

Analysis results of Surface water monitoring under NWMP for the month of February, 2020

River Satluj

S.N.	Point of Sample Collection	Code	Date of receipt in lab	Lab Sample No.	Sample Collected & Analyzed by	pH	DO mg/l	BOD mg/l	Cond μ s/Cm	T.Coli MPN/100ml	F. Coli MPN/100ml	Free Amm. mg/l	SAR	B mg/l	Quality of water as per DBU	Water Quality Index
1	River Satluj at U/S Nangal	1017	03.02.20	SW 1161	ZO Lab Ldh	7.3	10.4	<1	204	140	45	BDL	0.15	BDL	B	S
2	River Satluj at D/S NFL	1380	03.02.20	SW 1162	ZO Lab Ldh	8.2	10.2	<1	221	210	110	BDL	0.17	BDL	B	S
3	River Sutej at 100m D/s PACL Nangal	2915	03.02.20	SW 1163	ZO Lab Ldh	8.2	10.3	1.2	225	200	78	BDL	0.17	BDL	B	S
4	River Satluj at D/s Nangal	1018	03.02.20	SW 1164	ZO Lab Ldh	7.3	10.2	<1	243	210	78	BDL	0.16	BDL	B	S
5	River Satluj at Kiratpur Sahib	1814	02.02.20	SW 1146	ZO Lab Ldh	7.8	10.1	<1	231	490	230	BDL	0.19	0.10	B	S
6	Ropar Head-Works	1019	02.02.20	SW 1149	ZO Lab Ldh	7.5	9.3	1.6	288	1700	450	BDL	0.31	BDL	C	S
7	River Satluj D/S of Rishab- Paper Mills	1293	02.02.20	SW 1150	ZO Lab Ldh	7.5	9.9	<1	321	2100	780	BDL	0.34	0.11	C	S
8	River Satluj U/S Buddha Nallah	1690	04.02.20	SW 1182	ZO Lab Ldh	7.4	9.0	1.8	356	2000	780	0.017	0.28	0.17	C	S
9	River Satluj at 100 mts D/s after Budha Nallah confluence, Ludhiana	1020	04.02.20	SW 1184	ZO Lab Ldh	6.9	3.7	22	565	11,00,000	4,90,000	BDL	0.82	0.26	E	U
10	River Satluj at Boat Bridge, Dharamkot Nakodar Road	1021	05.02.20	SW 1190	ZO Lab Ldh	6.9	5.0	7	543	1,10,000	46,000	BDL	0.71	0.18	D	U
11	River Satluj at D/s East Bein	1381	05.02.20	SW 1191	ZO Lab Ldh.	6.9	4.7	9	611	1,70,000	70,000	BDL	0.81	0.21	D	U
12	River Satluj at Harike	1022	05.02.20	SW 1192	ZO Lab Ldh.	6.8	4.4	3.2	365	3300	780	BDL	0.96	0.19	C	S
13	Harike Lake D/S from canal	1382	10.02.2020	SW 61	ZO Lab Jal.	8.1	8.9	1.9	310	1700	450	0.059	0.15	0.13	C	S
14	D/S Harike lake	1297	10.02.2020	SW 62	ZO Lab Jal.	7.9	8.3	1.4	280	1200	370	0.036	0.14	0.22	C	S
15	U/S Hussainiwala H/W Ferozepur	1691	11.02.20	SW 1193	ZO Lab Ldh	8.3	11.8	<1	238	630	230	0.110	0.39	0.14	C	S
16	D/S Hussainiwala H/W Ferozepur	1692	11.02.20	SW 1194	ZO Lab Ldh	8.4	11.6	<1	245	630	310	0.150	0.33	0.21	C	S

Note. 1. BDL means Below Method Detection Limit
2. DBU means Designated Best Use (Class-A,B,C,D & E)
3. Water Quality Index (S means Satisfactory, U means Unsatisfactory)
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River Satluj

