

WATER QUALITY OF RIVER NAGAVALI - 2011

Penta U/s

Month	Year	Temp., °C	pH	DO, mg/l	BOD, mg/l	COD, mg/l	Cond., µS/cm	Nitrate- N, mg/l
Jan	2011	27	8.1	7.7	1.5	9.9	216	0.249
Feb		28	7.9	7.6	1.0	7.5	259	6.844
Mar		25	8.3	7.8	1.4	8.3	242	0.289
Apr		27	8	7.5	1.3	15.7	204	0.503
May		30	8.2	7.4	0.7	7.4	206	0.20
June		27	7.8	7.6	1.6	13.7	169	0.345
July		29	8.2	7.8	1.2	6.0	241	0.657
Aug		31	7.7	6.8	2.2	20.5	153	0.387
Sep		31	7.7	6.8	2.2	20.5	153	0.387
Oct		23	7.9	7.2	2.1	6.1	158	0.408
Nov		22	7.6	7.4	1.4	10.2	201	0.223
Dec		16	8.1	7.1	1.6	10.7	225	0.037
Minimum		16.0	7.6	6.8	0.7	6.0	153.0	0.037
Maximum		31.0	8.3	7.8	2.2	20.5	259.0	6.844
Average		26.3	8.0	7.4	1.5	11.4	202.3	0.877

Jaykaypur D/s

Month	Year	Temp., °C	pH	DO, mg/l	BOD, mg/l	COD, mg/l	Cond., µS/cm	Nitrate- N, mg/l
Jan	2011	27	7.9	6.9	2.4	28.8	275	0.578
Feb		27	7.8	7.2	3.7	20	333	7.528
Mar		26	7.7	7	1.7	12.3	303	1.627
Apr		27	7.59	6.8	2.9	25.7	461	2.337
May		30	7.9	7.1	1.1	9.3	282	4.78
June		27	8.3	7.7	2.0	20.5	392	0.467
July		28	7.8	7.6	3.2	10.0	256	0.208
Aug		30	7.6	6.6	2.5	30.5	164	0.548
Sep		30	7.6	6.6	2.5	30.5	164	0.548
Oct		24	7.9	6.8	2.5	14.3	208	0.546
Nov		22	8.1	6.8	0.8	10.2	225	0.773
Dec		17	7.5	6.8	2.5	29.6	210	0.849

Minimum	17.0	7.5	6.6	0.8	9.3	164.0	0.208
Maximum	30.0	8.3	7.7	3.7	30.5	461.0	7.528
Average	26.3	7.8	7.0	2.3	20.1	272.7	1.733

Raygada D/s

Month	Year	Temp., °C	pH	DO, mg/l	BOD, mg/l	COD, mg/l	Cond., µS/cm	Nitrate- N, mg/l
Jan	2011	23	7.8	7.6	1.4	17.8	253	0.37
Feb		25	8.2	7.8	2.7	12.5	309	1.164
Mar		26	7.9	7.6	1.1	10.3	243	0.422
Apr		26	7.79	7.3	1.1	16	301	2.438
May		28	8.3	7.5	1.5	13	321	0.04
June		26	8.2	7.2	1.6	17.1	317	0.252
July		27	8.4	7.9	2.1	8.0	277	0.169
Aug		30	8.0	6.4	2.1	22.9	183	0.171
Sep		30	8.0	6.4	2.1	22.9	183	0.171
Oct		23	7.9	7.4	1.8	14.3	288.3	0.667
Nov		22	8.0	6.6	0.8	8.2	219	0.589
Dec		16	8.2	7.2	1.9	15.8	240	0.791
Minimum		16.0	7.8	6.4	0.8	8.0	183.0	0.036
Maximum		30.0	8.4	7.9	2.7	22.9	321.0	2.438
Average		25.2	8.1	7.2	1.7	14.9	261.2	0.603

