

**WATER QUALITY CHARACTERISTICS OF BHELLA RIVER U/S KASHIPUR, US NAGAR**

Month	pH	BOD mg/L	COD mg/L	Conductivity µmhos/cm	Temp °C	DO mg/L	TDS mg/L
<b>2023</b>							
Jan	7.80	2.0	12.0	195	13	2.0	155
Feb	7.50	2.6	16	262	15	7.6	174
Mar	7.50	2.8	16.0	316	24	7.4	208
Apr	7.80	3.0	20.0	247	21	7.1	168
May	River Dry						
June	7.30	2.4	16.0	182	30	5.6	126
July	7.60	2.2	16.0	185	27	6.2	114
Aug	7.20	2.8	16.0	246	27	6.0	143
Sept	7.30	2.6	16.0	242	26	6.2	147
Oct	7.30	2.8	16.0	214	23	6.0	138
Nov	7.70	2.6	16.0	181	24	6.2	107
<b>2022</b>							
Jan	7.7	3.2	12	190	8	5.3	127
Feb	7.70	3.4	16	200	22	5.2	134
Mar	7.60	3.9	14	280	25	5.1	182
Apr	7.50	3.4	12	286	28	5.3	190
May	7.60	3.1	11.4	208	28	5.4	140
June	River Dry						
July	River Dry						
Aug	River Dry						
Sept	7.50	3.0	17.2	155	26	6.5	102
Oct	7.50	3.0	13	215	24	6.4	140
Nov	7.70	3.4	13	197	12	5.6	131
Dec	7.50	2.8	13.0	182	16	5.7	120
<b>2021</b>							
Jan	7.90	8.0	30	540	12	3.0	348
Feb	8.0	3.0	10	240	17	7.50	172
Mar	7.90	3.20	16	280	23	7.0	186
Apr	River Dry						
May	7.20	23	108	612	21	1.4	434
June	7.40	18	94	628	24.20	1.80	420
July	7.40	12	40	300	27	2.60	205
Aug	7.30	11.10	39.50	304	31	2.90	203
Sep	7.6	12.4	37.2	298		3.0	199
Oct	7.4	12.5	39	310		3.2	205
Nov	7.3	13.8	41	320		3.5	214.4
Dec	7.20	11.4	34.20	300	27.5	3.8	201
<b>2020</b>							
Jan	7.3	4.0	30	290	8.0	8.4	188
Feb	7.41	5.0	40	330	31	6.0	177
Mar	8.1	4.6	40	270	31	3.2	270
Apr	7.2	3	8	290	33	7	190
May	7.3	3.2	36	158	39	5.2	104
June	7.7	5.2	28	260	35	3.8	175
July	7.6	5	27	440	28	3.2	295
Aug	7.92	5.0	15	326	29	6.9	166

