

**WATER QUALITY CHARACTERISTICS OF RIVER KICHHA (D/S  
NAGARBLLA), KASHIPUR, US NAGAR**

| Month       | pH   | BOD<br>mg/L | COD<br>mg/L | Conductivity<br>µmhos/cm | Temp °C | DO<br>mg/L | TDS<br>mg/L |
|-------------|------|-------------|-------------|--------------------------|---------|------------|-------------|
| <b>2024</b> |      |             |             |                          |         |            |             |
| Jan         | 7.60 | 3.2         | 28.0        | 385                      | 15      | 5.8        | 254         |
| Feb         | 7.82 | 3.3         | 28.0        | 535                      | 20      | 5.6        | 356         |
| Mar         | 7.79 | 3.5         | 36.0        | 626                      | 22      | 4.6        | 411         |
| Apr         | 7.86 | 3.8         | 40.0        | 706                      | 27      | 4.4        | 418         |
| May         | 6.80 | 4.9         | 48.0        | 648                      | 34      | 4.0        | 432         |
| June        | 7.98 | 6.2         | 64.0        | 964                      | 34      | 3.6        | 582         |
| July        | 7.51 | 4.8         | 52          | 488                      | 34      | 5.5        | 295         |
| Aug         | 7.45 | 4.2         | 44          | 488                      | 35      | 6          | 295         |
| Sept        | 7.35 | 3.8         | 32          | 418                      | 30      | 6.6        | 258         |
| Oct         | 7.72 | 4           | 36          | 502                      | 28      | 5.8        | 304         |
| <b>2023</b> |      |             |             |                          |         |            |             |
| Jan         | 7.60 | 3.8         | 28.0        | 376                      | 12      | 7.0        | 505         |
| Feb         | 7.50 | 5.8         | 48.0        | 394                      | 18      | 6.8        | 593         |
| Mar         | 7.40 | 7.8         | 56.0        | 672                      | 22      | 5.8        | 464         |
| Apr         | 7.60 | 5.8         | 48.0        | 588                      | 21      | 5.6        | 384         |
| May         | 7.40 | 3.0         | 28.0        | 328                      | 28      | 7.0        | 225         |
| June        | 7.90 | 5.0         | 44.0        | 522                      | 32      | 6.3        | 358         |
| July        | 7.70 | 3.0         | 28.0        | 334                      | 32      | 7.0        | 227         |
| Aug         | 7.40 | 3.2         | 28.0        | 345                      | 30      | 6.2        | 213         |
| Sept        | 7.60 | 3.0         | 24.0        | 265                      | 30      | 6.5        | 183         |
| Oct         | 7.60 | 3.0         | 28.0        | 324                      | 25      | 6.4        | 215         |
| Nov         | 7.60 | 3.2         | 32.0        | 533                      | 25      | 6.2        | 369         |
| <b>2022</b> |      |             |             |                          |         |            |             |
| Jan         | 7.3  | 5.2         | 22          | 940                      | 10      | 5.6        | 628         |
| Feb         | 7.30 | 5.2         | 20          | 970                      | 22      | 6.0        | 650         |
| Mar         | 7.20 | 7.8         | 26          | 730                      | 25      | 5.0        | 524         |
| Apr         | 7.40 | 7.0         | 22          | 800                      | 28      | 6.1        | 536         |
| May         | 7.60 | 5.8         | 20          | 760                      | 28      | 6.6        | 510         |
| June        | 7.20 | 6.7         | 22          | 700                      | 30      | 6.2        | 469         |
| July        | 7.30 | 5.2         | 20          | 680                      | 28      | 6.5        | 456         |
| Aug         | 7.40 | 12          | 52.8        | 300                      | 31      | 4.3        | 197         |
| Sept        | 7.80 | 14          | 37.4        | 342                      | 28      | 4.6        | 227         |
| Oct         | 7.80 | 13          | 68          | 221                      | 25      | 4.4        | 145         |
| Nov         | 7.80 | 6.2         | 32          | 421                      | 24      | 5.3        | 279         |
| Dec         | 7.60 | 6.0         | 32.0        | 470                      | 18      | 5.2        | 312         |
| <b>2021</b> |      |             |             |                          |         |            |             |
| Jan         | 8.10 | 6.90        | 36          | 920                      | 15      | 2.80       | 750         |
| Feb         | 8.0  | 3.60        | 20          | 980                      | 26      | 8.80       | 723         |
| Mar         | 8.10 | 3.40        | 18          | 925                      | 23      | 9.0        | 620         |
| Apr         | 8.0  | 3.10        | 20          | 916                      | 24      | 8.80       | 612         |
| May         | 7.90 | 3.30        | 21          | 867                      | 22      | 8.70       | 592         |
| June        | 8.0  | 3.20        | 18          | 840                      | 23.50   | 9.0        | 560         |
| July        | 7.50 | 4.50        | 28          | 1210                     | 28      | 4.20       | 920         |
| Aug         | 7.40 | 3.90        | 22          | 1185                     | 33      | 4.30       | 793         |

