

**Table 3a - RIVER CHAPORA NEAR ALORNA FORT, PERNEM 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Limit for class C river as per CPCB classification based on designated best use of rivers
1	pH	6.36	7.1	7.61	6.9	6.93	6.87	6.78	6.85	7.08	6.73	6.41	7.27	6-9
2	Temperature °C	29	31	30.7	28.6	28	28	29	29	28	28	29	29	
3	Conductivity µs/cm	56.41	47.9	53.8	68.59	66.5	56.42	66.21	59.42	291.8	4.77	2060	4782	
4	Dissolved Oxygen mg/l	7.2	8	6.9	7	7.3	7.3	7.4	7.6	7.45	6.9	7.2	6	4 mg/l or more
5	Turbidity (NTU)	4.23	1.44	1.23	13.59	3.92	116	112	1.8	2.76	1.66	3.31	2.94	
6	Nitrite Nitrogen mg/l	0.002	0.001	0.002	0.004	0.002	0.01	0.005	0.002	0.001	0.005	0.013	0.03	
7	Nitrogen(Nitrate) mg/l	0.07	0.057	0.02	0.33	0.02	0.25	0.12	0.13	0.185	0.15	0.18	0.2	
8	Phosphate mg/l	0.001	0.082	0.002	0.01	0.006	0.02	0.03	0.003	0.006	0.004	0.02	BDL	
9	BOD mg/l	1.7	1.7	2	0.5	0.7	0.8	1	1.2	0.65	1.3	2.1	0.4	3 mg/l or less
10	COD mg/l	5	5	8	8	2	6	3	8	15	10	14	-	
11	Chloride mg/l	300	3.4	7	6.31	4.37	5.34	5.87	5.2	68	10.2	495	2374	
12	Fecal Coliform MPN/100 ml	1700	2300	1300	1700	2300	4900	2300	1300	1300	780	1300	1300	
13	Total Coliform MPN/100 ml	3300	4900	2300	3300	3300	9400	4900	2200	2200	1100	2400	2200	5000 or less MPN/100 ml
14	Ammonia mg/l	0.008	0.046	0.02	0.06	0.08	0.07	0.05	0.008	BDL	0.01	0.18	BDL	
15	Total Dissolved Solids(mg/l)	80	39	34	46	53	43	40	39	210	2656	1200	2971	
16	Total Fixed Solids (mg/l)	50	4	22	15	17	27	23	29	186	1003	712	-	
17	Total Suspended Solid (mg/l)	7	1	5	5	4	75	66	78	4	49	49	73	
18	Hardness(mg/l)	600	20	20	26	24	24	26	24	44	28	2000	1400	
19	Fluoride(mg/l)	0.076	0.185	0.23	0.2	0.02	0.07	BDL	0.08	0.04	0.09	0.07	BDL	
20	Boron(mg/l)	0.71	0.009	0.49	0.01	0.09	0.8	4.22	-	-	2.99	-	-	
21	Sulphate (mg/l)	17.3	2.82	7.41	4.09	1.77	8.4	1.54	7.7	23.7	6.04	68	314.5	
22	Total Alkalinity(mg/l)	15	24	8	10	34	26	26	52	36	44	54	50	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)	34.8	6.3	2	5.3	6.2	4.5	8.6	1.5	49.1	292.2	264.3	551	
25	Potassium(mg/l)	5.5	4.5	1	2.6	2	1.5	0.9	2.9	3.5	18.8	13.9	28.4	
26	Calcium as CaCO3(mg/l)	200	14	12	16	10	14	14	14	22	16	800	600	
27	Magnesium(mg/l)	97.2	1.46	1.94	2.43	3.4	1.46	2.92	2.4	5.35	2.9	292	194	

**Table 3b - RIVER KALNA AT CHANDEL, PERNEM 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Limit for class C river as per CPCB classification based on designated best use of rivers
1	pH	6.73	6.73	7.11	6.8	7.54	6.88	6.98	6.75	7	6.17	6.25	6.77	6-9
2	Temperature °C	28	29.5	30.5	28.7	27.3	27	28	29	28	28	28	28	
3	Conductivity µs/cm	22.71	50.26	67.09	50.39	58.72	56.89	64.29	62.29	8382	93.24	82.02	64.7	
4	Dissolved Oxygen mg/l	5.7	6.5	5.8	7	7.4	7.5	7.6	8.3	8.08	6.4	7.4	7.6	4 mg/l or more
5	Turbidity (NTU)	1.57	2.74	1.95	6.35	17.45	96.7	98.7	1.59	1.48	2.07	2.33	1.77	
6	Nitrite Nitrogen mg/l	0.003	0.007	0.002	0.003	0.006	0.01	0.002	0.002	0.002	0.004	0.002	0.002	
7	Nitrogen(Nitrate) mg/l	0.03	0.111	0.02	0.16	0.26	0.17	0.01	0.011	0.06	0.01	0.01	0.01	
8	Phosphate mg/l	0.02	0.026	0.008	0.004	0.004	0.01	BDL	0.002	0.035	0.003	0.005	0.002	
9	BOD mg/l	0.8	2	2.4	1.9	1	0.6	0.9	1.4	1.48	1	1.8	3	3 mg/l or less
10	COD mg/l	5	5	2	2	17	6	3	5	4	8	8	7	
11	Chloride mg/l	6.5	3.4	11.0	4.86	4.89	4.86	3.91	5.4	7	10.68	10	7.5	
12	Fecal Coliform MPN/100 ml	780	450	4900	2300	1700	3300	780	1300	3300	1300	780	450	
13	Total Coliform MPN/100 ml	1300	780	7000	3300	4600	7900	1300	2300	4900	1700	1300	780	5000 or less MPN/100 ml
14	Ammonia mg/l	0.001	0.148	5	0.08	0.01	0.36	0.02	0.006	0.06	0.01	0.15	BDL	
15	Total Dissolved Solids(mg/l)	55	46	39	39	41	39	41	52	54	58	347	119	
16	Total Fixed Solids (mg/l)	45	5	25	9	21	26	20	24	26	33	118	-	
17	Total Suspended Solid (mg/l)	5	1	5	3	24	93	56	72	10	53	83	84	
18	Hardness(mg/l)	54	26	20	20	18	20	22	28	40	32	28	24	
19	Fluoride(mg/l)	0.016	0.149	0.1	0.3	1	0.06	BDL	0.05	BDL	0.13	0.39	BDL	
20	Boron(mg/l)	BDL	BDL	1.26	0.06	BDL	BDL	2.17	-	-	1.22	-	-	
21	Sulphate (mg/l)	2.91	4.03	4.22	1.16	1.61	5.07	2.21	7.4	1.26	5.26	3.8	2.8	
22	Total Alkalinity(mg/l)	21	30	10	6	22	30	26	48	26	40	32	40	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)	8.8	6.4	47	4.6	4.5	3	7	5.2	11.8	4.3	6.3	5.7	
25	Potassium(mg/l)	4.2	4.4	3.5	2.5	2.1	1.1	0.5	3	3.3	0.6	0.9	1.7	
26	Calcium as CaCO3(mg/l)	10	14	12	8	8	14	10	18	16	18	16	14	
27	Magnesium(mg/l)	10.7	2.92	1.94	2.92	2.43	1.46	2.92	2.4	5.83	3.4	2.9	2.4	

**Table 3c - RIVER MAPUSA ON CULVERT ON HIGHWAY MAPUSA-PANAJI 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	pH	6.93	6.86	7.29	6.8	6.81	6.97	6.87	6.72	7.1	6.68	7.14	7.26	6.5 - 8.5
2	Temperature °C	32	32	31	28.9	28.1	30	30	30	29	27	29	30	
3	Conductivity ms/cm	15730	25900	23590	110.5	87.32	403.38	203.370	312.32	4260	15790	16380	14020	
4	Dissolved Oxygen mg/l	6.8	3.5	3.2	5.1	5.1	4.2	5.2	6.6	8.55	5.6	3.8	7	4 mg/l or more
5	Turbidity (NTU)	1.77	0.98	2.01	13.71	29.5	5.07	5.01	2.44	1.41	0.9	1.87	1.88	30 NTU
6	Nitrite Nitrogen mg/l	0.005	0.011	0.016	0.045	0.036	0.01	0.01	0.01	0.003	0.005	0.01	0.004	
7	Nitrogen(Nitrate) mg/l	0.12	0.249	0.14	0.29	0.21	0.56	0.05	0.08	0.111	0.07	0.09	0.12	
8	Phosphate mg/l	0.03	0.043	0.069	0.05	0.05	0.02	0.04	0.02	0.006	0.01	0.02	0.007	
9	BOD mg/l	2.2	1.5	2.1	1.7	2	1.3	1.8	1.8	1.85	1.5	1.5	2.8	3 mg/l or less
10	COD mg/l	-	-	12	12	19	3	6	4	11	9	-	-	
11	Chloride mg/l	5621	5002.3	6506	15.06	5.87	82	59.68	90	1209	60.22	6123	5373	
12	Fecal Coliform MPN/100 ml	3300	3300	2300	2300	2300	2300	1300	4900	3300	4900	7900	2200	100 or less MPN/100 ml
13	Total Coliform MPN/100 ml	4900	7000	3300	4900	4900	4900	2300	7900	4900	7900	11000	2700	
14	Ammonia mg/l	0.014	0.236	0.44	0.2	0.24	0.02	0.07	0.06	0.01	0.04	0.15	BDL	
15	Total Dissolved Solids(mg/l)	9984	11374	12494	113	58	282	133	158	2388	8826	2910	9834	
16	Total Fixed Solids (mg/l)	5554	0	10623	49	30	165	80	97	1572	4569	1858	-	
17	Total Suspended Solid (mg/l)	20	29	40	6	30	4	26	31	30	24	130	71	
18	Hardness(mg/l)	2000	1000	800	36	28	58	52	68	422	54	2600	2200	
19	Fluoride(mg/l)	0.484	1.05	2	0.21	BDL	0.12	BDL	0.14	0.35	0.22	0.43	BDL	
20	Boron(mg/l)	0.99	1.53	3.09	0.025	5.31	BDL	3.78	-	-	2.35	-	-	
21	Sulphate (mg/l)	422.4	498.9	632.3	11.02	7.64	11	12.86	31.8	131	1990.8	425	425	
22	Total Alkalinity(mg/l)	38	92	24	10	30	40	50	58	54	42	90	90	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)	2632	2443	3147	8.3	8.1	44.2	44.3	73.7	73.6	640.9	1972	1570	
25	Potassium(mg/l)	99.2	93	124.4	3.6	3.1	3.3	5	4.3	17.1	67.4	80.9	82.3	
26	Calcium as CaCO3(mg/l)	600	540	400	24	24	26	24	28	114	18	800	600	
27	Magnesium(mg/l)	340	111.8	97.2	2.92	0.97	7.78	6.8	9.7	75	8.7	437	389	

**Table 3d - RIVER ASSANORA AT ASSANORA 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Limit for class C river as per CPCB classification based on designated best use of rivers
1	pH	6.1	7.81	8.23	5.64	6.07	6.26	6	7.3	7.74	5.98	6.06	6.22	6-9
2	Temperature °C	29.5	28	27.9	26	25	27	27	28	26	28	28	28	
3	Conductivity µs/cm	39.41	37.63	79.63	69.15	51.37	64.58	80.75	98.84	65.17	53.08	49.4	63.57	
4	Dissolved Oxygen mg/l	6.1	5.4	6.6	6.4	6.7	6.9	6.8	6.2	6.3	6.5	6.2	6.2	4 mg/l or more
5	Turbidity (NTU)	2.21	3.94	38.5	42.3	12.62	3.6	4.22	11.79	3.99	4.15	2.77	2.92	
6	Nitrite Nitrogen mg/l	0.005	0.002	0.03	0.007	BDL	0.001	0.003	0.006	0.002	0.002	0.002	0.001	
7	Nitrogen(Nitrate) mg/l	0.019	0.02	0.07	0.06	0.139	0.15	0.0088	0.03	0.13	0.077	0.07	0.074	
8	Phosphate mg/l	0.007	0.006	0.008	0.013	0.009	0.003	0.004	0.13	0.008	0.012	0.002	0.004	
9	BOD mg/l	1.1	1.4	0.8	0.7	0.7	0.7	1.7	2.7	2.3	1.3	1.1	2.5	3 mg/l or less
10	COD mg/l	6	5	11	7	11	19	10	23	15	2	2	-	
11	Chloride mg/l	7.5	9.5	16.14	15.17	4.86	7.5	7.65	18.1	8.5	11.7	6.8	6.3	
12	Fecal Coliform MPN/100 ml	790	2400	2400	78	490	1300	130	1300	230	1300	1300	790	
13	Total Coliform MPN/100 ml	2400	5400	9200	330	1100	1700	490	2400	700	3500	3500	1300	5000 or less MPN/100 ml
14	Ammonia mg/l	0.007	0.002	0.07	0.09	0.07	0.07	0.024	0.06	0.02	0.017	0.02	0.08	
15	Total Dissolved Solids(mg/l)	24	20	55	41	37	35.5	110	65	-	39			
16	Total Fixed Solids (mg/l)	22	18	16	20	14	25	69	33	-	24	10	-	
17	Total Suspended Solid (mg/l)	4	3	8	11	8	2	28	11	-	2	1	10	
18	Hardness(mg/l)	20	70	28	38	14	26	25	36	34	16	22	24	
19	Fluoride(mg/l)	0.08	0.15	0.07	BDL	1.08	BDL	0.013	0.75	0.28	BD L	0.83	0.03	
20	Boron(mg/l)	2.15	0.12	0.09	0.01	BDL	2.27	0.95	1.06	-	-	-	-	
21	Sulphate (mg/l)	2.1	2.4	1.36	0.64	1.86	1.98	0.97	1.23	3.6	3.51	2.13	1.95	
22	Total Alkalinity(mg/l)	500	20	32	4	18	32	33	24	32	10	22	20	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)	9.1	11.4	6.4	4.6	4.2	9.5	6.3	47.1	7.7	4.1	2.9	5.7	
25	Potassium(mg/l)	4.9	2.3	2.1	2.5	2.2	4.9	0.6	41.1	1.2	0.6	0	1.8	
26	Calcium as CaCO3(mg/l)	10	10	22	26	10	8	17	22	14	10		12	12
27	Magnesium(mg/l)	2.4	14.6	1.5	2.9	0.972	4.4	1.7	3.4	4.9	4.01	2.43	3	

**Table  
3e - RIVER VALVANTI AT SANQUELIM 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Limit for class C river as per CPCB classification based on designated best use of rivers
1	pH	6.61	7.69	8.9	5.96	7.15	6.36	6.51	7.09	6.8	6.1	6.37	6.92	6-9
2	Temperature °C	31.8	27	26	26.3	25.2	28	25	30	26	29	29.5	29	
3	Conductivity µs/cm	46.07	51.54	67.45	63.58	79.21	54.13	70.3	81.82	78.37	75.58	63.55	81.2	
4	Dissolved Oxygen mg/l	7.4	6.8	6.8	7.5	7.5	7.8	7.8	7.1	7.3	7.8	8.1	7.6	4 mg/l or more
5	Turbidity (NTU)	1.71	2.74	8.92	11.04	7.4	2.81	2.72	2.58	4.27	3.92	2.08	2.49	
6	Nitrite Nitrogen mg/l	0.004	0.003	0.05	0.002	0.003	0.001	0.002	0.004	0.004	0.024	0.002	0.01	
7	Nitrogen(Nitrate) mg/l	0.025	0.02	0.18	0.15	0.114	0.04	0.0041	0.06	0.04	0.056	0.08	0.08	
8	Phosphate mg/l	0.011	0.013	0.01	0.019	0.014	0.003	0.03	0.19	0.005	0.019	0.003	0.02	
9	BOD mg/l	2.6	0.9	0.4	0.3	1	1.2	1.2	2.5	2.1	3.4	2.1	3.4	3 mg/l or less
10	COD mg/l	10	7	8	9	18	2	12	3	7	7	3	-	
11	Chloride mg/l	5	11	9.29	9.78	12.63	6.5	8.5	11.74	8	13.6	7.77	6.8	
12	Fecal Coliform MPN/100 ml	4900	7900	4900	4900	7900	2300	3300	7900	7900	7900	17000	2300	
13	Total Coliform MPN/100 ml	7900	13000	7000	7900	11000	4600	4900	13000	11000	17000	28000	4600	5000 or less MPN/100 ml
14	Ammonia mg/l	0.002	0.02	0.15	0.02	0.012	0.02	0.015	0.23	0.02	BDL	0.01	BDL	
15	Total Dissolved Solids(mg/l)	28	25	42	38	55	33	214	51	-	47	40	48	
16	Total Fixed Solids (mg/l)	24	20	20	15	16	29	120	23	-	29	17	-	
17	Total Suspended Solid (mg/l)	6	4	17	21	28	5	17	13	-	8	2	12	
18	Hardness(mg/l)	34	18	52	42	14	22	25	42	30	16	26	36	
19	Fluoride(mg/l)		0.15	0.11	BDL	1.01	BDL	0.08	0.63	0.28	2.92	0.24	0.01	
20	Boron(mg/l)	2.21	0.18	0.14	0.44	BDL	1.92	1.2	1.09	-	-	-	-	
21	Sulphate (mg/l)	2.82	4	2.86	2.71	0.66	2.65	0.9	1.35	3.6	6.34	2.52	2.24	
22	Total Alkalinity(mg/l)	300	20	30	8	22	30	48	28	42	19	24	30	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)	8.9	16.9	7.6	4.2	4.8	2.3	6	44.8	9.2	5.3	4.5	7.8	
25	Potassium(mg/l)	5.1	3.5	2.9	2.3	9.3	4.7	1.5	40.6	1.1	0.9	0.3	1.8	
26	Calcium as CaCO3(mg/l)	30	12	16	22	10	10	22	26	10	10	16	20	
27	Magnesium(mg/l)	1	1.5	8.7	4.9	0.972	2.9	1.9	3.9	4.9	6.41	2.43	4	

**Table 3f - RIVER MADEI AT DABOSE, VALPOI 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Limit for class C river as per CPCB classification based on designated best use of rivers
1	pH	7	6.81	8.17	6.48	7.66	6.35	6.83	7.05	7	5.95	6.75	6.96	6-9
2	Temperature °C	31.2	30	29.3	26.7	26.3	28	29	27	28	28	29.5	28.5	
3	Conductivity µs/cm	125.9	101.5	112.9	72.02	90.96	62.6	90.6	83.42	91.65	105.6	101.2	207.36	
4	Dissolved Oxygen mg/l	6.9	6.3	6.4	8	7.7	7.7	7.7	7.2	7.2	7.4	7.2	6.5	4 mg/l or more
5	Turbidity (NTU)	2.88	3.45	3.91	28.2	40.9	4.6	4.21	2.35	1.35	1.45	1.32	3.15	
6	Nitrite Nitrogen mg/l	0.006	0.002	0.003	0.004	0.006	0.001	0.03	0.007	0.002	0.124	0.006	0.002	
7	Nitrogen(Nitrate) mg/l	0.269	0.09	0.06	0.03	0.07	0.12	0.0018	0.02	0.12	0.206	0.008	0.02	
8	Phosphate mg/l	0.017	0.022	0.02	0.017	0.035	0.028	0.02	0.01	0.005	0.19	0.004	0.004	
9	BOD mg/l	1.5	1.8	0.4	0.8	0.9	0.4	0.5	1	1.1	1.5	2.1	2.6	3 mg/l or less
10	COD mg/l	18	5	12	10	30	11	15	2	11	2	3	-	
11	Chloride mg/l	20	8.5	6.36	10.76	17.97	6	8.58	10.27	7.5	10.7	7.77	27.7	
12	Fecal Coliform MPN/100 ml	78	220	790	330	1300	790	780	220	130	3500	3500	1300	
13	Total Coliform MPN/100 ml	230	340	1300	490	3500	1100	1700	340	230	5400	5400	2300	5000 or less MPN/100 ml
14	Ammonia mg/l	0.011	0.06	0.13	0.14	0.01	0.17	0.017	0.16	0.004	0.026	0.01	0.09	
15	Total Dissolved Solids(mg/l)	70	45	65	47	64	34	198	57	-	62	60	126	
16	Total Fixed Solids (mg/l)	45	30	32	22	36	24	87	24	-	69	26	-	
17	Total Suspended Solid (mg/l)	8	10	42	34	121	5	18	16	-	1	1	7	
18	Hardness(mg/l)	60	22	84	74	20	20	35	30	40	42	48	58	
19	Fluoride(mg/l)	0.1	0.14	0.09	BDL	0.366	0.12	0.09	0.5	0.19	1.27	1.41	0.12	
20	Boron(mg/l)	3.14	0.17	0.2	0.56	BDL	2.31	1.85	1.17	-	-	-	-	
21	Sulphate (mg/l)	6.03	1.6	1.73	9.17	2	3.03	0.7	0.83	2	3.8	1.74	3.25	
22	Total Alkalinity(mg/l)	680	44	38	6	26	30	47	18	52	23	48	56	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)	13.8	4.7	5.2	4.5	4.5	4.9	6.4	44.7	6.9	4.7	4.2	21.3	
25	Potassium(mg/l)	6.7	3.2	2.7	2.5	13.9	3.1	0.4	40.6	1	0.9	0.4	3.1	
26	Calcium as CaCO3(mg/l)	44	10	38	46	12	8	25	16	24	24	30	36	
27	Magnesium(mg/l)	3.9	2.9	11.2	6.8	1.94	2.9	1.7	3.4	3.9	4.01	4.37	5	

