

Quality of Water of Polluted River stretches in Punjab for the month of April, 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 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    | 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                           |
| 2    | 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                           |
| 3    | 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                           |
| 4    | 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                           |
| 5    | 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                           |
| 6    | 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                           |
| 7    | 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                           |

| 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 <sub>4</sub> 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 <sub>4</sub> as P mg/l | F mg/l | Na mg/l | K mg/l |
|------|---------------------------------------------------------------------|------|----------------|--------------------------------|----------|----------|----------|----------|----------|---------|----------------------|---------|---------|---------|-------------|-------------|-----------|------------|----------|---------------------------|--------|---------|--------|
| 1    | Ropar Head-Works                                                    | 1019 | 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    |
| 2    | River Satluj D/S of Rishab- Paper Mills                             | 1293 | 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    |
| 3    | River Satluj U/S Buddha Nallah                                      | 1690 | 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    |
| 4    | River Satluj at 100 mts D/s after Budha Nallah confluence, Ludhiana | 1020 | 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   |
| 5    | River Satluj at Boat Bridge, Dharamkot Nakodar Road                 | 1021 | SW 19          | ZO Lab Ldh                     | 88       | 60       | 57       | 441      | 374      | 94      | 70                   | 172     | 45.6    | 14.1    | 164         | BDL         | 3.3       | 4          | 4.5      | 0.6                       | 0.29   | 80      | 10.4   |
| 6    | River Satluj at D/s East Bein                                       | 1381 | 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   |
| 7    | River Satluj at Harike                                              | 1022 | 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    |

- 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

Note. 1.  
BDL

Quality of Water of Polluted River stretches in Punjab for the month of April, 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 µs/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 | 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                            |

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|------|--------------------------------------------------------------------|------|----------------|--------------------------------|----------|----------|----------|----------|----------|---------|----------------------|---------|---------|---------|-------------|-------------|-----------|------------|----------|---------------------------|--------|---------|--------|
| 1    | Ghaggar at Mubarikpur Rest House                                   | 1023 | SW 3           | 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 | SW 4           | 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 | SW 5           | 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 | SW 6           | 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 | SW 7           | 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 | SW 9           | 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 | SW 10          | 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 | SW 19          | 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 | SW 20          | 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 | SW 21          | 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 | SW 24          | 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 | SW 26          | 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 | SW 16          | 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 | SW 17          | 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     |

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