

Analysis results of Surface water monitoring under NWMP for the month of April, 2021

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	12.04.21	SW 1969	ZO Lab Ldh	8.2	7.0	<1	260	110	20	BDL	0.17	BDL	B	S
2	River Satluj at D/S NFL	1380	12.04.21	SW 1970	ZO Lab Ldh	9.1	10.2	<1	270	100	20	BDL	0.19	BDL	B	S
3	River Sutej at 100m D/s PACL Nangal	2915	12.04.21	SW 1971	ZO Lab Ldh	9.2	10.1	<1	272	93	18	BDL	0.20	BDL	B	S
4	River Satluj at D/s Nangal	1018	12.04.21	SW 1972	ZO Lab Ldh	8.2	8.9	<1	280	170	45	BDL	0.21	BDL	B	S
5	River Satluj at Kiratpur Sahib	1814	09.04.21	SW 1968	ZO Lab Ldh	8.6	10.0	<1	265	380	130	BDL	0.17	0.11	B	S
6	Ropar Head-Works	1019	09.04.21	SW 1965	ZO Lab Ldh	8.3	8.4	<1	288	930	370	BDL	0.27	0.16	C	S
7	River Satluj D/S of Rishab- Paper Mills	1293	09.04.21	SW 1964	ZO Lab Ldh	8.9	8.2	<1	294	940	460	BDL	0.28	0.31	C	S
8	River Satluj U/S Buddha Nallah	1690	14.04.21	SW 1975	ZO Lab Ldh	8.3	6.7	2.1	337	2600	780	0.110	0.44	0.25	C	S
9	River Satluj at 100 mts D/s after Budha Nallah confluence, Ludhiana	1020	14.04.21	SW 1977	ZO Lab Ldh	7.6	BDL	44	890	23,00,000	11,00,000	0.465	2.28	0.51	E	U
10	River Satluj at Boat Bridge, Dharamkot Nakodar Road	1021	15.04.21	SW 1979	ZO Lab Ldh	6.8	BDL	20	672	4,80,000	1,70,000	BDL	1.69	0.23	E	U
11	River Satluj at D/s East Bein	1381	15.04.21	SW 1980	ZO Lab Ldh	7.0	BDL	24	697	8,40,000	3,10,000	BDL	1.70	0.46	E	U
12	River Satluj at Harike	1022	15.04.21	SW 1981	ZO Lab Ldh	6.9	5.8	6.2	433	5800	1700	BDL	0.93	0.40	D	U
13	Harike Lake D/S from canal	1382	15/04/21	147	ZO Lab, Jal	7.7	5.9	3.8	340	4100	1700	0.039	1.83	0.22	D	U
14	D/S Harike lake	1297	15/04/21	148	ZO Lab, Jal	8.0	7.6	2.7	258	3300	1300	0.055	0.86	0.31	C	S
15	U/S Hussainiwala H/W Ferozepur	1691	15.04.21	SW 1982	ZO Lab Ldh	7.2	6.4	1.8	318	1500	490	0.011	0.78	0.19	C	S
16	D/S Hussainiwala H/W Ferozepur	1692	15.04.21	SW 1983	ZO Lab Ldh	7.0	7.3	2.0	294	1400	460	BDL	0.56	0.38	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)
4. U/s means Upstream , D/s means Downstream

Analysis results of Surface water monitoring under NWMP for the month of April, 2021

