

**MADHYA PRADESH POLLUTION CONTROL BOARD**  
**Water Quality during Year - 2017-2018**

Natural Water Resource : River Betwa, Orchha

XGN ID: 23405

**Description of Sampling Station: Near road bridge**

S.No.	Characteristic	Unit	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb	March	Av.	Maxi.	Mini.
1	Date of Sampling		17.04.17	07.05.17	02.06.17	21.07.17	10.08.17	27.9.17	8.10.17	28.11.17	15.12.17	01.4.18	02.2.18	22.03.18	-	-	-
2	Appearance		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Temperature	oC	29	31	30	23	29	28	29	21	21	20	20	27	25.7	31	20
4	Turbidity	NTU	1	1	4	8	3	4	15	10	3	1	2	4	-	-	-
5	Colour	PCS	C.less	C.less	C.less	C.less	C.less	C.less	C.less	C.less	C.less	C.less	C.less	C.less	-	-	-
6	Odour	T. No	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.less			
7	pH	pH Unit	8.44	8.2	7.96	7.47	7.79	7.86	7.98	7.97	7.75	8.28	8.36	8.44	8.0	8.44	7.47
8	Sp. Conductivity	µMhos/cm.	267.5	254.9	257.8	204.4	222.16	235.2	168.2	236	227.9	251.4	252	276.9	237.9	276.9	168.2
9	T. Solids	mg/l	192	170	208	152	172	174	110	114	134	166	184	202	164.8	208	110
10	D. Solids	mg/l	190	166	202	146	168	168	106	110	132	162	180	198	160.7	202	106
11	S. Solids	mg/l	2	4	6	8	4	6	4	4	2	4	4	4	4.3	8	2
12	Amm. Nitrogen	mg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL			
13	Nitrite Nitrogen	mg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.03	0.02	0.03	0.02	0.06			
14	Nitrate Nitrogen	mg/l	0.2	0.36	0.38	BDL	BDL	BDL	BDL	0.24	0.53	0.3	0.34	0.57	0.4	0.57	0.2
15	Phosphate (PO <sub>4</sub> )	mg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL			
16	Fluoride	mg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL			
17	Chloride	mg/l	22	21.95	26.91	21.14	24.99	23.61	17.32	14.95	18.25	27.39	25.44	26.54	22.5	27.39	14.95
18	Sulphate (SO <sub>4</sub> )	mg/l	34.4	12.72	13.32	1.4	1.8	1.2	3.37	10.4	0.52	24.19	12.75	10.98	10.6	34.4	0.52
19	T. Alkalinity	mg/l	146	150	153.2	134.8	149.2	153.2	104.4	124	132	144	128	131.2	137.5	153.2	104.4
20	T. Hardness	mg/l	140	148	156	136	140	136	100	140	128	184	136	160	142.0	184	100
21	CalciumHardness	mg/l	84	88	100	104	104	100	56	80	88	96	84	88	89.3	104	56
22	Magnesium H.	mg/l	56	60	56	32	36	36	44	60	40	88	52	78	53.2	88	32
23	D. Oxygen	mg/l	7.14	7.24	7.72	7.42	7.63	7.66	6.67	7.68	7.48	7.56	7.52	7.54	7.4	7.72	6.67
24	B.O.D.	mg/l	0.98	1.12	0.97	0.42	0.69	0.66	1.69	1.48	1.56	1.02	1.03	1.06	1.1	1.69	0.42
25	C.O.D.	mg/l	3.52	3.65	3.1	3	3.68	3.68	3.64	3.41	4.92	3.92	4.08	4.01	3.7	4.92	3
26	Sodium	mg/l	10.78	10.83	11.23	8.36	9.81	8.32	8.17	11.79	16.68	25.19	26.58	35.07	15.2	35.07	8.17
27	Potassium	mg/l	1.98	1.95	1.99	1.12	1.31	1.08	2.21	2.73	3.4	5.13	4.72	4.58	2.7	5.13	1.08
28	T. Coliform	MPN/100ml	0	0	0	0	2	0	2	2	2	2	3	2	1.3	3	0
29	F. Coliform	MPN/100ml	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
30	T.K.N.	mg/l	-	-	-	-	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL			
31	Phenolphthalein	mg/l	4.4	4.8	0	0	0	0	3.6	1.2	0	0	0	1.6	1.3	4.8	0
32	Calcium	mg/l	33.6	35.2	40	41.6	41.6	40	22.4	32	35.2	38.4	33.6	35.2	35.7	41.6	22.4
33	Magnesium	mg/l	13.62	14.59	13.32	7.78	8.75	8.75	10.7	14.59	9.73	21.4	12.64	18.96	12.9	21.4	7.78
34	SAR	meq/L	0.39	0.39	0.38	0.31	0.36	0.3	0.36	0.43	0.65	0.8	0.98	1.17	0.5	1.17	0.3

CATEGORY

A

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**MADHYA PRADESH POLLUTION CONTROL BOARD REGIONAL LABORATORY GWAILOR.**

**Water Quality during Year - 2017-2018**

**Natural water resource - Chambal River**

**Description of sampling station - Interstate Boundary Near Road Bridge Dholpur Rajasthan**

S.No.	Characteristic	Unit	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb	March	Av.	Maxi.	Mini.
1	Date of sampling		24.4.17	3.5.17	21.6.17	19.7.17	16.8.17	5.9.17	6.10.17	7.11.17	29/12/17	3.01.18	5.2.18	7.3.18			
2	Appearance		Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear	clear	Clear	Clear	Clear			
3	Temprature	oC	29	29	28	26	23	26	25	22	18	17	23	21	23.57	29	17
4	Turbidity	NTU	6	8	8	8	7	10	6	6	6	8	4	5	6.43	8	4
5	colour	PCS	C.less	C.less	C.less	C.less	C.less	C.less	C.less	C.less	C .less	C.less	C.less	C.less			
6	Odour	T.NO	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O .less	O.less	O.less	O.less			
7	pH	pH unit	7.48	7.56	7.5	8	7.13	7.85	7.32	8.24	7.82	7.8	7.6	7.9	7.67	7.9	7.48
8	Sp. Conductivity	µMhos/cm	680	580	665	705	556	760	656	860	640	620	512	624	617.3	680	512
9	T. solids	mg/l	488	435	465	495	356	496	423	574	442	480	342	365	431.0	488	342
10	D. solids	mg/l	438	374	394	418	334	460	394	550	394	410	307	326	377.6	438	307
11	S. solids	mg/l	50	61	71	77	22	36	29	24	48	70	35	39	53.4	71	35
12	Amm. Nitrogen	mg/l	1.1	1.1	1.3	1.4	1	1.1	1.85	0.2	1.1	1	2.1	1.6	1.3	2.1	1
13	Nitrite nitrogen	mg/l	2.2	1.9	2.1	2.1	1.8	3.25	0.62	1	2	1.6	1.6	1.9	1.9	2.2	1.6
14	Nitrate nitrogen	mg/l															
15	Phosphate	mg/l	1	1.1	1.2	1.2	0.35	0.95	0.42	0.23	1.2	1.3	1.2	1.3	1.2	1.3	1
16	chloride	mg/l	40.33	77.56	96.45	97.52	44.42	70	45.64	38.58	86.43	62.03	60.98	53.98	68.3	96.45	40.33
17	Sulphate	mg/l	16.2	16	17	19	7.5	8.5	5.5	28.2	16.4	15.9	15.6	15.4	16.1	17	15.4
18	T. alkalinity	mg/l	200	150	190	190	130	150	170	200	180	200	170	210	185.7	210	150
19	T. hardness	mg/l	178	162	194	194	112	140	140	190	174	252	130	202	184.6	252	130
20	Calcium hardness	mg/l	98	108	136	136	70	90	90	100	110	150	114	130	120.9	150	98
21	Magnisium hardness	mg/l	80	54	58	58	42	50	50	90	64	103	16	72	63.9	103	16
22	D. oxygen	mg/l	8	8.5	7.8	8	7.8	7.3	7.9	8.3	8.4	8.4	8.4	8.6	8.3	8.6	7.8
23	BOD	mg/l	1.4	1.8	2	2	1.2	2.5	2	1.20	1.2	1.4	1.1	1.6	1.5	2	1.1
24	COD	mg/l	44.24	43.47	55.55	79.99	25.28	63.2	50.56	22.49	37.6	62.4	41.6	35.39	45.8	62.4	35.39
25	Sodium	mg/l	13.1	23	25	27	6.7	8.5	5.2	16.4	22.2	23.1	22	20	21.2	25	13.1
26	Potassium	mg/l	1	1.3	2	2	0.5	1.1	0.75	1.1	1.4	1.8	1.4	1.6	1.5	2	1
27	T. coliform	MPN/100ml	34	34	34	26	22	26	34	34	34	34	27	24	31.6	34	24
28	F. coliform	MPN/100ml									<2	<2	2	<2			
	CATEGORY		A	A	A	A	A	A	A	A		A	A	A			

