

WATER QUALITY OF RIVER BUDHABALANGA - 2013

Baripada D/s

Month	Year	Temp., °C	pH	DO, mg/l	BOD, mg/l	COD, mg/l	Cond., µS/cm	Nitrate- N, mg/l
Jan	2013	18	8.4	8.4	1.0	7.8	268	0.381
Feb		23	8.2	8.0	1.1	6.5	296	0.200
Mar		24	7.4	7.6	2.3	10.9	420	0.192
Apr		27	8.3	7.6	1.3	12.3	372	0.526
May		23	8.1	7.2	2.5	15.4	369	0.918
June		23	8.1	7.2	2.5	15.4	369	0.918
July		27	7.0	6.8	1.2	18.0	136	0.550
Aug		28	7.6	6.8	0.9	9.7	147	0.197
Sep		21	8.0	8.0	1.8	19.0	151	0.174
Oct			7.5	8.0	0.8	11.1	148	0.136
Nov		21	7.9	7.4	1.0	4.2	185	0.136
Dec								
Minimum		18.0	7.0	6.8	0.8	4.2	135.7	0.1
Maximum		28.0	8.4	8.4	2.5	19.0	420.0	0.9
Average		23.5	7.9	7.5	1.5	11.8	260.0	0.4

Balasore U/s

Month	Year	Temp., °C	pH	DO, mg/l	BOD, mg/l	COD, mg/l	Cond., µS/cm	Nitrate- N, mg/l
Jan	2013	20	7.2	7.8	2.0	12.8	264	0.172
Feb		22	7.9	8.0	1.4	9.1	291	0.306
Mar		23	8.4	7.8	2.0	10.0	322	0.268
Apr		25	8.2	8.0	2.6	14.1	363	0.410
May		24	8.2	7.6	1.4	9.6	298	0.365
June		24	8.2	7.6	1.4	9.6	298	0.365
July		28	7.6	7.2	0.8	9.8	128	2.158
Aug		28	7.5	6.4	1.4	11.6	112	0.133
Sep		20	7.9	7.9	1.2	10.3	125	0.179
Oct			7.5	7.4	0.5	9.8	125	0.267

Nov		23	7.4	7.4	0.9	7.0	196	0.267
Dec								
Minimum		20.0	7.2	6.4	0.5	7.0	112.0	0.1
Maximum		28.0	8.4	8.0	2.6	14.1	363.0	2.2
Average		23.7	7.8	7.6	1.4	10.3	229.3	0.4

Balasore D/s

Month	Year	Temp., °C	pH	DO, mg/l	BOD, mg/l	COD, mg/l	Cond., µS/cm	Nitrate- N, mg/l	
Jan	2013	20	8.3	7.8	2.4	18.6	338	0.844	
Feb		21	8.3	7.6	2.1	12.3	516	1.455	
Mar		23	7.3	8.2	2.8	12.9	4648	2.735	
Apr		25	7.8	7.4	3.6	20.7	5880	2.561	
May		23	7.9	8.0	3.5	30.8	27880	1.018	
June		23	7.9	8.0	3.5	30.8	27880	1.018	
July		29	7.5	7.0	1.5	11.5	142	0.730	
Aug		28	7.4	6.6	2.1	19.3	191	0.148	
Sep		22	7.7	7.7	1.6	27.6	260	1.433	
Oct				7.3	7.6	1.8	16.7	195	1.448
Nov		22	7.7	7.2	1.8	8.3	194	1.448	
Dec									
Minimum		20.0	7.3	6.6	1.5	8.3	141.9	0.1	
Maximum		29.0	8.3	8.2	3.6	30.8	27880.0	2.7	
Average		23.6	7.7	7.6	2.4	19.0	6193.1	1.3	

