

Water Quality Seasonal Average for the period: 2004-2018

Station Name : RAJEGAON (AGH4MC3)

Division : Wainganga Div., Nagpur

Local River : Bagh

River Water

Sub-Division : Upper Wainganga SD, Nagpur

S.No	Parameters	Flood													
		Jun-Oct													
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
19	SO4 (mg/L)	6.2	8.2							7.4	16.3	13.3	11.0	10.6	16.4
	BIOLOGICAL/BACTERIOLOGICAL														
1	BOD3-27 (mg/L)	1.2	1.4							1.1	1.4	1.6	1.7	1.5	1.7
2	COD (mg/L)									65.5	71.1	23.6	104.7	39.7	44.5
3	DO (mg/L)	6.7	5.9							6.5	6.3	6.1	6.5	6.3	6.1
4	DO_SAT% (%)	86	75							78	78	80	79	78	77
5	FCol-MPN (MPN/100mL)	1250	283							150	725	274	165	125	254
6	Tcol-MPN (MPN/100mL)	11010	797							9667	63175	800	805	1258	474
	TRACE & TOXIC														
1	As (µg/L)									3.4	2.2			1.3	1.0
2	Cd (µg/L)									1.5	0.2			0.3	0.0
3	Cr (µg/L)									0.5	2.0			3.6	11.0
4	Cu (µg/L)									25.1	7.3			7.4	4.0
5	Hg (µg/L)										0.0				
6	Ni (µg/L)									0.9	12.8			3.4	
7	Pb (µg/L)									0.6	0.0			0.7	0.0
8	Zn (µg/L)									5.8	2.0			3.4	0.0
	CHEMICAL INDICES														
1	HAR_Ca (mgCaCO3/L)	45	27							50	43	67	47	42	51
2	HAR_Total (mgCaCO3/L)	70	57							77	79	101	105	60	74
3	Na% (%)	18	11							11	13	25	18	28	31
4	RSC (-)	0.2	0.0							0.1	0.1	0.2	0.0	0.2	0.3
5	SAR (-)	0.4	0.2							0.2	0.3	0.7	0.4	0.7	0.8
	PESTICIDES														

Water Quality Seasonal Average for the period: 2004-2018

Station Name : RAJEGAON (AGH4MC3)

Division : Wainganga Div., Nagpur

Local River : Bagh

River Water

Sub-Division : Upper Wainganga SD, Nagpur

S.No	Parameters	Winter													
		Nov-Feb													
		2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
	PHYSICAL														
1	Q (cumec)	39.85							8.720	12.02	14.53	13.18	7.192		6.623
2	EC_GEN (µmho/cm)	175							470	229	257	237	234	232	291
3	pH_GEN (pH units)	7.8							8.2	8.1	7.6	7.9	7.9	8.2	7.7
4	Temp (deg C)	20.1							17.0	21.4	21.4	21.5	20.8	20.4	19.3
5	Turb (NTU)								1.7	0.6	1.9	0.8			
	CHEMICAL														
1	Alk-Phen (mgCaCO3/L)	0.0							0.0	0.0	0.0	0.0	1.3	8.0	0.0
2	ALK-TOT (mgCaCO3/L)	92							109	119	118	112	114	122	125
3	B (mg/L)	0.17							0.17	0.28	0.17	0.36	0.34	0.37	0.39
4	Ca (mg/L)	19							51	33	43	26	29	32	35
5	Cl (mg/L)	4.6							54.0	8.0	5.9	8.5	7.9	8.9	15.8
6	CO3 (mg/L)	0.0							0.0	0.0	0.0	0.0	1.6	9.6	0.0
7	F (mg/L)	0.39							0.66	0.19	0.18	0.16	0.05	0.20	0.05
8	Fe (mg/L)	0.1							0.2	0.3	0.3	0.0	0.1	0.1	0.1
9	HCO3 (mg/L)	112							133	145	144	136	136	129	152
10	K (mg/L)	1.8							1.4	2.6	1.8	1.5	2.1	1.8	2.2
11	Mg (mg/L)	12.7							20.8	9.4	9.4	15.1	9.6	10.1	9.1
12	Na (mg/L)	6.5							32.9	13.4	14.0	13.8	14.6	15.4	16.6
13	NH3-N (mg N/L)	0.11							0.16	0.08	0.10	0.15	0.35	0.56	0.15
14	NO2+NO3 (mg N/L)	1.67							0.22	0.21	1.83	3.86	4.15	1.30	1.40
15	NO2-N (mgN/L)	0.10							0.01	0.01	0.00	0.00	0.02	0.01	0.01
16	NO3-N (mgN/L)	1.57							0.21	0.20	1.82	3.85	4.13	1.29	1.39
17	o-PO4-P (mg P/L)	0.419							0.023	0.038	0.431	0.171	0.085	0.801	0.111
18	SiO2 (mg/L)	34.2							139.2	30.4	11.5	9.0	18.7	18.6	13.9

Water Quality Seasonal Average for the period: 2004-2018

Station Name : RAJEGAON (AGH4MC3)

Division : Wainganga Div., Nagpur

Local River : Bagh

River Water

Sub-Division : Upper Wainganga SD, Nagpur

S.No	Parameters	Winter													
		Nov-Feb													
		2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
19	SO4 (mg/L)	10.8							25.9	14.1	15.9	16.3	18.6	14.7	18.9
	BIOLOGICAL/BACTERIOLOGICAL														
1	BOD3-27 (mg/L)	1.8							2.0	1.6	1.4	2.7	1.2	1.3	1.9
2	COD (mg/L)								77.1	29.6	36.0	27.3	36.6	69.5	52.1
3	DO (mg/L)	7.9							8.1	7.8	7.3	7.4	7.4	7.8	7.3
4	DO_SAT% (%)	87							84	88	82	84	82	87	79
5	FCol-MPN (MPN/100mL)	2300							100	300	138	100	145	90	287
6	Tcol-MPN (MPN/100mL)	7125							250	11975	663	340	630	368	1133
	TRACE & TOXIC														
1	As (µg/L)								0.3				0.6	1.1	3.8
2	Cd (µg/L)								0.3			0.3	0.1	0.2	0.0
3	Cr (µg/L)								2.9			2.5	0.2	0.7	4.4
4	Cu (µg/L)								137.6			4.0	0.6	2.0	5.0
5	Hg (µg/L)														
6	Ni (µg/L)								45.8			5.2	0.6	1.0	2.8
7	Pb (µg/L)								0.0			0.8	0.1	17.3	0.7
8	Zn (µg/L)								38.6			4.0	5.8	1.6	6.8
	CHEMICAL INDICES														
1	HAR_Ca (mgCaCO3/L)	47							128	82	108	65	72	81	86
2	HAR_Total (mgCaCO3/L)	100							215	121	147	128	112	123	124
3	Na% (%)	12							25	20	18	19	22	21	22
4	RSC (-)	0.0							0.0	0.1	0.0	0.0	0.1	0.2	0.1
5	SAR (-)	0.3							1.0	0.5	0.5	0.5	0.6	0.6	0.6
	PESTICIDES														

Water Quality Seasonal Average for the period: 2004-2018

Station Name : RAJEGAON (AGH4MC3)

Local River : Bagh

River Water

Division : Wainganga Div., Nagpur

Sub-Division : Upper Wainganga SD, Nagpur

S.No	Parameters	Summer														
		Mar - May														
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	PHYSICAL															
1	Q (cumec)	4.751	0.302							0.276	0.747	8.319	7.355	1.224		
2	EC_GEN (µmho/cm)	277	257							284	276	224	272	228	260	
3	pH_GEN (pH units)	7.8	8.0							8.1	7.9	7.5	7.8	7.6	8.0	
4	Temp (deg C)	26.7	25.0							24.0	24.5	27.3	23.5	24.0	24.0	
5	Turb (NTU)									2.0	0.4	3.9	26.9			
	CHEMICAL															
1	Alk-Phen (mgCaCO3/L)	0.0	0.0							0.0	0.0	0.0	0.0	0.0	0.0	
2	ALK-TOT (mgCaCO3/L)	178	131							122	146	103	103	120	105	
3	B (mg/L)	0.57	0.09							0.14	0.23	0.31	0.45	0.05	0.08	
4	Ca (mg/L)	28	27							36	41	28	36	51	26	
5	Cl (mg/L)	8.7	6.4							12.1	9.2	8.4	9.5	8.2	40.7	
6	CO3 (mg/L)	0.0	0.0							0.0	0.0	0.0	0.0	0.0	0.0	
7	F (mg/L)	0.25	0.54							0.17	0.00	0.49	0.12	0.01	0.13	
8	Fe (mg/L)	0.0	0.0							0.2	0.0	0.3	0.3	0.0	0.1	
9	HCO3 (mg/L)	162	159							149	178	126	126	146	129	
10	K (mg/L)	2.9	2.0							1.0	3.0	2.7	2.2	2.6	1.9	
11	Mg (mg/L)	13.4	12.3							17.5	15.9	8.6	13.4	16.6	16.8	
12	Na (mg/L)	14.0	13.9							13.3	14.9	18.3	11.5	14.5	19.5	
13	NH3-N (mg N/L)	0.42	0.14							0.14	0.02	0.78	0.10	0.09	1.16	
14	NO2+NO3 (mg N/L)	0.27	1.33							0.35	0.00	3.56	5.04	14.33	1.77	
15	NO2-N (mgN/L)	0.05	0.20							0.01	0.00	0.01	0.01	0.05	0.01	
16	NO3-N (mgN/L)	0.23	1.13							0.34	0.00	3.55	5.03	14.28	1.76	
17	o-PO4-P (mg P/L)	0.010	0.107							0.040	0.043	0.697	0.219	0.085	0.402	
18	SiO2 (mg/L)	31.0	34.1							29.4	15.3	13.7	40.2	22.4	30.2	

Water Quality Seasonal Average for the period: 2004-2018

Station Name : RAJEGAON (AGH4MC3)

Division : Wainganga Div., Nagpur

Local River : Bagh

River Water

Sub-Division : Upper Wainganga SD, Nagpur

S.No	Parameters	Summer														
		Mar - May														
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
19	SO4 (mg/L)	5.7	4.5							9.6	25.8	10.9	13.3	27.4	15.8	
	BIOLOGICAL/BACTERIOLOGICAL															
1	BOD3-27 (mg/L)	1.0	2.6							1.4	1.7	2.2	1.8	15.0	1.9	
2	COD (mg/L)									9.3	57.3	31.7	33.0	88.8	240.3	
3	DO (mg/L)	5.8	5.7							6.9	7.2	6.5	6.2	4.8	6.7	
4	DO_SAT% (%)	72	69							82	86	81	73	57	79	
5	FCol-MPN (MPN/100mL)	583	933							100	100	223	410	110	200	
6	Tcol-MPN (MPN/100mL)	1183	21933							400	200	3227	660	800	700	
	TRACE & TOXIC															
1	As (µg/L)										6.1	3.9	1.3		1.0	
2	Cd (µg/L)										0.0	0.2	1.0		0.0	
3	Cr (µg/L)										0.7	1.7	0.0		2.0	
4	Cu (µg/L)										0.3	10.1			1.2	
5	Hg (µg/L)										0.0	0.4	0.1			
6	Ni (µg/L)										10.7	1.7	0.0		1.6	
7	Pb (µg/L)										16.8	0.3	1.0		0.0	
8	Zn (µg/L)										2.8	12.0	17.0		7.0	
	CHEMICAL INDICES															
1	HAR_Ca (mgCaCO3/L)	70	67							90	101	70	91	128	65	
2	HAR_Total (mgCaCO3/L)	126	119							163	167	106	147	197	134	
3	Na% (%)	19	20							15	16	26	15	14	24	
4	RSC (-)	0.2	0.3							0.0	0.0	0.1	0.0	0.0	0.0	
5	SAR (-)	0.5	0.6							0.5	0.5	0.8	0.4	0.5	0.7	
	PESTICIDES															

HISTORY SHEET

		Water Year	: 2017-2018
Site	: KUMHARI	Code	: AGH40R6
State	: Madhya Pradesh	District	Balaghat
Basin	: Godavari	Independent River	: Godavari
Tributary	: Pranhita	Sub Tributary	: Wainganga
Sub-Sub Tributary	: -	Local River	: Wainganga
Division	: Wainganga Div., Nagpur	Sub-Division	: Upper Wainganga SD, Nagpur
Drainage Area	: 8070 Sq. Km.	Bank	: Left
Latitude	: 21°53'03"	Longitude	: 80°10'36"
	Opening Date	Closing Date	
Gauge	: 01.12.1986		
Discharge	: 01.12.1986		
Sediment	: 01.09.2014		
Water Quality	: 01.02.2012		

Water Quality Datasheet for the period : 2017-2018

Station Name : KUMHARI (AGH40R6)

Local River : Wainganga

River Water Analysis

Division : Wainganga Div., Nagpur

Sub-Division : Upper Wainganga SD, Nagpur

S.No	Parameters	01.06.2017	03.07.2017	01.08.2017	04.09.2017	03.10.2017	01.11.2017	04.12.2017	01.01.2018	01.02.2018	05.03.2018	02.04.2018	01.05.2018
		A	A	A	A	A	A	A	A	A	A	A	A
	PHYSICAL												
1	Q (cumec)	0.944	325.9	38.95	52.30	13.89	8.080	11.24	6.220	1.465	5.678	0.413	0.253
2	Colour_Cod (-)	Clear	Brown	Light Brown	Light Brown	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear
3	EC_GEN (µmho/cm)	352	178	249	252	336	455	408	370	375	503	457	447
4	Odour_Code (-)	odour free	odour free	odour free	odour free	odour free	odour free	odour free	odour free	odour free	odour free	odour free	odour free
5	pH_GEN (pH units)	8.1	7.5	7.9	7.5	7.9	8.0	8.1	8.0	7.8	7.7	8.1	8.1
6	Temp (deg C)	26.0	23.0	24.0	24.0	23.0	21.0	17.0	14.0	14.0	17.0	21.0	24.0
	CHEMICAL												
1	Alk-Phen (mgCaCO3/L)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO3/L)	193	89	81	64	142	173	173	171	219	183	291	269
3	B (mg/L)	1.04	0.10	0.10	0.46	0.00	0.70	0.25	0.21	0.09	0.78	0.82	1.00
4	Ca (mg/L)	37	13	18	18	32	40	43	49	57	60	70	56
5	Cl (mg/L)	11.9	11.9	43.7	47.7	8.2	12.4	41.2	12.4	28.8	42.9	22.3	15.9
6	CO3 (mg/L)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	F (mg/L)	0.30	0.21	0.13	0.01	0.00	0.00	0.00	0.31	0.36	0.40	0.41	0.39
8	Fe (mg/L)	0.1	0.7	1.1	0.3	0.3	0.1	0.4	0.1	0.1	0.1	0.1	0.1
9	HCO3 (mg/L)	235	109	99	78	173	211	211	208	267	223	355	328
10	K (mg/L)	1.8	2.7	2.1	1.7	1.2	1.5	1.5	2.0	1.5	2.0	1.9	1.9
11	Mg (mg/L)	17.1	7.5	10.2	8.0	5.5	11.1	12.8	16.3	21.6	8.8	18.7	16.9
12	Na (mg/L)	27.0	15.1	18.2	16.3	15.0	19.5	20.8	21.3	23.2	21.7	28.8	25.8
13	NH3-N (mg N/L)	1.01	0.16	0.33	0.35	0.10	0.14	0.10	0.22	0.37	0.21	0.18	0.00
14	NO2+NO3 (mg N/L)	0.98	3.14	2.98	1.62	1.36	1.35	1.65	2.61	2.28	2.43	0.86	4.78
15	NO2-N (mgN/L)	0.01	0.05	0.05	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01
16	NO3-N (mgN/L)	0.97	3.09	2.93	1.61	1.35	1.34	1.64	2.59	2.27	2.42	0.85	4.77
17	o-PO4-P (mg P/L)	1.651	0.837	1.542	0.656	0.147	0.075	0.067	0.110	0.057	0.122	0.403	0.130
18	SiO2 (mg/L)	40.2	15.3	12.9	25.5	32.1	32.0	13.8	11.0	18.4	17.1	22.7	18.2
19	SO4 (mg/L)	18.6	4.6	1.7	2.3	0.7	0.4	15.6	28.6	4.3	0.1	0.5	3.8

Water Quality Datasheet for the period : 2017-2018

Station Name : KUMHARI (AGH40R6)

Division : Wainganga Div., Nagpur

Local River : Wainganga

River Water Analysis

Sub-Division : Upper Wainganga SD, Nagpur

S.No	Parameters	01.06.2017	03.07.2017	01.08.2017	04.09.2017	03.10.2017	01.11.2017	04.12.2017	01.01.2018	01.02.2018	05.03.2018	02.04.2018	01.05.2018
		A	A	A	A	A	A	A	A	A	A	A	A
	BIOLOGICAL/BACTERIOLOGICAL												
1	BOD3-27 (mg/L)	1.2	5.4	1.2	1.3	1.3	1.5	1.3	1.5	1.5	2.6	1.6	1.9
2	COD (mg/L)	52.8	24.0	8.3	8.3	10.3	31.8	11.3	53.9	22.1	15.5	32.7	47.9
3	DO (mg/L)	7.0	11.0	6.2	6.1	7.0	7.5	7.4	8.0	6.4	7.2	7.2	8.1
4	DO_SAT% (%)	86	128	74	72	82	84	77	78	62	74	81	96
5	FCol-MPN (MPN/100mL)	80	1400	130	40	500	300	40	130	20	80	20	140
6	Tcol-MPN (MPN/100mL)	110	5000	2800	330	1800	9000	130	170	20	130	20	800
	TRACE & TOXIC												
1	As (µg/L)			1.0				2.3				1.5	
2	Cd (µg/L)			0.1				0.1				0.1	
3	Cr (µg/L)			11.0				1.5				1.5	
4	Cu (µg/L)			3.0				18.7				5.1	
5	Ni (µg/L)							0.3				6.5	
6	Pb (µg/L)			0.0				1.3				6.7	
7	Zn (µg/L)			4.0				20.5				3.0	
	CHEMICAL INDICES												
1	HAR_Ca (mgCaCO3/L)	92	33	44	44	81	101	108	122	142	151	175	139
2	HAR_Total (mgCaCO3/L)	163	64	86	77	104	147	161	190	231	188	253	210
3	Na% (%)	26	33	31	31	24	22	22	19	18	20	20	21
4	RSC (-)	0.6	0.5	0.0	0.0	0.8	0.5	0.2	0.0	0.0	0.0	0.8	1.2
5	SAR (-)	0.9	0.8	0.9	0.8	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.8
	PESTICIDES												

Water Quality Summary for the period : 2017-2018

Station Name : KUMHARI (AGH40R6)

Division : Wainganga Div., Nagpur

Local River : Wainganga

Sub-Division : Upper Wainganga SD, Nagpur

River Water Summary

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
	PHYSICAL				
1	Q (cumec)	365	675.2	0.154	32.30
2	EC_GEN (μmho/cm)	12	503	178	365
3	pH_GEN (pH units)	12	8.1	7.5	7.9
4	Temp (deg C)	12	26.0	14.0	20.7
	CHEMICAL				
1	Alk-Phen (mgCaCO3/L)	12	0.0	0.0	0
2	ALK-TOT (mgCaCO3/L)	12	291	64	171
3	B (mg/L)	12	1.04	0.00	0.46
4	Ca (mg/L)	12	70	13	41
5	Cl (mg/L)	12	47.7	8.2	24.9
6	CO3 (mg/L)	12	0.0	0.0	0
7	F (mg/L)	12	0.41	0.00	0.21
8	Fe (mg/L)	12	1.1	0.1	0.3
9	HCO3 (mg/L)	12	355	78	208
10	K (mg/L)	12	2.7	1.2	1.8
11	Mg (mg/L)	12	21.6	5.5	12.9
12	Na (mg/L)	12	28.8	15.0	21.1
13	NH3-N (mg N/L)	12	1.01	0.00	0.26
14	NO2+NO3 (mg N/L)	12	4.78	0.86	2.17
15	NO2-N (mgN/L)	12	0.05	0.01	0.02
16	NO3-N (mgN/L)	12	4.77	0.85	2.15
17	o-PO4-P (mg P/L)	12	1.651	0.057	0.483
18	SiO2 (mg/L)	12	40.2	11.0	21.6
19	SO4 (mg/L)	12	28.6	0.1	6.8
	BIOLOGICAL/BACTERIOLOGICAL				
1	BOD3-27 (mg/L)	12	5.4	1.2	1.9
2	COD (mg/L)	12	53.9	8.3	26.6
3	DO (mg/L)	12	11.0	6.1	7.4
4	DO_SAT% (%)	12	128	62	83
5	FCol-MPN (MPN/100mL)	12	1400	20	240
6	Tcol-MPN (MPN/100mL)	12	9000	20	1693
	TRACE & TOXIC				
1	As (μg/L)	3	2.3	1.0	1.6
2	Cd (μg/L)	3	0.1	0.1	0.1
3	Cr (μg/L)	3	11.0	1.5	4.7
4	Cu (μg/L)	3	18.7	3.0	8.9
5	Ni (μg/L)	2	6.5	0.3	3.4
6	Pb (μg/L)	3	6.7	0.0	2.7
7	Zn (μg/L)	3	20.5	3.0	9.2
	CHEMICAL INDICES				
1	HAR_Ca (mgCaCO3/L)	12	175	33	103
2	HAR_Total (mgCaCO3/L)	12	253	64	156
3	Na% (%)	12	33	18	24
4	RSC (-)	12	1.2	0.0	0.4
5	SAR (-)	12	0.9	0.6	0.8
	PESTICIDES				

Water Quality Seasonal Average for the period: 2004-2018

Station Name : KUMHARI (AGH40R6)

Division : Wainganga Div., Nagpur

Local River : Wainganga

River Water

Sub-Division : Upper Wainganga SD, Nagpur

S.No	Parameters	Flood													
		Jun-Oct													
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	PHYSICAL														
1	Q (cumec)	30.42	697.6						113.1	179.8	186.0	93.26	51.14		86.40
2	EC_GEN (µmho/cm)	226	210							225	206	304	286	242	273
3	pH_GEN (pH units)	8.1	8.0							8.5	8.1	7.2	7.9	8.2	7.8
4	Temp (deg C)	27.7	28.4							25.4	20.8	27.4	26.6	28.0	24.0
5	Turb (NTU)									8.6	8.5	12.3			
	CHEMICAL														
1	Alk-Phen (mgCaCO3/L)	1.2	0.0							5.4	3.6	0.0	1.0	7.2	0.0
2	ALK-TOT (mgCaCO3/L)	119	100							133	109	142	133	116	114
3	B (mg/L)	0.23	0.21							0.15	0.11	0.20	0.17	0.72	0.34
4	Ca (mg/L)	30	29							32	27	36	29	26	24
5	Cl (mg/L)	5.2	6.1							7.2	8.9	8.2	16.7	19.5	24.7
6	CO3 (mg/L)	1.5	0.0							6.6	4.3	0.0	1.2	8.6	0.0
7	F (mg/L)	0.31	0.24							0.40	0.33	0.37	0.12	0.18	0.13
8	Fe (mg/L)	0.1	0.3							0.1	0.5	0.1	0.1	0.2	0.5
9	HCO3 (mg/L)	142	122							149	124	173	159	124	139
10	K (mg/L)	2.1	1.4							1.6	2.3	1.9	2.1	2.0	1.9
11	Mg (mg/L)	8.5	8.3							14.2	12.4	13.2	13.4	9.5	9.7
12	Na (mg/L)	11.3	9.5							14.3	11.9	19.1	19.5	16.0	18.3
13	NH3-N (mg N/L)	0.25	0.11							0.05	0.11	0.42	0.16	0.36	0.39
14	NO2+NO3 (mg N/L)	1.62	0.47							1.35	1.54	1.39	6.01	1.90	2.02
15	NO2-N (mgN/L)	0.08	0.07							0.06	0.01	0.01	0.01	0.01	0.03
16	NO3-N (mgN/L)	1.54	0.39							1.29	1.54	1.38	6.00	1.89	1.99
17	o-PO4-P (mg P/L)	0.113	0.031							0.085	0.046	0.101	0.140	0.111	0.967
18	SiO2 (mg/L)	38.3	65.4							46.0	24.3	24.7	31.8	23.5	25.2
19	SO4 (mg/L)	8.6	17.3							15.9	11.9	10.0	13.3	5.2	5.6

Water Quality Seasonal Average for the period: 2004-2018

Station Name : KUMHARI (AGH40R6)

Division : Wainganga Div., Nagpur

Local River : Wainganga

River Water

Sub-Division : Upper Wainganga SD, Nagpur

S.No	Parameters	Flood													
		Jun-Oct													
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	BIOLOGICAL/BACTERIOLOGICAL														
1	BOD3-27 (mg/L)	1.1	2.0							1.2	3.0	1.6	1.7	8.6	2.1
2	COD (mg/L)									43.9	69.6	26.2	92.0	39.1	20.7
3	DO (mg/L)	6.8	6.4							7.0	5.6	6.7	6.7	6.0	7.5
4	DO_SAT% (%)	86	82							85	64	85	83	77	88
5	FCol-MPN (MPN/100mL)	1420	210							250	260	274	154	254	430
6	Tcol-MPN (MPN/100mL)	5100	652							3030	15880	1520	804	1900	2008
	TRACE & TOXIC														
1	As (µg/L)									4.3	3.1			0.5	1.0
2	Cd (µg/L)									1.2	0.2			0.3	0.1
3	Cr (µg/L)									0.2	1.0			1.8	11.0
4	Cu (µg/L)									21.0	4.8			10.0	3.0
5	Hg (µg/L)										0.0				
6	Ni (µg/L)									2.8	9.5			3.1	
7	Pb (µg/L)									1.1	0.9			1.1	0.0
8	Zn (µg/L)									2.9	3.0			3.1	4.0
	CHEMICAL INDICES														
1	HAR_Ca (mgCaCO3/L)	74	72							80	68	89	72	66	59
2	HAR_Total (mgCaCO3/L)	110	107							139	120	144	128	105	99
3	Na% (%)	17	14							16	17	22	25	24	29
4	RSC (-)	0.2	0.1							0.2	0.0	0.1	0.3	0.3	0.4
5	SAR (-)	0.5	0.4							0.5	0.5	0.7	0.8	0.7	0.8
	PESTICIDES														

Water Quality Seasonal Average for the period: 2004-2018

Station Name : KUMHARI (AGH40R6)

Division : Wainganga Div., Nagpur

Local River : Wainganga

River Water

Sub-Division : Upper Wainganga SD, Nagpur

S.No	Parameters	Winter													
		Nov-Feb													
		2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
	PHYSICAL														
1	Q (cumec)	22.87							31.25	10.22	28.36	19.62	11.75		6.751
2	EC_GEN (µmho/cm)	304							726	334	364	316	295	308	402
3	pH_GEN (pH units)	8.3							7.0	8.0	8.1	7.8	8.0	8.3	8.0
4	Temp (deg C)	21.6							16.0	14.0	18.3	16.8	20.0	19.3	16.5
5	Turb (NTU)								22.1	0.3	1.4	0.8			
	CHEMICAL														
1	Alk-Phen (mgCaCO3/L)	4.9							0.0	0.0	1.1	0.0	2.6	10.5	0.0
2	ALK-TOT (mgCaCO3/L)	167							271	214	180	149	158	169	184
3	B (mg/L)	0.24							0.24	0.25	0.20	0.30	0.19	0.59	0.31
4	Ca (mg/L)	40							63	52	56	44	39	38	47
5	Cl (mg/L)	7.1							56.1	11.9	7.6	7.4	10.4	27.4	23.7
6	CO3 (mg/L)	5.9							0.0	0.0	1.3	0.0	3.1	12.6	0.0
7	F (mg/L)	0.45							0.67	0.28	0.35	0.23	0.12	0.14	0.17
8	Fe (mg/L)	0.0							0.1	0.5	0.5	0.0	0.1	0.1	0.2
9	HCO3 (mg/L)	192							331	261	217	182	187	180	224
10	K (mg/L)	1.4							3.8	2.0	1.4	1.3	1.6	1.3	1.6
11	Mg (mg/L)	16.5							30.1	21.4	15.2	11.1	12.3	16.6	15.4
12	Na (mg/L)	13.9							51.3	18.8	16.0	15.8	17.2	17.0	21.2
13	NH3-N (mg N/L)	0.16							1.20	0.16	0.08	0.12	0.39	0.50	0.21
14	NO2+NO3 (mg N/L)	1.49							0.20	0.67	2.35	5.55	6.86	3.56	1.97
15	NO2-N (mgN/L)	0.04							0.01	0.01	0.00	0.00	0.01	0.01	0.01
16	NO3-N (mgN/L)	1.45							0.20	0.66	2.34	5.54	6.85	3.55	1.96
17	o-PO4-P (mg P/L)	0.099							0.352	0.061	0.438	0.136	0.121	0.994	0.077
18	SiO2 (mg/L)	36.1							307.2	56.6	16.1	15.4	25.6	24.1	18.8
19	SO4 (mg/L)	11.0							61.9	7.7	5.8	12.1	10.7	3.7	12.2

Water Quality Seasonal Average for the period: 2004-2018

Station Name : KUMHARI (AGH40R6)

Division : Wainganga Div., Nagpur

Local River : Wainganga

River Water

Sub-Division : Upper Wainganga SD, Nagpur

S.No	Parameters	Winter													
		Nov-Feb													
		2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
	BIOLOGICAL/BACTERIOLOGICAL														
1	BOD3-27 (mg/L)	1.5							1.2	2.8	1.5	2.2	1.8	1.8	1.4
2	COD (mg/L)								69.7	22.0	54.8	34.0	29.1	62.6	29.8
3	DO (mg/L)	9.8							7.6	9.4	7.5	8.3	7.5	8.4	7.3
4	DO_SAT% (%)	112							77	91	79	86	82	90	75
5	FCol-MPN (MPN/100mL)	400							120000	438	1063	328	135	95	123
6	Tcol-MPN (MPN/100mL)	600							120000	3925	2201	758	393	500	2330
	TRACE & TOXIC														
1	As (µg/L)												0.6	1.3	2.3
2	Cd (µg/L)								0.2			0.0	0.1	0.1	0.1
3	Cr (µg/L)								4.4			2.7	0.6	0.8	1.5
4	Cu (µg/L)								78.9			3.4	0.5	0.5	18.7
5	Hg (µg/L)														
6	Ni (µg/L)								44.5			0.2	1.1	1.6	0.3
7	Pb (µg/L)								0.3			0.9	0.1	0.1	1.3
8	Zn (µg/L)								57.3			5.0	7.5	2.9	20.5
	CHEMICAL INDICES														
1	HAR_Ca (mgCaCO3/L)	100							158	129	139	110	96	96	118
2	HAR_Total (mgCaCO3/L)	169							283	218	203	156	148	165	183
3	Na% (%)	15							28	16	15	18	20	19	20
4	RSC (-)	0.1							0.0	0.1	0.0	0.2	0.3	0.2	0.2
5	SAR (-)	0.5							1.3	0.6	0.5	0.6	0.6	0.6	0.7
	PESTICIDES														

Water Quality Seasonal Average for the period: 2004-2018

Station Name : KUMHARI (AGH40R6)

Local River : Wainganga

River Water

Division : Wainganga Div., Nagpur

Sub-Division : Upper Wainganga SD, Nagpur

S.No	Parameters	Summer														
		Mar - May														
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	PHYSICAL															
1	Q (cumec)	3.283	2.754							5.078	3.997	8.232	9.997	1.557		2.115
2	EC_GEN (µmho/cm)	344	373							331	382	351	309	361	341	469
3	pH_GEN (pH units)	8.0	8.1							8.4	8.5	7.7	7.6	8.1	8.2	8.0
4	Temp (deg C)	22.7	24.3							22.0	22.3	20.7	22.3	25.7	22.0	20.7
5	Turb (NTU)									8.5	0.2	0.8	23.6			
	CHEMICAL															
1	Alk-Phen (mgCaCO3/L)	0.0	0.0							4.2	6.7	0.0	0.0	0.0	10.0	0.0
2	ALK-TOT (mgCaCO3/L)	230	198							150	208	172	149	187	170	248
3	B (mg/L)	0.61	0.11							0.19	0.17	0.11	0.19	0.12	0.79	0.87
4	Ca (mg/L)	37	38							38	45	43	37	54	38	62
5	Cl (mg/L)	8.0	10.9							10.9	8.3	9.4	17.1	29.4	50.4	27.0
6	CO3 (mg/L)	0.0	0.0							5.1	8.0	0.0	0.0	0.0	12.0	0.0
7	F (mg/L)	0.32	0.46							0.34	0.22	0.47	0.17	0.05	0.36	0.40
8	Fe (mg/L)	0.0	0.0							0.2	0.0	0.3	0.0	0.0	0.3	0.1
9	HCO3 (mg/L)	213	241							173	238	210	181	228	183	302
10	K (mg/L)	2.2	1.3							1.2	2.1	1.7	1.5	1.8	1.5	1.9
11	Mg (mg/L)	12.9	20.0							18.1	22.4	14.4	11.4	23.5	20.8	14.8
12	Na (mg/L)	19.3	18.5							17.5	19.5	23.7	16.8	21.2	21.3	25.4
13	NH3-N (mg N/L)	0.22	0.10							0.62	0.02	0.65	0.13	0.31	1.58	0.13
14	NO2+NO3 (mg N/L)	0.24	2.78							0.14	0.33	4.09	5.01	5.93	1.81	2.69
15	NO2-N (mgN/L)	0.01	0.05							0.01	0.01	0.00	0.00	0.15	0.03	0.01
16	NO3-N (mgN/L)	0.23	2.73							0.12	0.33	4.09	5.01	5.78	1.78	2.68
17	o-PO4-P (mg P/L)	0.013	0.181							0.023	0.045	0.734	0.199	0.100	0.881	0.218
18	SiO2 (mg/L)	43.7	49.8							36.7	24.5	23.4	34.6	29.9	32.5	19.3
19	SO4 (mg/L)	5.7	6.4							78.4	8.8	5.9	13.1	14.8	9.5	1.5

Water Quality Seasonal Average for the period: 2004-2018

Station Name : KUMHARI (AGH40R6)

Division : Wainganga Div., Nagpur

Local River : Wainganga

River Water

Sub-Division : Upper Wainganga SD, Nagpur

S.No	Parameters	Summer														
		Mar - May														
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	BIOLOGICAL/BACTERIOLOGICAL															
1	BOD3-27 (mg/L)	1.6	1.6							8.9	15.9	1.8	2.1	1.4	1.9	2.0
2	COD (mg/L)									47.1	56.7	37.3	27.7	47.0	102.4	32.0
3	DO (mg/L)	7.1	7.1							5.4	6.0	7.6	6.2	7.4	7.2	7.5
4	DO_SAT% (%)	82	84							63	67	84	72	91	82	84
5	FCol-MPN (MPN/100mL)	100	450							150	233	143	447	130	347	80
6	Tcol-MPN (MPN/100mL)	433	1667							467	533	750	813	233	523	317
	TRACE & TOXIC															
1	As (µg/L)									0.6	2.5	4.3	0.9	1.7	0.0	1.5
2	Cd (µg/L)									0.0	1.3	0.1	1.0	0.1	0.0	0.1
3	Cr (µg/L)									0.0	1.2	6.4	0.0	0.7	3.0	1.5
4	Cu (µg/L)										1.8	14.9		1.4	3.0	5.1
5	Hg (µg/L)									0.3	0.1	0.3	0.2			
6	Ni (µg/L)									1.6	6.6	5.0	2.7	0.3	9.0	6.5
7	Pb (µg/L)									16.7	7.0	0.3	12.0	0.5	1.0	6.7
8	Zn (µg/L)									9.1	16.1	13.4	0.0	2.8	22.0	3.0
	CHEMICAL INDICES															
1	HAR_Ca (mgCaCO3/L)	93	95							95	112	108	92	134	95	155
2	HAR_Total (mgCaCO3/L)	147	178							170	205	168	140	233	182	217
3	Na% (%)	22	18							18	17	23	20	17	20	20
4	RSC (-)	0.6	0.4							0.3	0.1	0.2	0.4	0.0	0.0	0.7
5	SAR (-)	0.7	0.6							0.6	0.6	0.8	0.6	0.6	0.7	0.8
	PESTICIDES															

HISTORY SHEET

		Water Year	: 2017-2018
Site	: SAKMUR	Code	: AGH30B6
State	: Maharashtra	District	Chandrapur
Basin	: Godavari	Independent River	: Godavari
Tributary	: Pranhita	Sub Tributary	: Wardha
Sub-Sub Tributary	: -	Local River	: Wardha
Division	: Wainganga Div., Nagpur	Sub-Division	: Wardha SD, Chandrapur
Drainage Area	: 47500 Sq. Km.	Bank	: Left
Latitude	: 19°33'41"	Longitude	: 79°36'48"
	Opening Date	Closing Date	
Gauge	: 23.06.1964		
Discharge	: 01.02.1968		
Sediment	: 01.06.2014		
Water Quality	: 01.06.2014		

Water Quality Datasheet for the period : 2017-2018

Station Name : SAKMUR (AGH30B6)

Local River : Wardha

River Water Analysis

Division : Wainganga Div., Nagpur

Sub-Division : Wardha SD, Chandrapur

S.No	Parameters	01.06.2017	03.07.2017	01.08.2017	04.09.2017	03.10.2017	01.11.2017	04.12.2017	01.01.2018	01.02.2018	05.03.2018	02.04.2018
		A	A	A	A	A	A	A	A	A	A	A
	PHYSICAL											
1	Q (cumec)	3.985	336.8	167.5	293.7	123.9	85.51	1.890	36.53	7.082	2.814	0.873
2	Colour_Cod (-)	Clear	Clear	Light Brown	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear
3	EC_GEN (µmho/cm)	350	389	589	603	683	684	555	598	558	954	765
4	Odour_Code (-)	odour free	odour free	odour free	odour free	odour free	odour free	odour free	odour free	odour free	odour free	odour free
5	pH_GEN (pH units)	8.6	7.9	8.2	7.9	8.1	8.3	8.6	8.1	8.1	7.4	8.2
6	Temp (deg C)	27.0	25.0	26.0	25.0	25.0	25.0	23.0	24.0	24.0	25.0	24.0
	CHEMICAL											
1	Alk-Phen (mgCaCO3/L)	12.5	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO3/L)	208	147	195	201	199	205	177	169	179	187	165
3	B (mg/L)	0.59	0.00	0.11	0.93	0.15	0.57	0.21	0.14	0.07	0.72	0.76
4	Ca (mg/L)	39	26	37	38	46	40	42	48	33	38	43
5	Cl (mg/L)	87.5	19.9	27.8	25.8	37.1	47.4	82.4	76.2	76.2	74.7	101.8
6	CO3 (mg/L)	15.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0
7	F (mg/L)	0.62	0.64	1.00	0.89	0.09	0.20	0.00	0.43	0.46	0.43	0.44
8	Fe (mg/L)	0.1	0.2	0.4	0.1	0.3	0.1	0.2	0.1	0.1	0.1	0.1
9	HCO3 (mg/L)	223	179	238	245	243	250	206	206	218	228	201
10	K (mg/L)	6.4	3.0	4.1	4.0	4.1	3.7	4.9	4.9	2.7	6.1	7.2
11	Mg (mg/L)	30.9	11.8	15.0	16.6	19.3	25.1	20.4	27.4	28.0	34.4	25.7
12	Na (mg/L)	81.3	24.2	31.7	30.1	30.5	38.6	71.6	60.4	56.2	75.7	84.2
13	NH3-N (mg N/L)	0.87	0.62	0.60	0.28	0.19	0.16	0.09	0.32	0.28	0.26	0.27
14	NO2+NO3 (mg N/L)	2.04	2.24	2.55	2.27	2.66	1.97	2.04	1.69	2.08	2.14	1.98
15	NO2-N (mgN/L)	0.01	0.03	0.05	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.01
16	NO3-N (mgN/L)	2.03	2.21	2.50	2.26	2.64	1.95	2.03	1.68	2.07	2.13	1.97
17	o-PO4-P (mg P/L)	4.195	0.572	1.621	0.168	0.613	0.110	0.153	0.146	0.175	0.181	0.336
18	SiO2 (mg/L)	28.1	25.4	4.6	24.0	14.8	29.6	21.7	7.9	9.6	8.9	12.5
19	SO4 (mg/L)	37.2	18.0	33.4	27.5	45.2	47.0	30.2	40.4	35.7	43.7	171.3

Water Quality Datasheet for the period : 2017-2018

Station Name : SAKMUR (AGH30B6)

Division : Wainganga Div., Nagpur

Local River : Wardha

River Water Analysis

Sub-Division : Wardha SD, Chandrapur

S.No	Parameters	01.06.2017	03.07.2017	01.08.2017	04.09.2017	03.10.2017	01.11.2017	04.12.2017	01.01.2018	01.02.2018	05.03.2018	02.04.2018
		A	A	A	A	A	A	A	A	A	A	A
	BIOLOGICAL/BACTERIOLOGICAL											
1	BOD3-27 (mg/L)	2.0	45.0	50.0	4.8	3.2	80.0	2.0	1.3	65.0	10.0	25.0
2	COD (mg/L)	43.3	79.3	62.8	32.3	3.8	85.5	30.9	46.2	86.4	38.8	45.0
3	DO (mg/L)	6.0	4.3	5.0	6.1	6.3	5.3	9.0	8.0	4.9	1.5	3.5
4	DO_SAT% (%)	75	52	62	74	76	64	105	95	58	18	42
5	FCol-MPN (MPN/100mL)	20	20	20	40	40	40	330	500	220	70	270
6	Tcol-MPN (MPN/100mL)	20	140	40	40	70	130	1100	1100	800	500	270
	TRACE & TOXIC											
1	As (µg/L)			2.0				3.6				2.9
2	Cd (µg/L)			0.0				0.1				0.1
3	Cr (µg/L)			10.0				3.7				0.9
4	Cu (µg/L)			3.0				5.4				2.9
5	Ni (µg/L)							5.1				21.2
6	Pb (µg/L)			1.0				2.1				4.1
7	Zn (µg/L)			2.0				27.0				2.6
	CHEMICAL INDICES											
1	HAR_Ca (mgCaCO3/L)	97	66	93	95	115	101	106	120	82	96	108
2	HAR_Total (mgCaCO3/L)	225	115	155	164	196	205	191	234	198	239	215
3	Na% (%)	43	31	30	28	25	29	44	35	38	40	45
4	RSC (-)	0.0	0.7	0.8	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0
5	SAR (-)	2.4	1.0	1.1	1.0	1.0	1.2	2.3	1.7	1.7	2.1	2.5
	PESTICIDES											

Water Quality Summary for the period : 2017-2018

Station Name : SAKMUR (AGH30B6)

Division : Wainganga Div., Nagpur

Local River : Wardha

Sub-Division : Wardha SD, Chandrapur

River Water Summary

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
	PHYSICAL				
1	Q (cumec)	331	745.0	0.001	98.90
2	EC_GEN (μmho/cm)	11	954	350	612
3	pH_GEN (pH units)	11	8.6	7.4	8.1
4	Temp (deg C)	11	27.0	23.0	24.8
	CHEMICAL				
1	Alk-Phen (mgCaCO3/L)	11	12.5	0.0	1.5
2	ALK-TOT (mgCaCO3/L)	11	208	147	185
3	B (mg/L)	11	0.93	0.00	0.39
4	Ca (mg/L)	11	48	26	39
5	Cl (mg/L)	11	101.8	19.9	59.7
6	CO3 (mg/L)	11	15.0	0.0	1.8
7	F (mg/L)	11	1.00	0.00	0.47
8	Fe (mg/L)	11	0.4	0.1	0.2
9	HCO3 (mg/L)	11	250	179	222
10	K (mg/L)	11	7.2	2.7	4.6
11	Mg (mg/L)	11	34.4	11.8	23.1
12	Na (mg/L)	11	84.2	24.2	53.1
13	NH3-N (mg N/L)	11	0.87	0.09	0.36
14	NO2+NO3 (mg N/L)	11	2.66	1.69	2.15
15	NO2-N (mgN/L)	11	0.05	0.01	0.02
16	NO3-N (mgN/L)	11	2.64	1.68	2.13
17	o-PO4-P (mg P/L)	11	4.195	0.110	0.752
18	SiO2 (mg/L)	11	29.6	4.6	17
19	SO4 (mg/L)	11	171.3	18.0	48.2
	BIOLOGICAL/BACTERIOLOGICAL				
1	BOD3-27 (mg/L)	11	80.0	1.3	26.2
2	COD (mg/L)	11	86.4	3.8	50.4
3	DO (mg/L)	11	9.0	1.5	5.4
4	DO_SAT% (%)	11	105	18	66
5	FCoI-MPN (MPN/100mL)	11	500	20	143
6	TcoI-MPN (MPN/100mL)	11	1100	20	383
	TRACE & TOXIC				
1	As (μg/L)	3	3.6	2.0	2.8
2	Cd (μg/L)	3	0.1	0.0	0.1
3	Cr (μg/L)	3	10.0	0.9	4.9
4	Cu (μg/L)	3	5.4	2.9	3.8
5	Ni (μg/L)	2	21.2	5.1	13.1
6	Pb (μg/L)	3	4.1	1.0	2.4
7	Zn (μg/L)	3	27.0	2.0	10.5
	CHEMICAL INDICES				
1	HAR_Ca (mgCaCO3/L)	11	120	66	98
2	HAR_Total (mgCaCO3/L)	11	239	115	194
3	Na% (%)	11	45	25	35
4	RSC (-)	11	0.8	0.0	0.2
5	SAR (-)	11	2.5	1.0	1.6
	PESTICIDES				

Water Quality Seasonal Average for the period: 2014-2018

Station Name : SAKMUR (AGH30B6)

Local River : Wardha

River Water

Division : Wainganga Div., Nagpur

Sub-Division : Wardha SD, Chandrapur

S.No	Parameters	Flood				Winter				Summer			
		Jun - Oct				Nov - Feb				Mar - May			
		2014	2015	2016	2017	2014-2015	2015-2016	2016-2017	2017-2018	2015	2016	2017	2018
	PHYSICAL												
1	Q (cumec)	761.5	141.3		185.2	34.79	30.83		32.75	11.98	8.813		1.843
2	EC_GEN (µmho/cm)	566	486	365	523	500	537	523	599	680	548	575	860
3	pH_GEN (pH units)	7.8	8.2	8.2	8.1	8.2	8.3	8.4	8.3	8.2	8.3	8.2	7.8
4	Temp (deg C)	28.4	25.7	25.8	25.6	25.8	26.9	25.0	24.0	25.7	26.0	25.7	24.5
5	Turb (NTU)	7.8				0.8				1.2			
	CHEMICAL												
1	Alk-Phen (mgCaCO3/L)	1.2	3.1	3.0	2.5	2.9	3.2	9.0	1.0	2.3	6.0	8.3	0.0
2	ALK-TOT (mgCaCO3/L)	209	158	155	190	214	196	207	182	164	211	168	176
3	B (mg/L)	0.22	0.25	0.73	0.36	0.40	0.36	0.36	0.25	0.48	0.11	0.39	0.74
4	Ca (mg/L)	41	38	37	37	43	40	45	41	33	70	30	41
5	Cl (mg/L)	38.8	31.4	20.4	39.6	35.6	35.3	31.3	70.5	46.8	49.3	70.9	88.2
6	CO3 (mg/L)	1.5	3.7	3.6	3.0	3.5	3.9	10.8	1.2	2.7	7.2	10.0	0.0
7	F (mg/L)	0.87	0.29	0.22	0.65	0.30	0.33	0.28	0.27	0.50	0.20	0.95	0.43
8	Fe (mg/L)	0.1	0.0	0.0	0.2	0.0	0.0	0.1	0.1	0.1	0.0	0.2	0.1
9	HCO3 (mg/L)	252	185	182	226	254	231	231	220	195	243	184	214
10	K (mg/L)	4.9	3.5	2.7	4.3	2.8	4.0	2.4	4.0	5.2	4.7	3.9	6.6
11	Mg (mg/L)	24.3	16.1	14.7	18.7	23.8	24.3	23.4	25.2	23.7	24.1	27.5	30.0
12	Na (mg/L)	54.0	33.0	21.3	39.6	40.8	43.5	36.9	56.7	56.7	59.6	41.7	80.0
13	NH3-N (mg N/L)	0.31	0.08	0.19	0.51	0.06	0.18	0.46	0.21	0.10	0.24	0.73	0.27
14	NO2+NO3 (mg N/L)	1.79	9.91	1.91	2.35	5.16	6.74	2.73	1.94	6.07	4.99	1.06	2.06
15	NO2-N (mgN/L)	0.00	0.02	0.01	0.02	0.01	0.02	0.01	0.01	0.00	0.14	0.01	0.01
16	NO3-N (mgN/L)	1.79	9.89	1.90	2.33	5.16	6.72	2.72	1.93	6.07	4.85	1.04	2.05
17	o-PO4-P (mg P/L)	0.171	0.115	0.095	1.434	0.157	0.100	0.916	0.146	0.134	0.098	0.458	0.258
18	SiO2 (mg/L)	17.0	19.3	20.5	19.4	11.1	21.1	22.2	17.2	32.4	20.4	22.5	10.7

Water Quality Seasonal Average for the period: 2014-2018

Station Name : SAKMUR (AGH30B6)

Division : Wainganga Div., Nagpur

Local River : Wardha

River Water

Sub-Division : Wardha SD, Chandrapur

S.No	Parameters	Flood				Winter				Summer			
		Jun - Oct				Nov - Feb				Mar - May			
		2014	2015	2016	2017	2014-2015	2015-2016	2016-2017	2017-2018	2015	2016	2017	2018
19	SO4 (mg/L)	15.0	24.8	13.5	32.3	34.2	43.4	45.3	38.3	45.8	37.3	36.6	107.5
	BIOLOGICAL/BACTERIOLOGICAL												
1	BOD3-27 (mg/L)	4.8	13.1	7.2	21.0	2.0	1.5	2.3	37.1	2.7	28.5	16.5	17.5
2	COD (mg/L)	33.6	101.7	34.4	44.3	30.5	38.0	104.4	62.3	27.3	43.5	106.6	41.9
3	DO (mg/L)	5.9	5.7	6.0	5.5	7.3	6.3	7.3	6.8	6.3	5.4	5.0	2.5
4	DO_SAT% (%)	76	70	73	68	89	79	88	81	77	67	61	30
5	FCol-MPN (MPN/100mL)	516	42	960	28	80	53	70	273	70	70	357	170
6	Tcol-MPN (MPN/100mL)	1438	270	4318	62	215	270	858	783	117	295	713	385
	TRACE & TOXIC												
1	As (µg/L)			1.8	2.0		0.9	1.8	3.6	0.9	2.5	1.0	2.9
2	Cd (µg/L)			0.1	0.0	0.3	0.5	0.2	0.1	1.0	0.2	0.0	0.1
3	Cr (µg/L)			39.1	10.0	3.9	0.3	0.8	3.7	6.0	1.3	5.0	0.9
4	Cu (µg/L)			1.3	3.0	7.2	1.7	0.8	5.3		2.4	4.0	2.9
5	Hg (µg/L)									0.0			
6	Ni (µg/L)			2.8		0.2	0.4	1.4	5.1	5.7	1.9	12.0	21.2
7	Pb (µg/L)			0.5	1.0	1.0	2.4	2.8	2.1	15.0	1.8	0.0	4.1
8	Zn (µg/L)			1.2	2.0	4.0	6.0	2.9	27.0	22.0	4.5	6.0	2.6
	CHEMICAL INDICES												
1	HAR_Ca (mgCaCO3/L)	102	96	93	93	108	100	113	102	83	175	74	102
2	HAR_Total (mgCaCO3/L)	203	163	154	171	207	202	211	207	182	276	189	227
3	Na% (%)	33	29	22	31	30	32	28	37	40	32	31	43
4	RSC (-)	0.3	0.1	0.1	0.5	0.4	0.1	0.1	0.0	0.0	0.0	0.0	0.0
5	SAR (-)	1.6	1.1	0.7	1.3	1.2	1.3	1.1	1.7	1.8	1.6	1.3	2.3
	PESTICIDES												

