

Analysis results of Surface water monitoring under NWMP for the month of April, 2024

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 µs/Cm	T.Coli MPN/ 100ml	F. Coli MPN/ 100ml	Free Amm. mg/l	SAR	B mg/l	Quality of water as per DBU
1	River Satluj at U/S Nangal	1017	09.04.24	SW 1	ZO Lab Ldh	7.7	8.7	BDL	268	110	33	BDL	0.27	BDL	B
2	River Satluj at D/S NFL	1380	09.04.24	SW 2	ZO Lab Ldh	8.0	9.2	BDL	382	94	32	BDL	0.35	BDL	B
3	River Sutej at 100m D/s PACL Nangal	2915	09.04.24	SW 3	ZO Lab Ldh	8.0	9.2	BDL	375	84	31	BDL	0.34	BDL	B
4	River Satluj at D/s Nangal	1018	09.04.24	SW 4	ZO Lab Ldh	8.5	9.9	BDL	284	94	32	BDL	0.32	0.15	B
5	River Satluj at Kiratpur Sahib	1814	10.04.24	SW 7	ZO Lab Ldh	7.6	9.4	BDL	254	280	70	BDL	0.27	0.17	B
6	Ropar Head-Works	1019	10.04.24	SW 10	ZO Lab Ldh	7.9	7.8	BDL	275	540	220	BDL	0.39	0.31	C
7	River Satluj D/S of Rishab- Paper Mills	1293	10.04.24	SW 11	ZO Lab Ldh	7.7	6.8	BDL	485	700	220	BDL	0.37	0.39	C
8	River Satluj U/S Buddha Nallah	1690	12.04.24	SW 15	ZO Lab Ldh	8.0	8.2	2.9	403	1100	460	0.224	1.22	0.91	C
9	River Satluj at 100 mts D/s after Budha Nallah confluence, Ludhiana	1020	12.04.24	SW 17	ZO Lab Ldh	7.4	BDL	60	1026	11,00,000	79,000	0.126	4.88	0.34	E
10	River Satluj at Boat Bridge, Dharamkot Nakodar Road	1021	15.04.24	SW 19	ZO Lab Ldh	7.5	3.5	16	598	94,000	22,000	0.066	2.67	0.33	E
11	River Satluj at D/s East Bein	1381	15.04.24	SW 20	ZO Lab Ldh	7.5	3.0	18	623	94,000	49,000	0.090	2.88	0.28	E
12	River Satluj at Harike	1022	15.04.24	SW 21	ZO Lab Ldh	7.6	7.5	2.9	338	3300	1700	0.062	0.93	0.21	C
13	Harike Lake D/S from canal	1382	Stagnation observed, sample could not be collected												
14	D/S Harike lake	1297	No flow observed, hence sample could not be collected												
15	U/S Hussainiwala H/W Ferozepur	1691	15.04.24	SW 22	ZO Lab Ldh	8.2	9.8	BDL	283	920	220	BDL	0.70	0.17	C
16	D/S Hussainiwala H/W Ferozepur	1692	15.04.24	SW 23	ZO Lab Ldh	8.2	9.7	BDL	284	920	170	BDL	0.69	0.25	C

