

**WATER QUALITY CHARACTERISTICS OF RIVER PILAKHAR AFTER BILASPUR,
UDHAMSINGH NAGAR**

| Month | pH | BOD mg/L | COD mg/L | Conductivity µmhos/cm | Temp °C | DO mg/L | TDS mg/L |
|----------------|--------------------------------------|-------------------|----------------|--------------------------|---------------|----------------|------------------|
| 2022 | | | | | | | |
| Jan | 7.4 | 9.2 | 28 | 390 | 8 | 4.5 | 269 |
| Feb | 7.40 | 10 | 30 | 400 | 21 | 6 | 268 |
| Mar | 7.30 | 9.4 | 32 | 440 | 23 | 4.9 | 299 |
| Apr | 7.50 | 8.6 | 30 | 420 | 28 | 6.5 | 290 |
| May | 7.40 | 4.0 | 24 | 470 | 28 | 6.7 | 316 |
| June | 7.0 | 10 | 40 | 600 | 30 | 4.5 | 402 |
| July | 7.20 | 9.6 | 36 | 560 | 28 | 4.8 | 375 |
| Aug | 7.30 | 11 | 44 | 512 | 27 | 4.6 | 340 |
| Sept | 7.60 | 12 | 47.6 | 363 | 27 | 3.0 | 239 |
| Oct | 7.60 | 11 | 40 | 442 | 25 | 2.8 | 292 |
| Nov | 7.70 | 8.0 | 36 | 559 | 18 | 2.8 | 371 |
| Dec | 7.30 | 9.0 | 44.0 | 739 | 15 | 2.9 | 491 |
| 2021 | | | | | | | |
| Jan | 8.20 | 3.80 | 24 | 770 | 13 | 6.0 | 503 |
| Feb | 7.50 | 5.10 | 16 | 750 | 21 | 7.80 | 503 |
| Mar | 7.60 | 5.20 | 20 | 800 | 22 | 7.50 | 536 |
| Apr | 7.50 | 5.80 | 19 | 813 | 22 | 7.10 | 516 |
| May | 7.20 | 5.30 | 17 | 783 | 21 | 7.30 | 502 |
| June | 7.50 | 5.20 | 20 | 860 | 24 | 7.80 | 558 |
| July | 7.7 | 12.0 | 40 | 430 | 28 | 3.90 | 289 |
| Aug | 7.50 | 9.30 | 26 | 421 | 31 | 4.10 | 282 |
| Sep | 7.4 | 9.6 | 28 | 426 | | 3.8 | 285 |
| Oct | 7.6 | 13.50 | 41 | 430 | 31 | 4.0 | 293 |
| Nov | 7.4 | 14.5 | 33 | 450 | | 4.3 | 301.5 |
| Dec | 7.30 | 12 | 30 | 448 | 27 | 4.8 | 300 |
| 2020 | | | | | | | |
| Jan | 7.5 | 6.0 | 60 | 420 | 10 | 7.2 | 226 |
| Feb | 7.4 | 8.0 | 70 | 430 | 30 | 6.6 | 293 |
| Mar | 7.6 | 7 | 36 | 320 | 31 | 5.6 | 265 |
| Apr | 7.4 | 4 | 24 | | | 6.2 | |
| May | Sample not collected due to COVID-19 | | | | | | |
| June | Sample not collected due to COVID-19 | | | | | | |
| July | 8.20 | 5.1 | 16 | 320 | 33 | 6.5 | 208 |
| Aug | 8.10 | 5.0 | 16 | 325 | 32 | 5.9 | 228 |
| Sep | 7.90 | 9.2 | 40 | 580 | 31 | 4.4 | 387 |
| Oct | 7.2 | 8.6 | 42 | 340 | 19 | 4.2 | 228 |
| Nov | 7.1 | 8.6 | 42 | 351 | 9 | 4.0 | 240 |
| Average | 7.6 | 6.8 | 38.4 | 385.8 | 24.4 | 5.6 | 259.4 |
| Min-Max | (7.1 -8.2) | (4-9.2-70) | (16-70) | (320-580) | (9-33) | (4-7.2) | (208-387) |
| 2019 | | | | | | | |
| Jan | 7 | 8 | 28 | 400 | 14 | 6.80 | 254 |
| Feb | 7.3 | 8 | 26 | 210 | 15 | 6.6 | 285 |
| Mar | 7.7 | 10 | 30 | 440 | 19 | 6 | 178 |
| Apr | 7.5 | 7.2 | 32 | 420 | 32 | 5.6 | 319 |
| May | 7.3 | 7.4 | 36 | 480 | 38 | 5.8 | 342 |
| June | 7.5 | 6 | 30 | 590 | 37 | 4.8 | 265 |
| July | 7.3 | 8 | 20 | 462 | 30 | 5.6 | 309 |
| Aug | 7.6 | 6.0 | 20 | 320 | 30 | 4.4 | 219 |

| | | | | | | | |
|----------------|------------------|-----------------|----------------|------------------|----------------|------------------|------------------|
| Sep | 7.5 | 4.0 | 30 | 473 | 29 | 4.2 | 308 |
| Oct | 7.9 | 3.6 | 40 | 207 | 30 | 4.8 | 135 |
| Nov | 7.4 | 6.0 | 60 | 268 | 21 | 4.6 | 145 |
| Dec | 7.6 | 8.0 | 28 | 491 | 12 | 5.4 | 329 |
| Average | 7.5 | 6.7 | 32.0 | 388.2 | 26.8 | 5.4 | 250.8 |
| Min-Max | (7-7.9) | (3.6-10) | (20-60) | (207-590) | (14-38) | (4.2-6.8) | (135-342) |
| 2018 | | | | | | | |
| Jan | 7.6 | 3.2 | 30 | 520 | 18.6 | 6.8 | 344 |
| Feb | 7.7 | 4.8 | 42 | 590 | 22.6 | 5.8 | 386 |
| Mar | 7.35 | 14 | 80 | 610 | 27 | 3.6 | 317 |
| Apr | 7.54 | 16 | 40 | 420 | 28 | 3 | 178 |
| May | 7.4 | 10 | 38 | 320 | 29 | 4.2 | 202 |
| June | 7.2 | 8 | 30 | 310 | 30 | 4.8 | 192 |
| July | 7.3 | 10 | 38 | 220 | 29 | 5.2 | 188 |
| Aug | 7.5 | 3.2 | 18 | 280 | 27 | 7.2 | 180 |
| Sep | 7.4 | 6.2 | 20 | 310 | 27 | 6.8 | 198 |
| Oct | 7.5 | 8 | 30 | 470 | 26 | 5.2 | 306 |
| Nov | 7.8 | 8 | 30 | 430 | 22 | 6.8 | 284 |
| Dec | 7.4 | 10 | 32 | 420 | 17 | 6.2 | 277 |
| Average | 7.47 | 8.45 | 35.66 | 408.33 | 25.26 | 5.46 | 254.33 |
| Min-Max | (7.2-7.8) | (3.2-16) | (18-80) | (220-610) | (17-30) | (3-7.2) | (178-386) |