HISTORY SHEET

		Water Year	: 2017-2018
Site	: WAIRAGARH	Code	: AGH46D4
State	: Maharashtra	District	Gadchiroli
Basin	: Godavari	Independent River	: Godavari
Tributary	: Pranhita	Sub Tributary	: Wainganga
Sub-Sub Tributary	: Khobragarhi	Local River	: Khobragarhi
Division	: Wainganga Div., Nagpur	Sub-Division	: L Wainganga SD, Chandrapur
Drainage Area	: 2600 Sq. Km.	Bank	: Right
Latitude	: 20°25'19"	Longitude	: 80°05'30"
	Opening Date	Closing Date	
Gauge	: 18.07.1992		
Discharge	: 07.08.1992		
Sediment	:		
Water Quality	: 01.10.2014		

Water Quality Datasheet for the period : 2017-2018

Station Name : WAIRAGARH (AGH46D4)

Local River : Khobragarhi

Division : Wainganga Div., Nagpur

Sub-Division : L Wainganga SD, Chandrapur

River Water Analysis

S.No	Parameters	03.07.2017	01.08.2017	04.09.2017	03.10.2017	01.11.2017	04.12.2017	01.01.2018
		A	A	A	A	A	A	A
	PHYSICAL							
1	Q (cumec)		17.63	11.88	25.76	5.074	0.488	0.273
2	Colour_Cod (-)	Light Brown	Clear	Light Brown	Clear	Clear	Clear	Clear
3	EC_GEN (µmho/cm)	90	199	171	144	191	170	121
4	Odour_Code (-)	odour free	odour free	odour free	odour free	odour free	odour free	odour free
5	pH_GEN (pH units)	7.6	7.8	7.6	7.8	8.1	7.5	7.4
6	Temp (deg C)	28.0	26.0	29.0	29.0	26.0	19.0	19.0
	CHEMICAL							
1	Alk-Phen (mgCaCO3/L)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO3/L)	67	90	66	109	82	77	52
3	B (mg/L)	0.00	0.19	0.57	0.16	0.17	0.21	0.17
4	Ca (mg/L)	21	14	17	19	24	18	15
5	Cl (mg/L)	9.9	6.0	17.7	6.2	14.4	10.3	12.4
6	CO3 (mg/L)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	F (mg/L)	0.26	0.22	0.42	0.00	0.00	0.00	0.14
8	Fe (mg/L)	0.6	0.4	0.2	0.6	0.2	0.2	0.1
9	HCO3 (mg/L)	82	110	81	133	100	94	64
10	K (mg/L)	5.8	2.5	2.0	1.9	1.8	2.0	1.9
11	Mg (mg/L)	13.5	4.3	1.6	14.4	2.9	7.0	1.2
12	Na (mg/L)	17.6	16.0	14.4	10.4	13.5	17.3	13.5
13	NH3-N (mg N/L)	0.25	0.82	0.26	0.19	0.12	0.09	0.28
14	NO2+NO3 (mg N/L)	2.92	2.67	1.64	8.03	1.29	1.43	1.15
15	NO2-N (mgN/L)	0.05	0.10	0.01	0.03	0.01	0.01	0.01
16	NO3-N (mgN/L)	2.87	2.57	1.63	8.00	1.28	1.42	1.14
17	o-PO4-P (mg P/L)	1.071	1.183	0.143	0.112	0.098	0.069	0.147
18	SiO2 (mg/L)	18.5	13.6	18.2	17.4	24.3	10.3	11.4
19	SO4 (mg/L)	37.9	2.0	2.2	10.9	1.8	3.2	13.8

Water Quality Datasheet for the period : 2017-2018

Station Name : WAIRAGARH (AGH46D4)

Division : Wainganga Div., Nagpur

Local River : Khobragarhi

River Water Analysis

Sub-Division : L Wainganga SD, Chandrapur

S.No	Parameters	03.07.2017	01.08.2017	04.09.2017	03.10.2017	01.11.2017	04.12.2017	01.01.2018
		A	A	A	A	A	A	A
	BIOLOGICAL/BACTERIOLOGICAL							
1	BOD3-27 (mg/L)	2.4	1.9	1.2	1.3	1.2	1.6	1.2
2	COD (mg/L)	62.5	2.3	32.5	10.7	50.6	26.5	57.7
3	DO (mg/L)	6.5	6.3	6.9	6.7	6.6	7.6	7.5
4	DO_SAT% (%)	83	78	90	87	81	82	81
5	FCol-MPN (MPN/100mL)	800	40	70	110	40	20	40
6	Tcol-MPN (MPN/100mL)	16000	80	90	800	40	80	130
	TRACE & TOXIC							
1	As (µg/L)		2.0				4.2	
2	Cd (µg/L)		0.0				0.0	
3	Cr (µg/L)		10.0				3.6	
4	Cu (µg/L)		2.0				4.0	
5	Ni (µg/L)						4.5	
6	Pb (µg/L)		1.0				2.1	
7	Zn (µg/L)		1.0				1.5	
	CHEMICAL INDICES							
1	HAR_Ca (mgCaCO3/L)	53	35	42	48	60	46	38
2	HAR_Total (mgCaCO3/L)	109	53	49	108	72	75	43
3	Na% (%)	25	38	38	17	28	33	39
4	RSC (-)	0.0	0.7	0.4	0.0	0.2	0.0	0.2
5	SAR (-)	0.7	1.0	0.9	0.4	0.7	0.9	0.9
	PESTICIDES							

Water Quality Summary for the period : 2017-2018

Station Name : WAIRAGARH (AGH46D4)

Division : Wainganga Div., Nagpur

Local River : Khobragarhi

Sub-Division : L Wainganga SD, Chandrapur

River Water Summary

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
	PHYSICAL				
1	Q (cumec)	185	656.0	0.143	26.25
2	EC_GEN (µmho/cm)	7	199	90	155
3	pH_GEN (pH units)	7	8.1	7.4	7.7
4	Temp (deg C)	7	29.0	19.0	25.1
	CHEMICAL				
1	Alk-Phen (mgCaCO3/L)	7	0.0	0.0	0
2	ALK-TOT (mgCaCO3/L)	7	109	52	78
3	B (mg/L)	7	0.57	0.00	0.21
4	Ca (mg/L)	7	24	14	18
5	Cl (mg/L)	7	17.7	6.0	11
6	CO3 (mg/L)	7	0.0	0.0	0
7	F (mg/L)	7	0.42	0.00	0.15
8	Fe (mg/L)	7	0.6	0.1	0.3
9	HCO3 (mg/L)	7	133	64	95
10	K (mg/L)	7	5.8	1.8	2.5
11	Mg (mg/L)	7	14.4	1.2	6.4
12	Na (mg/L)	7	17.6	10.4	14.6
13	NH3-N (mg N/L)	7	0.82	0.09	0.29
14	NO2+NO3 (mg N/L)	7	8.03	1.15	2.73
15	NO2-N (mgN/L)	7	0.10	0.01	0.03
16	NO3-N (mgN/L)	7	8.00	1.14	2.7
17	o-PO4-P (mg P/L)	7	1.183	0.069	0.403
18	SiO2 (mg/L)	7	24.3	10.3	16.2
19	SO4 (mg/L)	7	37.9	1.8	10.3
	BIOLOGICAL/BACTERIOLOGICAL				
1	BOD3-27 (mg/L)	7	2.4	1.2	1.5
2	COD (mg/L)	7	62.5	2.3	34.7
3	DO (mg/L)	7	7.6	6.3	6.9
4	DO_SAT% (%)	7	90	78	83
5	FCoI-MPN (MPN/100mL)	7	800	20	160
6	TcoI-MPN (MPN/100mL)	7	16000	40	2460
	TRACE & TOXIC				
1	As (µg/L)	2	4.2	2.0	3.1
2	Cd (µg/L)	2	0.0	0.0	0
3	Cr (µg/L)	2	10.0	3.6	6.8
4	Cu (µg/L)	2	4.0	2.0	3
5	Ni (µg/L)	1	4.5	4.5	4.5
6	Pb (µg/L)	2	2.1	1.0	1.5
7	Zn (µg/L)	2	1.5	1.0	1.3
	CHEMICAL INDICES				
1	HAR_Ca (mgCaCO3/L)	7	60	35	46
2	HAR_Total (mgCaCO3/L)	7	109	43	73
3	Na% (%)	7	39	17	31
4	RSC (-)	7	0.7	0.0	0.2
5	SAR (-)	7	1.0	0.4	0.8
	PESTICIDES				

Water Quality Seasonal Average for the period: 2014-2018

Station Name : WAIRAGARH (AGH46D4)

Local River : Khobragarhi

River Water

Division : Wainganga Div., Nagpur

Sub-Division : L Wainganga SD, Chandrapur

S.No	Parameters	Flood				Winter				Summer			
		Jun - Oct				Nov - Feb				Mar - May			
		2014	2015	2016	2017	2014-2015	2015-2016	2016-2017	2017-2018	2015	2016	2017	2018
	PHYSICAL												
1	Q (cumec)	110.1	18.46		18.42	1.933	1.079		1.945				
2	EC_GEN (µmho/cm)	80	127	100	151	124	144	128	161				
3	pH_GEN (pH units)	7.3	7.8	7.6	7.7	7.7	8.2	8.0	7.7				
4	Temp (deg C)	26.8	27.5	28.6	28.0	19.0	26.5	22.3	21.3				
5	Turb (NTU)	86.5				1.7							
	CHEMICAL												
1	Alk-Phen (mgCaCO3/L)	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0				
2	ALK-TOT (mgCaCO3/L)	55	66	47	83	71	74	93	70				
3	B (mg/L)	0.20	0.21	0.43	0.23	0.25	0.43	0.37	0.18				
4	Ca (mg/L)	17	19	17	18	21	22	16	19				
5	Cl (mg/L)	8.4	10.4	9.2	9.9	6.3	9.9	8.6	12.4				
6	CO3 (mg/L)	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0				
7	F (mg/L)	0.39	0.06	0.08	0.23	0.13	0.07	0.08	0.05				
8	Fe (mg/L)	0.9	0.2	0.5	0.4	0.0	0.1	0.1	0.1				
9	HCO3 (mg/L)	67	81	57	101	86	90	108	86				
10	K (mg/L)	1.6	1.8	2.3	3.0	1.3	2.0	1.5	1.9				
11	Mg (mg/L)	2.4	9.0	2.1	8.5	4.3	3.7	8.3	3.7				
12	Na (mg/L)	10.6	9.5	11.3	14.6	11.2	11.9	14.0	14.7				
13	NH3-N (mg N/L)	0.14	0.07	0.04	0.38	0.32	0.07	0.26	0.17				
14	NO2+NO3 (mg N/L)	4.25	5.91	2.68	3.81	4.14	3.41	1.24	1.29				
15	NO2-N (mgN/L)	0.02	0.02	0.02	0.05	0.01	0.01	0.01	0.01				
16	NO3-N (mgN/L)	4.23	5.89	2.66	3.77	4.14	3.40	1.23	1.28				
17	o-PO4-P (mg P/L)	0.159	0.225	0.146	0.627	0.152	0.095	0.456	0.105				
18	SiO2 (mg/L)	19.4	21.1	10.8	16.9	5.2	17.5	25.3	15.3				
19	SO4 (mg/L)	11.1	11.2	6.8	13.2	6.7	9.4	1.2	6.3				

Water Quality Seasonal Average for the period: 2014-2018

Station Name : WAIRAGARH (AGH46D4)

Division : Wainganga Div., Nagpur

Local River : Khobragarhi

River Water

Sub-Division : L Wainganga SD, Chandrapur

S.No	Parameters	Flood				Winter				Summer			
		Jun - Oct				Nov - Feb				Mar - May			
		2014	2015	2016	2017	2014-2015	2015-2016	2016-2017	2017-2018	2015	2016	2017	2018
	BIOLOGICAL/BACTERIOLOGICAL												
1	BOD3-27 (mg/L)	2.3	1.3	7.7	1.7	2.1	2.7	1.4	1.3				
2	COD (mg/L)	34.0	115.4	26.4	27.0	38.5	51.2	123.6	44.9				
3	DO (mg/L)	6.4	6.4	5.3	6.6	7.3	7.3	8.2	7.2				
4	DO_SAT% (%)	80	81	69	84	79	91	94	81				
5	FCol-MPN (MPN/100mL)	125	108	553	255	85	95	167	33				
6	Tcol-MPN (MPN/100mL)	510	4315	5273	4243	215	720	677	83				
	TRACE & TOXIC												
1	As (µg/L)			0.3	2.0			3.2	4.2				
2	Cd (µg/L)			0.1	0.0	0.0		0.1	0.0				
3	Cr (µg/L)			25.9	10.0	0.5		1.7	3.6				
4	Cu (µg/L)			0.9	2.0	13.7		1.2	4.0				
5	Ni (µg/L)			2.4		0.5		1.6	4.5				
6	Pb (µg/L)			0.8	1.0	0.4		1.5	2.1				
7	Zn (µg/L)			0.2	1.0	5.0		91.3	1.5				
	CHEMICAL INDICES												
1	HAR_Ca (mgCaCO3/L)	42	49	42	45	53	56	40	48				
2	HAR_Total (mgCaCO3/L)	52	86	51	80	71	72	74	63				
3	Na% (%)	30	20	33	30	26	26	29	33				
4	RSC (-)	0.2	0.0	0.0	0.3	0.1	0.1	0.4	0.1				
5	SAR (-)	0.6	0.5	0.7	0.8	0.6	0.6	0.7	0.8				
	PESTICIDES												

HISTORY SHEET

		Water Year	: 2017-2018
Site	: RAMAKONA	Code	: AGH4BQ3
State	: Madhya Pradesh	District	Chhindwara
Basin	: Godavari	Independent River	: Godavari
Tributary	: Pranhita	Sub Tributary	: Wainganga
Sub-Sub Tributary	: Khanan	Local River	: Khanan
Division	: Wainganga Div., Nagpur	Sub-Division	: Upper Wainganga SD, Nagpur
Drainage Area	: 2500 Sq. Km.	Bank	: Left
Latitude	: 21°43'12"	Longitude	: 78°49'27"
	Opening Date	Closing Date	
Gauge	: 13.02.1986		
Discharge	: 21.11.1986		
Sediment	: 12.11.2014		
Water Quality	: 01.06.2014		

Water Quality Datasheet for the period : 2017-2018

Station Name : RAMAKONA (AGH4BQ3)

Local River : Khanan

Division : Wainganga Div., Nagpur

Sub-Division : Upper Wainganga SD, Nagpur

River Water Analysis

S.No	Parameters	03.07.2017	01.08.2017	04.09.2017	03.10.2017	01.11.2017	04.12.2017
		A	A	A	A	A	A
	PHYSICAL						
1	Q (cumec)	9.098	5.117	5.531	9.445	3.169	0.361
2	Colour_Cod (-)	Light Brown	Brown	Brown	Clear	Light Brown	Clear
3	EC_GEN (μmho/cm)	372	467	473	570	517	501
4	Odour_Code (-)	odour free	odour free	odour free	odour free	odour free	odour free
5	pH_GEN (pH units)	7.8	8.2	8.0	8.2	8.2	8.2
6	Temp (deg C)	22.0	22.0	21.0	23.0	19.0	12.0
	CHEMICAL						
1	Alk-Phen (mgCaCO3/L)	0.0	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO3/L)	156	165	165	205	187	215
3	B (mg/L)	0.02	0.14	0.43	0.46	0.51	0.32
4	Ca (mg/L)	42	39	37	45	48	58
5	Cl (mg/L)	9.9	13.9	15.9	14.4	18.5	24.7
6	CO3 (mg/L)	0.0	0.0	0.0	0.0	0.0	0.0
7	F (mg/L)	0.81	1.14	0.71	1.90	0.01	0.20
8	Fe (mg/L)	0.7	0.9	0.1	0.7	0.1	0.2
9	HCO3 (mg/L)	190	201	201	250	228	262
10	K (mg/L)	3.2	2.4	2.6	2.6	2.3	2.7
11	Mg (mg/L)	5.4	9.6	10.2	14.4	17.5	21.6
12	Na (mg/L)	25.0	25.5	22.9	21.0	26.0	37.8
13	NH3-N (mg N/L)	0.21	0.74	0.35	0.11	0.15	0.11
14	NO2+NO3 (mg N/L)	3.12	3.46	2.17	0.44	2.47	1.93
15	NO2-N (mgN/L)	0.03	0.03	0.01	0.10	0.04	0.03
16	NO3-N (mgN/L)	3.09	3.43	2.16	0.34	2.43	1.90
17	o-PO4-P (mg P/L)	0.911	1.867	0.164	0.147	0.157	0.051
18	SiO2 (mg/L)	24.1	7.8	31.0	27.9	35.6	29.1
19	SO4 (mg/L)	19.1	30.8	31.4	38.3	43.4	12.2

Water Quality Datasheet for the period : 2017-2018

Station Name : RAMAKONA (AGH4BQ3)

Division : Wainganga Div., Nagpur

Local River : Khanan

River Water Analysis

Sub-Division : Upper Wainganga SD, Nagpur

S.No	Parameters	03.07.2017	01.08.2017	04.09.2017	03.10.2017	01.11.2017	04.12.2017
		A	A	A	A	A	A
	BIOLOGICAL/BACTERIOLOGICAL						
1	BOD3-27 (mg/L)	1.9	2.2	2.3	1.0	1.2	1.5
2	COD (mg/L)	35.9	22.3	26.9	12.9	34.3	15.1
3	DO (mg/L)	6.4	6.2	7.8	7.1	7.8	8.2
4	DO_SAT% (%)	73	71	87	83	84	76
5	FCol-MPN (MPN/100mL)	20	80	20	340	300	1100
6	Tcol-MPN (MPN/100mL)	340	110	20	16000	5000	1400
	TRACE & TOXIC						
1	As (µg/L)		1.0				2.8
2	Cd (µg/L)		0.0				0.0
3	Cr (µg/L)		11.0				1.8
4	Cu (µg/L)		49.0				5.4
5	Ni (µg/L)						3.8
6	Pb (µg/L)		1.0				1.4
7	Zn (µg/L)		2.0				1.0
	CHEMICAL INDICES						
1	HAR_Ca (mgCaCO3/L)	106	97	93	113	120	144
2	HAR_Total (mgCaCO3/L)	128	137	135	173	193	234
3	Na% (%)	29	28	27	21	23	26
4	RSC (-)	0.6	0.6	0.6	0.7	0.0	0.0
5	SAR (-)	1.0	0.9	0.9	0.7	0.8	1.1
	PESTICIDES						

Water Quality Summary for the period : 2017-2018

Station Name : RAMAKONA (AGH4BQ3)

Division : Wainganga Div., Nagpur

Local River : Khanan

Sub-Division : Upper Wainganga SD, Nagpur

River Water Summary

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
	PHYSICAL				
1	Q (cumec)	178	230.8	0.145	14.46
2	EC_GEN (µmho/cm)	6	570	372	483
3	pH_GEN (pH units)	6	8.2	7.8	8.1
4	Temp (deg C)	6	23.0	12.0	19.8
	CHEMICAL				
1	Alk-Phen (mgCaCO3/L)	6	0.0	0.0	0
2	ALK-TOT (mgCaCO3/L)	6	215	156	182
3	B (mg/L)	6	0.51	0.02	0.31
4	Ca (mg/L)	6	58	37	45
5	Cl (mg/L)	6	24.7	9.9	16.2
6	CO3 (mg/L)	6	0.0	0.0	0
7	F (mg/L)	6	1.90	0.01	0.79
8	Fe (mg/L)	6	0.9	0.1	0.4
9	HCO3 (mg/L)	6	262	190	222
10	K (mg/L)	6	3.2	2.3	2.6
11	Mg (mg/L)	6	21.6	5.4	13.1
12	Na (mg/L)	6	37.8	21.0	26.4
13	NH3-N (mg N/L)	6	0.74	0.11	0.28
14	NO2+NO3 (mg N/L)	6	3.46	0.44	2.27
15	NO2-N (mgN/L)	6	0.10	0.01	0.04
16	NO3-N (mgN/L)	6	3.43	0.34	2.22
17	o-PO4-P (mg P/L)	6	1.867	0.051	0.55
18	SiO2 (mg/L)	6	35.6	7.8	25.9
19	SO4 (mg/L)	6	43.4	12.2	29.2
	BIOLOGICAL/BACTERIOLOGICAL				
1	BOD3-27 (mg/L)	6	2.3	1.0	1.7
2	COD (mg/L)	6	35.9	12.9	24.6
3	DO (mg/L)	6	8.2	6.2	7.3
4	DO_SAT% (%)	6	87	71	79
5	FCol-MPN (MPN/100mL)	6	1100	20	310
6	Tcol-MPN (MPN/100mL)	6	16000	20	3812
	TRACE & TOXIC				
1	As (µg/L)	2	2.8	1.0	1.9
2	Cd (µg/L)	2	0.0	0.0	0
3	Cr (µg/L)	2	11.0	1.8	6.4
4	Cu (µg/L)	2	49.0	5.4	27.2
5	Ni (µg/L)	1	3.8	3.8	3.8
6	Pb (µg/L)	2	1.4	1.0	1.2
7	Zn (µg/L)	2	2.0	1.0	1.5
	CHEMICAL INDICES				
1	HAR_Ca (mgCaCO3/L)	6	144	93	112
2	HAR_Total (mgCaCO3/L)	6	234	128	167
3	Na% (%)	6	29	21	26
4	RSC (-)	6	0.7	0.0	0.4
5	SAR (-)	6	1.1	0.7	0.9
	PESTICIDES				

Water Quality Seasonal Average for the period: 2014-2018

Station Name : RAMAKONA (AGH4BQ3)

Division : Wainganga Div., Nagpur

Local River : Khanan

River Water

Sub-Division : Upper Wainganga SD, Nagpur

S.No	Parameters	Flood				Winter				Summer			
		Jun - Oct				Nov - Feb				Mar - May			
		2014	2015	2016	2017	2014-2015	2015-2016	2016-2017	2017-2018	2015	2016	2017	2018
	PHYSICAL												
1	Q (cumec)	38.46	23.04		7.298	1.615	1.732		1.765	1.002	0.066		
2	EC_GEN (µmho/cm)	442	352	298	471	484	534	516	509	467	564		
3	pH_GEN (pH units)	7.8	8.1	8.2	8.0	8.0	8.1	8.4	8.2	8.0	8.1		
4	Temp (deg C)	23.6	23.8	24.0	22.0	16.0	17.3	15.8	15.5	19.3	20.5		
5	Turb (NTU)	22.6				0.5				0.5			
	CHEMICAL												
1	Alk-Phen (mgCaCO3/L)	0.8	0.0	4.5	0.0	1.0	1.3	6.2	0.0	0.0	0.0		
2	ALK-TOT (mgCaCO3/L)	193	161	135	173	228	189	227	201	206	221		
3	B (mg/L)	0.29	0.14	0.90	0.26	0.43	0.33	0.58	0.41	0.24	0.13		
4	Ca (mg/L)	48	43	33	41	56	49	52	53	47	53		
5	Cl (mg/L)	14.9	15.9	9.0	13.5	14.2	16.9	16.4	21.6	12.2	16.5		
6	CO3 (mg/L)	1.0	0.0	5.4	0.0	1.2	1.6	7.5	0.0	0.0	0.0		
7	F (mg/L)	0.73	0.21	0.23	1.14	0.44	0.64	0.41	0.11	0.34	0.44		
8	Fe (mg/L)	0.1	0.1	0.1	0.6	0.0	0.0	0.0	0.1	0.1	0.1		
9	HCO3 (mg/L)	233	196	154	211	276	228	261	245	252	269		
10	K (mg/L)	2.1	2.0	2.6	2.7	1.7	2.0	2.1	2.5	2.0	2.1		
11	Mg (mg/L)	15.7	15.7	12.3	9.9	16.4	22.9	22.9	19.5	16.4	16.8		
12	Na (mg/L)	27.9	18.0	17.7	23.6	26.5	29.9	33.3	31.9	25.8	41.8		
13	NH3-N (mg N/L)	0.35	0.08	0.24	0.35	0.05	0.15	0.40	0.13	0.05	0.17		
14	NO2+NO3 (mg N/L)	5.03	9.07	2.25	2.30	8.55	10.37	2.05	2.20	8.15	5.95		
15	NO2-N (mgN/L)	0.01	0.01	0.01	0.04	0.01	0.05	0.02	0.03	0.00	0.15		
16	NO3-N (mgN/L)	5.02	9.07	2.24	2.25	8.54	10.32	2.03	2.17	8.15	5.80		
17	o-PO4-P (mg P/L)	0.163	0.070	0.128	0.772	0.153	0.092	1.897	0.104	0.165	0.104		
18	SiO2 (mg/L)	19.5	28.3	22.9	22.7	21.0	33.9	33.2	32.3	41.1	29.6		
19	SO4 (mg/L)	10.4	25.1	13.2	29.9	16.4	54.0	29.4	27.8	23.1	21.2		

Water Quality Seasonal Average for the period: 2014-2018

Station Name : RAMAKONA (AGH4BQ3)

Division : Wainganga Div., Nagpur

Local River : Khanan

River Water

Sub-Division : Upper Wainganga SD, Nagpur

S.No	Parameters	Flood				Winter				Summer			
		Jun - Oct				Nov - Feb				Mar - May			
		2014	2015	2016	2017	2014-2015	2015-2016	2016-2017	2017-2018	2015	2016	2017	2018
	BIOLOGICAL/BACTERIOLOGICAL												
1	BOD3-27 (mg/L)	3.0	3.8	9.4	1.8	8.4	2.5	1.9	1.4	2.2	4.5		
2	COD (mg/L)	26.2	122.9	40.6	24.5	34.0	34.5	86.8	24.7	35.0	55.9		
3	DO (mg/L)	7.8	6.2	4.6	6.9	6.7	8.1	6.8	8.0	7.7	8.3		
4	DO_SAT% (%)	92	74	54	79	68	85	68	80	83	92		
5	FCol-MPN (MPN/100mL)	110	78	4378	115	63	68	93	700	63	45		
6	Tcol-MPN (MPN/100mL)	634	4265	10275	4118	175	308	318	3200	153	105		
	TRACE & TOXIC												
1	As (µg/L)			2.2	1.0		1.3	1.5	2.8	0.8	1.4		
2	Cd (µg/L)			0.2	0.0	0.0	0.2	0.0	0.0	1.0	0.2		
3	Cr (µg/L)			3.3	11.0	2.5	0.6	0.6	1.8	5.4	1.3		
4	Cu (µg/L)			8.2	49.0	16.4	0.6	1.9	5.4		2.3		
5	Hg (µg/L)									0.0			
6	Ni (µg/L)			2.1		0.1	0.3	1.6	3.8	3.6	0.9		
7	Pb (µg/L)			0.2	1.0	0.8	1.8	7.0	1.4	14.0	1.3		
8	Zn (µg/L)			2.1	2.0	5.0	7.4		1.0	1.0	3.6		
	CHEMICAL INDICES												
1	HAR_Ca (mgCaCO3/L)	119	108	83	102	141	122	130	132	118	133		
2	HAR_Total (mgCaCO3/L)	184	173	134	143	209	217	226	213	186	204		
3	Na% (%)	25	18	22	26	22	22	24	24	23	33		
4	RSC (-)	0.3	0.0	0.1	0.6	0.4	0.0	0.3	0.0	0.4	0.5		
5	SAR (-)	0.9	0.6	0.7	0.9	0.8	0.9	1.0	0.9	0.8	1.3		
	PESTICIDES												

HISTORY SHEET

		Water Year	: 2017-2018
Site	: KEOLARI	Code	: AGH40V3
State	: Madhya Pradesh	District	Seoni
Basin	: Godavari	Independent River	: Godavari
Tributary	: Pranhita	Sub Tributary	: Wainganga
Sub-Sub Tributary	: -	Local River	: Wainganga
Division	: Wainganga Div., Nagpur	Sub-Division	: Upper Wainganga SD, Nagpur
Drainage Area	: 2970 Sq. Km.	Bank	: Right
Latitude	: 22°22'50"	Longitude	: 79°54'00"
	Opening Date	Closing Date	
Gauge	: 27.11.1986		
Discharge	: 29.06.1987		
Sediment	:		
Water Quality	: 01.06.2014		

Water Quality Datasheet for the period : 2017-2018

Station Name : KEOLARI (AGH40V3)

Local River : Wainganga

River Water Analysis

Division : Wainganga Div., Nagpur

Sub-Division : Upper Wainganga SD, Nagpur

S.No	Parameters	01.06.2017	03.07.2017	01.08.2017	04.09.2017	03.10.2017	01.11.2017	04.12.2017	01.01.2018	01.02.2018	05.03.2018	02.04.2018	01.05.2018
		A	A	A	A	A	A	A	A	A	A	A	A
	PHYSICAL												
1	Q (cumec)		33.17	28.71	11.21	6.510	6.241	5.845	9.488	2.996	6.766	1.200	1.072
2	Colour_Cod (-)	Clear	Brown	Light Brown	Brown	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear
3	EC_GEN (µmho/cm)	426	319	561	453	580	437	370	355	343	506	360	367
4	Odour_Code (-)	odour free	odour free	odour free	odour free	odour free	odour free	odour free	odour free	odour free	odour free	odour free	odour free
5	pH_GEN (pH units)	8.2	8.0	8.2	8.1	8.3	8.6	8.1	8.3	8.2	7.9	8.5	8.0
6	Temp (deg C)	27.0	25.0	26.0	26.0	24.0	22.0	18.0	17.0	15.0	21.0	23.0	27.0
	CHEMICAL												
1	Alk-Phen (mgCaCO3/L)	0.0	0.0	0.0	0.0	12.0	5.8	0.0	6.0	0.0	0.0	4.0	0.0
2	ALK-TOT (mgCaCO3/L)	191	150	234	190	222	166	169	167	191	201	191	211
3	B (mg/L)	0.36	0.28	0.80	0.81	0.90	0.56	0.22	0.24	0.11	0.59	0.81	1.51
4	Ca (mg/L)	33	40	47	39	49	36	51	52	49	44	33	49
5	Cl (mg/L)	17.9	13.9	13.9	11.9	14.4	20.6	24.7	18.5	18.5	14.3	23.9	22.3
6	CO3 (mg/L)	0.0	0.0	0.0	0.0	14.4	7.0	0.0	7.2	0.0	0.0	4.8	0.0
7	F (mg/L)	0.35	0.40	0.69	0.41	0.00	0.02	0.00	0.32	0.36	0.33	0.39	0.40
8	Fe (mg/L)	0.1	0.4	0.3	0.1	0.2	0.1	0.2	0.1	0.1	0.0	0.1	0.1
9	HCO3 (mg/L)	233	183	285	232	242	189	206	189	233	245	223	257
10	K (mg/L)	2.7	2.3	1.6	1.6	1.9	2.0	1.7	1.7	1.5	1.9	1.7	2.7
11	Mg (mg/L)	20.4	1.6	15.5	10.7	18.8	18.1	15.7	12.2	17.5	17.5	21.6	14.0
12	Na (mg/L)	28.5	18.0	21.2	18.0	21.0	18.5	21.2	18.9	16.8	20.3	23.8	25.8
13	NH3-N (mg N/L)	0.79	0.53	0.82	0.34	0.49	0.20	0.11	0.35	0.34	0.22	0.26	0.14
14	NO2+NO3 (mg N/L)	1.36	2.05	2.82	1.89	0.58	2.18	1.95	1.65	1.94	2.14	1.58	7.70
15	NO2-N (mgN/L)	0.01	0.04	0.06	0.01	0.06	0.03	0.01	0.03	0.02	0.01	0.02	0.01
16	NO3-N (mgN/L)	1.35	2.00	2.76	1.88	0.52	2.15	1.94	1.62	1.92	2.13	1.56	7.70
17	o-PO4-P (mg P/L)	1.456	0.653	1.468	0.192	0.177	0.102	0.039	0.142	0.087	0.144	0.377	0.285
18	SiO2 (mg/L)	37.2	21.7	11.5	30.8	33.3	35.1	30.8	12.9	16.9	21.5	19.8	20.6
19	SO4 (mg/L)	9.2	1.2	7.4	2.2	1.0	3.6	4.6	26.2	3.5	5.0	2.6	1.9

Water Quality Datasheet for the period : 2017-2018

Station Name : KEOLARI (AGH40V3)

Division : Wainganga Div., Nagpur

Local River : Wainganga

River Water Analysis

Sub-Division : Upper Wainganga SD, Nagpur

S.No	Parameters	01.06.2017	03.07.2017	01.08.2017	04.09.2017	03.10.2017	01.11.2017	04.12.2017	01.01.2018	01.02.2018	05.03.2018	02.04.2018	01.05.2018
		A	A	A	A	A	A	A	A	A	A	A	A
	BIOLOGICAL/BACTERIOLOGICAL												
1	BOD3-27 (mg/L)	4.7	6.3	4.9	40.0	1.5	2.8	1.5	30.0	1.8	6.4	6.7	3.9
2	COD (mg/L)	92.3	46.4	7.8	58.3	33.1	30.0	6.8	61.6	88.7	41.0	51.2	34.6
3	DO (mg/L)	7.9	6.8	8.6	4.3	6.4	9.3	7.0	0.0	9.7	8.6	13.4	7.0
4	DO_SAT% (%)	99	82	106	53	76	106	74	0	96	96	156	88
5	FCol-MPN (MPN/100mL)	220	170	20	20	40	230	170	130	20	20	340	110
6	Tcol-MPN (MPN/100mL)	270	3500	40	20	90	2400	5000	500	130	20	340	110
	TRACE & TOXIC												
1	As (µg/L)			1.0				3.3				1.3	
2	Cd (µg/L)			0.0				0.1				0.1	
3	Cr (µg/L)			10.0				16.0				1.4	
4	Cu (µg/L)			3.0				6.8				3.0	
5	Ni (µg/L)							10.1				7.7	
6	Pb (µg/L)			1.0				9.0				1.6	
7	Zn (µg/L)			0.0				1.1				4.0	
	CHEMICAL INDICES												
1	HAR_Ca (mgCaCO3/L)	83	99	117	97	122	91	127	130	122	110	82	122
2	HAR_Total (mgCaCO3/L)	168	106	181	142	200	166	193	181	195	183	171	181
3	Na% (%)	27	27	20	22	18	19	19	18	16	19	23	23
4	RSC (-)	0.5	0.9	1.1	1.0	0.5	0.0	0.0	0.0	0.0	0.4	0.4	0.6
5	SAR (-)	1.0	0.8	0.7	0.7	0.6	0.6	0.7	0.6	0.5	0.7	0.8	0.8
	PESTICIDES												

Water Quality Summary for the period : 2017-2018

Station Name : KEOLARI (AGH40V3)

Division : Wainganga Div., Nagpur

Local River : Wainganga

Sub-Division : Upper Wainganga SD, Nagpur

River Water Summary

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
	PHYSICAL				
1	Q (cumec)	337	126.9	0.597	8.534
2	EC_GEN (µmho/cm)	12	580	319	423
3	pH_GEN (pH units)	12	8.6	7.9	8.2
4	Temp (deg C)	12	27.0	15.0	22.6
	CHEMICAL				
1	Alk-Phen (mgCaCO3/L)	12	12.0	0.0	2.3
2	ALK-TOT (mgCaCO3/L)	12	234	150	190
3	B (mg/L)	12	1.51	0.11	0.6
4	Ca (mg/L)	12	52	33	43
5	Cl (mg/L)	12	24.7	11.9	17.9
6	CO3 (mg/L)	12	14.4	0.0	2.8
7	F (mg/L)	12	0.69	0.00	0.31
8	Fe (mg/L)	12	0.4	0.0	0.1
9	HCO3 (mg/L)	12	285	183	226
10	K (mg/L)	12	2.7	1.5	1.9
11	Mg (mg/L)	12	21.6	1.6	15.3
12	Na (mg/L)	12	28.5	16.8	21
13	NH3-N (mg N/L)	12	0.82	0.11	0.38
14	NO2+NO3 (mg N/L)	12	7.70	0.58	2.32
15	NO2-N (mgN/L)	12	0.06	0.01	0.03
16	NO3-N (mgN/L)	12	7.70	0.52	2.29
17	o-PO4-P (mg P/L)	12	1.468	0.039	0.427
18	SiO2 (mg/L)	12	37.2	11.5	24.3
19	SO4 (mg/L)	12	26.2	1.0	5.7
	BIOLOGICAL/BACTERIOLOGICAL				
1	BOD3-27 (mg/L)	12	40.0	1.5	9.2
2	COD (mg/L)	12	92.3	6.8	46
3	DO (mg/L)	12	13.4	0.0	7.4
4	DO_SAT% (%)	12	156	0	86
5	FCol-MPN (MPN/100mL)	12	340	20	124
6	Tcol-MPN (MPN/100mL)	12	5000	20	1035
	TRACE & TOXIC				
1	As (µg/L)	3	3.3	1.0	1.9
2	Cd (µg/L)	3	0.1	0.0	0
3	Cr (µg/L)	3	16.0	1.4	9.1
4	Cu (µg/L)	3	6.8	3.0	4.3
5	Ni (µg/L)	2	10.1	7.7	8.9
6	Pb (µg/L)	3	9.0	1.0	3.9
7	Zn (µg/L)	3	4.0	0.0	1.7
	CHEMICAL INDICES				
1	HAR_Ca (mgCaCO3/L)	12	130	82	109
2	HAR_Total (mgCaCO3/L)	12	200	106	172
3	Na% (%)	12	27	16	21
4	RSC (-)	12	1.1	0.0	0.4
5	SAR (-)	12	1.0	0.5	0.7
	PESTICIDES				

Water Quality Seasonal Average for the period: 2014-2018

Station Name : KEOLARI (AGH40V3)

Local River : Wainganga

River Water

Division : Wainganga Div., Nagpur

Sub-Division : Upper Wainganga SD, Nagpur

S.No	Parameters	Flood				Winter				Summer			
		Jun - Oct				Nov - Feb				Mar - May			
		2014	2015	2016	2017	2014-2015	2015-2016	2016-2017	2017-2018	2015	2016	2017	2018
	PHYSICAL												
1	Q (cumec)	25.98	38.60	120.4	19.90	0.000	5.527		6.142	0.000	2.712		3.012
2	EC_GEN (µmho/cm)	323	254	287	468	384	324	347	376	372	330	322	411
3	pH_GEN (pH units)	7.8	8.0	8.3	8.2	8.0	8.2	8.4	8.3	8.1	8.2	8.4	8.1
4	Temp (deg C)	26.6	27.0	26.0	25.6	20.8	21.5	18.3	18.0	23.7	25.7	25.7	23.7
5	Turb (NTU)	5.4				0.5				0.7			
	CHEMICAL												
1	Alk-Phen (mgCaCO3/L)	0.0	0.0	5.4	2.4	1.7	1.3	7.3	2.9	0.0	0.0	8.3	1.3
2	ALK-TOT (mgCaCO3/L)	163	117	129	197	172	157	180	173	177	170	175	201
3	B (mg/L)	0.26	0.20	0.21	0.63	0.53	0.19	0.50	0.28	0.40	0.11	0.73	0.97
4	Ca (mg/L)	37	36	28	41	47	43	45	47	39	51	33	42
5	Cl (mg/L)	10.7	13.4	14.7	14.4	8.4	15.4	10.9	20.6	14.6	12.2	17.2	20.1
6	CO3 (mg/L)	0.0	0.0	6.5	2.9	2.0	1.6	8.8	3.5	0.0	0.0	10.0	1.6
7	F (mg/L)	0.69	0.08	0.28	0.37	0.21	0.15	0.15	0.17	0.47	0.03	0.52	0.37
8	Fe (mg/L)	0.1	0.1	0.0	0.2	0.0	0.1	0.1	0.1	0.1	0.0	0.2	0.1
9	HCO3 (mg/L)	199	143	144	235	206	188	201	204	217	208	193	242
10	K (mg/L)	1.7	1.4	1.8	2.0	1.1	2.2	1.2	1.7	1.1	1.7	1.4	2.1
11	Mg (mg/L)	18.8	15.5	11.7	13.4	12.4	15.2	18.2	15.9	17.5	16.3	21.1	17.7
12	Na (mg/L)	16.2	10.8	22.7	21.4	13.9	22.2	16.3	18.8	16.7	18.4	25.8	23.3
13	NH3-N (mg N/L)	0.33	0.08	0.28	0.59	0.05	0.14	0.55	0.25	0.05	0.12	0.99	0.21
14	NO2+NO3 (mg N/L)	1.95	9.16	2.09	1.74	7.81	8.41	2.07	1.93	7.46	4.99	1.73	3.81
15	NO2-N (mgN/L)	0.00	0.01	0.03	0.04	0.00	0.04	0.01	0.02	0.02	0.17	0.04	0.01
16	NO3-N (mgN/L)	1.95	9.15	2.06	1.70	7.80	8.36	2.05	1.91	7.45	4.82	1.70	3.80
17	o-PO4-P (mg P/L)	0.134	0.086	0.099	0.789	0.166	0.065	1.663	0.093	0.257	0.098	0.636	0.269
18	SiO2 (mg/L)	20.7	23.9	27.1	26.9	12.8	22.8	28.2	24.0	42.7	40.0	27.7	20.6
19	SO4 (mg/L)	7.4	21.1	4.7	4.2	8.6	11.9	20.4	9.5	15.6	11.6	9.6	3.2

Water Quality Seasonal Average for the period: 2014-2018

Station Name : KEOLARI (AGH40V3)

Division : Wainganga Div., Nagpur

Local River : Wainganga

River Water

Sub-Division : Upper Wainganga SD, Nagpur

S.No	Parameters	Flood				Winter				Summer			
		Jun - Oct				Nov - Feb				Mar - May			
		2014	2015	2016	2017	2014-2015	2015-2016	2016-2017	2017-2018	2015	2016	2017	2018
	BIOLOGICAL/BACTERIOLOGICAL												
1	BOD3-27 (mg/L)	18.6	2.3	15.1	11.5	2.2	1.4	3.1	9.0	2.1	11.5	11.4	5.7
2	COD (mg/L)	47.8	118.7	48.1	47.6	26.3	26.1	69.9	46.8	33.3	48.9	94.3	42.3
3	DO (mg/L)	4.8	6.8	6.2	6.8	7.5	6.6	9.3	6.5	6.8	5.8	6.7	9.7
4	DO_SAT% (%)	60	85	77	83	84	75	99	69	81	72	83	114
5	FCol-MPN (MPN/100mL)	714	135	3280	94	63	90	393	138	87	90	5440	157
6	Tcol-MPN (MPN/100mL)	3758	4440	4286	784	115	680	4695	2008	387	1797	5513	157
	TRACE & TOXIC												
1	As (µg/L)			2.7	1.0		0.5	0.9	3.3	0.4	1.2	1.0	1.3
2	Cd (µg/L)			0.2	0.0	0.0	0.1	0.5	0.1	1.0	0.2	0.0	0.1
3	Cr (µg/L)			2.7	10.0	0.9	0.4	0.9	16.0	5.4	6.5	3.0	1.4
4	Cu (µg/L)			1.4	3.0	5.2	0.9	1.7	6.8		4.0	3.0	3.0
5	Hg (µg/L)									0.0			
6	Ni (µg/L)			1.9		0.2	0.1	1.0	10.1	3.3	0.2	12.0	7.7
7	Pb (µg/L)			0.9	1.0	0.7	0.2	5.4	9.0	9.0	0.5	0.0	1.6
8	Zn (µg/L)			2.4	0.0	4.0	6.4	0.4	1.1	0.0	15.4	6.0	4.0
	CHEMICAL INDICES												
1	HAR_Ca (mgCaCO3/L)	94	89	70	104	118	109	114	118	98	126	83	105
2	HAR_Total (mgCaCO3/L)	172	154	118	159	170	172	189	184	171	194	171	178
3	Na% (%)	18	14	27	23	15	21	16	18	18	18	24	22
4	RSC (-)	0.1	0.0	0.3	0.8	0.1	0.0	0.1	0.0	0.2	0.2	0.2	0.5
5	SAR (-)	0.5	0.4	0.9	0.7	0.5	0.8	0.5	0.6	0.6	0.6	0.9	0.8
	PESTICIDES												

HISTORY SHEET

		Water Year	: 2017-2018
Site	: Mancherial	Code	: AG000J3
State	: Andhra Pradesh	District	Adilabad
Basin	: Godavari	Independent River	: Godavari
Tributary	: -	Sub Tributary	: -
Sub-Sub Tributary	: -	Local River	: Godavari
Division	: Upper Godavari Div., Hyderabad	Sub-Division	: Manjira SD, Nizamabad
Drainage Area	: 102900 Sq. Km.	Bank	: Right
Latitude	: 18°50'08"	Longitude	: 79°26'41"
	Opening Date		Closing Date
Gauge	: 01.03.1964		
Discharge	: 01.06.1966		
Sediment	: 01.06.1966		
Water Quality	: 01.12.1979		

Water Quality Datasheet for the period : 2017-2018

Station Name : Mancherla (AG000J3)

Local River : Godavari

Division : Upper Godavari Div., Hyderabad

Sub-Division : Manjira SD, Nizamabad

River Water Analysis

S.No	Parameters	01.08.2017	01.09.2017	01.11.2017	01.12.2017	01.01.2018	01.02.2018	05.03.2018	02.04.2018	01.05.2018
		A	A	A	A	A	A	A	A	A
	PHYSICAL									
1	Q (cumec)	4.000	4.825	4.472	4.192	3.027	1.951	1.521	2.534	3.034
2	Colour_Cod (-)	Clear	Clear	Clear		Clear	Clear	Clear	Clear	Clear
3	EC_GEN (µmho/cm)	400	564	525	747	325	430	258	323	517
4	Odour_Code (-)	odour free	odour free	odour free		odour free	odour free	odour free	odour free	odour free
5	pH_GEN (pH units)	8.2	8.3	7.9	7.9	8.1	8.2	8.0	8.2	8.0
6	TDS (mg/L)	277	401	326	461	280	284	248	279	324
7	Temp (deg C)	26.0	26.0	25.0		16.0	15.0	28.0	26.0	32.0
8	Turb (NTU)	18.0	17.0	8.0	7.0	3.0	19.0	4.0	7.0	3.0
	CHEMICAL									
1	Alk-Phen (mgCaCO3/L)	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO3/L)	149	184	160	242	252	183	202	202	205
3	B (mg/L)			0.14	0.01	0.03	0.00	0.01	0.00	0.22
4	Ca (mg/L)	35	42	47	54	70	35	32	33	26
5	Cl (mg/L)	32.4	53.4	44.9	64.9	38.2	17.6	29.3	28.3	37.4
6	CO3 (mg/L)	0.0	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	F (mg/L)	0.59	0.35	0.55	0.66	0.61	0.63	0.68	0.76	0.71
8	Fe (mg/L)	0.7	0.2	0.1	0.7	0.0	0.4	0.0	0.1	0.3
9	HCO3 (mg/L)	182	205	195	295	308	224	247	247	250
10	K (mg/L)	0.4	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.5
11	Mg (mg/L)	11.5	29.0	22.3	31.2	31.3	25.8	31.4	19.4	19.3
12	Na (mg/L)	39.0	58.0	47.1	60.0	46.9	38.4	36.1	43.2	47.0
13	NH3-N (mg N/L)	0.04	0.03	4.06	0.02	0.01	0.97	0.08	0.05	0.15
14	NO2+NO3 (mg N/L)	5.34	4.00	8.29	7.13	6.49	3.23	3.75	6.56	4.11
15	NO2-N (mgN/L)	0.01	0.40	0.04	0.26	0.05	0.02	0.02	0.03	0.02
16	NO3-N (mgN/L)	5.33	3.59	8.25	6.87	6.44	3.21	3.73	6.53	4.09
17	o-PO4-P (mg P/L)	0.020	0.480	0.430	0.650	0.420	0.460	0.640	1.100	0.750
18	SiO2 (mg/L)	17.8	20.3	22.0	21.8	22.6	19.9	21.3	5.4	15.7
19	SO4 (mg/L)	42.8	64.0	80.1	115.0	65.6	19.0	19.4	15.5	12.2

Water Quality Datasheet for the period : 2017-2018

Station Name : Mancherla (AG000J3)

Local River : Godavari

Division : Upper Godavari Div., Hyderabad

Sub-Division : Manjira SD, Nizamabad

River Water Analysis

S.No	Parameters	01.08.2017	01.09.2017	01.11.2017	01.12.2017	01.01.2018	01.02.2018	05.03.2018	02.04.2018	01.05.2018
		A	A	A	A	A	A	A	A	A
	BIOLOGICAL/BACTERIOLOGICAL									
1	BOD3-27 (mg/L)	1.6	1.3	1.2	0.2	0.6	2.3	1.8	0.5	1.1
2	COD (mg/L)	34.9	3.8	65.6	1.3	3.1	6.1	38.0	6.1	16.5
3	DO (mg/L)	6.5	6.6	6.2	6.1	8.1	7.0	7.2	6.1	7.3
4	DO_SAT% (%)	80	81	75		82	69	92	75	100
5	FCol-MPN (MPN/100mL)	270	16000	16000	20	170	340	70	70	
6	Tcol-MPN (MPN/100mL)	270	16000	16000	80	800	3000	170	800	
	TRACE & TOXIC									
1	As (µg/L)								1.5	
2	Cd (µg/L)								1.2	
3	Cr (µg/L)								0.0	
4	Cu (µg/L)	2.0		5.0	5.0	3.0	4.0	5.0	8.2	2.0
5	Hg (µg/L)								0.1	
6	Ni (µg/L)								3.8	
7	Pb (µg/L)								9.0	
8	Zn (µg/L)	93.9	50.0	66.0	22.0	136.8	32.9	26.9	49.8	43.0
	CHEMICAL INDICES									
1	HAR_Ca (mgCaCO3/L)	88	106	117	134	174	88	79	82	65
2	HAR_Total (mgCaCO3/L)	136	227	210	264	304	195	210	163	145
3	Na% (%)	38	36	33	33	25	30	27	37	41
4	RSC (-)	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.2
5	SAR (-)	1.5	1.7	1.4	1.6	1.2	1.2	1.1	1.5	1.7
	PESTICIDES									

Water Quality Summary for the period : 2017-2018

Station Name : Mancherla (AG000J3)