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, 2024

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	NO3-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	09.04.24	SW 1	ZO Lab Ldh	BDL	3	BDL	193	174	7	52	118	31.2	9.7	78	BDL	BDL	2.2	BDL	BDL	0.19	6.8	2.6
2	River Satluj at D/S NFL	1380	09.04.24	SW 2	ZO Lab Ldh	BDL	5	BDL	278	236	12	59	164	44	13.1	118	BDL	BDL	2.7	BDL	BDL	0.21	10.4	3.6
3	River Sutej at 100m D/s PACL Nangal	2915	09.04.24	SW 3	ZO Lab Ldh	BDL	4	BDL	283	238	12	60	172	45.6	14.1	122	BDL	BDL	2.7	BDL	BDL	0.21	10.3	3.5
4	River Satluj atD/s Nangal	1018	09.04.24	SW 4	ZO Lab Ldh	BDL	6	BDL	211	184	12	57	128	33.6	10.7	94	BDL	BDL	3.2	BDL	BDL	0.20	8.4	3.1
5	River Satluj at Kiratpur Sahib	1814	10.04.24	SW 7	ZO Lab Ldh	BDL	5	BDL	186	167	10	49	116	30.4	9.7	86	BDL	BDL	2.3	BDL	BDL	0.22	6.8	2.8
6	Ropar Head-Works	1019	10.04.24	SW 10	ZO Lab Ldh	12	28	BDL	209	184	14	46	128	34.4	10.2	96	BDL	BDL	2.4	BDL	BDL	0.24	10.1	3.1
7	River Satluj D/S of Rishab-Paper Mills	1293	10.04.24	SW 11	ZO Lab Ldh	10	30	BDL	386	334	84	52	184	49.6	14.6	146	BDL	BDL	2.8	BDL	BDL	0.26	11.6	3.6
8	River Satluj U/S Buddha Nallah	1690	12.04.24	SW 15	ZO Lab Ldh	28	45	49	288	254	37	57	144	38.4	11.7	134	BDL	2.8	4.7	3.9	0.3	0.26	33.6	6.2
9	River Satluj at 100 mts D/s after Budha Nallah confluence, Ludhiana	1020	12.04.24	SW 17	ZO Lab Ldh	206	130	154	758	612	192	86	232	61.6	19.0	276	BDL	8.4	4.8	11.8	1.3	0.31	171	19.2
10	River Satluj at Boat Bridge, Dharamkot Nakodar Road	1021	15.04.24	SW 19	ZO Lab Ldh	88	60	57	441	374	94	70	172	45.6	14.1	164	BDL	3.3	4.0	4.5	0.6	0.29	80	10.4
11	River Satluj at D/s East Bein	1381	15.04.24	SW 20	ZO Lab Ldh	96	70	80	460	376	96	67	176	47.2	14.1	184	BDL	4.5	3.6	7.0	1.0	0.33	88	12.1
12	River Satluj at Harike	1022	15.04.24	SW 21	ZO Lab Ldh	28	50	36	247	221	32	37	126	33.6	10.2	114	BDL	2.5	3.1	3.5	0.5	0.22	24	5.9
13	Harike Lake D/S from canal	1382	Stagnation observed, sample could not be collected																					
14	D/S Harike lake	1297	No flow observed, hence sample could not be collected																					
15	U/S Hussainiwala H/W Ferozepur	1691	15.04.24	SW 22	ZO Lab Ldh	BDL	30	18	207	184	22	35	112	30.4	8.7	108	BDL	BDL	3.0	BDL	0.2	0.21	17	5.4
16	D/S Hussainiwala H/W Ferozepur	1692	15.04.24	SW 23	ZO Lab Ldh	BDL	32	18	201	180	21	30	118	31.2	9.7	106	BDL	BDL	3.1	BDL	0.2	0.21	17	5.1

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, 2024 (Metal/Pesticides)

River Sutlej

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	09.04.24	SW 1	BDL	0.58	BDL	BDL	BDL	BDL	BDL	BDL	BDL
2	River Satluj at D/S NFL	1380	09.04.24	SW 2	BDL	0.67	BDL	BDL	BDL	BDL	BDL	BDL	BDL
3	River Sutej at 100m D/s PACL Nangal	2915	09.04.24	SW 3	BDL	0.54	BDL	BDL	BDL	BDL	BDL	BDL	BDL
4	River Satluj at D/s Nangal	1018	09.04.24	SW 4	BDL	0.50	BDL	BDL	BDL	BDL	BDL	BDL	BDL
5	River Satluj at Kiratpur Sahib	1814	10.04.24	SW 7	BDL	0.36	BDL	BDL	BDL	BDL	BDL	BDL	BDL
6	Ropar Head-Works	1019	10.04.24	SW 10	BDL	0.88	BDL	BDL	BDL	BDL	BDL	BDL	BDL
7	River Satluj D/S of Rishab-Paper Mills	1293	10.04.24	SW 11	BDL	0.46	BDL	BDL	BDL	BDL	BDL	BDL	BDL
8	River Satluj U/S Buddha Nallah	1690	12.04.24	SW 15	BDL	1.57	BDL	BDL	BDL	BDL	BDL	BDL	BDL
9	River Satluj at 100 mts D/s after Budha Nallah confluence, Ludhiana	1020	12.04.24	SW 17	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
10	River Satluj at Boat Bridge, Dharamkot Nakodar Road	1021	15.04.24	SW 19	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
11	River Satluj at D/s East Bein	1381	15.04.24	SW 20	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
12	River Satluj at Harike	1022	15.04.24	SW 21	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
13	Harike Lake D/S from canal	1382	Stagnation observed, sample could not be collected										
14	D/S Harike lake	1297	No flow observed, hence sample could not be collected										
15	U/S Hussainiwala H/W Ferozepur	1691	15.04.24	SW 22	BDL	0.58	BDL	0.22	BDL	BDL	BDL	BDL	BDL
16	D/S Hussainiwala H/W Ferozepur	1692	15.04.24	SW 23	BDL	0.57	BDL	0.22	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, 2024