**Table 3g - RIVER KHANDEPAR, OPA, PONDA 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Limit for class C river as per CPCB classification based on designated best use of rivers
1	pH	8.05	7.42	7.37	-	7.34	6.79	6.56	6.71	7.62	7.31	7.29	6.75	6-9
2	Temperature °C	33	30	30	27.1	28.3	28.9	27	27.5	28	29	30	32	
3	Conductivity µs/cm	99.57	73.38	94.6	63.7	42.65	54.24	-	74.03	143.7	88.75	90.28	111.2	
4	Dissolved Oxygen mg/l	6.4	5.8	5.2	7.1	7.5	7.6	7.4	7.9	7.9	7.2	6.8	7.2	4 mg/l or more
5	Turbidity (NTU)	3.87	1.8	3.73	7.1	6.21	11.7	6.66	2.79	1.85	1.6	2.26	2.62	
6	Nitrite Nitrogen mg/l	0.001	0.0015	0.002	0.004	0.002	0.004	0.002	0.023	0.166	0.002	0.003	0.002	
7	Nitrogen(Nitrate) mg/l	0.024	0.01	0.04	0.02	0.16	0.146	0.15	0.12	0.22	0.21	0.24	0.02	
8	Phosphate mg/l	BDL	0.005	0.02	0.004	0.013	0.017	0.003	0.01	BDL	0.003	0.18	0.007	
9	BOD mg/l	1.1	1	2.7	0.8	0.6	0.8	0.7	2.7	2.4	1.8	1.4	1.2	3 mg/l or less
10	COD mg/l	BDL	3	5	4	4	14	4	5	10	7	8	5	
11	Chloride mg/l	2.91	9	6.8	6.5	5.53	11.6	10.76	3.91	12.23	9.5	11	6	
12	Fecal Coliform MPN/100 ml	79	490	790	490	230	490	790	790	230	110	1700	78	
13	Total Coliform MPN/100 ml	140	790	1300	1300	330	1300	1300	1300	330	140	2200	110	5000 or less MPN/100 ml
14	Ammonia mg/l	0.001	0.06	0.01	0.084	0.012	0.12	BDL	0.18	0.07	0.02	0.17	0.002	
15	Total Dissolved Solids(mg/l)	61	60	48	139	32	50	45	43	80	96	77	62	
16	Total Fixed Solids (mg/l)	18	42	20	18	30	37	30	15	8	12	18	41	
17	Total Suspended Solid (mg/l)	10	5	10	28	6	22	10	14	6	7	12	8	
18	Hardness(mg/l)	58	34	40	24	10	16	22	30	42	34	44	38	
19	Fluoride(mg/l)	BDL	0.11	0.7	1.1	0.64	BDL	0.19	0.13	0.53	0.65	0.83	-	
20	Boron(mg/l)	0.08	0.16	3.52	2.8	0.4	BDL	-	-	-	-	-	-	
21	Sulphate (mg/l)	2.94	2.5	3.52	3.1	1.69	2.18	3.33	0.49	1.92	3.6	4.9	16.92	
22	Total Alkalinity(mg/l)	25	36	18	26	6	22	26	20	82	42	52	44	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)	44.4	1.9	5.2	6.3	4.9	3.7	17	3.6	10.1	9.8	8.5	7.3	
25	Potassium(mg/l)	10.4	2.2	2.5	2.8	2.1	1	2.9	3	8.1	0.9	0.6	2.7	
26	Calcium as CaCO3(mg/l)	0	28	28	12	6	12	10	14	22	20	22	11	
27	Magnesium(mg/l)	8.75	1.5	2.92	2.9	0.972	0.97	2.92	3.89	4.86	3.4	5.3	6.6	

**Table 3h - RIVER KHANDEPAR AT CODLI 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Limit for class C river as per CPCB classification based on designated best use of rivers
1	pH	9.09	7.58	7.49	-	7.26	6.99	6.63	6.81	6.49	7.05	7.21	6.94	6-9
2	Temperature °C	34.4	30	30.1	26.9	28.1	29	26	27.2	29	29	30	30	
3	Conductivity µs/cm	121.15	58.65	71.73	78.26	45.85	50.7	-	71.25	73.47	78.6	77.88	94.54	
4	Dissolved Oxygen mg/l	6.3	6.7	6.6	7.3	7.5	7.4	7.7	8	8.7	7.7	7.2	7.7	4 mg/l or more
5	Turbidity (NTU)	7.04	1.22	5.56	10.71	6.55	29.1	16.4	2.9	2.78	2.17	2.41	3.53	
6	Nitrite Nitrogen mg/l	0.001	0.0009	0.001	0.002	0.002	0.009	0.01	0.002	0.001	0.003	0.006	0.003	
7	Nitrogen(Nitrate) mg/l	BDL	0.003	0.08	0.05	0.13	0.126	0.16	0.04	0.23	0.22	0.25	0.07	
8	Phosphate mg/l	BDL	0.001	0.01	0.002	0.001	0.04	0.01	0.01	0.02	0.003	0.015	0.02	
9	BOD mg/l	0.2	0.5	1.6	1.1	0.4	0.6	1.4	1.4	1.5	1	0.1	0.7	3 mg/l or less
10	COD mg/l	BDL	20	6	5	4	20	-	3	4	5	5	15	
11	Chloride mg/l	8.74	9	2.43	7	1.38	9.71	25.9	3.91	4.4	8.5	1624	5	
12	Fecal Coliform MPN/100 ml	240	1300	1300	490	490	790	1300	2400	330	330	330	1300	
13	Total Coliform MPN/100 ml	540	3500	2400	1100	790	2400	2400	3500	490	460	700	1700	5000 or less MPN/100 ml
14	Ammonia mg/l	0.001	0.04	0.004	0.01	0.061	0.042	BDL	0.07	0.01	0.008	0.05	0.006	
15	Total Dissolved Solids(mg/l)	78	118	42	80	26	47	56	43	49	40	23	54	
16	Total Fixed Solids (mg/l)	20	90	17	45	20	36	20	23	26	20	10	28	
17	Total Suspended Solid (mg/l)	6	3	13	18	18	98	4	12	17	15	21	3	
18	Hardness(mg/l)	40	38	40	24	14	16	34	20	34	30	74	30	
19	Fluoride(mg/l)	BDL	0.03	0.24	1	0.46	BDL	0.31	BDL	0.22	0.58	0.64	-	
20	Boron(mg/l)	0.005	0.08	BDL	0.3	0.94	BDL	-	-	-	-	-	-	
21	Sulphate (mg/l)	1.65	2.9	1.57	2.7	1.38	4.02	3.89	0.51	0.83	3.3	3.9	2.14	
22	Total Alkalinity(mg/l)	68	24	12	10	6	22	30	18	34	38	52	44	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)	43.4	2	4	5.4	4.2	2.8	11.4	3.5	6.3	7.4	6.4	12.1	
25	Potassium(mg/l)	10.4	1	2.3	3.2	2	0.9	3	2.9	3	0.7	0.3	2.9	
26	Calcium as CaCO3(mg/l)	-	18	22	8	8	10	16	12	18	20	14	8	
27	Magnesium(mg/l)	2.92	4.9	4.37	3.9	1.458	1.46	4.37	3.89	3.88	2.4	14.6	5.3	



**Table 3i - RIVER KUSHAWATI NEAR BUND AT KEVONA, RIVONA, SANGUEM 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Limit for class C river as per CPCB classification based on designated best use of rivers
1	pH	6.57	7.93	6.5	7.62	8	6.49	6.36	7.26	6.78	6.7	6.5	7.2	6-9
2	Temperature °C	28	32.8	29.7	27.2	26.8	28	27	26	27.4	25	26.4	28	
3	Conductivity µs/cm	170.6	131.3	169.4	90.49	51.47	62.64	-	101.5	108.9	146.7	129.2	187.87	
4	Dissolved Oxygen mg/l	4.8	5.6	6.3	7	7.2	7.6	7.7	7.9	8.5	7.3	7.3	7	4 mg/l or more
5	Turbidity (NTU)	2.5	1.61	1.3	8.54	5.66	1.26	7.7	5.39	1.32	2.2	1.1	1.03	
6	Nitrite Nitrogen mg/l	0.004	0.002	0.002	0.004	0.001	0.049	0.001	0.003	0.001	0.003	0.002	0.003	
7	Nitrogen(Nitrate) mg/l	0.2	0.17	0.039	0.26	0.17	0.206	0.11	0.14	0.233	0.19	0.16	0.11	
8	Phosphate mg/l	0.003	0.002	0.009	0.02	0.28	0.002	0.009	0.01	0.004	0.023	0.02	BDL	
9	BOD mg/l	2.2	0.4	0.7	0.6	2.3	0.9	0.7	1	1.1	2.3	0.6	1.4	3 mg/l or less
10	COD mg/l	8	5	4	5	6	2	2.8	3	3	11	3	4	
11	Chloride mg/l	6.9	11	12.14	9.29	6	3.2	3.1	6.8	3.42	9	7	6.5	
12	Fecal Coliform MPN/100 ml	4900	780	2300	2300	2300	1700	7000	1300	1700	2400	230	490	
13	Total Coliform MPN/100 ml	7900	1300	4900	4900	3300	3300	9400	2300	3300	5400	490	1300	5000 or less MPN/100 ml
14	Ammonia mg/l	0	0.04	0.06	0.09	0.04	0.016	0.005	0.02	0.01	0.036	0.02	BDL	
15	Total Dissolved Solids(mg/l)	89	69	123	55	31	43	281	72	65	85	59	104	
16	Total Fixed Solids (mg/l)	35	23	33	23	27	13	171	40	32	80	22	-	
17	Total Suspended Solid (mg/l)	2	5	8	30	15	15	47	33	68	16	6	3	
18	Hardness(mg/l)	88	84	84	20	4	20	22	38	54	54	60	84	
19	Fluoride(mg/l)	0.37	0.07	0.82	0.1	0.53	0.6	0.61	BDL	0.09	0.53	BDL	BDL	
20	Boron(mg/l)	2.1	0.12	0.45	BDL	1.08	BDL	BDL	-	-	-	-	-	
21	Sulphate (mg/l)	3.21	3.3	2.02	3.51	2.28	1.44	3.1	3.34	2.3	6.46	4.82	2.6	
22	Total Alkalinity(mg/l)	74	40	22	8	4	30	60	8	49	66	58	100	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)	8	8.6	4.5	7.9	5.6	8.2	1.5	3.2	3.7	5.8	5.2	5.8	
25	Potassium(mg/l)	6.4	3.1	6.9	2.3	2.3	3.9	2.9	2.6	2.9	0.9	1.8	1.8	
26	Calcium as CaCO3(mg/l)	40	48	52	8	2	10	10	26	24	34	32	46	
27	Magnesium(mg/l)	11.66	8.8	7.78	2.92	0.5	2.43	2.9	4.37	7.29	4.9	7	9.2	

**Table 3j - RIVER TALPONA AT CANACONA 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Limit for class C river as per CPCB classification based on designated best use of rivers
1	pH	7.17	7.42	7.3	7.42	7.05	6.28	6.2	6.82	6.6	6.14	6.4	5.9	6-9
2	Temperature °C	32	33.1	29.5	27.7	26.9	30	32	28	28	27	27	30	
3	Conductivity µs/cm	52.18	106.08	120.9	74.67	60.03	64.61	-	79.72	62.16	68.14	118.16	103.4	
4	Dissolved Oxygen mg/l	7.7	7.1	8.2	7.3	7.6	8	1.07	8.2	7.4	6	6.5	6.5	4 mg/l or more
5	Turbidity (NTU)	3.25	2.1	14.31	2.77	12.43	2.9	8.6	2.49	1.79	3.8	3.4	4.64	
6	Nitrite Nitrogen mg/l	0.002	BDL	0.009	0.006	0.014	0.002	0.003	0.024	0.002	0.002	0.002	0.001	
7	Nitrogen(Nitrate) mg/l	0.06	0.03	0.01	0.19	0.024	0.07	0.15	0.06	0.02	0.02	BDL	0.001	
8	Phosphate mg/l	BDL	BDL	0.01	0.004	0.022	0.01	0.005	0.01	0.01	0.015	0.06	0.01	
9	BOD mg/l	1.7	0.9	3.4	0.5	1	1.6	1.1	1.7	1.6	0.9	1.7	1.3	3 mg/l or less
10	COD mg/l	8	2	13	8	10	17	10	11	11	11	2	-	
11	Chloride mg/l	5.34	13.7	12	10.3	12.23	4.89	60	5.87	7	7.5	27.2	9.78	
12	Fecal Coliform MPN/100 ml	23	23	13	13	79	540	23	23	490	1300	78	23	
13	Total Coliform MPN/100 ml	70	49	33	49	350	920	79	70	1300	3500	130	46	5000 or less MPN/100 ml
14	Ammonia mg/l	0.003	0.16	0.19	0.025	0.03	0.07	0.22	0.04	0.206	0.21	0.01	0.38	
15	Total Dissolved Solids(mg/l)	31	63	71	130	47	39	880	47	35	162	74	50	
16	Total Fixed Solids (mg/l)	12	30	40	72	10	17	780	28	27	144	31	-	
17	Total Suspended Solid (mg/l)	7	22	55	30	32	26	13	17	3	0	2	7	
18	Hardness(mg/l)	20	22	36	20	20	24	20	24	12	28	32	24	
19	Fluoride(mg/l)	BDL	0.22	0.03	BDL	0.16	1.3	1.41	BDL	1.65	0.36	1.91	-	
20	Boron(mg/l)	0.92	0.4	5.06	0.47	0.61	0.21	0.5	0.56	-	-	-	-	
21	Sulphate (mg/l)	2.72	4.34	7.26	1.16	0.68	1.82	2.01	27.2	3.19	1.7	7.48	4.9	
22	Total Alkalinity(mg/l)	40	8	140	12	16	24	160	18	22	28	32	32	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)	4	9.9	2.5	4.4	5.1	9.8	6.8	9.4	6.8	8.7	15.6	6.7	
25	Potassium(mg/l)	1	4.3	2.1	3.1	3.5	1.1	3.8	3	3.8	1.2	1.1	1.4	
26	Calcium as CaCO3(mg/l)	14	12	12	64	8	20	8	8	8	14	8	10	
27	Magnesium(mg/l)	1.46	2.43	5.8	2.43	2.9	0.97	2.9	3.89	1	3.4	5.83	3.4	

Table 3k - RIVER SAL AT PAZORCONI, CUNCOLIM 2016-2017

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	pH	6.55	6.63	6.6	7.3	7.24	6.2	6.6	6.57	5.8	5.91	6.41	6.06	6.5 - 8.5
2	Temperature °C	29	30.5	29	28.9	27.9	30	29	25	29	28	28	28	
3	Conductivity µs/cm	56.95	126.1	109.6	157.3	95.07	100.27	2619	59.78	93.96	101.6	80.16	98.02	
4	Dissolved Oxygen mg/l	6.6	5.3	5.5	6.5	7.29	7.1	6.4	6.4	6.4	6.2	6	5.8	4 mg/l or more
5	Turbidity (NTU)	24.8	18.6	22.2	9.09	11.88	7.31	9.4	10.25	5.65	10.58	8.74	5.9	30 NTU
6	Nitrite Nitrogen mg/l	0.01	BDL	0.15	0.021	0.003	0.003	0.004	BDL	0.005	0.007	0.008	0.003	
7	Nitrogen(Nitrate) mg/l	0.13	0.12	0.22	0.59	0.57	0.23	0.37	0.44	0.08	0.07	0.59	0.084	
8	Phosphate mg/l	0.01	0.06	0.035	0.04	0.03	0.01	0.02	0.02	0.03	0.017	0.005	0.02	
9	BOD mg/l	1	2.2	3.1	1.1	1.1	0.9	0.7	0.8	4.2	2.3	2.3	2.5	3 mg/l or less
10	COD mg/l	4	8	24	11	9	16	8	9	16	-	4	-	
11	Chloride mg/l	3.89	10.8	10	8.3	11.25	11.74	2375	9.78	14.5	2124	10.68	21.5	
12	Fecal Coliform MPN/100 ml	3300	7900	11000	2300	2300	3300	1300	2300	3300	2300	2300	790	100 or less MPN/100 ml
13	Total Coliform MPN/100 ml	7000	11000	14000	3300	3300	7000	2300	3300	4900	4600	4900	1400	
14	Ammonia mg/l	0.001	0.13	0.53	0.041	0.03	0.03	0.15	0.01	0.141	0.11	0.11	0.16	
15	Total Dissolved Solids(mg/l)	37	76	63	124	70	58	1509	38	53	174	53	52	
16	Total Fixed Solids (mg/l)	10	40	41	24	42	19	1326	26	43	160	21	-	
17	Total Suspended Solid (mg/l)	34	47	48	22	18	29	72	60	4	38	2	6	
18	Hardness(mg/l)	22	22	8	210	26	36	50	20	26	1200	26	3.4	
19	Fluoride(mg/l)	BDL	0.1	BDL	BDL	0.09	0.24	0.21	BDL	1.24	0.52	0.06	-	
20	Boron(mg/l)	0.92	0.21	0.71	0.29	0.39	1.05	0.42	0.5	-	-	-	-	
21	Sulphate (mg/l)	7.11	165.17	18.4	23.24	13.81	10.78	14	6.43	6.61	161.5	11.9	1.1	
22	Total Alkalinity(mg/l)	30	8	80	14	18	22	340	24	30	24	24	20	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)	6.2	10.7	5.9	8.4	8.6	11.3	6.3	8.5	6.3	12.5	9.3	6.7	
25	Potassium(mg/l)	1	4.8	3.2	3.5	3.2	1.1	3.7	3.2	3.7	1.7	0.6	1.7	
26	Calcium as CaCO <sub>3</sub> (mg/l)	16	12	2	32	14	1200	12	14	14	1000	18	10	
27	Magnesium(mg/l)	1.46	2.43	1.5	43.25	2.9	5.83	9.2	1.46	2.9	48.6	1.94	3.4	

**Table 31 - RIVER SAL AT MOBOR 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	pH	7.61	7.94	7.01	7.99	6.86	7.11	7.63	7.56	7.78	7.65	8.01	7.85	6.5 - 8.5
2	Temperature °C	32	32.5	27.8	27.6	27.8	31	30	30.09	30	28.5	29	34	
3	Conductivity µs/cm	0.07	155000	3600	31390	47460	48770	1405	-	77060	62400	50470	45760	
4	Dissolved Oxygen mg/l	6.1	5.9	5.3	6.5	6.4	4.8	6.2	2.7	5.8	5.2	5	6.2	4 mg/l or more
5	Turbidity (NTU)	10.32	17.68	57.2	16.02	1.98	10.92	1.24	1.82	7.61	3.39	26.2	2.33	30 NTU
6	Nitrite Nitrogen mg/l	0.014	0.024	0.014	0.01	0.005	0.008	0.007	0.002	0.004	0.005	0.005	0.055	
7	Nitrogen(Nitrate) mg/l	0.06	0.25	0.017	0.02	0.25	0.03	0.04	1.94	0.78	-	0.09	0.75	
8	Phosphate mg/l	0.02	0.04	0.07	0.03	0.1	0.13	0.05	0.531	0.29	0.08	0.04	1.87	
9	BOD mg/l	2.2	1.5	1.8	0.9	1.1	1.2	2.2	1	1.9	0.9	2.7	2.8	3 mg/l or less
10	COD mg/l	-	-	20	-	-	-	-	-	-	-	-	-	
11	Chloride mg/l	17366.9	87568.	907.2	13746	19994	28863.4	25261.4	21493.3	21368.4	22420.3	17484	20546.8	
12	Fecal Coliform MPN/100 ml	130	230	7900	1300	1700	2300	230	230	490	790	790	1300	100 or less MPN/100 ml
13	Total Coliform MPN/100 ml	230	490	13000	2400	3300	4900	310	490	700	1100	1300	1700	
14	Ammonia mg/l	0.02	0.32	0.58	0.3	0.03	0.06	0.05	0.038	0.64	0.03	0.13	0.82	
15	Total Dissolved Solids(mg/l)	38425	57225	2100	31690	29262	31592	54839	42598	-	-	34467	34464	
16	Total Fixed Solids (mg/l)	30291	32487	745	16591	15699	11260	30784	26866	-	-	30847	-	
17	Total Suspended Solid (mg/l)	92	72	76	199	130	64	55	163	48	52	499	272	
18	Hardness(mg/l)	6800	3000	296	3000	6000	24000	6800	14000	7500	11500	6400	5400	
19	Fluoride(mg/l)	0.97	5.32	0.93	0.7	1.4	0.39	1.4	0.05	0.87	0.91	0.65	-	
20	Boron(mg/l)	-	3.36	0.32	4.5	4.3	2.1	2.2	-	-	-	-	-	
21	Sulphate (mg/l)	2352.6	64.19	122.5	944	3301.4	2046.8	2204	2447.64	2118.78	3341	4997	2977.22	
22	Total Alkalinity(mg/l)	112	84	14	11	10	8	142	122	112	96	140	120	
23	Phenolphthalein Alkalinity(mg/l)	0.7	12	0	0	6	4	0	6	6	1	0	6	
24	Sodium(mg/l)	6463	5892	441.7	4382	6302	5127	7419	7968	1297	1365	8059	3972	
25	Potassium(mg/l)	179.3	151.7	26.1	197	239	214	206.9	222.1	235.9	220	261.1	268.5	
26	Calcium as CaCO3(mg/l)	1000	1800	80	1000	1200	4500	1200	2000	1000	2500	1000	820	
27	Magnesium(mg/l)	1409.	291.6	52.5	486	1166	4738.5	1360.8	2916		2187	1312	1113	