S.N.	Point of Sample Collection	Code	Date of receipt in lab	Lab Sample No.	Sample Collected & Analyzed by	COD mg/l	Turb NTU	TSS mg/l	TDS mg/l	FDS mg/l	Cl mg/l	SO ₄ mg/l	TH mg/l	Ca mg/l	Mg mg/l	T.Alkn mg/l	P.Alkn mg/l	AmnN mg/l	NO ₃ -N mg/l	TKN mg/l	PO ₄ as P mg/l	F mg/l	Na mg/l	K mg/l
1	River Satluj at U/S Nangal	1017	03.02.20	SW 1161	ZO Lab Ldh	<5	BDL	BDL	122	109	5	7	112	27.2	10.7	72	BDL	BDL	1.8	BDL	BDL	0.30	3.7	2.2
2	River Satluj at D/S NFL	1380	03.02.20	SW 1162	ZO Lab Ldh	<5	BDL	BDL	132	120	7	8	120	28	12.2	82	BDL	BDL	1.9	BDL	BDL	0.25	4.4	2.2
3	River Sutej at 100m D/s PACL Nangal	2915	03.02.20	SW 1163	ZO Lab Ldh	8	BDL	BDL	136	119	7	8	126	27.2	14.1	84	BDL	BDL	1.7	BDL	BDL	0.26	4.4	2.0
4	River Satluj at D/s Nangal	1018	03.02.20	SW 1164	ZO Lab Ldh	<5	2	BDL	141	122	7	7	140	31.2	15.1	94	BDL	BDL	1.7	BDL	BDL	0.25	4.3	2.0
5	River Satluj at Kiratpur Sahib	1814	02.02.20	SW 1146	ZO Lab Ldh	<5	BDL	BDL	135	121	7	8	118	25.6	13.1	82	BDL	BDL	1.8	BDL	BDL	0.30	4.7	2.7
6	Ropar Head-Works	1019	02.02.20	SW 1149	ZO Lab Ldh	10	4	9	169	149	11	12	140	30.4	15.6	108	BDL	BDL	1.5	BDL	BDL	0.21	8.5	2.6
7	River Satluj D/S of Rishab-Paper Mills	1293	02.02.20	SW 1150	ZO Lab Ldh	<5	9	20	183	163	15	16	142	32	15.1	118	BDL	BDL	1.8	BDL	BDL	0.40	9.2	3.9
8	River Satluj U/S Buddha Nallah	1690	04.02.20	SW 1182	ZO Lab Ldh	<5	14	26	223	194	13	16	188	41.6	20.4	144	BDL	1.1	2.6	1.3	0.08	0.40	8.9	3.1
9	River Satluj at 100 mts D/s after Budha Nallah confluence, Ludhiana	1020	04.02.20	SW 1184	ZO Lab Ldh	72	58	109	341	264	39	30	198	84	-2.9	226	BDL	3.2	2.7	3.9	0.19	0.43	26.4	5.5
10	River Satluj at Boat Bridge, Dharamkot Nakodar Road	1021	05.02.20	SW 1190	ZO Lab Ldh	30	41	52	327	255	32	33	186	40	20.9	232	BDL	3.9	1.4	4.6	1.01	0.24	22.3	5.1
11	River Satluj at D/s East Bein	1381	05.02.20	SW 1191	ZO Lab Ldh	32	43	66	357	292	39	36	192	41.6	21.4	238	BDL	4.0	1.5	4.8	0.34	0.24	25.7	5.6
12	River Satluj at Harike	1022	05.02.20	SW 1192	ZO Lab Ldh	12	10	18	216	183	34	18	132	27.2	15.6	116	BDL	1.4	1.6	1.6	0.17	0.30	25.3	6.6
13	Harike Lake D/S from canal	1382	10.02.2020	SW 61	ZO Lab Jal.	15	42	16	188	155	26	14	116	33	8	102	BDL	0.9	0.8	1.4	0.12	0.16	3.8	3.1
14	D/S Harike lake	1297	10.02.2020	SW 62	ZO Lab Jal.	11	35	22	173	142	24	12	118	34	8	106	BDL	0.8	0.5	1.5	0.13	0.15	3.6	2.9
15	U/S Hussainiwala H/W Ferozepur	1691	11.02.20	SW 1193	ZO Lab Ldh	<5	5	8	136	118	10	12	94	24	8.3	92	BDL	1.1	2.0	1.3	BDL	0.24	8.8	3.6
16	D/S Hussainiwala H/W Ferozepur	1692	11.02.20	SW 1194	ZO Lab Ldh	<5	6	10	140	120	15	12	96	24.8	8.3	96	BDL	1.2	1.7	1.5	BDL	0.20	7.5	3.5