Division : Upper Godavari Div., Hyderabad

Local River : Godavari

Sub-Division : Manjira SD, Nizamabad

River Water Summary

S.No	Parameters	Observations	Maximum	Minimum	Mean
	PHYSICAL				
1	Q (cumec)	368	236.6	0.000	7.294
2	EC_GEN (µmho/cm)	9	747	258	454
3	pH_GEN (pH units)	9	8.3	7.9	8.1
4	TDS (mg/L)	9	461	248	320
5	Temp (deg C)	8	32.0	15.0	24.3
6	Turb (NTU)	9	19.0	3.0	9.6
	CHEMICAL				
1	Alk-Phen (mgCaCO3/L)	9	8.0	0.0	0.9
2	ALK-TOT (mgCaCO3/L)	9	252	149	198
3	B (mg/L)	7	0.22	0.00	0.06
4	Ca (mg/L)	9	70	26	41
5	Cl (mg/L)	9	64.9	17.6	38.5
6	CO3 (mg/L)	9	9.6	0.0	1.1
7	F (mg/L)	9	0.76	0.35	0.61
8	Fe (mg/L)	9	0.7	0.0	0.3
9	HCO3 (mg/L)	9	308	182	239
10	K (mg/L)	9	0.5	0.4	0.4
11	Mg (mg/L)	9	31.4	11.5	24.6
12	Na (mg/L)	9	60.0	36.1	46.2
13	NH3-N (mg N/L)	9	4.06	0.01	0.6
14	NO2+NO3 (mg N/L)	9	8.29	3.23	5.43
15	NO2-N (mgN/L)	9	0.40	0.01	0.1
16	NO3-N (mgN/L)	9	8.25	3.21	5.34
17	o-PO4-P (mg P/L)	9	1.100	0.020	0.55
18	SiO2 (mg/L)	9	22.6	5.4	18.5
19	SO4 (mg/L)	9	115.0	12.2	48.2
	BIOLOGICAL/BACTERIOLOGICAL				
1	BOD3-27 (mg/L)	9	2.3	0.2	1.2
2	COD (mg/L)	9	65.6	1.3	19.5
3	DO (mg/L)	9	8.1	6.1	6.8
4	DO_SAT% (%)	8	100	69	82
5	FCol-MPN (MPN/100mL)	8	16000	20	4118
6	Tcol-MPN (MPN/100mL)	8	16000	80	4640
	TRACE & TOXIC				
1	As (µg/L)	1	1.5	1.5	1.5
2	Cd (µg/L)	1	1.2	1.2	1.2
3	Cr (µg/L)	1	0.0	0.0	0
4	Cu (µg/L)	8	8.2	2.0	4.3
5	Hg (µg/L)	1	0.1	0.1	0.1
6	Ni (µg/L)	1	3.8	3.8	3.8
7	Pb (µg/L)	1	9.0	9.0	9
8	Zn (µg/L)	9	136.8	22.0	57.9
	CHEMICAL INDICES				
1	HAR_Ca (mgCaCO3/L)	9	174	65	104
2	HAR_Total (mgCaCO3/L)	9	304	136	206
3	Na% (%)	9	41	25	33
4	RSC (-)	9	1.2	0.0	0.3
5	SAR (-)	9	1.7	1.1	1.4
	PESTICIDES				

Water Quality Seasonal Average for the period: 2004-2018

Station Name : Mancherla (AG000J3)

Local River : Godavari

River Water

Division : Upper Godavari Div., Hyderabad

Sub-Division : Manjira SD, Nizamabad

S.No	Parameters	Flood													
		Jun - Oct													
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	PHYSICAL														
1	Q (cumec)	18.41	289.5	367.5	129.0	53.74	55.37	1143	196.9	181.3	1162	34.58	81.02	979.4	4.413
2	EC_FLD (µmho/cm)				514										
3	EC_GEN (µmho/cm)	421	357	462	479	515	458	289	482	524	468	592	396	385	482
4	pH_FLD (pH units)				8.5										
5	pH_GEN (pH units)	8.6	8.5	8.6	8.6	8.5	8.3	7.5	8.5	8.2	7.3	7.7	6.9	8.1	8.3
6	TDS (mg/L)					320	270	191	374	383	295	387	303	304	339
7	Temp (deg C)	26.2	28.3	26.9	26.4	26.0	25.9	26.3	26.0	26.6	25.5	26.5	25.6	24.9	26.0
8	Turb (NTU)					2.3	6.0	41.3	0.3	13.2	2.6	5.4	8.0	54.8	17.5
	CHEMICAL														
1	Alk-Phen (mgCaCO3/L)	9.4	8.3	14.2	13.1	14.9	8.7	4.1	13.7	0.0	0.0	0.0	0.0	1.5	4.0
2	ALK-TOT (mgCaCO3/L)	182	136	183	159	177	157	109	179	178	151	203	180	173	166
3	B (mg/L)	0.67	0.05	0.14	0.08	0.11	0.18	0.20	0.15	0.19	0.13	0.24	0.09		
4	Ca (mg/L)	38	31	38	21	28	29	25	30	37	33	35	32	32	39
5	Cl (mg/L)	41.1	17.6	35.6	36.0	45.7	41.0	19.1	38.8	39.8	18.8	42.0	33.0	21.5	42.9
6	CO3 (mg/L)	11.3	9.9	17.1	15.8	17.9	10.5	4.9	16.5	0.0	0.0	0.0	0.0	1.8	4.8
7	F (mg/L)	0.75	0.57	0.75	0.92	0.87	0.80	0.36	0.67	0.75	0.67	0.82	0.69	0.34	0.47
8	Fe (mg/L)	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.0	0.1	0.4
9	HCO3 (mg/L)	199	145	189	162	179	170	124	185	217	184	247	219	208	193
10	K (mg/L)	3.6	2.8	2.9	3.0	3.3	3.2	2.8	3.2	3.2	3.1	3.6	3.5	3.5	0.5
11	Mg (mg/L)	8.8	9.7	11.3	22.0	24.9	18.9	10.3	20.4	18.8	18.7	19.6	17.9	17.4	20.3
12	Na (mg/L)	52.6	20.3	43.4	45.3	33.2	31.7	15.0	38.2	35.1	28.5	62.4	52.6	32.5	48.5
13	NH3-N (mg N/L)	0.02	0.04	0.05	1.08	0.04	0.15	0.07	0.20	0.02	0.12	0.07	0.02	0.04	0.03
14	NO2+NO3 (mg N/L)	0.48	0.85	0.47	0.71	0.85	0.36	0.73	0.80	0.32	0.37	0.37	0.31	0.86	4.67
15	NO2-N (mgN/L)	0.01	0.05	0.01	0.01	0.12	0.04	0.04	0.01	0.00	0.00	0.02	0.02	0.28	0.21
16	NO3-N (mgN/L)	0.48	0.81	0.46	0.70	0.73	0.32	0.69	0.79	0.32	0.37	0.35	0.29	0.57	4.46
17	o-PO4-P (mg P/L)	0.065	0.012			0.008	0.019	0.026	0.036	0.151	0.035	0.163	0.150	0.026	0.250
18	P-Tot (mgP/L)			0.032	0.009										
19	SiO2 (mg/L)	16.5	21.8	17.6	21.5	15.2	15.0	15.5	26.2	16.1	13.9	19.4	12.9	15.7	19.0
20	SO4 (mg/L)	35.4	15.5	15.6	25.0	26.3	23.3	12.9	27.8	27.5	22.2	40.6	36.4	18.6	53.4

Water Quality Seasonal Average for the period: 2004-2018

Station Name : Mancherla (AG000J3)

Division : Upper Godavari Div., Hyderabad

Local River : Godavari

River Water

Sub-Division : Manjira SD, Nizamabad

S.No	Parameters	Flood													
		Jun - Oct													
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	BIOLOGICAL/BACTERIOLOGICAL														
1	BOD3-27 (mg/L)	1.3	1.3	1.0	0.6	0.5	0.4	1.2	1.0	1.2	2.1	1.0	1.0	1.4	1.4
2	COD (mg/L)	16.3	13.0	11.3	17.7	2.3	2.5	8.0	8.2	15.2	9.0	11.6	11.9	6.6	19.3
3	DO (mg/L)	6.3	6.4	6.5	5.9	5.6	5.7	6.6	6.2	6.3	6.4	5.3		5.4	6.5
4	DO_SAT% (%)	77	82	81	73	69	71	82	76	79	78	65		65	81
5	FCol-MPN (MPN/100mL)	135	470	8720	1152	5417	3048	9133	11660	2028	558	3778	2135	9268	8135
6	Tcol-MPN (MPN/100mL)	245	470	10560	1924	5417	7580	12333	13280	3688	5358	4368	10600	13250	8135
7	TOC (mg/L)	5.1			2.1	4.5	2.6	2.1	2.7	3.1	4.1	20.6	15.6		
	TRACE & TOXIC														
1	As (µg/L)	1.0								10.9	7.6				
2	Cd (µg/L)	0.3			1.7					1.0	0.4				
3	Cr (µg/L)	5.3			22.4					1.4	1.4				
4	Cu (µg/L)	2.7								11.3	3.3				2.0
5	Hg (µg/L)				1.0						0.5				
6	Mn (mg/L)	0.00													
7	Ni (µg/L)				7.7					6.3	12.6				
8	Pb (µg/L)	4.0			17.9					0.0	1.6				
9	Se (µg/L)														
10	Zn (µg/L)	48.5			135.8					1.0	0.0				72.0
	CHEMICAL INDICES														
1	HAR_Ca (mgCaCO3/L)	96	77	96	53	71	73	63	74	92	83	87	80	79	97
2	HAR_Total (mgCaCO3/L)	132	117	143	145	175	152	107	159	170	161	169	154	152	181
3	Na% (%)	45	25	38	40	29	30	22	34	28	27	44	42	31	37
4	RSC (-)	1.0	0.5	0.8	0.5	0.1	0.1	0.1	0.4	0.5	0.0	0.7	0.5	0.5	0.1
5	SAR (-)	2.0	0.8	1.6	1.6	1.1	1.1	0.6	1.3	1.1	1.0	2.1	1.8	1.2	1.6
	PESTICIDES														
1	Aldrin (µg/L)				0.0										
2	BHC (µg/L)	0.1			0.1										
3	DDT (µg/L)	0.1			0.1										
4	Dieldrin (µg/L)	0.1			0.0										
5	Endos (µg/L)	0.1			0.1										

Water Quality Seasonal Average for the period: 2004-2018

Station Name : Mancherla (AG000J3)

Division : Upper Godavari Div., Hyderabad

Local River : Godavari

River Water

Sub-Division : Manjira SD, Nizamabad

S.No	Parameters	Winter													
		Nov - Feb													
		2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
	PHYSICAL														
1	Q (cumec)	13.96	51.93	40.73	16.49	17.99	7.149	87.80	30.41	29.22	66.33	21.57	24.11	41.66	3.411
2	EC_FLD (µmho/cm)				917										
3	EC_GEN (µmho/cm)	411	583	605	590	537	551	493	512	547	618	415	728	477	507
4	pH_FLD (pH units)				8.6										
5	pH_GEN (pH units)	8.4	8.5	8.7	8.4	8.4	8.5	8.4	8.4	7.9	7.4	7.6	8.1	8.1	8.0
6	TDS (mg/L)					340	319	306	344	352	365	307	237	275	338
7	Temp (deg C)	19.5	22.0	26.1	20.8	19.1	23.1	26.3	21.1	23.3	17.5	16.1	20.3	19.1	18.7
8	Turb (NTU)					0.5	1.2	3.4	0.0	2.3	5.8	0.8	3.0	2.8	9.3
	CHEMICAL														
1	Alk-Phen (mgCaCO3/L)	5.9	9.9	9.6	13.4	9.4	15.7	12.3	6.2	0.0	0.0	0.0	0.9	4.4	0.0
2	ALK-TOT (mgCaCO3/L)	196	232	204	233	204	225	180	216	191	222	193	167	184	209
3	B (mg/L)	0.18	0.13	0.07	0.24	0.03	0.20	0.19	0.17	0.13	0.09	0.18	0.00		0.04
4	Ca (mg/L)	30	56	35	28	33	39	32	35	49	41	38	31	40	51
5	Cl (mg/L)	25.3	26.3	44.5	37.3	47.5	48.0	40.0	32.3	35.8	31.3	38.9	20.3	28.5	41.4
6	CO3 (mg/L)	7.1	11.9	11.6	16.1	11.3	19.0	14.8	7.5	0.0	0.0	0.0	1.0	5.3	0.0
7	F (mg/L)	0.94	1.00	0.31	1.23	0.94	0.96	0.60	0.89	0.74	0.77	0.74	0.51	0.35	0.61
8	Fe (mg/L)	0.0	0.1	0.1	0.2	0.3	0.4	0.3	0.2	0.0	0.0	0.1	0.0	0.0	0.3
9	HCO3 (mg/L)	225	259	226	252	226	236	189	248	233	270	236	202	214	255
10	K (mg/L)	2.7	2.7	2.4	2.2	2.7	2.3	3.0	2.4	2.4	3.0	3.2	3.2	4.7	0.4
11	Mg (mg/L)	14.1	10.6	23.5	28.4	24.8	28.9	21.1	21.4	20.3	23.7	18.0	16.2	19.8	27.6
12	Na (mg/L)	47.3	41.8	53.3	50.7	36.8	37.0	35.1	44.1	46.1	50.7	57.7	33.4	48.8	48.1
13	NH3-N (mg N/L)	0.04	0.06	0.05	0.11	0.13	0.05	0.13	0.16	0.01	0.07	0.06	0.01	0.01	1.26
14	NO2+NO3 (mg N/L)	0.64	0.33	2.54	0.65	0.31	0.06	0.19	0.28	1.00	0.46	0.18	0.52	0.40	6.29
15	NO2-N (mgN/L)	0.01	0.01	0.00	0.08	0.03	0.01	0.02	0.03	0.00	0.00	0.04	0.01	0.04	0.09
16	NO3-N (mgN/L)	0.63	0.33	2.54	0.57	0.27	0.05	0.18	0.25	1.00	0.46	0.14	0.52	0.36	6.19
17	o-PO4-P (mg P/L)	0.019	0.018			0.006	0.027	0.023	0.025	0.066	0.053	0.087	0.061	0.054	0.490
18	P-Tot (mgP/L)			0.011	0.102										
19	SiO2 (mg/L)	12.5	21.8	20.8	16.9	16.3	17.0	34.3	11.2	21.2	18.6	17.2	15.2	15.7	21.6
20	SO4 (mg/L)	17.3	21.8	23.8	25.5	18.5	21.4	20.8	22.6	26.6	31.8	44.4	23.2	39.4	69.9

Water Quality Seasonal Average for the period: 2004-2018

Station Name : Mancherla (AG000J3)

Division : Upper Godavari Div., Hyderabad

Local River : Godavari

River Water

Sub-Division : Manjira SD, Nizamabad

S.No	Parameters	Winter													
		Nov - Feb													
		2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
	BIOLOGICAL/BACTERIOLOGICAL														
1	BOD3-27 (mg/L)	0.9	0.8	0.4	0.7	0.6	0.8	0.9	0.3	1.5	0.9	1.7	0.8	2.6	1.1
2	COD (mg/L)	40.6	21.5	53.1	43.0	2.7	4.7	5.9	9.8	11.6	5.7	11.4	7.8	9.8	19.0
3	DO (mg/L)	6.0	7.4	6.9	6.9	6.3	6.6	6.8	6.4	6.3	6.5	6.2		7.4	6.9
4	DO_SAT% (%)	65	85	85	76	68	77	84	71	73	68	63		80	76
5	FCol-MPN (MPN/100mL)	5515	6273	6210	868	4138	13250	16000	4420	716	63	773	2968	4635	4133
6	Tcol-MPN (MPN/100mL)	12115	10680	10833	1018	4205	16000	16000	5258	4700	111	2800	9050	5110	4970
7	TOC (mg/L)	14.9			1.0	2.8	2.5	2.2	2.0	1.3	4.3	28.1	4.5		
	TRACE & TOXIC														
1	As (µg/L)						0.2		0.2						
2	Cd (µg/L)	0.0		88.0		1.0	0.7	0.0	0.0			0.6			
3	Cr (µg/L)	0.0		12.0		0.0	0.0	0.3	0.7			4.8			
4	Cu (µg/L)	0.0							9.0			1.5		1.0	4.3
5	Hg (µg/L)			0.3											
6	Mn (mg/L)	3.75													
7	Ni (µg/L)			9.0		1.9	1.4	2.4	1.4			0.3			
8	Pb (µg/L)	1.0		130.0		8.0	10.9	0.0	0.8			4.6			
9	Se (µg/L)														
10	Zn (µg/L)	0.1		439.0		17.4	12.5	23.0	11.0			4.0		0.1	64.4
	CHEMICAL INDICES														
1	HAR_Ca (mgCaCO3/L)	75	139	89	71	83	98	81	88	122	102	96	77	99	128
2	HAR_Total (mgCaCO3/L)	133	183	186	189	187	218	169	177	206	200	171	144	182	243
3	Na% (%)	43	33	38	36	30	27	31	35	34	35	41	33	37	30
4	RSC (-)	1.3	1.0	0.4	0.9	0.4	0.2	0.3	0.8	0.2	0.5	0.6	0.5	0.2	0.0
5	SAR (-)	1.8	1.3	1.7	1.6	1.2	1.1	1.2	1.4	1.5	1.6	1.9	1.2	1.6	1.4
	PESTICIDES														
1	Aldrin (µg/L)			0.0		0.0	0.1	0.0	0.0						
2	BHC (µg/L)	0.1		0.1		0.0	0.3	0.0	0.0						
3	DDT (µg/L)	0.1		0.1		0.0	0.0	0.0	0.0						
4	Dieldrin (µg/L)	0.1		0.0		0.0	0.1	0.0	0.0						
5	Endos (µg/L)	0.1		0.1		0.1	0.0	0.0	0.0						

Water Quality Seasonal Average for the period: 2004-2018

Station Name : Mancherla (AG000J3)

Division : Upper Godavari Div., Hyderabad

Local River : Godavari

River Water

Sub-Division : Manjira SD, Nizamabad

S.No	Parameters	Summer														
		Mar - May														
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	PHYSICAL															
1	Q (cumec)	2.919	0.697	11.72	18.19	16.34	9.919		24.05	4.200	15.99	23.09	3.391	8.454	6.737	2.363
2	EC_FLD (µmho/cm)															
3	EC_GEN (µmho/cm)	505	431	548	551	644	609		488	591	599	596	516	642	362	366
4	pH_FLD (pH units)															
5	pH_GEN (pH units)	8.6	8.2	8.5	8.6	8.7	8.3		8.3	8.6	8.1	7.8	7.6	8.0	8.1	8.1
6	TDS (mg/L)						379		362	420	367	377	283	266	251	284
7	Temp (deg C)	22.0	24.5	25.7	27.7	22.7	24.2		28.0	28.3	25.3	22.0	20.3	23.0	26.3	28.7
8	Turb (NTU)						0.2		1.1	0.3	0.7	5.0	2.0	12.5	14.5	4.7
	CHEMICAL															
1	Alk-Phen (mgCaCO3/L)	14.6	0.0	5.3	5.3	11.4	13.8		14.7	4.2	1.4	0.0	0.0	0.0	4.7	0.0
2	ALK-TOT (mgCaCO3/L)	310	191	231	187	225	198		199	210	218	215	173	172	170	203
3	B (mg/L)	0.08	0.44	0.12	0.10	0.13	0.52		0.15	0.03	0.21	0.15	0.06			0.08
4	Ca (mg/L)	50	28	57	26	20	29		26	30	37	38	33	31	47	30
5	Cl (mg/L)	47.0	28.6	33.3	42.0	50.3	60.6		45.4	45.6	39.6	36.6	24.5	21.7	22.1	31.7
6	CO3 (mg/L)	17.5	0.0	6.3	6.3	13.8	16.7		17.7	5.1	1.7	0.0	0.0	0.0	5.7	0.0
7	F (mg/L)	0.96	1.02	0.87	0.42	1.05	0.96		0.77	0.72	0.88	0.82	0.81	0.47	0.66	0.72
8	Fe (mg/L)	0.0	0.1	0.1	0.1	0.3	0.2		0.6	0.1	0.2	0.0	0.0	0.0	0.0	0.1
9	HCO3 (mg/L)	236	233	268	215	246	208		207	246	262	262	211	210	196	248
10	K (mg/L)	2.2	2.4	2.4	1.9	2.9	3.5		3.0	3.4	3.1	3.4	3.1	3.6	3.6	0.5
11	Mg (mg/L)	18.7	13.2	11.8	28.7	29.7	26.9		27.0	18.1	20.8	21.4	18.9	17.0	19.3	23.4
12	Na (mg/L)	43.0	51.0	45.3	49.1	66.2	48.0		48.7	54.7	55.8	50.9	44.5	35.9	31.9	42.1
13	NH3-N (mg N/L)	0.34	0.07	0.06	0.05	0.31	0.24		0.17	0.04	0.03	0.05	0.02	0.03	0.35	0.09
14	NO2+NO3 (mg N/L)	0.00	0.56	0.21	0.59	0.43	0.29		0.18	0.20	0.84	0.47	0.04	0.89	0.97	4.81
15	NO2-N (mgN/L)		0.00	0.00	0.02	0.06	0.02		0.01	0.02	0.00	0.00	0.00	0.02	0.00	0.02
16	NO3-N (mgN/L)	0.00	0.56	0.21	0.57	0.37	0.27		0.17	0.18	0.84	0.47	0.03	0.87	0.97	4.78
17	o-PO4-P (mg P/L)	0.057	0.007	0.012			0.000		0.040	0.053	0.054	0.031	0.170	0.119	0.035	0.830
18	P-Tot (mgP/L)				0.134	0.241										
19	SiO2 (mg/L)	16.0	5.0	17.3	20.3	16.7	18.0		36.6	15.4	20.8	18.4	17.1	20.9	18.4	14.1
20	SO4 (mg/L)	28.5	17.0	26.7	24.7	32.0	22.3		27.3	29.0	20.7	30.5	23.0	19.8	23.0	15.7

Water Quality Seasonal Average for the period: 2004-2018

Station Name : Mancherial (AG000J3)

Division : Upper Godavari Div., Hyderabad

Local River : Godavari

River Water

Sub-Division : Manjira SD, Nizamabad

S.No	Parameters	Summer														
		Mar - May														
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	BIOLOGICAL/BACTERIOLOGICAL															
1	BOD3-27 (mg/L)	0.5	2.3	0.4	0.4	0.8	1.1		1.1	0.8	1.8	1.2	0.8	1.4	1.6	1.1
2	COD (mg/L)	38.0	65.8	23.5	21.0	7.3	8.6		4.7	7.4	6.2	4.9	6.2	6.8	5.9	20.2
3	DO (mg/L)	5.8	4.8	5.5	6.0	5.9	5.3		6.4	7.0	7.3	5.3	6.2		6.5	6.9
4	DO_SAT% (%)	66	57	68	75	67	62		82	90	89	61	67		80	89
5	FCol-MPN (MPN/100mL)	70		5907	1467	2900	1857		8370	5437	84	5423	30	2250	8150	70
6	Tcol-MPN (MPN/100mL)	110		6580	1567	5050	2723		10720	5643	511	5523	8070	9100	8250	485
7	TOC (mg/L)		3.3			2.7	3.2		3.2	3.0	3.2	14.7	24.6			
	TRACE & TOXIC															
1	As (µg/L)									0.6	2.6	3.0	0.7	0.8	0.9	1.5
2	Cd (µg/L)	4.0	0.0	1.0	3.0	0.8	1.7		0.0	0.0	0.9	0.0	14.8	0.0	0.0	1.2
3	Cr (µg/L)	2.0	0.0	6.0	2.0	7.1	0.0		0.0	0.8	0.6	0.5	0.0	0.0	0.0	0.0
4	Cu (µg/L)	2.5	0.0							5.7	0.5	2.4			2.0	5.1
5	Hg (µg/L)				1.3	0.7				0.0	0.6	0.5	0.0	0.0	0.5	0.1
6	Mn (mg/L)		0.01													
7	Ni (µg/L)			8.0	13.0	5.5	0.9		2.0	4.2	4.1	4.1	6.3	0.0	4.3	3.8
8	Pb (µg/L)	43.8	1.0	45.0	43.0	19.9	23.0		22.8	4.2	0.7	3.4	11.0	0.0	0.0	9.0
9	Se (µg/L)															
10	Zn (µg/L)		7.0	79.0	54.0	66.6	9.1		11.4	6.3	0.3	5.5	6.0	2.3	11.9	39.9
	CHEMICAL INDICES															
1	HAR_Ca (mgCaCO3/L)	125	70	143	64	49	73		66	76	92	94	83	78	118	75
2	HAR_Total (mgCaCO3/L)	202	124	192	184	173	184		178	152	178	183	162	148	198	173
3	Na% (%)	32	47	33	37	45	36		37	44	40	37	37	34	26	35
4	RSC (-)	0.4	1.3	0.8	0.1	1.1	0.3		0.5	1.2	0.8	0.7	0.3	0.5	0.0	0.7
5	SAR (-)	1.3	2.0	1.4	1.6	2.2	1.5		1.6	2.0	1.8	1.6	1.5	1.3	1.0	1.4
	PESTICIDES															
1	Aldrin (µg/L)			0.0	0.0	0.0	0.0		0.0	0.0						
2	BHC (µg/L)	0.1	0.1	0.0	0.1	0.0	0.0		0.1	0.0						
3	DDT (µg/L)	0.1	0.1	0.0	0.1	0.0	0.0		0.0	0.0						
4	Dieldrin (µg/L)	0.1	0.1	0.1	0.0	0.0	0.0		0.0	0.0						
5	Endos (µg/L)	0.1	0.1	0.0	0.1	0.0	0.0		0.1	0.0						

HISTORY SHEET

		Water Year	: 2017-2018
Site	: Gandlapet	Code	: AGM00G6
State	: Andhra Pradesh	District	Nizamabad
Basin	: Godavari	Independent River	: Godavari
Tributary	: Peddavagu	Sub Tributary	: -
Sub-Sub Tributary	: -	Local River	: Peddavagu
Division	: Upper Godavari Div., Hyderabad	Sub-Division	: Manjira SD, Nizamabad
Drainage Area	: 1360 Sq. Km.	Bank	: Right
Latitude	: 18°49'44"	Longitude	: 78°26'12"
	Opening Date	Closing Date	
Gauge	: 18.07.1986		
Discharge	: 10.09.1986		
Sediment	:		
Water Quality	: 31.07.1988		

Water Quality Datasheet for the period : 2017-2018

Station Name : Gandlapet (AGM00G6)

Division : Upper Godavari Div., Hyderabad

Local River : Peddavagu

River Water Analysis

Sub-Division : Manjira SD, Nizamabad

S.No	Parameters
	PHYSICAL
1	Q (cumec)
2	Colour_Cod (-)
3	EC_GEN (µmho/cm)
4	Odour_Code (-)
5	pH_GEN (pH units)
6	TDS (mg/L)
7	Temp (deg C)
8	Turb (NTU)
	CHEMICAL
1	Alk-Phen (mgCaCO3/L)
2	ALK-TOT (mgCaCO3/L)
3	B (mg/L)
4	Ca (mg/L)
5	Cl (mg/L)
6	CO3 (mg/L)
7	F (mg/L)
8	Fe (mg/L)
9	HCO3 (mg/L)
10	K (mg/L)
11	Mg (mg/L)
12	Na (mg/L)
13	NH3-N (mg N/L)
14	NO2+NO3 (mg N/L)
15	NO2-N (mgN/L)
16	NO3-N (mgN/L)
17	o-PO4-P (mg P/L)
18	SiO2 (mg/L)
19	SO4 (mg/L)
	BIOLOGICAL/BACTERIOLOGICAL
1	BOD3-27 (mg/L)
2	COD (mg/L)
3	DO (mg/L)
4	DO_SAT% (%)
5	Fcol-MPN (MPN/100mL)
6	Tcol-MPN (MPN/100mL)
	TRACE & TOXIC
1	As (µg/L)
2	Cd (µg/L)
3	Cr (µg/L)
4	Cu (µg/L)
5	Hg (µg/L)
6	Ni (µg/L)
7	Pb (µg/L)
8	Zn (µg/L)
	CHEMICAL INDICES
1	HAR_Ca (mgCaCO3/L)
2	HAR_Total (mgCaCO3/L)
3	Na% (%)
4	RSC (-)
5	SAR (-)
	PESTICIDES

No flow /Insufficient depth during sampling days

HISTORY SHEET

		Water Year	: 2017-2018
Site	: Saigaon	Code	: AGP00N8
State	: Karnataka	District	Bidar
Basin	: Godavari	Independent River	: Godavari
Tributary	: Manjira	Sub Tributary	: -
Sub-Sub Tributary	: -	Local River	: Manjira
Division	: Upper Godavari Div., Hyderabad	Sub-Division	: Manjira SD, Nizamabad
Drainage Area	: 9960 Sq. Km.	Bank	: Right
Latitude	: 18°04'33"	Longitude	: 77°03'09"
	Opening Date	Closing Date	
Gauge	: 01.08.1964		
Discharge	: 10.11.1967		
Sediment	: 19.07.1973		
Water Quality	: 16.08.1973		

Water Quality Datasheet for the period : 2017-2018

Station Name : Saigaon (AGP00N8)

Division : Upper Godavari Div., Hyderabad

Local River : Manjira

River Water Analysis

Sub-Division : Manjira SD, Nizamabad

S.No	Parameters	
	PHYSICAL	No flow /Insufficient depth during sampling days
1	Q (cumec)	
2	Colour_Cod (-)	
3	EC_GEN (µmho/cm)	
4	Odour_Code (-)	
5	pH_GEN (pH units)	
6	TDS (mg/L)	
7	Temp (deg C)	
8	Turb (NTU)	
	CHEMICAL	
1	Alk-Phen (mgCaCO3/L)	
2	ALK-TOT (mgCaCO3/L)	
3	B (mg/L)	
4	Ca (mg/L)	
5	Cl (mg/L)	
6	CO3 (mg/L)	
7	F (mg/L)	
8	Fe (mg/L)	
9	HCO3 (mg/L)	
10	K (mg/L)	
11	Mg (mg/L)	
12	Na (mg/L)	
13	NH3-N (mg N/L)	
14	NO2+NO3 (mg N/L)	
15	NO2-N (mgN/L)	
16	NO3-N (mgN/L)	
17	o-PO4-P (mg P/L)	
18	SiO2 (mg/L)	
19	SO4 (mg/L)	
	BIOLOGICAL/BACTERIOLOGICAL	
1	BOD3-27 (mg/L)	
2	COD (mg/L)	
3	DO (mg/L)	
4	DO_SAT% (%)	
5	FCol-MPN (MPN/100mL)	
6	Tcol-MPN (MPN/100mL)	
	TRACE & TOXIC	
1	As (µg/L)	
2	Cd (µg/L)	
3	Cr (µg/L)	
4	Cu (µg/L)	
5	Hg (µg/L)	
6	Ni (µg/L)	
7	Pb (µg/L)	
8	Zn (µg/L)	
	CHEMICAL INDICES	
1	HAR_Ca (mgCaCO3/L)	
2	HAR_Total (mgCaCO3/L)	
3	Na% (%)	
4	RSC (-)	
5	SAR (-)	
	PESTICIDES	

Water Quality Seasonal Average for the period: 2003-2018

Station Name : Saigaon (AGP00N8)
Local River : Manjira

River Water

Division : Upper Godavari Div., Hyderabad
Sub-Division : Manjira SD, Nizamabad

S.No	Parameters	Flood													
		Jun - Oct													
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	PHYSICAL														
1	Q (cumec)	18.95	20.43	83.49	36.17	33.47	1.229	171.6	96.65	0.394	19.48				
2	EC_GEN (µmho/cm)	289	437	380	291	316	254	436	415	322	541				
3	pH_GEN (pH units)	7.9	8.2	8.2	8.4	8.2	8.2	8.0	7.9	8.7	8.1				
4	TDS (mg/L)					192	153	274	310	300	321				
5	Temp (deg C)	23.0	25.0	25.3	25.3	24.5	26.0	27.0	26.3	26.0	30.3				
6	Turb (NTU)					28.4	8.4	5.0	0.8	4.0	1.8				
	CHEMICAL														
1	Alk-Phen (mgCaCO3/L)	0.0	2.8	5.0	6.8	0.0	5.9	2.7	4.1	0.1	0.0				
2	ALK-TOT (mgCaCO3/L)	105	160	146	87	98	77	169	148	104	194				
3	B (mg/L)	0.30	0.11	0.07	0.15	0.10	0.23	0.15	0.10	0.26	0.04				
4	Ca (mg/L)	26	44	37	25	27	20	40	37	28	42				
5	Cl (mg/L)	15.7	31.5	20.0	28.0	25.9	22.7	30.9	18.3	22.5	35.9				
6	CO3 (mg/L)	0.0	3.4	6.0	8.2	0.0	7.1	3.3	4.9	0.2	0.0				
7	F (mg/L)	0.45	0.34	0.20	0.38	0.35	0.27	0.39	0.38	0.30	0.45				
8	Fe (mg/L)	0.3	0.1	0.1	0.1	0.3	0.2	0.2	0.3	0.1	0.1				
9	HCO3 (mg/L)	128	188	167	90	120	80	199	171	127	237				
10	K (mg/L)	3.8	4.5	5.7	2.7	4.1	3.1	4.3	3.4	3.0	4.5				
11	Mg (mg/L)	4.4	11.2	10.7	10.5	13.5	8.9	17.5	14.4	15.5	29.7				
12	Na (mg/L)	17.0	24.0	22.0	18.3	17.5	14.3	21.8	16.4	21.0	31.7				
13	NH3-N (mg N/L)	0.05	0.04	0.05	0.05	0.10	0.03	0.07	0.10	0.01	0.10				
14	NO2+NO3 (mg N/L)	0.88	1.08	1.05	1.14	1.25	0.55	1.83	1.73	1.49	1.44				
15	NO2-N (mgN/L)		0.02	0.00	0.02	0.17	0.07	0.06	0.02	0.00	0.00				
16	NO3-N (mgN/L)	0.88	1.06	1.04	1.12	1.08	0.48	1.77	1.71	1.49	1.44				
17	o-PO4-P (mg P/L)	0.010	0.020			0.006	0.012	0.019	0.022	0.010	0.049				
18	P-Tot (mgP/L)			0.025	0.046										
19	SiO2 (mg/L)	17.0	20.3	14.8	13.3	11.2	11.1	20.9	13.4	12.8	15.7				
20	SO4 (mg/L)	6.0	9.7	2.5	15.8	16.5	15.6	21.0	15.0	16.2	38.0				

Water Quality Seasonal Average for the period: 2003-2018

Station Name : Saigaon (AGP00N8)

Division : Upper Godavari Div., Hyderabad

Local River : Manjira

River Water

Sub-Division : Manjira SD, Nizamabad

S.No	Parameters	Flood													
		Jun - Oct													
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	BIOLOGICAL/BACTERIOLOGICAL														
1	BOD3-27 (mg/L)	0.3	1.9	1.3	1.2	1.0	0.5	1.1	0.7	0.9	1.9				
2	COD (mg/L)	1.0	63.7	90.9	31.0	5.9	2.2	6.2	8.3	2.0	10.3				
3	DO (mg/L)	5.6	5.7	5.8	5.3	5.6	5.7	5.8	5.7	6.1	5.9				
4	DO_SAT% (%)	65	69	70	64	67	70	73	71	75	79				
5	FCol-MPN (MPN/100mL)		567	9200	1283	8010	16000	12333	11467	40	5767				
6	Tcol-MPN (MPN/100mL)		567	10500	2008	8010	16000	16000	16000	80	6700				
7	TOC (mg/L)				3.2	2.5	2.3	3.1	2.0	2.3	2.8				
	TRACE & TOXIC														
1	As (µg/L)										3.7				
2	Cd (µg/L)										0.7				
3	Cr (µg/L)										1.2				
4	Cu (µg/L)										1.8				
5	Hg (µg/L)										0.0				
6	Ni (µg/L)										15.7				
7	Pb (µg/L)										4.2				
8	Zn (µg/L)										2.0				
	CHEMICAL INDICES														
1	HAR_Ca (mgCaCO3/L)	65	111	91	63	66	50	101	91	70	106				
2	HAR_Total (mgCaCO3/L)	83	157	136	107	123	87	174	151	135	230				
3	Na% (%)	30	24	25	26	22	24	21	19	25	23				
4	RSC (-)	0.4	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
5	SAR (-)	0.8	0.8	0.8	0.8	0.7	0.6	0.7	0.6	0.8	0.9				
	PESTICIDES														
1	Aldrin (µg/L)				0.0										
2	BHC (µg/L)				0.1										
3	DDT (µg/L)				0.1										
4	Dieldrin (µg/L)				0.0										
5	Endos (µg/L)				0.1										

Water Quality Seasonal Average for the period: 2003-2018

Station Name : Saigaon (AGP00N8)

Local River : Manjira

River Water

Division : Upper Godavari Div., Hyderabad

Sub-Division : Manjira SD, Nizamabad

S.No	Parameters	Winter													
		Nov - Feb													
		2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
	PHYSICAL														
1	Q (cumec)		18.66					14.58			0.000			20.72	
2	EC_GEN (µmho/cm)		500					479			561			493	
3	pH_GEN (pH units)		8.0					8.2			8.2			8.5	
4	TDS (mg/L)							302			322			272	
5	Temp (deg C)		23.0					25.5			24.0			25.0	
6	Turb (NTU)							3.3			4.0			0.1	
	CHEMICAL														
1	Alk-Phen (mgCaCO3/L)		0.0					6.1			0.0			3.0	
2	ALK-TOT (mgCaCO3/L)		197					192			211			171	
3	B (mg/L)		0.63					0.19			0.04				
4	Ca (mg/L)		56					30			47			52	
5	Cl (mg/L)		33.5					40.2			37.2			33.7	
6	CO3 (mg/L)		0.0					7.3			0.0			3.6	
7	F (mg/L)		0.29					0.31			0.37			0.23	
8	Fe (mg/L)		0.2					0.2			0.0			0.2	
9	HCO3 (mg/L)		240					219			257			202	
10	K (mg/L)		3.6					4.2			5.1			4.4	
11	Mg (mg/L)		6.8					27.6			27.7			28.3	
12	Na (mg/L)		23.0					30.4			37.5			24.7	
13	NH3-N (mg N/L)		0.01					0.16			0.02			0.00	
14	NO2+NO3 (mg N/L)		0.23					0.58			0.73			0.09	
15	NO2-N (mgN/L)		0.01					0.03			0.00			0.01	
16	NO3-N (mgN/L)		0.22					0.56			0.73			0.09	
17	o-PO4-P (mg P/L)		0.000					0.021			0.001			0.009	
18	P-Tot (mgP/L)														
19	SiO2 (mg/L)		23.0					44.6			19.9			14.6	
20	SO4 (mg/L)		17.0					21.6			29.0			32.2	

Water Quality Seasonal Average for the period: 2003-2018

Station Name : Saigaon (AGP00N8)

Division : Upper Godavari Div., Hyderabad

Local River : Manjira

River Water

Sub-Division : Manjira SD, Nizamabad

S.No	Parameters	Winter													
		Nov - Feb													
		2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
	BIOLOGICAL/BACTERIOLOGICAL														
1	BOD3-27 (mg/L)		0.7					1.9			2.5			2.6	
2	COD (mg/L)		16.7					4.8			8.1			5.4	
3	DO (mg/L)		6.7					6.5			7.3			7.0	
4	DO_SAT% (%)		78					79			87			85	
5	FCol-MPN (MPN/100mL)							16000			16000			1400	
6	Tcol-MPN (MPN/100mL)							16000			16000			1400	
7	TOC (mg/L)							2.3			0.6				
	TRACE & TOXIC														
1	As (µg/L)														
2	Cd (µg/L)							0.4							
3	Cr (µg/L)							0.0							
4	Cu (µg/L)														
5	Hg (µg/L)														
6	Ni (µg/L)							2.9							
7	Pb (µg/L)							13.0							
8	Zn (µg/L)							10.5							
	CHEMICAL INDICES														
1	HAR_Ca (mgCaCO3/L)		140					76			118			130	
2	HAR_Total (mgCaCO3/L)		168					191			234			248	
3	Na% (%)		22					25			25			18	
4	RSC (-)		0.6					0.1			0.0			0.0	
5	SAR (-)		0.8					1.0			1.1			0.7	
	PESTICIDES														
1	Aldrin (µg/L)							0.0							
2	BHC (µg/L)							0.0							
3	DDT (µg/L)							0.0							
4	Dieldrin (µg/L)							0.0							
5	Endos (µg/L)							0.0							

Water Quality Seasonal Average for the period: 2003-2018

Station Name : Saigaon (AGP00N8)

Local River : Manjira

River Water

Division : Upper Godavari Div., Hyderabad

Sub-Division : Manjira SD, Nizamabad

S.No	Parameters	Summer														
		Mar - May														
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	PHYSICAL															
1	Q (cumec)															
2	EC_GEN (μmho/cm)															
3	pH_GEN (pH units)															
4	TDS (mg/L)															
5	Temp (deg C)															
6	Turb (NTU)															
	CHEMICAL															
1	Alk-Phen (mgCaCO3/L)															
2	ALK-TOT (mgCaCO3/L)															
3	B (mg/L)															
4	Ca (mg/L)															
5	Cl (mg/L)															
6	CO3 (mg/L)															
7	F (mg/L)															
8	Fe (mg/L)															
9	HCO3 (mg/L)															
10	K (mg/L)															
11	Mg (mg/L)															
12	Na (mg/L)															
13	NH3-N (mg N/L)															
14	NO2+NO3 (mg N/L)															
15	NO2-N (mgN/L)															
16	NO3-N (mgN/L)															
17	o-PO4-P (mg P/L)															
18	P-Tot (mgP/L)															
19	SiO2 (mg/L)															
20	SO4 (mg/L)															

Water Quality Seasonal Average for the period: 2003-2018

Station Name : Saigaon (AGP00N8)

Division : Upper Godavari Div., Hyderabad

Local River : Manjira

River Water

Sub-Division : Manjira SD, Nizamabad

S.No	Parameters	Summer														
		Mar - May														
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	BIOLOGICAL/BACTERIOLOGICAL															
1	BOD3-27 (mg/L)															
2	COD (mg/L)															
3	DO (mg/L)															
4	DO_SAT% (%)															
5	FCol-MPN (MPN/100mL)															
6	Tcol-MPN (MPN/100mL)															
7	TOC (mg/L)															
	TRACE & TOXIC															
1	As (µg/L)															
2	Cd (µg/L)															
3	Cr (µg/L)															
4	Cu (µg/L)															
5	Hg (µg/L)															
6	Ni (µg/L)															
7	Pb (µg/L)															
8	Zn (µg/L)															
	CHEMICAL INDICES															
1	HAR_Ca (mgCaCO3/L)															
2	HAR_Total (mgCaCO3/L)															
3	Na% (%)															
4	RSC (-)															
5	SAR (-)															
	PESTICIDES															
1	Aldrin (µg/L)															
2	BHC (µg/L)															
3	DDT (µg/L)															
4	Dieldrin (µg/L)															
5	Endos (µg/L)															

HISTORY SHEET

		Water Year	: 2017-2018
Site	: Nanded	Code	: Nanded
State	: Maharashtra	District	Nanded
Basin	: Godavari	Independent River	: Godavari
Tributary	: -	Sub Tributary	:
Sub-Sub Tributary	:	Local River	: Godavari
Division	: U Godavari Div., Hyderabad	Sub-Division	: Purna SD, Nanded
Drainage Area	: 52038 Sq. Km.	Bank	:
Latitude	: 19°10'00"	Longitude	: 77°19'19"
	Opening Date	Closing Date	
Gauge	: 20.08.1976		
Discharge	:		
Sediment	:		
Water Quality	: 01.04.2014		

Water Quality Datasheet for the period : 2017-2018

Station Name : Nanded (Nanded)
Local River : Godavari

Division : U Godavari Div., Hyderabad
Sub-Division : Purna SD, Nanded

River Water Analysis

S.No	Parameters	29.08.2017	11.10.2017
		A	A
	PHYSICAL		
1	Q (cumec)	1400	887.2
2	Colour_Cod (-)	Brown	
3	EC_GEN (µmho/cm)	279	360
4	Odour_Code (-)	odour free	
5	pH_GEN (pH units)	7.6	8.2
6	TDS (mg/L)	213	203
7	Temp (deg C)	26.0	
8	Turb (NTU)	181.0	93.0
	CHEMICAL		
1	Alk-Phen (mgCaCO3/L)	0.0	0.0
2	ALK-TOT (mgCaCO3/L)	104	108
3	B (mg/L)		0.03
4	Ca (mg/L)	22	30
5	Cl (mg/L)	33.0	25.4
6	CO3 (mg/L)	0.0	0.0
7	F (mg/L)	0.37	0.33
8	Fe (mg/L)	16.3	2.1
9	HCO3 (mg/L)	127	132
10	K (mg/L)	0.4	0.4
11	Mg (mg/L)	22.0	22.6
12	Na (mg/L)	23.8	26.4
13	NH3-N (mg N/L)	0.02	0.28
14	NO2+NO3 (mg N/L)	8.95	4.90
15	NO2-N (mgN/L)	1.00	0.04
16	NO3-N (mgN/L)	7.95	4.86
17	o-PO4-P (mg P/L)	1.350	0.930
18	SiO2 (mg/L)	13.8	16.4

Water Quality Datasheet for the period : 2017-2018

Station Name : Nanded (Nanded)

Local River : Godavari

Division : U Godavari Div., Hyderabad

Sub-Division : Purna SD, Nanded

River Water Analysis

S.No	Parameters	29.08.2017	11.10.2017
		A	A
19	SO4 (mg/L)	36.1	50.4
	BIOLOGICAL/BACTERIOLOGICAL		
1	BOD3-27 (mg/L)	1.9	0.7
2	COD (mg/L)	15.1	42.6
3	DO (mg/L)	5.5	6.6
4	DO_SAT% (%)	68	
5	FCol-MPN (MPN/100mL)	2400	3000
6	Tcol-MPN (MPN/100mL)	2400	16000
	TRACE & TOXIC		
1	Cu (µg/L)	37.0	9.0
2	Zn (µg/L)	73.0	31.0
	CHEMICAL INDICES		
1	HAR_Ca (mgCaCO3/L)	55	76
2	HAR_Total (mgCaCO3/L)	147	170
3	Na% (%)	26	25
4	RSC (-)	0.0	0.0
5	SAR (-)	0.9	0.9
	PESTICIDES		

Water Quality Summary for the period : 2017-2018

Station Name : Nanded (Nanded)

Division : U Godavari Div., Hyderabad

Local River : Godavari

Sub-Division : Purna SD, Nanded

River Water Summary

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
	PHYSICAL				
1	Q (cumec)	365	1525	0.000	39.73
2	EC_GEN (µmho/cm)	2	360	279	320
3	pH_GEN (pH units)	2	8.2	7.6	7.9
4	TDS (mg/L)	2	213	203	208
5	Temp (deg C)	1	26.0	26.0	26
6	Turb (NTU)	2	181.0	93.0	137
	CHEMICAL				
1	Alk-Phen (mgCaCO3/L)	2	0.0	0.0	0
2	ALK-TOT (mgCaCO3/L)	2	108	104	106
3	B (mg/L)	1	0.03	0.03	0.03
4	Ca (mg/L)	2	30	22	26
5	Cl (mg/L)	2	33.0	25.4	29.2
6	CO3 (mg/L)	2	0.0	0.0	0
7	F (mg/L)	2	0.37	0.33	0.35
8	Fe (mg/L)	2	16.3	2.1	9.2
9	HCO3 (mg/L)	2	132	127	129
10	K (mg/L)	2	0.4	0.4	0.4
11	Mg (mg/L)	2	22.6	22.0	22.3
12	Na (mg/L)	2	26.4	23.8	25.1
13	NH3-N (mg N/L)	2	0.28	0.02	0.15
14	NO2+NO3 (mg N/L)	2	8.95	4.90	6.92
15	NO2-N (mgN/L)	2	1.00	0.04	0.52
16	NO3-N (mgN/L)	2	7.95	4.86	6.41
17	o-PO4-P (mg P/L)	2	1.350	0.930	1.14
18	SiO2 (mg/L)	2	16.4	13.8	15.1
19	SO4 (mg/L)	2	50.4	36.1	43.2
	BIOLOGICAL/BACTERIOLOGICAL				
1	BOD3-27 (mg/L)	2	1.9	0.7	1.3
2	COD (mg/L)	2	42.6	15.1	28.9
3	DO (mg/L)	2	6.6	5.5	6
4	DO_SAT% (%)	1	68	68	68
5	FCol-MPN (MPN/100mL)	2	3000	2400	2700
6	Tcol-MPN (MPN/100mL)	2	16000	2400	9200
	TRACE & TOXIC				
1	Cu (µg/L)	2	37.0	9.0	23
2	Zn (µg/L)	2	73.0	31.0	52
	CHEMICAL INDICES				
1	HAR_Ca (mgCaCO3/L)	2	76	55	65
2	HAR_Total (mgCaCO3/L)	2	170	147	158
3	Na% (%)	2	26	25	26
4	RSC (-)	2	0.0	0.0	0
5	SAR (-)	2	0.9	0.9	0.9
	PESTICIDES				

Water Quality Seasonal Average for the period: 2014-2018

Station Name : Nanded (Nanded)

Local River : Godavari

River Water

Division : U Godavari Div., Hyderabad

Sub-Division : Purna SD, Nanded

S.No	Parameters	Flood				Winter				Summer			
		Jun - Oct				Nov - Feb				Mar - May			
		2014	2015	2016	2017	2014-2015	2015-2016	2016-2017	2017-2018	2015	2016	2017	2018
	PHYSICAL												
1	Q (cumec)			918.5	1144								
2	EC_GEN (μmho/cm)			346	320								
3	pH_GEN (pH units)			8.1	7.9								
4	TDS (mg/L)			206	208								
5	Temp (deg C)			26.0	26.0								
6	Turb (NTU)			1.0	137.0								
	CHEMICAL												
1	ALK-TOT (mgCaCO3/L)			144	106								
2	B (mg/L)				0.03								
3	Ca (mg/L)			31	26								
4	Cl (mg/L)			20.1	29.2								
5	F (mg/L)			0.01	0.35								
6	Fe (mg/L)			0.2	9.2								
7	HCO3 (mg/L)			175	129								
8	K (mg/L)			3.5	0.4								
9	Mg (mg/L)			17.1	22.3								
10	Na (mg/L)			19.7	25.1								
11	NH3-N (mg N/L)			0.00	0.15								
12	NO2+NO3 (mg N/L)			2.40	6.92								
13	NO2-N (mgN/L)			0.00	0.52								
14	NO3-N (mgN/L)			2.40	6.41								
15	o-PO4-P (mg P/L)			0.031	1.140								
16	SiO2 (mg/L)			10.9	15.1								
17	SO4 (mg/L)			17.3	43.2								

Water Quality Seasonal Average for the period: 2014-2018

Station Name : Nanded (Nanded)

Division : U Godavari Div., Hyderabad

Local River : Godavari

River Water

Sub-Division : Purna SD, Nanded

S.No	Parameters	Flood				Winter				Summer			
		Jun - Oct				Nov - Feb				Mar - May			
		2014	2015	2016	2017	2014-2015	2015-2016	2016-2017	2017-2018	2015	2016	2017	2018
	BIOLOGICAL/BACTERIOLOGICAL												
1	BOD3-27 (mg/L)			1.1	1.3								
2	COD (mg/L)			7.4	28.9								
3	DO (mg/L)			6.7	6.0								
4	DO_SAT% (%)			83	68								
5	FCoI-MPN (MPN/100mL)			16000	2700								
6	TcoI-MPN (MPN/100mL)			16000	9200								
	TRACE & TOXIC												
1	Cu (µg/L)				23.0								
2	Zn (µg/L)				52.0								
	CHEMICAL INDICES												
1	HAR_Ca (mgCaCO3/L)			79	65								
2	HAR_Total (mgCaCO3/L)			150	158								
3	Na% (%)			22	26								
4	SAR (-)			0.7	0.9								
	PESTICIDES												