**Table 3m - HARWALE WATERFALL 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Limit
1	pH	7.15	7.1	9.18	6.21	7.59	6.63	6.9	7.61	7.0	6.16	7.15	7.07	
2	Temperature °C	30	31	25	26.1	25	28.3	29	28	26	28	28	28	
3	Conductivity µs/cm	77.13	100.6	48.24	73.37	53.75	60.27	47.6	82.22	91.85	80.51	78.5	87.62	
4	Dissolved Oxygen mg/l	7.3	7.1	7.8	7.8	7.7	7.6	7.7	8.2	8.5	8.7	8.3	8	
5	Turbidity (NTU)	3.16	0	8.74	38	15.9	7.75	4.42	6.22	4.64	9.67	5.52	2.52	
6	Nitrite Nitrogen mg/l	0.003	0.003	0.001	0.006	0.002	0.004	0.005	0.006	0.002	0.003	0.002	0.001	
7	Nitrogen(Nitrate) mg/l	0.057	0.02	0.13	0.18	0.349	0.02	0.09	0.07	0.06	0.143	BDL	0.1	
8	Phosphate mg/l	0.016	0.019	0.02	0.022	0.039	0.004	0.004	0.02	0.02	0.014	0.06	0.01	
9	BOD mg/l	2	2.8	1.1	1.3	0.7	1.3	1.4	2	1.5	3.7	1.7	1.2	
10	COD mg/l	3	5	7	8	10	25	3	15	15	2	2	-	
11	Chloride mg/l	9	13	4.89	9.29	6.31	7	9	7.83	10.5	10.7	27.2	4.4	
12	Fecal Coliform MPN/100 ml	2300	4900	4900	4900	7000	7900	4900	3300	1300	1300	78	3300	
13	Total Coliform MPN/100 ml	4900	11000	7900	7900	11000	14000	7900	4900	3300	2300	130	4900	
14	Ammonia mg/l	0.007	0.05	0.001	0.18	0.024	0.08	0.07	0.43	0.04	0.017	0.01	0.05	
15	Total Dissolved Solids(mg/l)	44	40	32	47	38	36	58	54	-	50	74	59	
16	Total Fixed Solids (mg/l)	33	29	13	23	-	25	34	26	-	38	31	-	
17	Total Suspended Solid (mg/l)	5	6	7	9	33	5	6	22	-	5	2	7	
18	Hardness(mg/l)	42	58	58	44	22	24	22	74	28	32	32	42	
19	Fluoride(mg/l)	0.03	0.11	0.06	BDL	1.29	0.18	0.03	1.13	0.04	BDL	1.91	0.07	
20	Boron(mg/l)	2.53	0.13	0.16	0.76	0.021	1.86	1.84	1.11	-	-	-	-	
21	Sulphate (mg/l)	2.7	3.5	3.73	5.35	2.37	2.62	2.1	2.49	3.9	14.2	7.48	4.56	
22	Total Alkalinity(mg/l)	500	28	26	6	18	24	22	32	20	12	32	30	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0	0	0	5	
24	Sodium(mg/l)	3.6	1.8	3.3	4.8	4.9	9.1	9.6	44.2	6.2	3.7	15.6	4	
25	Potassium(mg/l)	2.2	2.8	2.4	2.5	2.1	6.4	3.6	40.5	0.6	0.5	1.1	1.5	
26	Calcium as CaCO3(mg/l)	16	38	22	18	8	8	10	44	18	20	8	20	
27	Magnesium(mg/l)	6.3	4.9	8.7	6.3	3.4	3.9	3.2	7.3	2.4	4.01	5.83	5	

**Table 3n - RIVER BICHOLIM, BARAZAN NAGAR, BICHOLIM 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Limit for class C river as per CPCB classification based on designated best use of rivers
1	pH	7.51	6.85	7.12	6.64	5.97	6.26	6.45	6.96	7.28	6.18	7.18	7.53	6-9
2	Temperature °C	30	32.5	30.9	27.5	28.2	28.6	28	29	30	26.1	30	29	
3	Conductivity µs/cm	72.1	2890	195.2	225	62.73	95.53	90.44	133.2	133.2	157.4	172.3	203	
4	Dissolved Oxygen mg/l	9	9.1	7.2	7	6.2	6.7	6.9	9.6	7.7	10.7	12	10.1	4 mg/l or more
5	Turbidity (NTU)	3.19	2.82	2.64	33.5	7.78	11.47	4.33	3.81	5.71	4.55	3.15	10.1	
6	Nitrite Nitrogen mg/l	0.01	0.007	0.005	0.02	0.009	0.009	0.002	0.006	0.005	0.01	0.01	0.003	
7	Nitrogen(Nitrate) mg/l	0.26	0.28	0.18	0.09	0.08	0.082	0.141	0.09	0.15	0.72	0.78	0.61	
8	Phosphate mg/l	0.03	0.01	0.01	0.02	0.01	0.06	0.031	0.009	0.01	0.01	0.005	BDL	
9	BOD mg/l	1.9	3.1	2.7	1.9	0.7	1.5	1.5	2.2	1.5	1.4	-	2.3	3 mg/l or less
10	COD mg/l	7	4	3	8	5	4	2	4	4	4	4	-	
11	Chloride mg/l	27.9	582.8	30	49	6.5	10	15.06	9	12.5	17.1	23	14.6	
12	Fecal Coliform MPN/100 ml	7900	7000	11000	4900	7900	7900	3300	4900	4900	7900	4900	13000	
13	Total Coliform MPN/100 ml	1300	11000	17000	7900	13000	22000	4900	7900	7900	13000	7900	17000	5000 or less MPN/100 ml
14	Ammonia mg/l	0.002	0.01	0.01	0.07	0.08	0.08	0.042	0.04	0.02	0.062	0.09	0.25	
15	Total Dissolved Solids(mg/l)	946	1657	302	708	600	57	60	85	285	95	104	160	
16	Total Fixed Solids (mg/l)	-	860	210	444	399	17	40	423	163	32	35	-	
17	Total Suspended Solid (mg/l)	6	15	24	60	50	15	5	5	12	16	15	28	
18	Hardness(mg/l)	74	204	46	30	16	32	30	32	50	34	64	60	
19	Fluoride(mg/l)	0.37	0.39	0.3	0.16	0.77	1.8	BDL	2.1	0.07	0.09	0.09	BDL	
20	Boron(mg/l)	2.1	0.92	0.7	0.41	0.38	0.32	BDL	-	-	-	-	-	
21	Sulphate (mg/l)	5.5	44.46	3.9	9.3	3.3	0.34	2.34	6.9	4.7	2.65	3.6	1.81	
22	Total Alkalinity(mg/l)	66	76	11	8	12	70	40	46	60	50	86	60	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)	22.8	282	38.7	21.6	5.6	5.7	9.9	9.3	14.4	9.5	18.8	12.1	
25	Potassium(mg/l)	6.6	11.5	3.7	4.5	2.6	1.6	9.7	3.2	1.5	1.2	1.6	2.5	
26	Calcium as CaCO3(mg/l)	42	70	38	12	8	16	14	20	30	14	14	38	
27	Magnesium(mg/l)	7.78	32.56	1.9	4.4	1.9	3.9	3.89	2.9	4.9	4.86	12.2	5	

**Table 3o - MAYEM LAKE AT MAYEM 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Limit for class C river as per CPCB classification based on designated best use of rivers
1	pH	6.7	6.75	7.42	6.38	5.91	5.64	5.92	6.07	6.05	6.57	6.8	6.15	6-9
2	Temperature °C	28.7	35.3	31	27.7	28.3	27.9	28	31	30.5	26.5	30	30	
3	Conductivity µs/cm	17.4	42.42	109.6	61.35	41.59	46.08	62.18	51.78	51.78	62.62	53.28	64.74	
4	Dissolved Oxygen mg/l	6.7	7.1	7.2	7.1	6.7	7.3	4.8	5.7	7.3	7.5	7.3	6.7	4 mg/l or more
5	Turbidity (NTU)	6.29	4.71	6.57	8.67	19.22	1.6	3.08	2.55	3.16	4.31	4.64	7.96	
6	Nitrite Nitrogen mg/l	0.004	0.003	0.003	0.005	0.01	0.003	BDL	0.002	0.004	0.002	0.002	0.004	
7	Nitrogen(Nitrate) mg/l	0.02	0.02	0.02	0.01	0.01	0.02	0.006	0.006	0.02	0.03	0.04	0.05	
8	Phosphate mg/l	0.01	0.01	0.01	0.004	0.017	0.05	BDL	0.04	0.07	BDL	BDL	BDL	
9	BOD mg/l	1.7	3.1	3	1.2	0.9	1.1	1.4	1.2	1.5	1.3	1.7	1	3 mg/l or less
10	COD mg/l	13	6	5	4	3	3	7	3	6	2	3	-	
11	Chloride mg/l	6.9	8.74	22	4.9	4.5	6.5	28.2	7	9	10.8	8	7.3	
12	Fecal Coliform MPN/100 ml	1300	2400	4900	790	4900	3300	780	4900	1300	2400	1300	1300	
13	Total Coliform MPN/100 ml	3500	5400	7900	2400	7900	4900	2300	13000	2300	5400	2400	2200	5000 or less MPN/100 ml
14	Ammonia mg/l	0.01	0.01	0.001	0.03	0.09	0.04	0.067	0.02	0.007	0.367	0.15	0.22	
15	Total Dissolved Solids(mg/l)	17	24	96	58	52	28	41	28	21	45	48	42	
16	Total Fixed Solids (mg/l)	13	15	27	27	25	16	10	318	10	10	12	-	
17	Total Suspended Solid (mg/l)	5	12	7	25	20	12	7	7	12	85	86	33	
18	Hardness(mg/l)	18	16	20	20	30	12	20	18	20	28	26	20	
19	Fluoride(mg/l)	0.08	0.04	0.25	0.19	0.7	1.8	BDL	2.1	0.15	BDL	0.06	0.1	
20	Boron(mg/l)	0.4	0.82	0.63	1.2	0.9	1.1	BDL	-	-	-	-	-	
21	Sulphate (mg/l)	1	2.4	36.3	2.9	4.9	0.17	2.73	76.5	6.1	1.9	1.5	0.46	
22	Total Alkalinity(mg/l)	22	22	7	6	10	46	30	30	30	20	36	24	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	-	0	0	0	0	0	
24	Sodium(mg/l)	11.9	7.4	13.9	4.5	5	3.1	12.5	2.2	8.4	5.6	12.5	5.4	
25	Potassium(mg/l)	8	4.3	2.4	2.3	2.2	0.9	1.4	2.9	0.7	0.6	0.5	1.6	
26	Calcium as CaCO3(mg/l)	12	10	4	10	20	10	8	14	10	8	9	14	
27	Magnesium(mg/l)	1.46	1.46	3.9	2.4	2.4	0.5	2.92	0.97	2.4	4.86	4.4	1	

**Table 3p - CUMBHARJUA CANAL, CORLIM 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	pH	6.93	7.64	7.64	5.75	6.88	6.72	6.99	6.92	6.93	7.16	7.26	7.67	6.5 - 8.5
2	Temperature °C	30.8	30	30	27	28	29	31	30	30	27.2	28	31	
3	Conductivity µs/cm	46130	59360	59360	588	5560	5430	897.8	30010	37520	51040	42840	37470	
4	Dissolved Oxygen mg/l	6.2	4.4	4.4	6.8	5.37	5.4	6.8	6.7	5.4	6.3	4.5	5.4	4 mg/l or more
5	Turbidity (NTU)	11.03	9.66	1.5	2.5	18.23	5.37	15.45	6.06	9.57	8.84	7.02	15.65	30 NTU
6	Nitrite Nitrogen mg/l	0.002	0.22	0.019	0.003	0.009	0.005	0.004	0.007	0.009	0.04	0.01	0.02	
7	Nitrogen(Nitrate) mg/l	0.03	0.07	0.06	0.31	0.27	0.3	0.28	0.12	0.098	0.035	0.08	0.08	
8	Phosphate mg/l	0.03	0.037	0.029	0.016	0.008	0.02	0.01	0.02	0.051	0.04	0.03	0.44	
9	BOD mg/l	3.2	1.5	1.5	1.3	0.8	0.08	0.7	4.6	0.4	3.9	1.1	3.1	3 mg/l or less
10	COD mg/l	-	-	-	8	7	-	-	-	-	-	-	-	
11	Chloride mg/l	17848	12621	12487	172	45	2374.3	2260	2120	29352	20993	16995	16619	
12	Fecal Coliform MPN/100 ml	790	78	330	170	1300	1700	330	790	790	170	78	78	100 or less MPN/100 ml
13	Total Coliform MPN/100 ml	1300	130	700	270	2400	4900	700	1300	1700	220	130	130	
14	Ammonia mg/l	0.01	0.12	0.09	0.58	0.13	0.09	0.08	0.07	0.06	0.028	0.12	BDL	
15	Total Dissolved Solids(mg/l)	34594	32887	2530	1286	186	175	665	213	2145	1988	238870	20462	
16	Total Fixed Solids (mg/l)	27579	23089	1215	271	88	77	516	109	1099	984	24702	-	
17	Total Suspended Solid (mg/l)	154	106	20	20	9	12	13	66	38	98	141	130	
18	Hardness(mg/l)	5600	4840	4000	64	28	468	90	5200	7000	6800	4920	8600	
19	Fluoride(mg/l)	1.67	0.9	0.81	0.13	0.69	0.26	0.28	0.29	0.41	1.4	0.9	BDL	
20	Boron(mg/l)	2.17	1.37	1.1	0.06	0.07	0.09	0.08	-	0.16	-	-	-	
21	Sulphate (mg/l)	558	2866	1013	193.2	68	68	34.3	50	74.53	2627	2111	1964	
22	Total Alkalinity(mg/l)	134	300	56	4	6	86	76	76	96	104	118	100	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)	6665	7535	7815	80.1	24.9	669.9	129.1	260.6	802.7	1118	5893	4910	
25	Potassium(mg/l)	254.9	246.5	289.5	4.9	3	33.4	4.9	19.1	145	179.4	216.3	275.7	
26	Calcium as CaCO3(mg/l)	1000	1100	1000	14	18	108	24	1200	1400	3000	860	2200	
27	Magnesium(mg/l)	1118	908.8	729	12.2	2.4	87.5	16	972	1360.8	923	987	1555	



**Table 3q - RIVER ZUARI AT PANCHAWADI 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	pH	6.62	6.95	7.14	-	7.36	6.82	6.81	6.96	6.58	6.77	6.82	6.82	6.5 - 8.5
2	Temperature °C	33.3	32	31	27.5	27.2	29.2	27.5	30	30	29	31	30	
3	Conductivity µs/cm	27420	22330	26120	153.2	87.2	597.5	17960	3536	14190	26350	16450	12160	
4	Dissolved Oxygen mg/l	5.5	5.2	4.7	5.9	7.1	7.9	7.1	5.3	5.5	5.2	5	4.8	4 mg/l or more
5	Turbidity (NTU)	5.14	3.58	12.2	36.1	5.12	3.32	4.08	5.91	9.66	11.39	6.32	16.6	30 NTU
6	Nitrite Nitrogen mg/l	0.011	0.001	0.006	0.005	0.003	0.003	BDL	0.058	0.002	0.04	0.04	0.013	
7	Nitrogen(Nitrate) mg/l	0.014	0.12	0.17	0.18	0.18	0.019	0.07	0.004	0.56	0.68	0.7	0.06	
8	Phosphate mg/l	BDL	0.001	0.04	0.018	0.002	0.012	0.01	0.02	0.03	0.018	0.003	0.03	
9	BOD mg/l	1.7	0.5	2.6	1.4	0.6	1.8	1.5	2.6	2.8	1.5	1	0.6	3 mg/l or less
10	COD mg/l	BDL	-	-	16	14	8	-	-	11	-	-	-	
11	Chloride mg/l	5220.9	5798	1.65	424	92.17	136	244.6	733.82	3669	6622	6900	5748	
12	Fecal Coliform MPN/100 ml	490	330	450	1700	1300	2300	1300	780	790	3300	1100	490	100 or less MPN/100 ml
13	Total Coliform MPN/100 ml	790	490	480	3300	1700	3300	1700	1100	2400	4900	1400	940	
14	Ammonia mg/l	0.001	0.002	0.004	6.05	0.004	0.065	0.01	0.1	BDL	0.002	0.09	0.02	
15	Total Dissolved Solids(mg/l)	18194	6510	14888	158	53	320	406	2200	7879	13179	31539	6860	
16	Total Fixed Solids (mg/l)		6001	11863	108	25	100	53	1193	4521	9025	28724	5739	
17	Total Suspended Solid (mg/l)	41	20	22	46	12	42	4	18	51	100	54	71	
18	Hardness(mg/l)	1920	8200	3240	24	20	640	-	240	1500	4800	4800	1400	
19	Fluoride(mg/l)	1.2	0.6	1.65	1.3	0.46	BDL	0.28	BDL	0.55	1.5	1.15	-	
20	Boron(mg/l)	-	0.45	3.21	2.9	2.77	4.4	-	-	-	-	-	-	
21	Sulphate (mg/l)	523.6	469	798	10.2	2.74	18.2	542.7	92.56	165.9	595	600	434	
22	Total Alkalinity(mg/l)	72	36	20	24	4	32	24	26	34	56	70	46	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)	8402	2301	3102	11.3	9.4	84.5	93.3	374.1	1277	764.9	2085	1439	
25	Potassium(mg/l)	100.2	99.7	143	3.8	2.4	14	4.2	11.8	47.3	95.8	99.7	57.2	
26	Calcium as CaCO3(mg/l)		600	480	14	6	24	20	50	300	1400	400	240	
27	Magnesium(mg/l)	379.1	1847	670.68	2.4	3.402	149.7	13.12	46.17	291.6	826	1069	282	

**Table 3r - RIVER ZUARI AT CORTALIM 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	pH	7.5	6.38	6.4	7.42	7.3	7.09	7.28	8.04	7.44	7.4	7.6	7.3	6.5 - 8.5
2	Temperature °C	29	31.5	30.6	29.3	28	30.0	30	28	28.9	27	28.6	29.5	
3	Conductivity µs/cm	44120	76300	55620	137	1260	12440	-	3166	54470	57760	47830	48810	
4	Dissolved Oxygen mg/l	4.6	3.7	5	6.5	6	5.9	6	5.4	5.3	6	5.4	4.9	4 mg/l or more
5	Turbidity (NTU)	11.42	72.7	65.2	144	8.04	25.8	17.56	35.1	8.41	7.44	8.73	6.09	30 NTU
6	Nitrite Nitrogen mg/l	0	0.007	0.047	0.063	0.01	0.003	0.003	0.025	0.04	0.025	0.02	0.007	
7	Nitrogen(Nitrate) mg/l	0.18	0.18	0.048	0.45	0.15	0.51	0.6	0.18	0.26	0.16	0.04	0.03	
8	Phosphate mg/l	0.02	0.063	0.032	0.04	0.19	0.04	0.03	0.05	0.05	0.09	0.04	0.02	
9	BOD mg/l	1.9	1.4	4.3	2.6	0.9	2.3	1.6	2.2	2.5	1.5	1.2	0.4	3 mg/l or less
10	COD mg/l	-	-	-	18	16	25.0	-	-	-	-	-	-	
11	Chloride mg/l	9906.5	19619	18577	319.94	300	4493.00	4100	14472.8	16609.	231180	16270	23867	
12	Fecal Coliform MPN/100 ml	2300	3300	4900	7900	2300	3300	4900	4900	1300	1100	200	200	100 or less MPN/100 ml
13	Total Coliform MPN/100 ml	4600	4900	7900	11000	3300	7000	7900	7900	2300	1400	450	450	
14	Ammonia mg/l	0.01	0.05	0.08	0.14	0.18	0.09	0.13	0.25	0.04	0.184	0.03	BDL	
15	Total Dissolved Solids(mg/l)	38177	38850	35674	89	693	8595	23249	24546	29147.8	31104	33666	72790	
16	Total Fixed Solids (mg/l)	29136	9265	30472	49	646	6099	12314	20842	24516	27196	28493	-	
17	Total Suspended Solid (mg/l)	19	132	143	170	66	252	233	198	161	66	189	153	
18	Hardness(mg/l)	7500	4200	5400	1280	84	1800	3400	6200	5700	5920	5800	11200	
19	Fluoride(mg/l)	1.44	0.99	1.38	BDL	0.73	0.64	0.83	1.54	1.81	0.73	1.22	BDL	
20	Boron(mg/l)	-	0.92	3.69	2.13	1.33	0.74	0.6	-	-	-	-	-	
21	Sulphate (mg/l)	2760.2	514	2640	59.85	3.11	177.1	181	3167.6	1541	4404.4	2928	3562	
22	Total Alkalinity(mg/l)	118	102	26	12	6	52	118	24	101	124	104	114	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0.6	0	0	0	
24	Sodium(mg/l)	6425	9394	7005	188.6	175.2	6932	3124	7681	6583	6805	6747	5667	
25	Potassium(mg/l)	168.5	277.8	284	16.6	8.5	1436	100.6	309	217	239.9	244.3	286.9	
26	Calcium as CaCO3(mg/l)	1500	1200	1100	340	10	400	800	1000	1000	1000	1100	2000	
27	Magnesium(mg/l)	1458	729	1045	228.42	18	340.2	631.8	1263.6	1142	1195.6	1142	2236	

**Table 3s - CREEK AT DANDO MOLLO, VELSAO, MORMUGAO 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Limit for class C river as per CPCB classification based on designated best use of rivers
1	pH	8.12	6.61	7.94	7.01	6.16	7.04	6.64	7.14	7.06	7.3	7.88	6.92	6-9
2	Temperature °C	30	31.5	30	26.7	27.1	30	28	27.2	27	25	27	32	
3	Conductivity µs/cm	31740	60300	55620	985	14430	562.96	2703	-	22450	46270	18770	13380	
4	Dissolved Oxygen mg/l	8.7	8.8	5.2	2.9	5.8	5.5	6.4	6	5.28	4.17	11.5	10.4	4 mg/l or more
5	Turbidity (NTU)	4.52	51.5	23.3	5.16	6.18	18.21	27.4	6.87	5.83	2.23	3.03	1.6	
6	Nitrite Nitrogen mg/l	1.254	0.04	0.23	0.3	0.07	0.103	0.11	0.416	0.509	0.093	0.89	4.93	
7	Nitrogen(Nitrate) mg/l	17.06	3.62	0.87	0.49	0.06	1.78	1.2	5.05	6.54	11.63	13.61	10.28	
8	Phosphate mg/l	0.514	0.16	0.073	0.2	0.23	0.11	0.02	0.057	0.273	0.632	6.2	0.23	
9	BOD mg/l	5.4	5.2	3.9	2.5	0.6	2.2	1.8	2.8	2.78	1.4	5.1	4.2	3 mg/l or less
10	COD mg/l	-	-	-	28	-	8	-	16	34	34	-	-	
11	Chloride mg/l	7460.	57482.2	151	315	6248	1467.6	652	2374.26	4373.6	19463.8	5342	2935.26	
12	Fecal Coliform MPN/100 ml	790	230	11000	7900	11000	2300	230	3500	2400	2400	4900	78	
13	Total Coliform MPN/100 ml	1300	330	17000	17000	17000	3300	490	9200	5400	5400	7900	130	5000 or less MPN/100 ml
14	Ammonia mg/l	0.02	0.12	0.504	0.3	0.93	0.08	0.04	0.157	0.631	0.02	8.28	0.02	
15	Total Dissolved Solids(mg/l)	19663	16627	340	1275	1100	454	251	2434	296.5	37341	13979	7349	
16	Total Fixed Solids (mg/l)	12742	12132	198	743	645	83	122	1203	8226	1831	9928	-	
17	Total Suspended Solid (mg/l)	65	118	37	8	12	11	9	13	49	37	879	155	
18	Hardness(mg/l)	7000	194	60	190	2000	3200	20	5500	3000	7500	2200	1000	
19	Fluoride(mg/l)	0.76	4.86	0.73	0.3	0.38	1.01	0.4	0.17	4.57	1.53	0.5	-	
20	Boron(mg/l)	-	5.26	0.014	1.6	1.6	0.98	1.5	-	-	-	-	-	
21	Sulphate (mg/l)	654.5	1128.3	28.9	53.9	40.7	63.3	4.1	864.62	9.57	4831.6	1773	520.89	
22	Total Alkalinity(mg/l)	60	48	8	9	16	14	76	56	82	94	50	48	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0	0.2	0	0	
24	Sodium(mg/l)	2831	2354	72.8	152.1	18.32	1498	8.9	751.6	667.9	1141	2825	1579	
25	Potassium(mg/l)	121.4	121.4	6.3	10.4	80.7	61.4	3.2	26.7	133.9	184.9	125.5	104.4	
26	Calcium as CaCO3(mg/l)	600	118	44	64	1600	800	16	1400	1500	2400	500	320	
27	Magnesium(mg/l)	155.2	18.5	3.89	30.6	16	583.2	0.97	996.3	364.5	5400	413	165	

