

Quality of Water of Polluted River stretches in Punjab for the month of March, 2024

Satluj : Roop Nagar to Harike Bridge : Priority I

| 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 |
|------|---|------|------------------------|----------------|--------------------------------|-----|---------|----------|-----------------|------------------|-------------------|----------------|------|--------|-----------------------------|
| 1 | Ropar Head-Works | 1019 | 06.03.24 | SW 431 | ZO Lab LDH | 7.9 | 8.1 | BDL | 366 | 920 | 380 | BDL | 0.48 | 0.15 | C |
| 2 | River Satluj D/S of Rishab- Paper Mills | 1293 | 06.03.24 | SW 432 | ZO Lab LDH | 7.3 | 10.3 | 1.2 | 371 | 840 | 260 | BDL | 0.51 | 0.34 | C |
| 3 | River Satluj U/S Buddha Nallah | 1690 | 07.03.24 | SW 438 | ZO Lab LDH | 7.4 | 8.1 | 2.6 | 409 | 1100 | 330 | 0.021 | 0.67 | 0.37 | C |
| 4 | River Satluj at 100 mts D/s after Budha Nallah confluence, Ludhiana | 1020 | 07.03.24 | SW 440 | ZO Lab LDH | 7.4 | 2.6 | 33 | 864 | 14,00,000 | 4,90,000 | 0.100 | 2.45 | 0.90 | E |
| 5 | River Satluj at Boat Bridge, Dharamkot Nakodar Road | 1021 | 11.03.24 | SW 444 | ZO Lab LDH | 7.5 | 4.2 | 8.7 | 602 | 63,000 | 26,000 | 0.072 | 2.07 | 0.23 | D |
| 6 | River Satluj at D/s East Bein | 1381 | 11.03.24 | SW 445 | ZO Lab LDH | 7.5 | 3.9 | 9.2 | 609 | 70,000 | 26,000 | 0.112 | 2.22 | 0.29 | E |
| 7 | River Satluj at Harike | 1022 | 11.03.24 | SW 446 | ZO Lab LDH | 7.8 | 5.0 | 2.6 | 398 | 3500 | 1700 | 0.049 | 1.00 | 0.21 | C |

| S.N. | Point of Sample Collection | Code | 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 | Ropar Head-Works | 1019 | SW 431 | ZO Lab LDH | BDL | 60 | 49 | 238 | 204 | 15 | 44 | 140 | 36 | 12.2 | 104 | BDL | BDL | 2.0 | BDL | BDL | 0.22 | 13 | 3.4 |
| 2 | River Satluj D/S of Rishab- Paper Mills | 1293 | SW 432 | ZO Lab LDH | 8 | 65 | 57 | 245 | 213 | 16 | 47 | 140 | 36.8 | 11.7 | 108 | BDL | BDL | 7.6 | BDL | BDL | 0.23 | 14 | 3 |
| 3 | River Satluj U/S Buddha Nallah | 1690 | SW 438 | ZO Lab LDH | 20 | 45 | 37 | 265 | 212 | 29 | 54 | 150 | 39.2 | 12.6 | 114 | BDL | 1.4 | 2.5 | 1.9 | 0.31 | 0.24 | 19 | 4.3 |
| 4 | River Satluj at 100 mts D/s after Budha Nallah confluence, Ludhiana | 1020 | SW 440 | ZO Lab LDH | 124 | 110 | 117 | 561 | 443 | 114 | 58 | 212 | 54.4 | 18.5 | 220 | BDL | 6.7 | 2.8 | 10.1 | 1.15 | 0.33 | 82 | 12 |
| 5 | River Satluj at Boat Bridge, Dharamkot Nakodar Road | 1021 | SW 444 | ZO Lab LDH | 58 | 50 | 63 | 391 | 326 | 81 | 47 | 186 | 48 | 16.0 | 146 | BDL | 3.6 | 2.8 | 5.2 | 0.54 | 0.27 | 65 | 8.2 |
| 6 | River Satluj at D/s East Bein | 1381 | SW 445 | ZO Lab LDH | 62 | 65 | 97 | 408 | 323 | 84 | 51 | 194 | 50.4 | 16.5 | 154 | BDL | 5.6 | 2.7 | 7.4 | 0.88 | 0.30 | 71 | 8.7 |
| 7 | River Satluj at Harike | 1022 | SW 446 | ZO Lab LDH | 24 | 40 | 42 | 251 | 204 | 31 | 39 | 128 | 33.6 | 10.7 | 122 | BDL | 1.4 | 1.7 | 2.0 | 0.27 | 0.21 | 26 | 5.5 |