NH ₄ -N, mg/l	TC, MPN/ 100 ml	FC, MPN/ 100 ml	S.I.	D.I.	Class	Nitrite-N, mg/l	T. Alk., mg/l	P. Alk., mg/l
0.728	1500	700	5.1	0.6	C	0.011	80	ND
0.62	2100	1100				ND	92	ND
0.616	1200	700				0.005	100	ND
0.784	1400	700	7	0.5	B	ND	94	ND
0.112	1100	700				0.002	92	ND
0.448	4900	2300				0.003	74	ND
0.728	2300	1300				0.006	96	ND
0.112	9400	4300				0.034	64	ND
0.112	9400	4300				0.034	64	ND
0.112	1700	940	6.2	0.8	B	0.013	68	4
0.056	1200	940				0.006	56	ND
0.056	1700	1100				ND	84	2
0.1	1100.0	700.0	5.1	0.5	0.0	0.0	56.0	2.0
0.8	9400.0	4300.0	7.0	0.8	0.0	0.0	100.0	4.0
0.4	3158.3	1590.0	6.1	0.6	#DIV/0!	0.0	80.3	3.0

NH ₄ -N, mg/l	TC, MPN/ 100 ml	FC, MPN/ 100 ml				Nitrite-N, mg/l	T. Alk., mg/l	P. Alk., mg/l
0.504	2400	1300	6	0.5	C	0.008	118	ND
1.06	3500	1700				ND	108	ND
0.504	2200	1300				0.003	112	ND
1.008	5400	1700	5.3	0.6	C	ND	166	ND
0.336	5400	2200				0.003	100	ND
0.672	1700	780				0.009	148	2
0.504	7000	2200				0.008	96	ND
0.728	13000	7900				0.041	66	ND
0.728	13000	7900				0.041	66	ND
0.224	5400	1700	5.3	0.7	C	0.009	76	ND
0.056	2800	1400				0.008	86	8
0.112	3500	1400				0.002	82	ND

0.1	1700.0	780.0	5.3	0.5	0.0	0.0	66.0	8.0
1.1	13000.0	7900.0	6.0	0.7	0.0	0.0	86.0	8.0
0.5	5441.7	2623.3	5.5	0.6	#DIV/0!	0.0	77.5	8.0

NH ₄ -N, mg/l	TC, MPN/ 100 ml	FC, MPN/ 100 ml				Nitrite-N, mg/l	T. Alk., mg/l	P. Alk., mg/l
0.504	2800	1400	6.1	0.8	B	0.010	114	ND
1.17	2100	940				ND	108	ND
1.064	1500	630				0.004	108	ND
0.616	1200	790	5.6	0.3	C	ND	114	ND
0.336	9200	3500				0.005	92	ND
0.448	2600	1700				0.004	128	ND
0.56	3300	1700				0.003	120	ND
0.56	15000	9400				0.041	66	ND
0.56	15000	9400				0.041	66	ND
0.112	2200	1100	6	0.64	C	0.009	96	2
0.056	1700	1100				0.006	86	4
0.168	2800	1100				0.004	98	2
0.1	1200.0	630.0	5.6	0.3	0.0	0.0	66.0	2.0
1.2	15000.0	9400.0	6.1	0.8	0.0	0.0	98.0	4.0
0.5	4950.0	2730.0	5.9	0.6	#DIV/0!	0.0	86.5	2.7

s CaCO ₃ , mg/l	Ca as CaCO ₃ , mg/l	Mg as CaCO ₃ , mg/l	Chloride , mg/l	Sulphate , mg/l	PO ₄ ³⁻ -P, mg/l	Flouride, mg/l	Total Kjeldahl N, mg/l	TSS, mg/l
92	56	36	13.7	12.7	0.008	0.186	2.2	12
88	80	8	17	0.65	1.251	0.122	2.8	36
90	52	38	14	3.12	0.114	0.19	4.2	46
84	48	36	12	4.3012	0.016	0.287	3.36	778
84	52	32	13	3.98	0.005	0.306	4.76	48
62	42	20	15.4	1.08	0.032	0.206	1.12	178
76	56	20	10.7	2.04	0.186	0.248	2.5	180
72	46	26	9.6	10.6	0.298	0.261	3.92	264
72	46	26	9.6	10.6	0.298	0.261	3.92	264
54	38	16	14.0	2.903	0.103	0.218	0.84	51
54	36	18	18	3.87	0.023	0.225	1.12	58
76	52	24	13.3	4.95	0.309	0.311	1.12	23
54.0	36.0	8.0	9.6	0.6	0.0	0.1	0.8	12.0
92.0	80.0	38.0	18.0	12.7	1.3	0.3	4.8	778.0
75.3	50.3	25.0	13.4	5.1	0.2	0.2	2.7	161.5