**Classification of River water based on IS - 2296 - 1992**

**MADHYA PRADESH POLLUTION CONTROL BOARD,**  
Water Quality during Year - 2017-2018

Natural Water Resource :River Parwati at Dharnawada.

Description of Sampling Station: Near MP Rajasthan Road Bridge,distt. Guna.

S.No.	Characteristic	Unit	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb	March	Av.	Maxi.	Mini.
1	Date of Sampling		28.04.17	18.05.17	22.06.17	25.07.17	29.08.17	22.09.17	30.10.17	30.11.17	23.12.20	16.01.18	24.02.18	22.03.18	-	-	-
2	Appearance		-	-	-	-	-	-	-	-	-	-	S. Turbid	S. Turbid	-	-	-
3	Temperature	oC	29.5	30.2	28	28.4	28	28	22	21	20.6	22	21	24	25.23	30.2	20.6
4	Turbidity	NTU	-	-	-	-	-	-	-	-	-	6	5	10	7.00	10	5
5	Colour	PCS	-	-	-	-	-	-	-	-	-	colourless	Colourless	Colourless	-	-	-
6	Odour	T. No	-	-	-	-	-	-	-	-	-	Odourless	Odourless	Odourless	-	-	-
7	pH	pH Unit	7.52	7.7	7.6	7.8	7.5	7.74	7.58	7.8	7.86	7.2	7.6	7.4	7.61	7.86	7.2
8	Sp. Conductivity	µMhos/cm.	578	601	584	764	724	746	571	590	644	560	680	440	623.50	764	440
9	T. Solids	mg/l	380	406	480	562	514	488	372	360	422	382	460	290	426.33	562	290
10	D. Solids	mg/l	352	374	442	482	454	460	350	335	396	358	428	230	388.42	482	230
11	S. Solids	mg/l	28	32	38	80	60	28	22	25	26	24	32	60	37.92	80	22
12	Amm. Nitrogen	mg/l	-	-	-	-	-	-	-	-	-	1	1	1	1.00	1	1
13	Nitrite Nitrogen	mg/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	Nitrate Nitrogen	mg/l	-	-	-	-	-	-	-	-	-	1.2	1.4	1.8	1.47	1.8	1.2
15	Phosphate (PO <sub>4</sub> )	mg/l	-	-	-	-	-	-	-	-	-	1.6	1.8	1.2	1.53	1.8	1.2
16	Chloride	mg/l	60	64	54	70	55	47	42	45	52	38	30.9	43.98	50.16	70	30.9
17	Sulphate (SO <sub>4</sub> )	mg/l	-	-	-	-	-	-	-	-	-	19	18	18	18.33	19	18
18	T. Alkalinity	mg/l	180	190	180	210	190	210	180	190	200	220	210	230	199.17	230	180
19	T. Hardness	mg/l	170	170	150	180	170	190	160	170	190	156	148	148	166.8333	190	148
20	CalciumHardness	mg/l	100	110	90	110	100	100	90	100	110	102	106	112	102.5	112	90
21	Magnesium H.	mg/l	70	60	60	70	70	80	70	70	80	54	42	36	63.50	80	36
22	D. Oxygen	mg/l	6.5	6.2	6.4	7.5	7.9	6.2	6.7	6.8	6.4	7.8	9	7.4	7.07	9	6.2
23	B.O.D.	mg/l	2.4	2.7	2.6	2.9	2.8	2.8	2.4	2.7	2.8	2.4	2.2	2.3	2.58	2.9	2.2
24	C.O.D.	mg/l	14	16	12	22	20	22	16	12	16	14	20.833	31	17.99	31	12
25	Sodium	mg/l	-	-	-	-	-	-	-	-	-	14	16	11.8	13.93	16	11.8
26	Potassium	mg/l	-	-	-	-	-	-	-	-	-	1.2	1.4	2	1.53	2	1.2
27	T. Coliform	MPN/100ml	-	-	-	-	-	-	-	-	-	28	25	21	24.67	28	21
28	F. Coliform	MPN/100ml	-	-	-	-	-	-	-	-	-	<2	<2	<2	<2	<2	<2
29	T.K.N.	mg/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

CATEGORY - B (Due to BOD more than 2.0 mg/l)

**MADHYA PRADESH POLLUTION CONTROL BOARD REGIONAL LABORATORY REWA.**

Water Quality during Year - 2017-2018

Natural Water Resource : River Sone at village-Khairpur, near M.P.-U.P. boundary,distt.Sidhi