**Table 3t - RIVER MANDOVI NEAR MANDOVI BRIDGE, PANAJI 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	pH	7.38	7.82	8.07	6.97	6.11	6.94	6.84	7.43	7.63	7.6	7.5	7.97	6.5 - 8.5
2	Temperature °C	32	31	30.2	29.3	28.9	33	30	29	30	29	30	31	
3	Conductivity µs/cm	47110	79750	65350	680	20490	8675	7680	7990	65410	59470	46770	50080	
4	Dissolved Oxygen mg/l	3.6	6.2	6.7	6.6	6	7.6	7.2	4.9	4.48	5.6	6	6.5	4 mg/l or more
5	Turbidity (NTU)	202	8.59	3.34	24.9	16.96	16.1	18.11	5.04	3.77	3.7	3.83	4.26	30 NTU
6	Nitrite Nitrogen mg/l	0.011	0.002	0.002	0.007	0.009	0.01	0.004	0.007	0.009	0.006	0.005	0.005	
7	Nitrogen(Nitrate) mg/l	0.09	0.261	BDL	0.57	0.39	0.08	0.11	0.16	0.11	0.12	0.15	0.16	
8	Phosphate mg/l	0.02	0.042	0.02	0.03	0.03	0.02	BDL	0.036	0.032	0.02	0.007	0.02	
9	BOD mg/l	2.5	1.8	2.9	0.8	1.1	1.3	1.1	1.9	1.38	2.2	2.3	2.2	3 mg/l or less
10	COD mg/l	-	-	-	-	-	-	-	-	-	-	-	-	
11	Chloride mg/l	15564	23919	20009	3351	6017.28	1991	10053.27	10101.5	19427	11073.2	15870	21743	
12	Fecal Coliform MPN/100 ml	230	130	130	5400	5400	2300	230	3300	2300	490	45	1300	100 or less MPN/100 ml
13	Total Coliform MPN/100 ml	330	210	230	9200	9200	4900	490	7900	3300	700	78	1700	
14	Ammonia mg/l	0.017	0.072	0.03	0.11	0.01	0.16	0.07	0.06	0.03	0.03	0.13	BDL	
15	Total Dissolved Solids(mg/l)	25016	50142	44191	481	12698	5553	4998	5726	36670	30500	39601	85391	
16	Total Fixed Solids (mg/l)	15581	-	36390	333	8695	4036	2081	3120	27312	26673	25958	-	
17	Total Suspended Solid (mg/l)	37	127	162	34	54	4	52	75	256	72	176	149	
18	Hardness(mg/l)	6600	7500	4900	72	2500	840	3320	4600	6000	5200	6400	9000	
19	Fluoride(mg/l)	1.048	1.69	3.3	0.23	BDL	0.29	0.43	0.21	0.56	1.26	0.61	BDL	
20	Boron(mg/l)	1.81	3.56	4.78	0.09	6.07	0.32	3.59	-	-	2.4	-	-	
21	Sulphate (mg/l)	2421	2749.1	2667.6	37.4	903.04	351	1018.12	2567	2654	2121.2	2380	2754	
22	Total Alkalinity(mg/l)	60	120	28	10	70	44	88	112	112	86	130	124	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)	8222	8566	10170	91	3243	1103	1182	5147	7193	1314	6489	5821	
25	Potassium(mg/l)	182	274	289.6	6.7	132.3	52.3	173.3	161.9	217	188.4	238.5	293	
26	Calcium as CaCO3(mg/l)	1000	1100	1100	24	400	16	520	800	1300	1200	1400	1800	
27	Magnesium(mg/l)	1361	1555.2	923.4	11.7	510.3	200	3480.4	923	1142	972	1215	1750	

**Table 3u - RIVER MANDOVI AT TONCA MARCELA 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	pH	38.89	7.17	6.83	7	6.05	6.84	6.83	6.97	6.97	6.18	7.25	7.53	6.5 - 8.5
2	Temperature °C	29.2	32.2	30	27.2	25.7	27	29	30	29	25	29	31	
3	Conductivity µs/cm	7100	67220	53040	156.8	89.05	6060	269.5	6428	30250	47730	34500	34180	
4	Dissolved Oxygen mg/l	4.8	5.3	4.4	6.8	7.2	6.9	7.6	6	4.9	5.9	5.5	5.4	4 mg/l or more
5	Turbidity (NTU)	61.6	4.61	3.44	28.4	26.5	2.82	12.08	1.35	7.9	6.03	5.39	15.51	30 NTU
6	Nitrite Nitrogen mg/l	0.07	0.048	0.04	0.008	0.014	0.004	0.002	0.004	0.009	0.14	0.14	0.03	
7	Nitrogen(Nitrate) mg/l	0.29	0.05	0.05	0.04	0.05	0.03	0.015	0.011	0.08	0.16	0.15	0.04	
8	Phosphate mg/l	0.02	0.02	0.02	0.01	0.01	0.02	0.007	0.008	0.03	0.02	0.01	0.04	
9	BOD mg/l	1.7	2.2	1.4	1.9	0.4	1.5	1.7	1.9	1.2	1.2	1.6	1	3 mg/l or less
10	COD mg/l	-	-	-	8	7	-	5	-	-	-	-	-	
11	Chloride mg/l	15899	15784.11	21618	90	20	3498.9	55.4	5120	8122	9882	13495	11413	
12	Fecal Coliform MPN/100 ml	790	1300	5400	3500	1300	1700	1300	4900	4900	1700	1300	5400	100 or less MPN/100 ml
13	Total Coliform MPN/100 ml	1700	2400	9200	9200	1700	3300	2200	7900	7900	3500	3500	9200	
14	Ammonia mg/l	0.02	0.01	0.04	0.08	0.07	0.06	0.03	0.06	0.11	0.1	0.001	0.31	
15	Total Dissolved Solids(mg/l)	29642	38221	47866	789	764	3515	183	3876	14801	35265	37319	25274	
16	Total Fixed Solids (mg/l)	21431	25408	27448	380	350	1846	107	4844	11787	16119	16779	-	
17	Total Suspended Solid (mg/l)	10	30	29	20	25	30	28	27	62	55	62	161	
18	Hardness(mg/l)	5500	5000	4800	26	1000	1200	420	1000	1400	1600	4800	4120	
19	Fluoride(mg/l)	1.49	1.7	1.2	0.3	1	0.67	0.63	0.72	1.6	3.34	0.85	2.69	
20	Boron(mg/l)	-	63.93	0.9	0.36	0.34	0.31	0.446	-	-	-	-	-	
21	Sulphate (mg/l)	1537.	2425.54	2408	1998	9.5	85	9.23	370.6	884	869.8	1250	669	
22	Total Alkalinity(mg/l)	96	102	14	3	8	78	36	58	80	800	118	86	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0	0	0	2	
24	Sodium(mg/l)	5533	7411	8233	10.5	11.6	762.8	40.1	897.6	862.6	1029	4771	4830	
25	Potassium(mg/l)	163.7	241	251	2.8	3.9	37.5	3.6	30.4	117	142.2	185.1	198.7	
26	Calcium as CaCO3(mg/l)	1000	840	1200	14	600	400	100	600	400	600	800	880	
27	Magnesium(mg/l)	1093.	1010.88	875	2.9	97	194	77.8	97.2	243	243	972	787	

**Table 3v - RIVER SELAULIM LAKE AT SELAULIM, SANGUEM 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Limit for class C as per CPCB classification based on designated best use
1	pH	7.56	8.64	7.2	7.61	7.5	6.95	6.55	7.28	6.58	6.9	7.2	6.9	6-9
2	Temperature °C	29	35	31.3	29.5	28.5	30	29	30	29	29	26	30.9	
3	Conductivity µs/cm	53.6	37.15	46.47	71.75	46.2	47.81	-	51.4	52.08	54.88	50.69	52.16	
4	Dissolved Oxygen mg/l	4.3	6.9	6.3	7.6	7.3	7.8	8.2	7.7	7.3	6.1	8.3	7	4 mg/l or more
5	Turbidity (NTU)	7.23	1.08	3.99	2.89	1.51	1.25	1.25	1.91	3.25	1.57	1.04	1	
6	Nitrite Nitrogen mg/l	0.001	0.001	0.001	0.003	0.002	0.013	0.002	0.001	0.002	0.001	0.001	0.001	
7	Nitrogen(Nitrate) mg/l	0.18	0.16	0.003	0.18	0.2	0.001	BDL	0.02	0.08	0.02	0.01	0.01	
8	Phosphate mg/l	0.003	0.0004	0.004	0.004	0.36	0.01	0.001	0.01	0.009	0.025	0.006	BDL	
9	BOD mg/l	0.3	0.1	0.6	0.9	3.4	0.6	0.8	1.1	1.5	0.9	0.6	0.1	3 mg/l or less
10	COD mg/l	5	4	7	5	12	3	2	2	2	8	8	7	
11	Chloride mg/l	4.4	8.5	5.34	6.36	5.5	2.8	3	3.4	3.42	7	6	5.5	
12	Fecal Coliform MPN/100 ml	NIL	NIL	NIL	NIL	7.8	23	NIL	78	4.5	NIL	NIL	NIL	
13	Total Coliform MPN/100 ml	<1.8	<1.8	7.8	7.8	49	79	6.8	23	13	<18	<18	<18	5000 or less MPN/100 ml
14	Ammonia mg/l	0.01	0.02	0.08	0.23	0.02	0.056	0.003	0.06	0.04	0.022	0.03	BDL	
15	Total Dissolved Solids(mg/l)	148	26	28	45	26	32	181	39	32	34	25	49	
16	Total Fixed Solids (mg/l)	35	10	11	22	23	24	183	22	19	19	5	-	
17	Total Suspended Solid (mg/l)	7	8	10	12	8	5	10	3	25	9	3	38	
18	Hardness(mg/l)	22	26	18	16	4	16	18	20	24	16	26	20	
19	Fluoride(mg/l)	0.02	0.18	0.63	0.04	0.46	1.3	0.41	0.24	0.15	0.46	BDL	BDL	
20	Boron(mg/l)	0.6	0.13	0.06	BDL	1.12	BDL	BDL	-	-	-	-	-	
21	Sulphate (mg/l)	2.77	1.8	2.17	2.65	1.44	1.95	2.3	0.81	1.42	7.89	0.89	2.1	
22	Total Alkalinity(mg/l)	22	24	8	8	4	22	56	6	17	24	24	32	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)	9.6	8.2	4.8	5.2	4.2	8.3	1.9	3	3.2	3.1	3.6	8	
25	Potassium(mg/l)	2.3	2.4	2.5	3.1	2.1	6.3	2.9	2.1	2.9	0.3	0.1	1.6	
26	Calcium as CaCO3(mg/l)	10	12	10	10	2	6	8	10	8	12	10	10	
27	Magnesium(mg/l)	2.916	3.4	1.94	1.46	0.5	2.43	2.4	2.43	4	1	4	2.4	

**Table 3w - AGRICULTURAL CANAL UPSTREAM OF CUNCOLIM INDUSTRIAL ESTATE 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Limit for Class E as per CPCB classification based on designated best use
1	pH	6.66	7.61	7.5	7.41	7.35	Canal was dry	Canal was dry	Canal was dry	Canal was dry	6.09	6.93	6.15	6-8.5
2	Temperature °C	29.5	31.6	29.2	29.8	28.9					27	29	28	
3	Conductivity µs/cm	41.96	62.96	49.3	81.22	55.98					66.85	66.61	128.2	Max 2250 µs/cm
4	Dissolved Oxygen mg/l	8.5	7.6	6.7	12.8	4.21					7.3	8.7	8.1	
5	Turbidity (NTU)	2.66	1.64	7.58	1.01	0.46					3.11	2.72	7.04	
6	Nitrite Nitrogen mg/l	0.002	BDL	0.004	0.007	0.001					0.003	0.002	0.002	
7	Nitrogen(Nitrate) mg/l	0.01	BDL	0.05	0.73	0.16					0.61	0.03	0.01	
8	Phosphate mg/l	0.001	BDL	0.004	0.008	0.03					0.007	0.004	0.02	
9	BOD mg/l	1.4	1.8	2.3	2	0.5					0.7	2	1.8	
10	COD mg/l	4	9	7	10	11					10	2.1	-	
11	Chloride mg/l	1.94	8.3	6.5	7.3	8.32					7.5	9.7	14.68	
12	Fecal Coliform MPN/100 ml	1300	2400	2400	330	490					1300	1300	1700	
13	Total Coliform MPN/100 ml	3500	5400	3500	490	700					2200	3500	3500	
14	Ammonia mg/l	0.01	0.04	0.16	0.025	0.02					0.06	0.04	0.3	
15	Total Dissolved Solids(mg/l)	25	37	32	98	38					152	40	57	
16	Total Fixed Solids (mg/l)	14	10	12	19	9					103	16	-	
17	Total Suspended Solid (mg/l)	15	6	44	43	18					15	2	5	
18	Hardness(mg/l)	22	62	20	20	20					18	22	2.43	
19	Fluoride(mg/l)	BDL	0.03	BDL	BDL	0.97					0.16	0.92	-	
20	Boron(mg/l)	0.88	BDL	1.52	1.36	0.76					-	-	-	Max 2mg/l
21	Sulphate (mg/l)	2.08	2.81	6.06	1.56	2.71					3.1	3.7	5.7	
22	Total Alkalinity(mg/l)	34	6	80	14	20					28	26	24	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0					0	0	0	
24	Sodium(mg/l)	0.8	5.8	2	4.7	4.6					7.5	6.9	14.2	
25	Potassium(mg/l)	0.3	4.3	1	3.2	3					1.6	0.5	1.5	
26	Calcium as CaCO3(mg/l)	14	14	6	14	14					10	10	12	
27	Magnesium(mg/l)	1.94	11.7	3.4	1.46	1.5					1.9	2.92	2.43	

**Table 3x - AGRICULTURAL CANAL DOWNSTREAM OF CUNCOLIM INDUSTRIAL ESTATE 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Limit for Class E as per CPCB classification based on designated best use
1	pH	7.01	7.73	7	6.41	6.89	5.49	5.5	6.52	Canal was dry	6.17	6.62	6.43	6-8.5
2	Temperature °C	30	31.9	29.9	30.1	29.4	31	30	28		28	29	31	
3	Conductivity µs/cm	68.33	63.62	97.65	1766	1450	1342	37.7	1151		68.22	66.3	184.4	Max 2250 µs/cm
4	Dissolved Oxygen mg/l	8.3	7.9	4.4	4	5.19	5.5	6.1	5.8		7.2	8.7	8.7	
5	Turbidity (NTU)	3.03	1.69	13.94	3.74	3.69	1.51	1.42	5.13		2.87	2.6	6.41	
6	Nitrite Nitrogen mg/l	0.002	BDL	0.01	0.012	0.007	0.005	0.002	0.803		0.002	0.002	0.005	
7	Nitrogen(Nitrate) mg/l	0.01	BDL	0.4	6.89	1.21	2.03	0.11	0.45		1.01	0.01	0.21	
8	Phosphate mg/l	0.01	BDL	0.013	0.005	0.01	0.01	0.003	0.02		0.003	0.003	0.05	
9	BOD mg/l	1	1.4	0.9	0.5	0.7	1.4	0.4	0.4		0.5	1.3	3.6	
10	COD mg/l	6	10	8	13	14	15	13	18		10	2	-	
11	Chloride mg/l	13.11	7.3	9.5	46.5	42.56	48.92	14000	47.94		7.5	11.7	32.3	
12	Fecal Coliform MPN/100 ml	2400	1300	3500	490	230	33	49	2400		1700	490	2400	
13	Total Coliform MPN/100 ml	9200	3500	9200	790	330	70	130	5400		3500	790	5400	
14	Ammonia mg/l	0.002	0.01	0.19	0.607	0.01	0.71	1.06	0.04		0.07	0.03	0.06	
15	Total Dissolved Solids(mg/l)	44	38	54	1752	1017	830	20875	690		130	40	102	
16	Total Fixed Solids (mg/l)	16	10	34	1370	930	411	17812	310		116	15	-	
17	Total Suspended Solid (mg/l)	17	5	23	26	24	36	54	65		9	1	2	
18	Hardness(mg/l)	26	24	22	1640	340	1000	2800	288		20	26	4.86	
19	Fluoride(mg/l)	0.01	0.01	BDL	0.8	BDL	BDL	BDL	BDL		1.26	BDL	-	
20	Boron(mg/l)	0.89	BDL	0.66	3.02	2.08	4.44	1.02	1.08		-	-	-	Max 2mg/l
21	Sulphate (mg/l)	2.17	2.33	13.7	1025.8	1249.8	313.72	28.3	266.74		3.3	7.48	36.3	
22	Total Alkalinity(mg/l)	36	8	160	10	24	22	300	26		30	22	30	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0		0	0	0	
24	Sodium(mg/l)	8.7	6	3.2	261.8	158.1	157.1	148.1	160.3		7.9	7.5	22.4	
25	Potassium(mg/l)	0.7	4.3	2.3	15.3	9.5	14.1	11.2	8.3		1.2	0.3	1.6	
26	Calcium as CaCO3(mg/l)	10	12	12	100	160	140	100	86		12	12	16	
27	Magnesium(mg/l)	3.89	2.92	2.4	374.2	43.7	208.98	671	49.09		1.9	3.4	4.86	



**Table 3y - RUMDER LAKE, NUVEM 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	
1	pH	6.86	8.05	7.19	6.69	6.08	7.08	6.82	6.43	6.28	6.45	6.44	8.03	
2	Temperature °C	31	29.8	29	27.5	28.3	30	30	30.04	27	27.5	29	30	
3	Conductivity µs/cm	120	224.69	69.47	133.5	93.93	94.28	134.5	-	176.7	171.8	187.5	160.7	
4	Dissolved Oxygen mg/l	11.1	6.8	5	4.4	6	5.8	7.7	7.2	2.95	7	1.9	3.5	
5	Turbidity (NTU)	21.7	28.9	105	15.53	16.2	12.7	3.08	5.97	25.3	8.93	22.9	9.19	
6	Nitrite Nitrogen mg/l	0.005	0.004	0.028	0.03	0.02	0.081	0.05	0.284	0.476	0.029	0.01	0.247	
7	Nitrogen(Nitrate) mg/l	0.06	0.13	0.059	0.045	0.05	0.10	0.3	10.35	1.37	-	0.64	2.18	
8	Phosphate mg/l	0.031	0.007	0.166	0.05	0.04	0.04	0.2	0.144	0.035	0.02	0.09	0.21	
9	BOD mg/l	1.6	6.4	1.5	0.3	0.9	2.6	1.5	-	-	3.3	4	6	
10	COD mg/l	14	13	20	20	20	6	12	24	33	14	15	16	
11	Chloride mg/l	244.6	32.8	6.8	5	25	13.21	20	15	109.97	29.57	32	20.55	
12	Fecal Coliform MPN/100 ml	780	330	7900	2300	2300	2300	2300	2300	4900	2300	2300	780	
13	Total Coliform MPN/100 ml	1300	490	13000	3300	4900	4600	4600	4900	7900	4900	3300	1100	
14	Ammonia mg/l	0.105	0.2	0.656	0.07	0.1	0.16	0.5	0.215	0.766	1.191	0.14	0.05	
15	Total Dissolved Solids(mg/l)	161	120	70	291	284	68	3728	199	516	-	1350	139	
16	Total Fixed Solids (mg/l)	112	70	28	264	200	28	2325	113	308	459	93	-	
17	Total Suspended Solid (mg/l)	52	75	70	9	19	4	4	10	36	31	35	29	
18	Hardness(mg/l)	2000	64	NIL	36	28	38	800	100	60	54	52	42	
19	Fluoride(mg/l)	0.1	2.73	BDL	0.3	1.69	0.33	1.6	0.07	3.1	0.24	0.03	-	
20	Boron(mg/l)	-	1.07	0.175	1.2	1.2	0.89	1.1	-	-	-	-	-	
21	Sulphate (mg/l)	15.4	1.75	1.28	7.5	7.07	5.8	10.2	24.16	11.66	5.35	24.93	1.72	
22	Total Alkalinity(mg/l)	76	50	4	6	8	10	74	40	48	54	58	54	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)	16.2	11.63	6	8	8.4	6.7	580.1	10.8	57.9	17.3	29.9	11.9	
25	Potassium(mg/l)	5.1	3.8	4	3.1	2.6	1.7	23.6	3.7	43	25	2.1	0.8	
26	Calcium as CaCO3(mg/l)	1000	34	NIL	16	16	18	106	26	22	50	30	30	
27	Magnesium(mg/l)	243	7.3	NIL	4.9	2.9	4.9	168.6	17.98	9.234	0.972	5	2.92	

