

**GROUP DATA WATER QUALITY**

**LAB 12 - WATER QUALITY INDEX**

Q Value

Average of Q-value X Weight Fac

| Test                        | Salt Creek | Busse     | Salt Creek | Busse | Weighting Factor | Salt Creek | Busse |
|-----------------------------|------------|-----------|------------|-------|------------------|------------|-------|
| <b>Dissolved Oxygen (%)</b> | 16.5 mg/L  | 14.8 mg/L | 75         | 75    | 0.17             | 12.75      | 12.75 |
|                             | 16.5mg/L   | 15.1 mg/L | 75         | 75    |                  |            |       |
| <b>pH</b>                   | 7.48       | 8.33      | 94         | 78    | 0.11             | 10.3       | 8.4   |
|                             | 7.09       | 8.44      | 91         | 76    |                  |            |       |
| <b>Temperature Change</b>   | 0.4        | 0.3       | 90         | 90    | 0.1              | 9          | 9     |
|                             | 0.2        | 0.2       | 90         | 90    |                  |            |       |
| <b>Fecal Coliform</b>       | 8          | 20        | 72         | 65    | 0.16             | 13.8       | 13.2  |
|                             | 0          | 0         | 100        | 100   |                  |            |       |
| <b>BOD (mg/L)</b>           | 2.8 mg/L   | 3.9 mg/L  | 90         | 90    | 0.11             | 9.9        | 9.9   |
|                             | x          | 3.9 mg/L  | x          | 90    |                  |            |       |
| <b>Nitrate (mg/L)</b>       | 0.3        | 0.1       | 95         | 98    | 0.1              | 9.7        | 9.8   |
|                             | 0.1        | 0.1       | 98         | 98    |                  |            |       |
| <b>Phosphate (mg/L)</b>     | 0.02       | 0.3       | 100        | 95    | 0.1              | 4.2        | 4.2   |
|                             | 2.75       | 1.95      | 20         | 25    |                  |            |       |
| <b>Total Dissolved</b>      | 4.82       | 4.35      | 80         | 80    | 0.07             | 5.6        | 5.6   |
|                             | 4.78       | 4.3       | 80         | 80    |                  |            |       |
| <b>Total Suspended</b>      | 3.5 ft     | 1 ft      | 75         | 60    | 0.08             | 6          | 4.8   |
|                             | x          | x         | x          | x     |                  |            |       |
| <b>Benthic Macro</b>        | Good       | Excellent |            |       | WQI Value        | 81.3       | 77.7  |
|                             |            |           |            |       | WQR              | Good       | Good  |

tor