HISTORY SHEET

		Water Year	: 2017-2018
Site	: Purna	Code	: AGR00A5
State	: Maharashtra	District	Parbhani
Basin	: Godavari	Independent River	: Godavari
Tributary	: Purna	Sub Tributary	: -
Sub-Sub Tributary	: -	Local River	: Purna
Division	: Upper Godavari Div., Hyderabad	Sub-Division	: Purna SD, Nanded
Drainage Area	: 15000 Sq. Km.	Bank	: Left
Latitude	: 19°10'33"	Longitude	: 77°00'50"
	Opening Date	Closing Date	
Gauge	: 23.06.1968		
Discharge	: 02.09.1969		
Sediment	: 10.10.1972	31.05.2006	
Water Quality	: 01.11.1972		

Water Quality Datasheet for the period : 2017-2018

Station Name : Purna (AGR00A5)
Local River : Purna

Division : Upper Godavari Div., Hyderabad
Sub-Division : Purna SD, Nanded

River Water Analysis

S.No	Parameters	23.08.2017	01.09.2017	10.10.2017	15.05.2018
		A	A	A	A
	PHYSICAL				
1	Q (cumec)	15.88	24.55	47.18	38.79
2	Colour_Cod (-)			Light Brown	Clear
3	EC_FLD (μmho/cm)		435	399	403
4	EC_GEN (μmho/cm)	375	335	420	229
5	Odour_Code (-)			odour free	odour free
6	pH_FLD (pH units)		8.1	7.2	7.5
7	pH_GEN (pH units)	7.8	8.3	7.7	8.2
8	TDS (mg/L)	185	275	238	168
9	Temp (deg C)	24.0	35.1	32.1	36.0
10	Turb (NTU)	178.0	51.0	546.0	4.0
	CHEMICAL				
1	Alk-Phen (mgCaCO3/L)	0.0	23.9	0.0	0.0
2	ALK-TOT (mgCaCO3/L)	124	156	132	146
3	B (mg/L)			0.00	0.13
4	Ca (mg/L)	34	29	32	25
5	Cl (mg/L)	29.3	24.8	74.4	34.1
6	CO3 (mg/L)	0.0	28.8	0.0	0.0
7	F (mg/L)	0.35	0.10	0.43	0.45
8	Fe (mg/L)	3.2	1.0	30.3	0.8
9	HCO3 (mg/L)	151	132	161	178
10	K (mg/L)	0.4	0.4	0.6	0.8
11	Mg (mg/L)	18.5	26.3	39.8	11.4
12	Na (mg/L)	30.8	23.7	25.7	31.6
13	NH3-N (mg N/L)	0.09	0.08	0.12	0.34
14	NO2+NO3 (mg N/L)	8.13	3.77	4.36	3.94
15	NO2-N (mgN/L)	0.66	0.05	0.02	0.03
16	NO3-N (mgN/L)	7.48	3.73	4.34	3.91
17	o-PO4-P (mg P/L)	0.460	0.500	0.970	0.200
18	SiO2 (mg/L)	15.5	17.0	18.4	10.7
19	SO4 (mg/L)	36.7	6.9	20.4	15.1

Water Quality Datasheet for the period : 2017-2018

Station Name : Purna (AGR00A5)
Local River : Purna

Division : Upper Godavari Div., Hyderabad
Sub-Division : Purna SD, Nanded

River Water Analysis

S.No	Parameters	23.08.2017	01.09.2017	10.10.2017	15.05.2018
		A	A	A	A
	BIOLOGICAL/BACTERIOLOGICAL				
1	BOD3-27 (mg/L)	2.8	0.3	1.7	0.7
2	COD (mg/L)	29.4	63.9	63.9	76.7
3	DO (mg/L)	5.5	6.3	4.1	5.1
4	DO_SAT% (%)	65	91	56	75
5	FCol-MPN (MPN/100mL)	5000	500	3000	
6	Tcol-MPN (MPN/100mL)	5000	500	3000	
	TRACE & TOXIC				
1	Cu (µg/L)	14.0	3.0	6.0	1.0
2	Zn (µg/L)	52.1	48.0	77.0	25.0
	CHEMICAL INDICES				
1	HAR_Ca (mgCaCO3/L)	85	72	79	62
2	HAR_Total (mgCaCO3/L)	162	181	245	109
3	Na% (%)	29	22	19	39
4	RSC (-)	0.0	0.0	0.0	0.7
5	SAR (-)	1.1	0.8	0.7	1.3
	PESTICIDES				

Water Quality Summary for the period : 2017-2018

Station Name : Purna (AGR00A5)

Division : Upper Godavari Div., Hyderabad

Local River : Purna

Sub-Division : Purna SD, Nanded

River Water Summary

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
	PHYSICAL				
1	Q (cumec)	365	233.6	0.000	6.614
2	EC_FLD (µmho/cm)	3	435	399	412
3	EC_GEN (µmho/cm)	4	420	229	340
4	pH_FLD (pH units)	3	8.1	7.2	7.6
5	pH_GEN (pH units)	4	8.3	7.7	8
6	TDS (mg/L)	4	275	168	217
7	Temp (deg C)	4	36.0	24.0	31.8
8	Turb (NTU)	4	546.0	4.0	194.8
	CHEMICAL				
1	Alk-Phen (mgCaCO3/L)	4	23.9	0.0	6
2	ALK-TOT (mgCaCO3/L)	4	156	124	139
3	B (mg/L)	2	0.13	0.00	0.06
4	Ca (mg/L)	4	34	25	30
5	Cl (mg/L)	4	74.4	24.8	40.6
6	CO3 (mg/L)	4	28.8	0.0	7.2
7	F (mg/L)	4	0.45	0.10	0.33
8	Fe (mg/L)	4	30.3	0.8	8.8
9	HCO3 (mg/L)	4	178	132	155
10	K (mg/L)	4	0.8	0.4	0.6
11	Mg (mg/L)	4	39.8	11.4	24
12	Na (mg/L)	4	31.6	23.7	28
13	NH3-N (mg N/L)	4	0.34	0.08	0.16
14	NO2+NO3 (mg N/L)	4	8.13	3.77	5.05
15	NO2-N (mgN/L)	4	0.66	0.02	0.19
16	NO3-N (mgN/L)	4	7.48	3.73	4.86
17	o-PO4-P (mg P/L)	4	0.970	0.200	0.533
18	SiO2 (mg/L)	4	18.4	10.7	15.4
19	SO4 (mg/L)	4	36.7	6.9	19.8
	BIOLOGICAL/BACTERIOLOGICAL				
1	BOD3-27 (mg/L)	4	2.8	0.3	1.4
2	COD (mg/L)	4	76.7	29.4	58.5
3	DO (mg/L)	4	6.3	4.1	5.3
4	DO_SAT% (%)	4	91	56	72
5	FCol-MPN (MPN/100mL)	3	5000	500	2833
6	Tcol-MPN (MPN/100mL)	3	5000	500	2833
	TRACE & TOXIC				
1	Cu (µg/L)	4	14.0	1.0	6
2	Zn (µg/L)	4	77.0	25.0	50.5
	CHEMICAL INDICES				
1	HAR_Ca (mgCaCO3/L)	4	85	62	74
2	HAR_Total (mgCaCO3/L)	4	245	109	174
3	Na% (%)	4	39	19	27
4	RSC (-)	4	0.7	0.0	0.2
5	SAR (-)	4	1.3	0.7	1
	PESTICIDES				

Water Quality Seasonal Average for the period: 2004-2018

Station Name : Purna (AGR00A5)

Local River : Purna

River Water

Division : Upper Godavari Div., Hyderabad

Sub-Division : Purna SD, Nanded

S.No	Parameters	Flood													
		Jun - Oct													
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	PHYSICAL														
1	Q (cumec)	20.31	32.24								131.9	470.3		74.67	29.20
2	EC_FLD (µmho/cm)													433	417
3	EC_GEN (µmho/cm)	261	423								397	449		405	377
4	pH_FLD (pH units)													8.0	7.6
5	pH_GEN (pH units)	7.9	8.2								7.9	8.1		8.2	8.0
6	TDS (mg/L)										247	252		308	233
7	Temp (deg C)	23.0	24.3								24.0	18.0		27.7	30.4
8	Turb (NTU)										22.1	72.0		22.0	258.3
	CHEMICAL														
1	Alk-Phen (mgCaCO3/L)	0.0	4.9								0.0	0.0		0.0	8.0
2	ALK-TOT (mgCaCO3/L)	108	153								192	105		173	137
3	B (mg/L)	0.25	0.09								0.04	0.43			0.00
4	Ca (mg/L)	25	33								39	33		37	31
5	Cl (mg/L)	17.7	23.8								16.3	25.5		24.4	42.8
6	CO3 (mg/L)	0.0	5.9								0.0	0.0		0.0	9.6
7	F (mg/L)	0.50	0.42								0.49	0.33		0.16	0.29
8	Fe (mg/L)	0.1	0.1								0.1	0.1		0.2	11.5
9	HCO3 (mg/L)	131	174								234	128		211	148
10	K (mg/L)	2.8	3.2								3.4	4.4		3.9	0.5
11	Mg (mg/L)	4.7	11.6								22.9	18.0		20.3	28.2
12	Na (mg/L)	19.3	27.0								34.6	42.4		27.7	26.8
13	NH3-N (mg N/L)	0.05	0.03								0.07	0.00		0.00	0.10
14	NO2+NO3 (mg N/L)	0.87	1.45								4.60	3.90		3.20	5.42
15	NO2-N (mgN/L)	0.01	0.06								0.00	0.13		1.38	0.24
16	NO3-N (mgN/L)	0.87	1.38								4.60	3.76		1.82	5.18
17	o-PO4-P (mg P/L)	0.090	0.021								0.101	0.167		0.027	0.643
18	SiO2 (mg/L)	14.0	23.7								22.1	19.1		15.2	17.0
19	SO4 (mg/L)	14.7	19.3								27.6	136.0		15.5	21.3

Water Quality Seasonal Average for the period: 2004-2018

Station Name : Purna (AGR00A5)

Division : Upper Godavari Div., Hyderabad

Local River : Purna

River Water

Sub-Division : Purna SD, Nanded

S.No	Parameters	Flood													
		Jun - Oct													
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	BIOLOGICAL/BACTERIOLOGICAL														
1	BOD3-27 (mg/L)	1.1	1.6								2.3	0.9		1.3	1.6
2	COD (mg/L)	1.0	25.4								13.1	19.4		7.0	52.4
3	DO (mg/L)	5.5	6.4								5.9	5.1		5.8	5.3
4	DO_SAT% (%)	64	77								70	54		73	71
5	FCol-MPN (MPN/100mL)										6300	16000		10667	2833
6	Tcol-MPN (MPN/100mL)										11033	16000		16000	2833
7	TOC (mg/L)	5.5									1.7	7.1			
	TRACE & TOXIC														
1	Al (mg/L)														
2	As (µg/L)										6.3				
3	Cd (µg/L)										0.3				
4	Cr (µg/L)										0.5				
5	Cu (µg/L)										2.3				7.7
6	Hg (µg/L)										0.3				
7	Ni (µg/L)										7.6				
8	Pb (µg/L)										1.9				
9	Zn (µg/L)										2.0				59.0
	CHEMICAL INDICES														
1	HAR_Ca (mgCaCO3/L)	63	82								98	82		92	79
2	HAR_Total (mgCaCO3/L)	83	130								193	157		176	196
3	Na% (%)	33	31								27	36		26	23
4	RSC (-)	0.5	0.5								0.2	0.0		0.0	0.0
5	SAR (-)	0.9	1.0								1.1	1.5		0.9	0.8
	PESTICIDES														

Water Quality Seasonal Average for the period: 2004-2018

Station Name : Purna (AGR00A5)

Division : Upper Godavari Div., Hyderabad

Local River : Purna

River Water

Sub-Division : Purna SD, Nanded

S.No	Parameters	Winter													
		Nov - Feb													
		2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
	PHYSICAL														
1	Q (cumec)		4.332								21.54				
2	EC_FLD (µmho/cm)														
3	EC_GEN (µmho/cm)		525								465				
4	pH_FLD (pH units)														
5	pH_GEN (pH units)		8.3								8.1				
6	TDS (mg/L)										284				
7	Temp (deg C)		20.0								23.0				
8	Turb (NTU)										5.0				
	CHEMICAL														
1	Alk-Phen (mgCaCO3/L)		4.3								0.0				
2	ALK-TOT (mgCaCO3/L)		201								193				
3	B (mg/L)		0.24								0.03				
4	Ca (mg/L)		50								42				
5	Cl (mg/L)		24.0								24.5				
6	CO3 (mg/L)		5.1								0.0				
7	F (mg/L)		0.55								0.39				
8	Fe (mg/L)		0.0								0.0				
9	HCO3 (mg/L)		235								235				
10	K (mg/L)		3.2								3.4				
11	Mg (mg/L)		10.9								24.3				
12	Na (mg/L)		32.5								34.6				
13	NH3-N (mg N/L)		0.05								0.04				
14	NO2+NO3 (mg N/L)		1.03								2.03				
15	NO2-N (mgN/L)		0.00								0.00				
16	NO3-N (mgN/L)		1.02								2.03				
17	o-PO4-P (mg P/L)		0.064								0.001				
18	SiO2 (mg/L)		25.0								26.1				
19	SO4 (mg/L)		22.5								25.6				

Water Quality Seasonal Average for the period: 2004-2018

Station Name : Purna (AGR00A5)

Division : Upper Godavari Div., Hyderabad

Local River : Purna

River Water

Sub-Division : Purna SD, Nanded

S.No	Parameters	Winter													
		Nov - Feb													
		2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
	BIOLOGICAL/BACTERIOLOGICAL														
1	BOD3-27 (mg/L)		0.8								0.5				
2	COD (mg/L)		17.9								4.1				
3	DO (mg/L)		7.1								6.4				
4	DO_SAT% (%)		79								75				
5	FCol-MPN (MPN/100mL)		660								16000				
6	Tcol-MPN (MPN/100mL)		930								16000				
7	TOC (mg/L)										0.5				
	TRACE & TOXIC														
1	Al (mg/L)														
2	As (µg/L)														
3	Cd (µg/L)														
4	Cr (µg/L)														
5	Cu (µg/L)														
6	Hg (µg/L)														
7	Ni (µg/L)														
8	Pb (µg/L)														
9	Zn (µg/L)														
	CHEMICAL INDICES														
1	HAR_Ca (mgCaCO3/L)		125								104				
2	HAR_Total (mgCaCO3/L)		170								205				
3	Na% (%)		29								27				
4	RSC (-)		0.6								0.0				
5	SAR (-)		1.1								1.1				
	PESTICIDES														

Water Quality Seasonal Average for the period: 2004-2018

Station Name : Purna (AGR00A5)

Local River : Purna

River Water

Division : Upper Godavari Div., Hyderabad

Sub-Division : Purna SD, Nanded

S.No	Parameters	Summer														
		Mar - May														
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	PHYSICAL															
1	Q (cumec)			0.910								5.128				38.79
2	EC_FLD (µmho/cm)															403
3	EC_GEN (µmho/cm)			520								464				229
4	pH_FLD (pH units)															7.5
5	pH_GEN (pH units)			8.1								7.7				8.2
6	TDS (mg/L)											319				168
7	Temp (deg C)			21.0								23.5				36.0
8	Turb (NTU)											19.5				4.0
	CHEMICAL															
1	Alk-Phen (mgCaCO3/L)			0.0								0.0				0.0
2	ALK-TOT (mgCaCO3/L)			207								179				146
3	B (mg/L)			0.20								0.02				0.13
4	Ca (mg/L)			62								34				25
5	Cl (mg/L)			27.5								24.1				34.1
6	CO3 (mg/L)			0.0								0.0				0.0
7	F (mg/L)			0.71								0.73				0.45
8	Fe (mg/L)			0.2								0.0				0.8
9	HCO3 (mg/L)			252								219				178
10	K (mg/L)			3.0								4.1				0.8
11	Mg (mg/L)			6.3								19.4				11.4
12	Na (mg/L)			26.0								31.0				31.6
13	NH3-N (mg N/L)			0.05								0.07				0.34
14	NO2+NO3 (mg N/L)			1.70								2.28				3.94
15	NO2-N (mgN/L)			0.02								0.00				0.03
16	NO3-N (mgN/L)			1.68								2.28				3.91
17	o-PO4-P (mg P/L)			0.049								0.001				0.200
18	SiO2 (mg/L)			21.0								24.5				10.7
19	SO4 (mg/L)			18.0								25.8				15.1

Water Quality Seasonal Average for the period: 2004-2018

Station Name : Purna (AGR00A5)

Division : Upper Godavari Div., Hyderabad

Local River : Purna

River Water

Sub-Division : Purna SD, Nanded

S.No	Parameters	Summer														
		Mar - May														
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	BIOLOGICAL/BACTERIOLOGICAL															
1	BOD3-27 (mg/L)			0.8								0.8				0.7
2	COD (mg/L)			17.5								4.1				76.7
3	DO (mg/L)			5.2								3.9				5.1
4	DO_SAT% (%)			58								46				75
5	FCol-MPN (MPN/100mL)			16000								8020				
6	Tcol-MPN (MPN/100mL)			16000								8060				
7	TOC (mg/L)											7.1				
	TRACE & TOXIC															
1	Al (mg/L)															
2	As (µg/L)											1.1				
3	Cd (µg/L)											0.0				
4	Cr (µg/L)											0.2				
5	Cu (µg/L)											1.6				1.0
6	Hg (µg/L)											0.1				
7	Ni (µg/L)											3.7				
8	Pb (µg/L)											17.6				
9	Zn (µg/L)											24.5				25.0
	CHEMICAL INDICES															
1	HAR_Ca (mgCaCO3/L)			155								86				62
2	HAR_Total (mgCaCO3/L)			181								167				109
3	Na% (%)			23								28				39
4	RSC (-)			0.5								0.3				0.7
5	SAR (-)			0.8								1.0				1.3
	PESTICIDES															

HISTORY SHEET

		Water Year	: 2017-2018
Site	: Dhalegaon	Code	: AG000S9
State	: Maharashtra	District	Parbhani
Basin	: Godavari	Independent River	: Godavari
Tributary	: -	Sub Tributary	: -
Sub-Sub Tributary	: -	Local River	: Godavari
Division	: Upper Godavari Div., Hyderabad	Sub-Division	: Upper Godavari SD, Aurangabad
Drainage Area	: 30840 Sq. Km.	Bank	: Left
Latitude	: 19°13'13"	Longitude	: 76°21'52"
	Opening Date	Closing Date	
Gauge	: 04.01.1964		
Discharge	: 16.08.1964		
Sediment	: 11.07.1971		
Water Quality	: 01.07.1972		

Water Quality Datasheet for the period : 2017-2018

Station Name : Dhalegaon (AG000S9)

Division : Upper Godavari Div., Hyderabad

Local River : Godavari

River Water Analysis Sub-Division : Upper Godavari SD, Aurangabad

S.No	Parameters	27.08.2017	01.09.2017	10.10.2017
		A	A	A
	PHYSICAL			
1	Q (cumec)	0.000	0.000	0.000
2	Colour_Cod (-)			Brown
3	EC_GEN (μ mho/cm)	315	250	370
4	Odour_Code (-)			odour free
5	pH_GEN (pH units)	8.0	8.3	8.3
6	TDS (mg/L)	225	139	205
7	Temp (deg C)	25.0		23.0
8	Turb (NTU)	308.0	195.0	22.0
	CHEMICAL			
1	Alk-Phen (mgCaCO3/L)	0.0	12.0	12.0
2	ALK-TOT (mgCaCO3/L)	104	108	108
3	B (mg/L)			0.00
4	Ca (mg/L)	28	51	27
5	Cl (mg/L)	23.3	66.8	80.2
6	CO3 (mg/L)	0.0	14.4	14.4
7	F (mg/L)	0.30	0.40	0.38
8	Fe (mg/L)	7.9	12.1	0.1
9	HCO3 (mg/L)	127	103	103
10	K (mg/L)	0.5	0.5	0.5
11	Mg (mg/L)	17.7	27.2	41.6
12	Na (mg/L)	30.8	32.0	28.8
13	NH3-N (mg N/L)	0.05	0.01	0.03
14	NO2+NO3 (mg N/L)	4.88	3.46	3.81
15	NO2-N (mgN/L)	0.32	0.02	0.01
16	NO3-N (mgN/L)	4.56	3.43	3.80
17	o-PO4-P (mg P/L)	0.420	0.120	0.700
18	SiO2 (mg/L)	14.8	15.5	12.4
19	SO4 (mg/L)	56.1	57.2	32.4
	BIOLOGICAL/BACTERIOLOGICAL			
1	BOD3-27 (mg/L)	1.8	1.1	1.6
2	COD (mg/L)	23.1	54.1	54.1
3	DO (mg/L)	4.9	6.6	4.6
4	DO_SAT% (%)	59		54
5	FCol-MPN (MPN/100mL)	16000	2400	1300
6	Tcol-MPN (MPN/100mL)	16000	2400	1300
	TRACE & TOXIC			
1	Cu (μ g/L)	24.0	34.0	10.0
2	Zn (μ g/L)	52.0	103.0	18.0
	CHEMICAL INDICES			
1	HAR_Ca (mgCaCO3/L)	70	128	68
2	HAR_Total (mgCaCO3/L)	144	242	241
3	Na% (%)	32	22	21
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	1.1	0.9	0.8
	PESTICIDES			

Water Quality Summary for the period : 2017-2018

Station Name : Dhalegaon (AG000S9)

Division : Upper Godavari Div., Hyderabad

Local River : Godavari

Sub-Division : Upper Godavari SD, Aurangabad

River Water Summary

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
	PHYSICAL				
1	Q (cumec)	365	0.000	0.000	0.000
2	EC_GEN (µmho/cm)	3	370	250	312
3	pH_GEN (pH units)	3	8.3	8.0	8.2
4	TDS (mg/L)	3	225	139	190
5	Temp (deg C)	2	25.0	23.0	24
6	Turb (NTU)	3	308.0	22.0	175
	CHEMICAL				
1	Alk-Phen (mgCaCO3/L)	3	12.0	0.0	8
2	ALK-TOT (mgCaCO3/L)	3	108	104	107
3	B (mg/L)	1	0.00	0.00	0
4	Ca (mg/L)	3	51	27	35
5	Cl (mg/L)	3	80.2	23.3	56.8
6	CO3 (mg/L)	3	14.4	0.0	9.6
7	F (mg/L)	3	0.40	0.30	0.36
8	Fe (mg/L)	3	12.1	0.1	6.7
9	HCO3 (mg/L)	3	127	103	111
10	K (mg/L)	3	0.5	0.5	0.5
11	Mg (mg/L)	3	41.6	17.7	28.8
12	Na (mg/L)	3	32.0	28.8	30.5
13	NH3-N (mg N/L)	3	0.05	0.01	0.03
14	NO2+NO3 (mg N/L)	3	4.88	3.46	4.05
15	NO2-N (mgN/L)	3	0.32	0.01	0.12
16	NO3-N (mgN/L)	3	4.56	3.43	3.93
17	o-PO4-P (mg P/L)	3	0.700	0.120	0.413
18	SiO2 (mg/L)	3	15.5	12.4	14.2
19	SO4 (mg/L)	3	57.2	32.4	48.6
	BIOLOGICAL/BACTERIOLOGICAL				
1	BOD3-27 (mg/L)	3	1.8	1.1	1.5
2	COD (mg/L)	3	54.1	23.1	43.8
3	DO (mg/L)	3	6.6	4.6	5.4
4	DO_SAT% (%)	2	59	54	56
5	FCol-MPN (MPN/100mL)	3	16000	1300	6567
6	Tcol-MPN (MPN/100mL)	3	16000	1300	6567
	TRACE & TOXIC				
1	Cu (µg/L)	3	34.0	10.0	22.7
2	Zn (µg/L)	3	103.0	18.0	57.7
	CHEMICAL INDICES				
1	HAR_Ca (mgCaCO3/L)	3	128	68	89
2	HAR_Total (mgCaCO3/L)	3	242	144	209
3	Na% (%)	3	32	21	25
4	RSC (-)	3	0.0	0.0	0
5	SAR (-)	3	1.1	0.8	0.9
	PESTICIDES				

Water Quality Seasonal Average for the period: 2004-2018

Station Name : Dhalegaon (AG000S9)

Local River : Godavari

River Water

Division : Upper Godavari Div., Hyderabad

Sub-Division : Upper Godavari SD, Aurangabad

S.No	Parameters	Flood													
		Jun - Oct													
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	PHYSICAL														
1	Q (cumec)	18.78	109.0	296.0	45.26			114.6	125.9					186.6	0.000
2	EC_GEN (µmho/cm)	344	322	440	635			389	421					381	312
3	pH_GEN (pH units)	8.3	7.6	8.4	8.6			8.1	8.3					7.5	8.2
4	TDS (mg/L)							241	312					213	190
5	Temp (deg C)	26.0	26.0	27.0	28.5			28.0	27.0					26.0	24.0
6	Turb (NTU)							2.3	0.0					2.0	175.0
	CHEMICAL														
1	Alk-Phen (mgCaCO3/L)	19.8	1.4	12.3	15.7			4.1	8.1					0.0	8.0
2	ALK-TOT (mgCaCO3/L)	148	93	137	130			143	147					149	107
3	B (mg/L)	0.16	0.16	0.19	0.09			0.18	0.17						0.00
4	Ca (mg/L)	28	31	33	26			30	28					32	35
5	Cl (mg/L)	26.5	21.2	38.7	62.0			31.5	24.3					20.1	56.8
6	CO3 (mg/L)	23.8	1.7	14.8	18.9			4.9	9.8					0.0	9.6
7	F (mg/L)	0.44	0.24	0.30	0.44			0.28	0.39					0.00	0.36
8	Fe (mg/L)	0.1	0.1	0.2	0.1			0.2	0.2					0.2	6.7
9	HCO3 (mg/L)	132	110	137	120			165	159					182	111
10	K (mg/L)	3.3	2.5	3.2	2.8			3.6	3.5					3.9	0.5
11	Mg (mg/L)	5.6	7.8	12.5	24.7			14.7	21.3					17.5	28.8
12	Na (mg/L)	45.5	22.3	46.7	55.3			28.5	27.0					16.5	30.5
13	NH3-N (mg N/L)	0.05	0.82	0.05	0.11			0.13	0.11					0.00	0.03
14	NO2+NO3 (mg N/L)	0.95	0.77	0.98	0.80			0.99	1.01					2.24	4.05
15	NO2-N (mgN/L)	0.01	0.05	0.01	0.02			0.05	0.01					0.24	0.12
16	NO3-N (mgN/L)	0.95	0.77	0.97	0.78			0.93	1.00					2.00	3.93
17	o-PO4-P (mg P/L)	0.060	0.009					0.022	0.013					0.091	0.413
18	P-Tot (mgP/L)			0.013	0.043										
19	SiO2 (mg/L)	25.0	25.0	12.5	22.0			24.8	19.8					16.8	14.2
20	SO4 (mg/L)	21.0	18.7	17.3	70.3			27.0	29.5					17.8	48.6

Water Quality Seasonal Average for the period: 2004-2018

Station Name : Dhalegaon (AG000S9)

Division : Upper Godavari Div., Hyderabad

Local River : Godavari

River Water

Sub-Division : Upper Godavari SD, Aurangabad

S.No	Parameters	Flood													
		Jun - Oct													
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	BIOLOGICAL/BACTERIOLOGICAL														
1	BOD3-27 (mg/L)	0.8	1.5	1.0	0.8			0.8	1.0					1.1	1.5
2	COD (mg/L)	31.8	25.0	29.8	24.1			4.9	6.7					6.1	43.8
3	DO (mg/L)	4.8	5.7	6.2	5.6			5.7	6.8					5.9	5.4
4	DO_SAT% (%)	59	70	78	72			72	85					73	56
5	FCol-MPN (MPN/100mL)		2050	12333	293			260	16000					3000	6567
6	Tcol-MPN (MPN/100mL)		3000	13667	403			8010	16000					9000	6567
7	TOC (mg/L)	5.2			1.1			2.4	4.6						
	TRACE & TOXIC														
1	Cd (µg/L)				8.4										
2	Cr (µg/L)				15.2										
3	Cu (µg/L)														22.7
4	Hg (µg/L)				2.0										
5	Ni (µg/L)				8.0										
6	Pb (µg/L)				14.3										
7	Zn (µg/L)				248.8										57.7
	CHEMICAL INDICES														
1	HAR_Ca (mgCaCO3/L)	70	77	83	66			74	70					80	89
2	HAR_Total (mgCaCO3/L)	93	110	134	169			135	159					153	209
3	Na% (%)	50	30	41	41			31	27					19	25
4	RSC (-)	1.1	0.0	0.2	0.0			0.2	0.0					0.0	0.0
5	SAR (-)	2.1	0.9	1.7	1.9			1.1	0.9					0.6	0.9
	PESTICIDES														
1	Aldrin (µg/L)				0.0										
2	BHC (µg/L)				0.1										
3	DDT (µg/L)				0.1										
4	Dieldrin (µg/L)				0.0										
5	Endos (µg/L)				0.1										

Water Quality Seasonal Average for the period: 2004-2018

Station Name : Dhalegaon (AG000S9)

Local River : Godavari

River Water

Division : Upper Godavari Div., Hyderabad

Sub-Division : Upper Godavari SD, Aurangabad

S.No	Parameters	Winter													
		Nov - Feb													
		2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
	PHYSICAL														
1	Q (cumec)		11.25	3.114	1.478										
2	EC_GEN (µmho/cm)		599	840	780										
3	pH_GEN (pH units)		8.3	8.6	8.2										
4	TDS (mg/L)														
5	Temp (deg C)		23.3	22.0	25.0										
6	Turb (NTU)														
	CHEMICAL														
1	Alk-Phen (mgCaCO3/L)		4.4	6.5	0.0										
2	ALK-TOT (mgCaCO3/L)		167	180	219										
3	B (mg/L)		0.21	0.12	0.18										
4	Ca (mg/L)		62	48	64										
5	Cl (mg/L)		53.2	72.3	65.0										
6	CO3 (mg/L)		5.3	7.8	0.0										
7	F (mg/L)		0.51	0.17	0.60										
8	Fe (mg/L)		0.1	0.1	0.3										
9	HCO3 (mg/L)		193	204	267										
10	K (mg/L)		4.2	3.3	0.6										
11	Mg (mg/L)		7.9	22.8	17.0										
12	Na (mg/L)		47.3	88.0	73.6										
13	NH3-N (mg N/L)		0.05	0.05	0.05										
14	NO2+NO3 (mg N/L)		0.81	1.54	1.83										
15	NO2-N (mgN/L)		0.01	0.00	0.15										
16	NO3-N (mgN/L)		0.81	1.54	1.68										
17	o-PO4-P (mg P/L)		0.004												
18	P-Tot (mgP/L)			0.030	0.037										
19	SiO2 (mg/L)		25.0	24.1	25.0										
20	SO4 (mg/L)		28.0	98.0	98.0										

Water Quality Seasonal Average for the period: 2004-2018

Station Name : Dhalegaon (AG000S9)

Division : Upper Godavari Div., Hyderabad

Local River : Godavari

River Water

Sub-Division : Upper Godavari SD, Aurangabad

S.No	Parameters	Winter													
		Nov - Feb													
		2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
	BIOLOGICAL/BACTERIOLOGICAL														
1	BOD3-27 (mg/L)		0.8	0.8	1.2										
2	COD (mg/L)		0.0	6.8	65.0										
3	DO (mg/L)		7.3	6.7	6.9										
4	DO_SAT% (%)		85	75	84										
5	FCol-MPN (MPN/100mL)		1760	1260	800										
6	Tcol-MPN (MPN/100mL)		8020	9500	1300										
7	TOC (mg/L)				1.4										
	TRACE & TOXIC														
1	Cd (µg/L)			131.0											
2	Cr (µg/L)			27.0											
3	Cu (µg/L)														
4	Hg (µg/L)			0.2											
5	Ni (µg/L)			24.0											
6	Pb (µg/L)			180.0											
7	Zn (µg/L)			170.0											
	CHEMICAL INDICES														
1	HAR_Ca (mgCaCO3/L)		154	120	160										
2	HAR_Total (mgCaCO3/L)		187	215	231										
3	Na% (%)		35	46	41										
4	RSC (-)		0.0	0.4	0.0										
5	SAR (-)		1.5	2.7	2.1										
	PESTICIDES														
1	Aldrin (µg/L)			0.0											
2	BHC (µg/L)			0.1											
3	DDT (µg/L)			0.1											
4	Dieldrin (µg/L)			0.0											
5	Endos (µg/L)			0.1											

Water Quality Seasonal Average for the period: 2004-2018

Station Name : Dhalegaon (AG000S9)

Local River : Godavari

River Water

Division : Upper Godavari Div., Hyderabad

Sub-Division : Upper Godavari SD, Aurangabad

S.No	Parameters	Summer														
		Mar - May														
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	PHYSICAL															
1	Q (cumec)															
2	EC_GEN (µmho/cm)															
3	pH_GEN (pH units)															
4	TDS (mg/L)															
5	Temp (deg C)															
6	Turb (NTU)															
	CHEMICAL															
1	Alk-Phen (mgCaCO3/L)															
2	ALK-TOT (mgCaCO3/L)															
3	B (mg/L)															
4	Ca (mg/L)															
5	Cl (mg/L)															
6	CO3 (mg/L)															
7	F (mg/L)															
8	Fe (mg/L)															
9	HCO3 (mg/L)															
10	K (mg/L)															
11	Mg (mg/L)															
12	Na (mg/L)															
13	NH3-N (mg N/L)															
14	NO2+NO3 (mg N/L)															
15	NO2-N (mgN/L)															
16	NO3-N (mgN/L)															
17	o-PO4-P (mg P/L)															
18	P-Tot (mgP/L)															
19	SiO2 (mg/L)															
20	SO4 (mg/L)															

Water Quality Seasonal Average for the period: 2004-2018

Station Name : Dhalegaon (AG000S9)

Division : Upper Godavari Div., Hyderabad

Local River : Godavari

River Water

Sub-Division : Upper Godavari SD, Aurangabad

S.No	Parameters	Summer														
		Mar - May														
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	BIOLOGICAL/BACTERIOLOGICAL															
1	BOD3-27 (mg/L)															
2	COD (mg/L)															
3	DO (mg/L)															
4	DO_SAT% (%)															
5	FCol-MPN (MPN/100mL)															
6	Tcol-MPN (MPN/100mL)															
7	TOC (mg/L)															
	TRACE & TOXIC															
1	Cd (µg/L)															
2	Cr (µg/L)															
3	Cu (µg/L)															
4	Hg (µg/L)															
5	Ni (µg/L)															
6	Pb (µg/L)															
7	Zn (µg/L)															
	CHEMICAL INDICES															
1	HAR_Ca (mgCaCO3/L)															
2	HAR_Total (mgCaCO3/L)															
3	Na% (%)															
4	RSC (-)															
5	SAR (-)															
	PESTICIDES															
1	Aldrin (µg/L)															
2	BHC (µg/L)															
3	DDT (µg/L)															
4	Dieldrin (µg/L)															
5	Endos (µg/L)															

HISTORY SHEET

		Water Year	: 2017-2018
Site	: Pachegaon	Code	: AGU00D3
State	: Maharashtra	District	Ahmednagar
Basin	: Godavari	Independent River	: Godavari
Tributary	: Pravara	Sub Tributary	: -
Sub-Sub Tributary	: -	Local River	: Pravara
Division	: Upper Godavari Div., Hyderabad	Sub-Division	: Upper Godavari SD, Aurangabad
Drainage Area	: 5800 Sq. Km.	Bank	: Left
Latitude	: 19°32'07"	Longitude	: 74°50'01"
	Opening Date	Closing Date	
Gauge	: 07.12.1978		
Discharge	: 23.07.1983		
Sediment	:		
Water Quality	: 01.04.2014		

Water Quality Datasheet for the period : 2017-2018

Station Name : Pachegaon (AGU00D3)
Local River : Pravara

River Water Analysis

Division : Upper Godavari Div., Hyderabad
Sub-Division : Upper Godavari SD, Aurangabad

S.No	Parameters	01.08.2017	01.09.2017	03.10.2017	01.11.2017
		A	A	A	A
	PHYSICAL				
1	Q (cumec)	115.9	196.3	42.47	0.000
2	Colour_Cod (-)	Clear	Brown	Clear	Clear
3	EC_GEN (µmho/cm)	185	185	250	449
4	Odour_Code (-)	odour free	odour free	odour free	odour free
5	pH_GEN (pH units)	8.0	7.8	8.4	8.0
6	TDS (mg/L)	133	133	246	272
7	Temp (deg C)	26.0	24.0	26.0	24.0
8	Turb (NTU)	44.0	83.0	11.0	18.0
	CHEMICAL				
1	Alk-Phen (mgCaCO3/L)	0.0	0.0	15.9	0.0
2	ALK-TOT (mgCaCO3/L)	156	104	124	188
3	B (mg/L)			0.25	0.03
4	Ca (mg/L)	27	24	45	34
5	Cl (mg/L)	12.0	19.1	60.7	42.8
6	CO3 (mg/L)	0.0	0.0	19.2	0.0
7	F (mg/L)	0.10	0.09	0.17	0.13
8	Fe (mg/L)	0.4	3.1	0.0	0.3
9	HCO3 (mg/L)	190	127	112	229
10	K (mg/L)	0.1	0.1	0.2	0.2
11	Mg (mg/L)	15.9	19.0	24.4	30.0
12	Na (mg/L)	12.0	11.2	38.7	42.4
13	NH3-N (mg N/L)	0.04	0.07	0.14	3.32
14	NO2+NO3 (mg N/L)	4.29	5.92	4.90	8.90
15	NO2-N (mgN/L)	0.02	0.02	0.07	0.02
16	NO3-N (mgN/L)	4.27	5.90	4.83	8.88
17	o-PO4-P (mg P/L)	0.080	0.490	0.990	0.820
18	SiO2 (mg/L)	23.0	19.4	22.6	22.6

Water Quality Datasheet for the period : 2017-2018

Station Name : Pachegaon (AGU00D3)

Local River : Pravara

Division : Upper Godavari Div., Hyderabad

Sub-Division : Upper Godavari SD, Aurangabad

River Water Analysis

S.No	Parameters	01.08.2017	01.09.2017	03.10.2017	01.11.2017
		A	A	A	A
19	SO4 (mg/L)	5.3	7.9	36.8	66.5
	BIOLOGICAL/BACTERIOLOGICAL				
1	BOD3-27 (mg/L)	1.0	0.5	2.1	2.7
2	COD (mg/L)	17.2	2.2	27.9	47.5
3	DO (mg/L)	7.3	6.9	6.8	7.6
4	DO_SAT% (%)	90	82	84	90
5	FCol-MPN (MPN/100mL)	2400	340	300	3000
6	Tcol-MPN (MPN/100mL)	2400	3000	300	3000
	TRACE & TOXIC				
1	Cu (µg/L)	1.0	5.0	7.0	4.0
2	Zn (µg/L)	92.1	57.0	43.0	30.0
	CHEMICAL INDICES				
1	HAR_Ca (mgCaCO3/L)	66	60	113	85
2	HAR_Total (mgCaCO3/L)	133	140	215	210
3	Na% (%)	17	15	28	31
4	RSC (-)	0.5	0.0	0.0	0.0
5	SAR (-)	0.5	0.4	1.2	1.3
	PESTICIDES				

Water Quality Summary for the period : 2017-2018

Station Name : Pachegaon (AGU00D3)

Division : Upper Godavari Div., Hyderabad

Local River : Pravara

Sub-Division : Upper Godavari SD, Aurangabad

River Water Summary

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
	PHYSICAL				
1	Q (cumec)	365	834.8	0.000	15.92
2	EC_GEN (μmho/cm)	4	449	185	267
3	pH_GEN (pH units)	4	8.4	7.8	8
4	TDS (mg/L)	4	272	133	196
5	Temp (deg C)	4	26.0	24.0	25
6	Turb (NTU)	4	83.0	11.0	39
	CHEMICAL				
1	Alk-Phen (mgCaCO3/L)	4	15.9	0.0	4
2	ALK-TOT (mgCaCO3/L)	4	188	104	143
3	B (mg/L)	2	0.25	0.03	0.14
4	Ca (mg/L)	4	45	24	32
5	Cl (mg/L)	4	60.7	12.0	33.7
6	CO3 (mg/L)	4	19.2	0.0	4.8
7	F (mg/L)	4	0.17	0.09	0.12
8	Fe (mg/L)	4	3.1	0.0	1
9	HCO3 (mg/L)	4	229	112	165
10	K (mg/L)	4	0.2	0.1	0.2
11	Mg (mg/L)	4	30.0	15.9	22.3
12	Na (mg/L)	4	42.4	11.2	26.1
13	NH3-N (mg N/L)	4	3.32	0.04	0.89
14	NO2+NO3 (mg N/L)	4	8.90	4.29	6
15	NO2-N (mgN/L)	4	0.07	0.02	0.03
16	NO3-N (mgN/L)	4	8.88	4.27	5.97
17	o-PO4-P (mg P/L)	4	0.990	0.080	0.595
18	SiO2 (mg/L)	4	23.0	19.4	21.9
19	SO4 (mg/L)	4	66.5	5.3	29.1
	BIOLOGICAL/BACTERIOLOGICAL				
1	BOD3-27 (mg/L)	4	2.7	0.5	1.6
2	COD (mg/L)	4	47.5	2.2	23.7
3	DO (mg/L)	4	7.6	6.8	7.2
4	DO_SAT% (%)	4	90	82	87
5	FCoI-MPN (MPN/100mL)	4	3000	300	1510
6	TcoI-MPN (MPN/100mL)	4	3000	300	2175
	TRACE & TOXIC				
1	Cu (μg/L)	4	7.0	1.0	4.3
2	Zn (μg/L)	4	92.1	30.0	55.5
	CHEMICAL INDICES				
1	HAR_Ca (mgCaCO3/L)	4	113	60	81
2	HAR_Total (mgCaCO3/L)	4	215	133	174
3	Na% (%)	4	31	15	23
4	RSC (-)	4	0.5	0.0	0.1
5	SAR (-)	4	1.3	0.4	0.8
	PESTICIDES				

Water Quality Seasonal Average for the period: 2014-2018

Station Name : Pachegaon (AGU00D3)

Local River : Pravara

River Water

Division : Upper Godavari Div., Hyderabad

Sub-Division : Upper Godavari SD, Aurangabad

S.No	Parameters	Flood				Winter				Summer			
		Jun - Oct				Nov - Feb				Mar - May			
		2014	2015	2016	2017	2014-2015	2015-2016	2016-2017	2017-2018	2015	2016	2017	2018
	PHYSICAL												
1	Q (cumec)			79.42	118.2		85.61		0.000	66.51			
2	EC_GEN (µmho/cm)			327	207		228		449	474			
3	pH_GEN (pH units)			7.7	8.0		7.1		8.0	7.5			
4	TDS (mg/L)			184	171		69		272	306			
5	Temp (deg C)			26.7	25.3		23.5		24.0	23.0			
6	Turb (NTU)			68.7	46.0		28.5		18.0	5.0			
	CHEMICAL												
1	Alk-Phen (mgCaCO3/L)			1.6	5.3		0.0		0.0	0.0			
2	ALK-TOT (mgCaCO3/L)			126	128		90		188	112			
3	B (mg/L)				0.25		0.00		0.03	0.16			
4	Ca (mg/L)			27	32		23		34	24			
5	Cl (mg/L)			18.1	30.6		7.3		42.8	45.5			
6	CO3 (mg/L)			1.9	6.4		0.0		0.0	0.0			
7	F (mg/L)			0.11	0.12		0.01		0.13	0.93			
8	Fe (mg/L)			0.1	1.2		0.0		0.3	0.3			
9	HCO3 (mg/L)			149	143		110		229	137			
10	K (mg/L)			2.2	0.1		1.1		0.2	2.3			
11	Mg (mg/L)			14.9	19.8		10.8		30.0	13.6			
12	Na (mg/L)			23.8	20.6		9.7		42.4	45.9			
13	NH3-N (mg N/L)			0.00	0.08		0.04		3.32	0.00			
14	NO2+NO3 (mg N/L)			1.77	5.04		0.39		8.90	1.40			
15	NO2-N (mgN/L)			1.05	0.04		0.00		0.02	0.00			
16	NO3-N (mgN/L)			0.72	5.00		0.38		8.88	1.40			
17	o-PO4-P (mg P/L)			0.075	0.520		0.046		0.820	0.200			
18	SiO2 (mg/L)			17.4	21.7		13.4		22.6	36.8			
19	SO4 (mg/L)			15.3	16.7		4.8		66.5	33.0			

Water Quality Seasonal Average for the period: 2014-2018

Station Name : Pachegaon (AGU00D3)

Division : Upper Godavari Div., Hyderabad

Local River : Pravara

River Water

Sub-Division : Upper Godavari SD, Aurangabad

S.No	Parameters	Flood				Winter				Summer			
		Jun - Oct				Nov - Feb				Mar - May			
		2014	2015	2016	2017	2014-2015	2015-2016	2016-2017	2017-2018	2015	2016	2017	2018
	BIOLOGICAL/BACTERIOLOGICAL												
1	BOD3-27 (mg/L)			1.2	1.2		1.0		2.7	1.7			
2	COD (mg/L)			11.8	15.8		2.4		47.5	13.7			
3	DO (mg/L)			6.3	7.0				7.6	5.8			
4	DO_SAT% (%)			78	85				90	68			
5	FCol-MPN (MPN/100mL)			5701	1013		12500		3000	40			
6	Tcol-MPN (MPN/100mL)			16000	1900		16000		3000	3500			
7	TOC (mg/L)						1.7			3.7			
	TRACE & TOXIC												
1	Cu (µg/L)				4.3				4.0				
2	Zn (µg/L)				64.0				30.0				
	CHEMICAL INDICES												
1	HAR_Ca (mgCaCO3/L)			67	80		58		85	60			
2	HAR_Total (mgCaCO3/L)			129	162		103		210	117			
3	Na% (%)			28	20		17		31	46			
4	RSC (-)			0.1	0.2		0.1		0.0	0.0			
5	SAR (-)			0.9	0.7		0.4		1.3	1.9			
	PESTICIDES												

HISTORY SHEET

		Water Year	: 2017-2018
Site	: Kopergaon	Code	: Kopergaon
State	: Maharashtra	District	Ahmednagar
Basin	: Godavari	Independent River	: Godavari
Tributary	: -	Sub Tributary	:
Sub-Sub Tributary	:	Local River	: Godavari
Division	: U Godavari Div., Hyderabad	Sub-Division	: U Godavari SD, Aurangabad
Drainage Area	: 6480 Sq. Km.	Bank	:
Latitude	: 19°52'42"	Longitude	: 74°28'50"
	Opening Date	Closing Date	
Gauge	: 08.07.1978		
Discharge	:		
Sediment	:		
Water Quality	: 01.04.2014		

Water Quality Datasheet for the period : 2017-2018

Station Name : Kopergaon (Kopergaon)

Division : U Godavari Div., Hyderabad

Local River : Godavari

River Water Analysis

Sub-Division : U Godavari SD, Aurangabad

S.No	Parameters	03.07.2017	01.08.2017	01.09.2017	03.10.2017	01.11.2017
		A	A	A	A	A
	PHYSICAL					
1	Q (cumec)	56.29	145.8	401.5	0.000	0.000
2	Colour_Cod (-)	Dark Brown	Light Brown	Brown	Clear	Clear
3	EC_GEN (µmho/cm)	647	354	270	259	588
4	Odour_Code (-)	fishy	fishy	fishy	odour free	odour free
5	pH_GEN (pH units)	8.3	7.8	7.6	8.2	7.8
6	TDS (mg/L)	441	254	193	231	397
7	Temp (deg C)	25.0	25.0	25.0	24.0	22.0
8	Turb (NTU)	71.0	94.0	82.0	12.0	21.0
	CHEMICAL					
1	Alk-Phen (mgCaCO3/L)	19.9	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO3/L)	128	136	108	132	182
3	B (mg/L)				0.11	0.00
4	Ca (mg/L)	34	44	32	42	65
5	Cl (mg/L)	82.3	27.4	30.5	50.9	75.5
6	CO3 (mg/L)	24.0	0.0	0.0	0.0	0.0
7	F (mg/L)	0.19	0.16	0.10	0.17	0.17
8	Fe (mg/L)	1.9	6.0	2.4	0.1	0.3
9	HCO3 (mg/L)	107	166	132	161	222
10	K (mg/L)	0.3	0.3	0.2	0.3	0.3
11	Mg (mg/L)	30.9	27.4	19.9	25.3	22.3
12	Na (mg/L)	68.0	21.7	13.8	33.0	47.8
13	NH3-N (mg N/L)	0.05	0.04	0.04	0.14	1.72
14	NO2+NO3 (mg N/L)	10.79	6.19	4.82	5.05	7.85
15	NO2-N (mgN/L)	0.13	0.95	0.08	0.17	0.19
16	NO3-N (mgN/L)	10.66	5.24	4.74	4.88	7.66
17	α-PO4-P (mg P/L)	0.200	0.480	0.520	0.500	0.540
18	SiO2 (mg/L)	8.2	16.3	20.3	19.8	22.7
19	SO4 (mg/L)	98.7	61.5	18.7	51.2	100.2
	BIOLOGICAL/BACTERIOLOGICAL					
1	BOD3-27 (mg/L)	2.0	1.8	0.5	2.4	2.7
2	COD (mg/L)	5.2	29.3	2.2	16.4	11.5
3	DO (mg/L)	7.4	5.9	4.0	6.6	6.4
4	DO_SAT% (%)	90	71	48	78	73
5	FCol-MPN (MPN/100mL)	16000	16000	5000	16000	9000
6	Tcol-MPN (MPN/100mL)	16000	16000	5000	16000	9000
	TRACE & TOXIC					
1	Cu (µg/L)		10.0	4.0	9.0	4.0
2	Zn (µg/L)	75.9	100.7	52.0	40.0	27.0
	CHEMICAL INDICES					
1	HAR_Ca (mgCaCO3/L)	85	111	79	106	161
2	HAR_Total (mgCaCO3/L)	214	225	162	211	254
3	Na% (%)	41	17	16	26	29
4	RSC (-)	0.0	0.0	0.0	0.0	0.0
5	SAR (-)	2.0	0.6	0.5	1.0	1.3
	PESTICIDES					

Water Quality Summary for the period : 2017-2018

Station Name : Kopergaon (Kopergaon)