**Table 3z - RIVER SAL AT ORLIM BRIDGE 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	
1	pH	7.94	7.84	6.77	6.81	6.54	7.08	6.84	7.01	7.09	7.46	7.47	8.11	
2	Temperature °C	31.2	31	28.1	28	28.6	32	30	31.5	29	27	29.5	32	
3	Conductivity µs/cm	42400	91730	508.6	573.5	779.45	1564	82.92	-	40850	4380	33600	29490	
4	Dissolved Oxygen mg/l	14.1	7	3.2	4.5	5.3	6.5	5.1	4.3	4.43	6.27	5.9	8.4	
5	Turbidity (NTU)	14.81	19	42.5	13.3	7.36	5.3	4.25	4.79	6.88	3.26	5.57	1.26	
6	Nitrite Nitrogen mg/l	0.007	0.004	0.094	0.03	0.03	0.028	0.04	0.147	0.152	0.026	0.011	0.003	
7	Nitrogen(Nitrate) mg/l	1.05	0.26	BDL	0.01	0.13	0.38	0.52	30.16	1.43	0.1	1.37	0.99	
8	Phosphate mg/l	0.038	0.074	0.081	0.06	0.62	0.03	0.02	0.054	0.027	0.078	0.04	0.1	
9	BOD mg/l	12.5	6.2	2.4	3.9	2.6	3.2	2.1	2.1	3.03	3.5	2.1	6.4	
10	COD mg/l	10	-	18	20	25	9	-	27	50	-	-	-	
11	Chloride mg/l	8805.7	54057.7	121.9	154	195	4529.2	730	7547.6	9497.06	19463.8 2	10320	11251.8 3	
12	Fecal Coliform MPN/100 ml	230	130	7900	3300	2300	1300	230	230	130	170	490	230	
13	Total Coliform MPN/100 ml	330	230	17000	4900	4900	1700	490	330	170	220	790	490	
14	Ammonia mg/l	0.043	0.37	0.788	0.06	0.03	0.23	0.15	0.263	0.822	0.117	0.1	1.55	
15	Total Dissolved Solids(mg/l)	14566	25542	302	471	400	1099	2123	11900	307	26948	26170	14349	
16	Total Fixed Solids (mg/l)	16268	18127	120	47	50	469	1395	8053	14519	-	18562	-	
17	Total Suspended Solid (mg/l)	60	53	23	28	25	15	15	64	8	14	174	278	
18	Hardness(mg/l)	4200	1600	56	4000	82	2500	1600	3600	3000	10000	3900	3800	
19	Fluoride(mg/l)	0.66	6.73	0.6	0.26	1.52	0.27	1.5	0.02	3.93	1.26	0.4	-	
20	Boron(mg/l)	22.12	4.88	1.9	4.6	4.4	2.2	2.4	-	-	-	-	-	
21	Sulphate (mg/l)	771.8	81.48	24.6	61	136	194.8	131	137.32	1080.72	2212.77	2172	1159.52	
22	Total Alkalinity(mg/l)	104	74	10	7	14	10	91	78	92	100	118	92	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0	0	0	12	
24	Sodium(mg/l)	2831	2157	58.8	69.8	102.9	89.4	370.5	2612	928	1112	4998	2602	
25	Potassium(mg/l)	121.6	99.2	7.7	9.9	6.2	4.1	13.9	95.4	169.2	177.9	178.1	220.8	
26	Calcium as CaCO3(mg/l)	400	800	34	600	20	1500	64	2000	480	4000	600	520	
27	Magnesium(mg/l)	923.4	194.4	5.35	826	15.01	243	373	388.8	612.36	1458	802	797	

**Table 3aa - RIVER SAL AT KHAREBAND, MARGAO 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	
1	pH	Sample not collected as it was in accessible	Sample not collected as it was in accessible	6.88	6.84	7.26	7.12	6.4	6.55	6.52	6.55	6.7	8	
2	Temperature °C			29	28	28.6	30	30	30.7	28	26	28	31	
3	Conductivity µs/cm			116.5	159.1	116.36	145.28	-	7819	449.2	539.2	777.6	386.7	
4	Dissolved Oxygen mg/l			2.9	2.9	4.5	3.3	3.5	8.2	-	7.2	0.7	1.3	
5	Turbidity (NTU)			56.4	22.6	10.14	14.82	9.32	20.2	32.5	17.84	17.89	3.23	
6	Nitrite Nitrogen mg/l			0.036	0.04	0.03	0.004	0.004	4.2	4.644	0.372	0.01	0.002	
7	Nitrogen(Nitrate) mg/l			0.3	0.094	0.12	1.06	1.1	0.23	12.28	-	0.09	3.06	
8	Phosphate mg/l			0.105	0.08	0.05	0.05	0.03	0.021	0.105	1.034	0.04	0.01	
9	BOD mg/l			10	2.2	1.1	1.7	1.3	8.9	7.41	4.2	6	1.3	
10	COD mg/l			26	28	30	10	10	28	37	15	21	6	
11	Chloride mg/l			12.14	10	20	20.06	18	34.99	59.98	197.1	155	26	
12	Fecal Coliform MPN/100 ml			24000	13000	24000	54000	35000	54000	54000	54000	54000	24000	
13	Total Coliform MPN/100 ml			35000	17000	35000	92000	54000	92000	92000	92000	92000	35000	
14	Ammonia mg/l			0.746	0.1	0.18	0.43	0.18	1.634	0.753	0.017	5.16	2.18	
15	Total Dissolved Solids(mg/l)			60	266	260	88	87	1145	1506	-	616	318	
16	Total Fixed Solids (mg/l)			24	126	115	38	94	545	1538	1323	232	-	
17	Total Suspended Solid (mg/l)			102	40	41	8	8	25	76	51	29	21	
18	Hardness(mg/l)			34	2000	30	58	600	200	200	460	98	70	
19	Fluoride(mg/l)			0.59	0.28	1.46	0.35	1.5	0.01	1.19	0.13	0.09	-	
20	Boron(mg/l)			0.64	1.4	1.2	0.81	1.1	-	-	-	-	-	
21	Sulphate (mg/l)			26.18	10.8	15.61	24.4	18.2	16.28	184.39	28.78	38.24	5.66	
22	Total Alkalinity(mg/l)			10	8	12	8	56	70	82	74	90	56	
23	Phenolphthalein Alkalinity(mg/l)			0	0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)			8.7	9.9	10.6	12.1	14	38.7	89.5	71.8	106.4	52.7	
25	Potassium(mg/l)			5.3	3.7	3	2.1	3.5	5	46.2	8	8.6	4.4	
26	Calcium as CaCO3(mg/l)			24	800	26	22	20	38	40	140	50	40	
27	Magnesium(mg/l)			2.43	291.6	0.97	8.7	141	39.36	38.88	77.76	12	7	

**Table 3ab - RIVER TIRACOL AT KERI, PERNEM 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	
1	pH	7.73	7.91	8.25	5.61	6.41	7.19	7.79	7.86	8.06	7.81	7.77	8.08	
2	Temperature °C	32.2	31	30	27.4	26	28	26	28	29	28	29	29	
3	Conductivity µs/cm	53970	82720	66450	9319	14890	24220	56440	46450	81030	87510	64790	52090	
4	Dissolved Oxygen mg/l	6	6.1	7.2	6.9	7.1	6.9	6.1	5.9	4.1	5.8	6	6.4	
5	Turbidity (NTU)	7.89	7.73	17.59	16.6	6.91	4.9	3.3	3.5	2.21	3.49	2.72	2.64	
6	Nitrite Nitrogen mg/l	0.002	0.009	0.002	0.01	0.008	0.004	0.001	0.002	0.008	0.005	0.006	0.005	
7	Nitrogen(Nitrate) mg/l	0.05	0.013	0.01	0.523	0.19	0.16	0.005	0.02	0.11	0.147	0.17	0.2	
8	Phosphate mg/l	0.02	0.04	0.13	0.016	0.003	0.003	0.055	0.072	0.06	0.028	0.011	0.04	
9	BOD mg/l	1.7	3.6	2.3	2.4	1	3.6	0.9	3.5	2.1	2.9	3	2.9	
10	COD mg/l	-	-	-	-	-	-	-	-	-	-	-	-	
11	Chloride mg/l	25641	27440	23243	2413.8	4177	8872.2	18212	18455	18369	19427	20993	25492	
12	Fecal Coliform MPN/100 ml	33	490	130	790	1300	790	230	240	240	23	33	33	
13	Total Coliform MPN/100 ml	79	1300	220	1700	3500	1700	330	540	540	33	49	46	
14	Ammonia mg/l	0.014	0.22	0.002	0.492	0.07	0.14	0.03	0.2	0.12	0.02	0.11	BDL	
15	Total Dissolved Solids(mg/l)	39018	41090	49620	5482	11436	16762	33204	33291	52095	41668	71469	43950	
16	Total Fixed Solids (mg/l)	28614	32594	38752	3874	9590	12230	27873	31375	18662	32721	51870	30779	
17	Total Suspended Solid (mg/l)	91	104	199	59	59	34	168	78	197	198	168	212	
18	Hardness(mg/l)	7600	7500	5800	810	1780	2600	6240	2720	7400	7800	8400	10000	
19	Fluoride(mg/l)	0.904	1.33	1.44	0.524	1.05	0.9	0.41	1.32	1.8	3.25	0.99	BDL	
20	Boron(mg/l)	4.58	3.15	0.9	0.5	2.88	2.3	2.22	-	-	-	-	-	
21	Sulphate (mg/l)	2389	2455	2013	239.4	511	382.5	2844	3811	2788	2257	2474	3009	
22	Total Alkalinity(mg/l)	56	86	12	12	16	120	118	120	152	120	134	126	
23	Phenolphthalein Alkalinity(mg/l)	0	4	0	0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)	9088	9088	10088	986.1	2264	3018	1605	8198	1494	1474	6854	6118	
25	Potassium(mg/l)	204.1	285	284.4	54.3	92.4	134.7	234.7	232.2	212	211.6	275.1	301	
26	Calcium as CaCO3(mg/l)	1800	1400	3000	142	260	600	1120	1400	1800	1200	1400	1800	
27	Magnesium(mg/l)	1409	1482	686	162.3	369	486	1244	320.8	1361	1604	1701	1993	

**Table 3ac - RIVER CHAPORA NEAR SIOLIM BRIDGE 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	
1	pH	7.57	7.6	7.76	5.97	6.65	7.28	7.82	7.81	7.81	7.93	8.01	8.09	
2	Temperature °C	33.9	30.4	32.1	28.7	26.3	28.3	27	27	28	28	29.6	29.5	
3	Conductivity µs/cm	32700	52010	46450	2759	7070	5390	48830	43300	66950	81420	32170	52380	
4	Dissolved Oxygen mg/l	5.3	6.1	4	6.8	6.9	7.6	6.1	5.6	5	5.2	7.2	6.2	
5	Turbidity (NTU)	6.25	2.75	6.9	23.3	8.33	11.8	1.89	2.72	1.25	2.28	3.23	2.73	
6	Nitrite Nitrogen mg/l	0.004	0.02	0.003	0.037	0.006	0.004	0.001	0.002	0.008	0.003	0.003	0.004	
7	Nitrogen(Nitrate) mg/l	0.04	0.002	0.005	0.508	0.13	0.15	0.06	0.02	0.09	0.136	0.12	0.13	
8	Phosphate mg/l	0.03	0.01	0.03	0.022	0.006	0.034	0.11	0.048	0.03	0.02	0.004	0.005	
9	BOD mg/l	2.1	2.1	1.4	1.4	0.9	1.7	1.2	2.4	1	1.8	5.2	2.7	
10	COD mg/l	-	-	-	-	-	-	-	-	-	-	-	-	
11	Chloride mg/l	14564	13599	18119	684.8	2331	6248.1	16027	15784	18744	19669	11746	25742	
12	Fecal Coliform MPN/100 ml	1300	1300	1300	7900	7900	7900	1300	7900	2300	4900	780	450	
13	Total Coliform MPN/100 ml	3300	2300	2200	17000	13000	13000	2300	1300	3300	7900	1100	780	
14	Ammonia mg/l	0.038	0.16	0.002	0.323	0.08	0.11	0.01	0.15	0.04	0.03	0.09	BDL	
15	Total Dissolved Solids(mg/l)	27561	27045	30911	1690	5557	2930	39508	30094	39476	42811	35091	45721	
16	Total Fixed Solids (mg/l)	17498	15927	17890	1268	4862	2521	33028	19091	11863	28112	27807	32411	
17	Total Suspended Solid (mg/l)	101	79	107	52	54	37	207	215	206	208	182	158	
18	Hardness(mg/l)	3600	4640	3000	270	780	2600	5700	5900	7000	6800	4400	9400	
19	Fluoride(mg/l)	0.836	1.05	1.09	0.343	0.6	1.3	0.79	1.43	1.79	2.84	1.15	BDL	
20	Boron(mg/l)	3.2	2	0.7	0.985	1.64	1.7	2.55	-	-	-	-	-	
21	Sulphate (mg/l)	1615	1440	1630	94.05	259	170	2668.6	3322	4734	1926	1250	2822	
22	Total Alkalinity(mg/l)	46	114	13	8	14	98	106	106	128	106	110	124	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0	6	0	0	
24	Sodium(mg/l)	5396	5554	6793	329.8	1049	674.3	1505	6848	1391	1422	3929	5769	
25	Potassium(mg/l)	138.5	196.6	222.4	17.3	44	35	219	212	198	204.4	164.5	316.2	
26	Calcium as CaCO3(mg/l)	800	880	1000	48	180	400	1100	1200	1400	1400	400	1800	
27	Magnesium(mg/l)	608	914	486	54	146	534.6	1118	1142	1361	1312	972	1847	

**Table 3ad - RIVER SINGUERIM, CANDOLIM SIDE 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	
1	pH	7.3	7.5	7.97	6.16	6.61	7.14	7.6	7.72	7.99	7.75	8.03	8	
2	Temperature °C	33.1	31	31	28.2	26.8	28.7	27	29	27	28.5	30	28	
3	Conductivity µs/cm	53710	84000	67600	5320	19980	34650	43810	45490	71070	79480	55910	51310	
4	Dissolved Oxygen mg/l	4.4	5.3	5.9	6.5	5.9	6.8	5.6	5.1	4.5	5.2	5.7	6.8	
5	Turbidity (NTU)	3.78	10.3	25.6	22.6	6.71	5.83	3.21	2.5	3.74	3.53	7.42	4.81	
6	Nitrite Nitrogen mg/l	0.003	0.002	0.003	0.396	0.011	0.004	0.003	0.002	0.015	0.009	0.006	0.005	
7	Nitrogen(Nitrate) mg/l	0.04	0.005	0.006	0.579	0.25	0.19	0.03	0.02	0.08	0.158	0.16	0.14	
8	Phosphate mg/l	0.03	0.03	0.02	0.009	0.02	0.34	0.05	0.068	0.04	0.035	0.004	0.03	
9	BOD mg/l	1.5	1.8	1.9	1.8	0.9	2.3	1.4	2.2	1.2	1.9	2.4	2.8	
10	COD mg/l	-	-	-	-	-	-	-	-	-	-	-	-	
11	Chloride mg/l	24641	27926	27991	1340.4	6022	12996	13356	17970	21893	21855	21743	20993	
12	Fecal Coliform MPN/100 ml	450	3300	780	4600	4900	1300	780	2300	780	2400	230	790	
13	Total Coliform MPN/100 ml	780	4900	1700	7000	7900	2300	2300	3300	1300	3500	310	1300	
14	Ammonia mg/l	0.008	0.12	0.001	0.38	0.127	0.13	0.11	0.1	0.09	0.01	0.14	BDL	
15	Total Dissolved Solids(mg/l)	41146	41709	49026	3616	14320	24417	29790	34243	44762	42398	76054	50875	
16	Total Fixed Solids (mg/l)	30462	34215	38399	2624	12573	18495	23876	29555	13587	32787	48639	32175	
17	Total Suspended Solid (mg/l)	950	107	117	45	128	5	200	64	241	214	238	183	
18	Hardness(mg/l)	13000	6800	6400	450	2360	4000	5000	6000	7600	6400	8800	14200	
19	Fluoride(mg/l)	0.948	1.38	1.27	0.505	1.04	1.05	0.68	1.4	1.5	3.48	1.23	BDL	
20	Boron(mg/l)	3.7	2.66	1.1	0.615	3.48	3.8	0.04	-	-	-	-	-	
21	Sulphate (mg/l)	2081	2717	2877	51.3	797	901	2319	3034	6670	2334	3468	3290	
22	Total Alkalinity(mg/l)	54	126	16	12	20	140	98	118	138	118	138	130	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)	9471	9006	9561	602.2	3002	4467	1400	7641	1461	1474	7473	6499	
25	Potassium(mg/l)	200.6	291	288.4	32.9	125.1	183.3	206	219.6	209	210.4	254.7	309	
26	Calcium as CaCO3(mg/l)	1400	1100	1200	90	400	1000	800	900	1400	1400	1400	2600	
27	Magnesium(mg/l)	2819	1385	1264	87.5	476	729	1020	1239	1507	1215	1798	2819	

**Table 3ae - RIVER SINQUERIM, NEAR GANPATI TEMPLE 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	
1	pH	7.37	7.6	8.03	6.16	6.69	7.19	7.6	7.67	7.86	7.68	7.71	7.97	
2	Temperature °C	32.3	31	31.2	28.4	26.9	28.9	27	28	28	28	30	28	
3	Conductivity µs/cm	53630	83420	67210	5350	27570	39120	47470	45690	79340	83240	56110	51780	
4	Dissolved Oxygen mg/l	4.3	5.7	6	6.5	5.8	5.9	7.6	4.6	4.5	5.1	5.7	6.2	
5	Turbidity (NTU)	6.42	13.96	30.9	26	9.56	7.5	3.92	5.41	3.54	4.47	8.7	6.91	
6	Nitrite Nitrogen mg/l	0.003	0.003	0.002	0.605	0.012	0.004	0.004	0.015	0.015	0.01	0.007	0.005	
7	Nitrogen(Nitrate) mg/l	0.04	0.022	0.018	0.443	0.26	0.2	0.05	0.04	0.1	0.187	0.16	0.14	
8	Phosphate mg/l	0.1	0.06	0.02	0.011	0.02	0.36	0.23	0.082	0.15	0.033	0.006	0.01	
9	BOD mg/l	1.1	2.4	1.7	2.1	1.9	1.9	1.4	1.5	1.1	2.1	2.6	1.7	
10	COD mg/l	-	-	-	-	-	-	-	-	-	-	-	-	
11	Chloride mg/l	23616	23069	24242	1316.2	8499	16370	15541	17483	21118	21612	22368	20743	
12	Fecal Coliform MPN/100 ml	1300	1300	450	4900	7000	4900	450	4900	1300	3500	130	1300	
13	Total Coliform MPN/100 ml	2300	1700	780	7900	11000	7900	1300	7900	2300	5400	170	2200	
14	Ammonia mg/l	0.011	0.08	0.002	0.206	0.09	0.16	0.07	0.14	0.12	0.07	0.18	0.2	
15	Total Dissolved Solids(mg/l)	40199	42349	48459	3633	17846	38088	32754	35524	45111	40841	58727	49944	
16	Total Fixed Solids (mg/l)	30110	34151	37658	2424	16706	17875	22617	29305	13889	31505	47000	32078	
17	Total Suspended Solid (mg/l)	98	163	126	53	139	21	175	171	225	196	237	153	
18	Hardness(mg/l)	7600	6900	6200	442	3200	4600	5500	5800	9800	7800	6600	8400	
19	Fluoride(mg/l)	0.944	1.06	1.24	0.481	0.49	2.25	0.42	0.55	1.7	0.63	1.17	BDL	
20	Boron(mg/l)	3.82	3.08	0.8	0.765	3.8	3.6	BDL	-	-	-	-	-	
21	Sulphate (mg/l)	2705	2317	2124	39.9	1130	433.5	2208	3023	3884	2281	2873	2958	
22	Total Alkalinity(mg/l)	61	118	12	10	24	148	110	116	148	116	138	130	
23	Phenolphthalein Alkalinity(mg/l)	0	6	0	0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)	10094	9125	9579	569.6	4289	5120	1469	7564	1452	1470	7139	6291	
25	Potassium(mg/l)	204.8	288	285	32.5	168	203.4	215	222.4	207	209.2	256.8	315.5	
26	Calcium as CaCO3(mg/l)	1400	1400	1600	82	540	1200	1000	1100	1600	1200	1800	1800	
27	Magnesium(mg/l)	1507	1336	1118	87.5	646	826	1093	1142	1993	1604	1166	1604	

**Table 3af - RIVER MANDOVI AT IFFI JETTY 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	
1	pH	7.33	7.3	7.3	7.31	6.21	7.52	7.7	7.85	7.78	7.7	8.1	7.88	
2	Temperature °C	31.3	30.5	30.5	26.9	28.7	29	30	28	30.5	27.3	29	32	
3	Conductivity µs/cm	52460	62920	62920	15620	489.8	50870	46930	69790	74910	57110	51270	48100	
4	Dissolved Oxygen mg/l	5.7	6.3	6.3	7.1	5.81	5.8	6.8	6.1	5.9	5.9	5.5	6.6	
5	Turbidity (NTU)	5.22	23.7	23.7	26.4	15.97	5.81	3.94	1.74	3.14	7.48	6.48	10.29	
6	Nitrite Nitrogen mg/l	0.005	0.002	0.005	0.014	0.01	0.005	0.004	0.002	0.005	0.03	0.007	0.005	
7	Nitrogen(Nitrate) mg/l	0.007	0.02	0.03	0.28	0.29	0.32	0.38	0.26	0.19	0.2	0.04	0.04	
8	Phosphate mg/l	0.03	0.028	0.027	0.028	0.022	0.08	0.05	0.07	0.036	0.02	0.04	0.02	
9	BOD mg/l	1.3	3.4	3.6	1.5	2.2	2.2	1.7	2.7	1.9	3.1	0.9	4	
10	COD mg/l	-	-	-	-	-	-	-	-	-	-	-	-	
11	Chloride mg/l	22341	26367	27991	4380	8747	26617	25562	25090	23971.3	19368	25742	26491	
12	Fecal Coliform MPN/100 ml	490	490	330	3500	4900	4900	2300	780	490	1700	790	790	
13	Total Coliform MPN/100 ml	790	790	490	9200	9400	7900	4900	1700	790	2200	1300	1100	
14	Ammonia mg/l	0.01	0.03	0.05	0.07	0.25	0.06	0.006	0.1	0.08	0.004	0.03	BDL	
15	Total Dissolved Solids(mg/l)	41956	34856	11250	11728	12775	14698	49082	12886	45999	51925	28856	29928	
16	Total Fixed Solids (mg/l)	31523	23040	7119	7085	7862	9244	27131	8210	33975	30124	18360	-	
17	Total Suspended Solid (mg/l)	118	132	230	248	52	48	150	112	72	177	191	198	
18	Hardness(mg/l)	7400	5340	5130	1400	2000	4000	11800	6600	9500	9000	6000	11200	
19	Fluoride(mg/l)	1.84	1	1.1	0.79	1.2	1.9	1.8	2.2	3.25	1.8	1	BDL	
20	Boron(mg/l)	2.85	2.36	1.9	1.7	1.5	1.3	1.2	-	2.84	-	-	-	
21	Sulphate (mg/l)	3351	6316	2465	520.7	931.6	1436.5	1314	1418	1842.7	2380	3291	2788	
22	Total Alkalinity(mg/l)	146	760	56	14	16	146	148	124	108	124	128	128	
23	Phenolphthalein Alkalinity(mg/l)	0	6	0	0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)	7816	8792	8743	1898	2508	7320	6616	7468	1031	1233	6498	5697	
25	Potassium(mg/l)	293	279.6	327.8	97.5	104	252.5	179.2	209.3	190.3	197.8	270.8	304.7	
26	Calcium as CaCO3(mg/l)	1100	1280	2500	230	1200	1400	6400	3200	1900	2000	1400	2000	
27	Magnesium(mg/l)	1531	986	639	284.3	194.4	631.8	1312	826	1846.8	1701	1118	2236	