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	12.04.21	SW 1969	ZO Lab Ldh	<5	BDL	BDL	146	131	8	6	130	30.4	13.1	94	BDL	BDL	1.4	BDL	BDL	0.22	6.8	1.5
2	River Satluj at D/S NFL	1380	12.04.21	SW 1970	ZO Lab Ldh	<5	BDL	BDL	152	134	9	7	146	33.6	15.1	104	BDL	BDL	1.5	BDL	BDL	0.24	7.2	1.5
3	River Sutej at 100m D/s PACL Nangal	2915	12.04.21	SW 1971	ZO Lab Ldh	<5	BDL	BDL	153	135	9	7	140	32	14.6	102	BDL	BDL	1.6	BDL	BDL	0.23	7.6	1.6
4	River Satluj at D/s Nangal	1018	12.04.21	SW 1972	ZO Lab Ldh	<5	2	BDL	157	137	11	9	134	31.2	13.6	106	BDL	BDL	1.5	BDL	BDL	0.24	8.2	1.4
5	River Satluj at Kiratpur Sahib	1814	09.04.21	SW 1968	ZO Lab Ldh	<5	1	BDL	163	140	14	10	132	30.4	13.6	110	BDL	BDL	1.4	BDL	BDL	0.23	6.9	1.5
6	Ropar Head-Works	1019	09.04.21	SW 1965	ZO Lab Ldh	<5	9	16	165	142	13	9	146	34.4	14.6	112	BDL	BDL	1.6	BDL	BDL	0.24	7.5	1.7
7	River Satluj D/S of Rishab-Paper Mills	1293	09.04.21	SW 1964	ZO Lab Ldh	<5	7	13	191	170	18	12	176	39.2	19.0	132	BDL	BDL	1.5	BDL	BDL	0.24	8.6	1.7
8	River Satluj U/S Buddha Nallah	1690	14.04.21	SW 1975	ZO Lab Ldh	16	16	37	207	179	31	16	158	32.8	18.5	126	BDL	1.1	1.8	1.5	0.64	0.26	12.6	4.9
9	River Satluj at 100 mts D/s after Budha Nallah confluence, Ludhiana	1020	14.04.21	SW 1977	ZO Lab Ldh	207	120	220	548	432	167	34	226	54.4	21.9	230	BDL	18.6	3.5	25.6	6.8	0.46	79	12.2
10	River Satluj at Boat Bridge, Dharamkot Nakodar Road	1021	15.04.21	SW 1979	ZO Lab Ldh	111	75	132	429	346	132	31	186	42.4	19.4	174	BDL	13.6	2.9	18.5	4.5	0.37	53	8.3
11	River Satluj at D/s East Bein	1381	15.04.21	SW 1980	ZO Lab Ldh	126	70	118	421	332	122	34	190	43.2	19.9	186	BDL	12.2	2.9	16.9	4.0	0.35	54	6.7
12	River Satluj at Harike	1022	15.04.21	SW 1981	ZO Lab Ldh	32	28	49	276	227	54	28	148	34.4	15.1	132	BDL	2.7	2.7	3.8	1.8	0.31	26	4.8
13	Harike Lake D/S from canal	1382	15/04/21	147	ZO Lab, Jal	24	11	BDL	239	185	50	38	100	30	6	88	BDL	1.3	5.6	2.9	0.10	0.21	42	4.0
14	D/S Harike lake	1297	15/04/21	148	ZO Lab, Jal	20	12	BDL	184	150	26	20	94	29	5	102	BDL	1.1	2.5	2.2	0.08	0.19	19	3.5
15	U/S Hussainiwala H/W Ferozepur	1691	15.04.21	SW 1982	ZO Lab Ldh	14	16	24	192	169	21	15	138	29.6	15.6	120	BDL	1.1	1.7	1.5	0.54	0.26	21	2.8
16	D/S Hussainiwala H/W Ferozepur	1692	15.04.21	SW 1983	ZO Lab Ldh	16	18	29	187	167	23	14	136	30.4	14.6	122	BDL	1.2	1.8	1.6	0.59	0.24	15	3.0

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)

4. U/s means Upstream , D/s means Downstream

Analysis results of Surface water monitoring under NWMP for the month of April, 2021 (Metal/Pesticides)

River Satluj

S.N.	Point of Sample Collection	Code	Date of receipt in lab	Lab Sample No.	T.Cr (mg/l)	Fe (mg/l)	Ni (mg/l)	Zn (mg/l)	Pb (mg/l)	Cd (mg/l)	Cu (mg/l)	Hg (mg/l)	As (mg/l)
1	River Satluj at U/S Nangal	1017	12.04.21	SW 1969	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
2	River Satluj at D/S NFL	1380	12.04.21	SW 1970	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
3	River Sutej at 100m D/s PACL Nangal	2915	12.04.21	SW 1971	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
4	River Satluj at D/s Nangal	1018	12.04.21	SW 1972	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
5	River Satluj at Kiratpur Sahib	1814	09.04.21	SW 1968	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
6	Ropar Head-Works	1019	09.04.21	SW 1965	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
7	River Satluj D/S of Rishab-Paper Mills	1293	09.04.21	SW 1964	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
8	River Satluj U/S Buddha Nallah	1690	14.04.21	SW 1975	BDL	BDL	BDL	0.04	BDL	BDL	BDL	BDL	BDL
9	River Satluj at 100 mts D/s after Budha Nallah confluence, Ludhiana	1020	14.04.21	SW 1977	BDL	1.27	BDL	0.06	BDL	BDL	BDL	BDL	BDL
10	River Satluj at Boat Bridge, Dharamkot Nakodar Road	1021	15.04.21	SW 1979	BDL	0.54	BDL	0.03	BDL	BDL	BDL	BDL	BDL
11	River Satluj at D/s East Bein	1381	15.04.21	SW 1980	BDL	0.36	BDL	BDL	BDL	BDL	BDL	BDL	BDL
12	River Satluj at Harike	1022	15.04.21	SW 1981	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
13	Harike Lake D/S from canal	1382	15/04/21	SW 147	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
14	D/S Harike lake	1297	15/04/21	SW 148	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
15	U/S Hussainiwala H/W Ferozepur	1691	15.04.21	SW 1982	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
16	D/S Hussainiwala H/W Ferozepur	1692	15.04.21	SW 1983	BDL	BDL	BDL	0.03	BDL	BDL	BDL	BDL	BDL