s CaCO ₃ , mg/l	Ca as CaCO ₃ , mg/l	Mg as CaCO ₃ , mg/l	Chloride , mg/l	Sulphate , mg/l	PO ₄ ³⁻ -P, mg/l	Flouride, mg/l	Total Kjeldahl N, mg/l	TSS, mg/l
112	84	28	19.6	19.5	0.045	0.196	1.4	24
106	68	38	25	14.95	0.090	0.207	1.96	51
108	60	28	20	5.27	0.241	0.206	6.16	76
152	112	40	33	22.47377	0.225	0.32	1.68	1472
108	84	24	16	15.38	0.005	0.32	10.64	240
144	114	30	28.8	14.11	0.056	0.219	2.80	126
88	64	24	18.7	3.93	0.009	0.249	2.0	152
76	48	28	12.5	13.3	0.089	0.247	1.56	286
76	48	28	12.5	13.3	0.089	0.247	1.56	286
68	44	24	16.0	3.548	0.068	0.236	0.56	160
96	54	42	14	2.47	0.063	0.226	0.56	60
82	44	38	17	3.44	0.080	0.322	1.12	30

68.0	44.0	24.0	12.5	2.5	0.1	0.2	0.6	30.0
96.0	54.0	42.0	17.0	13.3	0.1	0.3	1.6	286.0
80.5	47.5	33.0	14.9	5.7	0.1	0.3	1.0	134.0

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	Flouride, mg/l	Total Kjeldahl N, mg/l	TSS, mg/l
118	84	34	17.6	13.1	0.104	0.213	5.3	14
96	64	32	22	4.73	0.056	0.225	4.48	47
92	66	46	13	3.66	0.556	0.207	4.48	41
120	78	42	18	12.04336	0.030	0.257	2.8	680
108	72	36	17	18.71	0.675	0.344	11.2	258
118	76	42	22.1	6.02	0.037	0.088	4.76	194
94	56	38	12.8	2.69	0.664	0.251	3.1	200
60	42	18	11.5	9.9	0.091	0.256	1.12	282
60	42	18	11.5	9.9	0.091	0.256	1.12	282
88	50	38	21.0	5.053	0.08	0.215	0.28	30
68	44	24	13	4.30	0.075	0.565	2.24	47
88	52	36	14.3	3.66	0.033	0.292	1.12	30
60.0	42.0	18.0	11.5	3.7	0.0	0.2	0.3	30.0
88.0	52.0	38.0	21.0	9.9	0.1	0.6	2.2	282.0
76.0	47.0	29.0	15.0	5.7	0.1	0.3	1.2	97.3

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
138	132	9.1	8.6	2.3	0.011	0.8	4.9	0.1
137	150	8.1	11.3	2.3	0.049	0.6	3.5	2.3
136	160	7.5	10.52	2.96	0.026	2.0	8.0	BDL
125	868	115.6	8.19	2.83	0.019	0.6	1.2	4.9
134	152	0.8	6.15	2.19	0.14	2.5	8.5	5.6
107	212	27.6	10.65	2.7	0.091	1.6	0.8	3.9
122	248	45.8	7.16	2.4	0.106	1.9	4.5	8.0
99	312	61.7	6	2.5	0.023	0.4	5.9	4.9
99	312	61.7	6	2.5	0.023	0.4	5.9	4.9
104	134	9.2	9.53	2.6	0.068	3.4	1.6	6.6
110	130	6.9	13.3	3.0	0.075	2.7	4.9	2.3
120	120	4.5	9.5	2.3	0.023	1.0	5.3	5.0
99.0	120.0	0.8	5.6	2.2	0.0	0.4	0.8	0.1
137.9	868.0	115.6	13.3	3.0	0.1	3.4	8.5	8.0
119.2	244.2	29.9	8.8	2.6	0.1	1.5	4.6	4.4

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
175	160	8.6	12.6	3.5	0.034	0.4	2.8	1.0
176	180	9.1	16.5	2.94	0.068	1.1	4.0	2.8
156	220	16.5	12.27	1.3	0.023	3.0	7.0	1.0
248	1648	157.5	22.7	4.59	0.045	1.3	4.8	4.9
183	402	31.2	9.01	3.19	0.087	2.3	8.7	8.9
219	290	32.7	19.8	3.7	0.072	1.5	4.2	8.8
139	240	37.3	11.31	3.3	0.026	1.4	9.5	8.4
105	334	56.2	9	2.6	0.008	0.4	5.9	5.7
105	334	56.2	9	2.6	0.008	0.4	5.9	5.7
120	244	10.1	11.16	3.23	0.042	3.5	2.1	7.7
124	160	7.4	9.5	2.5	0.023	3.1	7.1	6.7
122	122	2.9	11.3	2.0	0.045	1.6	2.3	8.1