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 µs/Cm	T. Coli MPN/ 100ml	F. Coli MPN/ 100ml	Free Amm. mg/l	SAR	B mg/l	Quality of water as per DBU
17	River Beas at Talwara H/W	1693	05/04/2024	3	ZO Lab, Jal	7.4	7.9	1.3	243	110	33	0.015	0.57	BDL	B
18	River Beas at U/S Pathankot	1694	05/04/2024	5	ZO Lab, Jal	7.4	7.6	1.4	243	220	78	0.014	0.26	0.19	B
19	River Beas at D/S Pathankot	1695	05/04/2024	6	ZO Lab, Jal	7.5	7.4	1.3	297	260	92	0.016	0.45	0.23	B
20	River Beas at Mirthal Bridge Gurdaspur (Pb.)	1010	05/04/2024	4	ZO Lab, Jal	7.5	7.5	1.4	336	210	46	0.020	0.60	0.16	B
21	River Beas 1 Km D/S effluent discharge point at Mukerian	1294	09/04/2024	9	ZO Lab, Jal	7.4	7.6	1.6	255	400	210	0.012	0.26	0.48	B
22	River Beas at Bridge, village Bheate Patan Tehsil Batala Distt. Gurdaspur	4164	09/04/2024	10	ZO Lab, Jal	7.5	7.5	1.4	268	380	170	0.018	0.21	0.53	B
23	River Beas at G.T. Road, under Bridge Near Kapurthalla (Pb)	1011	09/04/2024	12	ZO Lab, Jal	7.3	7.4	1.6	257	330	140	0.010	0.26	0.44	B
24	River Beas at U/s Goindwal	1696	16/04/2024	16	ZO Lab, Jal	7.4	8.3	1.3	255	320	110	0.012	0.33	0.10	B
25	River Beas at D/s Goindwal	1012	16/04/2024	17	ZO Lab, Jal	7.6	8.2	1.4	265	380	140	0.018	0.28	0.15	B
26	Beas at Harike	1697	16/04/2024	18	ZO Lab, Jal	7.7	8.2	1.4	249	380	170	0.027	0.29	0.24	B

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	05/04/24	3	ZO Lab Jal.	9	16	11	138	110	16	12	100	34	6	88	BDL	1.0	0.44	1.4	0.17	0.14	13	3.5
18	River Beas at U/S Pathankot	1694	05/04/24	5	ZO Lab Jal.	11	12	10	178	140	11	14	162	46	11	121	BDL	0.9	0.52	1.6	0.22	0.21	7.7	3.8
19	River Beas at D/S Pathankot	1695	05/04/24	6	ZO Lab Jal.	10	22	16	181	138	15	12	156	46	10	130	BDL	0.8	0.48	1.4	0.18	0.18	13	4.0
20	River Beas at Mirthal Bridge Gurdaspur (Pb.)	1010	05/04/24	4	ZO Lab Jal.	10	18	12	193	152	16	15	170	48	12	126	BDL	1.0	0.60	1.7	0.25	0.20	13	3.5
21	River Beas 1 Km D/S effluent discharge point at Mukerian	1294	09/04/24	9	ZO Lab, Jal	12	24	14	188	148	16	15	136	41	10	122	BDL	0.8	0.62	1.8	0.19	0.18	7	3.8
22	River Beas at Bridge, village Bheate Patan Tehsil Batala Distt. Gurdaspur	4164	09/04/24	10	ZO Lab, Jal	11	18	12	164	126	11	10	190	59	10	104	BDL	0.9	0.46	1.4	0.24	0.22	6.6	3.4
23	River Beas at G.T. Road, under Bridge Near Kapurthalla (Pb)	1011	09/04/24	12	ZO Lab, Jal	14	18	16	160	124	12	11	166	49	11	108	BDL	1.0	0.50	1.5	0.23	0.15	7.6	3.9
24	River Beas at U/s Goindwal	1696	16/04/24	16	ZO Lab, Jal	12	20	14	156	118	11	13	140	38	11	111	BDL	0.8	0.44	1.3	0.16	0.14	8.9	3.9
25	River Beas at D/s Goindwal	1012	16/04/24	17	ZO Lab, Jal	10	25	12	162	124	11	12	178	45	16	108	BDL	0.7	0.46	1.3	0.17	0.17	8.7	3.8
26	Beas at Harike	1697	16/04/24	18	ZO Lab, Jal	12	20	12	143	112	12	11	124	34	10	98	BDL	0.9	0.58	1.5	0.19	0.18	7.3	3.4