Note. 1. BDL means Below Method Detection Limit

2. Pesticides i.e. Alpha HCH, Beta HCH, Gama HCH, Anilophos, Chloropyrifos, 4,4' DDT, Endosulphan-1, Endosulphan-2, Dieldrin, Aldrin, Methyl Parathion & Malathion were BDL

Analysis results of Surface water monitoring under NWMP for the month of April, 2021

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	07/04/21	SW 131	ZO Lab, Jal	8.1	7.6	1.2	236	140	61	0.046	0.57	BDL	B	S
18	River Beas at U/S Pathankot	1694	07/04/21	SW 133	ZO Lab, Jal	7.5	7.4	1.5	241	430	68	0.016	0.47	0.29	B	S
19	River Beas at D/S Pathankot	1695	07/04/21	SW 134	ZO Lab, Jal	8.0	7.1	1.7	217	460	78	0.030	0.24	0.36	B	S
20	River Beas at Mirthal Bridge Gurdaspur (Pb.)	1010	07/04/21	SW 132	ZO Lab, Jal	8.2	7.7	1.6	254	170	92	0.072	0.66	0.14	B	S
21	River Beas 1 Km D/S effluent discharge point at Mukerian	1294	09/04/21	SW 137	ZO Lab, Jal	8.2	7.4	1.8	229	480	120	0.080	0.36	0.40	B	S
22	River Beas at Bridge, village Bheate Patan Tehsil Batala Distt. Gurdaspur	4164	09/04/21	SW 138	ZO Lab, Jal	7.7	7.5	1.5	230	460	110	0.024	0.31	0.14	B	S
23	River Beas at G.T. Road, under Bridge Near Kapurthalla (Pb)	1011	09/04/21	SW 139	ZO Lab, Jal	7.9	7.5	1.7	242	840	210	0.041	0.38	0.19	C	S
24	River Beas at U/s Goindwal	1696	15/04/21	SW 144	ZO Lab, Jal	7.9	7.5	1.3	235	460	110	0.018	0.28	0.09	B	S
25	River Beas at D/s Goindwal	1012	15/04/21	SW 145	ZO Lab, Jal	8.2	7.4	1.4	229	480	140	0.040	0.26	0.14	B	S
26	Beas at Harike	1697	15/04/21	SW 146	ZO Lab, Jal	8.0	8.1	1.4	210	490	93	0.040	0.30	0.19	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	07/04/21	SW 131	ZO Lab Jal.	14	13	BDL	144	120	14	12	84	29	3	75	BDL	0.7	0.8	BDL	0.06	0.11	12	2.6
18	River Beas at U/S Pathankot	1694	07/04/21	SW 133	ZO Lab Jal.	15	27	BDL	154	129	16	14	85	28	4	88	BDL	0.8	1.1	BDL	0.05	0.14	10	2.4
19	River Beas at D/S Pathankot	1695	07/04/21	SW 134	ZO Lab Jal.	17	39	10	135	104	15	17	80	26	4	79	BDL	0.6	1.0	BDL	0.07	0.18	4.9	2.0
20	River Beas at Mirthal Bridge Gurdaspur (Pb.)	1010	07/04/21	SW 132	ZO Lab Jal.	17	18	BDL	158	127	16	12	82	29	3	90	BDL	0.9	1.1	BDL	0.05	0.16	14	2.5
21	River Beas 1 Km D/S effluent discharge point at Mukerian	1294	09/04/21	SW 137	ZO Lab, Jal	16	14	BDL	148	125	16	18	85	29	3	94	BDL	1.0	1.8	1.6	0.09	0.16	7.7	2.5
22	River Beas at Bridge, village Bheate Patan Tehsil Batala Distt. Gurdaspur	4164	09/04/21	SW 138	ZO Lab, Jal	15	17	BDL	152	129	15	12	87	30	3	92	BDL	0.8	1.4	1.5	0.07	0.12	6.6	2.3
23	River Beas at G.T. Road, under Bridge Near Kapurthalla (Pb)	1011	09/04/21	SW 139	ZO Lab, Jal	14	8	BDL	159	133	17	16	90	29	4	98	BDL	0.9	1.2	1.6	0.09	0.17	8.2	2.6
24	River Beas at U/s Goindwal	1696	15/04/21	SW 144	ZO Lab, Jal	12	11	BDL	136	109	12	10	89	28	5	86	BDL	0.4	0.9	BDL	0.05	0.10	6.2	2.5
25	River Beas at D/s Goindwal	1012	15/04/21	SW 145	ZO Lab, Jal	14	6	BDL	142	115	13	10	93	30	4	94	BDL	0.5	0.9	BDL	0.07	0.11	5.8	2.4
26	Beas at Harike	1697	15/04/21	SW 146	ZO Lab, Jal	13	8	BDL	138	110	14	11	92	29	5	90	BDL	0.8	1.0	1.5	0.07	0.11	6.6	2.4