105.0	122.0	2.9	8.540	2.010	0.008	0.438	2.1	5.69
124.0	334.0	56.2	11.330	3.230	0.045	3.500	7.1	8.13
117.8	215.0	19.2	10.143	2.573	0.029	2.172	4.36	7.05

TDS, mg/l	TFS, mg/l	Turbidity, NTU	Na, mg/l	K, mg/l	B, mg/l	Cadmiu m, micro gm/l	Copper, micro gm/l	Lead, micro gm/l
164	132	11.3	10.7	3.0	0.053	0.7	2.5	1.5
169	190	9.5	15.3	3	0.064	1.0	4.9	2.6
134	168	7	8.84	2.69	0.034	2.0	8.0	BDL
163	808	114.8	12.48	1.88	0.011	0.8	0.3	4.9
171	384	13	9.16	3.12	0.015	2.4	7.1	4.3
206	346	41.6	12.19	3.2	0.110	2.4	2.8	4.3
143	260	55.6	8.1	3.0	0.007	2.1	4.6	7.9
110	330	73.2	8	2.6	0.042	0.2	3.4	3.9
110	330	73.2	8	2.6	0.042	0.2	3.4	3.9
153	158	8.3	15.79	2.97	0.061	3.4	1.8	4.5
118	132	7.3	9.5	2.5	0.019	2.8	0.6	9.9
134	132	4.8	9.5	2.3	0.030	1.9	2.6	5.1
110.0	132.0	4.8	7.720	2.270	0.019	0.188	0.6	3.94
153.0	330.0	73.2	15.790	2.970	0.061	3.438	3.4	9.88
128.8	188.0	23.4	10.648	2.575	0.038	2.078	2.09	5.84

m Total, micro gm/l	Nickel, micro gm/l	Zinc, micro gm/l	Total, micro gm/l	Hg, micro gm/l
43	6.9	10.7	1390	BDL
104	9.2	7.9	1136	
28	7.0	BDL	2140	BDL
37	4.5	10.1	20750	BDL
13	2.9	4.8	14678	BDL
12	1.3	1.6	9450	BDL
62	3.4	7.2	9158	BDL
31	2.8	11.8	13689	BDL
31	2.8	11.8	13689	BDL
20	3.1	2.5	2110	BDL
18	1.8	5.6	696	BDL
15	1.6	3.5	893	BDL
12.0	1.3	1.6	696.0	0.0
104.0	9.2	11.8	20750.0	
34.5	3.9	7.0	7481.6	#DIV/0!

m Total, micro gm/l	Nickel, micro gm/l	Zinc, micro gm/l	Total, micro gm/l	Hg, micro gm/l
86	6.6	8.2	1780	
87	11.6	9.3	1742	
53	8.0	8.0	3140	BDL
65	8.3	5.6	23650	BDL
40	0.5	0.4	11020	BDL
46	2.6	1.8	1882	BDL
88	6.7	9.1	8141	BDL
36	1.4	12.4	14035	BDL
36	1.4	12.4	14035	BDL
35	2.9	4.3	1620	BDL
101	2.7	7.3	1094	BDL
18	4.0	6.4	67	BDL

18.00	1	4		
101.00	4	12		
47.50	3	8		

m Total, micro gm/l	Nickel, micro gm/l	Zinc, micro gm/l	Total, micro gm/l	Hg, micro gm/l
157	7.1	8.6	2180	
77	10.9	9.6	1622	
52	7.0	6.0	1580	BDL
57	6.5	5.8	12970	BDL
43	0.8	0.6	706	BDL
28	0.4	2.6	4685	BDL
47	3.5	8.9	10426	BDL
43	0.8	6.0	12960	BDL
43	0.8	6.0	12960	BDL
31	2.3	3.9	1060	BDL
36	0.9	3.8	1022	BDL
26	7.0	4.8	994	BDL
26.00	1	4		
43.00	7	6		
34.00	3	5		