<b>Sep</b>	7.30	4.0	10	180	29	5.8	160
<b>Oct</b>	7.10	7.2	22	260	26	4.6	166
<b>Nov</b>	7.0	7.3	25	286	18	4.3	188
<b>Dec</b>	7.2	7.9	27	265	12	4.1	198
<b>Average</b>	<b>7.43</b>	<b>5.12</b>	<b>25.67</b>	<b>279.58</b>	<b>26.58</b>	<b>5.21</b>	<b>189.75</b>
<b>Min-Max</b>	<b>(7-8.1)</b>	<b>(3-7.9)</b>	<b>(8-40)</b>	<b>(158-440)</b>	<b>(8-39)</b>	<b>(3.2-8.4)</b>	<b>(104-295)</b>
<b>2019</b>							
<b>Jan</b>	7.10	2.0	6.20	240	12	7.20	158
<b>Feb</b>	7.4	1.5	5.8	251	14	6.2	136
<b>Mar</b>	7.8	1.8	30	430	20	3.2	320
<b>Apr</b>	7.3	2.0	6.2	212	28	4.8	159
<b>May</b>	River Dry						
<b>June</b>	7.5	3	28	540	38	4	177
<b>July</b>	River Dry						
<b>Aug</b>	7.3	6.6	30	260	30	4.4	129
<b>Sep</b>	6.9	4.2	40	156	30	5.2	102
<b>Oct</b>	7.30	5.0	30.0	227	32	5.2	148
<b>Nov</b>	7.30	4.0	40	173	24	3.8	116
<b>Dec</b>	7.2	6.0	20	189	12	4.6	173
<b>Average</b>	<b>7.31</b>	<b>3.61</b>	<b>23.62</b>	<b>267.80</b>	<b>24.00</b>	<b>4.86</b>	<b>161.80</b>
<b>Min-Max</b>	<b>(6.9-7.8)</b>	<b>(1.5-6.6)</b>	<b>(5.8-40)</b>	<b>(156-540)</b>	<b>(12-38)</b>	<b>(3.2-7.2)</b>	<b>(102-320)</b>
<b>2018</b>							
<b>Jan</b>	7.2	6	20	240	18	6.2	162
<b>Feb</b>	7.2	4	14	280	20.8	5.8	187
<b>Mar</b>	7.2	4.2	16	320	25	6.2	210
<b>Apr</b>	7.3	6	20	240	28.3	7	168
<b>May</b>	River Dry						
<b>June</b>	River Dry						
<b>July</b>	7.2	3.4	10	220	28	6	140
<b>Aug</b>	7.2	4	16	210	26	7.2	138
<b>Sep</b>	7.1	6	18	220	26	7.2	152
<b>Oct</b>	7.3	4	8.2	210	25	6.6	139
<b>Nov</b>	7.3	6.2	16	240	22	5.8	166
<b>Dec</b>	7.1	3.2	8	220	17	6.8	146
<b>Average</b>	<b>7.21</b>	<b>4.7</b>	<b>14.62</b>	<b>240</b>	<b>23.61</b>	<b>6.48</b>	<b>160.8</b>
<b>Min-Max</b>	<b>(7.1-7.3)</b>	<b>(4-6.2)</b>	<b>(8-20)</b>	<b>(210-320)</b>	<b>(17-28.3)</b>	<b>(5.8-7.2)</b>	<b>(139-210)</b>

**WATER QUALITY CHARACTERISTICS OF BHELLA RIVER AT LOHIA BRIDGE D/S  
KASHIPUR, US NAGAR**

Month	pH	BOD mg/L	COD mg/L	Conductivity µmhos/cm	Temp °C	DO mg/L	TDS mg/L
<b>2023</b>							
Jan	7.70	18.0	128.0	350	13	3.0	260
Feb	6.80	28.0	224.0	469	18	1.8	311
Mar	6.70	26.0	176.0	636	23	1.9	431
Apr	7.40	28.0	184.0	598	22	1.7	368
May	7.20	26.0	176.0	416	27	1.8	288
June	7.60	24.0	144.0	588	32	1.8	382
July	7.20	14.0	80.0	371	30	4.2	245
Aug	7.20	12.0	76.0	216	29	4.4	131
Sept	7.10	12.0	80.0	269	32	4.2	166
Oct	7.00	14.0	96.0	305	27	3.9	206
Nov	6.80	20.0	128.0	254	24	3.0	166
<b>2022</b>							
Jan	7.7	15.5	100	400	8	3.6	263
Feb	7.60	12	105.6	420	22	3.8	281
Mar	7.80	17	120	510	25	2.1	328
Apr	7.60	16	112	504	28	2.4	340
May	7.30	18	120	467	28	2.2	313
June	7.00	22	168	600	28	1.5	402
July	7.20	20	150	586	28	1.8	392
Aug	7.00	60	194	415	31	1.4	275
Sept	7.40	50	136	239	25	1.0	158
Oct	7.50	48	140	302	26	2.8	199
Nov	7.20	23	140	547	20	2.1	363
Dec	7.20	25.0	160.0	437	18	2.6	290
<b>2021</b>							
Jan	6.90	28	160	690	14	0.80	437
Feb	6.90	24	96	630	21	1.40	412
Mar	6.50	26	104	650	24	1.20	434
Apr	6.80	27	119	695	23	1.10	479
May	6.80	29	131	695	21	1.10	467
June	6.60	26	117	682	24	1.40	456
July	6.90	28	210	770	27	1.10	526
Aug	6.80	26.50	202	795	33	1.50	532
Sep	6.9	24	192	803		1.9	538
Oct	6.5	26	210	810		1.9	549
Nov	6.8	25	196	801		2.0	536.67
Dec	6.80	20	176	858	27.5	2.8	574
<b>2020</b>							
Jan	7.6	22	70	576	8.0	1.6	374
Feb	7.5	24	80	580	30	4.0	335
Mar	7.3	28	160	600	30	0.2	356
Apr	6.6	22	140	620	33	0.6	373
May	6.8	22	120	347	39	1.0	246
June	6.2	26	160	570	36	0.4	385
July	7.2	19.5	130	330	29	1.0	225
Aug	7.44	20	80	435	30	2.6	292
Sep	7.32	18	74	430	30	2.5	294

