under NWMP. The analytical data generated is being uploaded in the RRC https://rrc.ap.gov.in/Views/Monitoring.aspx of APPCB website in addition to EWQDES (CPCB). e) The monitoring committee may convene meeting of Stakeholder organizations on Quarterly basis by the CDMA as Nodal Authority.	Pollution Control Board
SolidWaste	a) Prohibition of direct disposal of Municipal solid waste in the river banks. b) Frequent River Surface cleaning by removal of debris, plastics etc.	CDMA/ Municipal Corporation /Water Resource Department

Environmental Flow	a) Flow measurement of the river should be carried out by the concerned department and there cord has to be maintained b) Fresh water flowing through escape channels / small barrages should be checked. c) The river can be of good potential for Irrigation purpose and the farmers have to adopt good irrigation practices.	Water Resource /Irrigation/ Agriculture Department
Public Awareness	a) To highlight the issues related with the direct discharge of domestic solid waste and open defecation awareness programs have to be implemented. b) Mass awareness to conserve water.	CDMA/ Municipal Corporation/ Village Panchayats / NGOs

Model River Stretch for Rejuvenation of River Krishna (Priority-V)

1. Monitoring mechanism proposed for implementation of action plans

The water quality assessment and evaluation of impacts is necessary to understand the river state at various stages of the project implementation and post implementation of the project. Therefore, the water quality assessment and evaluation of the project achievements is essential component for the long term benefit of the project. The monitoring and evaluation is necessary for taking corrective measures at appropriate time. The monitoring and evaluation schedule proposed is as detailed below:

1.1 Water Quality Monitoring Stations (WQMS):

The APPCB is regularly monitoring water quality of River Krishna on monthly basis for the following parameters at the locations mentioned below, which are also NWMP locations:

S No.	Code *	Location	Parameters
01	1175	Sangameswaram, Kurnool Dist.	pH Dissolved Oxygen(DO) Bio-Chemical Oxygen Demand (BOD) Total Coli form Fecal Coliform Total Dissolved Solids(TDS)
02	3083	Srisailam, Kurnool Dist.	
03	4381	After confluence with river Musi at Vadapalli, GunturDist.	
04	1786	Vedadri, KrishnaDist.	
05	1787	Amaravathi, GunturDist.	
06	0025	Prakasham barrage, Vijayawada, Krishna Dist	
07	4375	Pavitra sangamam at Ibrahimpatnam, Krishna Dist.	
08	1782	Hamsaladeevi, Krishna Dist.	

*The code relates to NWMP of CPCB.

All the parameters are presently monitored manually and uploaded in the River Rejuvenation Committee (RRC) link <https://rrc.ap.gov.in/Views/Monitoring.aspx>, of APPCB website. There is a scope in future to install continuous water quality monitoring system (CWQMS) for the required parameters.

2. Public Mass awareness etc.

To implement any river conservation project successfully, public awareness is of utmost importance. Unless the public are made aware of the irreversible damage and pollution caused by indiscriminate littering and dumping of waste and garbage in drains and water bodies which leads to Killing of the River. Hence, it should be ensured to conserve the river with the following action points

- To involve the local communities in all the stages of the project cycle, from conceptualization, preparation, finalization, implementation and finally operation and maintenance (O&M).
- Public Awareness & Public Participation should be the front-end activity of the project.
- The entire programme of River conservation should be conceived, formulated, implemented, monitored and evaluated in close consultation with the stake holding communities.
- Therefore, education and awareness programmes are key to the sustainability of the various components implemented as part of the river conservation/ restoration project.

3. River Rejuvenation Plan:

Action Point		
Type	Action Points	Authority Responsible
Industrial Pollution	In Krishna district, there is only one industry discharging the effluent into River Krishna, i.e., M/s. Dr. Narla Tata Rao Thermal Power Station. The effluent is discharged through Budameru Diversion Channel(drain), which in turn joins river Krishna in the upstream of Prakasam Barrage, Near Ibrahimpatnam village.	SPCB
Interception and treatment of Raw Sewage	a) There are total 09 (Vijayawada – 07 &Guntur – 02) Sewage Treatment Plants (STPs)currently operational. b) Identify any untreated sewage joining the river. c) Whether the present STPs are sufficient in capacity to treat total sewage generation or not. d) Identify the gaps.	CDMA
Ground Water Assessment	a) Carry out assessment of ground water survey in the catchment area of the identified polluted stretch twice in a year to ensure quality. b) To promote roof top rain water harvesting by individual households.	Ground water dept
	a) Conservation of the river through water shed management. b) Cleaning of the river bed and bank. c) Afforestation on both the banks to	Water Resources/ CDMA/ Municipal

Flood Plain Zone	prevent soil erosion. d) Recreational activities to be promoted. e) Erection of pathway of the river banks. f) Checking encroachment in the flood plain zone of the polluted river stretch g) Prohibition of disposal of municipal, plastic, biomedical and other wastes in the polluted stretch of the river bank. h) Demarcation of the flood plain zone.	Corporation /Irrigation/Forest/Tourism/PWD/ Local Administration
Monitoring of Action Plan	The plan for the polluted stretches of the river may be implemented in a time bound manner by activities such as: a) Modification of consent conditions for STPs in and around the polluted river stretches. b) Surveillance of sources of pollution in contrast to the norms. c) Assessment of water quality of the polluted stretches on monthly basis. The APPCB is regularly (monthly) monitoring the river water quality under NWMP. The analytical data generated is being uploaded in the RRC https://rrc.ap.gov.in/Views/Monitoring.aspx of APPCB website in addition to EWQDES (CPCB). d) The monitoring committee may convene meeting of Stakeholder organizations on Quarterly basis by the CDMA as Nodal Authority.	Pollution Control Board
Solid Waste	a) Prohibition of direct disposal of Municipal Solid waste in the river banks. b) Frequent River Surface cleaning by removal of debris, plastics etc.	CDMA/ Municipal Corporation/ Water Resource Department
Environmental Flow	a) Flow measurement of the river should be carried out by the concerned department and there cord has to be maintained b) Fresh water flowing through escape channels/small barrages should be checked. c) The river can be of good potential for Irrigation purpose and the farmers have to adopt good irrigation practices.	Water Resource /Irrigation/ Agriculture Department

Public Awareness	a) To highlight the issues related with the direct discharge of domestic solid waste and open defecation awareness programs have to be implemented. b) Mass awareness to conserve water.	CDMA/ Municipal Corporation/ Village Panchayats/ NGOs
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