Note. 1. BDL means Below Method Detection Limit

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Analysis results of Surface water monitoring under NWMP for the month of April, 2021 (Metal/Pesticides)

River Beas

S.N.	Point of Sample Collection	Code	Date of receipt in lab	Lab Sample No.	Sample Collected & Analyzed by	T.Cr mg/l	Ni mg/l	Fe mg/l	Zn mg/l	Cu mg/l	Pb mg/l	Cd mg/l	As mg/l	Hg mg/l
1	River Beas at Talwara H/W	1693	07/04/21	SW 131	ZO Lab Jal.	BDL	BDL	BDL	0.01	BDL	BDL	BDL	BDL	BDL
2	River Beas at U/S Pathankot	1694	07/04/21	SW 133	ZO Lab Jal.	BDL	BDL	BDL	0.02	BDL	BDL	BDL	BDL	BDL
3	River Beas at D/S Pathankot	1695	07/04/21	SW 134	ZO Lab Jal.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
4	River Beas at Mirthal Bridge Gurdaspur (Pb.)	1010	07/04/21	SW 132	ZO Lab Jal.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
5	River Beas 1 Km D/S effluent discharge point at Mukerian	1294	09/04/21	SW 137	ZO Lab Jal.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
6	River Beas at Bridge, village Bheate Patan Tehsil Batala Distt. Gurdaspur	4164	09/04/21	SW 138	ZO Lab Jal.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
7	River Beas at G.T. Road, under Bridge Near Kapurthalla (Pb)	1011	09/04/21	SW 139	ZO Lab Jal.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
8	River Beas at U/s Goindwal	1696	15/04/21	SW 144	ZO Lab Jal.	BDL	BDL	BDL	0.03	BDL	BDL	BDL	BDL	BDL
9	River Beas at D/s Goindwal	1012	15/04/21	SW 145	ZO Lab Jal.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
10	Beas at Harike	1697	15/04/21	SW 146	ZO Lab Jal.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

Note. 1. BDL means Below Method Detection Limit

2. Pesticides i.e. Alpha HCH, Beta HCH, Gama HCH, Anilophos, Chloropyrifos, 4,4' DDT, OP-DDT, Endosulphan-1, Endosulphan-2, Dieldrin, Aldrin, Methyl Parathion & Malathion were BDL.

Analysis results of Surface water monitoring under NWMP for the month of April, 2021

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	07/04/21	130	ZO Lab, Jal	8.2	7.9	1.1	245	110	45	0.040	0.74	BDL	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	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
27	Ravi at U/s of Madhopur H/W	1097	07/04/21	130	ZO Lab Jal.	12	11	BDL	149	122	12	7	85	30	3	71	BDL	0.5	0.6	BDL	BDL	BDL	16	2.8

Note. 1. BDL means Below Method Detection Limit

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3. Water Quality Index (S means Satisfactory, U means Unsatisfactory)

4. U/s means Upstream , D/s means Downstream

Analysis results of Surface water monitoring under NWMP for the month of April, 2021 (Metal/Pesticides)

S.N.	Point of Sample Collection	Code	Date of receipt in lab	Lab Code	T.Cr mg/l	Ni mg/l	Fe mg/l	Zn mg/l	Cu mg/l	Pb mg/l	Cd mg/l	As mg/l	Hg mg/l
1	Ravi at U/s of Madhopur H/W	1097	07/04/21	130	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

Note. 1. BDL means Below Method Detection Limit

2. Pesticides i.e. Alpha HCH, Beta HCH, Gama HCH, Anilophos, Chloropyrifos, 4,4' DDT, OP-DDT, Endosulphan-1, Endosulphan-2, Dieldrin, Aldrin, Methyl Parathion & Malathion were BDL.