NH ₄ -N, mg/l	TC, MPN/ 100 ml	FC, MPN/ 100 ml	SI	DI	Class	Nitrite-N, mg/l	T. Alk., mg/l	P. Alk., mg/l
0.112	3500	2200	6.2	0.83	B	0.009	108	14
0.250	5400	2400	--	--	--	0.013	120	BDL
0.224	17000	7900	--	--	--	0.007	156	BDL
0.224	22000	11000	5.6	0.8	C	BDL	132	6.0
0.550	2200	1300	--	--	--	0.006	140	BDL
0.550	2200	1300	--	--	--	0.006	140	BDL
0.504	54000	22000	--	--	--	0.023	38	BDL
0.440	54000	24000	--	--	--	0.006	56	BDL
0.448	11000	7000	--	--	--	0.002	60	BDL
0.224	11000	7900	5.8	0.78	C	0.003	64	BDL
0.224	17000	490				0.012	76	BDL
0.1	2200.0	490.0						
0.6	54000.0	24000.0						
0.3	18118.2	7953.6						

NH ₄ -N, mg/l	TC, MPN/ 100 ml	FC, MPN/ 100 ml	SI	DI	Class	Nitrite-N, mg/l	T. Alk., mg/l	P. Alk., mg/l
0.280	1100	490	6.2	0.64	B	0.011	112	BDL
0.300	24000	13000	--	--	--	0.017	108	BDL
0.112	3500	2400	--	--	--	0.011	104	4.0
0.224	3500	2400	6	0.84	C	0.004	100	BDL
0.330	1700	790	--	--	--	0.011	94	BDL
0.330	1700	790	--	--	--	0.011	94	BDL
0.560	7000	2200	--	--	--	0.027	40	BDL
0.220	11000	3300	--	--	--	0.005	44	BDL
0.112	7900	4900	--	--	--	0.008	44	BDL
0.168	4900	1700	6.4	0.63	B	0.004	52	BDL

0.112	2200	790				0.003	70	BDL
0.1	1100.0	490.0						
0.6	24000.0	13000.0						
0.2	6227.3	2978.2						

NH ₄ -N, mg/l	TC, MPN/ 100 ml	FC, MPN/ 100 ml	SI	DI	Class	Nitrite-N, mg/l	T. Alk., mg/l	P. Alk., mg/l
0.224	92000	54000	6.5	0.54	B	0.003	92	16
0.400	2200	1100	--	--	--	0.003	120	4
0.224	22000	17000	--	--	--	0.015	128	BDL
0.168	54000	35000	5.6	0.94	C	BDL	120	BDL
0.385	7900	4900	--	--	--	0.009	108	BDL
0.385	7900	4900	--	--	--	0.009	108	BDL
0.056	54000	35000	--	--	--	0.038	44	BDL
0.495	35000	13000	--	--	--	0.007	62	BDL
0.112	28000	17000	--	--	--	0.004	72	BDL
0.308	22000	17000	5.25	0.9	C	0.004	78	BDL
0.112	28000	13000				0.018	74	BDL
0.1	2200	1100.0						
0.5	92000	54000.0						
0.3	32091	19263.6						

s	Ca as CaCO ₃ , mg/l	Mg as CaCO ₃ , mg/l	Chloride , mg/l	Sulphate , mg/l	PO ₄ ³⁻ -P, mg/l	Fluoride, mg/l	Total Kjeldahl N, mg/l	TSS, mg/l
112	60	52	15.7	6.83	0.012	0.196	5.04	24
106	60	46	22.6	5.84	0.077	0.132	3.4	114
144	74	70	33.4	16.92	0.088	0.128	2.24	72
132	76	56	35.9	12.1	0.090	0.196	3.1	82
112	68	44	42.3	3.4	0.002	0.246	1.9	106
112	68	44	42.3	3.4	0.002	0.246	1.9	106
48	32	16	9.6	10.6	0.257	0.082	1.4	212
52	30	22	7.7	4.2	0.488	0.188	2.5	206
58	40	18	7.7	2.3	0.100	0.120	2.52	34
58	30	28	9.4	4.9	0.352	0.116	3.92	88
66	40	26	8.5	2.24	0.093	0.118	2.8	20

s	Ca as CaCO ₃ , mg/l	Mg as CaCO ₃ , mg/l	Chloride , mg/l	Sulphate , mg/l	PO ₄ ³⁻ -P, mg/l	Fluoride, mg/l	Total Kjeldahl N, mg/l	TSS, mg/l
96	64	32	15.7	12.28	0.015	0.301	3.40	20
118	66	52	23.6	19.11	0.072	0.172	3.1	140
114	68	46	25.5	18.57	0.122	0.164	1.96	168
124	84	40	32.1	29.9	0.054	0.208	1.7	66
88	52	36	37.1	12.1	0.006	0.232	3.0	46
88	52	36	37.1	12.1	0.006	0.232	3.0	46
52	30	22	9.6	17.4	0.23	0.110	3.3	276
36	22	14	7.7	3.9	0.032	0.361	2.8	186
50	26	24	6.7	4.4	0.112	0.130	2.24	124
48	28	20	7.54	4.975	0.040	0.122	2.24	94