Description of Sampling Station: Near road bridge

S.No.	Characteristic	Unit	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb	March	Av.	Maxi.	Mini.
1	Date of Sampling		18.04.17.	28.05.17	27.06.17	25.07.17	9.08.17	5.09.17	8.10.17	7.11.17	13.12.20	05.01.18	05.02.18	06.03.18			
2	Appearance		Clear	Clear	Clear	Turbid	Turbid	Sl.Turbid	Clear	Clear	Clear	Clear	Clear	Clear			
3	Temperature	oC	30.4	32	28.5	27.5	31.5	29.5	29	28.4	24	20.5	22	24	26.37	32	20.5
4	Turbidity	NTU	23	26	19	42	33	28	7	12	10	8	13	7	19.30	42	7
5	Colour	PCS	C.less	C.less	C.less	Muddy	Muddy	C.less	C.less	C.less	C.less	C.less	C.less	C.less			
6	Odour	T. No	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.less			
7	pH	pH Unit	7.38	7.46	7.41	7.72	7.1	7.45	7.28	7.28	7.31	7.4	7.6	7.4	7.44	7.72	7.28
8	Sp. Conductivity	µMhos/cm.	0.455	0.429	0.413	0.695	0.793	0.629	0.308	0.362	0.296	0.324	0.268	0.25	0.39	0.695	0.25
9	T. Solids	mg/l	448	439	422	688	918	612	302	319	263	308	270	218	375.00	688	218
10	D. Solids	mg/l	411	398	384	546	789	572	274	288	236	273	233	187	328.44	546	187
11	S. Solids	mg/l	37	41	38	142	129	40	28	31	27	35	37	31	46.56	142	27
12	Amm. Nitrogen	mg/l	0.04	0.05	0.09	0.05	0.03	0.02	0.01	0.02	0.01	0.02	0.01	0.02	0.03	0.09	0.01
13	Nitrite Nitrogen	mg/l	0.006	0.02	Traces	0.04	0.02	0.01	0.007	0.01	trace	0.03	0.07	trace	0.03	0.07	0.006
14	Nitrate Nitrogen	mg/l	2.9	3.1	2.2	3.5	2.9	1.8	0.71	0.81	0.76	0.96	0.88	0.8	1.77	3.5	0.76
15	Phosphate (PO <sub>4</sub> )	mg/l	0.65	0.73	0.54	0.89	0.77	0.64	0.38	0.65	0.58	0.62	0.6	0.55	0.65	0.89	0.54
16	Chloride	mg/l	29.35	39.13	28.5	34.24	19.56	38	28.5	38.25	29.35	29.35	39.13	34.24	33.50	39.13	28.5
17	Sulphate (SO <sub>4</sub> )	mg/l	11	9	6	10	12	9	8	11	7	10	7	6	8.56	11	6
18	T. Alkalinity	mg/l	60	64	52	72	72	68	60	68	96	100	80	84	75.11	100	52
19	T. Hardness	mg/l	124	140	132	192	184	156	128	132	164	164	172	108	147.56	192	108
20	CalciumHardness	mg/l	72	80	80	124	108	88	92	100	108	88	100	72	91.56	124	72
21	Magnesium H.	mg/l	52	60	52	68	76	68	36	32	56	76	72	36	56.00	76	32
22	D. Oxygen	mg/l	6.6	6.3	6.7	7.2	9.2	8.1	7.9	7.7	8.4	8.6	8.2	8	7.52	8.6	6.3
23	B.O.D.	mg/l	1.4	1.6	1.2	2.6	1.5	1.3	1.2	1.4	1.2	1.1	0.9	1.1	1.39	2.6	0.9
24	C.O.D.	mg/l	9.82	9.75	9.6	19	9.88	10.2	9.56	9.6	9.82	9.6	9.6	9.82	10.73	19	9.6
25	Sodium	mg/l	8	7	5	9	6	7	5	7	23	12.7	14	14	11.08	23	5
26	Potassium	mg/l	17	21	18	22	19	16	15	19	2.7	3.6	3.2	3	12.17	22	2.7
27	T. Coliform	MPN/100ml	40	50	33	90	40	27	21	30	26	27	21	26	38.11	90	21
28	F. Coliform	MPN/100ml	17	21	11	17	5	<2	2	2	2	2	<2	2	9.25	21	2
29	Iron	mg/l	0.13	0.19	0.08	0.15	0.09	0.06	0.13	0.06	0.03	0.06	0.04	0.08	0.09	0.19	0.03
	CATEGORY		A	A	A	B	A	A	A					A			

**MADHYA PRADESH POLLUTION CONTROL BOARD**

Water Quality during Year - 2017-2018

Natural Water Resource : River Tons at M.P.-U.P. boundary, before mixing to River Belan,chakghat,Rewa

Description of Sampling Station: Near road bridge

S.No.	Characteristic	Unit	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb	March	Av.	Maxi.	Mini.
1	Date of Sampling		25.04.17	21.05.17	17.06.17	21.07.17.	2.8.17	13.9.17	9.10.17	14.11.17	5.12.17	03.01.18	03.02.18	01.03.18			
2	Appearance		Clear	Clear	Clear	Turbid	Turbid	Turbid	Clear	Clear	Clear	Clear	Clear	Clear			
3	Temperature	oC	30.2	31	28.2	26..8	31.5	32	28.5	28.4	24	20	22	23.5	25.9125	31	20
4	Turbidity	NTU	22	25	28	38	30	11	6	9	9	9	10	9	18.90	38	9
5	Colour	PCS	C.less	C.less	C.less	Muddy	Muddy	C.less	C.less	C.less	C.less	C.less	C.less	C.less			
6	Odour	T. No	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.less			
7	pH	pH Unit	7.43	7.39	7.66	7.89	7.6	7.63	7.25	7.1	7.28	7.2	7.3	7.5	7.4	7.89	7.1
8	Sp. Conductivity	µMhos/cm.	0.439	0.475	0.487	0.723	0.473	0.521	0.267	0.272	0.278	0.308	0.258	0.213	0.4	0.723	0.213
9	T. Solids	mg/l	486	469	512	698	524	508	258	265	268	321	260	216	388.3	698	216
10	D. Solids	mg/l	447	426	472	541	461	457	227	236	239	291	228	186	340.7	541	186
11	S. Solids	mg/l	39	43	40	157	63	51	31	29	29	30	32	30	47.7	157	29
12	Amm. Nitrogen	mg/l	0.04	0.05	0.12	0.04	0.03	0.06	0.02	0.01	0.04	0.03	0.04	0.02	0.0	0.12	0.01
13	Nitrite Nitrogen	mg/l	0.009	0.01	0.008	0.02	0.01	0.01	0.009	trace	0.004	0.06	0.009	trace	0.0	0.06	0.004
14	Nitrate Nitrogen	mg/l	2.7	3.3	4.5	4.8	3.3	1.6	0.98	0.72	1.4	1.1	1	0.95	2.3	4.8	0.72
15	Phosphate (PO <sub>4</sub> )	mg/l	0.71	0.73	0.69	1.1	0.95	0.09	0.69	0.8	0.7	0.7	0.65	0.7	0.8	1.1	0.65
16	Chloride	mg/l	24.46	29.35	38	43.03	19.56	19.7	42.75	43.03	39.13	24.46	24.98	24.46	32.3	43.03	24.46
17	Sulphate (SO <sub>4</sub> )	mg/l	12	13	9	14	11	7	6	8	10	8	12	8	10.4	14	8
18	T. Alkalinity	mg/l	56	52	60	68	72	72	68	64	72	92	88	80	70.2	92	52
19	T. Hardness	mg/l	116	136	164	188	124	140	160	156	160	172	180	108	153.3	188	108
20	CalciumHardness	mg/l	76	80	96	100	80	88	92	84	108	104	118	68	92.7	118	68
21	Magnesium H.	mg/l	40	56	68	88	44	52	68	72	52	68	62	40	60.7	88	40
22	D. Oxygen	mg/l	6.6	6.5	6.4	7.2	9.2	7.9	7.7	7.1	7.4	7.3	7.1	6.9	6.9	7.4	6.4
23	B.O.D.	mg/l	1.6	1.9	1.7	2.3	2	1.3	1.2	1.4	1.2	1.3	1.2	1.5	1.6	2.3	1.2
24	C.O.D.	mg/l	9.82	9.6	19.2	9.6	9.88	10.2	9.56	9.82	9.6	9.6	9.6	9.6	10.7	19.2	9.6
25	Sodium	mg/l	4	7	3	6	7	9	8	12	26	11	13	11.8	10.4	26	3
26	Potassium	mg/l	13	16	15	19	21	23	17	21	3	2.8	3	1.8	10.5	21	1.8
27	T. Coliform	MPN/100ml	40	33	21	70	33	30	27	30	21	33	26	33	34.1	70	21
28	F. Coliform	MPN/100ml	7	11	6	21	17	4	<2	<2	2	2	<2	2	7.3	21	2
29	Iron	mg/l	0.09	0.11	0.19	0.2	0.1	0.02	0.19	0.07	0.01	1.2	0.75	0.09	0.3	1.2	0.01
	CATEGORY		A	A	A	B	A	A	A	A							