Analysis results of Surface water monitoring under NWMP for the month of April, 2021

River Ghaggar

S.N.	Point of Sample Collection	Code	Lab Sample No.	Date of receipt in lab	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	Ghaggar at Mubarikpur Rest House	1023	SW 3976	6/4/21	H/o Lab Patiala	7.7	5.2	24	728	24000	4100	0.27	1.94	0.38	D	U
2	Ghaggar at Bhankarpur	1295	SW 3977	6/4/21	H/o Lab Patiala	7.5	3.8	33	794	28000	4600	0.27	2.27	0.51	E	U
3	Ghaggar at Chattbir	1698	SW 3978	6/4/21	H/o Lab Patiala	7.5	3.6	30	752	28000	4300	0.24	2.21	0.30	E	U
4	Ghaggar at U/s Jharmal Nadi	1702	SW 3979	6/4/21	H/o Lab Patiala	7.3	3.7	13	578	22000	2700	0.10	1.87	0.34	E	U
5	Ghaggar at D/s Jharmal Nadi	1701	SW 3980	6/4/21	H/o Lab Patiala	7.6	3.4	16	707	28000	3400	0.26	0.77	0.64	E	U
6	Ghaggar at U/s Dhakanshu Nallah	1699	SW 3982	6/4/21	H/o Lab Patiala	7.8	3.4	14	672	22000	2600	0.33	1.87	0.64	E	U
7	Ghaggar at D/s Dhakanshu Nallah	1700	SW 3983	6/4/21	H/o Lab Patiala	7.7	3.2	18	760	28000	4000	0.32	1.97	0.72	E	U
8	Ghaggar at Rattanheri	1473	SW 3993	12/4/21	H/o Lab Patiala	7.6	1.2	39	1098	35000	4600	0.34	2.72	0.80	E	U
9	Ghaggar before mixing with Sagar Para drain (U/s sagar para Drain)	4159	SW 3994	12/4/21	H/o Lab Patiala	7.8	1.8	38	1065	35000	4300	0.47	2.67	0.91	E	U
10	Ghaggar after mixing with Sagar Para drain (D/s Sagar Para Drain)	4160	SW 3995	12/4/21	H/o Lab Patiala	7.8	1.4	41	1148	35000	4700	0.45	2.72	1.00	E	U
11	Ghaggar at Khanauri	1024	SW 3998	12/4/21	H/o Lab Patiala	7.8	1.9	31	883	28000	3900	0.43	2.52	1.31	E	U
12	Ghaggar at Moonak	1703	SW 4000	12/4/21	H/o Lab Patiala	7.8	2.0	35	992	35000	4700	0.45	2.46	0.64	E	U
13	Ghaggar at U/s Sardulgarh	1705	SW 4064	22/4/21	H/o Lab Patiala	7.5	5.9	9	512	14000	2100	0.16	1.23	0.39	D	U
14	Ghaggar at D/s Sardulgarh	1704	SW 4065	22/4/21	H/o Lab Patiala	7.5	4.6	11	640	21000	2700	0.18	1.80	0.45	D	U