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, 2024 (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	05/04/24	3	ZO Lab Jal.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
2	River Beas at U/S Pathankot	1694	05/04/24	5	ZO Lab Jal.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
3	River Beas at D/S Pathankot	1695	05/04/24	6	ZO Lab Jal.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
4	River Beas at Mirthal Bridge Gurdaspur (Pb.)	1010	05/04/24	4	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	09/04/24	9	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	09/04/24	10	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	09/04/24	12	ZO Lab Jal.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
8	River Beas at U/s Goindwal	1696	16/04/24	16	ZO Lab Jal.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
9	River Beas at D/s Goindwal	1012	16/04/24	17	ZO Lab Jal.	BDL	BDL	0.09	BDL	BDL	BDL	BDL	BDL	BDL
10	Beas at Harike	1697	16/04/24	18	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, 2024

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 µs/Cm	T.Coli MPN/ 100ml	F Coli MPN/ 100ml	Free Amm. mg/l	SAR	B mg/l	Quality of water as per DBU
27	Ravi at U/s of Madhopur H/W	1097	05/04/2024	2	ZO Lab, Jal	7.4	8.1	1.2	200	79	27	BDL	0.25	BDL	B

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	05/04/2024	2	ZO Lab Jal.	8	12	BDL	114	80	7	5	96	24	9	80	BDL	BDL	0.42	BDL	BDL	0.14	5.6	3.8

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, 2024 (Metal/Pesticides)

S.N.	Point of Sample Collection	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	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, 2024

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 µs/Cm	T.Coli MPN/ 100ml	F. Coli MPN/ 100ml	Free Amm.N	SAR	B mg/l	Quality of water as per DBU
1	Ghaggar at Mubarikpur Rest House	1023	SW 3	3/4/2024	H/o Lab Patiala	7.5	5.7	7	521	21000	1700	0.19	1.03	0.41	D
2	Ghaggar at Bhankarpur	1295	SW 4	3/4/2024	H/o Lab Patiala	7.3	3.1	17	865	24000	3400	0.11	0.83	0.73	E
3	Ghaggar at Chattbir	1698	SW 5	3/4/2024	H/o Lab Patiala	7.2	2.8	19	921	28000	3800	0.12	1.20	0.76	E
4	Ghaggar at U/s Jharmal Nadi	1702	SW 6	3/4/2024	H/o Lab Patiala	7.5	3.8	10	663	21000	2100	0.23	0.94	0.58	E
5	Ghaggar at D/s Jharmal Nadi	1701	SW 7	3/4/2024	H/o Lab Patiala	7.5	2.9	15	835	28000	3800	0.24	1.13	0.75	E
6	Ghaggar at U/s Dhakanshu Nallah	1699	SW 9	3/4/2024	H/o Lab Patiala	7.5	3.8	12	698	24000	3400	0.24	1.00	0.62	E
7	Ghaggar at D/s Dhakanshu Nallah	1700	SW 10	3/4/2024	H/o Lab Patiala	7.5	2.8	16	909	28000	3900	0.25	1.18	0.79	E
8	Ghaggar at Rattanheri	1473	SW 19	10/4/2024	H/o Lab Patiala	7.5	3.0	18	981	28000	3800	0.25	1.24	0.80	E
9	Ghaggar before mixing with Sagar Para drain (U/s sagar para Drain)	4159	SW 20	10/4/2024	H/o Lab Patiala	7.5	3.2	17	915	28000	3800	0.25	1.19	0.75	E
10	Ghaggar after mixing with Sagar Para drain (D/s Sagar Para Drain)	4160	SW 21	10/4/2024	H/o Lab Patiala	7.7	2.6	19	1035	28000	4600	0.36	1.28	0.84	E
11	Ghaggar at Khanauri	1024	SW 24	10/4/2024	H/o Lab Patiala	7.6	2.9	19	972	28000	3900	0.31	1.18	0.82	E
12	Ghaggar at Moonak	1703	SW 26	10/4/2024	H/o Lab Patiala	7.5	2.6	20	1100	35000	5800	0.26	1.23	0.89	E
13	Ghaggar at U/s Sardulgarh	1705	SW 16	9/4/2024	H/o Lab Patiala	7.7	7.5	8	471	21000	1700	0.27	0.81	0.32	D
14	Ghaggar at D/s Sardulgarh	1704	SW 17	9/4/2024	H/o Lab Patiala	7.7	5.2	9	585	21000	2100	0.28	0.98	0.50	D