**MADHYA PRADESH POLLUTION CONTROL BOARD,  
Water Quality during Year - 2017-2018**

Natural Water Resource : River Chambal at, Gandhi sagar

Description of Sampling Station: Chambal River 100 Meter D/S at Gandhi sagar

S.No.	Characteristic	Unit	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb	March	Av.	Maxi.	Mini.
1	Date of Sampling		18.4.17	16.5.17	26.6.17	20.7.17	11.8.17	10.9.17	5.10.17	14.11.17	12.12.17	18.1.18	09.2.18	01.03.18			
2	Appearance		Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear			
3	Temperature	oC	30	28	26	26.5	26	27	26	27	26	23	24	28	26.46	30	23
4	Turbidity	NTU	6.8	4.8	4.8	4	3.4	2.9	1.82	2.9	2	2.8	2.8	3.8	3.57	6.8	1.82
5	Colour	PCS	Colourless	5	5	5	5	5	5	5	5	5	5	5	5.00	5	5
6	Odour	T. No	--	--	--	--	--	--	--	--	O .less	O .less	O .less	O .less			
7	pH	pH Unit	7.4	7.72	7.61	7.92	8.12	8.12	7.95	7.89	7.82	7.9	7.84	8.48	7.90	8.48	7.4
8	Sp. Conductivity	µMhos/cm.	424	400	410	347	336	352	332	326	336	332	380	386	363.42	424	326
9	T. Solids	mg/l	298	290	308	296	248	256	238	242	250	246	258	270	266.67	308	238
10	D. Solids	mg/l	282	276	296	280	238	244	230	230	240	234	244	256	254.17	296	230
11	S. Solids	mg/l	16	14	12	16	10	12	8	12	10	12	14	14	12.50	16	8
12	Amm. Nitrogen	mg/l	0.528	0.052	0.061	0.026	0.1382	0.074	0.319	0.11	0.381	0.386	0.388	0.392	0.24	0.528	0.026
13	Nitrite Nitrogen	mg/l	0.006	0.006	0.009	0.187	0.0014	0.0018	0.079	0.007	0.006	0.068	0.069	0.072	0.04	0.187	0.0014
14	Nitrate Nitrogen	mg/l	0.78	0.772	0.817	1.21	0.564	0.514	0.994	0.79	0.916	0.892	0.881	0.942	0.84	1.21	0.514
15	Phosphate (PO <sub>4</sub> )	mg/l	0.052	0.052	0.048	0.036	BDL	BDL	0.0016	BDL	BDL	BDL	BDL	BDL	0.04	0.052	0.0016
16	Chloride	mg/l	40	36	39	39	42	34	34	40	42	34	36	40	38.00	42	34
17	Sulphate (SO <sub>4</sub> )	mg/l	16.4	14.1	18.4	17.9	10.24	14.312	14.6	18	16.4	12.2	12.8	13.4	14.90	18.4	10.24
18	T. Alkalinity	mg/l	110	116	118	126	108	96	122	176	128	102	106	120	119.00	176	96
19	T. Hardness	mg/l	120	152	154	180	190	154	156	170	146	144	156	108	152.50	190	108
20	CalciumHardness	mg/l	72	94	96	122	100	78	72	72	120	92	156	56	94.17	156	56
21	Magnesium H.	mg/l	48	58	58	58	90	76	84	98	26	52	78	52	64.83	98	26
22	D. Oxygen	mg/l	7.6	7.2	7.5	8.3	7.3	7.1	7	7	7	7.3	7.9	7	7.35	8.3	7
23	B.O.D.	mg/l	2	1.8	2	2.3	2	2	2	2	2	2	2	2	2.01	2.3	1.8
24	C.O.D.	mg/l	14	14	12	14	12	14	10	10	14	12	12	13	12.58	14	10
25	Sodium	mg/l	26.6	24	25.9	15.9	13.4	16.2	13.9	24.75	18.2	14.8	13.8	14.6	18.50	26.6	13.4
26	Potassium	mg/l	1.4	1	1.4	1.2	1	1	1	3.15	1.2	1	1.3	1.4	1.34	3.15	1
27	T. Coliform	MPN/100ml	70	70	50	40	60	60	46	33	40	40	40	40	49.08	70	33
28	F. Coliform	MPN/100ml	9	9	8	8	8	7	9	7	9	7	7	17	8.75	17	7
29	T.K.N.	mg/l	3.36	3.08	2.8	1.4	1.4	2.24	--	--	2.52		--	--	2.40	3.36	1.4
	CATEGORY		AS	A	A	A	A	A	A	A	A	A	A	A			

**MADHYA PRADESH POLLUTION CONTROL BOARD,**  
Water Quality during Year - 2017-2018

Natural Water Resource : River Narmada  
Description of Sampling Station: At Kakrana, interstate boundry, Alirajpur.