Division : U Godavari Div., Hyderabad

Local River : Godavari

Sub-Division : U Godavari SD, Aurangabad

River Water Summary

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
	PHYSICAL				
1	Q (cumec)	365	1701	0.000	58.09
2	EC_GEN (μmho/cm)	5	647	259	423
3	pH_GEN (pH units)	5	8.3	7.6	7.9
4	TDS (mg/L)	5	441	193	303
5	Temp (deg C)	5	25.0	22.0	24.2
6	Turb (NTU)	5	94.0	12.0	56
	CHEMICAL				
1	Alk-Phen (mgCaCO3/L)	5	19.9	0.0	4
2	ALK-TOT (mgCaCO3/L)	5	182	108	137
3	B (mg/L)	2	0.11	0.00	0.05
4	Ca (mg/L)	5	65	32	43
5	Cl (mg/L)	5	82.3	27.4	53.3
6	CO3 (mg/L)	5	24.0	0.0	4.8
7	F (mg/L)	5	0.19	0.10	0.16
8	Fe (mg/L)	5	6.0	0.1	2.1
9	HCO3 (mg/L)	5	222	107	158
10	K (mg/L)	5	0.3	0.2	0.3
11	Mg (mg/L)	5	30.9	19.9	25.2
12	Na (mg/L)	5	68.0	13.8	36.9
13	NH3-N (mg N/L)	5	1.72	0.04	0.4
14	NO2+NO3 (mg N/L)	5	10.79	4.82	6.94
15	NO2-N (mgN/L)	5	0.95	0.08	0.3
16	NO3-N (mgN/L)	5	10.66	4.74	6.64
17	o-PO4-P (mg P/L)	5	0.540	0.200	0.448
18	SiO2 (mg/L)	5	22.7	8.2	17.5
19	SO4 (mg/L)	5	100.2	18.7	66
	BIOLOGICAL/BACTERIOLOGICAL				
1	BOD3-27 (mg/L)	5	2.7	0.5	1.9
2	COD (mg/L)	5	29.3	2.2	12.9
3	DO (mg/L)	5	7.4	4.0	6.1
4	DO_SAT% (%)	5	90	48	72
5	FCoI-MPN (MPN/100mL)	5	16000	5000	12400
6	TcoI-MPN (MPN/100mL)	5	16000	5000	12400
	TRACE & TOXIC				
1	Cu (μg/L)	4	10.0	4.0	6.8
2	Zn (μg/L)	5	100.7	27.0	59.1
	CHEMICAL INDICES				
1	HAR_Ca (mgCaCO3/L)	5	161	79	108
2	HAR_Total (mgCaCO3/L)	5	254	162	213
3	Na% (%)	5	41	16	26
4	RSC (-)	5	0.0	0.0	0
5	SAR (-)	5	2.0	0.5	1.1
	PESTICIDES				

Water Quality Seasonal Average for the period: 2014-2018

Station Name : Kopergaon (Kopergaon)

Local River : Godavari

River Water

Division : U Godavari Div., Hyderabad

Sub-Division : U Godavari SD, Aurangabad

S.No	Parameters	Flood				Winter				Summer			
		Jun - Oct				Nov - Feb				Mar - May			
		2014	2015	2016	2017	2014-2015	2015-2016	2016-2017	2017-2018	2015	2016	2017	2018
	PHYSICAL												
1	Q (cumec)	447.2	288.0	384.2	150.9		447.3		0.000				
2	EC_FLD (µmho/cm)		437										
3	EC_GEN (µmho/cm)	411	783	361	382		550		588				
4	pH_FLD (pH units)		7.1										
5	pH_GEN (pH units)	7.4	7.2	8.0	8.0		8.2		7.8				
6	TDS (mg/L)	270	212	285	280		245		397				
7	Temp (deg C)	26.0	27.0	25.7	24.8		26.0		22.0				
8	Turb (NTU)	103.0	76.7	110.0	64.8		14.0		21.0				
	CHEMICAL												
1	Alk-Phen (mgCaCO3/L)	0.0	0.0	2.3	5.0		0.0		0.0				
2	ALK-TOT (mgCaCO3/L)	109	129	141	126		103		182				
3	B (mg/L)	0.26	0.50		0.11		0.00		0.00				
4	Ca (mg/L)	31	42	36	38		30		65				
5	Cl (mg/L)	3.9	90.5	42.4	47.8		54.7		75.5				
6	CO3 (mg/L)	0.0	0.0	2.8	6.0		0.0		0.0				
7	F (mg/L)	0.20	0.40	0.20	0.15		0.24		0.17				
8	Fe (mg/L)	0.1	0.0	0.1	2.6		0.0		0.3				
9	HCO3 (mg/L)	133	158	166	142		126		222				
10	K (mg/L)	2.8	4.2	3.3	0.3		3.9		0.3				
11	Mg (mg/L)	17.7	23.9	20.3	25.9		17.0		22.3				
12	Na (mg/L)	22.3	94.7	34.9	34.1		49.0		47.8				
13	NH3-N (mg N/L)	0.03	0.00	0.00	0.07		0.00		1.72				
14	NO2+NO3 (mg N/L)	3.23	1.72	2.29	6.71		0.95		7.85				
15	NO2-N (mgN/L)	0.04	0.00	0.95	0.33		0.00		0.19				
16	NO3-N (mgN/L)	3.19	1.71	1.34	6.38		0.95		7.66				
17	o-PO4-P (mg P/L)	0.137	0.405	0.323	0.425		0.108		0.540				
18	SiO2 (mg/L)	20.9	17.3	15.9	16.1		11.1		22.7				
19	SO4 (mg/L)	65.0	162.3	40.4	57.5		65.5		100.2				

Water Quality Seasonal Average for the period: 2014-2018

Station Name : Kopergaon (Kopergaon)

Local River : Godavari

River Water

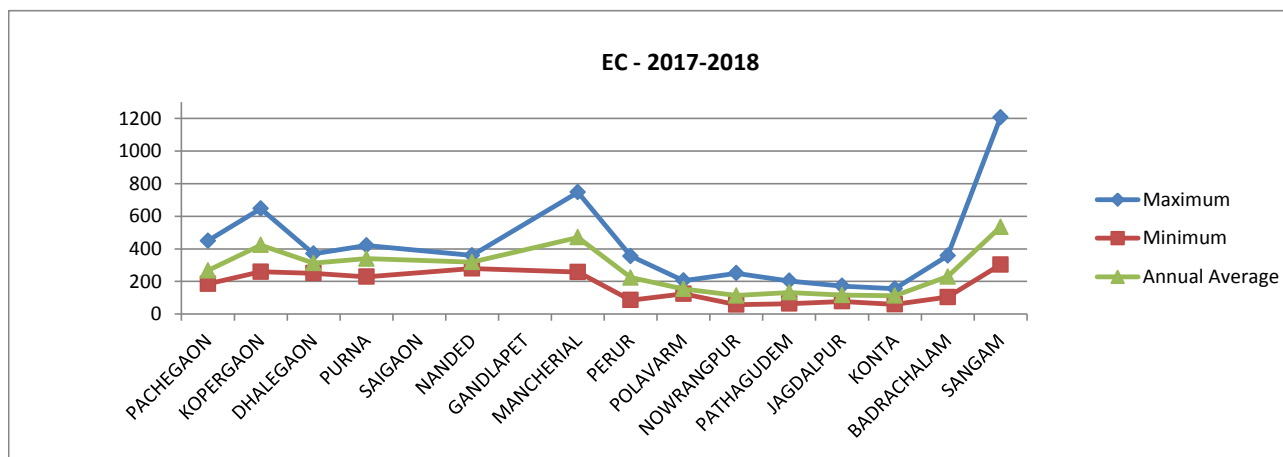
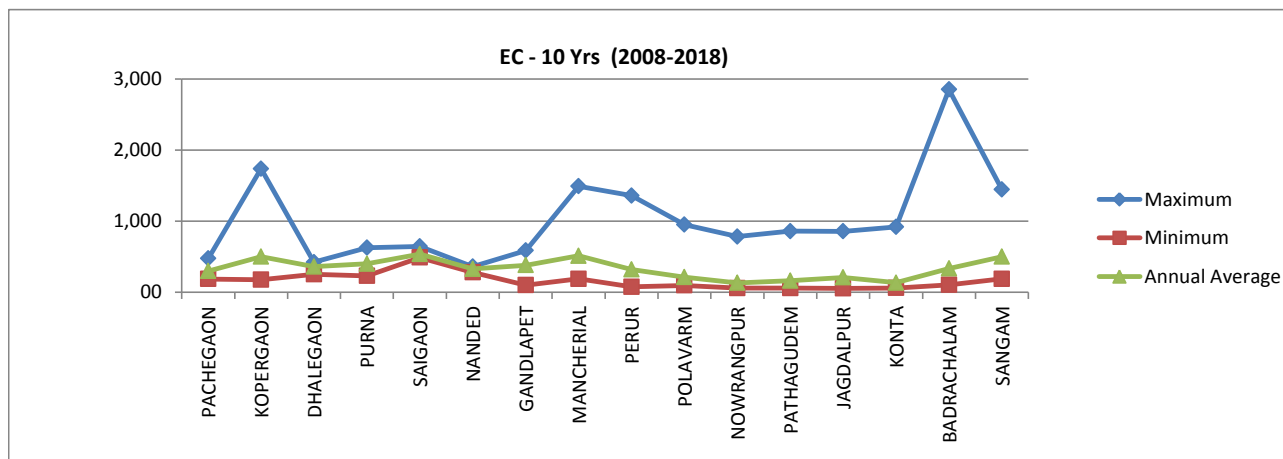
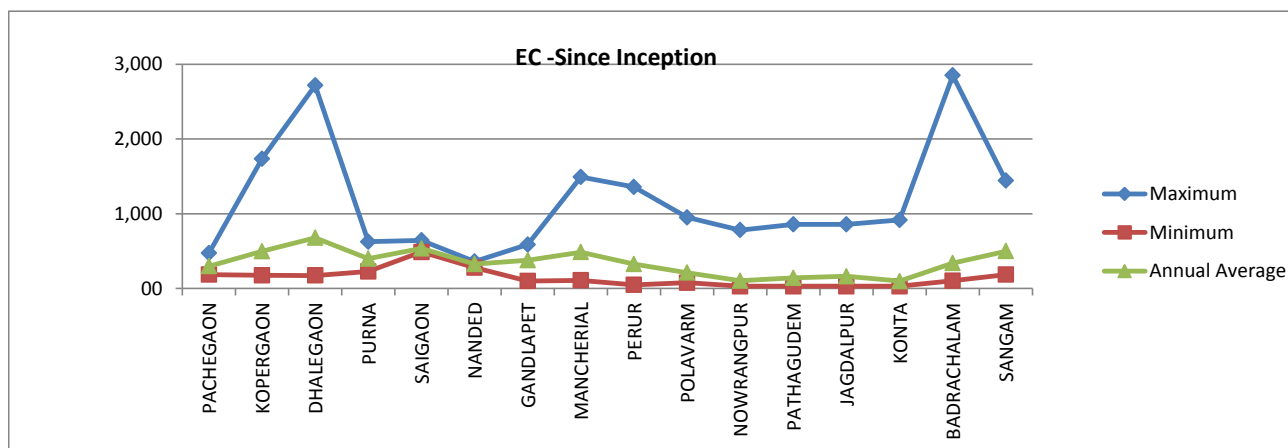
Division : U Godavari Div., Hyderabad

Sub-Division : U Godavari SD, Aurangabad

S.No	Parameters	Flood				Winter				Summer			
		Jun - Oct				Nov - Feb				Mar - May			
		2014	2015	2016	2017	2014-2015	2015-2016	2016-2017	2017-2018	2015	2016	2017	2018
	BIOLOGICAL/BACTERIOLOGICAL												
1	BOD3-27 (mg/L)	1.9	0.5	2.0	1.7		0.5		2.7				
2	COD (mg/L)	16.8	17.3	5.9	13.3		11.7		11.5				
3	DO (mg/L)	6.0		5.7	6.0				6.4				
4	DO_SAT% (%)	73		70	72				73				
5	FCoI-MPN (MPN/100mL)	9200	2100	12333	13250		16000		9000				
6	TcoI-MPN (MPN/100mL)	16000	16000	16000	13250		16000		9000				
7	TOC (mg/L)	6.1	10.5				4.6						
	TRACE & TOXIC												
1	Cu (µg/L)				7.7				4.0				
2	Zn (µg/L)				67.1				27.0				
	CHEMICAL INDICES												
1	HAR_Ca (mgCaCO3/L)	77	106	90	95		76		161				
2	HAR_Total (mgCaCO3/L)	151	205	174	203		147		254				
3	Na% (%)	23	41	30	25		41		29				
4	RSC (-)	0.0	0.0	0.2	0.0		0.0		0.0				
5	SAR (-)	0.8	2.4	1.1	1.0		1.8		1.3				
	PESTICIDES												

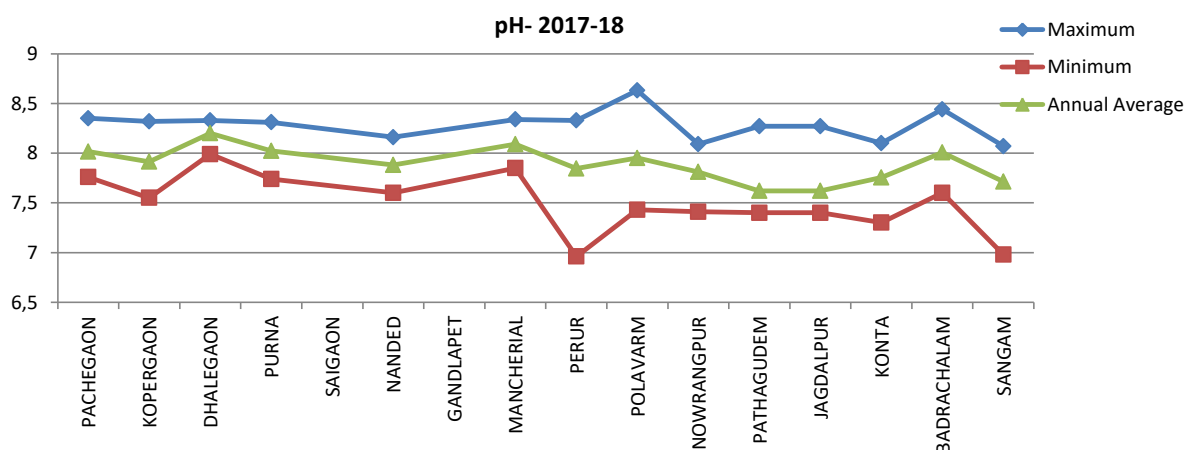
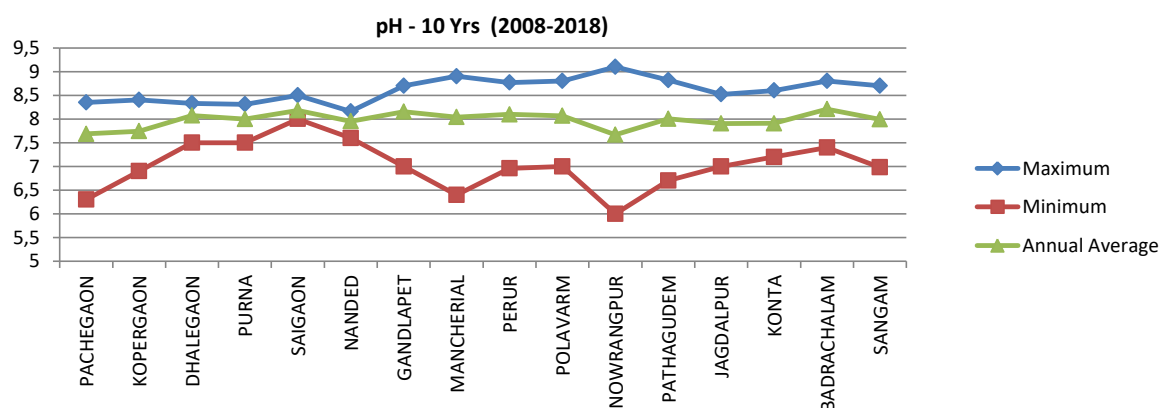
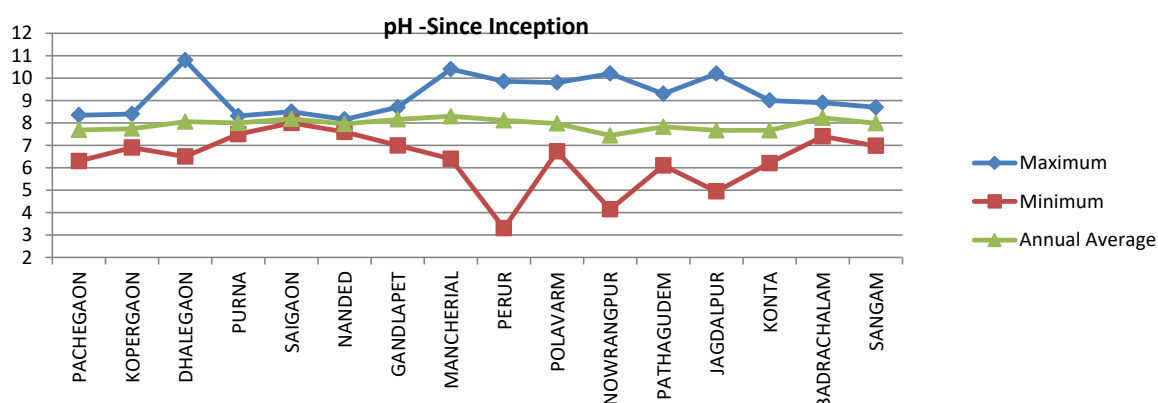
1. Electrical Conductivity

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
PACHEGAON	474.0	474.0	449.3	184.9	184.9	184.9	298.0	298.0	267.4
KOPERGAON	1736.0	1736.0	646.5	177.0	177.0	259.3	499.5	499.5	423.4
DHALEGAON	2718.0	421.0	370.3	175.0	250.4	250.4	680.2	359.4	311.9
PURNA	626.0	626.0	420.2	228.6	228.6	228.6	400.6	400.6	339.6
SAIGAON	644.0	644.0		488.0	488.0		535.4	535.4	
NANDED	360.0	360.0	360.0	279.0	279.0	279.0	328.3	328.3	319.5
GANDLAPET	587.0	587.0		101.0	101.0		379.6	379.6	
MANCHERIAL	1490.0	1490.0	747.0	110.0	187.0	258.0	486.7	511.1	470.7
PERUR	1358.0	1358.0	355.2	48.0	76.0	85.5	327.6	321.4	223.4
POLAVARM	951.5	951.5	205.0	78.0	95.0	124.1	212.6	211.4	153.5
NOWRANGPUR	781.0	781.0	250.4	30.0	57.1	57.1	104.4	131.6	113.5
PATHAGUDEM	858.0	858.0	203.3	30.0	57.0	63.9	142.9	161.2	132.6
JAGDALPUR	857.0	857.0	172.0	30.0	53.0	77.6	163.7	207.0	116.7
KONTA	917.0	917.0	155.0	30.0	59.5	59.5	98.8	133.0	112.6
BADRACHALAM	2850.0	2850.0	358.1	103.9	103.9	103.9	342.2	333.9	229.8
SANGAM	1442.0	1442.0	1207.0	188.0	188.0	303.0	500.6	500.6	533.9



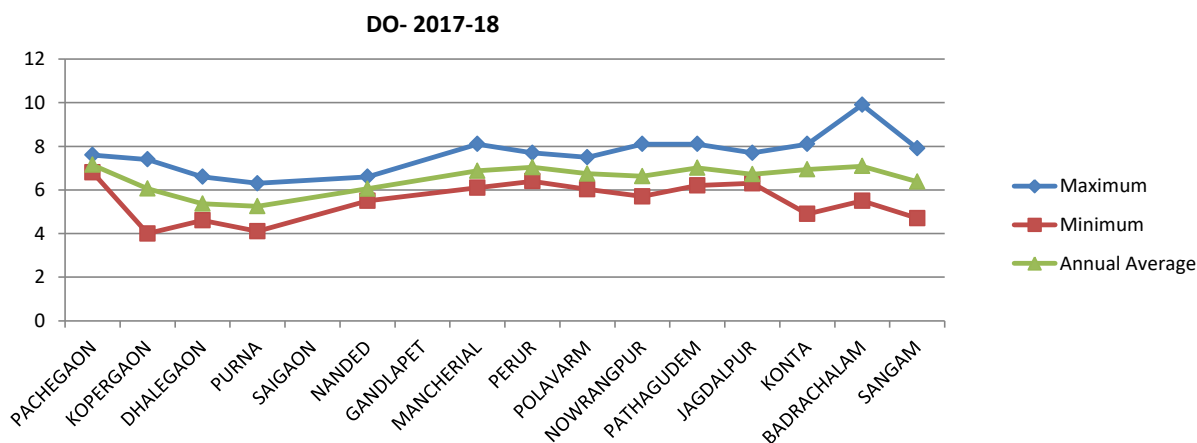
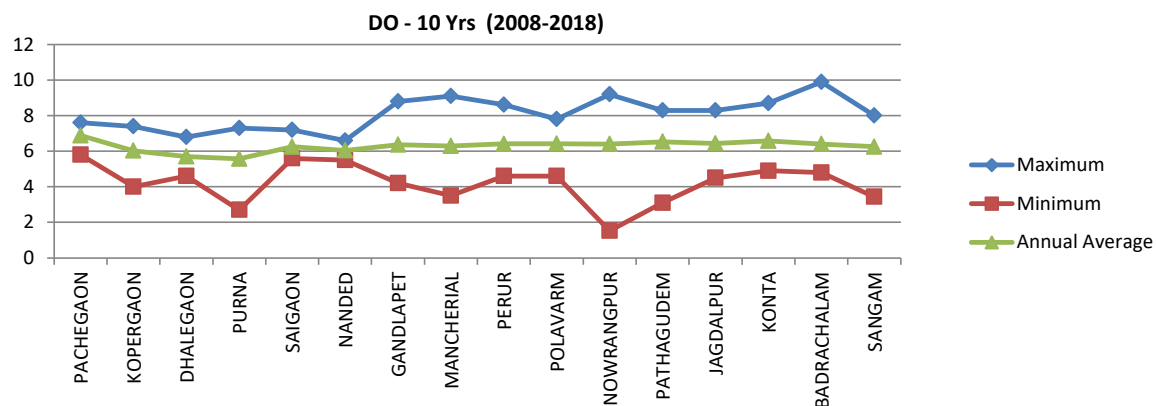
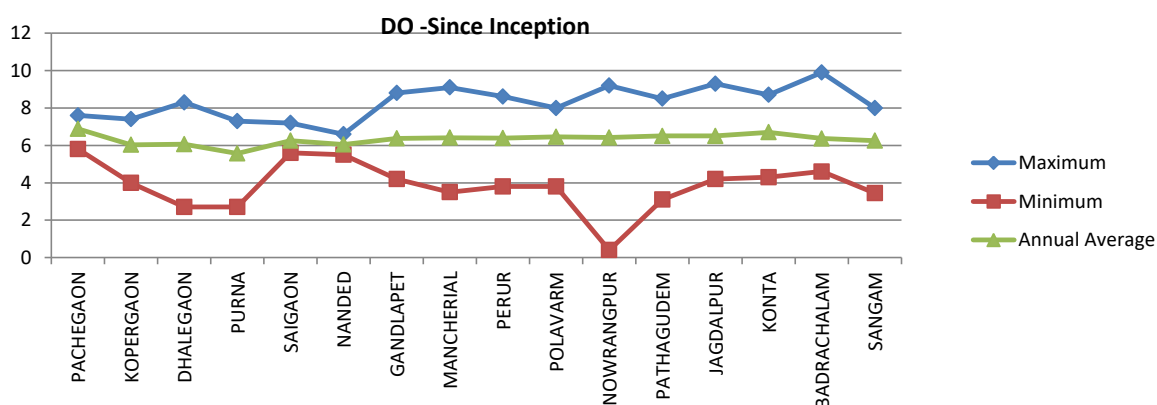
2. pH

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
PACHEGAON	8.4	8.4	8.4	6.3	6.3	7.8	7.7	7.7	8.0
KOPERGAON	8.4	8.4	8.3	6.9	6.9	7.6	7.7	7.7	7.9
DHALEGAON	10.8	8.3	8.3	6.5	7.5	8.0	8.1	8.1	8.2
PURNA	8.3	8.3	8.3	7.5	7.5	7.7	8.0	8.0	8.0
SAIGAON	8.5	8.5		8.0	8.0		8.2	8.2	
NANDED	8.2	8.2	8.2	7.6	7.6	7.6	8.0	8.0	7.9
GANDLAPET	8.7	8.7		7.0	7.0		8.2	8.2	
MANCHERIAL	10.4	8.9	8.3	6.4	6.4	7.8	8.3	8.0	8.1
PERUR	9.9	8.8	8.3	3.3	7.0	7.0	8.1	8.1	7.8
POLAVARM	9.8	8.8	8.6	6.7	7.0	7.4	8.0	8.1	8.0
NOWRANGPUR	10.2	9.1	8.1	4.2	6.0	7.4	7.4	7.7	7.8
PATHAGUDEM	9.3	8.8	8.3	6.1	6.7	7.4	7.8	8.0	7.6
JAGDALPUR	10.2	8.5	8.3	4.9	7.0	7.4	7.7	7.9	7.6
KONTA	9.0	8.6	8.1	6.2	7.2	7.3	7.7	7.9	7.8
BADRACHALAM	8.9	8.8	8.4	7.4	7.4	7.6	8.2	8.2	8.0
SANGAM	8.7	8.7	8.1	7.0	7.0	7.0	8.0	8.0	7.7



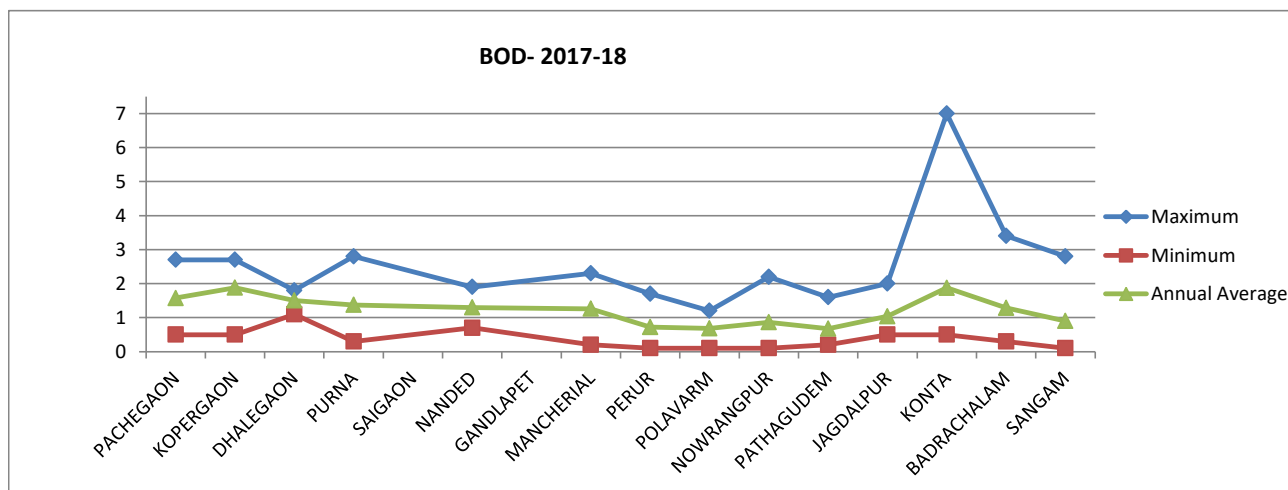
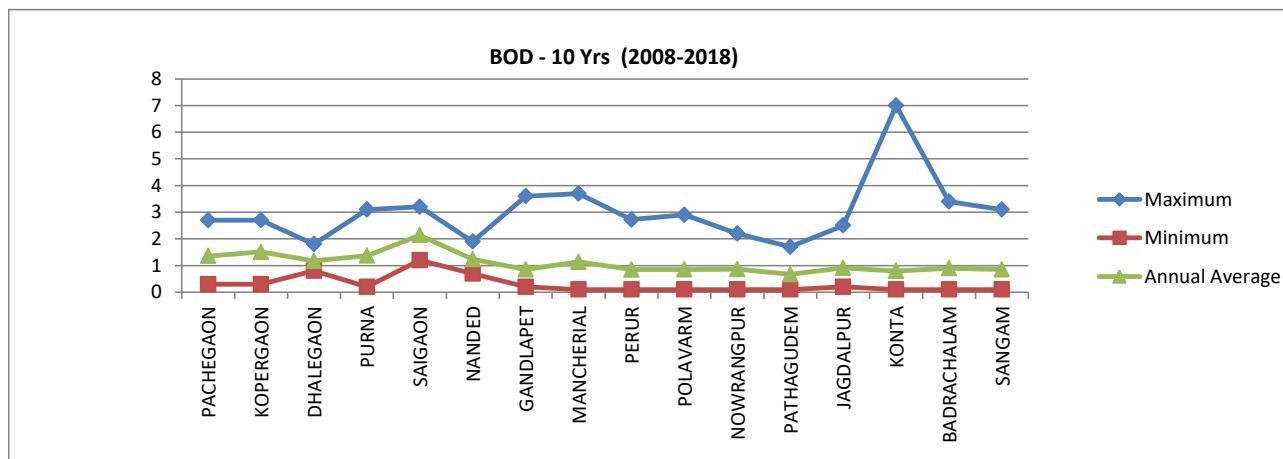
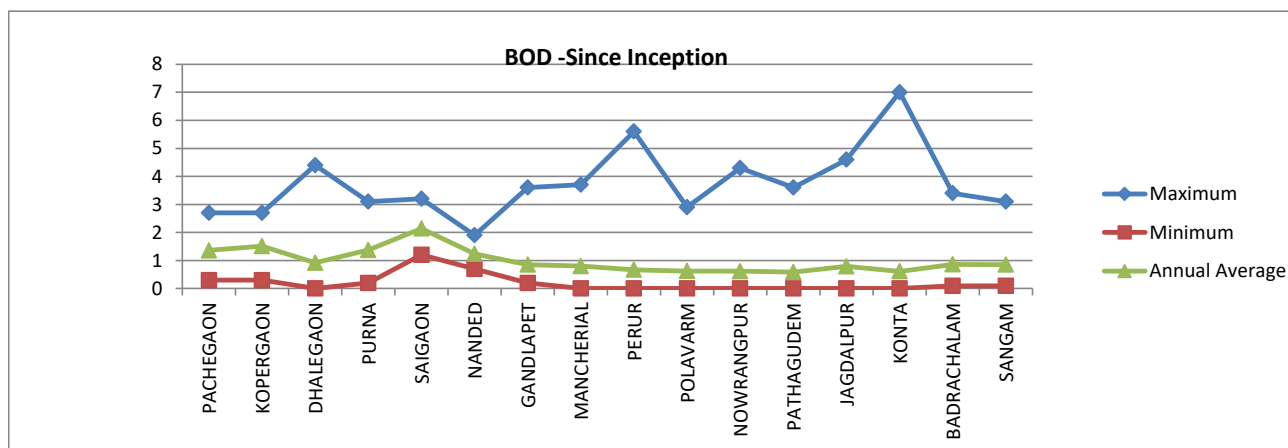
3.DISSOLVED OXEGEN

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
PACHEGAON	7.6	7.6	7.6	5.8	5.8	6.8	6.9	6.9	7.2
KOPERGAON	7.4	7.4	7.4	4.0	4.0	4.0	6.0	6.0	6.1
DHALEGAON	8.3	6.8	6.6	2.7	4.6	4.6	6.1	5.7	5.4
PURNA	7.3	7.3	6.3	2.7	2.7	4.1	5.6	5.6	5.3
SAIGAON	7.2	7.2		5.6	5.6		6.2	6.2	
NANDED	6.6	6.6	6.6	5.5	5.5	5.5	6.0	6.0	6.0
GANDLAPET	8.8	8.8		4.2	4.2		6.4	6.4	
MANCHERIAL	9.1	9.1	8.1	3.5	3.5	6.1	6.4	6.3	6.9
PERUR	8.6	8.6	7.7	3.8	4.6	6.4	6.4	6.4	7.0
POLAVARM	8.0	7.8	7.5	3.8	4.6	6.0	6.5	6.4	6.7
NOWRANGPUR	9.2	9.2	8.1	0.4	1.5	5.7	6.4	6.4	6.6
PATHAGUDEM	8.5	8.3	8.1	3.1	3.1	6.2	6.5	6.5	7.0
JAGDALPUR	9.3	8.3	7.7	4.2	4.5	6.3	6.5	6.4	6.7
KONTA	8.7	8.7	8.1	4.3	4.9	4.9	6.7	6.6	6.9
BADRACHALAM	9.9	9.9	9.9	4.6	4.8	5.5	6.4	6.4	7.1
SANGAM	8.0	8.0	7.9	3.4	3.4	4.7	6.3	6.3	6.4



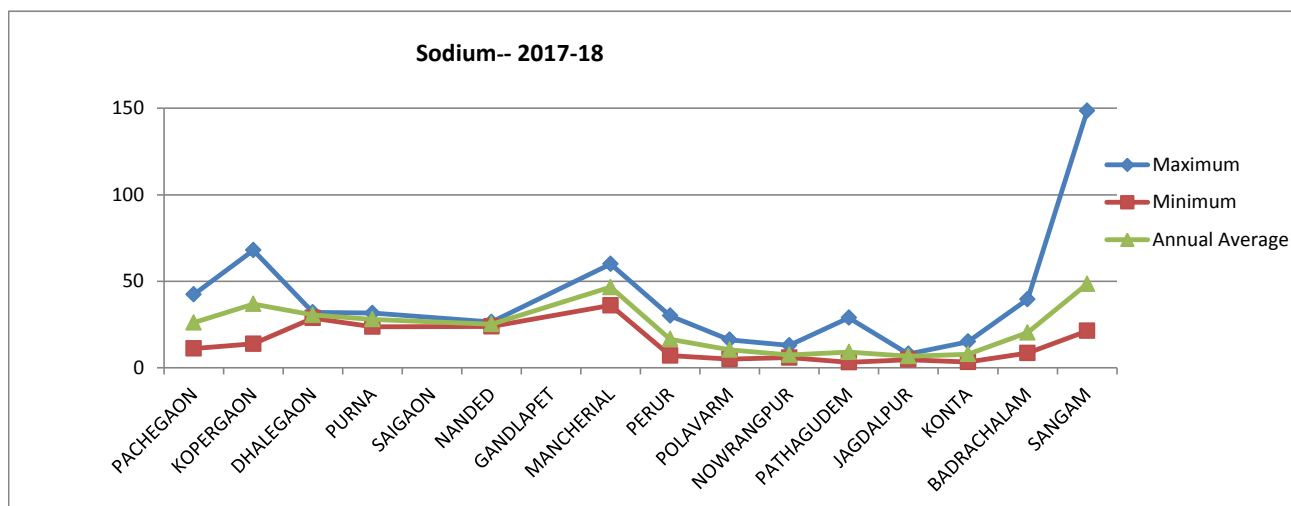
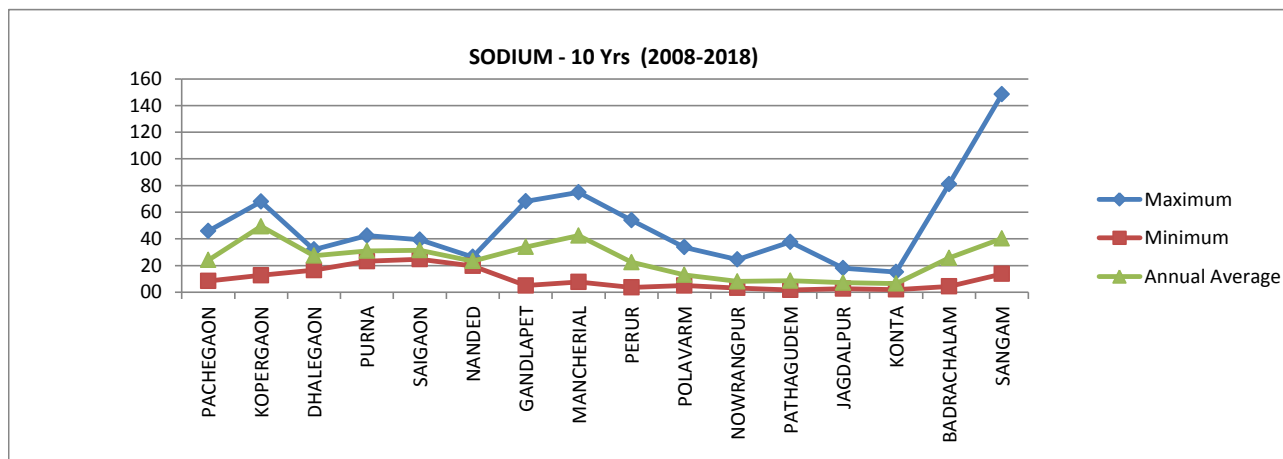
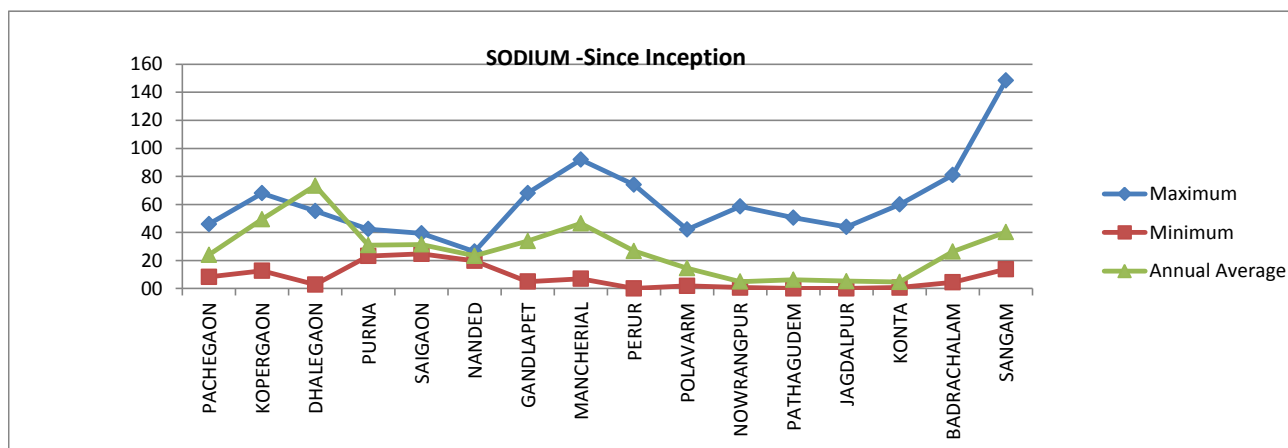
4. BOD

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
PACHEGAON	2.7	2.7	2.7	0.3	0.3	0.5	1.4	1.4	1.6
KOPERGAON	2.7	2.7	2.7	0.3	0.3	0.5	1.5	1.5	1.9
DHALEGAON	4.4	1.8	1.8	0.0	0.8	1.1	0.9	1.2	1.5
PURNA	3.1	3.1	2.8	0.2	0.2	0.3	1.4	1.4	1.4
SAIGAON	3.2	3.2		1.2	1.2		2.1	2.1	
NANDED	1.9	1.9	1.9	0.7	0.7	0.7	1.2	1.2	1.3
GANDLAPET	3.6	3.6		0.2	0.2		0.9	0.9	
MANCHERIAL	3.7	3.7	2.3	0.0	0.1	0.2	0.8	1.1	1.3
PERUR	5.6	2.7	1.7	0.0	0.1	0.1	0.7	0.8	0.7
POLAVARM	2.9	2.9	1.2	0.0	0.1	0.1	0.6	0.8	0.7
NOWRANGPUR	4.3	2.2	2.2	0.0	0.1	0.1	0.6	0.9	0.9
PATHAGUDEM	3.6	1.7	1.6	0.0	0.1	0.2	0.6	0.7	0.7
JAGDALPUR	4.6	2.5	2.0	0.0	0.2	0.5	0.8	0.9	1.0
KONTA	7.0	7.0	7.0	0.0	0.1	0.5	0.6	0.8	1.9
BADRACHALAM	3.4	3.4	3.4	0.1	0.1	0.3	0.9	0.9	1.3
SANGAM	3.1	3.1	2.8	0.1	0.1	0.1	0.9	0.9	0.9



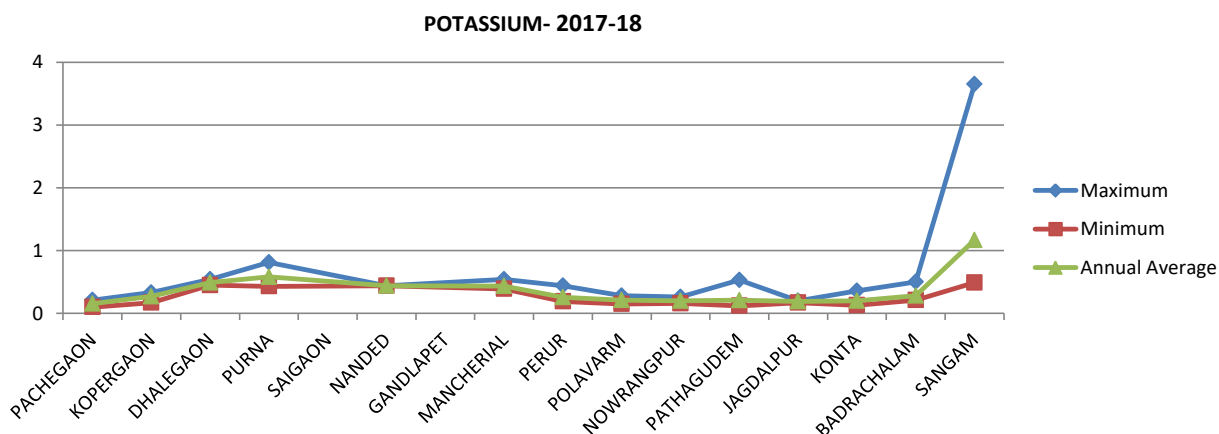
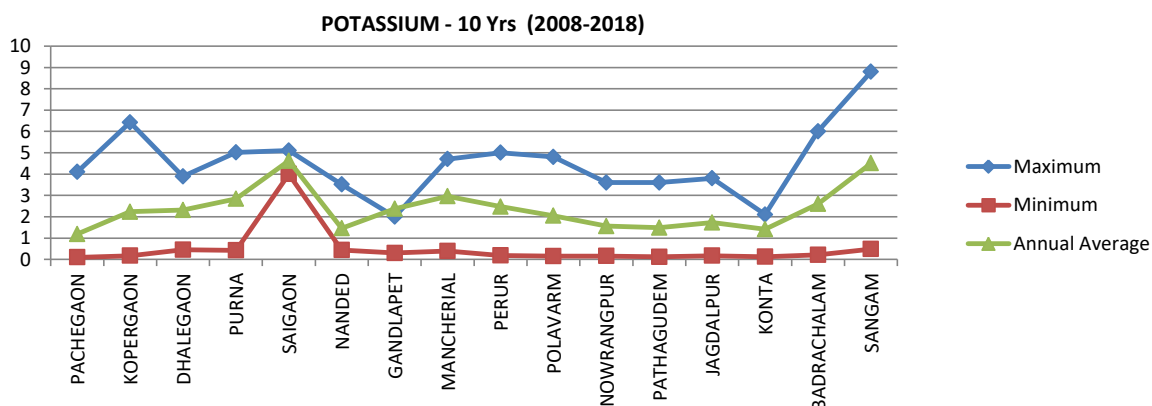
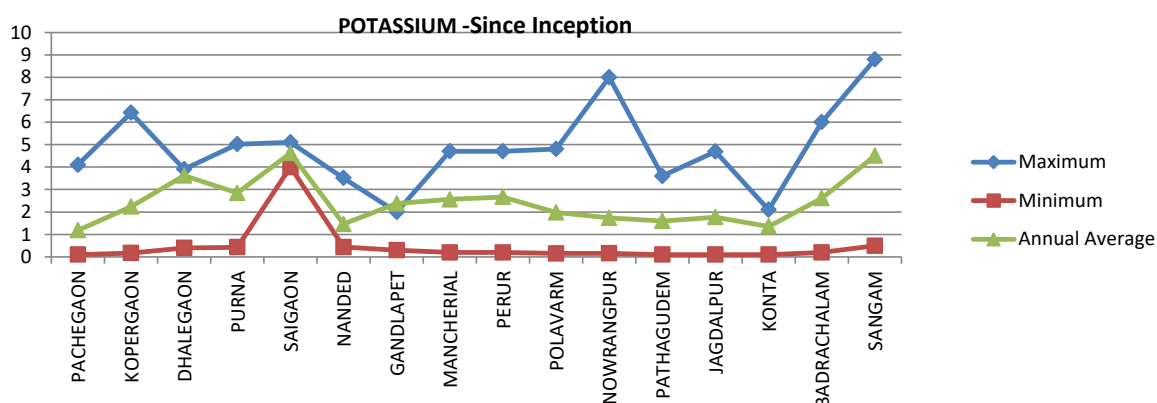
5. SODIUM

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
PACHEGAON	45.9	45.9	42.4	8.3	8.3	11.1	24.1	24.1	26.1
KOPERGAON	68.0	68.0	68.0	12.6	12.6	13.8	49.4	49.4	36.9
DHALEGAON	55.3	32.0	32.0	2.8	16.5	28.8	73.4	27.4	30.5
PURNA	42.4	42.4	31.6	23.3	23.3	23.7	31.0	31.0	28.0
SAIGAON	39.4	39.4		24.7	24.7		31.5	31.5	
NANDED	26.4	26.4	26.4	19.7	19.7	23.8	23.3	23.3	25.1
GANDLAPET	68.1	68.1		5.0	5.0		33.9	33.9	
MANCHERIAL	92.0	74.9	60.0	7.0	7.6	36.1	46.5	42.4	46.5
PERUR	74.0	54.0	30.0	0.0	3.6	7.0	26.7	22.5	16.6
POLAVARM	42.1	33.7	16.2	2.0	5.0	5.1	14.6	13.0	10.3
NOWRANGPUR	58.5	24.6	12.9	0.7	3.2	5.8	5.0	8.1	7.4
PATHAGUDEM	50.5	37.6	28.9	0.0	1.6	3.2	6.3	8.6	9.0
JAGDALPUR	43.9	18.1	8.0	0.0	2.7	4.7	5.3	7.1	6.6
KONTA	60.0	15.1	15.1	0.7	2.0	3.3	4.7	6.6	7.9
BADRACHALAM	81.0	81.0	39.5	4.4	4.4	8.4	26.4	25.7	20.3
SANGAM	148.5	148.5	148.5	13.8	13.8	21.3	40.3	40.3	48.5



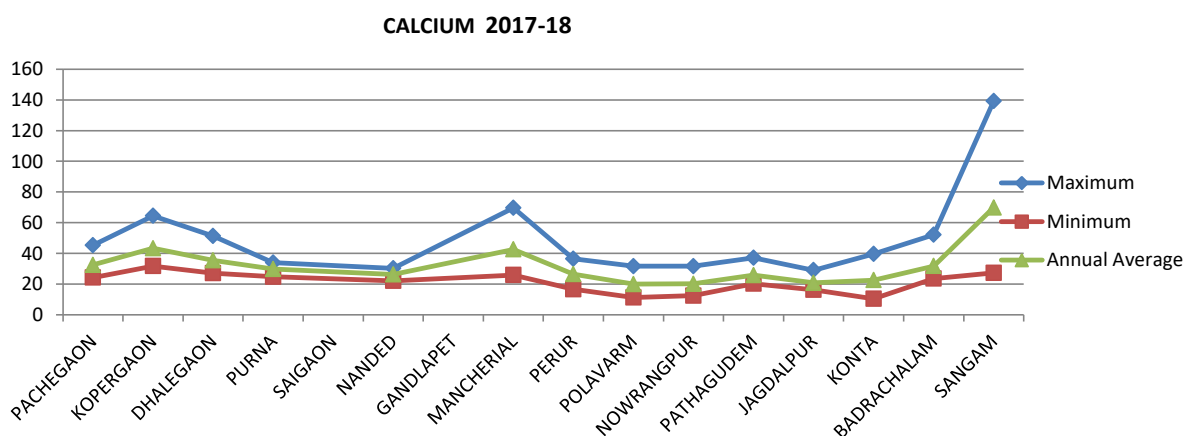
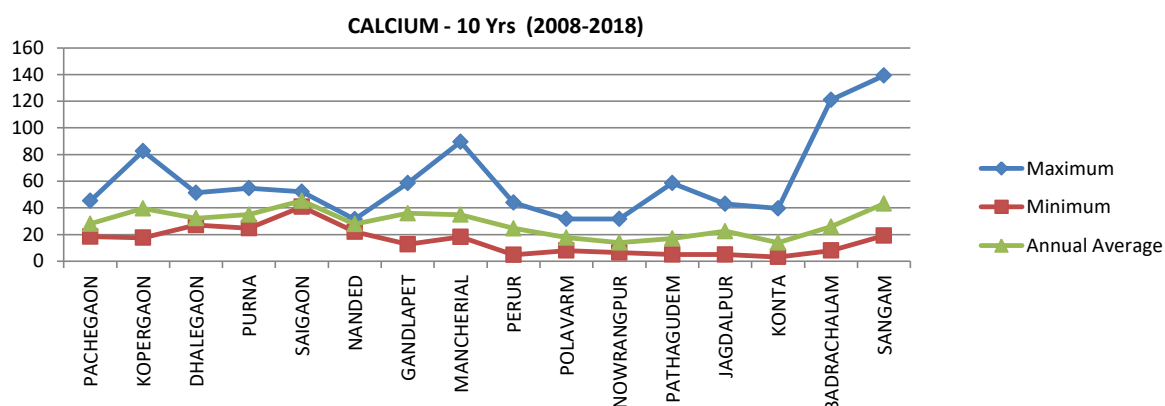
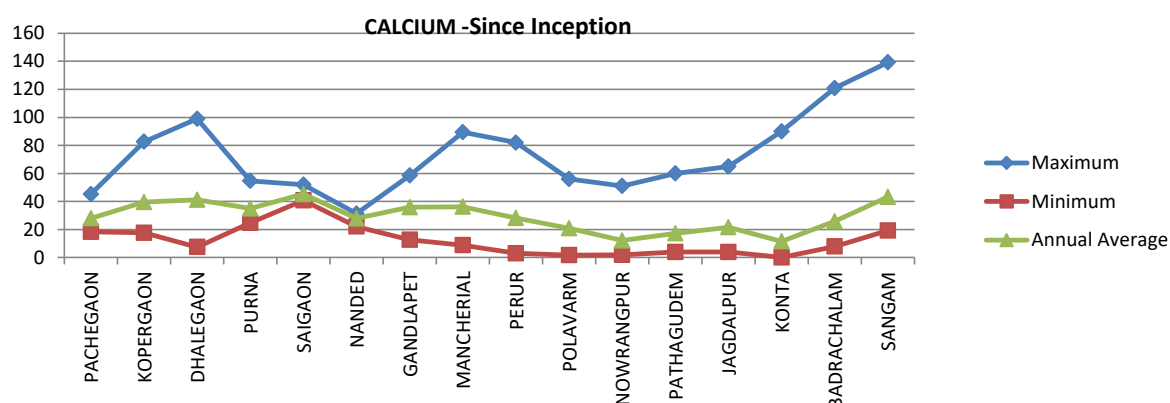
6.POTASSIUM