S.N.	Point of Sample Collection	Code	Date of receipt in lab	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
1	Ghaggar at Mubarikpur Rest House	1023	6/4/21	H/o Lab Patiala	123	490	453	473	408	59	37	254	57	27	247	BDL	9.1	1.7	12.7	1.4	1.3	71	40
2	Ghaggar at Bhankarpur	1295	6/4/21	H/o Lab Patiala	167	470	334	516	439	70	35	292	69	29	251	BDL	13.7	1.4	19.2	2.7	1.3	89	41
3	Ghaggar at Chattbir	1698	6/4/21	H/o Lab Patiala	160	130	187	488	416	68	31	280	66	28	236	BDL	12.2	1.3	17.1	2.2	1.2	85	34
4	Ghaggar at U/s Jharmal Nadi	1702	6/4/21	H/o Lab Patiala	60	45	102	314	321	51	18	176	39	19	214	BDL	9.6	1.0	13.4	2.0	1.0	57	29
5	Ghaggar at D/s Jharmal Nadi	1701	6/4/21	H/o Lab Patiala	79	70	111	462	394	62	26	256	51	31	239	BDL	10.2	1.1	14.3	2.1	1.2	69	33
6	Ghaggar at U/s Dhakanshu Nallah	1699	6/4/21	H/o Lab Patiala	70	25	49	439	376	53	24	222	46	26	234	BDL	9.3	1.1	13.0	1.6	1.1	64	32
7	Ghaggar at D/s Dhakanshu Nallah	1700	6/4/21	H/o Lab Patiala	86	30	81	492	419	64	31	281	58	33	253	BDL	10.7	1.3	15.0	1.9	1.3	76	40
8	Ghaggar at Rattanheri	1473	12/4/21	H/o Lab Patiala	192	60	124	715	610	97	46	495	96	62	277	BDL	13.7	2.7	19.2	3.1	1.4	139	68
9	Ghaggar before mixing with Sagar Para drain (U/s sagar para Drain)	4159	12/4/21	H/o Lab Patiala	186	55	119	693	590	96	43	476	93	59	272	BDL	13.4	2.9	18.8	3.0	1.4	134	64
10	Ghaggar after mixing with Sagar Para drain (D/s Sagar Para Drain)	4160	12/4/21	H/o Lab Patiala	198	60	128	746	634	100	54	524	99	67	284	BDL	12.8	3.2	17.9	3.2	1.6	143	72
11	Ghaggar at Khanauri	1024	12/4/21	H/o Lab Patiala	148	50	78	577	492	77	34	354	74	41	255	BDL	12.3	2.3	17.2	1.8	1.2	109	50
12	Ghaggar at Moonak	1703	12/4/21	H/o Lab Patiala	174	40	74	648	553	90	45	434	88	52	265	BDL	12.9	2.9	18.1	2.0	1.3	118	54
13	Ghaggar at U/s Sardulgarh	1705	22/4/21	H/o Lab Patiala	41	15	29	334	285	35	24	171	34	21	210	BDL	8.1	2.3	11.3	1.4	1.0	37	23
14	Ghaggar at D/s Sardulgarh	1704	22/4/21	H/o Lab Patiala	56	20	42	415	354	48	29	225	47	26	228	BDL	8.8	2.6	12.3	1.4	1.1	62	31

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)

Analysis results of Surface water monitoring under NWMP for the month of April, 2021 (Metal/Pesticides)

S.N.	Point of Sample Collection	Code	Date of receipt in lab	Lab Code	T.Cr mg/l	Ni mg/l	Fe mg/l	Zn mg/l	Cu mg/l	Pb mg/l	Cd mg/l	As mg/l	Hg mg/l
1	Ghaggar at Mubarikpur Rest House	1023	6/4/21	SW 3976	BDL	BDL	4.15	0.34	BDL	BDL	BDL	BDL	BDL
2	Ghaggar at Bhankarpur	1295	6/4/21	SW 3977	BDL	BDL	6.31	0.54	BDL	BDL	BDL	BDL	BDL
3	Ghaggar at Chhattbir	1698	6/4/21	SW 3978	BDL	BDL	5.70	0.33	BDL	BDL	BDL	BDL	BDL
4	Ghaggar at U/s Jharmal Nadi	1702	6/4/21	SW 3979	BDL	BDL	5.12	0.30	BDL	BDL	BDL	BDL	BDL
5	Ghaggar at D/s Jharmal Nadi	1701	6/4/21	SW 3980	BDL	BDL	6.01	0.29	BDL	BDL	BDL	BDL	BDL
6	Ghaggar at U/s Dhakanshu Nallah	1699	6/4/21	SW 3982	BDL	BDL	6.9	0.37	BDL	BDL	BDL	BDL	BDL
7	Ghaggar at D/s Dhakanshu Nallah	1700	6/4/21	SW 3983	BDL	BDL	7.26	0.69	BDL	BDL	BDL	BDL	BDL
8	Ghaggar at Rattanheri	1473	12/4/21	SW 3993	BDL	BDL	0.61	0.42	BDL	BDL	BDL	BDL	BDL
9	Ghaggar before mixing with Sagar Para drain (U/s sagar para Drain)	4159	12/4/21	SW 3994	BDL	BDL	0.59	0.36	BDL	BDL	BDL	BDL	BDL
10	Ghaggar after mixing with Sagar Para drain (D/s Sagar Para Drain)	4160	12/4/21	SW 3995	BDL	BDL	0.67	0.52	BDL	BDL	BDL	BDL	BDL
11	Ghaggar at Khanauri	1024	12/4/21	SW 3998	BDL	BDL	0.75	0.35	BDL	BDL	BDL	BDL	BDL
12	Ghaggar at Moonak	1703	12/4/21	SW 4000	BDL	BDL	0.76	0.37	BDL	BDL	BDL	BDL	BDL
13	Ghaggar at U/s Sardulgarh	1705	22/4/21	SW 4064	BDL	BDL	0.58	0.25	BDL	BDL	BDL	BDL	BDL
14	Ghaggar at D/s Sardulgarh	1704	22/4/21	SW 4065	BDL	BDL	0.64	0.34	BDL	BDL	BDL	BDL	BDL

Note. 1. BDL means Below Method Detection Limit

2. Pesticides i.e. Alpha HCH, Beta HCH, Gama HCH, Anilophos, Chloropyrifos, 4,4' DDT, OP-DDT, Endosulphan-1, Endosulphan-2, Dieldrin, Aldrin, Methyl Parathion & Malathion were BDL.