S.No.	Characteristic	Unit	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Average	Max.	Min.
1	Date of Sampling		18.4.17	13.5.17	30.6.17	13.07.17	19.08.17	05.09.17	02.10.17	04.11.17	16.12.17	01.01.18	05.02.18	05.03.18			
2	Appearance		Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear			
3	Temperature	°C	31	31	29.5	28	24	23	24	24	22	21	22	22	25.13	31	21
4	Turbidity	NTU	1	1.4	1.2	12.5	1.2	2.3	8.5	1.8	1.3	6.1	5.8	4.6	3.98	12.5	1
5	Colour	PCS	1	1	1	1	1	1	1	1	1	1	1	1	1.00	1	1
6	Odour	T. No	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.L	O. Less	O. less	O. Less			
7	pH	pH Unit	7.8	8.3	8.6	8.5	8.2	8.42	8.06	7.72	8.56	8.7	8.66	8.14	8.31	8.7	7.72
8	Sp. Conductivity	µMhos/cm.	294	320	333	380	320	310	418.47	483	449.4	439.45	405	480	386.03	483	294
9	T. Solids	mg/l	204	220	210	270	196	222	282	270	291	269	251	349	252.83	349	196
10	D. Solids	mg/l	194	212	202	244	186	211	270	258	279	261	243	336	241.33	336	186
11	S. Solids	mg/l	10	8	8	26	10	132	12	12	12	8	8	13	21.58	132	8
12	Amm. Nitrogen	mg/l	0.014	0.013	0.018	0.024	0.016	0.019	0.018	0.016	0.016	0.016	0.022	0.023	0.02	0.024	0.013
13	Nitrite Nitrogen	mg/l	0.003	0.018	0.007	0.006	0.004	0.008	0.008	0.004	0.005	0.005	0.004	0.008	0.01	0.018	0.003
14	Nitrate Nitrogen	mg/l	0.86	0.92	0.66	0.92	0.72	0.56	1.228	1.68	1.956	0.973	0.87	1.066	1.03	1.956	0.56
15	Phosphate (PO <sub>4</sub> )	mg/l	0.011	0.016	0.014	0.02	0.012	0.012	0.032	0.012	0.022	0.012	0.018	0.02	0.02	0.032	0.011
16	Chloride	mg/l	22.97	34.2	27.22	35.22	34.71	25.6	26.8	43.39	25.99	30.85	32.06	39.42	31.54	43.39	22.97
17	Sulphate (SO <sub>4</sub> )	mg/l	3.06	3.03	2.66	4.93	2.8	3.46	5.17	4.97	8.912	14.45	6.49	7.68	5.63	14.45	2.66
18	T. Alkalinity	mg/l	136	148	148	160	132	140	148	152	168	180	148	156	151.33	180	132
19	T. Hardness	mg/l	124	128	132	156	124	124	140	140	176	172	144	172	144.33	176	124
20	Calcium Hardness	mg/l	96	104	100	120	104	100	112	100	132	120	112	148	112.33	148	96
21	Magnesium Hardness	mg/l	28	24	32	36	20	24	28	40	44	52	32	24	32.00	52	20
22	D. Oxygen	mg/l	7.5	7.2	7.4	6.8	7.1	7.2	6.9	7.1	7.7	7.8	7.5	7.3	7.29	7.8	6.8
23	B.O.D.	mg/l	1.3	1.4	1.2	1.3	1.2	1.2	1.2	1.4	1.4	1.4	1.9	2.2	1.43	2.2	1.2
24	C.O.D.	mg/l	11.5	15.23	11.76	18.24	10	10	5.88	20	9	14.52	19.76	11.52	13.12	20	5.88
25	Sodium	mg/l	17	16	16.3	21	17	17.9	1.8	17.2	18.2	19	20.19	23.9	17.12	23.9	1.8
26	Potassium	mg/l	1.8	1.6	1.7	2	1.2	2	26.8	1.6	2	2	2.2	2.08	3.92	26.8	1.2
27	T. Coliform	MPN/100ml	34	50	50	40	50	40	30	50	40	33	60	50	43.92	60	30
28	F. Coliform	MPN/100ml	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2			
29	Fluoride	mg/l	0.77	0.72	0.8	1.04	0.72	0.58	0.82	0.78	0.69	0.8	0.8	1	0.79	1.04	0.58
30	FDS	mg/l	128	152	154	170	132	132	180	174	188	170	168	220	164.00	220	128
31	T.K.N.	mg/l	5.042	5.42	3.921	6.163	4.28	5.04	5.04	6.12	5.6	5.04	7.28	2.8	5.15	7.28	2.8
32	Boron	mg/l	0.003	0.008	0.008	0.008	0.002	0.008	0.004	0.004	0.006	0.006	0.008	0.008	0.01	0.008	0.002
	CATEGORY		"A "	"A "	"A "	"A "	"A "	"A "	"A "	"A "	"A "	"A "	"A "	"A "			

**MADHYA PRADESH POLLUTION CONTROL BOARD,  
Water Quality during Year - 2017-2018**

Natural Water Resource : River Mahi at Forest Guest house rajapur mataji shivgarh Ratlam

**Description of Sampling Station:**

River water

S.No.	Characteristic	Unit	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb	March	Av.	Maxi.	Mini.
1	Date of Sampling		12.4.17			17.7.17	9.8.18	20.9.17	10/31/2017	30.11.17	11.12.17	12.1.18	12.2.18	3.3.18	Av.	Maxi.	Mini.
2	Appearance		--			--	--	--	Clear		Clear	Clear	Clear	Clear	-	-	-
3	Temperature	oC	28			23	27	25	--	26	27	27	24	26	-	-	-
4	Turbidity	NTU	4.2			118	6.2	3.4	6.6	1.95	3.2	3.1	2.5	2.8	-	-	-
5	Colour	PCS	5			Muddy	Colourless	5	--	C.less	5	5	5	5	5.00	5	5
6	Odour	T. No	O.less			O.less	O.less	O.less	O.less	O.less	O .less	O .less	O .less	O .less			
7	pH	pH Unit	8.06			7.7	8.39	7.38	7.9	7.68	7.98	7.8	7.82	8.36	7.91	8.39	7.38
8	Sp. Conductivity	µMhos/cm.	436			240	440	363	512	398	474		482	364	412.11	512	240
9	T. Solids	mg/l	302			360	310	268	358	250	346	356	350	254	315.40	360	250
10	D. Solids	mg/l	290			140	298	254	348	240	336	342	340	242	283.00	348	140
11	S. Solids	mg/l	12			220	12	14	10	10	10	14	10	12	32.40	220	10
12	Amm. Nitrogen	mg/l	0.824			0.74	0.07	0.422	0.418	0.415	0.398	0.192	0.421	0.411	0.43	0.824	0.07
13	Nitrite Nitrogen	mg/l	0.006			0.06	0.006	0.006	0.014	0.013	0.012	0.0018	0.013	0.012	0.01	0.06	0.0018
14	Nitrate Nitrogen	mg/l	2.268			1.52	0.991	2.62	0.766	0.612	0.698	0.692	0.712	0.698	1.16	2.62	0.612
15	Phosphate (PO <sub>4</sub> )	mg/l	BDL			BDL	BDL	0.062	0.004	0.0359	0.003	BDL	0.004	BDL	0.02	0.062	0.003
16	Chloride	mg/l	30			20	29.9	25	40	56	38	32	44	28	34.29	56	20
17	Sulphate (SO <sub>4</sub> )	mg/l	18.2			20	14.4	12.453	14.2	10.95	12.2	11.4	18.2	16.4	14.84	20	10.95
18	T. Alkalinity	mg/l	118			66	140	116	102	98	100	264	110	140	125.40	264	66
19	T. Hardness	mg/l	184			126	198	140	148	172	150	280	160	136	169.40	280	126
20	CalciumHardness	mg/l	100			52	108	102	106	120	110	152	116	96	106.2	152	52
21	Magnesium H.	mg/l	84			74	90	38	42	52	40	128	44	40	63.2	128	38
22	D. Oxygen	mg/l	7.2			6.9	7	7	7.6	7.6	7.4	7.3	7.2	7	7.2	7.6	6.9
23	B.O.D.	mg/l	2.2			2.2	2	1.8	2	1.1	2	2	2	2	1.9	2.2	1.1
24	C.O.D.	mg/l	17			16	12	12	12	12	10	14	12	12	12.9	17	10
25	Sodium	mg/l	15.6			26.18	20.2	14.56	12.6	14.1	10.6	30.6	16.4	18.4	17.9	30.6	10.6
26	Potassium	mg/l	0.7			2.0	0.8	1.71	1.3	1.1	0.9	2.4	1	1	1.3	2.4	0.7
27	T. Coliform	MPN/100ml	90			80	40	30	50	40	40	50	40	50	51.0	90	30
28	F. Coliform	MPN/100ml	21			7	4	4	4	8	4	9	4	4	6.9	21	4
29	T.K.N.	mg/l	--			--	--	--	--	--	--	--	--	--			

