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
( ) Water Penny Larvae	( ) Beetle Larvae	( ) Aquatic Worms
( ) Hellgrammites	( ) Clams	( ) Blackfly Larvae
( ) Mayfly Nymphs	( ) Cranefly Larvae	( ) Leeches
( ) Gilled Snails	( ) Crayfish	( ) Midge Larvae
( ) Riffle Beetle Adults	( ) Damselfly Nymphs	( ) Snails
( ) Stonefly Nymphs	( ) Dragonfly Nymphs	
( ) Non-net Spinning Caddisfly Larvae	( ) Scuds	
	( ) Sowbugs	
	( ) Fishfly Larvae	
	( ) Alderfly Larvae	
	( ) 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	
Group II - Somewhat Sensitive	
Group III - Tolerant	
Water Quality Score	

Compare this score to the following number ranges to determine the quality of your stream site

Good >40 Fair 20-40 Poor<20