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River Beas

S.N.	Point of Sample Collection	Code	Date of receipt in lab	Lab Sample No.	Sample Collected & Analyzed by	pH	DO mg/l	BOD mg/l	Cond μ S/cm	T. Coli MPN/100ml	F. Coli MPN/100ml	Free Amm. mg/l	SAR	B mg/l	Quality of water as per DBU	Water Quality Index
17	River Beas at Talwara H/W	1693	13.02.2020	SW 85	ZO Lab Jal.	7.6	7.3	1.4	250	110	49	0.008	0.41	BDL	B	S
18	River Beas at U/S Pathankot	1694	13.02.2020	SW 87	ZO Lab Jal.	7.9	7.2	1.4	394	70	26	0.032	0.43	0.15	B	S
19	River Beas at D/S Pathankot	1695	13.02.2020	SW 88	ZO Lab Jal.	7.8	6.8	1.7	390	170	63	0.032	0.25	0.24	B	S
20	River Beas at Mirthal Bridge Gurdaspur (Pb.)	1010	13.02.2020	SW 86	ZO Lab Jal.	7.7	7.2	1.3	380	94	33	0.024	0.46	0.12	B	S
21	River Beas 1 Km D/S effluent discharge point at Mukerian	1294	12.02.2020	SW 79	ZO Lab Jal.	7.6	6.1	1.5	365	350	170	0.018	0.38	0.29	B	S
22	River Beas at Bridge, village Bheate Patan Tehsil Batala Distt. Gurdaspur	4164	12.02.2020	SW 80	ZO Lab Jal.	7.6	7.7	1.2	288	280	140	0.015	0.17	0.20	B	S
23	River Beas at G.T. Road, under Bridge Near Kapurthalla (Pb)	1011	12.02.2020	SW 81	ZO Lab Jal.	7.9	8.5	1.3	300	220	110	0.036	0.18	0.36	B	S
24	River Beas at U/s Goindwal	1696	10.02.2020	SW 58	ZO Lab Jal.	8.1	8.4	1.1	268	240	130	0.033	0.16	0.21	B	S
25	River Beas at D/s Goindwal	1012	10.02.2020	SW 59	ZO Lab Jal.	7.6	8.3	1.2	270	280	170	0.013	0.14	0.25	B	S
26	Beas at Harike	1697	10.02.2020	SW 60	ZO Lab Jal.	7.9	8.2	1.1	280	220	120	0.032	0.16	0.20	B	S

S.N.	Point of Sample Collection	Code	Date of receipt in lab	Lab Sample No.	Sample Collected & Analyzed by	COD mg/l	Turb NTU	TSS mg/l	TDS mg/l	FDS mg/l	Cl mg/l	SO4 Mg/l	TH mg/l	Ca mg/l	Mg mg/l	T.Alkn mg/l	P.Alkn mg/l	AmnN mg/l	NO3-N mg/l	TKN mg/l	PO4as P mg/l	F mg/l	Na mg/l	K mg/l
17	River Beas at Talwara H/W	1693	13.02.2020	SW 85	ZO Lab Jal.	10	22	10	178	148	18	8	86	25	6	122	BDL	BDL	BDL	BDL	BDL	BDL	8.8	2.5
18	River Beas at U/S Pathankot	1694	13.02.2020	SW 87	ZO Lab Jal.	14	26	14	238	194	24	BDL	144	38	12	156	BDL	0.7	0.6	1.2	0.07	0.14	12	2.8
19	River Beas at D/S Pathankot	1695	13.02.2020	SW 88	ZO Lab Jal.	15	25	14	245	198	25	12	130	34	11	141	BDL	0.9	0.6	1.4	0.06	0.12	6.6	2.5
20	River Beas at Mirthal Bridge Gurdaspur (Pb.)	1010	13.02.2020	SW 86	ZO Lab Jal.	14	24	12	231	184	22	9	150	39	13	160	BDL	0.8	0.4	1.1	0.05	0.14	13	2.8
21	River Beas 1 Km D/S effluent discharge point at Mukerian	1294	12.02.2020	SW 79	ZO Lab Jal.	14	27	16	221	180	18	10	122	33	10	140	BDL	0.7	0.5	1.1	0.08	0.15	9.8	4.3
22	River Beas at Bridge, village Bheate Patan Tehsil Batala Distt. Gurdaspur	4164	12.02.2020	SW 80	ZO Lab Jal.	13	32	16	180	145	20	14	127	36	9	129	BDL	0.6	0.6	1.2	0.06	0.16	4.5	2.6
23	River Beas at G.T. Road, under Bridge Near Kapurthalla (Pb)	1011	12.02.2020	SW 81	ZO Lab Jal.	13	36	18	183	156	18	12	120	31	10	118	BDL	0.8	0.5	1.2	0.07	0.17	4.5	2.6
24	River Beas at U/s Goindwal	1696	10.02.2020	SW 58	ZO Lab	11	34	12	159	132	16	BDL	100	25	9	107	BDL	0.5	0.5	1.0	0.05	0.17	3.6	2.4