CATEGORY

B

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**MADHYA PRADESH POLLUTION CONTROL BOARD, UJJAIN.**  
**Water Quality during Year - 2017-2018**

Natural Water Resource : River Mahi at Ranisingh Village

**Description of Sampling Station:**

River water

S.No.	Characteristic	Unit	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb	March	Av.	Maxi.	Mini.
1	Date of Sampling		12.4.17	11.5.17	23.6.17	17.7.17	8.9.17	20.9.17	31.10.17	30.11.17	11.12.17	12.1.18	12.2.18	3.3.18			
2	Appearance		--	--	--	--	--	--	--	Clear	Clear	Clear	Clear	Clear			
3	Temperature	oC	28	27	26	23	27	25	27	26	27	27	24	25	26.33	28	24
4	Turbidity	NTU	3.8	4.6	4.2	200	6.8	2.6	6.2	6.8	3.2	2.8	6.5	3.5	4.62	6.8	2.8
5	Colour	PCS	5	5	5	Muddy	5	5	5	5	Clear	5	5	Clear	5.00	5	5
6	Odour	T. No	O.less	O.less	O.less	--	--	--	--	--	--	--	--	--			
7	pH	pH Unit	8.02	7.86	7.88	7.54	7.64	7.82	7.72	7.76	7.96	7.89	7.78	8.39	7.92	8.39	7.72
8	Sp. Conductivity	µMhos/cm.	429	440	506	196	374	352	505	510	486	372	530	402	464.4	530	372
9	T. Solids	mg/l	298	314	356	330	268	182	358	362	352	280	372	280	330.2	372	280
10	D. Solids	mg/l	288	302	346	120	254	174	346	346	342	268	354	268	317.8	354	268
11	S. Solids	mg/l	10	12	10	210	14	8	12	16	10	12	18	12	12.4	18	10
12	Amm. Nitrogen	mg/l	0.7160	0.742	0.816	0.72	0.0618	0.321	0.514	0.524	0.511	0.162	0.542	0.426	0.6	0.816	0.162
13	Nitrite Nitrogen	mg/l	0.004	0.003	0.0028	0.06	0.006	0.266	0.012	0.014	0.08	0.0016	0.018	0.016	0.0	0.08	0.0016
14	Nitrate Nitrogen	mg/l	1.164	1.246	0.984	0.24	0.849	3.181	0.618	0.628	0.612	0.644	0.642	0.532	0.8	1.246	0.532
15	Phosphate (PO <sub>4</sub> )	mg/l	BDL	BDL	BDL	BDL	BDL	0.308	0.003	0.004	0.002	BDL	0.006	BDL			
16	Chloride	mg/l	26	34	36	19	40	24	34	38	40	51	42	30	36.8	51	26
17	Sulphate (SO <sub>4</sub> )	mg/l	16.14	18.2	18.28	16	16.4	17.53	12.6	16.6	12.1	10.26	20.8	20.5	16.2	20.8	10.26
18	T. Alkalinity	mg/l	112	120	120	64	96	102	98	106	96	192	120	160	124.9	192	96
19	T. Hardness	mg/l	174	180	194	100	182	150	142	150	140	264	170	140	172.7	264	140
20	CalciumHardness	mg/l	96	100	100	52	98	120	98	100	98	96	110	80	97.6	110	80
21	Magnesium H.	mg/l	78	80	94	48	84	30	44	50	42	168	60	60	75.1	168	42
22	D. Oxygen	mg/l	7.1	7.4	7.2	7	6.7	7.2	7.5	7.4	7	7.2	7.2	7	7.2	7.5	7
23	B.O.D.	mg/l	2	1.8	2	2	2	1.2	2	2.2	2	1.8	2	2	2.0	2.2	1.8
24	C.O.D.	mg/l	18	16	16	14	12	8	14	16	12	14	18	14	15.3	18	12
25	Sodium	mg/l	24.12	22.4	26.64	22.06	18.2	15.91	10.8	12.4	11.2	22.9	22.4	22.4	19.5	26.64	10.8
26	Potassium	mg/l	0.64	0.8	0.86	1.5	1	2.18	1.2	1.5	1	2.6	1.5	0.9	1.2	2.6	0.64
27	T. Coliform	MPN/100ml	110	80	90	140	90	40	50	50	60	50	50	50	65.6	110	50
28	F. Coliform	MPN/100ml	30	9	11	12	11	6	9	9	6	9	9	4	10.7	30	4
29	T.K.N.	mg/l	2.8	2.8	2.8	2.52	1.68	1	1.4	1.96	--	--	--	--	2.4	2.8	1.4

CATEGORY

B

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**MADHYA PRADESH POLLUTION CONTROL BOARD,**

Water Quality during Year - 2017-2018

Natural Water Resource

: RiverKen, Panna

XGN ID: 28918

**Description of Sampling Station: Near road bridge, Panna**

S.No.	Characteristic	Unit	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan	Feb	March	Av.	Maxi.	Mini.
1	Date of Sampling		13.04.17	11.05.17	01.06.17	28.07.17	08.08.17	27.9.17	8.10.17	26.11.17	19.12.17	17.1.18	15.02.18	15.03.18	-	-	-
2	Temperature	oC	31	30	29	26	28	29	29	25	23	17	24	30	26.8	31	17
3	Turbidity	NTU	-	-	-	-	-	-	-	4	8	8	7	7	6.8	8	4
4	Colour	PCS	C.less	C.less	C.less	Muddy	Light	C.less	C.less	C.less	C.less	C.less	C.less	C.less	-	-	-
5	Odour	T. No	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.less	-	-	-
6	pH	pH Unit	8.42	8.72	8.54	7.93	7.74	7.9	7.76	7.89	7.96	8.26	8.36	8.37	8.2	8.72	7.74
7	Sp. Conductivity	µMhos/cm.	238	256.4	243.6	155.6	145.3	188	201	202	207.8	220.5	233	226	209.8	256.4	145.3
8	T. Solids	mg/l	176	164	180	238	192	165	174	156	162	166	176	172	176.8	238	156
9	D. Solids	mg/l	170	156	174	102	106	155	162	144	150	158	166	160	150.3	174	102
10	S. Solids	mg/l	6	8	6	136	86	10	12	12	12	8	10	12	26.5	136	6
11	Amm. Nitrogen	mg/l	BDL	-	-	-	-	BDL	BDL	BDL	BDL	BDL	BDL	BDL			
12	Nitrite Nitrogen	mg/l	0.01	0.02	0.01	0.01	BDL	BDL	BDL	BDL	0.03	0.02	0.03	0.03	0.0	0.03	0.01
13	Nitrate Nitrogen	mg/l	-	-	-	-	-	0.9	0.71	0.62	0.5	0.68	0.35	0.46	0.6	0.9	0.35
14	Phosphate (PO <sub>4</sub> )	mg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL			
15	Chloride	mg/l	25.6	20.12	21.14	13.46	15.38	19.14	20.55	16.82	22.3	25.44	17.61	17.69	19.6	25.6	13.46
16	Sulphate (SO <sub>4</sub> )	mg/l	12.42	12.38	11.36	BDL	BDL	5	12	13	16.72	10.05	12.72	14.02	12.0	16.72	5
17	T. Alkalinity	mg/l	125.6	122.4	130.8	80	93.2	96	108	100	104	132	108	112	109.3	132	80
18	T. Hardness	mg/l	128	124	132	92	64	72	84	120	108	152	112	128	109.7	152	64
19	Calcium Hardness	mg/l	88	72	88	56	48	40	52	72	72	112	76	68	70.3	112	40
20	Magnesium H.	mg/l	40	52	44	36	16	32	32	48	36	40	36	60	39.3	60	16
21	D. Oxygen	mg/l	7.52	7.64	7.54	6.86	7	7.1	7.2	7.79	7.76	7.46	7.38	7.12	7.4	7.79	6.86
22	B.O.D.	mg/l	0.92	0.86	0.84	1.04	0.6	1.5	1.1	1.08	1.02	0.68	1.24	1.32	1.0	1.5	0.6
23	C.O.D.	mg/l	3.52	3.04	3.65	3	3.68	3.68	3.64	3.41	4.04	3.68	7.84	4.01	3.9	7.84	3
24	Sodium	mg/l	10.74	10.68	10.84	5.91	5.59	6	9.53	8.89	18.45	18.8	15.52	20.82	11.8	20.82	5.59
25	Potassium	mg/l	1.72	1.69	1.58	3.38	2.26	2	1.6	2.75	4.4	4.91	3.67	4.73	2.9	4.91	1.58
26	T. Coliform	MPN/100ml	5	-	-	-	-	-	7	5	4	1	1	3	3.7	7	1
27	F. Coliform	MPN/100ml	1	-	-	-	-	-	0	0	0	0	0	0	0.14	1	0
	CATEGORY		A	A	A	A	A	A	A	A	A	A	A	A			

