

Macroinvertebrate Survey and Assessment

Monitor Name(s): _____

Date: _____

GPS Location: _____

Stream Name: _____

Naming Convention: _____

Macroinvertebrate Count

Identify the macroinvertebrates (to order) using the identification sheets. We are only concerned with organisms that appear on the identification sheets. Record the number of organisms in the table below and assign them letter codes based on their abundance.

R (Rare) = 1-9

C (Common) = 10-99

D (dominant) = 100+

EXAMPLE: 23 (C) Stonefly Nymphs or 8 (R) Aquatic Worms or 117 (D) Sowbugs

Group I - Sensitive	Group II - Somewhat Sensitive	Group III - Tolerant
<input type="checkbox"/> Water Penny Larvae	<input type="checkbox"/> Beetle Larvae	<input type="checkbox"/> Aquatic Worms
<input type="checkbox"/> Hellgrammites	<input type="checkbox"/> Clams	<input type="checkbox"/> Blackfly Larvae
<input type="checkbox"/> Mayfly Nymphs	<input type="checkbox"/> Crane-fly Larvae	<input type="checkbox"/> Leeches
<input type="checkbox"/> Gilled Snails	<input type="checkbox"/> Crayfish	<input type="checkbox"/> Midge Larvae
<input type="checkbox"/> Riffle Beetle Adults	<input type="checkbox"/> Damselfly Nymphs	<input type="checkbox"/> Snails
<input type="checkbox"/> Stonefly Nymphs	<input type="checkbox"/> Dragonfly Nymphs	
<input type="checkbox"/> Non-net Spinning Caddisfly Larvae	<input type="checkbox"/> Scuds	
	<input type="checkbox"/> Sowbugs	
	<input type="checkbox"/> Fishfly Larvae	
	<input type="checkbox"/> Alderfly Larvae	
	<input type="checkbox"/> Net Spinning Caddisfly Larvae	

Water Quality Rating

To calculate the index value, add the number of letters found in the three groups above and multiple by the indicated weighting factor.

Group I - Sensitive	Group II - Somewhat Sensitive	Group III - Tolerant
(# of R's) X 5.0 = _____	(# of R's) X 3.2 = _____	(# of R's) X 1.2 = _____
(# of C's) X 5.6 = _____	(# of C's) X 3.4 = _____	(# of C's) X 1.1 = _____
(# of D's) X 5.3 = _____	(# of D's) X 3.0 = _____	(# of D's) X 1.0 = _____
Index Sum Total	Index Sum Total	Index Sum Total

To calculate the water quality score of the stream site, add together the index sum total for each group. The sum of these values equals the water quality score.

Group I - Sensitive		Compare this score to the following number ranges to determine the quality of your stream site
Group II - Somewhat Sensitive		
Group III - Tolerant		
Water Quality Score		Good >40 Fair 20-40 Poor <20