|                |                   |               |                 |                  |                |                    |                  |
|----------------|-------------------|---------------|-----------------|------------------|----------------|--------------------|------------------|
| Sep            | 7.4               | 4.0           | 20              | 1052             | 32             | 5.2                | 704              |
| Oct            | 7.3               | 7.50          | 26.80           | 920              |                | 4.10               | 620              |
| Nov            | 7.2               | 6.7           | 28              | 1010             |                | 4                  | 676.7            |
| Dec            | 7.30              | 6.50          | 22.70           | 1050             | 28             | 5.4                | 703              |
| <b>2020</b>    |                   |               |                 |                  |                |                    |                  |
| Jan            | 7.2               | 6.6           | 80              | 565              | 10             | 3.4                | 328              |
| Feb            | 7.44              | 7.0           | 50              | 530              | 30             | 2.4                | 321              |
| Mar            | 8.8               | 8             | 40              | 820              | 32             | 2.6                | 482              |
| Apr            | 7.4               | 6.0           | 28              | 550              | 35             | 4                  | 341              |
| May            | 7.6               | 10            | 60              | 758              | 39             | 3.8                | 490              |
| June           | 8.0               | 12            | 80              | 440              | 37             | 3.0                | 282              |
| July           | 8.1               | 8.2           | 68.6            | 410              | 32             | 3.0                | 276              |
| Aug            | 7.97              | 4.8           | 16              | 334              | 33             | 6.9                | 168              |
| Sep            | 8.30              | 3.0           | 13              | 310              | 32             | 4.10               | 165              |
| Oct            | 7.67              | 4.70          | 22              | 470              | 19             | 6.10               | 398              |
| Nov            | 7.57              | 4.7           | 22              | 470              | 19             | 6.10               | 398              |
| Dec            | 7.4               | 4.8           | 22              | 450              | 12             | 6.0                | 410              |
| <b>2019</b>    |                   |               |                 |                  |                |                    |                  |
| Jan            | 7.3               | 10            | 28              | 560              | 13             | 6.4                | 358              |
| Feb            | 7.6               | 12            | 26              | 580              | 17             | 6.4                | 329              |
| Mar            | 7.7               | 6.8           | 22              | 620              | 23             | 4.4                | 432              |
| Apr            | 7.4               | 8.0           | 40              | 480              | 32             | 4.2                | 266              |
| May            | 7.2               | 7.2           | 36              | 460              | 36             | 4.8                | 428              |
| June           | 7.4               | 5             | 20              | 510              | 38             | 4.2                | 488              |
| July           | 6.9               | 6             | 20              | 247              | 30             | 4.8                | 161              |
| Aug            | 7.2               | 5.0           | 20.0            | 340              | 30             | 4.2                | 178              |
| Sep            | 7.3               | 2.0           | 20              | 286              | 30             | 4.0                | 186              |
| Oct            | 7.4               | 2.6           | 40              | 570              | 30             | 4.8                | 371              |
| Nov            | 7.3               | 5.0           | 80              | 816              | 24             | 3.8                | 547              |
| Dec            | 7.4               | 4.0           | 40              | 570              | 12             | 2.8                | 371              |
| <b>2018</b>    |                   |               |                 |                  |                |                    |                  |
| Jan            | 8.10              | 8             | 46              | 580              | 17             | 4.80               | 386              |
| Feb            | 8                 | 18            | 66              | 560              | 20             | 4.40               | 366              |
| Mar            | 7.42              | 6             | 58              | 690              | 26             | 6.60               | 448              |
| Apr            | 7.54              | 38            | 140             | 720              | 21             | 0.40               | 469              |
| May            | 7.6               | 28            | 88              | 570              | 28             | 2                  | 378              |
| June           | 7.4               | 22            | 80              | 550              | 30             | 2.6                | 348              |
| July           | 7.5               | 18            | 70              | 490              | 29             | 3.2                | 316              |
| Aug            | 7.7               | 12            | 44              | 430              | 27             | 4.6                | 276              |
| Sep            | 7.6               | 10.2          | 38              | 410              | 28             | 4.4                | 260              |
| Oct            | 7.7               | 12            | 46              | 530              | 25             | 4                  | 346              |
| Nov            | 7.4               | 14.2          | 46              | 460              | 23             | 4.2                | 308              |
| Dec            | 7.8               | 12            | 30              | 530              | 18             | 6.2                | 346              |
| <b>Average</b> | <b>7.65</b>       | <b>16.53</b>  | <b>62.67</b>    | <b>543.33</b>    | <b>24.33</b>   | <b>3.95</b>        | <b>354.64</b>    |
| <b>Min-Max</b> | <b>(7.4-8.10)</b> | <b>(6-38)</b> | <b>(30-140)</b> | <b>(410-720)</b> | <b>(17-30)</b> | <b>(0.40-6.60)</b> | <b>(260-469)</b> |