Classification of River water based on IS - 2296 - 1992

**MADHYA PRADESH POLLUTION CONTROL BOARD,**  
**Water Quality during Year - 2017-2018**

Natural Water Resource : River Water

**Description of Sampling Station: Tapti River at Pipalghat, Burhanpur**

S.No.	Characteristic	Unit	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Avg.	Max.	Min.
1	Date of Sampling		08.04.17	10.05.17	27.06.17	22.07.17	04.08.17	05.09.17	02.10.17	6.11.17	20.12.17	23.01.18	10.02.18	08.03.18	-	-	-
2	Appearance		Clear	Greenish	Sl. Turbid	Muddy	Sl. Muddy	Sl.Muddy	Clear	Clear	Clear	Clear	Clear	sl.turbid	Clear	Clear	Clear
3	Temperature	oC	30	31	30.5	26	28	24	24	23	19.4	23	23	22	23.71	31.5	0
4	Turbidity	NTU	4.4	12.9	14.6	84.6	0.8	7.6	0.7	4.3	27	6	29.4	9.62	77.47	200.02	2.6
5	Colour	PCS	1	1	1	1	1	1	1	1	1	1	1	1	1.57	5	1
6	Odour	T. No	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.less	O.less			
7	pH	pH Unit	7.47	8.68	7.96	8.16	8.31	8.49	8.31	-	8.52	8.66	8.77	8.69	8.25	9.14	7.74
8	Sp. Conductivity	µMhos/cm.	404	880	716	374.12	530	524	524	548.4	596	640	694	1019	624.74	834.9	445
9	T. Solids	mg/l	298	615	496	295	332	360	338	373	424	436	403	684	418.57	500	338
10	D. Solids	mg/l	282	590	467	253	324	346	330	-	408	422	387	670	371.29	478	270
11	S. Solids	mg/l	16	25	29	42	8	14	8	11	16	14	16	14	47.29	110	10
12	Amm. Nitrogen	mg/l	0.033	0.022	0.021	0.028	0.021	0.015	0.024	0.027	0.034	0.042	0.036	0.062	0.03	0.04	0
13	Nitrite Nitrogen	mg/l	0.089	0.084	0.03	0.08	0.005	0.008	0.014	0.011	0.02	0.012	0.018	0.012	0.04	0.11	0
14	Nitrate Nitrogen	mg/l	1.209	4.6	0.862	2.73	2.01	1.63	2.2	0.926	1.82	1.862	1.84	1.143	3.24	6.76	1.68
15	Phosphate (PO <sub>4</sub> )	mg/l	0.04	0.043	0.019	0.043	0.668	0.022	0.46	0.022	0.028	0.034	0.027	0.043	0.09	0.47	0.02
16	Chloride	mg/l	71.78	68.4	34.485	13.99	33.25	73.16	33.5	56.74	35.47	38.47	40.55	77.13	66.87	109.75	42
17	Sulphate (SO <sub>4</sub> )	mg/l	3.68	12.5	34.485	8.8	4.11	6.868	7.29	7.36	10.4	23.21	12.4	12.58	15.76	68.14	4.38
18	T. Alkalinity	mg/l	200	300	5.66	168	200	248	210	188	212	256	228	324	189.43	248	136
19	T. Hardness	mg/l	188	268	208	148	190	268	190	180	192	236	204	252	212.86	320	172
20	CalciumHardness	mg/l	148	188	156	108	100	220	110	128	132	168	156	172	154.57	180	132
21	M. Hardness	mg/l	40	80	52	40	90	48	80	52	60	68	48	80	58.29	152	30
22	D. Oxygen	mg/l	6.6	8	6.6	6.7	6.9	6.1	6.6	7.6	8	7.2	7.5	6.8	6.47	9.8	3
23	B.O.D.	mg/l	1.6	4.6	1.6	1.6	1.6	1.6	1.8	2.6	2.8	2.8	2.6	1.7	3.59	8	1.8
24	C.O.D.	mg/l	18.24	28.56	24.5	20	8	24	24.5	29.04	38	26	32.9	15.36	39.85	100	25.92
25	Sodium	mg/l	26.81	32	23	28	12.12	22.08	22.4	24.8	30	24.8	28.4	27.4	31.58	52.7	26
26	Potassium	mg/l	1.2	3	1.9	3	1.5	2.06	2.2	2.4	3	2.2	3	2.2	3.02	5.4	2.4
27	T. Coliform	MPN/100ml	80	500	140	110	40	60	170	90	130	80	220	220	317.14	900	70
28	F. Coliform	MPN/100ml	<2	17	<2	<2	<2	<2	<1.8	<2	<2	<2	<2	<2	<2	<2	<2
29	Fluoride	mg/l	0.89	0.78	0.83	1.73	0.68	0.86	0.62	0.96	1.11	1.02	1.08	1.02	0.97	1.2	0.71
30	FDS	mg/l	190	416	320	158	181	210	156	230	232	274	242	442	214.71	336	156
31	T.K.N.	mg/l	8.4	16.24	5.042	6.72	2.8	6.16	5.6	6.16	-	7.84	7.84	8.12	9	10.08	8.12
32	Boron	mg/l	0.006	0.08	0.008	0.006	0.004	0.004	0.004	0.004	0.008	0.008	0.008	0.005	0.02	0.08	0.01
	CATEGORY		"B"	"B"	"B"	"B"	"A"	"A"	"B"	"B"	"B"	"B"	"B"	"B"	"B"	"C"	"B"

