

VOLUNTEER STREAM MONITORING PROGRAM
FIELD DATA COLLECTION SHEET:
BENTHIC MACRO INVERTEBRATE SURVEY

Group Name: _____ Number of Volunteers: _____

Contact Name: _____ Date & Time: _____

Phone: _____ Email: _____

Stream Name: _____ Sampling Location: _____

GPS Coordinates: N ____° ____' ____." and W ____° ____' ____."

A. Field Observations

Weather Conditions (last 3 days): _____

Average water depth at site (feet): _____ Average width at site (feet): _____

Stream Flow Rate (check one) High Normal Low

Stream Appears (check one) Clear Cloudy Muddy

B. Illicit Discharge Monitoring

Possible Illicit/Improper Discharge: Please make note of any pipe which flows into the stream during dry weather as this may be an indication of an improper connection.

C. Benthic Macro Invertebrate Monitoring

1. Use the "Stream Insects & Crustaceans" identification key to identify organisms.
2. Record the species of organisms found in the space below, using the chart to classify them by their tolerance levels.
3. Calculate the Aquatic Index Value by multiplying the number of species of organisms in each group by the index value for that group. Then, add the resulting three numbers to obtain the Aquatic Index Value.

Group Name: _____

Date: _____

C.1. Individual Sample Results

		3 Sweep (Dip) Net Samples	2 Kick Net Samples	1 Leaf Pack Sample	Visual Sample	2 Fine Mesh Samples	1 Sand Sample
Group One Taxa Sensitive	<input type="checkbox"/> Stonefly						
	<input type="checkbox"/> Caddisfly						
	<input type="checkbox"/> Water Penny						
	<input type="checkbox"/> Riffle Beetle						
	<input type="checkbox"/> Mayfly						
	<input type="checkbox"/> Gilled Snail						
	<input type="checkbox"/> Dobsonfly (Hellgrammite)						
Boxes checked = _____							
Group Two Taxa Somewhat Sensitive	<input type="checkbox"/> Crayfish						
	<input type="checkbox"/> Sowbug						
	<input type="checkbox"/> Scud						
	<input type="checkbox"/> Alderfly Larva						
	<input type="checkbox"/> Fishfly Larva						
	<input type="checkbox"/> Damsel fly						
	<input type="checkbox"/> Watersnipe Fly Larva						
	<input type="checkbox"/> Crane Fly						
	<input type="checkbox"/> Beetle Larva						
	<input type="checkbox"/> Dragon Fly						
	<input type="checkbox"/> Clam						
Boxes checked = _____							
Group Three Taxa Tolerant	<input type="checkbox"/> Aquatic Worm						
	<input type="checkbox"/> Midge Fly Larva						
	<input type="checkbox"/> Blackfly Larva						
	<input type="checkbox"/> Leech						
	<input type="checkbox"/> Pouch Snail and Pond Snail						
	<input type="checkbox"/> Other Snails						
Boxes checked = _____							

All Field Data Sheets should be emailed to StormwaterVolunteers@raleighnc.gov or sent via US mail to:

City of Raleigh Stormwater Management
 Attn: Volunteer Stream Monitoring
 Professional Building, 8th Floor
 127 West Hargett Street
 Raleigh, NC 27601

C.2. Water Quality Rating

Enter the number of boxes checked for each Taxa on the previous page into the table below and multiply by the index to get the Aquatic Index Value for each Taxa. Then sum the three Taxa Aquatic Index Values together to determine the Total Aquatic Index Value.

Group One Taxa Sensitive		Group Two Taxa Somewhat Sensitive		Group Three Taxa Tolerant	
Number of Boxes Checked		Number of Boxes Checked		Number of Boxes Checked	
	x 3		x 2		x 1
<i>Group One Taxa Aquatic Index Value</i>		<i>Group Two Taxa Aquatic Index Value</i>		<i>Group Three Taxa Aquatic Index Value</i>	

Group One Taxa Aquatic Index Value	_____
Group Two Taxa Aquatic Index Value	+ _____
Group Three Taxa Aquatic Index Value	+ _____
Total Aquatic Index Value	_____

Excellent (>22)

Good (17-22)

Total Aquatic Index Value = _____

Fair (11-16)

Poor (<11)

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