**Table 3ag - RIVER MANDOVI NEAR HOTEL MARIOTT 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	
1	pH	6.66	7.57	7.57	7.15	5.96	7.55	7.76	7.78	7.75	7.81	8.08	7.82	
2	Temperature °C	31.1	30.5	30.5	27.2	28.4	29	30	28	30.5	27.1	29	32	
3	Conductivity µs/cm	52150	63330	63330	14780	479.2	50500	51120	66430	78030	51040	51140	48690	
4	Dissolved Oxygen mg/l	5.7	6	6	7.2	6.91	6.9	6.6	5.3	5.1	6.2	5.7	6.8	
5	Turbidity (NTU)	7.57	25.5	25.5	16.04	18.45	6.91	6.19	3.07	2.62	8.84	6.95	8.76	
6	Nitrite Nitrogen mg/l	0.002	0.006	0.006	0.007	0.01	6.005	0.004	0.002	0.006	0.03	0.01	0.005	
7	Nitrogen(Nitrate) mg/l	0.03	0.05	0.06	0.26	0.28	0.29	0.3	0.28	0.15	0.18	0.04	0.03	
8	Phosphate mg/l	0.03	0.031	0.032	0.029	0.024	0.05	0.04	0.07	0.021	0.03	0.04	0.02	
9	BOD mg/l	1.5	2.6	2.6	1.6	1.3	1.3	1.6	2.1	2.1	3.4	1.1	3.6	
10	COD mg/l	-	-	-	-	-	-	-	-	-	-	-	-	
11	Chloride mg/l	20398	23743	23493	4672	8747	16245	15264	15114	27395.8	22493	22493	21868	
12	Fecal Coliform MPN/100 ml	2400	78	490	2400	2300	1300	130	130	1300	3500	2400	2400	
13	Total Coliform MPN/100 ml	5400	170	790	5400	3300	2300	230	230	3500	5400	5400	3500	
14	Ammonia mg/l	0.03	0.1	0.1	0.05	0.2	0.04	0.004	0.04	0.05	0.008	0.09	BDL	
15	Total Dissolved Solids(mg/l)	38657	34362	11235	12344	13040	15288	57174	13080	46900	54413	28562	29184	
16	Total Fixed Solids (mg/l)	31139	22221	7120	7537	8865	9764	31137	8946	26758	28193	18221	-	
17	Total Suspended Solid (mg/l)	131	150	320	342	40	42	319	174	101	199	190	180	
18	Hardness(mg/l)	6300	5260	4920	1490	2400	5000	7400	6400	10200	7800	8600	13000	
19	Fluoride(mg/l)	0.96	0.98	0.95	0.72	0.78	1.4	1.5	1.7	2.02	1.6	0.98	BDL	
20	Boron(mg/l)	2.33	2.38	2	1.64	1.24	1.1	1.1	-	2.59	-	-	-	
21	Sulphate (mg/l)	3163	7042	1595	543.1	816	1861.5	1621.1	1582	2056	3137	3497	4352	
22	Total Alkalinity(mg/l)	134	780	56	10	18	160	134	134	114	116	128	120	
23	Phenolphthalein Alkalinity(mg/l)	0	4	0	0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)	7883	8799	7297	1959	2415	66.6	7402	7642	1021	1240	6927	5736	
25	Potassium(mg/l)	3274	283.1	295.1	102.5	102	250.5	190.8	212.3	196.2	199.5	251.3	326.9	
26	Calcium as CaCO3(mg/l)	2500	1220	2000	280	600	1000	1400	1600	1600	1400	1400	2200	
27	Magnesium(mg/l)	923	981.7	710	294	437.4	972	1458	1166	2089.8	1555	1750	2624	

**Table 3ah - RIVER MANDOVIA AT AMONA 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	
1	pH	6.73	7.11	6.88	6.93	6.08	6.97	6.94	7.04	7.09	6.91	7.35	7.28	
2	Temperature °C	28.5	32.2	30.1	27.3	25.9	26.9	28	29	29	25.3	29	30	
3	Conductivity µs/cm	37140	60550	49730	176.2	82.39	-	209.61	9216	20120	36430	28200	29770	
4	Dissolved Oxygen mg/l	5	4.8	4.8	7.1	7.4	7.6	7.9	6.7	5.7	5.7	6	5.4	
5	Turbidity (NTU)	8.08	3.79	2.86	27.5	25.9	2.53	26.7	13.21	10.47	11.26	10.08	13.66	
6	Nitrite Nitrogen mg/l	0.08	0.083	0.06	0.01	0.014	0.003	0.004	0.01	0.01	0.15	0.14	0.17	
7	Nitrogen(Nitrate) mg/l	0.76	0.08	0.07	0.05	0.05	0.04	0.012	0.018	0.11	0.16	0.14	0.25	
8	Phosphate mg/l	0.03	0.01	0.04	0.02	0.014	0.04	0.003	0.07	0.06	0.02	0.01	0.02	
9	BOD mg/l	0.9	1.2	1.3	1.3	0.6	1.7	2.2	6.2	1.1	1.7	2	1	
10	COD mg/l	-	-	-	9	9	8	7	-	-	-	-	-	
11	Chloride mg/l	16633.1	15152.75	21368	95	20	1374.6	35.9	4190	8247	7631.7	12246	9956	
12	Fecal Coliform MPN/100 ml	790	230	1300	1300	5400	4900	3300	7900	4900	1700	3500	780	
13	Total Coliform MPN/100 ml	1300	330	3500	3500	9200	7900	7000	11000	7900	3500	5400	1400	
14	Ammonia mg/l	0.76	0.01	0.004	0.1	0.26	0.06	0.036	0.01	0.12	0.118	0.02	0.2	
15	Total Dissolved Solids(mg/l)	29642	35535	36695	894	800	6792	153	1434	9247	19982	23127	22896	
16	Total Fixed Solids (mg/l)	20688	23415	18310	456	400	4212	71	1869	953	11658	12888	-	
17	Total Suspended Solid (mg/l)	5	13	10	15	20	13	41	13	42	73	70	135	
18	Hardness(mg/l)	6000	6000	3200	30	20	600	34	1600	1000	1000	4800	3600	
19	Fluoride(mg/l)	1.32	1.63	1.18	0.23	0.85	0.8	0.89	0.98	1.1	2.55	0.22	2.72	
20	Boron(mg/l)	-	1.15	1.3	0.67	0.62	0.59	BDL	-	-	-	-	-	
21	Sulphate (mg/l)	1525.2	2057.51	2161	2448	11.4	1190	15.43	425	552	542.7	1148	564	
22	Total Alkalinity(mg/l)	94	94	14	5	12	74	40	52	70	70	94	78	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0	0	0	2	
24	Sodium(mg/l)	5281	6630	7538	13.2	9.3	237.6	31.5	386.7	671	865	3765	3665	
25	Potassium(mg/l)	160	220	236.6	3	3.2	10	3.2	12.3	80.7	118.5	159.4	174.4	
26	Calcium as CaCO3(mg/l)	1500	820	1400	16	16	400	12	1000	600	800	1000	600	
27	Magnesium(mg/l)	1093.5	1258.74	437	3.4	1	48.6	5.35	145.8	97	48.6	923	729	

Table 3ai - RAIA LAKE 2016-2017

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	
1	pH	6.82	Sample not collected as it was in accessible	6.8	7.48	7.8	6.37	6.34	7.22	6.54	6.5	6.5	6.77	
2	Temperature °C	28.7		31.3	30.3	30	31	29	30	29.1	26.5	26.4	31.5	
3	Conductivity µs/cm	147.3		203.6	114.3	72.8	84.13	-	104.3	117.3	155.6	129.2	128.45	
4	Dissolved Oxygen mg/l	7.9		8.2	7.5	7.4	4.2	3	5	5.9	8.2	7.3	6.5	
5	Turbidity (NTU)	18.8		33.8	1.83	1.31	2.08	1.48	2.74	4.02	3.73	1.1	12.88	
6	Nitrite Nitrogen mg/l	0.04		0.045	0.165	0.006	BDL	0.003	0.001	0.002	0.004	0.002	0.03	
7	Nitrogen(Nitrate) mg/l	0.01		0.697	0.17	0.26	0.168	0.18	0.01	0.08	0.03	0.16	0.01	
8	Phosphate mg/l	0.01		0.085	0.01	0.2	0.01	0.003	0.02	0.01	0.027	0.02	0.02	
9	BOD mg/l	3.4		2.8	2.1	1	1.1	1.5	1.4	3	3	0.6	4.5	
10	COD mg/l	40		25	26	10	2	3.1	7	6	10	3	25	
11	Chloride mg/l	20.1		29.14	11.74	9	6.5	6.2	11.6	15.17	17	7	19	
12	Fecal Coliform MPN/100 ml	490		1300	780	790	780	3500	3300	2400	1300	230	780	
13	Total Coliform MPN/100 ml	1100		2200	1100	1400	1100	9200	7900	5400	2400	490	1300	
14	Ammonia mg/l	0.01		7.08	0.028	0.09	BDL	0.04	0.14	0.09	0.085	0.02	0.3	
15	Total Dissolved Solids(mg/l)	138		152	85	41	63	175	69	70	83	59	60	
16	Total Fixed Solids (mg/l)	60		45	45	31	17	229	23	28	69	22	-	
17	Total Suspended Solid (mg/l)	1		17	15	4	4	11	9	32	4	6	118	
18	Hardness(mg/l)	34		34	400	10	24	22	28	32	32	60	26	
19	Fluoride(mg/l)	0.2		0.42	0.07	0.72	0.6	0.82	BDL	0.07	0.72	BDL	BDL	
20	Boron(mg/l)	-		0.281	BDL	1.76	0.06	0.07	-	-	-	-	-	
21	Sulphate (mg/l)	8.1		31.12	4.7	6.35	3.31	2.7	1.27	5.4	10.3	4.82	5.7	
22	Total Alkalinity(mg/l)	38		10	10	4	34	62	12	30	48	58	34	
23	Phenolphthalein Alkalinity(mg/l)	0		0	0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)	18.6		12.9	6.1	6.3	15.1	8.5	11.9	11.7	12.5	5.2	16.7	
25	Potassium(mg/l)	1.1		13.7	4.4	2.6	5.8	3.2	3.5	3.4	1.9	1.8	4.2	
26	Calcium as CaCO <sub>3</sub> (mg/l)	20		14	240	4	10	14	12	16	14	32	14	
27	Magnesium(mg/l)	3.4		4.86	38.88	1.5	3.4	1.9	3.89	4	4.4	7	2.9	

**Table 3aj - SAIPEM LAKE, NAVELIM 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	
1	pH	Sample not collected as it was inaccessible	Sample not collected as it was dry	7.03	7.67	6.26	Sample not collected as there was no flow of water	6.54	6.71	6.64	6.45	6.55	7.76	
2	Temperature °C			28.7	27.5	30		30	30.06	29	26	27	30	
3	Conductivity µs/cm			303.2	298.2	277.98		-	-	385	413.4	418.1	308.5	
4	Dissolved Oxygen mg/l			3.9	5.7	2.1		1.2	7.8	0.37	-	0	0	
5	Turbidity (NTU)			45	52.4	32		14.83	14.14	37.1	2.17	16.98	10.5	
6	Nitrite Nitrogen mg/l			0.304	0.09	0.11		-	0.138	5.676	0.456	0.01	0.013	
7	Nitrogen(Nitrate) mg/l			0.11	0.04	0.12		0.15	26.99	16.02	9.31	2.24	6.16	
8	Phosphate mg/l			0.117	0.03	0.11		0.2	0.037	0.487	0.734	0.73	0.04	
9	BOD mg/l			3.7	1.4	4		3	8	23	7	8	7	
10	COD mg/l			45	35	32		10	22	38	10	28	31	
11	Chloride mg/l			25.3	25	25		28	49.98	199.94	54.2	48	41.09	
12	Fecal Coliform MPN/100 ml			54000	54000	54000		-	54000	54000	54000	54000	54000	
13	Total Coliform MPN/100 ml			92000	92000	92000		-	92000	92000	92000	92000	92000	
14	Ammonia mg/l			2.916	1	1.5		0.22	1.9	0.789	0.039	11.04	0.02	
15	Total Dissolved Solids(mg/l)			180	1662	1562		133	1031	778	344	255	214	
16	Total Fixed Solids (mg/l)			102	368	70		60	452	599	565	186	-	
17	Total Suspended Solid (mg/l)			166	79	78		20	28	64	58	23	56	
18	Hardness(mg/l)			100	94	74		62	1200	600	74	32	62	
19	Fluoride(mg/l)			0.66	0.2	0.62		0.8	0.01	1.79	1.13	0.1	-	
20	Boron(mg/l)			0.6	1.7	1.5		1.4	-	-	-	-	-	
21	Sulphate (mg/l)			38	26	26.2		12.8	111.89	16.92	10.72	101.64	7.87	
22	Total Alkalinity(mg/l)			16	12	16		126	90	102	80	106	50	
23	Phenolphthalein Alkalinity(mg/l)			0	0	0		0	0	0	0	0	0	
24	Sodium(mg/l)			16.7	18.9	19.4		22.2	33.7	82.3	47.6	47.3	37.2	
25	Potassium(mg/l)			7	7.1	5.1		4.3	5.3	47.7	7.6	8.8	5.9	
26	Calcium as CaCO3(mg/l)			80	78	12		50	38	42	60	16	42	
27	Magnesium(mg/l)			4.86	3.9	15.1		2.9	282.3	135.594	3.402	4	4.86	

**Table 3ak - CURTORIM LAKE, CURTORIM 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	
1	pH	7.1	8.72	6.8	7.34	7.9	6.59	6.76	7.04	6.96	7.2	6.8	6.7	
2	Temperature °C	29.2	32.6	30.3	30.2	29.8	30	28	32	29	26	27	30.3	
3	Conductivity µs/cm	154.1	190.7	231.7	140.4	92.3	109.01	-	22.4	157.4	180.2	256.6	399.36	
4	Dissolved Oxygen mg/l	7.9	2.3	6.3	5.8	3.6	3.5	2.5	1.9	14.7	4.8	6.4	3.4	
5	Turbidity (NTU)	31.5	8.16	17.55	42.8	18.43	16.45	15.34	23.8	51	0.29	23.9	40.4	
6	Nitrite Nitrogen mg/l	0.01	0.009	0.008	0.137	0.003	0.002	0.002	0.018	0.013	0.004	0.006	0.008	
7	Nitrogen(Nitrate) mg/l	0.03	0.21	0.211	0.05	0.04	0.05	0.07	0.01	0.09	0.01	0.008	0.009	
8	Phosphate mg/l	0.05	0.017	0.007	0.02	0.08	0.013	0.003	0.05	0.01	0.023	0.06	0.02	
9	BOD mg/l	8	0.7	2.4	1.9	0.9	0.7	2	4.8	16	3.9	4.8	-	
10	COD mg/l	56	22	23	19	12	2	3.3	13	20	13	22	20	
11	Chloride mg/l	16.1	13.75	28.65	12.72	9.5	10.1	11	29.6	15.17	25	46	32	
12	Fecal Coliform MPN/100 ml	1300	450	1300	780	1300	780	1700	3300	7900	780	130	7900	
13	Total Coliform MPN/100 ml	2300	780	3300	1300	2300	1300	2100	7900	11000	1300	230	13000	
14	Ammonia mg/l	0.12	0.81	0.45	0.15	0.06	0.041	0.01	0.02	2.35	0.064	2.59	BDL	
15	Total Dissolved Solids(mg/l)	144	50	150	81	50	80	1000	143	88	101	179	131	
16	Total Fixed Solids (mg/l)	51	16	20	41	45	54	542	118	58	84	75	-	
17	Total Suspended Solid (mg/l)	3	13	8	59	16	80	21	30	53	12	31	45	
18	Hardness(mg/l)	28	88	48	600	8	28	80	48	52	46	60	50	
19	Fluoride(mg/l)	0.14	0.17	0.31	BDL	0.73	0.013	0.84	BDL	0.55	0.73	BDL	BDL	
20	Boron(mg/l)	1.4	0.14	0.78	1.59	1.16	0.02	0.03	-	-	-	-	-	
21	Sulphate (mg/l)	16.8	206	32.11	12.88	3.67	5.62	3.4	1.9	1318	8.74	16.21	12.7	
22	Total Alkalinity(mg/l)	24	28	10	12	6	40	84	14	38	148	48	70	
23	Phenolphthalein Alkalinity(mg/l)	0	0	2	0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)	14.3	35.8	11.6	6.8	7.6	26.1	9.4	14.2	13.5	17	33.4	25.6	
25	Potassium(mg/l)	2.3	5.5	18.9	3.5	2.5	15.5	4.5	6.1	4.8	4.2	5.2	5.8	
26	Calcium as CaCO3(mg/l)	18	18	30	320	4	12	20	24	26	20	26	24	
27	Magnesium(mg/l)	2.43	17	4.37	68.04	1	3.888	14.6	5.83	6.32	6.3	8	6.3	

**Table 3a1 - RIVER ZUARI AT MADKAIJETTY 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	
1	pH	6.04	7.53	8.01	-	7.18	7.22	7.16	7.47	7.53	7.38	7.79	7.68	
2	Temperature °C	32.4	32	31	28	28	29.5	29	30	30	29	31	32.5	
3	Conductivity µs/cm	4200	78600	61890	13910	13680	33560	-	71420	73530	75840	48330	46760	
4	Dissolved Oxygen mg/l	5.7	4.8	5.3	6	6.7	4.8	6.5	6	5.5	5.2	5.4	5.6	
5	Turbidity (NTU)	14.92	4.11	40	35.9	17.61	15.56	10.66	8.22	10.98	6.51	47.2	23.5	
6	Nitrite Nitrogen mg/l	0.009	0.006	0.019	0.11	0.007	0.008	0.01	0.065	0.006	0.06	0.016	0.01	
7	Nitrogen(Nitrate) mg/l	0.055	0.15	0.04	0.025	0.31	0.069	0.1	0.007	0.46	0.51	0.6	0.25	
8	Phosphate mg/l	0.02	0.027	0.1	0.11	0.033	0.09	0.02	0.05	0.03	0.05	0.03	0.11	
9	BOD mg/l	1.5	0.9	1.7	1.6	1.7	1.5	3.1	2.4	2.7	2.3	1.3	1.2	
10	COD mg/l	BDL	-	-	15	18	-	-	-	-	-	-	-	
11	Chloride mg/l	17241.1	20994	18698.1	405	47.93	11655	6995.7	21525.2 4	18345.4	23367	18923	23493	
12	Fecal Coliform MPN/100 ml	790	78	790	2200	1300	780	450	130	490	130	490	790	
13	Total Coliform MPN/100 ml	1100	130	1700	3400	1700	1300	780	230	700	170	940	1300	
14	Ammonia mg/l	0.001	0.05	0.03	0.14	0.034	0.58	BDL	0.17	0.03	0.027	0.009	0.02	
15	Total Dissolved Solids(mg/l)	33676	22164	35896	8369	8651	23888.4	13553	39696	55086	63880	43049	25950	
16	Total Fixed Solids (mg/l)	-	18014	24660	7006	7041	20110	9813	27594	28650	27717	29086	16750	
17	Total Suspended Solid (mg/l)	161	190	33	141	137	238	48	35	179	200	235	194	
18	Hardness(mg/l)	6000	7200	6040	2400	1800	4020	3000	6000	7800	5200	3800	6200	
19	Fluoride(mg/l)	1.84	101	1.76	0.9	1.27	BDL	0.73	0.98	1.41	2.8	1.41	-	
20	Boron(mg/l)	-	0.93	N.R	0.48	3.16	-	-	-	-	-	-	-	
21	Sulphate (mg/l)	2588.6	2464	3186	360.4	541.2	1090.4	1313.3	2738.12	2272.8	3392	2560	2085	
22	Total Alkalinity(mg/l)	0.1	112	28	20	12	84	60	36	106	118	128	92	
23	Phenolphthalein Alkalinity(mg/l)	124	0	2	0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)	2665.2	8843	7679	4.8	1835	4433	2534	6947	6852	1393	6374	6681	
25	Potassium(mg/l)	313.4	270.5	313.8	2.2	79.5	180.2	90.4	235.5	229.1	200.5	249.1	251	
26	Calcium as CaCO3(mg/l)	-	1400	1080	800	600	620	400	3200	1400	3200	1400	960	
27	Magnesium(mg/l)	1166.4	1409	1205.28	389	291.6	826.2	631.8	680.4	1555.2	486	583	1273	