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
PACHEGAON	4.1	4.1	0.2	0.1	0.1	0.1	1.2	1.2	0.2
KOPERGAON	6.4	6.4	0.3	0.2	0.2	0.2	2.2	2.2	0.3
DHALEGAON	3.9	3.9	0.5	0.4	0.4	0.4	3.6	2.3	0.5
PURNA	5.0	5.0	0.8	0.4	0.4	0.4	2.8	2.8	0.6
SAIGAON	5.1	5.1		4.0	4.0		4.6	4.6	
NANDED	3.5	3.5	0.4	0.4	0.4	0.4	1.5	1.5	0.4
GANDLAPET	2.0	2.0		0.3	0.3		2.4	2.4	
MANCHERIAL	4.7	4.7	0.5	0.2	0.4	0.4	2.6	3.0	0.4
PERUR	4.7	5.0	0.4	0.2	0.2	0.2	2.7	2.5	0.3
POLAVARM	4.8	4.8	0.3	0.2	0.2	0.2	2.0	2.1	0.2
NOWRANGPUR	8.0	3.6	0.3	0.2	0.2	0.2	1.7	1.6	0.2
PATHAGUDEM	3.6	3.6	0.5	0.1	0.1	0.1	1.6	1.5	0.2
JAGDALPUR	4.7	3.8	0.2	0.1	0.2	0.2	1.8	1.7	0.2
KONTA	2.1	2.1	0.4	0.1	0.1	0.1	1.4	1.4	0.2
BADRACHALAM	6.0	6.0	0.5	0.2	0.2	0.2	2.6	2.6	0.3
SANGAM	8.8	8.8	3.7	0.5	0.5	0.5	4.5	4.5	1.2



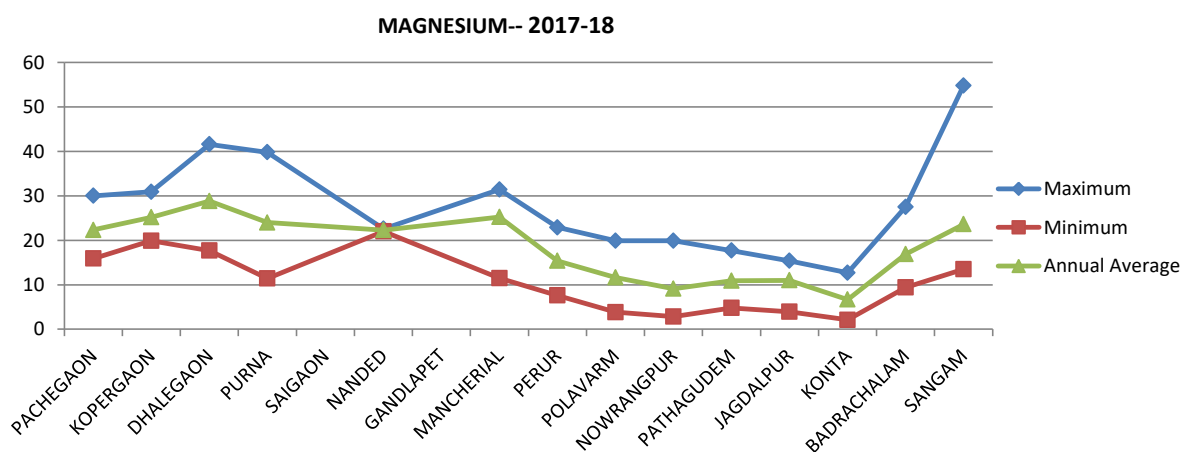
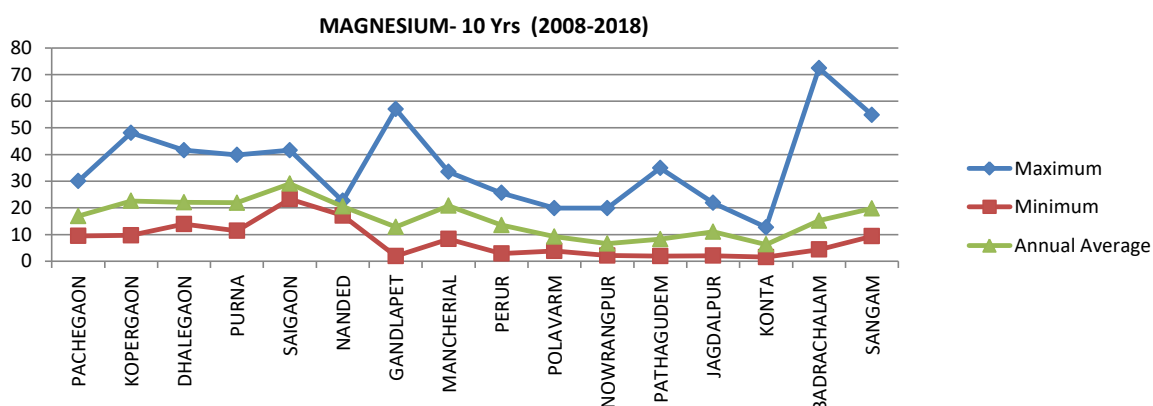
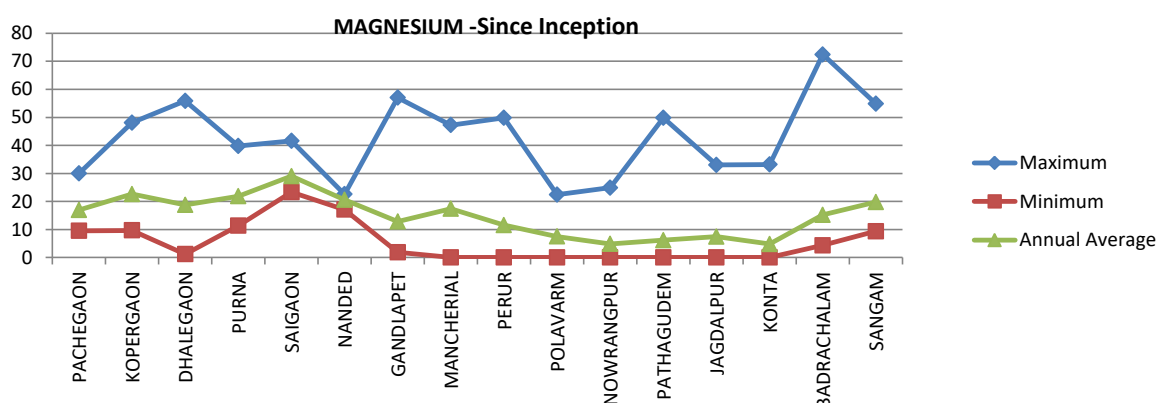
7.CALCIUM

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
PACHEGAON	45.2	45.2	45.2	18.4	18.4	24.1	28.0	28.0	32.4
KOPERGAON	82.6	82.6	64.5	17.6	17.6	31.7	39.5	39.5	43.3
DHALEGAON	99.0	51.3	51.3	7.5	27.1	27.1	41.3	32.2	35.5
PURNA	54.7	54.7	33.9	24.7	24.7	24.7	35.0	35.0	29.8
SAIGAON	52.0	52.0		40.8	40.8		45.3	45.3	
NANDED	31.4	31.4	30.2	22.1	22.1	22.1	27.9	27.9	26.2
GANDLAPET	58.6	58.6		12.6	12.6		36.0	36.0	
MANCHERIAL	89.5	89.5	69.6	8.8	18.3	25.9	36.2	34.9	42.5
PERUR	82.0	44.0	36.4	3.0	4.8	16.6	28.3	24.6	26.4
POLAVARM	56.0	31.6	31.6	1.7	8.0	11.3	20.9	17.6	20.0
NOWRANGPUR	51.0	31.6	31.6	2.0	6.4	12.4	12.1	14.0	20.1
PATHAGUDEM	60.0	58.5	37.1	4.0	4.9	20.2	17.3	17.0	25.8
JAGDALPUR	65.0	43.0	29.0	4.0	4.9	16.2	21.6	22.5	20.7
KONTA	90.0	39.5	39.5	0.0	3.2	10.3	11.6	13.9	22.5
BADRACHALAM	120.9	120.9	52.2	8.0	8.0	23.6	25.8	25.9	31.8
SANGAM	139.2	139.2	139.2	19.2	19.2	27.2	43.2	43.2	69.8



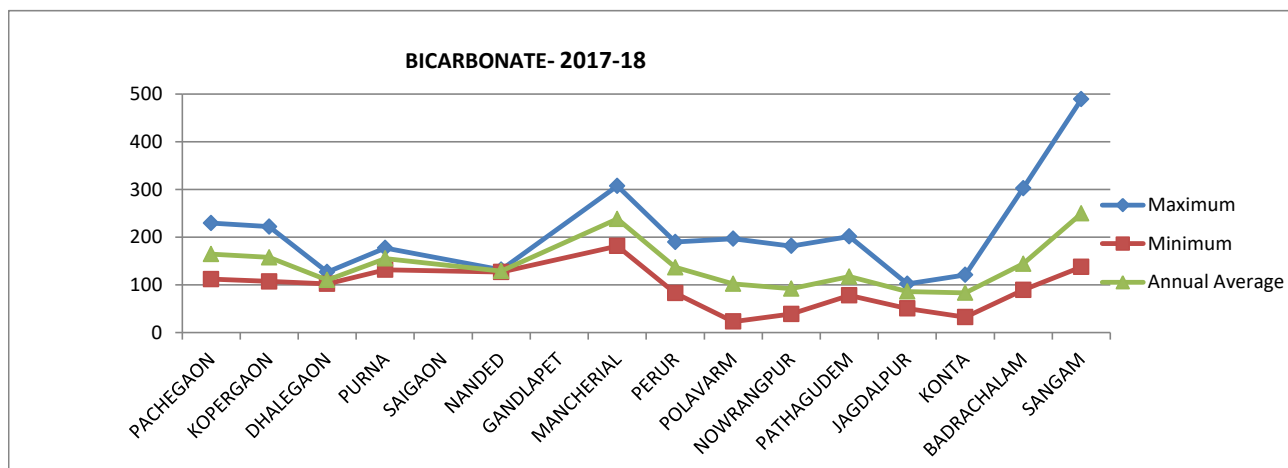
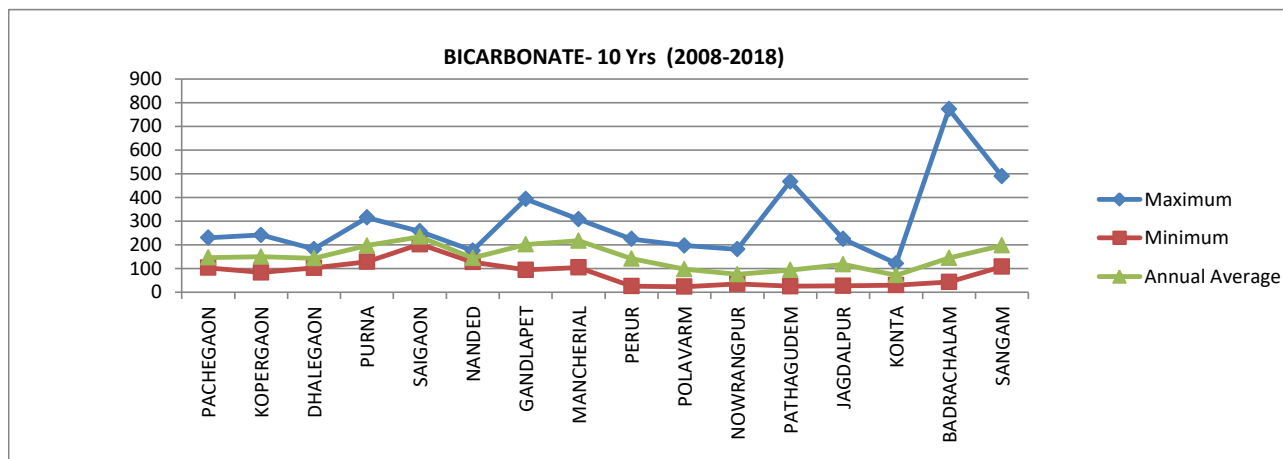
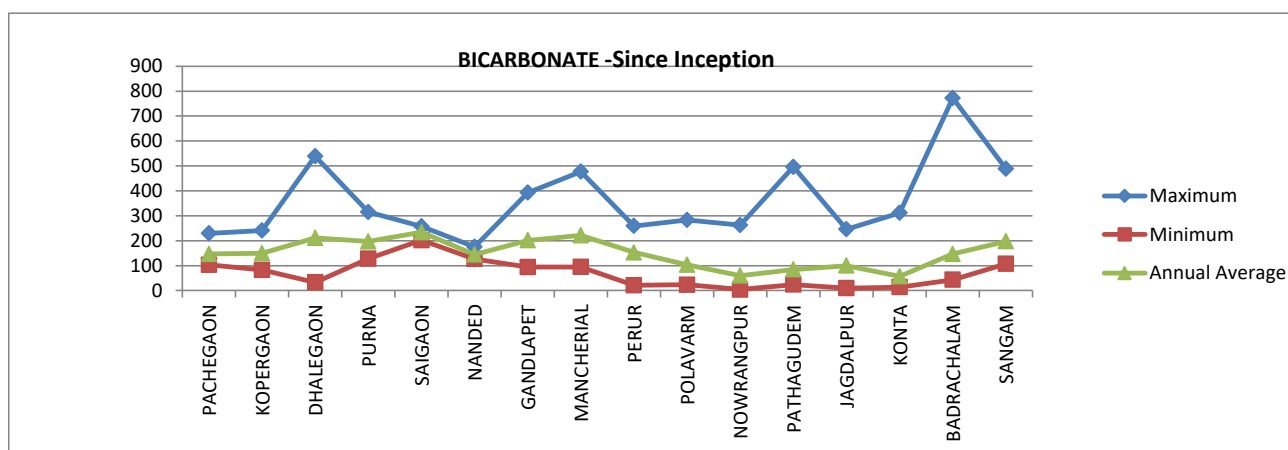
8.MAGNESIUM

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
PACHEGAON	30.0	30.0	30.0	9.5	9.5	15.9	16.9	16.9	22.3
KOPERGAON	48.1	48.1	30.9	9.7	9.7	19.9	22.6	22.6	25.2
DHALEGAON	55.9	41.6	41.6	1.2	13.9	17.7	18.8	22.1	28.8
PURNA	39.8	39.8	39.8	11.4	11.4	11.4	21.9	21.9	24.0
SAIGAON	41.6	41.6		23.3	23.3		29.0	29.0	
NANDED	22.6	22.6	22.6	17.1	17.1	22.0	20.6	20.6	22.3
GANDLAPET	57.0	57.0		1.9	1.9		12.8	12.8	
MANCHERIAL	47.3	33.5	31.4	0.0	8.3	11.5	17.4	20.8	25.2
PERUR	49.8	25.6	22.9	0.0	2.9	7.6	11.6	13.6	15.4
POLAVARM	22.4	19.9	19.9	0.0	3.8	3.8	7.5	9.2	11.6
NOWRANGPUR	24.9	19.9	19.9	0.0	2.1	2.8	4.9	6.6	9.1
PATHAGUDEM	49.8	35.0	17.7	0.0	1.9	4.8	6.2	8.3	10.9
JAGDALPUR	33.0	21.9	15.4	0.0	2.1	3.9	7.5	11.0	11.0
KONTA	33.2	12.7	12.7	0.0	1.5	2.1	4.8	6.3	6.7
BADRACHALAM	72.4	72.4	27.5	4.4	4.4	9.4	15.2	15.2	16.9
SANGAM	54.8	54.8	54.8	9.4	9.4	13.5	19.8	19.8	23.6



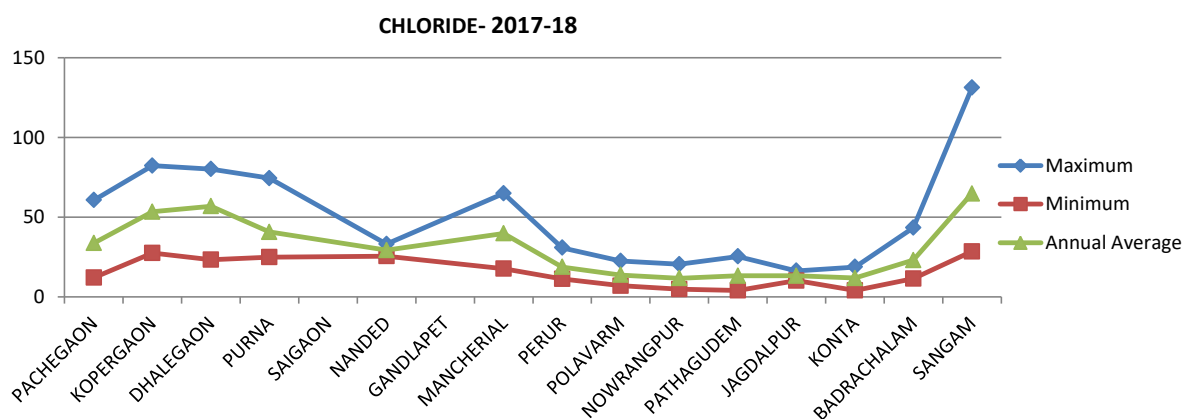
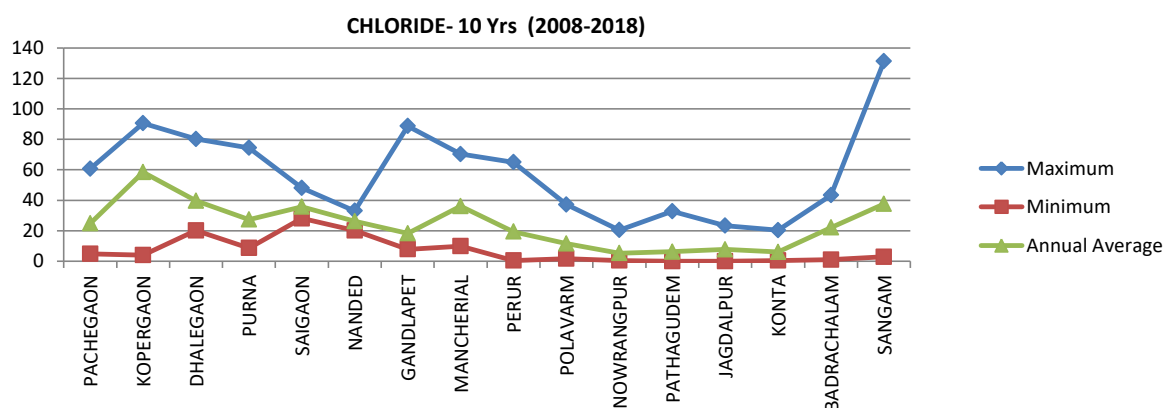
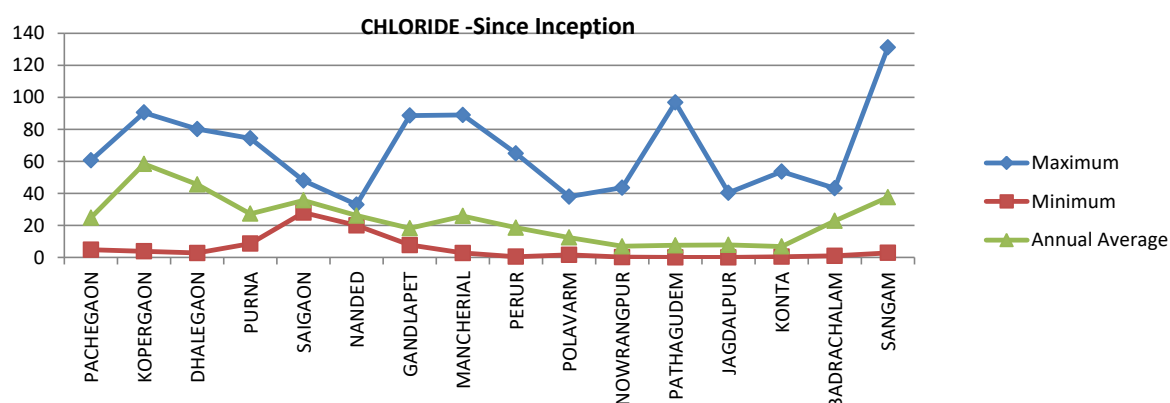
8.BICARBONATE

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
PACHEGAON	229.4	229.4	229.4	103.0	103.0	112.2	146.4	146.4	164.7
KOPERGAON	241.0	241.0	222.0	83.0	83.0	107.4	149.8	149.8	157.6
DHALEGAON	538.6	181.6	126.9	32.9	102.5	102.5	211.0	143.3	110.6
PURNA	314.8	314.8	177.6	128.0	128.0	131.8	196.9	196.9	155.4
SAIGAON	257.0	257.0		202.0	202.0		234.0	234.0	
NANDED	175.3	175.3	131.8	126.9	126.9	126.9	144.7	144.7	129.3
GANDLAPET	392.8	392.8		93.9	93.9		201.6	201.6	
MANCHERIAL	477.0	307.5	307.5	95.0	104.2	181.5	221.5	217.2	238.2
PERUR	259.0	224.0	189.8	21.0	26.0	83.0	152.8	141.6	136.9
POLAVARM	283.0	196.6	196.6	23.4	23.4	23.4	103.3	96.9	102.3
NOWRANGPUR	262.3	181.5	181.5	3.9	35.0	39.0	60.3	75.3	92.2
PATHAGUDEM	495.9	466.9	201.6	24.0	24.9	78.1	84.5	93.3	117.5
JAGDALPUR	246.0	224.0	102.5	9.8	26.7	50.8	100.1	117.8	86.3
KONTA	312.0	121.0	121.0	14.0	30.0	32.7	57.2	72.1	83.4
BADRACHALAM	772.0	772.0	302.5	43.5	43.5	89.3	146.5	144.3	144.2
SANGAM	489.0	489.0	489.0	107.5	107.5	137.6	197.4	197.4	249.9



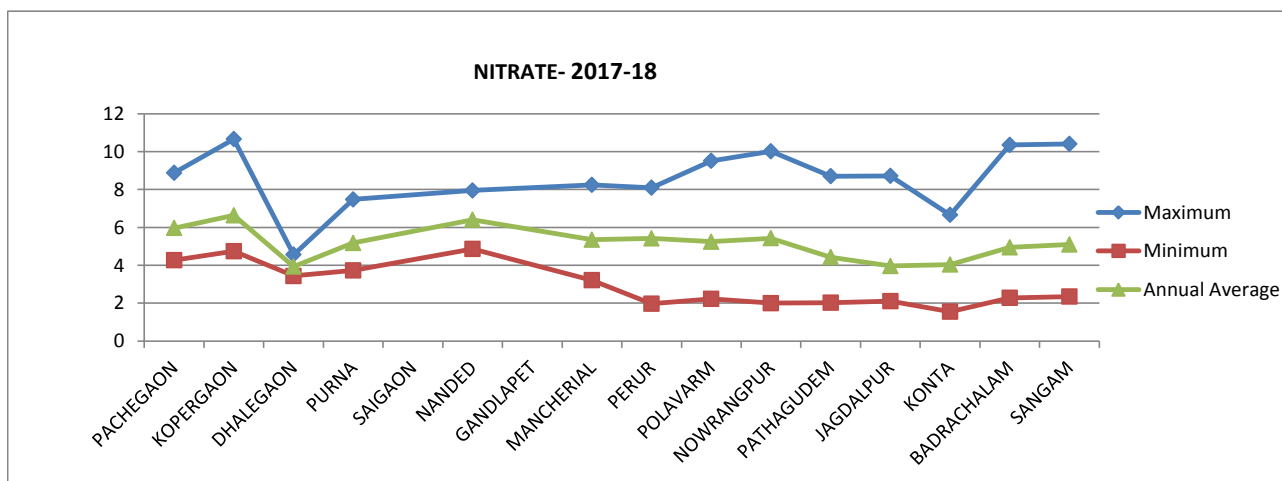
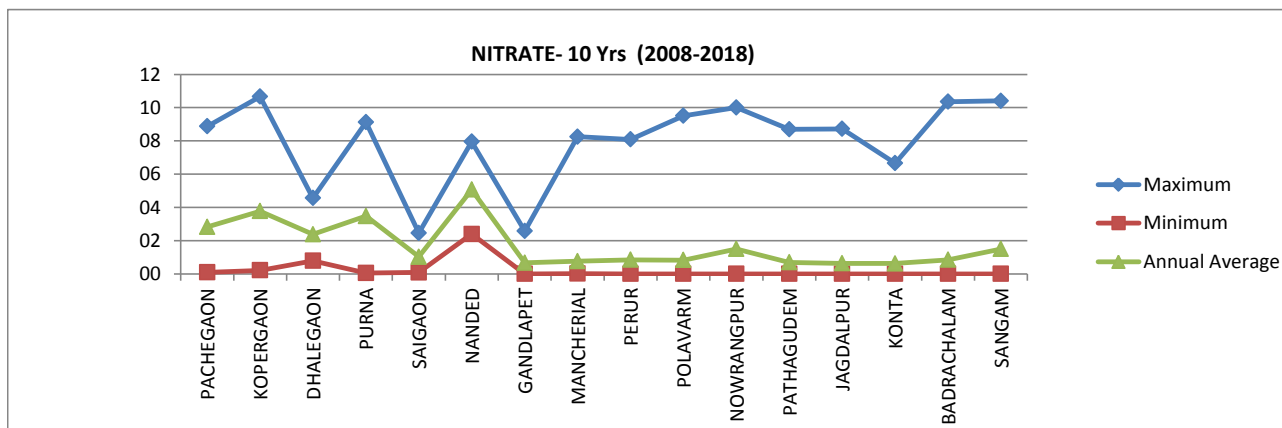
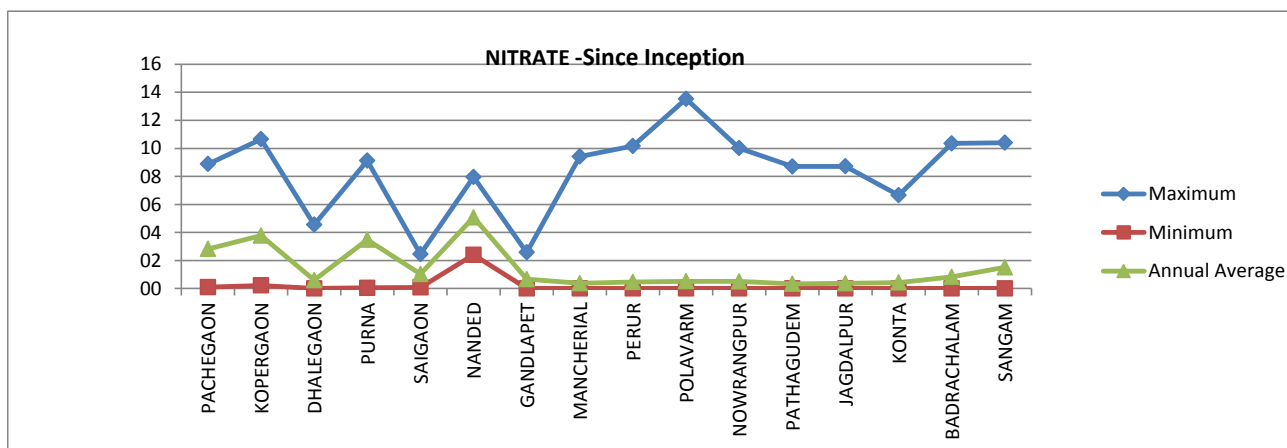
9.CHLORIDE

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
PACHEGAON	60.7	60.7	60.7	4.8	4.8	12.0	24.9	24.9	33.7
KOPERGAON	90.5	90.5	82.3	3.9	3.9	27.4	58.5	58.5	53.3
DHALEGAON	80.2	80.2	80.2	2.8	20.1	23.3	45.6	39.7	56.8
PURNA	74.4	74.4	74.4	8.7	8.7	24.8	27.3	27.3	40.6
SAIGAON	48.1	48.1		28.1	28.1		35.7	35.7	
NANDED	33.0	33.0	33.0	20.1	20.1	25.4	26.2	26.2	29.2
GANDLAPET	88.6	88.6		7.8	7.8		18.3	18.3	
MANCHERIAL	89.0	70.3	64.9	2.8	9.9	17.6	26.0	36.2	39.8
PERUR	65.0	65.0	30.7	0.5	0.5	11.1	18.7	19.4	18.7
POLAVARM	38.0	37.1	22.4	1.6	1.6	6.9	12.5	11.6	13.7
NOWRANGPUR	43.6	20.4	20.4	0.2	0.5	4.8	7.0	5.3	11.7
PATHAGUDEM	96.8	32.8	25.3	0.0	0.0	3.9	7.6	6.2	13.1
JAGDALPUR	40.4	23.3	16.3	0.0	0.0	10.1	8.0	7.7	13.1
KONTA	53.6	20.3	18.7	0.5	0.5	3.9	6.9	6.0	11.7
BADRACHALAM	43.3	43.3	43.3	1.0	1.0	11.4	22.9	22.1	23.0
SANGAM	131.2	131.2	131.2	2.9	2.9	28.4	37.6	37.6	64.8



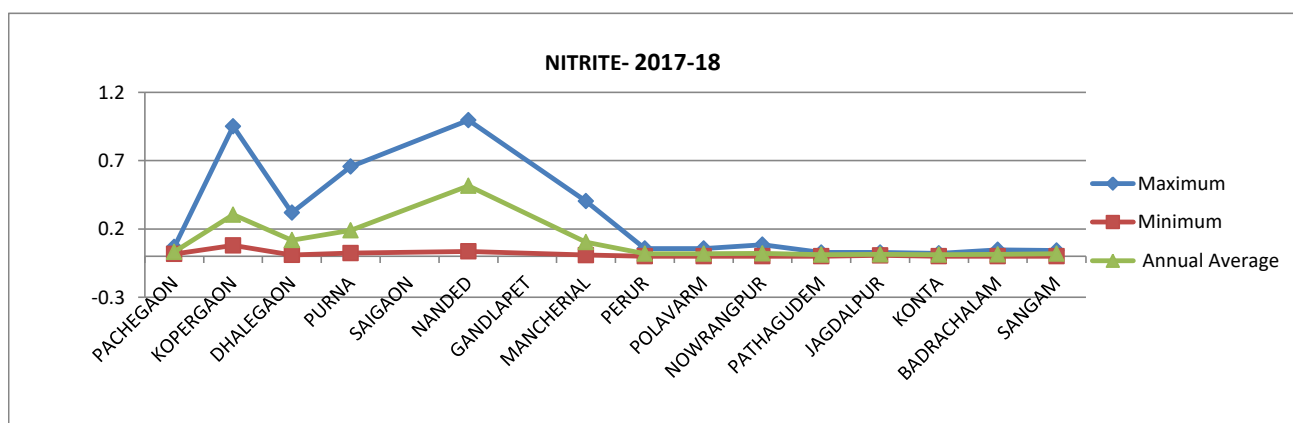
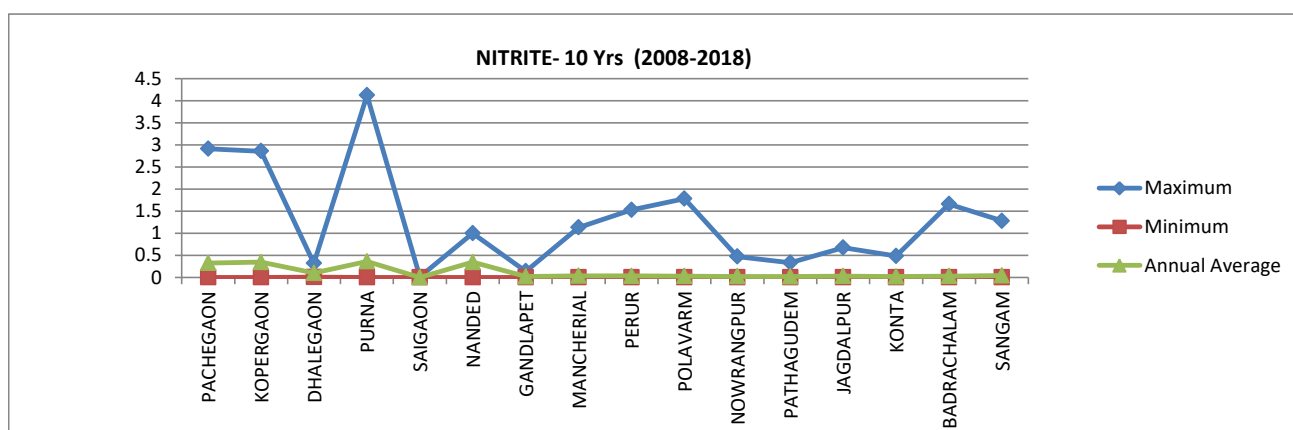
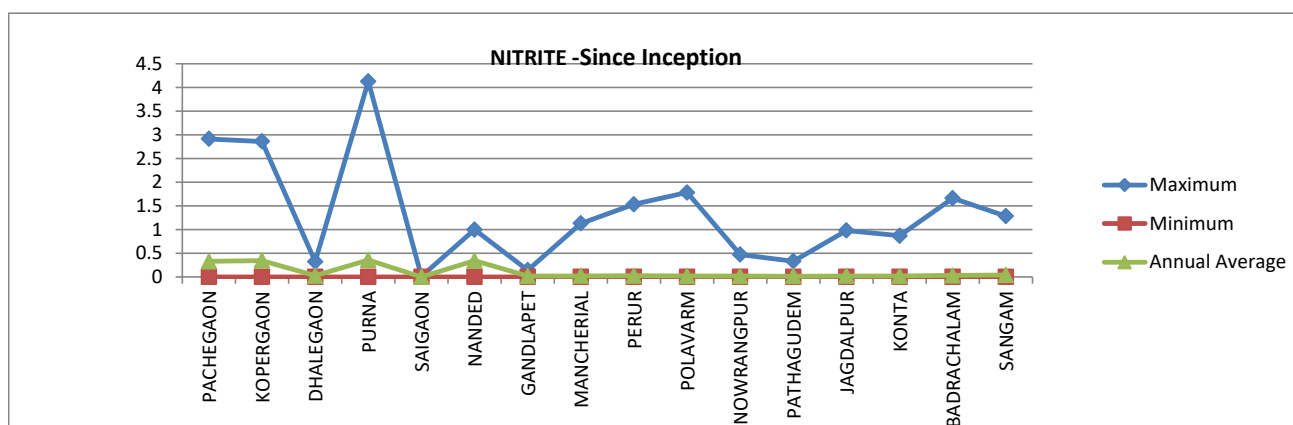
11. NITRATE - No3

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
PACHEGAON	8.9	8.9	8.9	0.1	0.1	4.3	2.8	2.8	6.0
KOPERGAON	10.7	10.7	10.7	0.2	0.2	4.7	3.8	3.8	6.6
DHALEGAON	4.6	4.6	4.6	0.0	0.8	3.4	0.6	2.4	3.9
PURNA	9.1	9.1	7.5	0.1	0.1	3.7	3.5	3.5	5.2
SAIGAON	2.5	2.5		0.1	0.1		1.0	1.0	
NANDED	8.0	8.0	8.0	2.4	2.4	4.9	5.1	5.1	6.4
GANDLAPET	2.6	2.6		0.0	0.0		0.7	0.7	
MANCHERIAL	9.4	8.3	8.3	0.0	0.0	3.2	0.4	0.8	5.3
PERUR	10.2	8.1	8.1	0.0	0.0	2.0	0.5	0.8	5.4
POLAVARM	13.5	9.5	9.5	0.0	0.0	2.2	0.5	0.8	5.2
NOWRANGPUR	10.0	10.0	10.0	0.0	0.0	2.0	0.5	1.5	5.4
PATHAGUDEM	8.7	8.7	8.7	0.0	0.0	2.0	0.3	0.7	4.4
JAGDALPUR	8.7	8.7	8.7	0.0	0.0	2.1	0.4	0.6	4.0
KONTA	6.7	6.7	6.7	0.0	0.0	1.6	0.4	0.6	4.0
BADRACHALAM	10.4	10.4	10.4	0.0	0.0	2.3	0.8	0.8	4.9
SANGAM	10.4	10.4	10.4	0.0	0.0	2.3	1.5	1.5	5.1



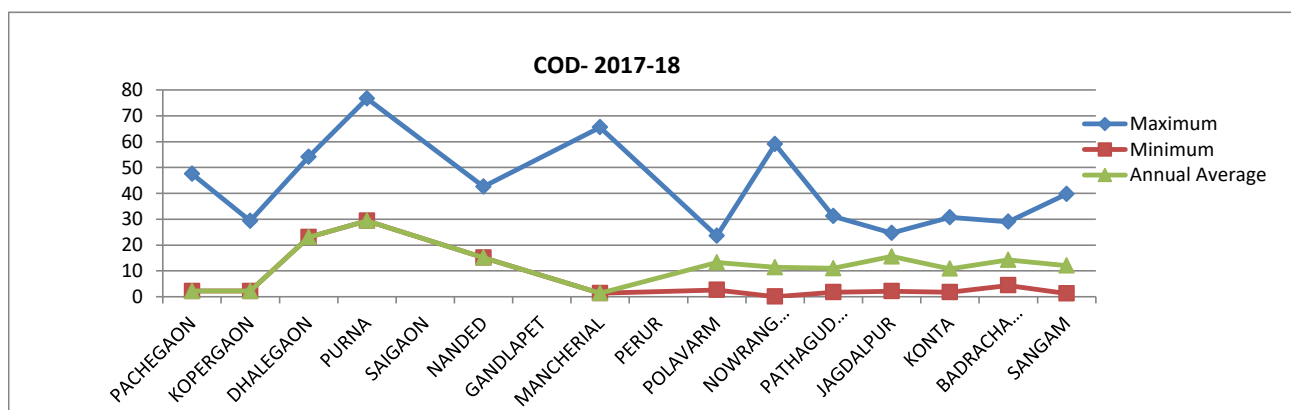
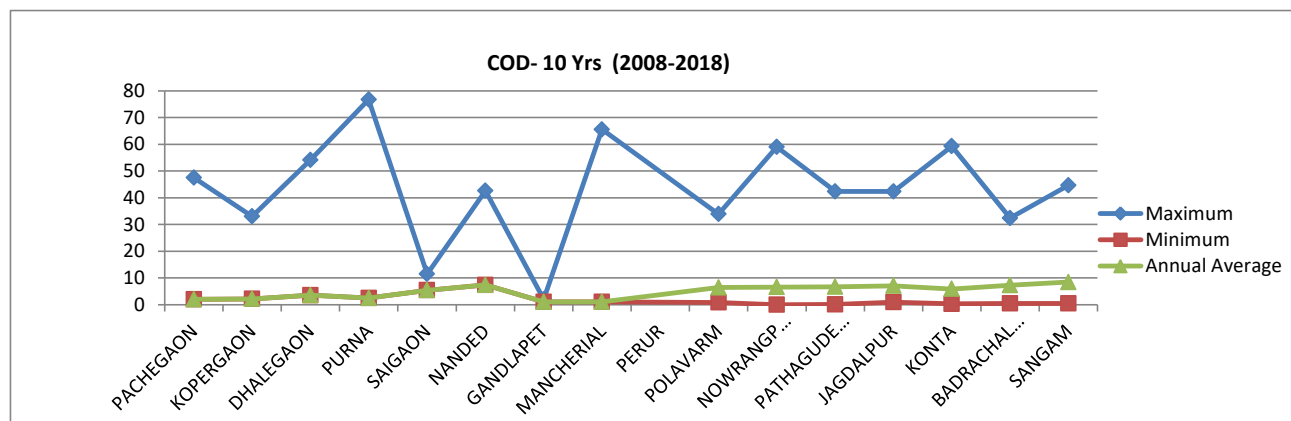
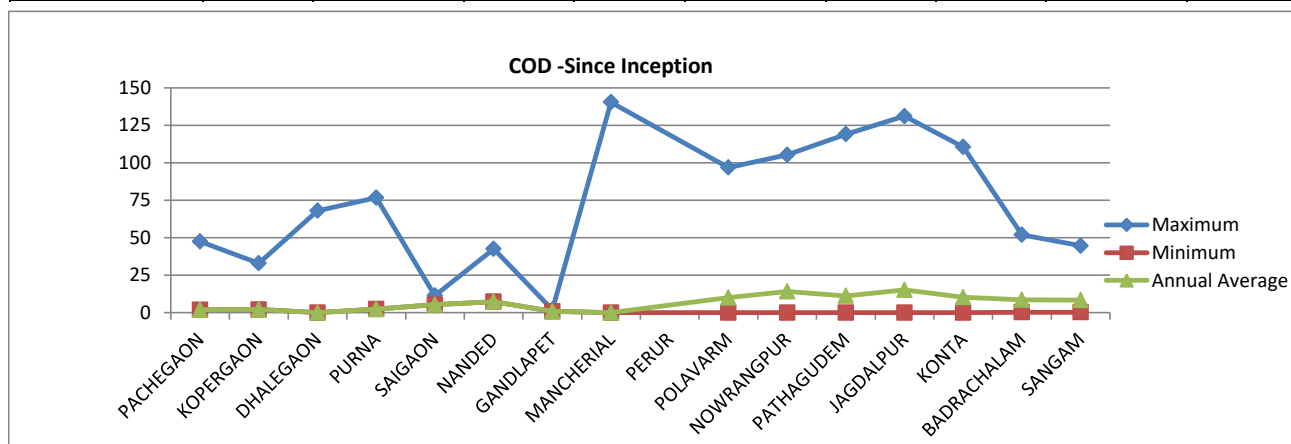
12. NITRITE

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
PACHEGAON	2.9	2.9	0.1	0.0	0.0	0.0	0.3	0.3	0.0
KOPERGAON	2.9	2.9	1.0	0.0	0.0	0.1	0.3	0.3	0.3
DHALEGAON	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.1	0.1
PURNA	4.1	4.1	0.7	0.0	0.0	0.0	0.4	0.4	0.2
SAIGAON	0.0	0.0		0.0	0.0		0.0	0.0	
NANDED	1.0	1.0	1.0	0.0	0.0	0.0	0.3	0.3	0.5
GANDLAPET	0.1	0.1		0.0	0.0		0.0	0.0	
MANCHERIAL	1.1	1.1	0.4	0.0	0.0	0.0	0.0	0.0	0.1
PERUR	1.5	1.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0
POLAVARM	1.8	1.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0
NOWRANGPUR	0.5	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0
PATHAGUDEM	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JAGDALPUR	1.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KONTA	0.9	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BADRACHALAM	1.7	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SANGAM	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0



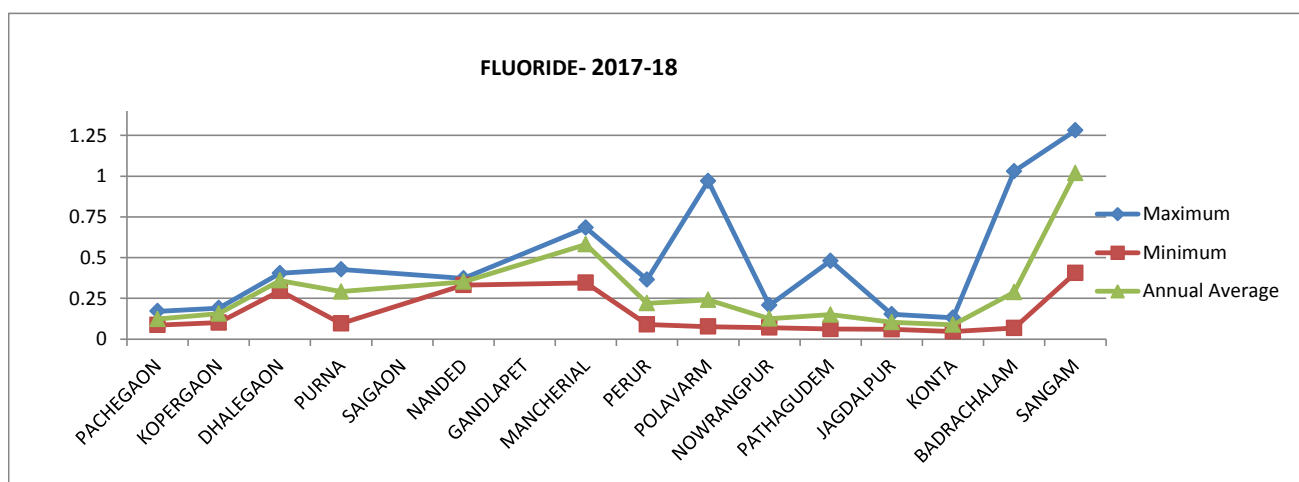
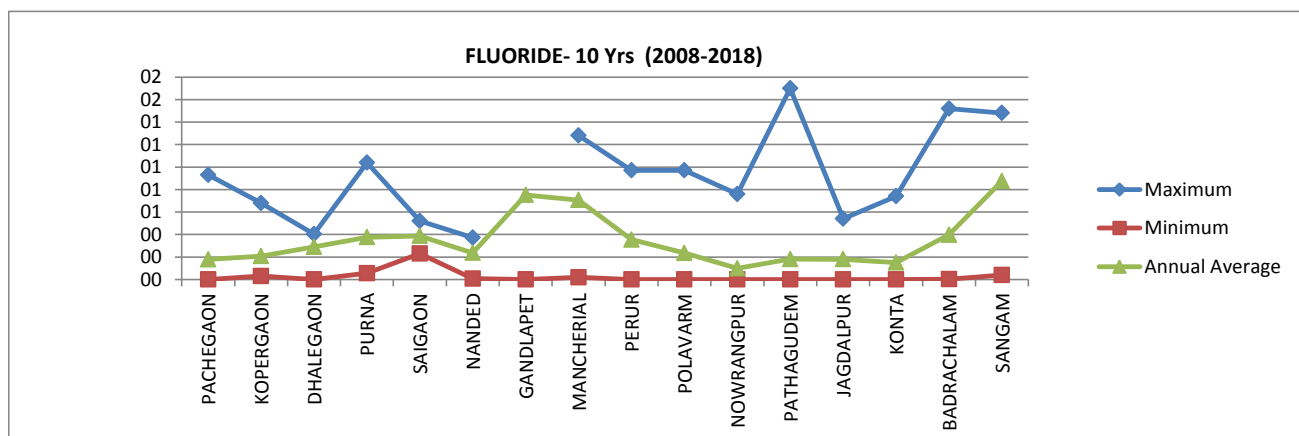
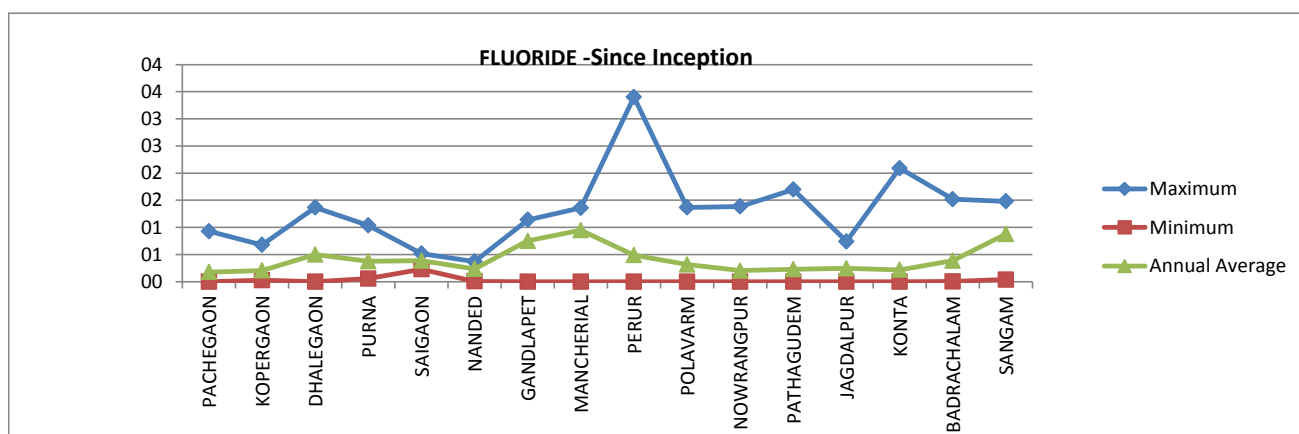
13.COD

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
PACHEGAON	47.5	47.5	47.5	2.0	2.0	2.2	2.0	2.0	2.2
KOPERGAON	33.0	33.0	29.3	2.2	2.2	2.2	2.2	2.2	2.2
DHALEGAON	68.0	54.1	54.1	0.0	3.6	23.1	0.0	3.6	23.1
PURNA	76.7	76.7	76.7	2.4	2.4	29.4	2.4	2.4	29.4
SAIGAON	11.5	11.5		5.4	5.4		5.4	5.4	
NANDED	42.6	42.6	42.6	7.4	7.4	15.1	7.4	7.4	15.1
GANDLAPET	2.0	2.0		1.0	1.0		1.0	1.0	
MANCHERIAL	140.4	65.6	65.6	0.0	1.0	1.3	0.0	1.0	1.3
PERUR									
POLAVARM	96.8	33.9	23.5	0.0	0.8	2.6	10.2	6.4	13.2
NOWRANGPUR	105.3	59.0	59.0	0.0	0.0	0.0	14.2	6.6	11.4
PATHAGUDEM	119.0	42.4	31.1	0.0	0.1	1.8	11.3	6.7	11.0
JAGDALPUR	131.1	42.4	24.6	0.0	0.9	2.1	15.3	7.1	15.6
KONTA	110.5	59.3	30.7	0.0	0.3	1.8	10.3	5.9	10.8
BADRACHALAM	51.9	32.4	29.0	0.4	0.4	4.4	8.7	7.2	14.2
SANGAM	44.6	44.6	39.7	0.4	0.4	1.3	8.4	8.4	12.0