- 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

Quality of Water of Polluted River stretches in Punjab for the month of March, 2024

Ghaggar: Mubarkpur to Sardulgarh: Priority I

| 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 DBDU |
|------|--|------|------------------------|----------------|--------------------------------|-----|---------|----------|-----------------|-------------------|--------------------|----------------|------|--------|------------------------------|
| 1 | Ghaggar at Mubarikpur Rest House | 1023 | 6.3.2024 | SW 2942 | H/o Lab Patiala | 7.1 | 6.6 | 8 | 531 | 21000 | 2100 | 2.06 | 0.05 | 0.46 | D |
| 2 | Ghaggar at Bhankarpur | 1295 | 6.3.2024 | SW 2943 | H/o Lab Patiala | 7.8 | 3.8 | 13 | 851 | 24000 | 3400 | 2.19 | 0.39 | 0.69 | E |
| 3 | Ghaggar at Chattbir | 1698 | 6.3.2024 | SW 2944 | H/o Lab Patiala | 7.3 | 3.8 | 13 | 877 | 24000 | 3400 | 2.17 | 0.12 | 0.70 | E |
| 4 | Ghaggar at U/s Jharmal Nadi | 1702 | 6.3.2024 | SW 2945 | H/o Lab Patiala | 7.7 | 4.0 | 9 | 651 | 22000 | 2600 | 1.84 | 0.36 | 0.52 | D |
| 5 | Ghaggar at D/s Jharmal Nadi | 1701 | 6.3.2024 | SW 2946 | H/o Lab Patiala | 7.6 | 3.7 | 16 | 787 | 28000 | 3200 | 2.09 | 0.30 | 0.68 | E |
| 6 | Ghaggar at U/s Dhakanshu Nallah | 1699 | 6.3.2024 | SW 2948 | H/o Lab Patiala | 7.7 | 3.6 | 13 | 693 | 24000 | 2700 | 1.89 | 0.35 | 0.60 | E |
| 7 | Ghaggar at D/s Dhakanshu Nallah | 1700 | 6.3.2024 | SW 2944 | H/o Lab Patiala | 7.7 | 2.7 | 16 | 875 | 28000 | 3300 | 2.25 | 0.37 | 0.77 | E |
| 8 | Ghaggar at Rattanheri | 1473 | 5.3.2024 | SW 2934 | H/o Lab Patiala | 7.6 | 3.0 | 17 | 931 | 28000 | 3800 | 2.32 | 0.25 | 0.79 | E |
| 9 | Ghaggar before mixing with Sagar Para drain (U/s sagar para Drain) | 4159 | 5.3.2024 | SW 2935 | H/o Lab Patiala | 7.6 | 3.2 | 14 | 875 | 28000 | 3300 | 2.23 | 0.24 | 0.74 | E |
| 10 | Ghaggar after mixing with Sagar Para drain (D/s Sagar Para Drain) | 4160 | 5.3.2024 | SW 2936 | H/o Lab Patiala | 7.8 | 3.0 | 18 | 989 | 28000 | 3900 | 2.40 | 0.41 | 0.80 | E |
| 11 | Ghaggar at Khanauri | 1024 | 5.3.2024 | SW 2939 | H/o Lab Patiala | 7.7 | 2.9 | 16 | 951 | 28000 | 3800 | 2.20 | 0.38 | 0.81 | E |
| 12 | Ghaggar at Moonak | 1703 | 5.3.2024 | SW 2941 | H/o Lab Patiala | 7.6 | 2.7 | 20 | 1041 | 35000 | 4600 | 2.23 | 0.26 | 0.85 | E |
| 13 | Ghaggar at U/s Sardulgarh | 1705 | 1.3.2024 | SW 2929 | H/o Lab Patiala | 7.5 | 5.7 | 9 | 493 | 21000 | 2100 | 1.52 | 0.14 | 0.35 | D |
| 14 | Ghaggar at D/s Sardulgarh | 1704 | 1.3.2024 | SW 2930 | H/o Lab Patiala | 7.7 | 4.5 | 11 | 610 | 22000 | 2600 | 1.89 | 0.30 | 0.51 | D |