**Table 3am - RIVER ZUARI AT BORIM BRIDGE 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	
1	pH	6.33	7.03	7.47	-	7.33	6.98	6.75	7.04	7.07	7.18	7.36	7.31	
2	Temperature °C	33.8	32	30	27.6	27.5	29.1	28	30	30	30	32	32	
3	Conductivity µs/cm	50700	46720	47600	228.2	277.4	14140	-	31510	38190	58190	33450	32550	
4	Dissolved Oxygen mg/l	6	5.8	4.1	6.1	6.8	6	6.3	6.5	5.9	5	5.4	6.2	
5	Turbidity (NTU)	25.3	16.87	33	33.7	20.1	0.86	9.5	5.13	7.15	4.14	12.09	14.7	
6	Nitrite Nitrogen mg/l	0.011	0.018	0.002	0.004	0.006	0.004	0.003	0.065	0.002	0.03	0.04	0.01	
7	Nitrogen(Nitrate) mg/l	0.038	0.03	0.19	0.26	0.19	0.063	0.1	0.06	0.68	0.06	0.76	0.06	
8	Phosphate mg/l	0.015	0.022	0.21	0.014	0.017	0.018	0.004	0.03	0.1	0.03	0.02	0.04	
9	BOD mg/l	1.7	2.5	1.8	1.4	1.6	1	1.7	3.1	1.4	1.8	2.6	1.9	
10	COD mg/l	BDL	-	-	18	24	-	-	-	-	-	-	-	
11	Chloride mg/l	11413.1	11496	13841.4 5	750	63.6	4176.7	3766.9	7020.16	8756.9	16369	25604	18244	
12	Fecal Coliform MPN/100 ml	2300	1300	4900	4900	7900	3300	1300	780	3500	230	3500	230	
13	Total Coliform MPN/100 ml	4900	1700	7900	7900	11000	4900	2300	1300	5400	330	5400	790	
14	Ammonia mg/l	0.001	0.02	0.01	0.03	0.022	0.04	0.02	0.28	0.03	0.001	0.12	0.003	
15	Total Dissolved Solids(mg/l)	35490	16562	28084	341	162	9510	6703	17091	27551	25162	30714	17929	
16	Total Fixed Solids (mg/l)	-	14621	12625	200	53	6900	4953	8289	15107	9342	19354	6377	
17	Total Suspended Solid (mg/l)	119	62	15	38	34	64	44	15	104	115	142	131	
18	Hardness(mg/l)	6500	2980	4480	32	34	1640	1400	2800	3800	2600	5800	4020	
19	Fluoride(mg/l)	1.28	0.9	1.14	0.9	0.51	0.41	0.49	0.63	1.13	1.7	1.63	-	
20	Boron(mg/l)	1.56	0.56	1.38	1.1	1.06	1.81	-	-	-	-	-	-	
21	Sulphate (mg/l)	1405.4	1470	2114.7	0.3	7.5	557.6	1714.7	678.74	841.35	1717	1940	1542.4	
22	Total Alkalinity(mg/l)	106.3	48	36	14	6	48	42	38	82	94	104	100	
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)	16515	5005	6065	23.6	38.5	1865	1286	2720	3515	1208	4463	3511	
25	Potassium(mg/l)	103.9	178.7	249.7	4.1	3.6	84.3	45.1	106	129.9	169	177.2	138.2	
26	Calcium as CaCO3(mg/l)	-	800	300	10	8	232	400	400	600	2200	1000	620	
27	Magnesium(mg/l)	1385.1	530	894.24	5.3	6.318	342.1	243	583.2	777.6	97.2	1166	826.2	

**Table 3an - CARAMBOLIM LAKE 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17		
1	pH	7.51	Sample not collected as it was in accessible		7.05	5.87	6.6	6.76	6.7	6.44	6.44	7.25	6.5		
2	Temperature °C	27.7			27.2	28.1	28.4	29	29	29	23.3	23.3	29	29	
3	Conductivity µs/cm	69.72				145.7	110.52	164.03	158.52	126.5	155.4	195.2	63.1	221.7	
4	Dissolved Oxygen mg/l	6.4				6.2	6.4	1.4	4.6	2.9	4.6	4	3.6	3.4	
5	Turbidity (NTU)	9.02				27.9	10.69	3.86	3.71	3.32	2.29	4.78	5.56	10.49	
6	Nitrite Nitrogen mg/l	0.004				0.03	0.011	0.006	0.001	0.002	0.03	0.01	0.005	0.16	
7	Nitrogen(Nitrate) mg/l	0.01				0.03	0.02	0.02	0.007	0.009	0.12	0.47	0.44	0.11	
8	Phosphate mg/l	0.016				0.01	0.016	0.05	0.001	0.009	0.03	0.04	0.003	0.01	
9	BOD mg/l	3.4				3	2	-	1.3	1.7	1.7	1	1.6	1.3	
10	COD mg/l	22				11	5	7	10	-	12	2	7	-	
11	Chloride mg/l	26.42				14	9	14.5	25.74	20	15.5	25.4	19	21.4	
12	Fecal Coliform MPN/100 ml	230				780	1700	1300	790	5400	490	130	270	790	
13	Total Coliform MPN/100 ml	460				1300	2200	2300	1700	9200	790	170	330	1100	
14	Ammonia mg/l	0.01				0.02	0.11	0.05	0.098	0.06	0.08	0.127	0.09	0.28	
15	Total Dissolved Solids(mg/l)	277				6.91	620	98	100	106	613	120	112	172	
16	Total Fixed Solids (mg/l)	8				240	210	36	41	357	104	71	69	-	
17	Total Suspended Solid (mg/l)	4				30	40	20	4	4	12	20	18	19	
18	Hardness(mg/l)	64				30	40	52	46	48	30	54	64	64	
19	Fluoride(mg/l)	0.12				0.25	1.08	1.8	BDL	2	0.49	0.43	0.22	0.02	
20	Boron(mg/l)	0.04				0.43	0.48	0.5	0.109	-	-	-	-	-	
21	Sulphate (mg/l)	158.5				1861.5	7.4	2.45	4.6	0.7	4.2	2.82	3.1	0.97	
22	Total Alkalinity(mg/l)	70				8	8	96	64	60	66	58	78	60	
23	Phenolphthalein Alkalinity(mg/l)	0				0	0	0	0	0	0	0	0	0	
24	Sodium(mg/l)	19.5				6.2	7.2	9.3	15.4	7.6	14.4	16	16.2	18.9	
25	Potassium(mg/l)	1.9				2.8	2.8	2.6	5.4	3.3	1.8	2.1	2	3.6	
26	Calcium as CaCO3(mg/l)	50				28	28	44	36	36	20	34	40	46	
27	Magnesium(mg/l)	3.4				0.5	2.9	1.04	2.43	2.9	2.4	4.86	5.8	4	



Table 3ao - ANJUNEM LAKE 2016-2017

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17
1	pH	7.51	7.81	9.41	6.12	6.21	6.85	6.84	7.53	6.9	6.22	7.55	7.66
2	Temperature °C	31	28	30.1	26	25.4	28.4	26	28	27	28	29.5	28
3	Conductivity µs/cm	38.87	38.6	82.58	101.7	50.06	82.39	63.3	54.92	52.48	52.24	54.9	71.68
4	Dissolved Oxygen mg/l	7.4	6.8	6.6	7.3	7.4	7.9	7.8	8.3	8.2	6.1	7.2	7.3
5	Turbidity (NTU)	0.79	2.05	5.77	4.27	2.02	1.33	2.41	1.09	0.87	1.14	1.24	4.5
6	Nitrite Nitrogen mg/l	0.005	0.001	0.001	0.005	0.005	0.002	0.003	0.005	0.001	0.001	0.001	0.001
7	Nitrogen(Nitrate) mg/l	0.048	0.03	0.17	0.12	0.11	0.37	0.39	0.04	0.28	0.02	0.012	0.01
8	Phosphate mg/l	0.012	0.009	0.01	0.005	0.015	0.004	0.003	0.024	0.002	0.005	0.002	0.01
9	BOD mg/l	0.3	1	0.8	1.5	0.5	0.3	0.4	1.3	1.5	1.1	0.8	1.1
10	COD mg/l	13	2	10	6	17	10	10	23	10	9	1	-
11	Chloride mg/l	8	9.5	10.27	6.85	5.34	13.5	14.2	13.21	7	9.71	2.91	9.2
12	Fecal Coliform MPN/100 ml	2	4.5	23	7.8	79	49	22	2	-	-	NIL	49
13	Total Coliform MPN/100 ml	6.8	11	79	33	240	130	49	7.8	4.5	2	4.5	130
14	Ammonia mg/l	0.079	0.03	0.04	0.04	0.029	0.17	0.18	0.08	BDL	BDL	0.02	0.03
15	Total Dissolved Solids(mg/l)	22	25	52	63	34	52	56	36	-	42	32	46
16	Total Fixed Solids (mg/l)	12	16	24	16	9	44	38	19	-	20	9	-
17	Total Suspended Solid (mg/l)	6	8	24	20	4	5	5	10	-	2	4	8
18	Hardness(mg/l)	26	58	40	48	12	20	18	26	28	16	62	26
19	Fluoride(mg/l)	0.13	0.1	0	BDL	0.713	BDL	0.02	0.88	0.2	BDL	0.59	0.1
20	Boron(mg/l)	2.05	0.16	0.08	0.92	BDL	1.82	1.81	21.14	-	-	-	-
21	Sulphate (mg/l)	1.7	2.7	3.04	6.12	0.48	3.27	3.2	2.13	2.5	1.33	3.75	2.06
22	Total Alkalinity(mg/l)	280	24	22	8	18	26	24	20	54	12	22	24
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0	0	0	0
24	Sodium(mg/l)	9.1	1.1	8.2	7.6	4.9	3.6	3.4	44.1	5.9	4.3	3.4	7.2
25	Potassium(mg/l)	6.4	2	2.2	2.6	2.4	2.2	2.1	40.4	0.6	0.4	0.1	2.1
26	Calcium as CaCO3(mg/l)	22	22	14	24	8	10	11	14	18	10	16	16
27	Magnesium(mg/l)	1	8.8	6.3	5.8	0.972	2.4	2	2.9	2.4	8.01	11.2	2

**Table 3ap - RIVER MANDOVI AT RIBANDAR-CHODAN FERRY, PANAJI 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17
1	pH	7.14	4.4	7.97	7.1	6.43	6.94	6.74	7.65	-	-	7.53	7.83
2	Temperature °C	31	31	30.6	29.1	28.5	32	30	30	-	-	29	31
3	Conductivity µs/cm	46600	74460	63020	699	5247	6892	7723	7210	-	-	43050	47800
4	Dissolved Oxygen mg/l	5.3	4.6	6.1	6.5	6.5	7.5	7.4	4.5	-	-	6.1	5.5
5	Turbidity (NTU)	81.9	4.001	5.04	24.4	42.6	9.21	10.02	3.85	-	-	6.55	7.83
6	Nitrite Nitrogen mg/l	0.011	0.004	0.003	0.01	0.005	0.003	0.004	0.004	-	-	0.005	0.006
7	Nitrogen(Nitrate) mg/l	0.08	0.049	0.02	0.56	0.23	0.21	0.19	0.1	-	-	0.12	0.15
8	Phosphate mg/l	0.03	0.053	0.01	0.05	0.01	0.015	0.02	0.04	-	-	0.01	0.05
9	BOD mg/l	2.4	0.9	2.5	1.5	0.7	1.2	1.2	2.4	-	-	1.7	3.3
10	COD mg/l	-	-	-	-	-	-	-	-	-	-	-	-
11	Chloride mg/l	19216	17119.7	19764	1214	1516.55	1651	10204.92	10002.8	-	-	17619	20493
12	Fecal Coliform MPN/100 ml	790	130	230	3500	3500	3300	330	3300	-	-	490	1300
13	Total Coliform MPN/100 ml	1300	220	330	5400	5400	7000	790	7000	-	-	790	2400
14	Ammonia mg/l	0.097	0.067	0.05	0.17	0.01	0.2	0.06	0.04	-	-	0.12	BDL
15	Total Dissolved Solids(mg/l)	25541	39686	38697	469	3076	4336	5035	5978	-	-	37242	80471
16	Total Fixed Solids (mg/l)	14964	-	31950	303	1104	3058	3501	4066	-	-	24228	-
17	Total Suspended Solid (mg/l)	42	136	111	150	58	19	59	86	-	-	200	83
18	Hardness(mg/l)	6000	6500	3400	76	568	620	3260	4800	-	-	5400	7000
19	Fluoride(mg/l)	0.964	1.85	3.22	0.29	BDL	0.22	0.6	1.1	-	-	1.24	BDL
20	Boron(mg/l)	1.99	5.33	4.5	0.08	BDL	0.22	3.48	-	-	-	-	-
21	Sulphate (mg/l)	2028	3050.5	2445.3	65.09	262.28	221	938.42	2784.6	-	-	2168	3358
22	Total Alkalinity(mg/l)	55	104	24	10	46	56	88	114	-	-	114	116
23	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	-	-	0	0
24	Sodium(mg/l)	8118	8047	8796	86.5	866.5	861	1182	5099	-	-	5259	5592
25	Potassium(mg/l)	184.3	263	264.6	6.7	34.9	42	173.3	158.6	-	-	203.2	280.4
26	Calcium as CaCO3(mg/l)	1000	1400	800	22	100	12	520	800	-	-	1200	1400
27	Magnesium(mg/l)	1215	1239.3	631.08	13.1	113.72	148	6145.82	972	-	-	1021	1361







**Table 3at - DATA OF MICRO POLLUTANTS MONITORED BIANNUALLY (APRIL & OCTOBER) FOR 2016 - 2017**

Sr. No	Parameters	RIVER SELAULIM LAKE AT SELAULIM, SANGUEM		AGRICULTURAL CANAL UPSTREAM OF CUNCOLIM INDUSTRIAL ESTATE		AGRICULTURAL CANAL DOWNSTREAM OF CUNCOLIM INDUSTRIAL ESTATE		RUMDER LAKE, NUVEM		RIVER SAL AT ORLIM BRIDGE		RIVER SAL AT KHAREBAND, MARGAO		RIVER TIRACOL AT KERI, PERNEM	
		Apr-16	Oct-16	Apr-16	Oct-16	Apr-16	Oct-16	Apr-16	Oct-16	Apr-16	Oct-16	Apr-16	Oct-16	Apr-16	Oct-16
1	Nickel(mg/l)	ND	ND	0.048	-	0.018	ND	0.03	0.432	0.47	0.307	-	0.532	0.761	0.013
2	Copper(mg/l)	0.035	ND	0.067	-	0.073	ND	0.048	0.012	0.124	0.052	-	0.027	0.155	0.009
3	Chromium(mg/l)	ND	ND	0.042	-	0.04	ND	ND	ND	0.098	ND	-	0.002	0.205	ND
4	Cadmium(mg/l)	0.009	ND	ND	-	0.02	ND	0.017	0.314	0.072	0.121	-	0.007	0.18	0.013
5	Zinc(mg/l)	0.113	0.212	0.149	-	0.053	0.541	0.081	0.017	0.161	0.092	-	0.114	0.182	0.108
6	Lead(mg/l)	ND	ND	ND	-	ND	ND	ND	0.079	6.576	0.009	-	0.312	1.309	0.009
7	Iron(mg/l)	0.61	0.104	1.016	-	0.255	0.912	2.991	1.413	1.914	2.145	-	0.918	0.809	2.142
8	Manganese (mg/l)	0.119	0.004	0.236	-	0.17	0.004	2.769	0.149	0.53	0.407	-	0.012	0.251	0.089
9	Cobalt (mg/l)	ND	ND	ND	-	ND	0.002	ND	ND	0.362	ND	-	-	0.812	ND
10	Alpha BHC (mg/l)	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005
11	Beta BHC (mg/l)	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005
12	Gamma BHC (mg/l)	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005
13	Aldrin (mg/l)	<0.010	<0.010	<0.010	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	-	<0.010	<0.010	<0.010
14	Dieldrin (mg/l)	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005
15	O,P-DDT (mg/l)	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005
16	P,P-DDT (mg/l)	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005
17	Alpha endosulphane (mg/l)	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005
18	β-endosulphane (mg/l)	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005
19	carboryl (mg/l)	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005
20	Anilofos (mg/l)	<0.04	<0.04	<0.04	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-	<0.04	<0.04	<0.04
21	Parathion methyl (mg/l)	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005
22	Malathion (mg/l)	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005
23	Chloropylos (mg/l)	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005







**Table 3aw - INLET SAMPLE TO STP AT TONCA, PANAJI 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17
1	pH	6.65	5.8	5.8	6.47	6.46	6.56	6.25	6.66	6.85	6.28	7.11	6.2
2	BOD mg/l	440	256	240	100	100	110	100	120	294.1	250	140	320
3	COD mg/l	880	800	650	340	350	420	380	540	740	620	583	450
4	Total Suspended Solid (mg/l)	75	119	119	437	250	298	171	1635	525	500	214	120

**Table 3ax - OUTLET SAMPLE TO STP AT TONCA, PANAJI 2016-2017**

Sr. No	Parameters	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17
1	pH	6.92	6.8	6.8	6.88	6.54	7.37	7.22	6.55	7.1	7.19	6.71	6.86
2	BOD mg/l	4	6	8	6	8	8	18	20	18.07	18	10	12
3	COD mg/l	20	20	20	40	40	38	70	90	60	17	14	20
4	Total Suspended Solid (mg/l)	5	7	7	14	8	9	56	44	36	22	7	7

**Table 3ay - BOREWELL/TUBE WELL/ OPEN WELL IN ZUARI INDUSTRIES LTD, ZUARINAGAR 2016-2017**

Sr. No	Parameters	Apr-16	Oct-16	Limit for class A as per CPCB classification based on designated best use
1	pH	Sample not collected as well was dismantled	Sample not collected as well was dismantled	6.5-8.5
2	Temperature °C			
3	Conductivity µs/cm			
4	Dissolved Oxygen mg/l			6 mg/l or more
5	Turbidity (NTU)			
6	Nitrite Nitrogen mg/l			
7	Nitrogen(Nitrate) mg/l			
8	Phosphate mg/l			
9	BOD mg/l			2 mg/l or less
10	COD mg/l			
11	Chloride mg/l			
12	Fecal Coliform MPN/100 ml			
13	Total Coliform MPN/100 ml			50 or less MPN/100 ml
14	Ammonia mg/l			
15	Total Dissolved Solids(mg/l)			
16	Total Fixed Solids (mg/l)			
17	Total Suspended Solid (mg/l)			
18	Hardness(mg/l)			
19	Fluoride(mg/l)			
20	Boron(mg/l)			
21	Sulphate (mg/l)			
22	Total Alkalinity(mg/l)			
23	Phenolphthalein Alkalinity(mg/l)			
24	Sodium(mg/l)			
25	Potassium(mg/l)			
26	Calcium as CaCO <sub>3</sub> (mg/l)			
27	Magnesium(mg/l)			
28	Nickel(mg/l)			
29	Copper(mg/l)			
30	Chromium(mg/l)			
31	Cadmium(mg/l)			
32	Zinc(mg/l)			
33	Lead(mg/l)			
34	Iron(mg/l)			
35	Manganese (mg/l)			
36	Cobalt (mg/l)			
37	Alpha BHC (mg/l)			
38	Beta BHC (mg/l)			
39	Gamma BHC (mg/l)			
40	Aldrin (mg/l)			
41	Dieldrin (mg/l)			
42	O,P-DDT (mg/l)			
43	P,P-DDT (mg/l)			
44	Alpha endosulphane (mg/l)			
45	β-endosulphane (mg/l)			
46	carboryl (mg/l)			
47	Anilofos (mg/l)			
48	Parathion methyl (mg/l)			
49	Malathion (mg/l)			
50	Chloropylos (mg/l)			

**Table 3az - BOREWELL/TUBE WELL/OPEN WELL AT SANCOALE INDUSTRIAL ESTATE 2016-2017**

Sr. No	Parameters	Apr-16	Oct-16	Limit for class A as per CPCB classification based on designated best use
1	pH	6.94	6.69	6.5-8.5
2	Temperature °C	29	27	
3	Conductivity µs/cm	64.33	2533	
4	Dissolved Oxygen mg/l	6.5	7.3	6 mg/l or more
5	Turbidity (NTU)	3.75	0.9	
6	Nitrite Nitrogen mg/l	0.001	0.004	
7	Nitrogen(Nitrate) mg/l	1.14	1.1	
8	Phosphate mg/l	0.009	0.003	
9	BOD mg/l	1.7	1.1	2 mg/l or less
10	COD mg/l	-	9	
11	Chloride mg/l	12.72	11	
12	Fecal Coliform MPN/100 ml	NIL	NIL	
13	Total Coliform MPN/100 ml	<18	13	50 or less MPN/100 ml
14	Ammonia mg/l	0.039	0.02	
15	Total Dissolved Solids(mg/l)	154	58	
16	Total Fixed Solids (mg/l)	87	30	
17	Total Suspended Solid (mg/l)	11	2	
18	Hardness(mg/l)	26	30	
19	Fluoride(mg/l)	0.05	-	
20	Boron(mg/l)	1.6	1.2	
21	Sulphate (mg/l)	1.43	0.95	
22	Total Alkalinity(mg/l)	26	78	
23	Phenolphthalein Alkalinity(mg/l)	0	0	
24	Sodium(mg/l)	8.6	4.4	
25	Potassium(mg/l)	8.6	3	
26	Calcium as CaCO <sub>3</sub> (mg/l)	12	18	
27	Magnesium(mg/l)	3.4	2.9	
28	Nickel(mg/l)	ND	0.142	
29	Copper(mg/l)	0.061	0.03	
30	Chromium(mg/l)	ND	0.001	
31	Cadmium(mg/l)	ND	0.172	
32	Zinc(mg/l)	0.276	0.187	
33	Lead(mg/l)	ND	0.172	
34	Iron(mg/l)	0.775	0.171	
35	Manganese (mg/l)	0.088	0.172	
36	Cobalt (mg/l)	ND	ND	
37	Alpha BHC (mg/l)	<0.005	<0.005	
38	Beta BHC (mg/l)	<0.005	<0.005	
39	Gamma BHC (mg/l)	<0.005	<0.005	
40	Aldrin (mg/l)	<0.010	<0.010	
41	Dieldrin (mg/l)	<0.005	<0.005	
42	O,P-DDT (mg/l)	<0.005	<0.005	
43	P,P-DDT (mg/l)	<0.005	<0.005	
44	Alpha endosulphane (mg/l)	<0.005	<0.005	
45	β-endosulphane (mg/l)	<0.005	<0.005	
46	carbaryl (mg/l)	<0.005	<0.005	
47	Anilofos (mg/l)	<0.04	<0.04	
48	Parathion methyl (mg/l)	<0.005	<0.005	
49	Malathion (mg/l)	<0.005	<0.005	
50	Chloropylos (mg/l)	<0.005	<0.005	