Analysis results of Surface water monitoring under NWMP for the month of April, 2021

Drains

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	FColi MPN/100ml	Free Amm. mg/l	SAR	B mg/l	Water quality as per DBU	Water Quality Index
1	Dhanula Drain falling into Lasara drain, Near village, Ghunas Punjab	2906	23/4/21	4091	H.O. Lab Patiala	7.6	BDL	161	4696	430000	110000	0.19	7.00	0.64	E	U
2	Tallewal Drain along with Lohgarh –Jalwana Link road near Shri Krishna rice mill Punjab	2909	23/4/21	4092	H.O. Lab Patiala	7.3	BDL	113	2585	170000	46000	0.21	3.00	0.57	E	U
3	Point Source B/N	2914	14.04.21	SW 1976	ZO Lab Ldh	7.5	BDL	175	1974	39,00,000	13,00,000	0.724	5.41	0.59	E	U
4	Kali Bein into Beas	2913	16/04/21	155	ZO Lab, Jal	7.0	2.8	5.8	342	4600	1400	0.001	1.45	0.64	E	U
5	Outfall of Nag Kalan drain into Tung Dhab drain at Majitha road, Amritsar	4163	Sample was not collected													
6	Tungdab drain at fatehgarh churian, Amritsar	2910	15/04/21	149	ZO Lab, Jal	7.1	BDL	295	2080	1100000	790000	0.016	9.79	0.41	E	U
7	Hundiara drain before entering Pakistan	2907	15/04/21	150	ZO Lab, Jal	8.0	BDL	196	1320	790000	330000	0.950	7.55	0.58	E	U
8	Pathlawa Drain	2911	Sample was not collected													
9	Ranjit Sagar Reservoir	2912	07/04/21	129	Z.O. Lab Jalandhar	7.9	8.0	BDL (<1)	234	110	40	0.027	0.77	BDL	B	S
	Outlet Of Nadiala Drain into Dhakanshu Nallah, Punjab	2908	6/4/21	3981	H.O. Lab Patiala	7.9	BDL	38	1070	280000	46000	0.30	2.05	1.21	E	U
11	Sagar Para Drain at village sagra dist.Patiala	4158	12/4/21	3996	H.O. Lab Patiala	7.7	1.0	41	1183	46000	6100	0.26	2.69	0.58	E	U
12	Confluence point of sukhana Choe with River Ghaggar,vill.Mubarkpur	4162	6/4/21	3988	H.O. Lab Patiala	7.4	1.7	64	1275	280000	84000	0.27	3.04	0.48	E	U
13	Confluence point of Sarsa Nadi with river Satluj	4161	09.04.21	SW 1966	ZO Lab Ldh	8.6	10.3	<1	396	580	110	BDL	0.65	0.18	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)

4. U/s means Upstream , D/s means Downstream

Analysis results of Surface water monitoring under NWMP for the month of April, 2021