TDS, mg/l	TFS, mg/l	Turbidity, NTU	Na, mg/l	K, mg/l	B, mg/l	Cadmium, micro gm/l	Copper, micro gm/l	Lead, micro gm/l
151	150	11.1	10.2	1.7	0.109	--	--	--
177	262	41.2	13.5	5.6	0.060	0.8	3.2	6.9
247	262	7.0	21.7	7.7	0.049	--	--	--
222	272	11.0	18.3	4.9	0.072	--	--	--
238	278	33.0	24.7	3.5	0.037	--	--	--
238	278	33.0	24.7	3.5	0.037	--	--	--
82	246	150	4.4	2.2	0.098	--	--	--
86	250	55	4.6	1.9	0.071	--	--	--
88	100	45	4.6	1.7	0.075	--	--	--
83	148	17	5.1	1.2	0.003			
107	96	16	5.4	1.4	0.011	--	--	--

TDS, mg/l	TFS, mg/l	Turbidity, NTU	Na, mg/l	K, mg/l	B, mg/l	Cadmium, micro gm/l	Copper, micro gm/l	Lead, micro gm/l
150	150	3.8	10.1	1.6	0.076	--	--	--
179	270	62.0	14.1	5.1	0.011	0.6	2.6	4.3
183	270	4.0	15.7	4.6	0.034	--	--	--
203	223	10.0	16.9	5.3	0.083	--	--	--
194	196	25.0	23.1	2.2	0.079	--	--	--
194	196	25.0	23.1	2.2	0.079	--	--	--
80	292	130	5.2	0.9	0.272	--	--	--
68	204	75	4.5	1.7	0.012	--	--	--
72	174	90	4.0	1.1	0.022	--	--	--
72	130	39	4.36	1.27	0.022			

Chromium Total, micro gm/l	Nickel, micro gm/l	Zinc, micro gm/l	Iron Total, micro gm/l	Mercury, micro gm/l	Cr(VI)
17	--	--	360	BDL	BDL
23	2.3	8.5	192	BDL	BDL
10	--	--	427	BDL	BDL
25	--	--	650	BDL	BDL
11	--	--	132	BDL	BDL
11	--	--	132	BDL	BDL
63	--	--	12736	BDL	BDL
8	--	--	12195	BDL	BDL
250	--	--	2067	BDL	BDL
38			5078	BDL	BDL
56	--	--	1428	BDL	BDL

Chromium Total, micro gm/l	Nickel, micro gm/l	Zinc, micro gm/l	Iron Total, micro gm/l	Mercury, micro gm/l	Cr(VI)
27	--	--	240	BDL	BDL
15	2.6	6.9	9870	BDL	BDL
15	--	--	782	BDL	BDL
180	--	--	1880	BDL	BDL
5	--	--	2125	2	BDL
5	--	--	2125	BDL	BDL
27	--	--	11918	BDL	13
22	--	--	10664	BDL	BDL
28	--	--	7733	BDL	BDL
33			6474		3

38	--	--	7003	BDL	BDL

Chromium Total, micro gm/l	Nickel, micro gm/l	Zinc, micro gm/l	Iron Total, micro gm/l	Mercury, micro gm/l	Cr(VI)
13	--	--	3365	BDL	BDL
33	2.2	8.6	3790	BDL	BDL
5	--	--	651	BDL	BDL
17	--	--	7270	BDL	BDL
6	--	--	12951	13	BDL
6	--	--	12951	BDL	BDL
13	--	--	12691	BDL	BDL
15	--	--	11146	BDL	BDL
10	--	--	3424	BDL	BDL
21			5543		BDL
26	--	--	3872	BDL	BDL