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	3/4/2024	H/o Lab Patiala	40	510	480	338	291	40	10	141	40	10	241	BDL	9.7	1.0	13.6	1.3	1.0	54	10
2	Ghaggar at Bhankarpur	1295	3/4/2024	H/o Lab Patiala	83	470	296	563	481	68	19	356	98	27	299	BDL	11.1	1.3	15.5	1.4	1.3	96	43
3	Ghaggar at Chattbir	1698	3/4/2024	H/o Lab Patiala	90	470	1424	598	510	92	22	353	95	28	303	BDL	12.4	1.5	17.4	1.4	1.3	98	49
4	Ghaggar at U/s Jharmal Nadi	1702	3/4/2024	H/o Lab Patiala	50	360	286	431	367	51	14	231	61	19	272	BDL	11.6	1.3	16.2	1.2	1.2	62	30
5	Ghaggar at D/s Jharmal Nadi	1701	3/4/2024	H/o Lab Patiala	78	410	448	543	463	86	20	309	87	22	291	BDL	12.2	1.3	17.1	1.4	1.4	87	35
6	Ghaggar at U/s Dhakanshu Nallah	1699	3/4/2024	H/o Lab Patiala	60	300	224	455	387	63	18	241	65	19	269	BDL	11.8	1.1	16.5	1.2	1.1	68	30
7	Ghaggar at D/s Dhakanshu Nallah	1700	3/4/2024	H/o Lab Patiala	80	380	386	591	507	89	26	341	92	27	310	BDL	12.3	1.4	17.2	1.5	1.4	95	42
8	Ghaggar at Rattanheri	1473	10/4/2024	H/o Lab Patiala	81	320	298	641	547	97	29	380	99	32	317	BDL	12.7	2.0	17.8	2.6	2.2	105	51
9	Ghaggar before mixing with Sagar Para drain (U/s sagar para Drain)	4159	10/4/2024	H/o Lab Patiala	78	310	292	598	511	90	25	346	94	27	308	BDL	12.4	2.0	17.4	2.3	2.0	97	46
10	Ghaggar after mixing with Sagar Para drain (D/s Sagar Para Drain)	4160	10/4/2024	H/o Lab Patiala	90	340	387	675	578	99	34	411	102	38	335	BDL	12.0	2.2	16.8	2.8	2.3	112	53
11	Ghaggar at Khanauri	1024	10/4/2024	H/o Lab Patiala	86	330	356	633	539	96	30	387	97	35	312	BDL	12.4	2.3	17.4	2.6	2.4	100	54
12	Ghaggar at Moonak	1703	10/4/2024	H/o Lab Patiala	95	350	360	719	613	105	39	474	114	46	343	BDL	12.8	2.4	17.9	2.6	2.6	115	57
13	Ghaggar at U/s Sardulgarh	1705	9/4/2024	H/o Lab Patiala	42	100	46	309	265	35	8	127	36	9	227	BDL	9.0	1.0	12.6	1.0	1.1	40	19
14	Ghaggar at D/s Sardulgarh	1704	9/4/2024	H/o Lab Patiala	55	110	66	381	327	41	14	157	43	12	281	BDL	9.4	1.0	13.2	1.1	1.1	54	21

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, 2024 (Metal/Pesticides)