<b>Oct</b>	6.80	19.5	56	690	32	1.8	470
<b>Nov</b>	6.7	20	85	650	19	1.5	472
<b>Dec</b>	6.9	26	86	670	19	1.3	500
<b>Average</b>	<b>7.03</b>	<b>22.25</b>	<b>103.42</b>	<b>541.50</b>	<b>27.92</b>	<b>1.54</b>	<b>360.17</b>
<b>Min-Max</b>	<b>(6.2-7.6)</b>	<b>(18-28)</b>	<b>(56-160)</b>	<b>(330-690)</b>	<b>(8-39)</b>	<b>(0.2-4)</b>	<b>(225-500)</b>
<b>2019</b>							
<b>Jan</b>	6.80	48	120	570	13	0.80	367
<b>Feb</b>	7.3	42	102	556	13	0.4	334
<b>Mar</b>	6.3	5.6	160	750	21	0.2	510
<b>Apr</b>	7.5	42	110	540	28	0	349
<b>May</b>	6.8	44	120	560	36	0.2	398
<b>June</b>	7.3	20	60	660	38	0.2	422
<b>July</b>	7.1	40	130	360	30	0	234
<b>Aug</b>	6.9	48	140	320	30	0.0	155
<b>Sep</b>	6.8	52	190	244	30	0.80	159
<b>Oct</b>	7.30	44	90	489	29	0.60	318
<b>Nov</b>	7.10	20	100	516	27	0.70	346
<b>Dec</b>	7.4	20	60	288	12	3.0	193
<b>Average</b>	<b>7.05</b>	<b>35.47</b>	<b>115.17</b>	<b>487.75</b>	<b>25.58</b>	<b>0.58</b>	<b>315.42</b>
<b>Min-Max</b>	<b>(6.3-7.5)</b>	<b>(5.6-52)</b>	<b>(60-190)</b>	<b>(244-750)</b>	<b>(12-38)</b>	<b>(0-3)</b>	<b>(155-510)</b>
<b>2018</b>							
<b>Jan</b>	7.4	18	48	440	20	1.2	291
<b>Feb</b>	7.4	44	108	460	20.2	2.2	301
<b>Mar</b>	7.5	38	128	580	26.2	1.2	381
<b>Apr</b>	7.68	40	156	690	26	1.2	454
<b>May</b>	7.9	52	168	700	30	0.8	462
<b>June</b>	7.8	48	150	660	32	1.2	428
<b>July</b>	6.8	32	88	590	29	0.8	387
<b>Aug</b>	6.9	34	98	560	29	1.8	362
<b>Sep</b>	6.8	40	140	540	28	1.6	374
<b>Oct</b>	7.5	48	110	510	27	0	332
<b>Nov</b>	7.6	26	88	520	23	2.6	336
<b>Dec</b>	6.8	44	110	370	20	0.4	240
<b>Average</b>	<b>7.32</b>	<b>39.5</b>	<b>117.66</b>	<b>558.33</b>	<b>25.78</b>	<b>1.1</b>	<b>366.66</b>
<b>Min-Max</b>	<b>(6.8-7.9)</b>	<b>(18-52)</b>	<b>(48-168)</b>	<b>(370-700)</b>	<b>(20-32)</b>	<b>(0-2.6)</b>	<b>(240-462)</b>