					Jal.																				
25	River Beas at D/s Goindwal	1012	10.02.2020	SW 59	ZO Lab Jal.	12	34	12	167	136	14	BDL	102	26	9	100	BDL	0.5	0.4	1.1	0.06	0.13	3.2	2.5	
26	Beas at Harike	1697	10.02.2020	SW 60	ZO Lab Jal.	10	38	14	173	140	18	12	104	30	7	103	BDL	0.7	0.8	1.3	0.09	0.15	3.7	2.6	

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Analysis results of Surface water monitoring under NWMP for the month of February, 2020

River Ravi

S.N.	Point of Sample Collection	Code	Date of receipt in lab	Lab Sample No.	Sample Collected & Analyzed by	pH	DO mg/l	BOD mg/l	Cond μ s/Cm	T.Coli MPN/100ml	F Coli MPN/100ml	Free Amm. mg/l	SAR	B mg/l	Quality of water as per DBU	Water Quality Index
27	Ravi at U/s of Madhopur H/W	1097	13.02.2020	SW 84	ZO Lab Jal.	7.9	8.2	1.0	211	70	26	0.023	0.07	BDL	B	S

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27	Ravi at U/s of Madhopur H/W	1097	13.02.2020	SW 84	ZO Lab Jal.	9	20	12	146	125	10	8	82	25	5	92	BDL	0.5	0.4	0.8	BDL	BDL	1.4	2.0

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Analysis results of Surface water monitoring under NWMP for the month of February, 2020

River Ghaggar

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1	Ghaggar at Mubarikpur Rest House	1023	6/2/20	SW 1832	H/o Lab Patiala	7.9	5.3	10	598	21000	2700	0.55	1.64	0.89	D	U
2	Ghaggar at Bhankarpur	1295	6/2/20	SW 1833	H/o Lab Patiala	7.7	4.2	29	808	28000	3200	0.41	1.77	0.92	D	U
3	Ghaggar at Chattbir	1698	6/2/20	SW 1834	H/o Lab Patiala	7.5	4.1	35	870	28000	3800	0.28	1.95	0.86	D	U
4	Ghaggar at U/s Jharmal Nadi	1702	6/2/20	SW 1835	H/o Lab Patiala	7.7	4.4	9	718	22000	2700	0.33	1.86	0.71	D	U
5	Ghaggar at D/s Jharmal Nadi	1701	6/2/20	SW 1836	H/o Lab Patiala	7.6	2.2	26	1122	28000	3300	0.36	2.13	0.86	E	U
6	Ghaggar at U/s Dhakanshu Nallah	1699	6/2/20	SW 1838	H/o Lab Patiala	7.6	3.4	17	1002	17000	2200	0.32	2.08	0.74	E	U
7	Ghaggar at D/s Dhakanshu Nallah	1700	6/2/20	SW 1839	H/o Lab Patiala	7.7	3.0	21	1128	28000	4700	0.40	2.20	0.80	E	U
8	Ghaggar at Rattanheri	1473	10/2/20	SW 1892	H/o Lab Patiala	7.8	1.9	28	962	35000	4900	0.51	2.16	0.87	E	U
9	Ghaggar before mixing with Sagar Para drain (U/s sagar para Drain)	4159	10/2/20	SW 1893	H/o Lab Patiala	7.4	2.0	29	998	35000	4700	0.21	2.24	0.84	E	U
10	Ghaggar after mixing with Sagar Para drain (D/s Sagar Para Drain)	4160	10/2/20	SW 1894	H/o Lab Patiala	7.9	1.4	34	1143	43000	5800	0.49	2.19	0.91	E	U
11	Ghaggar at Khanauri	1024	10/2/20	SW 1897	H/o Lab Patiala	7.8	2.4	28	1088	28000	3800	0.42	2.07	0.78	E	U
12	Ghaggar at Moonak	1703	10/2/20	SW 1899	H/o Lab Patiala	7.8	2.6	26	1008	35000	4700	0.44	2.08	0.81	E	U
13	Ghaggar at U/s Sardulgarh	1705	25/2/20	SW 2015	H/o Lab Patiala	7.9	5.8	14	620	21000	2600	0.44	1.40	0.49	D	U
14	Ghaggar at D/s Sardulgarh	1704	25/2/20	SW 2016	H/o Lab Patiala	7.8	4.2	17	697	24000	3300	0.37	1.54	0.73	D	U