**Table 3aaa - BOREWELL/TUBE WELL/ OPEN WELL AT VERNA INDUSTRIAL ESTATE 2016-2017**

Sr. No	Parameters	Apr-16	Oct-16	Limit for class A as per CPCB classification based on designated best use
1	pH	7.5	6.7	6.5-8.5
2	Temperature °C	31.5	32	
3	Conductivity µs/cm	285.2	-	
4	Dissolved Oxygen mg/l	8.3	6.5	6 mg/l or more
5	Turbidity (NTU)	0.3	0.31	
6	Nitrite Nitrogen mg/l	0.06	0.003	
7	Nitrogen(Nitrate) mg/l	3.6	3.1	
8	Phosphate mg/l	0.01	0.003	
9	BOD mg/l	1.1	0.9	2 mg/l or less
10	COD mg/l	4	8	
11	Chloride mg/l	26.4	37.5	
12	Fecal Coliform MPN/100 ml	NIL	NIL	
13	Total Coliform MPN/100 ml	<18	6.8	50 or less MPN/100 ml
14	Ammonia mg/l	0.002	0.006	
15	Total Dissolved Solids(mg/l)	218	366	
16	Total Fixed Solids (mg/l)	126	398	
17	Total Suspended Solid (mg/l)	1	45	
18	Hardness(mg/l)	86	72	
19	Fluoride(mg/l)	0.09	0.52	
20	Boron(mg/l)	1.79	1.8	
21	Sulphate (mg/l)	21.8	35	
22	Total Alkalinity(mg/l)	58	118	
23	Phenolphthalein Alkalinity(mg/l)	0	0	
24	Sodium(mg/l)	19.5	26.6	
25	Potassium(mg/l)	6.6	3.5	
26	Calcium as CaCO3(mg/l)	44	44	
27	Magnesium(mg/l)	10.2	6.8	
28	Nickel(mg/l)	ND	ND	
29	Copper(mg/l)	0.039	0.012	
30	Chromium(mg/l)	ND	ND	
31	Cadmium(mg/l)	ND	ND	
32	Zinc(mg/l)	0.098	0.452	
33	Lead(mg/l)	ND	ND	
34	Iron(mg/l)	0.335	0.112	
35	Manganese (mg/l)	2.837	0.007	
36	Cobalt (mg/l)	ND	ND	
37	Alpha BHC (mg/l)	<0.005	<0.005	
38	Beta BHC (mg/l)	<0.005	<0.005	
39	Gamma BHC (mg/l)	<0.005	<0.005	
40	Aldrin (mg/l)	<0.010	<0.010	
41	Dieldrin (mg/l)	<0.005	<0.005	
42	O,P-DDT (mg/l)	<0.005	<0.005	
43	P,P-DDT (mg/l)	<0.005	<0.005	
44	Alpha endosulphane (mg/l)	<0.005	<0.005	
45	β-endosulphane (mg/l)	<0.005	<0.005	
46	carbaryl (mg/l)	<0.005	<0.005	
47	Anilofos (mg/l)	<0.04	<0.04	
48	Parathion methyl (mg/l)	<0.005	<0.005	
49	Malathion (mg/l)	<0.005	<0.005	
50	Chloropylos (mg/l)	<0.005	<0.005	

**Table 3aab - BOREWELL/ TUBE WELL/ OPEN WELL KUNDAIM INDUSTRIAL ESTATE 2016-2017**

Sr. No	Parameters	Apr-16	Oct-16	Limit for class A as per CPCB classification based on designated best use
1	pH	6.08	6.56	6.5-8.5
2	Temperature °C	31	29	
3	Conductivity µs/cm	33.75	-	
4	Dissolved Oxygen mg/l	4	2.7	6 mg/l or more
5	Turbidity (NTU)	2.29	19.67	
6	Nitrite Nitrogen mg/l	BDL	0.002	
7	Nitrogen(Nitrate) mg/l	0.4	0.09	
8	Phosphate mg/l	0.01	0.003	
9	BOD mg/l	0.6	0.6	2 mg/l or less
10	COD mg/l	2	10	
11	Chloride mg/l	16.51	9.5	
12	Fecal Coliform MPN/100 ml	NIL	NIL	
13	Total Coliform MPN/100 ml	<18	<1.8	50 or less MPN/100 ml
14	Ammonia mg/l	0.004	BDL	
15	Total Dissolved Solids(mg/l)	23	168	
16	Total Fixed Solids (mg/l)	13	14	
17	Total Suspended Solid (mg/l)	9	8	
18	Hardness(mg/l)	30	96	
19	Fluoride(mg/l)	0.01	-	
20	Boron(mg/l)	0.93	0.9	
21	Sulphate (mg/l)	5.58	26.5	
22	Total Alkalinity(mg/l)	46	124	
23	Phenolphthalein Alkalinity(mg/l)	0	0	
24	Sodium(mg/l)	11	7.7	
25	Potassium(mg/l)	2.4	4.8	
26	Calcium as CaCO <sub>3</sub> (mg/l)	16	66	
27	Magnesium(mg/l)	3	7.3	
28	Nickel(mg/l)	ND	ND	
29	Copper(mg/l)	0.048	0.005	
30	Chromium(mg/l)	ND	ND	
31	Cadmium(mg/l)	ND	ND	
32	Zinc(mg/l)	0.205	0.192	
33	Lead(mg/l)	ND	ND	
34	Iron(mg/l)	2.23	0.219	
35	Manganese (mg/l)	0.472	0.047	
36	Cobalt (mg/l)	ND	0.001	
37	Alpha BHC (mg/l)	<0.005	<0.005	
38	Beta BHC (mg/l)	<0.005	<0.005	
39	Gamma BHC (mg/l)	<0.005	<0.005	
40	Aldrin (mg/l)	<0.010	<0.010	
41	Dieldrin (mg/l)	<0.005	<0.005	
42	O,P-DDT (mg/l)	<0.005	<0.005	
43	P,P-DDT (mg/l)	<0.005	<0.005	
44	Alpha endosulphane (mg/l)	<0.005	<0.005	
45	β-endosulphane (mg/l)	<0.005	<0.005	
46	carbaryl (mg/l)	<0.005	<0.005	
47	Anilofos (mg/l)	<0.04	<0.04	
48	Parathion methyl (mg/l)	<0.005	<0.005	
49	Malathion (mg/l)	<0.005	<0.005	
50	Chloropylos (mg/l)	<0.005	<0.005	

**Table 3aac - BORE WELL/ TUBE WELL / OPENWELL IN CORLIM INDUSTRIAL ESTATE 2016-2017**

Sr. No	Parameters	Apr-16	Oct-16	Limit for class A as per CPCB classification based on designated best use
1	pH	7.04	6.5	6.5-8.5
2	Temperature °C	29.9	31	
3	Conductivity µs/cm	22.53	-	
4	Dissolved Oxygen mg/l	7.2	4.8	6 mg/l or more
5	Turbidity (NTU)	0.61	0.15	
6	Nitrite Nitrogen mg/l	0.003	0.002	
7	Nitrogen(Nitrate) mg/l	0.41	0.51	
8	Phosphate mg/l	0.001	0.002	
9	BOD mg/l	0.5	0.3	2 mg/l or less
10	COD mg/l	3	10	
11	Chloride mg/l	14	15.5	
12	Fecal Coliform MPN/100 ml	13	NIL	
13	Total Coliform MPN/100 ml	170	<1.8	50 or less MPN/100 ml
14	Ammonia mg/l	0.04	0.002	
15	Total Dissolved Solids(mg/l)	14	1641	
16	Total Fixed Solids (mg/l)	6	1022	
17	Total Suspended Solid (mg/l)	3	7	
18	Hardness(mg/l)	16	14	
19	Fluoride(mg/l)	0.01	-	
20	Boron(mg/l)	0.92	0.9	
21	Sulphate (mg/l)	2.54	0.5	
22	Total Alkalinity(mg/l)	42	58	
23	Phenolphthalein Alkalinity(mg/l)	0	0	
24	Sodium(mg/l)	4.3	13.1	
25	Potassium(mg/l)	2.5	2.9	
26	Calcium as CaCO <sub>3</sub> (mg/l)	12	6	
27	Magnesium(mg/l)	1	2	
28	Nickel(mg/l)	ND	ND	
29	Copper(mg/l)	0.055	0.002	
30	Chromium(mg/l)	ND	ND	
31	Cadmium(mg/l)	ND	ND	
32	Zinc(mg/l)	0.204	0.412	
33	Lead(mg/l)	ND	ND	
34	Iron(mg/l)	0.355	0.169	
35	Manganese (mg/l)	0.102	0.009	
36	Cobalt (mg/l)	ND	ND	
37	Alpha BHC (mg/l)	<0.005	<0.005	
38	Beta BHC (mg/l)	<0.005	<0.005	
39	Gamma BHC (mg/l)	<0.005	<0.005	
40	Aldrin (mg/l)	<0.010	<0.010	
41	Dieldrin (mg/l)	<0.005	<0.005	
42	O,P-DDT (mg/l)	<0.005	<0.005	
43	P,P-DDT (mg/l)	<0.005	<0.005	
44	Alpha endosulphane (mg/l)	<0.005	<0.005	
45	β-endosulphane (mg/l)	<0.005	<0.005	
46	carbaryl (mg/l)	<0.005	<0.005	
47	Anilofos (mg/l)	<0.04	<0.04	
48	Parathion methyl (mg/l)	<0.005	<0.005	
49	Malathion (mg/l)	<0.005	<0.005	
50	Chloropylos (mg/l)	<0.005	<0.005	

**Table 3aad - BOREWELL/TUBE WELL/OPEN WELL IN PILERNE INDUSTRIAL ESTATE 2016-2017**

Sr. No	Parameters	Apr-16	Oct-16	Limit for class A as per CPCB classification based on designated best use
1	pH	6.86	7.11	6.5-8.5
2	Temperature °C	32.8	28	
3	Conductivity µs/cm	81.12	266.12	
4	Dissolved Oxygen mg/l	7.6	7	6 mg/l or more
5	Turbidity (NTU)	2.8	5.66	
6	Nitrite Nitrogen mg/l	0.001	0.002	
7	Nitrogen(Nitrate) mg/l	1	0.07	
8	Phosphate mg/l	0.02	0.03	
9	BOD mg/l	1.2	2.7	2 mg/l or less
10	COD mg/l	2	9	
11	Chloride mg/l	8	11	
12	Fecal Coliform MPN/100 ml	7.8	23	
13	Total Coliform MPN/100 ml	33	79	50 or less MPN/100 ml
14	Ammonia mg/l	0.011	0.03	
15	Total Dissolved Solids(mg/l)	84	204	
16	Total Fixed Solids (mg/l)	32	118	
17	Total Suspended Solid (mg/l)	12	44	
18	Hardness(mg/l)	102	88	
19	Fluoride(mg/l)	0.212	BDL	
20	Boron(mg/l)	0.72	BDL	
21	Sulphate (mg/l)	161	5	
22	Total Alkalinity(mg/l)	43	116	
23	Phenolphthalein Alkalinity(mg/l)	0	0	
24	Sodium(mg/l)	49.8	27.8	
25	Potassium(mg/l)	0.2	5	
26	Calcium as CaCO <sub>3</sub> (mg/l)	6	56	
27	Magnesium(mg/l)	10.2	7.78	
28	Nickel(mg/l)	0.054	ND	
29	Copper(mg/l)	0.022	0.019	
30	Chromium(mg/l)	ND	0.004	
31	Cadmium(mg/l)	ND	ND	
32	Zinc(mg/l)	1.777	0.172	
33	Lead(mg/l)	ND	ND	
34	Iron(mg/l)	0.71	0.214	
35	Manganese (mg/l)	0.308	0.092	
36	Cobalt (mg/l)	0.028	0.017	
37	Alpha BHC (mg/l)	<0.005	<0.005	
38	Beta BHC (mg/l)	<0.005	<0.005	
39	Gamma BHC (mg/l)	<0.005	<0.005	
40	Aldrin (mg/l)	<0.010	<0.010	
41	Dieldrin (mg/l)	<0.005	<0.005	
42	O,P-DDT (mg/l)	<0.005	<0.005	
43	P,P-DDT (mg/l)	<0.005	<0.005	
44	Alpha endosulphane (mg/l)	<0.005	<0.005	
45	β-endosulphane (mg/l)	<0.005	<0.005	
46	carbaryl (mg/l)	<0.005	<0.005	
47	Anilofos (mg/l)	<0.04	<0.04	
48	Parathion methyl (mg/l)	<0.005	<0.005	
49	Malathion (mg/l)	<0.005	<0.005	
50	Chloropylos (mg/l)	<0.005	<0.005	

**Table 3aee - BORE WELL/TUBE WELL/ OPEN WELL IN CUNCOLIM INDUSTRIAL ESTATE 2016-2017**

Sr. No	Parameters	Apr-16	Oct-16	Limit for class A as per CPCB classification based on designated best use
1	pH	6.72	6.7	6.5-8.5
2	Temperature °C	29	31	
3	Conductivity µs/cm	350.5	-	
4	Dissolved Oxygen mg/l	3.5	2.2	6 mg/l or more
5	Turbidity (NTU)	0.42	0.12	
6	Nitrite Nitrogen mg/l	0.01	0.002	
7	Nitrogen(Nitrate) mg/l	0.02	0.04	
8	Phosphate mg/l	0.01	0.015	
9	BOD mg/l	0.8	0.5	2 mg/l or less
10	COD mg/l	1	8	
11	Chloride mg/l	9.71	155	
12	Fecal Coliform MPN/100 ml	7.8	130	
13	Total Coliform MPN/100 ml	23	350	50 or less MPN/100 ml
14	Ammonia mg/l	BDL	0.1	
15	Total Dissolved Solids(mg/l)	207	8118	
16	Total Fixed Solids (mg/l)	94	7016	
17	Total Suspended Solid (mg/l)	8	49	
18	Hardness(mg/l)	128	142	
19	Fluoride(mg/l)	0.08	0.6	
20	Boron(mg/l)	0.9	0.45	
21	Sulphate (mg/l)	1.63	2.4	
22	Total Alkalinity(mg/l)	146	1620	
23	Phenolphthalein Alkalinity(mg/l)	0	0	
24	Sodium(mg/l)	9.3	7.3	
25	Potassium(mg/l)	2.1	4.1	
26	Calcium as CaCO <sub>3</sub> (mg/l)	74	76	
27	Magnesium(mg/l)	13.12	16	
28	Nickel(mg/l)	ND	ND	
29	Copper(mg/l)	0.087	ND	
30	Chromium(mg/l)	0.049	ND	
31	Cadmium(mg/l)	0.019	ND	
32	Zinc(mg/l)	0.282	0.781	
33	Lead(mg/l)	ND	ND	
34	Iron(mg/l)	0.582	0.41	
35	Manganese (mg/l)	0.251	0.01	
36	Cobalt (mg/l)	ND	ND	
37	Alpha BHC (mg/l)	<0.005	<0.005	
38	Beta BHC (mg/l)	<0.005	<0.005	
39	Gamma BHC (mg/l)	<0.005	<0.005	
40	Aldrin (mg/l)	<0.010	<0.010	
41	Dieldrin (mg/l)	<0.005	<0.005	
42	O,P-DDT (mg/l)	<0.005	<0.005	
43	P,P-DDT (mg/l)	<0.005	<0.005	
44	Alpha endosulphane (mg/l)	<0.005	<0.005	
45	β-endosulphane (mg/l)	<0.005	<0.005	
46	carbaryl (mg/l)	<0.005	<0.005	
47	Anilofos (mg/l)	<0.04	<0.04	
48	Parathion methyl (mg/l)	<0.005	<0.005	
49	Malathion (mg/l)	<0.005	<0.005	
50	Chloropylos (mg/l)	<0.005	<0.005	



Table 3aaf - BOREWELL/TUBE WELL/OPEN WELL IN BETHORA INDUSTRIAL ESTATE 2016-2017

Sr. No	Parameters	Apr-16	Oct-16	Limit for class A as per CPCB classification based on designated best use
1	pH	7.47	5.34	6.5-8.5
2	Temperature °C	29.7	28.5	
3	Conductivity µs/cm	108.8	-	
4	Dissolved Oxygen mg/l	4.41	4.7	6 mg/l or more
5	Turbidity (NTU)	0.64	0	
6	Nitrite Nitrogen mg/l	0.001	BDL	
7	Nitrogen(Nitrate) mg/l	1.87	3.21	
8	Phosphate mg/l	BDL	0.003	
9	BOD mg/l	0.5	0.2	2 mg/l or less
10	COD mg/l	BDL	8	
11	Chloride mg/l	10.7	18.1	
12	Fecal Coliform MPN/100 ml	NIL	NIL	
13	Total Coliform MPN/100 ml	<18	<1.8	50 or less MPN/100 ml
14	Ammonia mg/l	0.001	0.01	
15	Total Dissolved Solids(mg/l)	50.8	44	
16	Total Fixed Solids (mg/l)	-	25	
17	Total Suspended Solid (mg/l)	3	3	
18	Hardness(mg/l)	24	28	
19	Fluoride(mg/l)	BDL	BDL	
20	Boron(mg/l)	0.11	-	
21	Sulphate (mg/l)	0.914	0.5	
22	Total Alkalinity(mg/l)	30	14	
23	Phenolphthalein Alkalinity(mg/l)	0	0	
24	Sodium(mg/l)	7.5	5.7	
25	Potassium(mg/l)	0.1	2.8	
26	Calcium as CaCO <sub>3</sub> (mg/l)	8	10	
27	Magnesium(mg/l)	3.89	4.37	
28	Nickel(mg/l)	0.016	-	
29	Copper(mg/l)	0.096	-	
30	Chromium(mg/l)	ND	-	
31	Cadmium(mg/l)	ND	-	
32	Zinc(mg/l)	0.08	-	
33	Lead(mg/l)	ND	-	
34	Iron(mg/l)	0.281	-	
35	Manganese (mg/l)	0.132	-	
36	Cobalt (mg/l)	ND	-	
37	Alpha BHC (mg/l)	<0.005	<0.005	
38	Beta BHC (mg/l)	<0.005	<0.005	
39	Gamma BHC (mg/l)	<0.005	<0.005	
40	Aldrin (mg/l)	<0.010	<0.010	
41	Dieldrin (mg/l)	<0.005	<0.005	
42	O,P-DDT (mg/l)	<0.005	<0.005	
43	P,P-DDT (mg/l)	<0.005	<0.005	
44	Alpha endosulphane (mg/l)	<0.005	<0.005	
45	β-endosulphane (mg/l)	<0.005	<0.005	
46	carbaryl (mg/l)	<0.005	<0.005	
47	Anilofos (mg/l)	<0.04	<0.04	
48	Parathion methyl (mg/l)	<0.005	<0.005	
49	Malathion (mg/l)	<0.005	<0.005	
50	Chloropylos (mg/l)	<0.005	<0.005	

**Table 3aag - BOREWELL/ TUBEWELL/OPENWELL IN MADKAI INDUSTRIAL ESTATE 2016-2017**

Sr. No	Parameters	Apr-16	Oct-16	Limit for Class A as per CPCB classification based on designated best use
1	pH	6.94	5.48	6.5-8.5
2	Temperature °C	29	32	
3	Conductivity µs/cm	74.01	-	
4	Dissolved Oxygen mg/l	6.5	6.7	6 mg/l or more
5	Turbidity (NTU)	3.75	0	
6	Nitrite Nitrogen mg/l	0.001	BDL	
7	Nitrogen(Nitrate) mg/l	0.97	1.26	
8	Phosphate mg/l	BDL	0.003	
9	BOD mg/l	1.7	1.2	2 mg/l or less
10	COD mg/l	BDL	9	
11	Chloride mg/l	6.31	11.7	
12	Fecal Coliform MPN/100 ml	2	13	
13	Total Coliform MPN/100 ml	7.8	49	50 or less MPN/100 ml
14	Ammonia mg/l	BDL	BDL	
15	Total Dissolved Solids(mg/l)	41.6	40	
16	Total Fixed Solids (mg/l)	14	25	
17	Total Suspended Solid (mg/l)	14	2	
18	Hardness(mg/l)	12	22	
19	Fluoride(mg/l)	BDL	0.25	
20	Boron(mg/l)	0.96	-	
21	Sulphate (mg/l)	0.296	0.95	
22	Total Alkalinity(mg/l)	28	16	
23	Phenolphthalein Alkalinity(mg/l)	0	0	
24	Sodium(mg/l)	3.9	3.9	
25	Potassium(mg/l)	0.3	2.9	
26	Calcium as CaCO3(mg/l)	10	8	
27	Magnesium(mg/l)	0.49	3.4	
28	Nickel(mg/l)	0.024	-	
29	Copper(mg/l)	0.089	-	
30	Chromium(mg/l)	ND	-	
31	Cadmium(mg/l)	ND	-	
32	Zinc(mg/l)	0.048	-	
33	Lead(mg/l)	ND	-	
34	Iron(mg/l)	0.746	-	
35	Manganese (mg/l)	0.081	-	
36	Cobalt (mg/l)	ND	-	
37	Alpha BHC (mg/l)	<0.005	<0.005	
38	Beta BHC (mg/l)	<0.005	<0.005	
39	Gamma BHC (mg/l)	<0.005	<0.005	
40	Aldrin (mg/l)	<0.010	<0.010	
41	Dieldrin (mg/l)	<0.005	<0.005	
42	O,P-DDT (mg/l)	<0.005	<0.005	
43	P,P-DDT (mg/l)	<0.005	<0.005	
44	Alpha endosulphane (mg/l)	<0.005	<0.005	
45	β-endosulphane (mg/l)	<0.005	<0.005	
46	carbaryl (mg/l)	<0.005	<0.005	
47	Anilofos (mg/l)	<0.04	<0.04	
48	Parathion methyl (mg/l)	<0.005	<0.005	
49	Malathion (mg/l)	<0.005	<0.005	
50	Chloropylos (mg/l)	<0.005	<0.005	