Biotic Index Data Sheet

Reproduce for use

Date: _____   Investigator Names: _____

Time: _____ AM/PM   Leaf Pack Location: _____

1

Group 1: Sensitive	
☐	Stoneflies
☐	Mayflies
☐	Other Caddisflies
☐	Dobsonflies, Fishflies, and Alderflies
☐	Riffle Beetle Larvae/ Adults
☐	Water Pennies
☐	Right-Handed/ Gilled Snails
☐	Aquatic Snipe Flies
☐	**Number of TAXA**

Group 2: Somewhat Sensitive	
☐	Damselflies
☐	Dragonflies
☐	Sowbugs
☐	Scuds
☐	Crane Flies
☐	Clams/Mussels
☐	Crayfish
☐	Net-Spinning Caddisflies
☐	**Number of TAXA**

Group 3: Tolerant	
☐	Midge Flies
☐	Black Flies
☐	Planarians
☐	Leeches
☐	Left-Handed/ Lunged Snails
☐	Aquatic Worms
☐	Rat-Tailed Maggots
☐	**Number of TAXA**

2 ☐ **Sum of All Individuals** *(Add the values from all boxes next to the taxa names)*

3

4 Number of TAXA x 3 = INDEX VALUE ☐   Number of TAXA x 2 = INDEX VALUE ☐   Number of TAXA x 1 = INDEX VALUE ☐

5 ☐ **Pollution Tolerance Index (PTI) Score** *(Add the three Index Values)*

Calculating the Biotic Index

Sort the macroinvertebrates into taxa groups.

1. Count the number of individual macroinvertebrates for each taxa. Record the quantity in the box to the left of the taxa name.
2. Determine the **Sum of All Individuals** by adding the numbers in the boxes next to all of the the taxa names. Record the total in the **Sum of All Individuals** box on the far right.
3. Count how many boxes in each sensitivity group column have a quantity entered. (Group 1 and Group 2: maximum 8, Group 3: maximum 7). Enter the **Number of TAXA** in the box at the bottom of each column.

4. Multiply the **Number of TAXA** by the weighting factor (3, 2 or 1) at the bottom of the column to obtain the **Index Value** for each Sensitivity Group.
5. Add the **Index Values** for the three groups to determine the **Pollution Tolerance Index (PTI) Score**. Enter the **PTI Score** in the box.
6. Determine the **Pollution Tolerance Index Rating** from the PTI Score.

6

POLLUTION TOLERANCE INDEX RATING		
23 or more	**Excellent**	☐
17-22	**Good**	☐
11-16	**Fair**	☐
10 or less	**Poor**	☐