Drains

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.Alk n mg/l	p.Alkn mg/l	Amn-N 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	Dhanula Drain falling into Lasara drain, Near village, Ghunas Punjab	2906	23/4/21	4091	H.O. Lab Patiala	688	170	312	3053	2597	768	259	1641	324	202	923	BDL	7.4	5.7	10.4	6.4	3.4	652	199
2	Tallewal Drain along with Lohgarh –Jalwana Link road near Shri Krishna rice mill Punjab	2909	23/4/21	4092	H.O. Lab Patiala	482	80	204	1680	1428	248	117	1465	278	187	413	BDL	21.4	4.8	30.0	5.3	2.7	264	287
3	Point Source B/N	2914	14.04.21	SW 1976	ZO Lab Ldh	610	180	540	1165	883	396	61	342	80.8	34.0	442	BDL	36.2	5.4	48.4	12.6	0.94	230	27
4	Kali Bein into Beas	2913	16/04/21	155	ZO Lab, Jal	28	29	13	213	168	37	26	94	27	6	100	BDL	1.0	2.3	1.9	0.17	0.20	32	12
5	Outfall of Nag Kalan drain into Tung Dhab drain at Majitha road, Amritsar	4163	Sample was not collected																					
6	Tungdab drain at fatehgarh churian, Amritsar	2910	15/04/21	149	Z.O. Lab Jalandhar	494	456	124	1215	840	210	118	271	79	18	644	BDL	31	3.7	56	3.9	0.71	371	22
7	Hundiara drain before entering Pakistan	2907	15/04/21	150	Z.O. Lab Jalandhar	268	315	56	890	605	146	94	197	52	16	420	BDL	19	2.6	28	2.3	0.42	243	38
8	Pathlawa Drain	2911	Drain was found dried, hence sample could not be collected																					
9	Ranjit Sagar Reservoir	2912	07/04/21	129	Z.O. Lab Jalandhar	BDL	7	BDL	135	108	10	8	84	28	3	76	BDL	0.6	0.7	BDL	BDL	BDL	16	2.6
10	Outlet Of Nadiala Drain into Dhakanshu Nallah, Punjab	2908	6/4/21	3981	H.O. Lab Patiala	175	25	67	698	594	119	51	527	112	60	249	BDL	6.7	1.3	9.4	3.8	1.4	108	64
11	Sagar Para Drain at village sagra dist.Patiala	4158	12/4/21	3996	H.O. Lab Patiala	194	20	62	770	655	104	55	557	106	71	291	BDL	8.7	2.6	12.2	3.1	1.4	146	74
12	Confluence point of sukhana Choe with River Ghaggar, vill.Mubarkpur	4162	6/4/21	3988	H.O. Lab Patiala	286	90	157	829	706	128	66	606	124	72	296	BDL	18.1	3.6	25.3	3.6	2.0	172	49
13	Confluence point of Sarsa Nadi with river Satluj	4161	09.04.21	SW 1966	ZO Lab Ldh	<5	7	BDL	224	194	15	11	184	41.6	19.4	130	BDL	BDL	1.5	BDL	BDL	0.26	20.3	4.1

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)

4. U/s means Upstream , D/s means Downstream

Analysis results of Surface water monitoring under NWMP for the month of April, 2021 (Metal/Pesticides)

S.N.	Point of Sample Collection	Code	Date of receipt in lab	Lab Code	Fe mg/l	Zn mg/l	T.Cr mg/l	Ni mg/l	Cu mg/l	Pb mg/l	Cd mg/l	As mg/l	Hg mg/l
1	Dhanula Drain falling into Lasara drain, Near village, Ghunas Punjab	2906	23/4/21	SW 4091	BDL	BDL	7.22	0.55	BDL	BDL	BDL	BDL	BDL
2	Tallewal Drain along with Lohgarh – Jalwana Link road near Shri Krishna rice mill Punjab	2909	23/4/21	SW 4092	BDL	BDL	4.12	0.29	BDL	BDL	BDL	BDL	BDL
3	Point Source B/N	2914	14.04.21	SW 1976	5.84	0.26	BDL	BDL	BDL	BDL	BDL	BDL	BDL
4	Kali Bein into Beas	2913	16/04/21	SW 155	BDL	0.04	BDL	BDL	BDL	BDL	BDL	BDL	BDL
5	Outfall of Nag Kalan drain into Tung Dhab drain at Majitha road, Amritsar	4163	Sample was not collected										
6	Tungdab drain at fatehgarh churian, Amritsar	2910	15/04/21	SW 149	4.26	1.43	BDL	BDL	0.32	0.17	BDL	BDL	BDL
7	Hundiara drain before entering Pakistan	2907	15/04/21	SW 150	0.21	0.45	BDL	BDL	0.07	BDL	BDL	BDL	BDL
8	Pathlawa Drain	2911	Sample was not collected										
9	Ranjit Sagar Reservoir	2912	07/04/21	SW 129	BDL	0.04	BDL	BDL	BDL	BDL	BDL	BDL	BDL
10	Outlet Of Nadiala Drain into Dhakanshu Nallah, Punjab	2908	6/4/21	SW 3981	BDL	BDL	7.18	0.38	BDL	BDL	BDL	BDL	BDL
11	Sagar Para Drain at village sagra dist.Patiala	4158	12/4/21	SW 3996	BDL	BDL	0.70	0.39	BDL	BDL	BDL	BDL	BDL
12	Confluence point of sukhana Choe with River Ghaggar,vill.Mubarkpur	4162	6/4/21	SW 3988	BDL	BDL	7.25	0.74	BDL	BDL	BDL	BDL	BDL
13	Confluence point of Sarsa Nadi with river Satluj	4161	09.04.21	SW 1966	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

Note. 1. BDL means Below Method Detection Limit

2. Pesticides i.e. Alpha HCH, Beta HCH, Gama HCH, Anilophos, Chloropyrifos, 4,4' DDT, OP-DDT, Endosulphan-1, Endosulphan-2, Dieldrin, Aldrin, Methyl Parathion & Malathion were BDL.