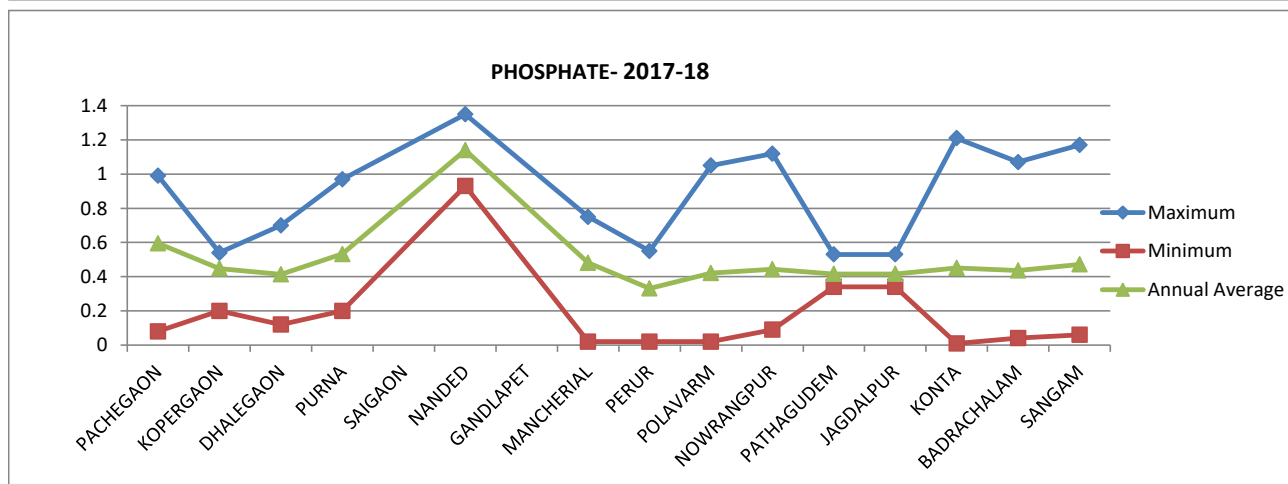
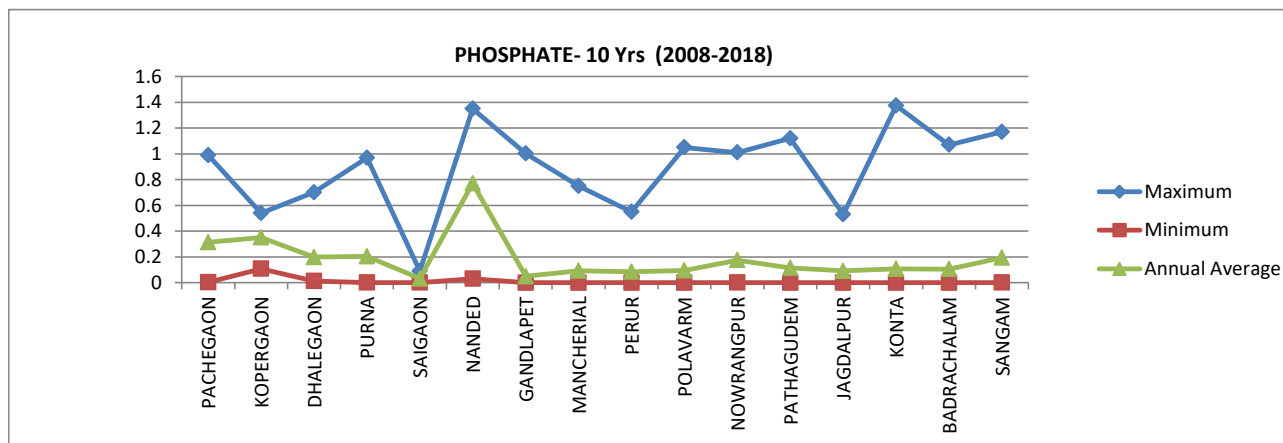
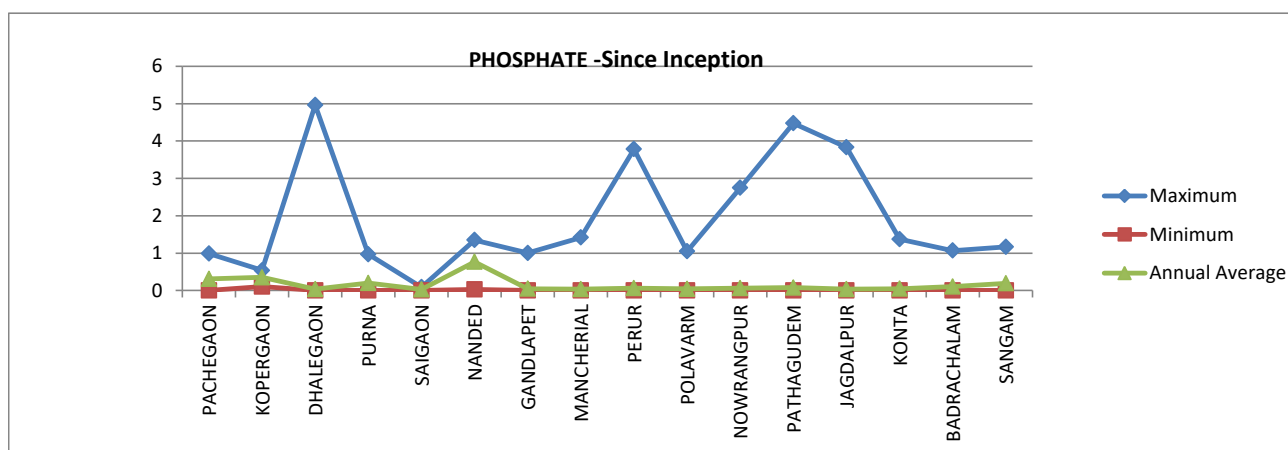
14.FLUORIDE

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
PACHEGAON	0.9	0.9	0.2	0.0	0.0	0.1	0.2	0.2	0.1
KOPERGAON	0.7	0.7	0.2	0.0	0.0	0.1	0.2	0.2	0.2
DHALEGAON	1.4	0.4	0.4	0.0	0.0	0.3	0.5	0.3	0.4
PURNA	1.0	1.0	0.4	0.1	0.1	0.1	0.4	0.4	0.3
SAIGAON	0.5	0.5		0.2	0.2		0.4	0.4	
NANDED	0.4	0.4	0.4	0.0	0.0	0.3	0.2	0.2	0.4
GANDLAPET	1.1			0.0	0.0		0.8	0.8	
MANCHERIAL	1.4	1.3	0.7	0.0	0.0	0.3	0.9	0.7	0.6
PERUR	3.4	1.0	0.4	0.0	0.0	0.1	0.5	0.4	0.2
POLAVARM	1.4	1.0	1.0	0.0	0.0	0.1	0.3	0.2	0.2
NOWRANGPUR	1.4	0.8	0.2	0.0	0.0	0.1	0.2	0.1	0.1
PATHAGUDEM	1.7	1.7	0.5	0.0	0.0	0.1	0.2	0.2	0.1
JAGDALPUR	0.7	0.5	0.2	0.0	0.0	0.1	0.2	0.2	0.1
KONTA	2.1	0.7	0.1	0.0	0.0	0.0	0.2	0.2	0.1
BADRACHALAM	1.5	1.5	1.0	0.0	0.0	0.1	0.4	0.4	0.3
SANGAM	1.5	1.5	1.3	0.0	0.0	0.4	0.9	0.9	1.0



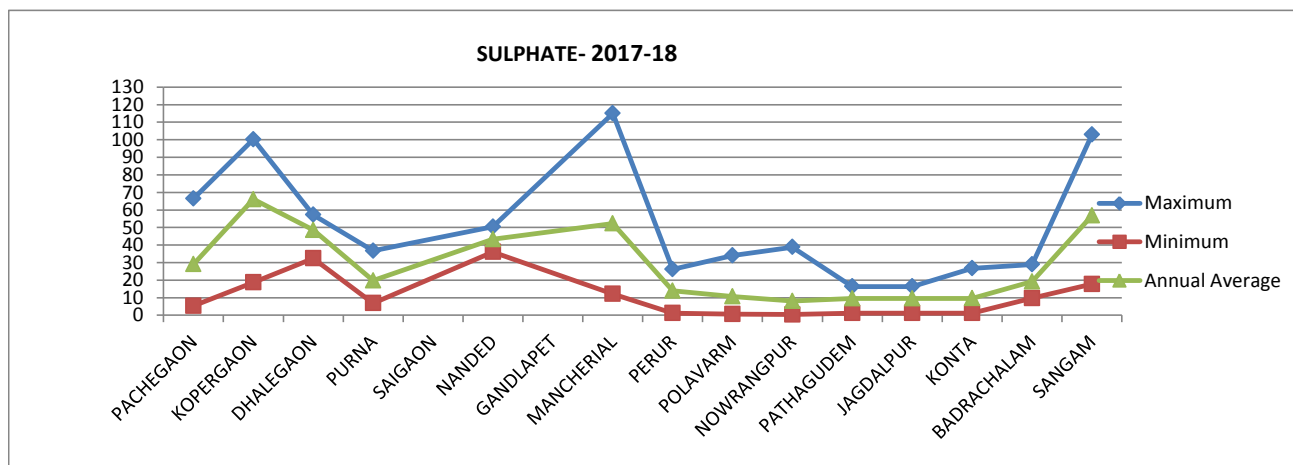
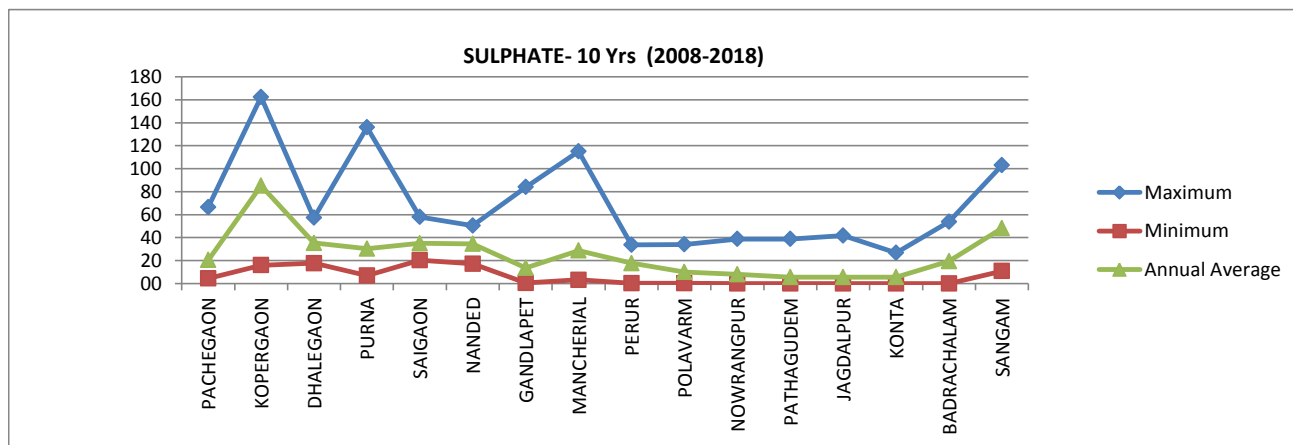
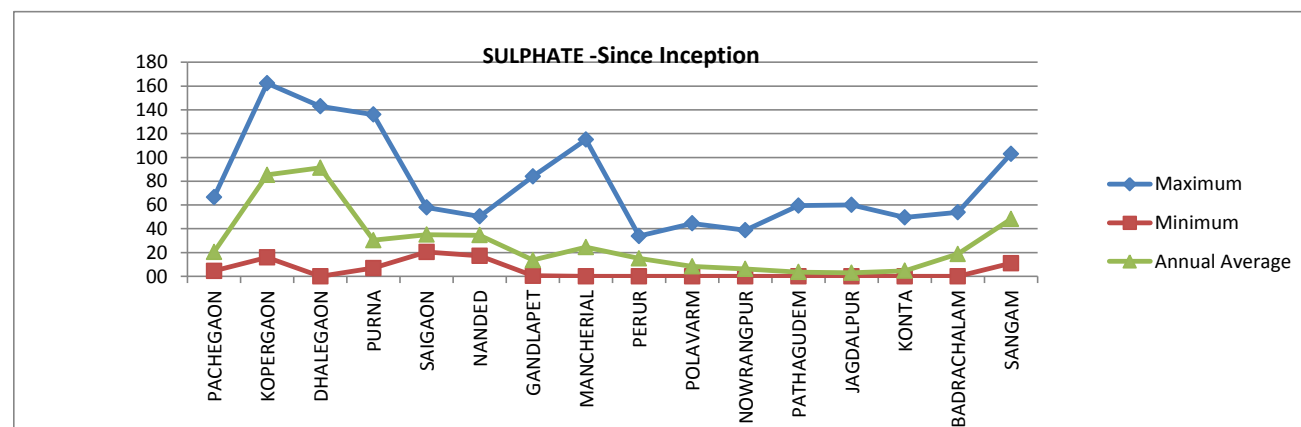
15. PHOSPHATE

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
PACHEGAON	1.0	1.0	1.0	0.0	0.0	0.1	0.3	0.3	0.6
KOPERGAON	0.5	0.5	0.5	0.1	0.1	0.2	0.4	0.4	0.4
DHALEGAON	5.0	0.7	0.7	0.0	0.0	0.1	0.0	0.2	0.4
PURNA	1.0	1.0	1.0	0.0	0.0	0.2	0.2	0.2	0.5
SAIGAON	0.1	0.1		0.0	0.0		0.0	0.0	
NANDED	1.4	1.4	1.4	0.0	0.0	0.9	0.8	0.8	1.1
GANDLAPET	1.0	1.0		0.0	0.0		0.0	0.0	
MANCHERIAL	1.4	0.8	0.8	0.0	0.0	0.0	0.0	0.1	0.5
PERUR	3.8	0.6	0.6	0.0	0.0	0.0	0.1	0.1	0.3
POLAVARM	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.1	0.4
NOWRANGPUR	2.7	1.0	1.1	0.0	0.0	0.1	0.1	0.2	0.4
PATHAGUDEM	4.5	1.1	0.5	0.0	0.0	0.3	0.1	0.1	0.4
JAGDALPUR	3.8	0.5	0.5	0.0	0.0	0.3	0.0	0.1	0.4
KONTA	1.4	1.4	1.2	0.0	0.0	0.0	0.0	0.1	0.5
BADRACHALAM	1.1	1.1	1.1	0.0	0.0	0.0	0.1	0.1	0.4
SANGAM	1.2	1.2	1.2	0.0	0.0	0.1	0.2	0.2	0.5



16.SULPHATE

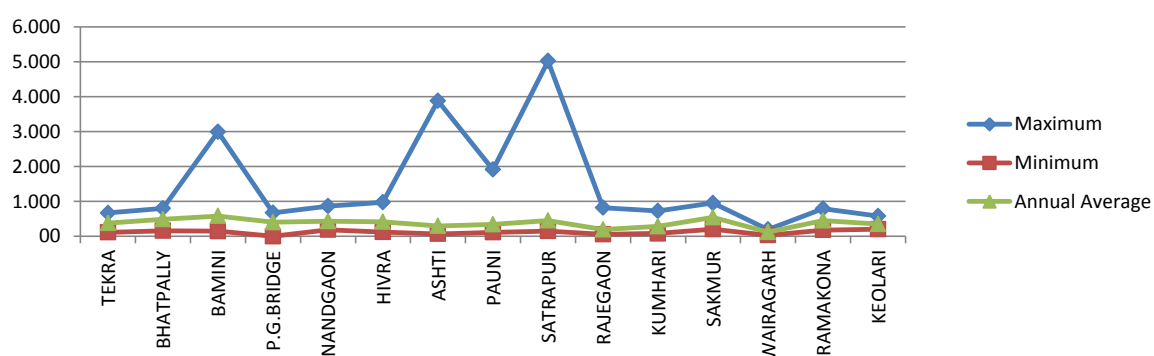
Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
PACHEGAON	66.5	66.5	66.5	4.5	4.5	5.3	20.5	20.5	29.1
KOPERGAON	162.3	162.3	100.2	16.0	16.0	18.7	85.3	85.3	66.0
DHALEGAON	143.0	57.2	57.2	0.0	17.8	32.4	91.4	35.3	48.6
PURNA	136.0	136.0	36.7	6.9	6.9	6.9	30.3	30.3	19.8
SAIGAON	58.0	58.0		20.4	20.4		35.0	35.0	
NANDED	50.4	50.4	50.4	17.3	17.3	36.1	34.6	34.6	43.2
GANDLAPET	84.0	84.0		0.5	0.5		13.6	13.6	
MANCHERIAL	115.0	115.0	115.0	0.0	3.3	12.1	24.6	28.7	52.2
PERUR	33.8	33.8	26.2	0.0	0.3	1.2	15.1	17.7	14.0
POLAVARM	44.5	34.1	34.1	0.0	0.3	0.7	8.3	10.1	10.7
NOWRANGPUR	38.8	38.8	38.8	0.0	0.0	0.4	6.3	8.0	8.1
PATHAGUDEM	59.5	38.8	16.4	0.0	0.0	1.2	3.6	5.6	9.5
JAGDALPUR	60.0	41.8	16.4	0.0	0.0	1.2	2.9	5.6	9.5
KONTA	49.5	26.7	26.7	0.0	0.0	1.2	4.6	5.6	9.6
BADRACHALAM	53.8	53.8	29.0	0.0	0.0	9.7	18.8	19.4	19.2
SANGAM	103.0	103.0	103.0	11.0	11.0	17.7	48.2	48.2	56.8



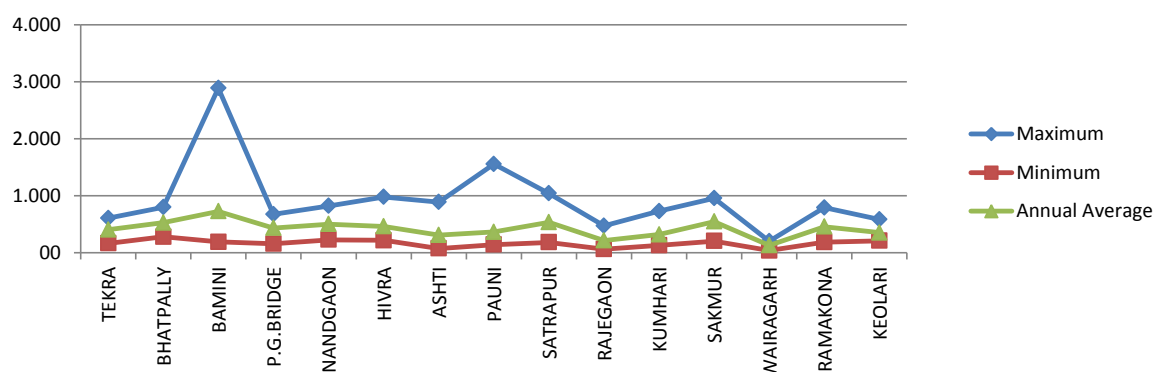
1. Electrical Conductivity

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
TEKRA	671.0	605.0	582.0	117.0	163.0	331.0	381.0	404.1	455.2
BHATPALLY	798.0	798.0	798.0	158.0	278.0	468.0	488.5	525.5	664.8
BAMINI	2991.0	2887.0	1501.0	148.0	188.0	513.0	586.4	724.1	840.5
P.G.BRIDGE	678.0	671.0	605.0	0.0	157.0	385.0	404.2	433.0	518.3
NANDGAON	868.0	820.0	820.0	192.0	225.0	360.0	431.1	499.1	604.2
HIVRA	978.0	978.0	795.0	127.0	215.0	361.0	416.6	460.3	501.3
ASHTI	3884.0	887.0	409.0	72.0	72.0	249.0	298.4	307.9	318.5
PAUNI	1914.0	1552.0	1552.0	119.0	140.0	301.0	341.1	361.3	475.1
SATRAPUR	5024.0	1040.0	1040.0	153.0	180.0	440.0	457.7	534.7	664.8
RAJEGAON	825.0	470.0	324.0	56.0	61.0	145.0	194.5	214.2	246.1
KUMHARI	726.0	726.0	503.0	83.0	130.0	178.0	288.6	317.3	365.2
SAKMUR	954.0	954.0	954.0	203.0	203.0	350.0	545.4	545.4	611.6
WAIKAGARH	199.0	199.0	199.0	36.0	36.0	90.0	127.7	127.7	155.1
RAMAKONA	790.0	790.0	570.0	181.0	181.0	372.0	455.0	455.0	483.3
KEOLARI	580.0	580.0	580.0	207.0	207.0	319.0	349.7	349.7	423.1

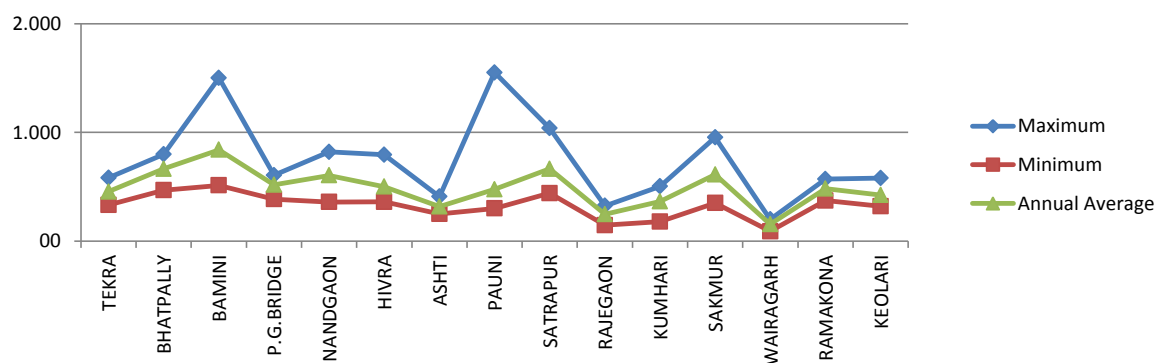
EC -Since Inception



EC - 10 Yrs (2008-2018)



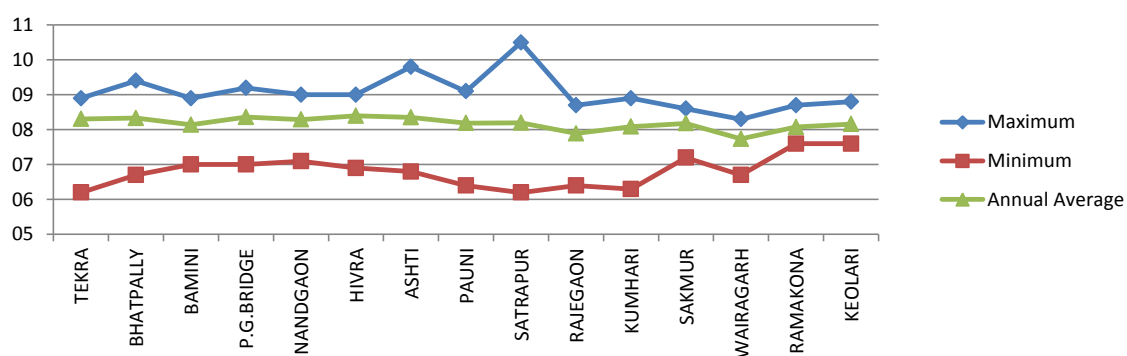
EC - 2017-18



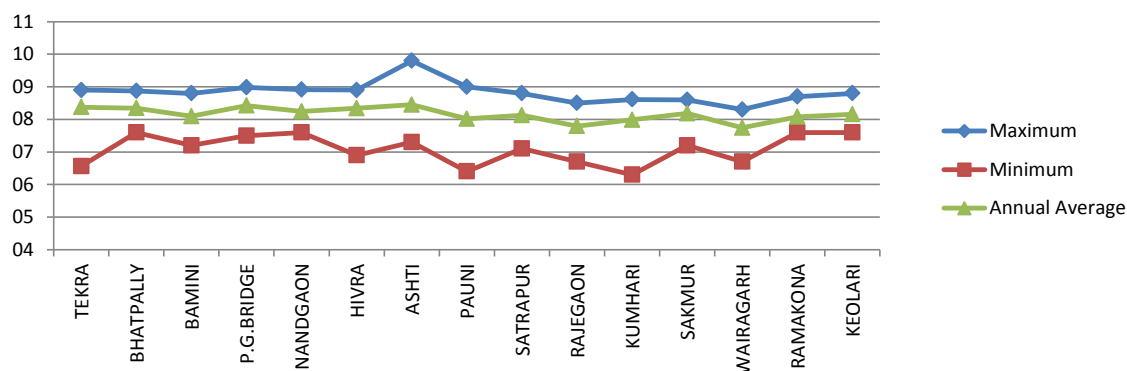
2.pH

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
TEKRA	8.9	8.9	8.6	6.2	6.6	8.0	8.3	8.4	8.4
BHATPALLY	9.4	8.9	8.5	6.7	7.6	7.6	8.3	8.3	8.2
BAMINI	8.9	8.8	8.4	7.0	7.2	7.4	8.1	8.1	7.9
P.G.BRIDGE	9.2	9.0	8.6	7.0	7.5	8.0	8.4	8.4	8.3
NANDGAON	9.0	8.9	8.5	7.1	7.6	7.6	8.3	8.2	8.1
HIVRA	9.0	8.9	8.5	6.9	6.9	7.7	8.4	8.3	8.1
ASHTI	9.8	9.8	9.2	6.8	7.3	7.7	8.4	8.5	8.4
PAUNI	9.1	9.0	8.8	6.4	6.4	7.5	8.2	8.0	8.0
SATRAPUR	10.5	8.8	8.2	6.2	7.1	7.1	8.2	8.1	7.8
RAJEGAON	8.7	8.5	8.0	6.4	6.7	7.5	7.9	7.8	7.7
KUMHARI	8.9	8.6	8.1	6.3	6.3	7.5	8.1	8.0	7.9
SAKMUR	8.6	8.6	8.6	7.2	7.2	7.4	8.2	8.2	8.1
WAIKARH	8.3	8.3	8.1	6.7	6.7	7.4	7.7	7.7	7.7
RAMAKONA	8.7	8.7	8.2	7.6	7.6	7.8	8.1	8.1	8.1
KEOLARI	8.8	8.8	8.6	7.6	7.6	7.9	8.2	8.2	8.2

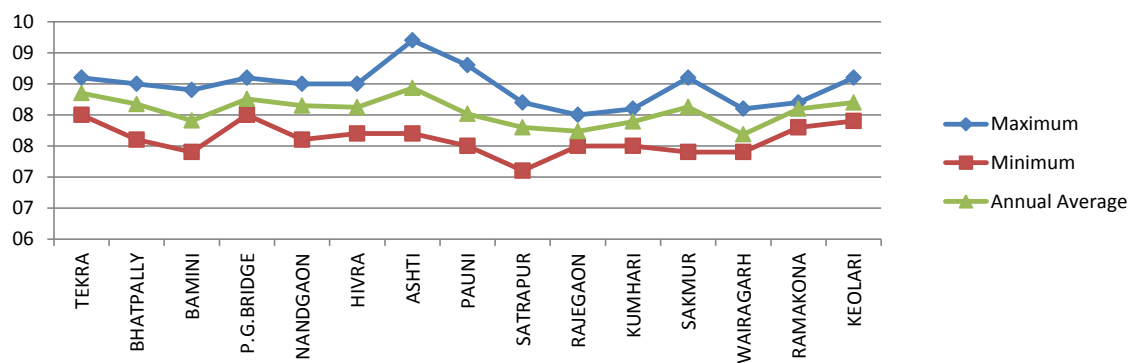
pH - Since Inception



pH - 10 Yrs (2008-2018)



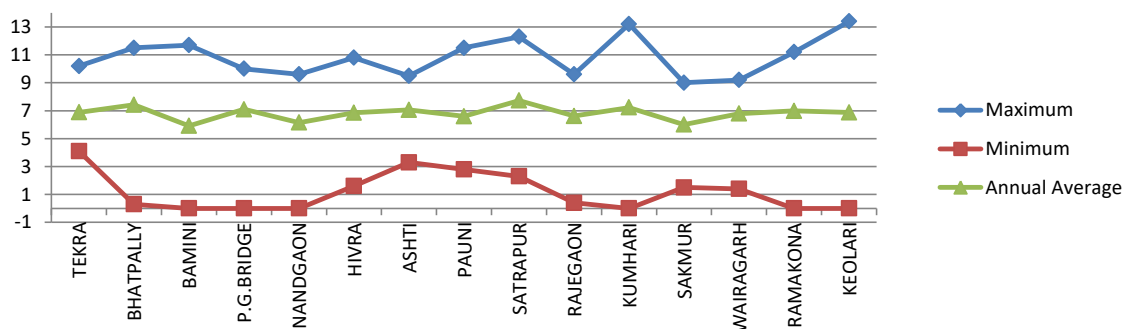
pH - 2017-18



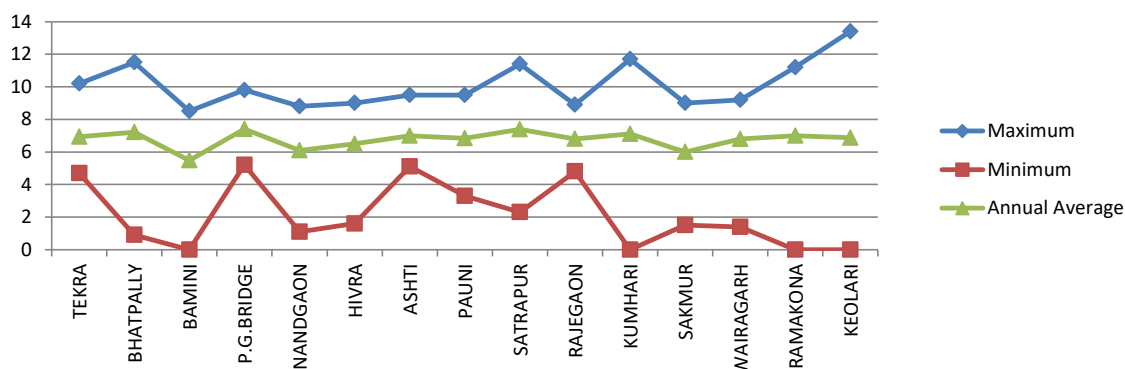
3. Dissolved Oxygen

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
TEKRA	10.2	10.2	8.9	4.1	4.7	6.1	6.9	6.9	7.2
BHATPALLY	11.5	11.5	9.5	0.3	0.9	5.3	7.4	7.2	7.6
BAMINI	11.7	8.5	7.3	0.0	0.0	2.3	5.9	5.5	5.4
P.G.BRIDGE	10.0	9.8	8.8	0.0	5.2	6.1	7.1	7.4	7.4
NANDGAON	9.6	8.8	7.8	0.0	1.1	2.0	6.2	6.1	6.0
HIVRA	10.8	9.0	8.3	1.6	1.6	1.6	6.9	6.5	4.6
ASHTI	9.5	9.5	8.9	3.3	5.1	5.8	7.1	7.0	7.1
PAUNI	11.5	9.5	8.7	2.8	3.3	3.6	6.6	6.8	6.9
SATRAPUR	12.3	11.4	10.7	2.3	2.3	2.3	7.7	7.4	5.2
RAJEGAON	9.6	8.9	8.3	0.4	4.8	5.9	6.6	6.8	6.6
KUMHARI	13.2	11.7	11.0	0.0	0.0	6.1	7.2	7.1	7.4
SAKMUR	9.0	9.0	9.0	1.5	1.5	1.5	6.0	6.0	5.4
WAIRAGARH	9.2	9.2	7.6	1.4	1.4	6.3	6.8	6.8	6.9
RAMAKONA	11.2	11.2	8.2	0.0	0.0	6.2	7.0	7.0	7.3
KEOLARI	13.4	13.4	13.4	0.0	0.0	0.0	6.9	6.9	7.4

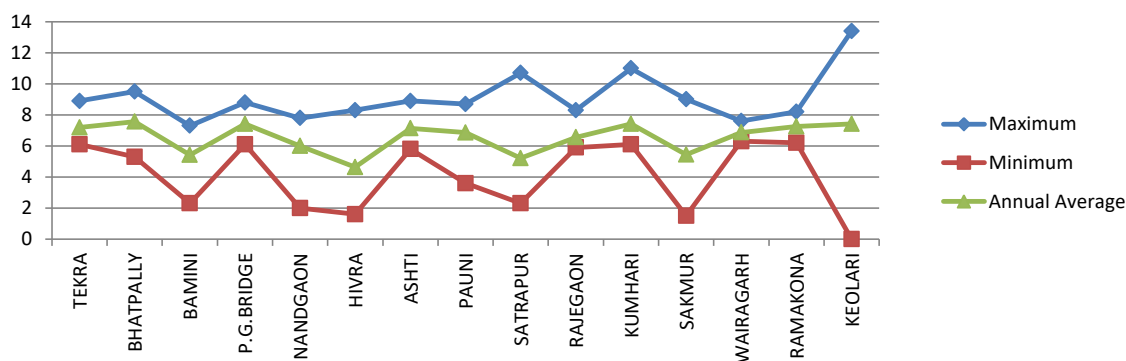
DO -Since Inception



DO - 10 Yrs (2008-2018)



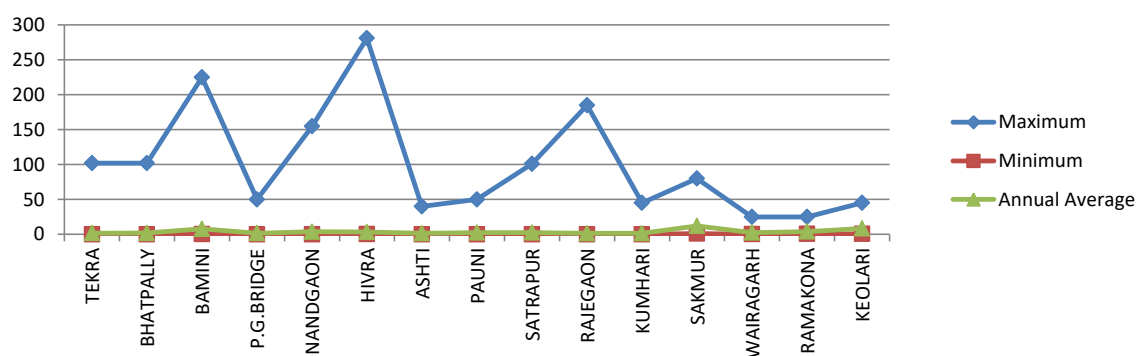
DO - 2017-18



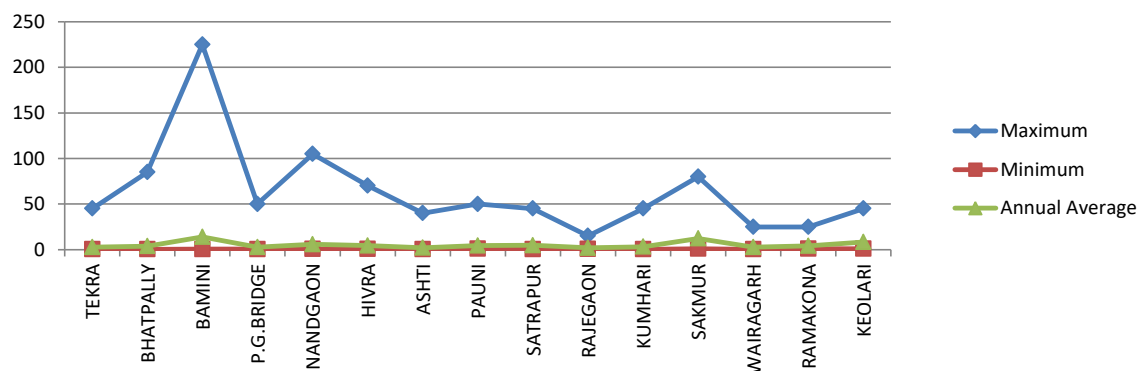
4. BOD

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
TEKRA	102.0	45.0	2.6	0.1	0.4	1.0	1.7	2.7	1.6
BHATPALLY	102.0	85.0	3.0	0.1	0.4	1.0	1.8	3.8	1.8
BAMINI	225.0	225.0	50.0	0.2	0.5	1.6	7.9	13.9	9.1
P.G.BRIDGE	50.0	50.0	4.5	0.0	0.5	1.3	1.7	2.8	2.5
NANDGAON	155.0	105.0	25.0	0.1	0.7	1.1	3.8	5.8	5.2
HIVRA	281.0	70.0	35.0	0.2	0.6	1.1	3.3	4.5	10.2
ASHTI	40.0	40.0	2.8	0.1	0.3	1.1	1.6	2.0	1.6
PAUNI	50.0	50.0	35.0	0.1	1.0	1.2	2.5	4.4	6.9
SATRAPUR	101.0	45.0	40.0	0.1	0.3	2.2	2.4	4.7	15.4
RAJEGAON	185.0	15.0	3.0	0.1	0.6	1.1	1.6	1.9	1.8
KUMHARI	45.0	45.0	5.4	0.1	0.4	1.2	1.4	3.2	1.9
SAKMUR	80.0	80.0	80.0	1.0	1.0	1.3	12.1	12.1	26.2
WAIKARH	25.0	25.0	2.4	0.4	0.4	1.2	2.7	2.7	1.5
RAMAKONA	25.0	25.0	2.3	0.9	0.9	1.0	4.0	4.0	1.7
KEOLARI	45.0	45.0	40.0	0.9	0.9	1.5	8.3	8.3	9.2

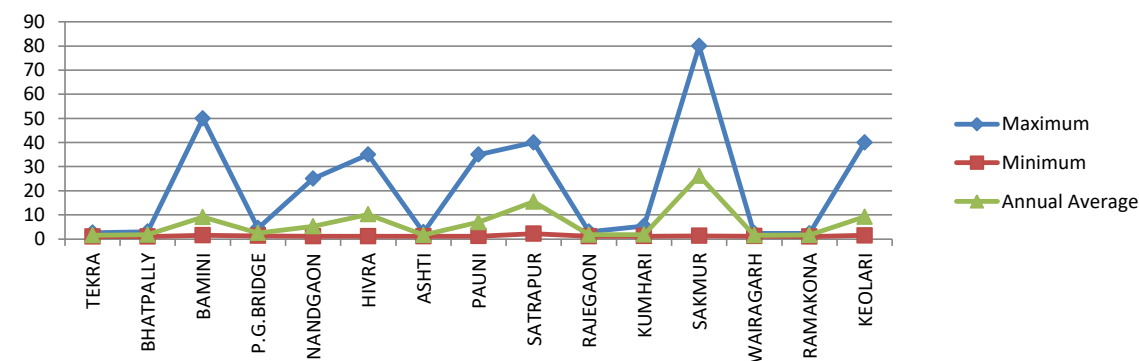
BOD - Since Inception



BOD - 10 Yrs (2008-2018)



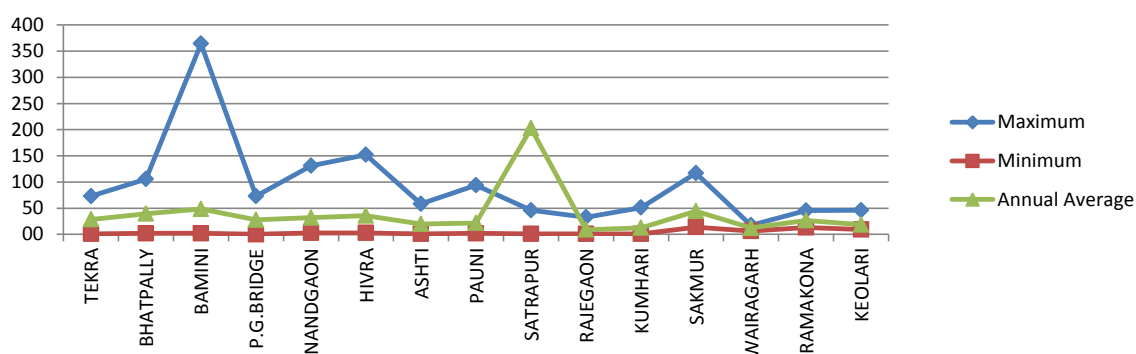
BOD - 2017-18



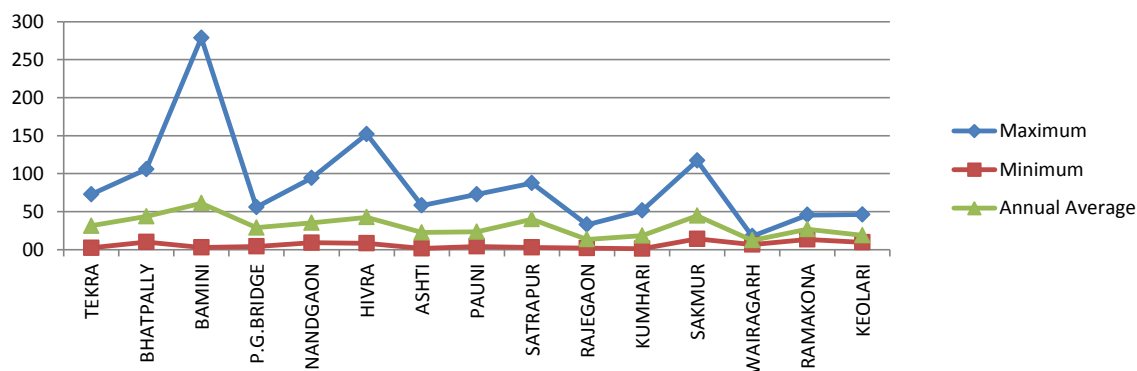
5. SODIUM

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
TEKRA	73.0	72.6	54.5	1.0	2.4	2.4	28.7	31.3	34.7
BHATPALLY	105.6	105.6	65.0	2.0	9.9	37.4	39.5	43.5	50.0
BAMINI	364.4	278.8	158.5	2.0	3.0	34.1	48.5	61.2	82.6
P.G.BRIDGE	73.0	55.8	55.3	0.0	4.1	20.7	27.8	28.8	32.1
NANDGAON	131.0	94.2	53.0	3.0	9.0	24.9	31.8	35.3	36.1
HIVRA	152.0	152.0	77.9	3.0	8.2	17.7	35.5	42.6	44.0
ASHTI	58.2	58.2	32.4	1.0	1.7	17.9	19.9	22.5	25.2
PAUNI	93.8	72.7	32.7	2.0	4.3	18.7	21.9	23.4	25.2
SATRAPUR	46.0	87.6	69.2	1.0	2.7	6.4	203.0	40.0	43.6
RAJEGAON	32.9	32.9	18.0	1.0	1.9	13.8	9.1	13.6	15.8
KUMHARI	51.3	51.3	28.8	1.0	1.3	15.0	12.7	18.5	21.1
SAKMUR	117.0	117.0	84.2	14.0	14.0	24.2	44.5	44.5	53.1
WAIKAGARH	17.6	17.6	17.6	6.6	6.6	10.4	12.2	12.2	14.6
RAMAKONA	45.5	45.5	37.8	13.3	13.3	21.0	26.7	26.7	26.4
KEOLARI	46.2	46.2	28.5	9.5	9.5	16.8	18.8	18.8	21.0

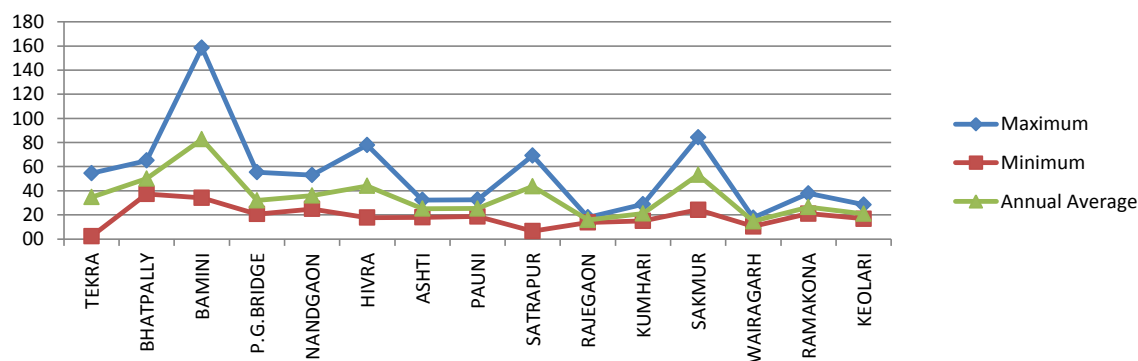
Sodium -Since Inception



Sodium - 10 Yrs (2008-2018)



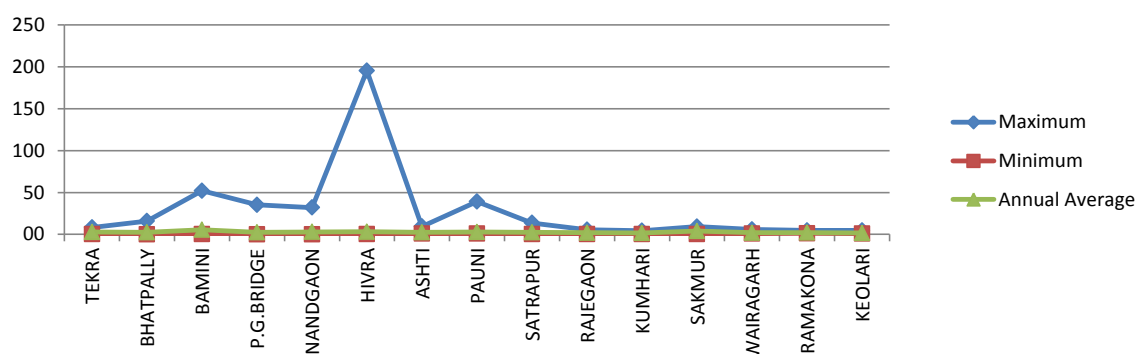
Sodium - 2017-18



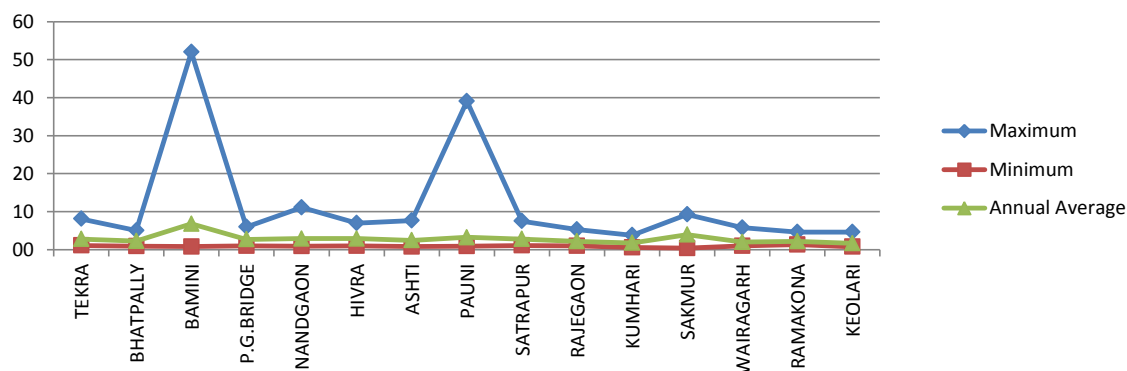
6. POTASSIUM

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
TEKRA	8.1	8.1	3.6	0.4	1.1	2.5	2.9	2.8	3.0
BHATPALLY	16.0	5.0	3.2	0.0	0.9	1.9	2.3	2.3	2.5
BAMINI	52.0	52.0	21.3	0.4	0.8	4.3	5.4	6.8	9.6
P.G.BRIDGE	35.2	6.0	4.3	0.0	1.0	2.4	2.6	2.7	3.2
NANDGAON	32.1	11.1	4.3	0.1	0.9	2.4	3.0	2.9	3.2
HIVRA	195.5	7.0	4.4	0.4	1.0	2.6	3.2	2.9	3.4
ASHTI	9.4	7.7	3.5	0.8	0.8	1.9	2.5	2.4	2.5
PAUNI	39.1	39.1	3.7	0.8	0.9	2.3	2.9	3.2	2.9
SATRAPUR	13.7	7.5	4.3	0.4	1.1	2.6	2.5	2.8	3.3
RAJEGAON	5.5	5.3	5.3	0.4	1.0	1.8	2.0	2.2	2.5
KUMHARI	4.3	3.8	2.7	0.4	0.6	1.2	1.6	1.8	1.8
SAKMUR	9.3	9.3	7.2	0.4	0.4	2.7	3.9	3.9	4.6
WAIRAGARH	5.8	5.8	5.8	1.0	1.0	1.8	2.0	2.0	2.5
RAMAKONA	4.6	4.6	3.2	1.3	1.3	2.3	2.2	2.2	2.6
KEOLARI	4.6	4.6	2.7	0.8	0.8	1.5	1.6	1.6	1.9

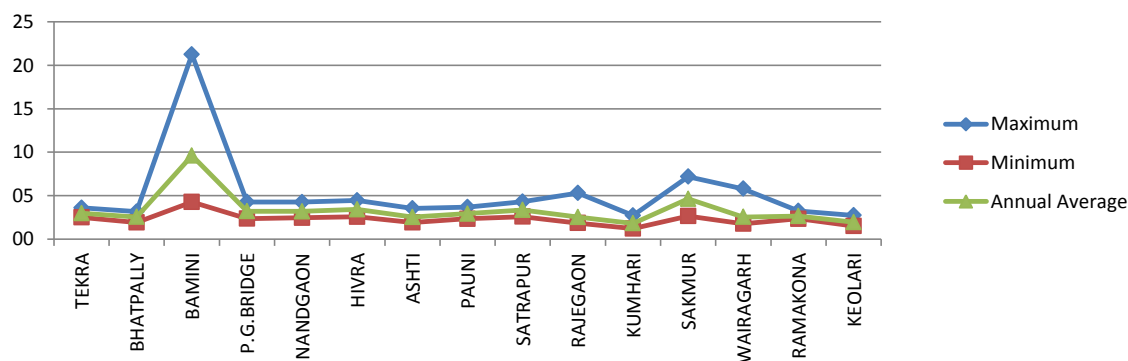
Potassium -Since Inception



Potassium - 10 Yrs (2008-2018)



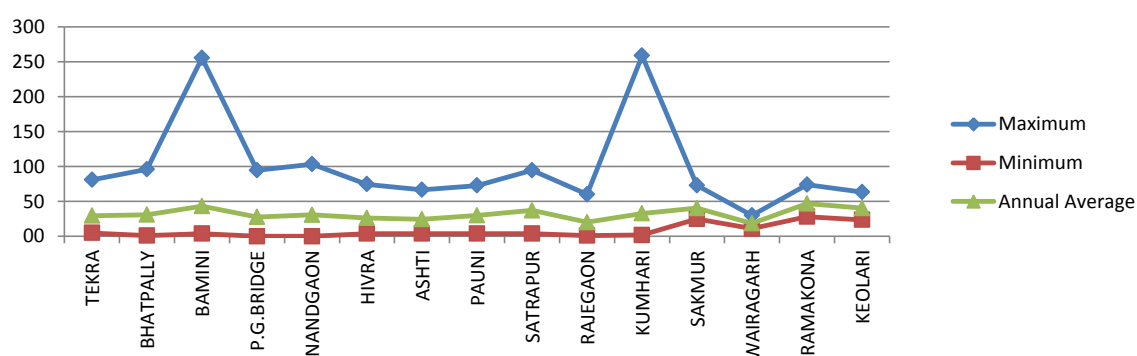
Potassium - 2017-18



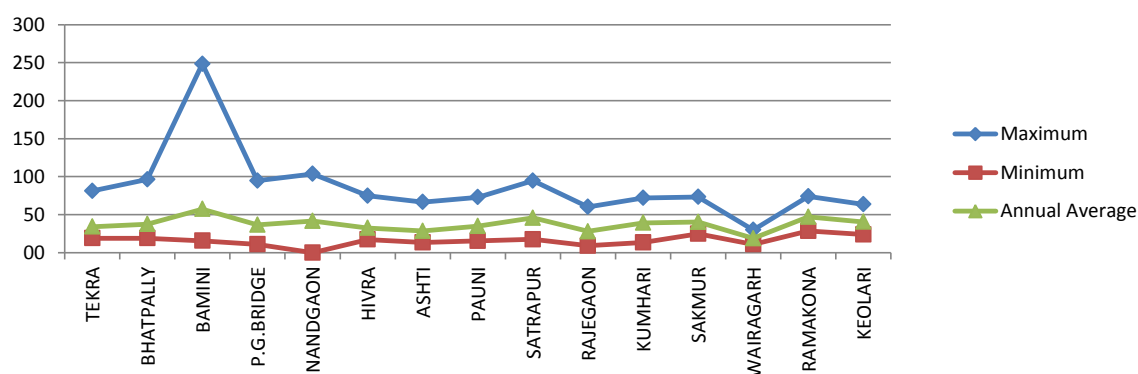
7.CALCIUM

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
TEKRA	81.0	81.0	54.3	5.0	19.0	24.8	29.6	34.2	35.2
BHATPALLY	96.3	96.3	64.3	1.2	19.0	23.0	31.2	37.5	36.9
BAMINI	255.8	248.4	103.7	4.0	15.6	39.7	43.1	57.3	60.8
P.G.BRIDGE	94.5	94.5	52.8	0.0	10.8	24.8	27.9	36.6	38.4
NANDGAON	103.5	103.5	59.5	0.0	0.0	26.5	30.8	41.7	44.5
HIVRA	74.7	74.7	40.2	4.0	17.3	22.9	26.3	32.4	26.7
ASHTI	66.6	66.6	43.2	4.0	13.2	20.2	24.7	28.5	28.4
PAUNI	72.9	72.9	54.7	4.0	15.4	17.6	30.1	35.0	34.6
SATRAPUR	94.5	94.5	70.1	4.0	17.5	17.5	37.2	45.8	48.4
RAJEGAON	60.3	60.3	36.5	1.0	9.0	9.7	20.3	28.0	25.6
KUMHARI	259.0	72.0	70.1	2.0	13.2	13.2	32.9	39.3	41.1
SAKMUR	73.2	73.2	48.0	24.9	24.9	26.5	40.4	40.4	39.2
WAIKARH	30.0	30.0	24.0	11.0	11.0	14.1	18.7	18.7	18.4
RAMAKONA	74.1	74.1	57.6	28.4	28.4	37.0	46.9	46.9	44.8
KEOLARI	63.5	63.5	51.8	23.8	23.8	32.6	40.5	40.5	43.4