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1	Ghaggar at Mubarikpur Rest House	1023	6/2/20	SW 1832	H/o Lab Patiala	58	10	502	359	305	46	10	154	39	14	263	BDL	12.3	2.8	17.2	2.08	0.80	47	12
2	Ghaggar at Bhankarpur	1295	6/2/20	SW 1833	H/o Lab Patiala	146	29	291	485	412	72	24	279	77	21	268	BDL	13.7	1.7	19.2	1.7	0.9	68	29
3	Ghaggar at Chattbir	1698	6/2/20	SW 1834	H/o Lab Patiala	176	35	298	522	444	79	28	311	81	26	270	BDL	14.2	1.9	19.9	1.4	0.98	79	33
4	Ghaggar at U/s Jharmal Nadi	1702	6/2/20	SW 1835	H/o Lab Patiala	34	9	268	431	366	68	14	217	54	20	253	BDL	11.0	1.0	15.4	1.2	0.7	63	28
5	Ghaggar at D/s Jharmal Nadi	1701	6/2/20	SW 1836	H/o Lab Patiala	104	26	298	675	574	97	50	433	104	42	315	BDL	14.5	2.8	20.3	3.1	1.7	102	48
6	Ghaggar at U/s Dhakanshu Nallah	1699	6/2/20	SW 1838	H/o Lab Patiala	70	17	98	601	511	83	44	379	89	38	292	BDL	12.9	1.6	18.1	1.0	0.9	93	42
7	Ghaggar at D/s Dhakanshu Nallah	1700	6/2/20	SW 1839	H/o Lab Patiala	96	21	104	677	575	100	51	458	104	48	298	BDL	13.4	2.0	18.8	4.9	1.0	108	50
8	Ghaggar at Rattanheri	1473	10/2/20	SW 1892	H/o Lab Patiala	132	28	178	577	490	80	40	357	82	37	280	BDL	14.6	1.4	20.4	2.8	0.75	94	40
9	Ghaggar before mixing with Sagar Para drain (U/s sagar para Drain)	4159	10/2/20	SW 1893	H/o Lab Patiala	136	29	100	599	509	84	43	362	87	35	283	BDL	13.9	1.2	19.5	2.1	0.70	98	46
10	Ghaggar after mixing with Sagar Para drain (D/s Sagar Para Drain)	4160	10/2/20	SW 1894	H/o Lab Patiala	152	34	112	686	583	97	55	459	98	52	299	BDL	10.8	1.7	15.1	3.9	1.0	108	60

11	Ghaggar at Khanauri	1024	10/2/20	SW 1897	H/o Lab Patiala	112	28	108	653	555	95	40	424	94	46	328	BDL	11.9	1.6	16.7	3.5	1.2	98	45
12	Ghaggar at Moonak	1703	10/2/20	SW 1899	H/o Lab Patiala	104	26	117	605	514	84	38	363	79	40	319	BDL	12.6	1.2	17.6	3.8	0.87	91	44
13	Ghaggar at U/s Sardulgarh	1705	25/2/20	SW 2015	H/o Lab Patiala	58	14	97	372	316	40	19	171	42	16	262	BDL	9.7	0.7	13.6	1.0	0.65	42	21
14	Ghaggar at D/s Sardulgarh	1704	25/2/20	SW 2016	H/o Lab Patiala	66	17	113	418	355	47	24	209	49	21	274	BDL	10.6	0.9	14.8	1.2	0.8	51	26

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