**Water quality during year - 2017-2018**

Natural water resource - Chambal River,

**Description of sampling station -Chambal River Itwa Road Bridge,Bhind**

S.No.	Characterstic	Unit	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Avg.	Min.	Max.
1	Date of sampling		-				29.8.17	20.9.17	6.10.17		15.12.17	02.1.18	13.2.18	9.3.18			
2	Appearance						S.Twsid	S. Turbid	S.Turbid		Clear	Clear	Clear	Clear			
3	Temprature	centigrate	-				28				20	17	22	22	21.8	28	17
4	Turbidity	N.T.U	-				10	10	11		6	11	6	6	8.6	11	6
5	Colour	pt.co.scale	-				C .less	C .less	C .less		C .less	C .less	C .less	C .less			
6	Odour						O .less	O .less	O .less		O .less	O .less	O .less	O .less			
7	pH	ph units	-				8.12	8.12	8.22		8.0	8	7.8	7.8	8.0	8.22	7.8
8	Conductivity	µmhos/cm	-				1140	1160	1260		860	1290	358	344	916.0	1290	344
9	Total solid	mg/l	-				772	788	834		261	450	240	230	510.7	834	230
10	Total dissolve solid	mg/l	-				708	702	738		200	401	202	202	450.4	738	200
11	Suspended solid	mg/l	-				64	86	96		61	49	38	28	60.3	96	28
12	Ammonical nitrogen	mg/l	-				1	1.1	-		0.23	1.1	0.8	1	0.9	1.1	0.23
13	Nitrite Nitrogen		-				-	-	-		1.0	1.8	1	1.2	1.3	1.8	1
14	Nitrate Nitrogen	mg/l	-				-	2.2	-						2.2	2.2	2.2
15	Phosphate	mg/l	-				1.3	1.3	-		2.2	1.4	1	1.2	1.4	2.2	1
16	chloride	mg/l	-				93.3	119.57	138.05		200	96.59	37.98	33.98	102.8	200	33.98
17	sulphate	mg/l	-				15.2	17.2	-		28.2	25.8	18.2	18	20.4	28.2	15.2
18	Alkalinity as cacO3	mg/l	-				270	272	290		200	290	180	190	241.7	290	180
19	total hardness	mg/l	-				238	248	274		170	246	142	148	209.4	274	142
20	calcium Haredness	mg/l	-				148	154	162		100	142	124	132	137.4	162	100
21	Magnesium hardness	mg/l	-				90	94	112		70	104	18	16	72.0	112	16
22	D.O.	mg/l	-				7.8	7.6	7.8		8.2	7.9	8.5	8.4	8.0	8.5	7.6
23	B.O.D.	mg/l	-				1.2	1.2	1.5		1.1	1.1	1.4	1.6	1.3	1.6	1.1
24	C.O.D.	mg/l	-				45.97	48.19	69.76		112	31.2	42.08	44.24	56.2	112	31.2
25	sodium	mg/l	-				11.2	-	-		1.1	1.5	1.2	1.4	3.3	11.2	1.1
26	potassium	mg/l	-				1.2	13.8	-						7.5	13.8	1.2
27	Total Coliform	MPN/100 ml	-					1.3	-		-	13	38	29	20.3	38	1.3
28	Feacal Coliform	MPN/100 ml	-					-	-		-	<2	2	<2			
29	T.K.N.	mg/l						-	-								

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**Water Quality monitoring during year 2017-2018**

**River Water Quality Monitoring Data of the Chambal RIVER**

**Sampling point-Chambal River Etawa Road Bridge, Phoo. Bhind**

	Month		April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Avg.	Min.	Max.
	Date of Sampling		-	-	-	-	-	29.9.18	6.10.17	-	5.12.17	02.1.18	13.3.18	09.3.18			
	Parameters	Unit															
1	Appearance		-	-	-	-	-	S. Turbid	S.Turbid	-	Clear	Clear	Clear	Clear			
2	Temprature	centigrate	-	-	-	-	-			-	20	17	22	22	20.25	17	22
3	Turbidity	N.T.U	-	-	-	-	-	10	11	-	6	11	6	6	7.25	6	11
4	Colour	pt.co.scale	-	-	-	-	-	Colourless	Colourless	-	Colourless	Colourless	Colourless	Colourless		0	0
5	Odour	-	-	-	-	-	-	Odourless	Odourless	-	Odourless	Odourless	Odourless	Odourless		0	0
6	pH	ph units	-	-	-	-	-	8.12	8.22	-	8	8	7.8	7.8	7.9	7.8	8
7	Conductivity	µmhos/cm	-	-	-	-	-	1160	1260	-	860	1290	358	344	713	344	1290
8	Total solid	mg/l	-	-	-	-	-	788	834	-	261	450	240	230	295.25	230	450
9	Total dissolve solid	mg/l	-	-	-	-	-	702	738	-	200	401	202	202	251.25	200	401
10	Suspended solid	mg/l	-	-	-	-	-	86	96	-	61	49	38	28	44	28	61
11	Ammonical nitrogen	mg/l	-	-	-	-	-	1.1	-	-	0.23	1.1	0.8	1	0.7825	0.23	1.1
12	Nitrate Nitrogen	mg/l	-	-	-	-	-	2.2	-	-	1	1.8	1	1.2	1.25	1	1.8
13	Phosphate	mg/l	-	-	-	-	-	1.3	-	-	2.2	1.4	1	1.2	1.45	1	2.2
14	chloride	mg/l	-	-	-	-	-	119.57	138.05	-	200	96.59	37.98	33.98	92.1375	33.98	200
15	sulphate	mg/l	-	-	-	-	-	17.2	-	-	28.2	25.8	18.2	18	22.55	18	28.2
16	Alkalinity as caco3	mg/l	-	-	-	-	-	272	290	-	200	290	180	190	215	180	290
17	total hardness	mg/l	-	-	-	-	-	248	274	-	170	246	142	148	176.5	142	246
18	calcium Haredness	mg/l	-	-	-	-	-	154	162	-	100	142	124	132	124.5	100	142
19	Magnesium hardness	mg/l	-	-	-	-	-	94	112	-	70	104	18	16	52	16	104
20	D.O.	mg/l	-	-	-	-	-	7.6	7.8	-	8.2	7.9	8.5	8.4	8.25	7.9	8.5
21	B.O.D.	mg/l	-	-	-	-	-	1.2	1.5	-	1.1	1.1	1.4	1.6	1.3	1.1	1.6
22	C.O.D.	mg/l	-	-	-	-	-	48.19	69.76	-	112	31.2	42.08	44.24	57.38	31.2	112
23	sodium	mg/l	-	-	-	-	-	13.8	-	-	16.4	11	16	16.4	14.95	11	16.4
24	potassium	mg/l	-	-	-	-	-	1.3	-	-	1.1	1.5	1.2	1.4	1.3	1.1	1.5
25	Total Coliform	MPN/100 ml										13	38	29	26.66667	13	38
26	Feacal Coliform	MPN/100 ml										<2	2	<2	2	2	2
	<b>Category</b>		-	-	-	-	-	<b>A</b>	<b>A</b>	-	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>			