Biological indicators

1. Create a water quality index for biological indicators using the following table

**Analysis**

|  |
| --- |
| **Data Table 2: Calculation of Water Quality Index \_\_\_\_\_\_\_\_\_\_ River, Site \_\_\_\_** |
| Sample | Group 1  | Group 2  | Group 3  | Water Quality Index | Water Quality Rating |
|  | Number of species x 3 | Number of species x 2 | Number of species x 1 | Sum of groups (1 + 2 + 3) |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |
| 4 |  |  |  |  |  |

Water Quality Rating: >20 = excellent     16-20 = good      11-15 = fair <11 = poor

1. In 100 words, comment on how biological indicators helped you to determine the water quality of our site close to Luther
2. In a 200 word conclusion, describe the overall water quality of our Luther water site combining the information from physical, chemical, and biological indicator labs.

**Macroinvertebrate Taxa Groups**

|  |  |
| --- | --- |
| **GROUP 1** (These organisms are generally pollution-intolerant. Their dominance generally signifies GOOD WATER QUALITY.)

|  |
| --- |
| appendixn05a03b01 |

 |
| **GROUP 2** (These organisms can exist in a wide range of water quality conditions.)

|  |
| --- |
| appendixn05a03b02 |

 |
| **GROUP 3** (These organisms are generally tolerant of pollution. Their dominance usually signifies POOR WATER QUALITY.)

|  |
| --- |
| appendixn05a03b03 |

 |