| S.N. | Point of Sample Collection | Code | 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 s P mg/l | F mg/l | Na mg/l | K mg/l |
|------|--|------|----------------|--------------------------------|----------|----------|----------|----------|----------|---------|----------------------|---------|---------|---------|-------------|-------------|-----------|-------------------------|----------|--------------------------|--------|---------|--------|
| 1 | Ghaggar at Mubarikpur Rest House | 1023 | SW 2942 | H/o Lab Patiala | 44 | 470 | 436 | 347 | 297 | 38 | 9 | 150 | 42 | 11 | 246 | BDL | 9.4 | 1.0 | 13.2 | 1.2 | 0.7 | 58 | 10 |
| 2 | Ghaggar at Bhankarpur | 1295 | SW 2943 | H/o Lab Patiala | 70 | 430 | 280 | 553 | 472 | 87 | 15 | 322 | 89 | 24 | 291 | BDL | 11.0 | 1.2 | 15.4 | 1.1 | 1.2 | 90 | 40 |
| 3 | Ghaggar at Chattbir | 1698 | SW 2944 | H/o Lab Patiala | 68 | 460 | 341 | 560 | 484 | 90 | 19 | 335 | 91 | 26 | 298 | BDL | 12.3 | 1.4 | 17.2 | 1.2 | 1.2 | 91 | 43 |
| 4 | Ghaggar at U/s Jharmal Nadi | 1702 | SW 2945 | H/o Lab Patiala | 51 | 370 | 224 | 423 | 361 | 52 | 13 | 202 | 56 | 15 | 275 | BDL | 11.9 | 1.2 | 16.7 | 1.2 | 1.3 | 60 | 31 |
| 5 | Ghaggar at D/s Jharmal Nadi | 1701 | SW 2946 | H/o Lab Patiala | 77 | 410 | 400 | 510 | 435 | 80 | 18 | 277 | 81 | 18 | 283 | BDL | 12.0 | 1.3 | 16.8 | 1.3 | 1.3 | 80 | 32 |
| 6 | Ghaggar at U/s Dhakanshu Nallah | 1699 | SW 2948 | H/o Lab Patiala | 58 | 290 | 268 | 451 | 384 | 59 | 19 | 224 | 63 | 16 | 264 | BDL | 11.6 | 1.1 | 16.2 | 1.2 | 1.2 | 65 | 28 |
| 7 | Ghaggar at D/s Dhakanshu Nallah | 1700 | SW 2944 | H/o Lab Patiala | 76 | 390 | 365 | 569 | 485 | 86 | 24 | 325 | 87 | 26 | 301 | BDL | 12.2 | 1.3 | 17.1 | 1.4 | 1.4 | 93 | 40 |
| 8 | Ghaggar at Rattanheri | 1473 | SW 2934 | H/o Lab Patiala | 78 | 300 | 296 | 608 | 519 | 94 | 27 | 345 | 95 | 26 | 310 | BDL | 12.4 | 2.1 | 20.2 | 2.4 | 1.9 | 99 | 47 |
| 9 | Ghaggar before mixing with Sagar Para drain (U/s sagar para Drain) | 4159 | SW 2935 | H/o Lab Patiala | 70 | 290 | 286 | 571 | 487 | 86 | 24 | 323 | 91 | 23 | 298 | BDL | 12.0 | 2.0 | 16.8 | 2.2 | 1.9 | 92 | 42 |
| 10 | Ghaggar after mixing with Sagar Para drain (D/s Sagar Para Drain) | 4160 | SW 2936 | H/o Lab Patiala | 86 | 340 | 332 | 643 | 549 | 97 | 32 | 371 | 99 | 30 | 327 | BDL | 11.8 | 2.3 | 16.5 | 2.4 | 2.0 | 106 | 49 |
| 11 | Ghaggar at Khanauri | 1024 | SW 2939 | H/o Lab Patiala | 86 | 370 | 334 | 619 | 527 | 94 | 29 | 378 | 95 | 34 | 309 | BDL | 12.5 | 2.2 | 17.5 | 2.3 | 2.3 | 98 | 51 |
| 12 | Ghaggar at Moonak | 1703 | SW 2941 | H/o Lab Patiala | 92 | 430 | 432 | 678 | 577 | 98 | 33 | 437 | 107 | 41 | 338 | BDL | 12.9 | 2.4 | 18.1 | 2.5 | 2.6 | 107 | 53 |
| 13 | Ghaggar at U/s Sardulgarh | 1705 | SW 2929 | H/o Lab Patiala | 45 | 110 | 52 | 321 | 275 | 37 | 9 | 139 | 39 | 10 | 224 | BDL | 9.1 | 0.9 | 12.7 | 1.1 | 1.0 | 41 | 21 |
| 14 | Ghaggar at D/s Sardulgarh | 1704 | SW 2930 | H/o Lab Patiala | 52 | 140 | 59 | 397 | 340 | 43 | 15 | 173 | 46 | 14 | 273 | BDL | 10.0 | 1.1 | 14.0 | 1.3 | 1.0 | 57 | 26 |

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)