S.N.	Point of Sample Collection	Code	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	SW 3	BDL	BDL	9.3	0.19	BDL	BDL	BDL	BDL	BDL
2	Ghaggar at Bhankarpur	1295	SW 4	BDL	BDL	7.6	0.29	BDL	BDL	BDL	BDL	BDL
3	Ghaggar at Chhattbir	1698	SW 5	BDL	BDL	8.2	0.31	BDL	BDL	BDL	BDL	BDL
4	Ghaggar at U/s Jharmal Nadi	1702	SW 6	BDL	BDL	8.9	0.17	BDL	BDL	BDL	BDL	BDL
5	Ghaggar at D/s Jharmal Nadi	1701	SW 7	BDL	BDL	3.3	0.37	BDL	BDL	BDL	BDL	BDL
6	Ghaggar at U/s Dhakanshu Nallah	1699	SW 9	BDL	BDL	3.39	BDL	BDL	BDL	BDL	BDL	BDL
7	Ghaggar at D/s Dhakanshu Nallah	1700	SW 10	BDL	BDL	2.93	0.16	BDL	BDL	BDL	BDL	BDL
8	Ghaggar at Rattanheri	1473	SW 19	BDL	BDL	1.31	0.17	BDL	BDL	BDL	BDL	BDL
9	Ghaggar before mixing with Sagar Para drain (U/s sagar para Drain)	4159	SW 20	BDL	BDL	1.14	0.19	BDL	BDL	BDL	BDL	BDL
10	Ghaggar after mixing with Sagar Para drain (D/s Sagar Para Drain)	4160	SW 21	BDL	BDL	2.98	0.24	BDL	BDL	BDL	BDL	BDL
11	Ghaggar at Khanauri	1024	SW 24	BDL	BDL	0.27	BDL	BDL	BDL	BDL	BDL	BDL
12	Ghaggar at Moonak	1703	SW 26	BDL	BDL	0.51	BDL	BDL	BDL	BDL	BDL	BDL
13	Ghaggar at U/s Sardulgarh	1705	SW 16	BDL	BDL	1.08	BDL	BDL	BDL	BDL	BDL	BDL
14	Ghaggar at D/s Sardulgarh	1704	SW 17	BDL	BDL	1.12	0.10	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, 2024

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 µs/Cm	T.Coli MPN/ 100ml	FColi MPN/ 100ml	Free Amm. mg/l	SAR	B mg/l	Water quality as per DBU
1	Dhanula Drain falling into Lasara drain, Near village, Ghunas Punjab	2906	2/4/2024	SW 1	H.O. Lab Patiala	7.5	BDL	78	3519	280000	110000	0.18	2.88	1.31	E
2	Tallewal Drain along with Lohgarh –Jalwana Link road near Shri Krishna rice mill Punjab	2909	2/4/2024	SW 2	H.O. Lab Patiala	7.3	BDL	56	2531	280000	94000	0.17	1.95	1.28	E
3	Point Source B/N	2914	12.04.24	SW 16	ZO Lab Ldh	7.4	BDL	100	1568	92,00,000	22,00,000	0.189	5.43	0.82	E
4	Kali Bein into Beas	2913	26/04/2024	SW 41	ZO Lab, Jal	7.2	4.0	2.7	325	2700	830	0.012	0.73	0.71	C
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	29/04/2024	SW 35	ZO Lab, Jal	7.2	BDL	260	2459	350000	220000	0.190	8.59	0.41	E
7	Hundiara drain before entering Pakistan	2907	29/04/2024	S\W 36	ZO Lab, Jal	7.3	BDL	102	1557	170000	79000	0.160	5.16	0.40	E
8	Pathlawar Drain	2911	Sample was not collected												
9	Ranjit Sagar Reservoir	2912	05/04/2024	SW 1	ZO Lab, Jal	7.4	7.6	1.1	196	70	21	BDL	0.29	BDL	B
	Outlet Of Nadiala Drain into Dhakanshu Nallah, Punjab	2908	3/4/2024	SW 8	H.O. Lab Patiala	7.2	BDL	65	1910	170000	46000	0.13	1.39	1.28	E
11	Sagar Para Drain at village sagra dist.Patiala	4158	10/4/2024	SW 22	H.O. Lab Patiala	8.0	BDL	35	1435	43000	9400	0.55	1.10	0.98	E
12	Confluence point of sukhana Choe with River Ghaggar,vill.Mubarkpur	4162	3/4/2024	SW 15	H.O. Lab Patiala	7.1	BDL	101	3163	350000	170000	0.10	2.20	1.73	E
13	Confluence point of Sarsa Nadi with river Satluj	4161	10.04.24	SW 9	ZO Lab Ldh	7.7	10.7	1.4	351	700	220	0.024	0.74	0.26	C