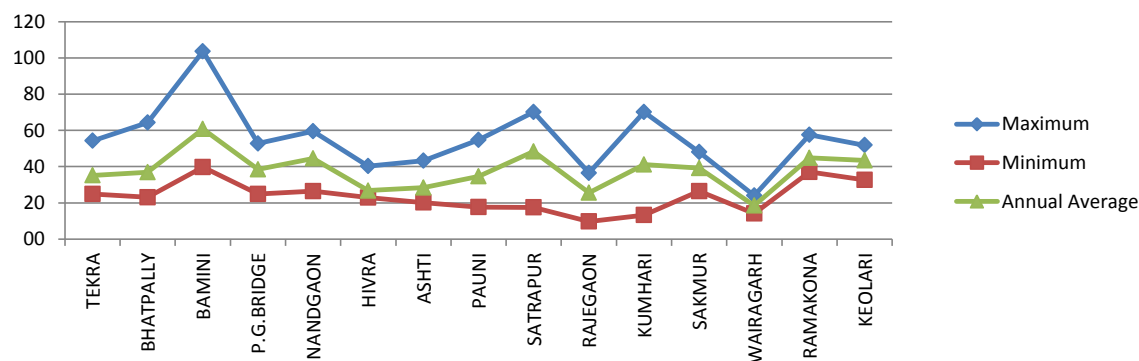
Calcium -Since Inception



Calcium - 10 Yrs (2008-2018)



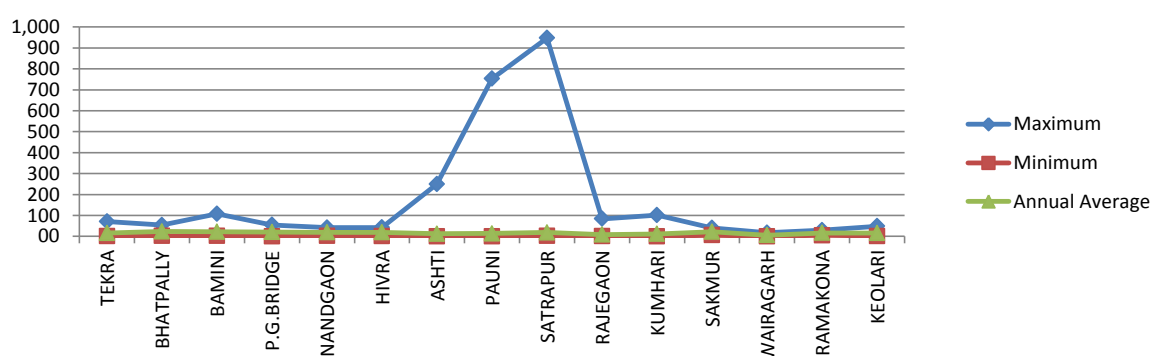
Calcium- 2017-18



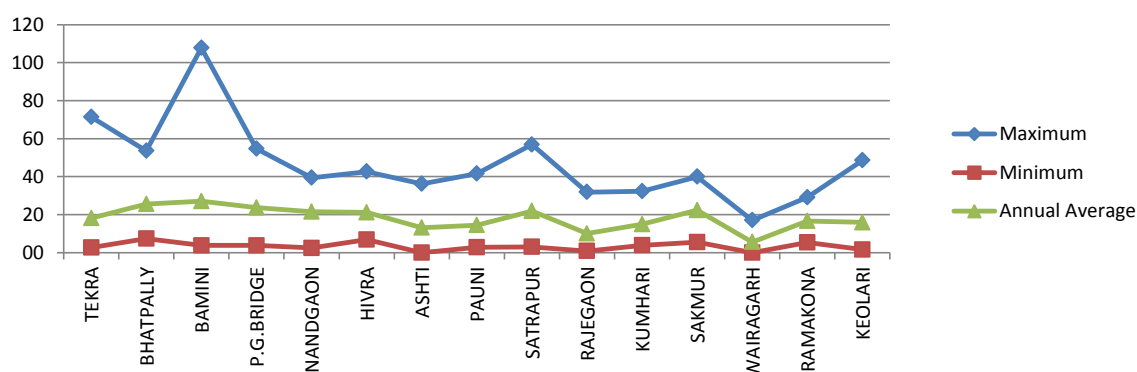
8. MAGNESIUM

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
TEKRA	71.4	71.4	39.1	1.1	2.7	5.9	15.4	18.1	18.2
BHATPALLY	53.6	53.6	46.1	2.6	7.4	16.6	23.6	25.6	29.0
BAMINI	107.8	107.8	61.2	2.2	3.8	5.9	22.3	27.1	24.7
P.G.BRIDGE	54.7	54.7	48.0	0.0	3.8	12.2	21.1	23.7	22.2
NANDGAON	41.9	39.4	29.1	2.4	2.4	12.3	19.3	21.6	22.1
HIVRA	42.6	42.6	23.9	1.7	6.8	11.2	19.5	21.1	19.2
ASHTI	250.0	36.2	27.3	0.0	0.0	6.6	12.2	13.1	12.6
PAUNI	753.3	41.6	23.9	0.5	2.8	7.0	13.9	14.5	12.7
SATRAPUR	947.7	56.9	37.5	2.2	3.1	6.9	18.8	21.9	23.5
RAJEGAON	84.0	31.9	12.8	0.9	0.9	2.8	8.3	10.1	7.0
KUMHARI	102.1	32.3	21.6	0.5	3.9	5.5	11.7	14.9	12.9
SAKMUR	39.9	39.9	34.4	5.5	5.5	11.8	22.3	22.3	23.1
WAIKAGARH	17.0	17.0	14.4	0.0	0.0	1.2	5.5	5.5	6.4
RAMAKONA	29.1	29.1	21.6	5.3	5.3	5.3	16.7	16.7	13.1
KEOLARI	48.6	48.6	21.6	1.6	1.6	1.6	15.9	15.9	15.3

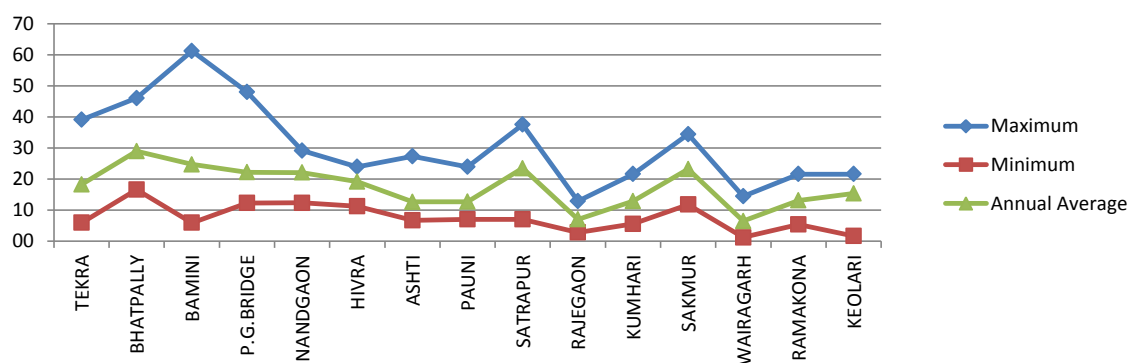
Magnesium -Since Inception



Magnesium - 10 Yrs (2008-2018)



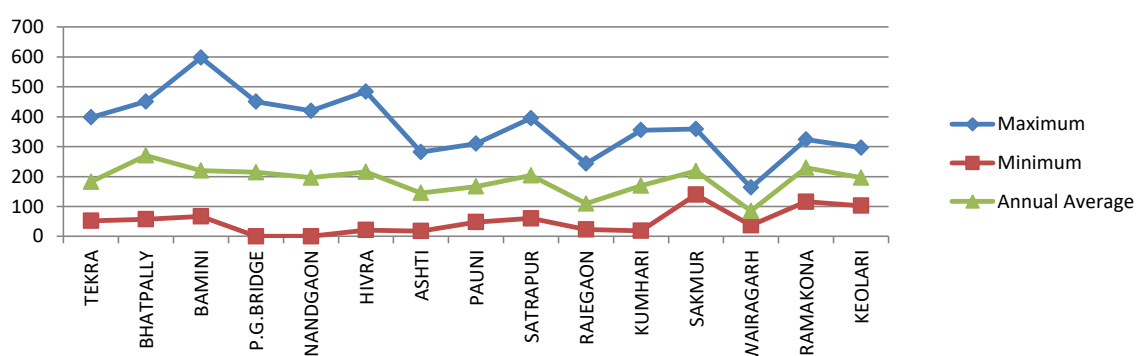
Magnesium- 2017-18



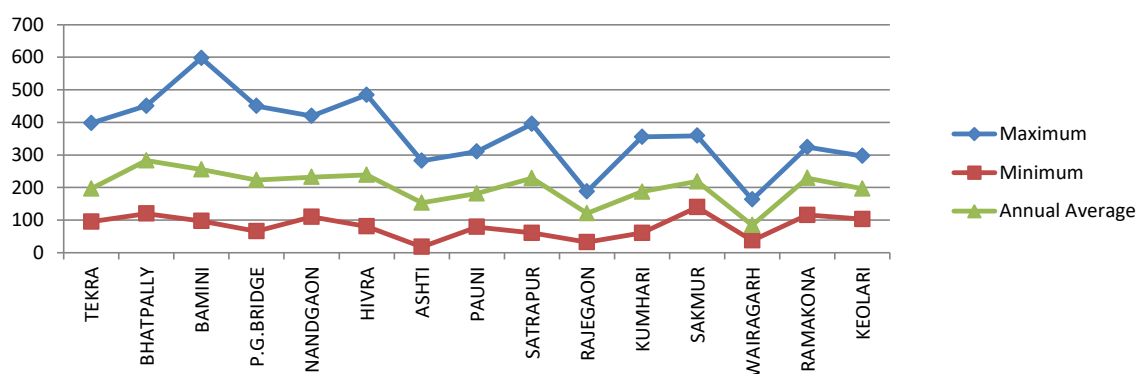
9. BICARBONATE

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
TEKRA	398.0	398.0	283.0	51.8	95.0	160.3	181.9	196.4	219.7
BHATPALLY	450.6	450.6	398.9	57.0	120.0	257.6	270.7	282.7	326.7
BAMINI	597.8	597.8	409.1	67.0	96.8	96.8	219.6	255.6	266.5
P.G.BRIDGE	450.0	450.0	330.8	0.0	65.9	200.9	214.2	222.7	261.5
NANDGAON	419.6	419.6	314.8	0.2	109.8	175.7	196.4	232.2	256.5
HIVRA	484.0	484.0	291.0	21.0	80.7	155.0	215.6	239.1	237.5
ASHTI	282.0	282.0	239.0	17.7	17.7	116.7	145.4	152.8	168.8
PAUNI	310.0	310.0	226.0	47.6	78.7	104.0	166.6	181.6	184.0
SATRAPUR	395.0	395.0	296.5	60.3	60.3	190.6	204.0	228.6	263.4
RAJEGAON	243.0	188.0	161.7	23.0	32.0	59.8	109.9	120.5	123.6
KUMHARI	355.3	355.3	355.3	19.0	60.4	77.7	169.3	187.2	208.1
SAKMUR	359.0	359.0	249.9	139.2	139.2	179.3	218.6	218.6	221.5
WAIRAGARH	163.2	163.2	132.7	37.0	37.0	63.7	84.6	84.6	94.7
RAMAKONA	323.8	323.8	262.1	115.6	115.6	190.3	229.3	229.3	222.1
KEOLARI	296.6	296.6	285.5	102.5	102.5	183.0	196.4	196.4	226.3

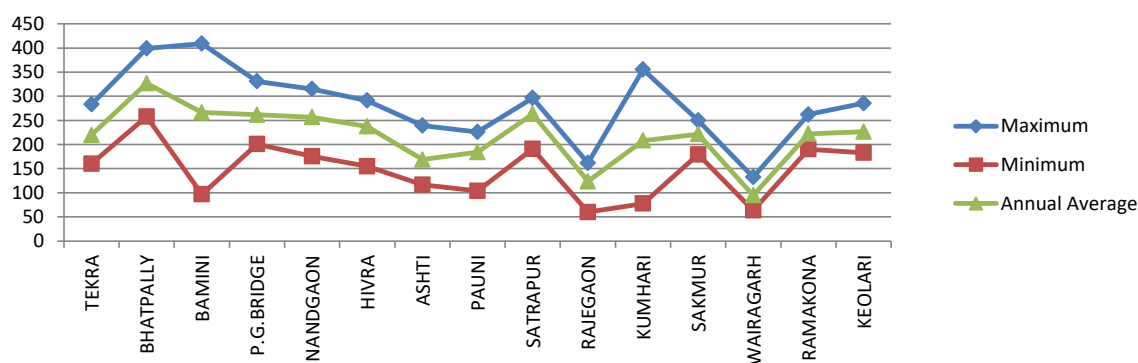
Bicarbonate -Since Inception



Bicarbonate - 10 Yrs (2008-2018)



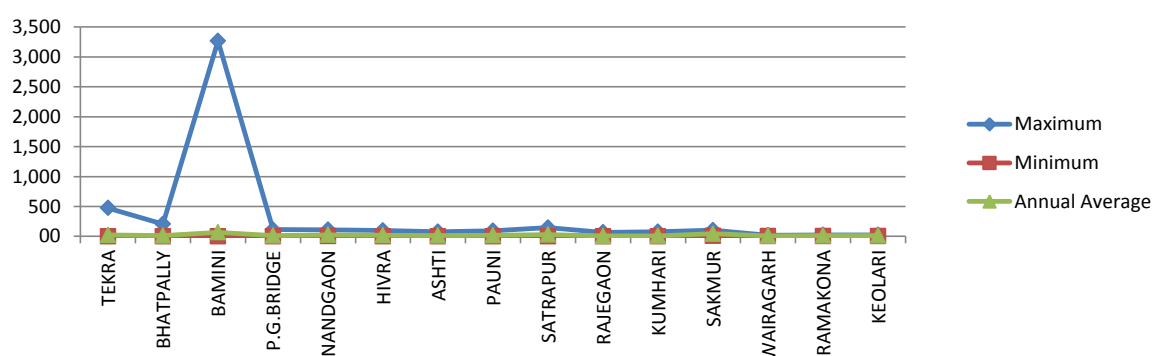
Bicarbonate- 2017-18



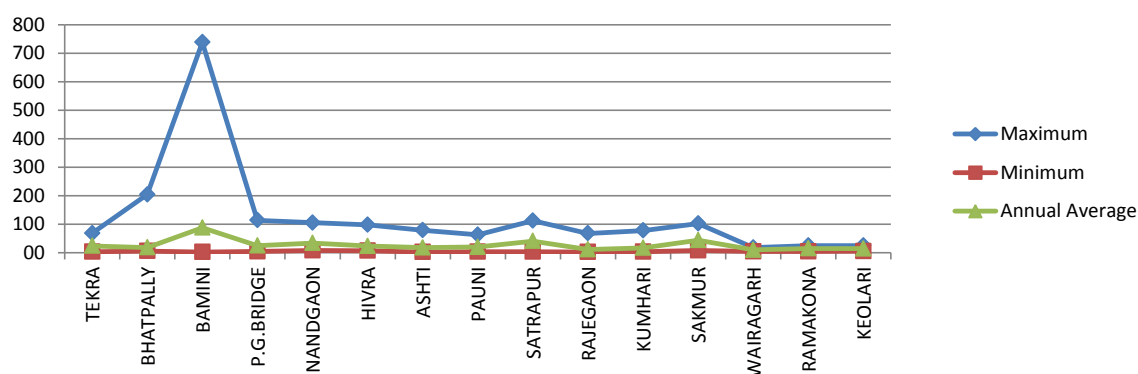
10. CHLORIDE

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
TEKRA	474.0	68.2	39.8	1.1	3.2	16.5	22.0	23.8	27.1
BHATPALLY	204.0	204.0	28.6	1.0	5.8	11.1	13.4	18.1	21.5
BAMINI	3266.0	738.4	230.6	1.0	2.1	35.8	68.4	87.5	113.7
P.G.BRIDGE	113.3	113.3	59.6	0.0	4.0	15.9	14.9	24.3	31.8
NANDGAON	110.0	105.1	73.1	2.1	7.8	15.9	25.4	33.8	42.4
HIVRA	97.4	97.4	97.4	1.0	6.4	11.9	16.9	22.8	33.2
ASHTI	78.8	78.8	37.1	0.0	2.1	11.9	13.5	17.6	22.4
PAUNI	95.0	62.5	37.8	0.0	3.5	15.9	16.9	19.6	23.8
SATRAPUR	147.0	112.2	94.7	0.0	3.5	21.9	29.7	40.6	56.2
RAJEGAON	67.5	67.5	28.8	0.0	2.0	4.0	5.9	11.2	13.7
KUMHARI	77.7	77.7	47.7	0.0	2.8	8.2	7.7	17.0	24.9
SAKMUR	101.8	101.8	101.8	7.9	7.9	19.9	43.3	43.3	59.7
WAIKAGARH	17.7	17.7	17.7	3.7	3.7	6.0	9.3	9.3	11.0
RAMAKONA	24.9	24.9	24.7	4.0	4.0	9.9	14.8	14.8	16.2
KEOLARI	24.7	24.7	24.7	5.1	5.1	11.9	14.2	14.2	17.9

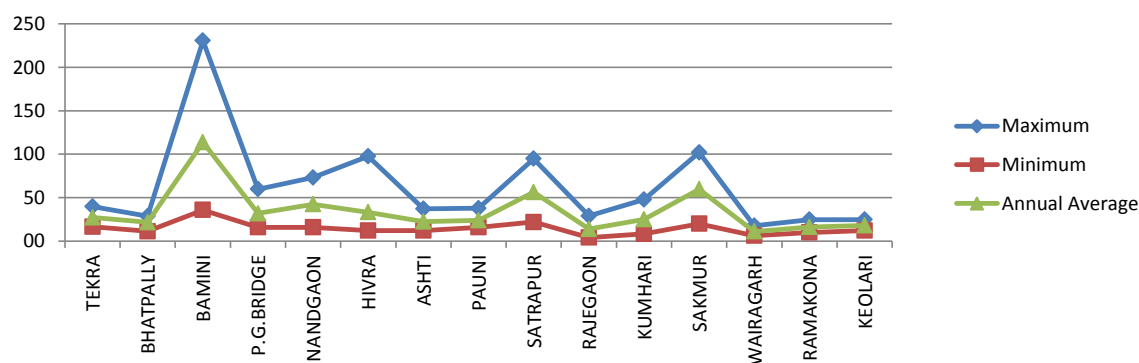
Chloride-Since Inception



Chloride - 10 Yrs (2008-2018)



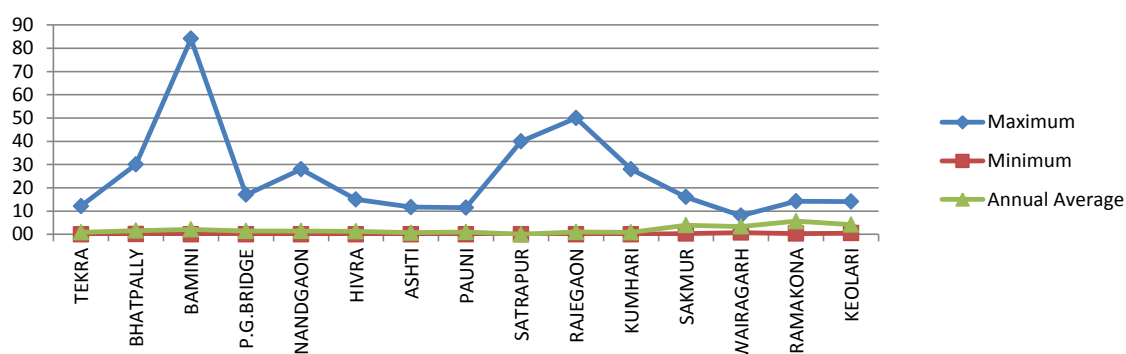
Chloride- 2017-18



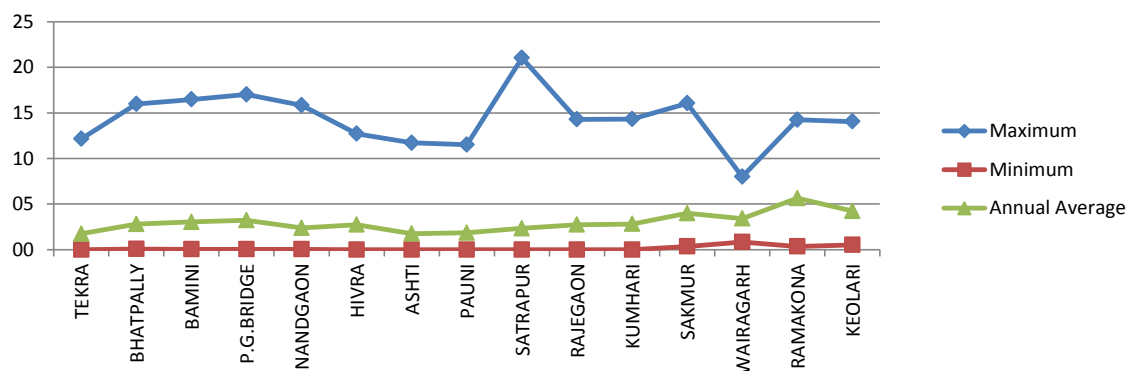
11. NITRATE - No3

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
TEKRA	12.1	12.1	6.3	0.0	0.0	0.8	0.9	1.7	2.1
BHATPALLY	30.0	16.0	11.0	0.1	0.1	0.8	1.6	2.8	3.0
BAMINI	84.1	16.5	4.7	0.0	0.0	0.4	2.1	3.0	2.4
P.G.BRIDGE	17.0	17.0	2.7	0.0	0.0	1.7	1.4	3.2	2.2
NANDGAON	28.0	15.8	2.5	0.0	0.0	0.3	1.4	2.4	1.7
HIVRA	15.0	12.7	12.5	0.0	0.0	1.0	1.3	2.7	2.6
ASHTI	11.7	11.7	8.7	0.0	0.0	1.1	0.7	1.8	2.2
PAUNI	11.5	11.5	7.9	0.0	0.0	1.2	1.0	1.9	2.2
SATRAPUR	40.0	21.0	7.3	0.0	0.0	0.4	0.0	2.3	2.0
RAJEGAON	50.0	14.3	2.7	0.0	0.0	1.0	1.0	2.7	1.9
KUMHARI	28.0	14.3	4.8	0.0	0.0	0.9	0.9	2.8	2.2
SAKMUR	16.0	16.0	2.6	0.3	0.3	1.7	4.0	4.0	2.1
WAIRAGARH	8.0	8.0	8.0	0.8	0.8	1.1	3.4	3.4	2.7
RAMAKONA	14.2	14.2	3.4	0.3	0.3	0.3	5.6	5.6	2.2
KEOLARI	14.1	14.1	7.7	0.5	0.5	0.5	4.2	4.2	2.3

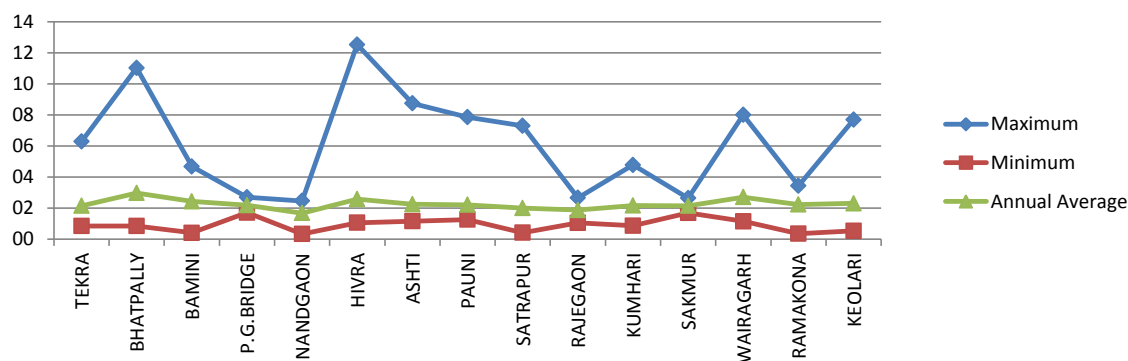
Nitrate-Since Inception



Nitrate - 10 Yrs (2008-2018)



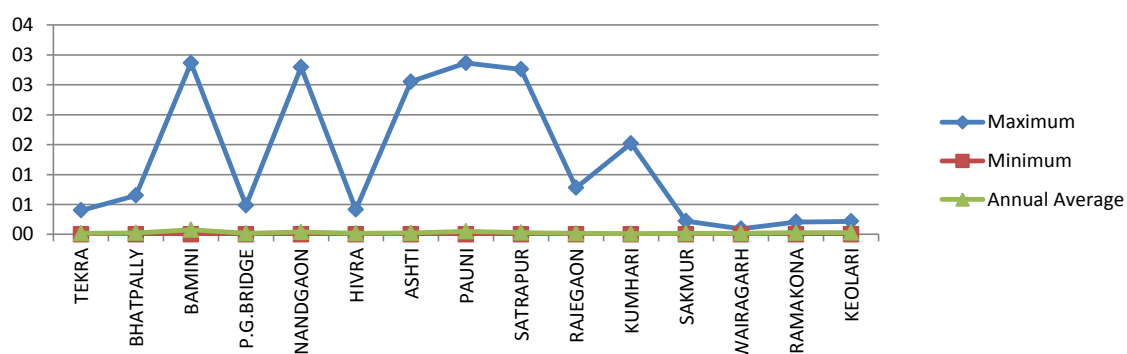
Nitrate- 2017-18



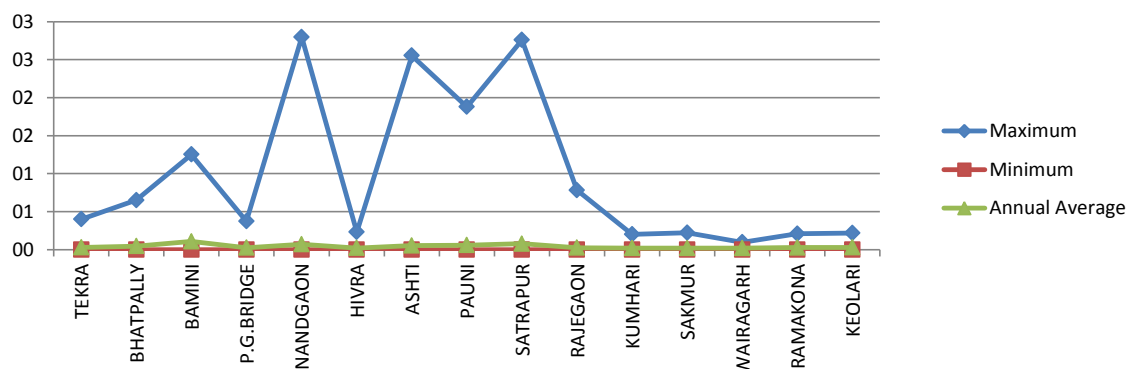
12. NITRITE

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
TEKRA	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BHATPALLY	0.6	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0
BAMINI	2.9	1.3	0.3	0.0	0.0	0.0	0.1	0.1	0.1
P.G.BRIDGE	0.5	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0
NANDGAON	2.8	2.8	0.1	0.0	0.0	0.0	0.0	0.1	0.0
HIVRA	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
ASHTI	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.1	0.0
PAUNI	2.9	1.9	0.1	0.0	0.0	0.0	0.1	0.1	0.0
SATRAPUR	2.8	2.8	0.1	0.0	0.0	0.0	0.0	0.1	0.0
RAJEGAON	0.8	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0
KUMHARI	1.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SAKMUR	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
WAIKAGARH	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
RAMAKONA	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
KEOLARI	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0

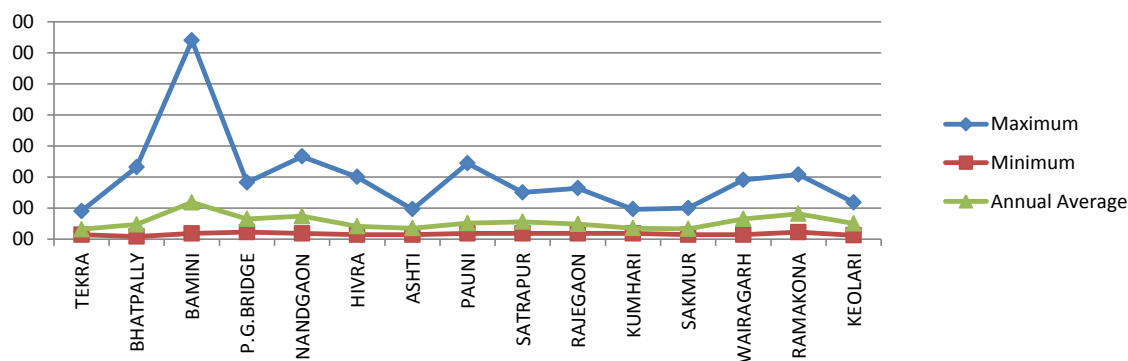
Nitrite-Since Inception



Nitrite - 10 Yrs (2008-2018)



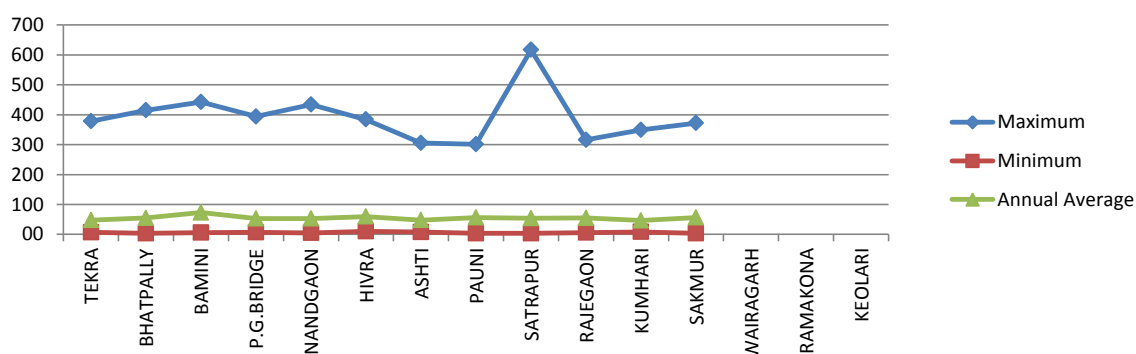
Nitrite- 2017-18



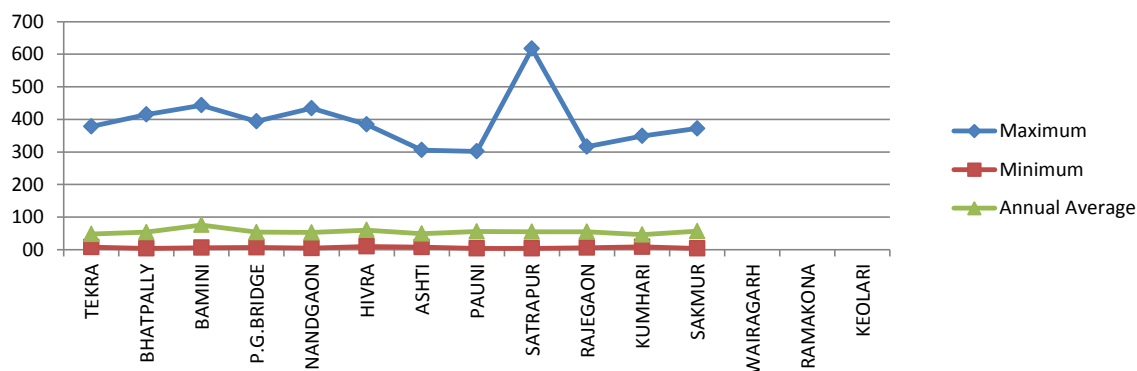
13.COD

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
TEKRA	378.0	378.0	75.2	7.2	7.2	20.5	47.8	47.9	41.5
BHATPALLY	415.0	415.0	132.6	3.4	3.4	3.4	54.9	53.5	36.1
BAMINI	443.0	443.0	296.3	6.0	6.0	6.0	73.0	75.7	68.5
P.G.BRIDGE	394.0	394.0	84.0	7.0	7.0	7.0	53.0	53.3	35.7
NANDGAON	434.0	434.0	53.6	4.7	4.7	4.7	52.9	52.4	32.0
HIVRA	384.0	384.0	88.7	10.0	10.0	16.8	59.6	59.9	47.5
ASHTI	305.8	305.8	92.0	7.7	7.7	7.7	47.7	48.8	39.4
PAUNI	301.4	301.4	96.3	3.6	3.6	3.6	56.7	55.7	38.1
SATRAPUR	617.1	617.1	96.2	3.4	3.6	14.3	53.7	55.0	44.3
RAJEGAON	316.0	316.0	90.4	5.6	5.6	17.7	54.7	54.7	47.3
KUMHARI	349.0	349.0	53.9	8.3	8.3	8.3	46.1	46.1	26.6
SAKMUR	372.0	372.0	86.4	3.8	3.8	3.8	56.6	56.6	50.4
WAIKAGARH									
RAMAKONA									
KEOLARI									

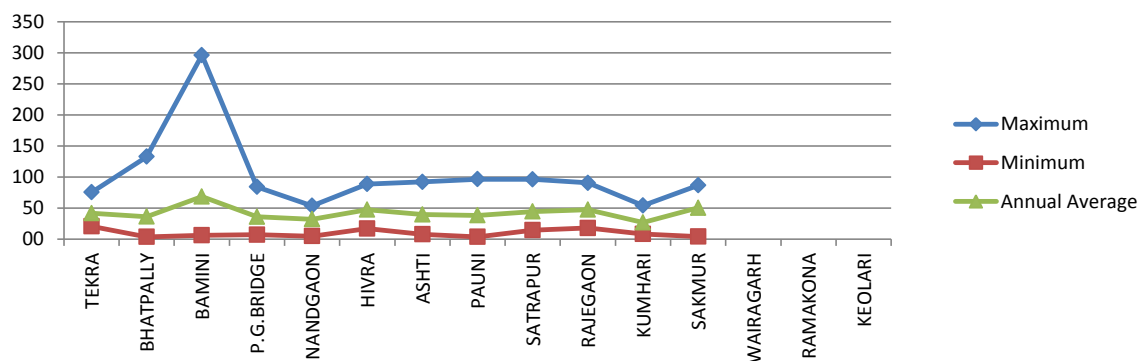
COD-Since Inception



COD - 10 Yrs (2008-2018)



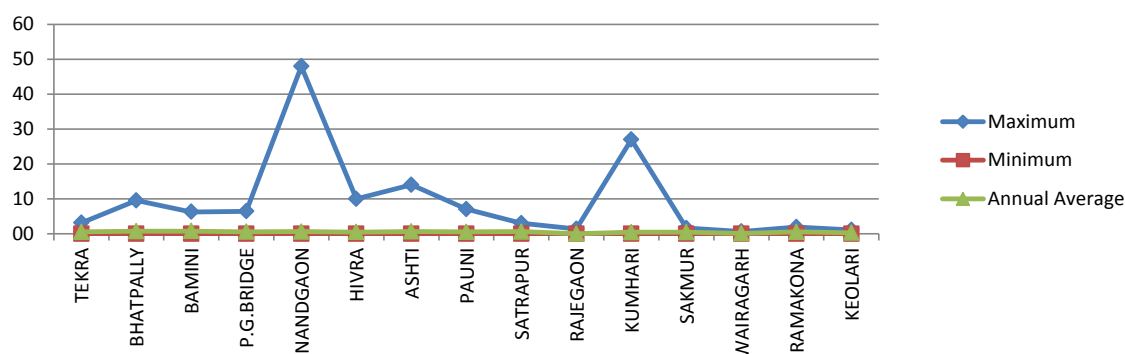
COD- 2017-18



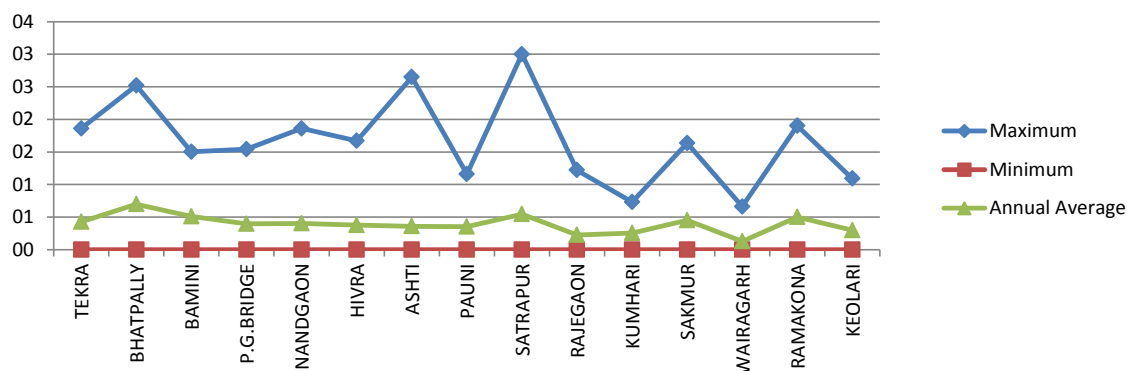
14.FLUORIDE

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
TEKRA	3.1	1.9	1.2	0.0	0.0	0.1	0.5	0.4	0.5
BHATPALLY	9.5	2.5	2.5	0.0	0.0	0.0	0.7	0.7	1.1
BAMINI	6.3	1.5	1.4	0.0	0.0	0.2	0.8	0.5	0.6
P.G.BRIDGE	6.5	1.5	1.0	0.0	0.0	0.1	0.6	0.4	0.5
NANDGAON	48.0	1.9	1.2	0.0	0.0	0.0	0.6	0.4	0.5
HIVRA	10.0	1.7	0.9	0.0	0.0	0.0	0.5	0.4	0.4
ASHTI	14.0	2.7	0.6	0.0	0.0	0.0	0.6	0.4	0.3
PAUNI	7.0	1.2	0.6	0.0	0.0	0.0	0.5	0.4	0.3
SATRAPUR	3.0	3.0	1.0	0.0	0.0	0.0	0.6	0.5	0.5
RAJEGAON	1.4	1.2	0.2	0.0	0.0	0.0	0.0	0.2	0.0
KUMHARI	27.0	0.7	0.4	0.0	0.0	0.0	0.4	0.3	0.2
SAKMUR	1.6	1.6	1.0	0.0	0.0	0.0	0.5	0.5	0.5
WAIRAGARH	0.7	0.7	0.4	0.0	0.0	0.0	0.1	0.1	0.1
RAMAKONA	1.9	1.9	1.9	0.0	0.0	0.0	0.5	0.5	0.8
KEOLARI	1.1	1.1	0.7	0.0	0.0	0.0	0.3	0.3	0.3

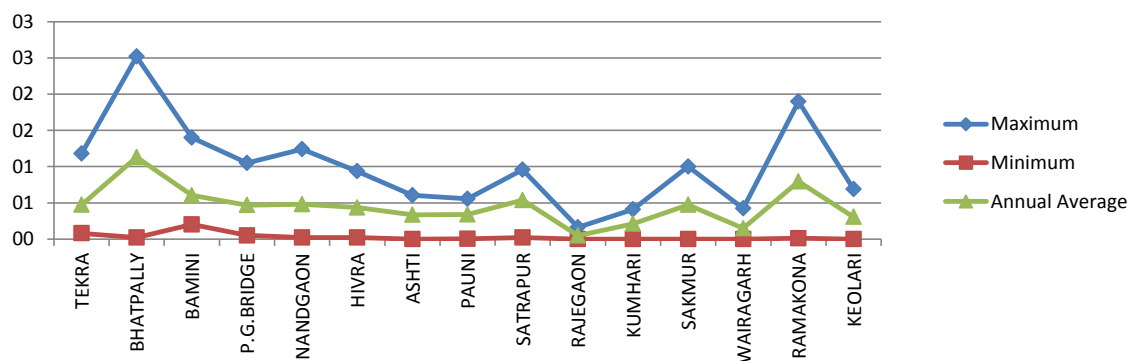
FLUORIDE-Since Inception



FLUORIDE - 10 Yrs (2008-2018)



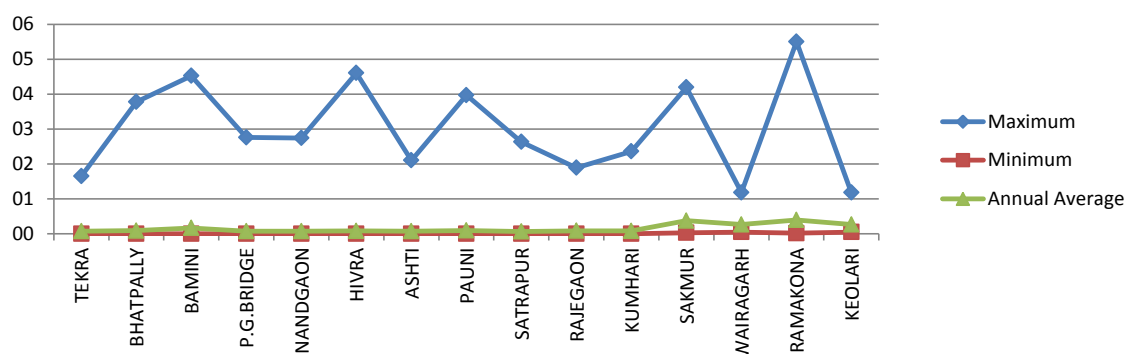
FLUORIDE- 2017-18



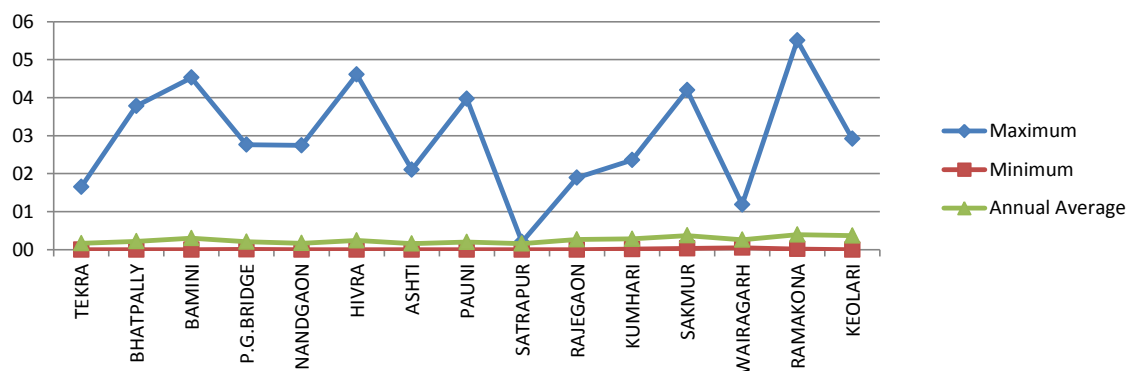
15. PHOSPHATE

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
TEKRA	1.6	1.6	1.6	0.0	0.0	0.0	0.1	0.2	0.4
BHATPALLY	3.8	3.8	2.0	0.0	0.0	0.1	0.1	0.2	0.5
BAMINI	4.5	4.5	4.5	0.0	0.0	0.0	0.2	0.3	0.8
P.G.BRIDGE	2.8	2.8	1.1	0.0	0.0	0.0	0.1	0.2	0.5
NANDGAON	2.7	2.7	0.7	0.0	0.0	0.1	0.1	0.2	0.3
HIVRA	4.6	4.6	4.6	0.0	0.0	0.1	0.1	0.2	0.7
ASHTI	2.1	2.1	2.1	0.0	0.0	0.1	0.1	0.2	0.5
PAUNI	4.0	4.0	4.0	0.0	0.0	0.1	0.1	0.2	0.6
SATRAPUR	2.6	0.2	0.9	0.0	0.0	0.0	0.1	0.2	0.3
RAJEGAON	1.9	1.9	1.1	0.0	0.0	0.1	0.1	0.3	0.5
KUMHARI	2.4	2.4	1.7	0.0	0.0	0.1	0.1	0.3	0.5
SAKMUR	4.2	4.2	4.2	0.0	0.0	0.1	0.4	0.4	0.8
WAIRAGARH	1.2	1.2	1.2	0.0	0.0	0.1	0.3	0.3	0.4
RAMAKONA	5.5	5.5	1.9	0.0	0.0	0.1	0.4	0.4	0.5
KEOLARI	1.2	2.9	1.5	0.0	0.0	0.0	0.3	0.4	0.4

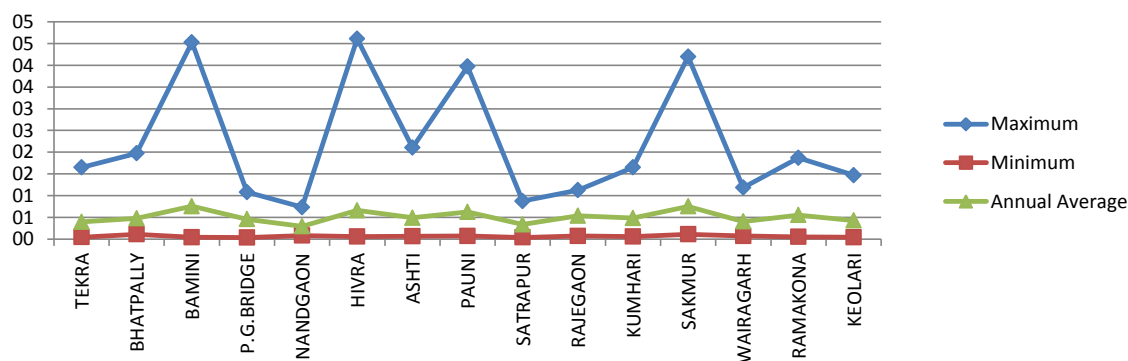
PHOSPHATE-Since Inception



PHOSPHATE- 10 Yrs (2008-2018)



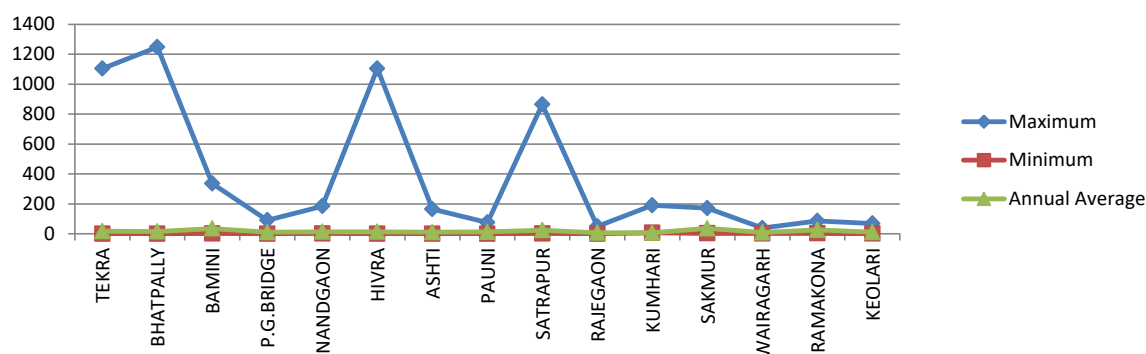
PHOSPHATE- 2017-18



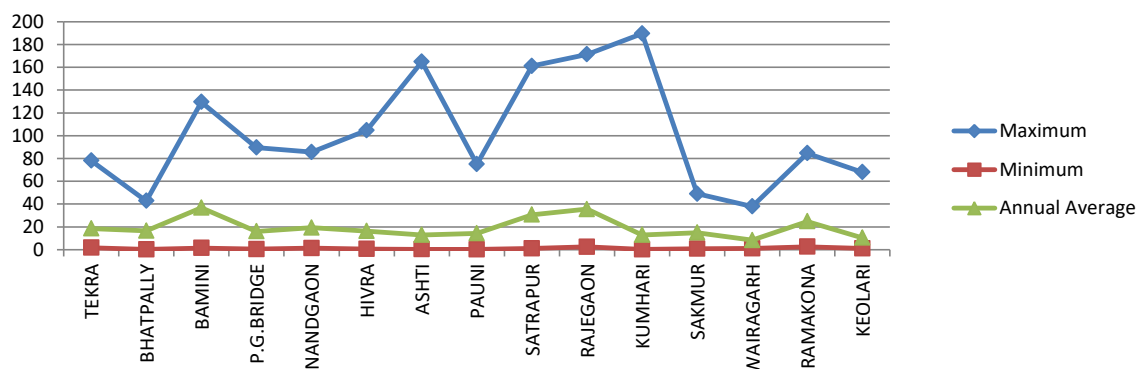
16.SULPHATE

Site Name (From U/s to D/s)	Avg. of yearly			Avg. of yearly			Annual Average		
	Maximum			Minimum					
	Since inception	10 years (2008 - 2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18	Since inception	10 years (2008 -2018)	2017-18
TEKRA	1104.0	78.0	31.9	0.0	1.6	4.6	17.5	18.5	17.1
BHATPALLY	1248.0	42.8	29.4	0.0	0.2	8.5	14.4	16.5	17.2
BAMINI	336.0	129.5	68.3	1.0	1.4	10.8	34.9	36.8	42.7
P.G.BRIDGE	89.6	89.6	25.7	0.0	0.4	0.4	10.3	16.0	15.4
NANDGAON	185.0	85.6	36.3	1.0	1.2	1.3	13.7	19.2	21.1
HIVRA	1104.0	104.6	22.0	0.0	0.5	0.5	13.6	16.3	7.3
ASHTI	164.9	164.9	21.6	0.3	0.3	0.3	9.8	12.9	7.5
PAUNI	75.0	75.0	18.0	0.0	0.1	0.1	11.8	14.2	8.4
SATRAPUR	864.0	161.1	161.1	1.0	1.0	6.8	23.6	30.6	43.8
RAJEGAON	49.0	171.3	41.3	0.0	2.4	0.9	6.5	35.5	17.4
KUMHARI	189.6	189.6	28.6	6.5	0.1	0.1	6.3	12.8	6.8
SAKMUR	171.3	49.0	171.3	2.4	0.9	18.0	35.5	14.9	48.2
WAIKAGARH	37.9	37.9	37.9	1.0	1.0	1.8	8.3	8.3	10.3
RAMAKONA	84.6	84.6	43.4	2.5	2.5	12.2	24.8	24.8	29.2
KEOLARI	68.0	68.0	26.2	0.9	0.9	0.9	10.4	10.4	5.7

SULPHATE-Since Inception



SULPHATE- 10 Yrs (2008-2018)



SULPHATE- 2017-18