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, 2024

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	NO3-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	2/4/2024	SW 1	H.O. Lab Patiala	314	340	322	2291	1951	391	125	1588	324	189	792	BDL	9.0	3.2	12.6	4.8	4.0	482	191
2	Tallewal Drain along with Lohgarh –Jalwana Link road near Shri Krishna rice mill Punjab	2909	2/4/2024	SW 2	H.O. Lab Patiala	223	270	262	1651	1409	231	121	1292	243	142	425	BDL	17.3	4.0	24.2	4.7	4.0	292	303
3	Point Source B/N	2914	12.04.24	SW 16	ZO Lab Ldh	323	150	172	1096	864	305	105	360	96	29.2	358	BDL	12.6	6.2	16.5	5.8	0.62	337	30
4	Kali Bein into Beas	2913	26/04/24	SW 41	ZO Lab, Jal	11	20	17	191	142	15	12	128	32	12	140	BDL	1.2	0.86	1.8	0.26	0.25	19	3
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	29/04/24	SW 35	Z.O. Lab Jalandhar	620	468	501	1365	820	192	70	420	107	37	520	BDL	19	3.1	30	2.4	0.58	405	29
7	Hundiara drain before entering Pakistan	2907	29/04/24	SW 36	Z.O. Lab Jalandhar	288	284	250	874	536	127	58	310	75	30	468	BDL	16	2.6	25	2.1	0.5	209	27
8	Pathlawar Drain	2911	Drain was found dried, hence sample could not be collected																					
9	Ranjit Sagar Reservoir	2912	05/04/24	SW 1	Z.O. Lab Jalandhar	8	10	BDL	108	84	7	6	90	22	8	72	BDL	BDL	0.38	BDL	BDL	0.12	6.4	3.7
10	Outlet Of Nadiala Drain into Dhakanshu Nallah, Punjab	2908	3/4/2024	SW 8	H.O. Lab Patiala	160	280	272	1241	1751	173	119	1115	242	124	371	BDL	12.7	3.8	17.8	3.0	3.0	197	124
11	Sagar Para Drain at village sagra dist.Patiala	4158	10/4/2024	SW 22	H.O. Lab Patiala	93	280	293	934	793	119	98	813	164	98	343	BDL	11.0	2.5	15.4	2.7	2.8	131	78
12	Confluence point of sukhana Choe with River Ghaggar,vill.Mubarkpur	4162	3/4/2024	SW 15	H.O. Lab Patiala	395	380	363	2057	395	342	259	1744	398	182	415	BDL	20.2	5.9	28.3	5.6	6.7	392	165
13	Confluence point of Sarsa Nadi with river Satluj	4161	10.04.24	SW 9	ZO Lab Ldh	14	65	62	267	235	22	58	156	41.6	12.6	128	BDL	0.8	3.0	BDL	0.2	0.22	21.3	4.3

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, 2024 (Metal/Pesticides)

S.N.	Point of Sample Collection	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	0.56	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
2	Tallewal Drain along with Lohgarh – Jalwana Link road near Shri Krishna rice mill Punjab	2909	1.09	0.28	BDL	BDL	BDL	BDL	BDL	BDL	BDL
3	Point Source B/N	2914	9.9	0.93	BDL	0.15	BDL	BDL	BDL	BDL	BDL
4	Kali Bein into Beas	2913	BDL	BDL	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	1.8	BDL	0.36	0.18	BDL	BDL	BDL	BDL	BDL
7	Hundiara drain before entering Pakistan	2907	3.2	0.07	0.56	0.24	BDL	BDL	BDL	BDL	BDL
8	Pathlawa Drain	2911	Sample was not collected								
9	Ranjit Sagar Reservoir	2912	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
10	Outlet Of Nadiala Drain into Dhakanshu Nallah, Punjab	2908	4.16	0.36	BDL	BDL	BDL	BDL	BDL	BDL	BDL
11	Sagar Para Drain at village sagra dist.Patiala	4158	1.44	0.12	BDL	BDL	BDL	BDL	BDL	BDL	BDL
12	Confluence point of sukhana Choe with River Ghaggar,vill.Mubarkpur	4162	2.93	0.32	BDL	BDL	0.15	BDL	BDL	BDL	BDL
13	Confluence point of Sarsa Nadi with river Satluj	4161	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.