

Macroinvertebrate Data Sheet

Name: _____

Stream Name: _____

Location on Stream: _____



Date: ____/____/____

Time: _____ AM / PM

Sampling Duration: _____ min / hrs

Weather at time of sampling: ☐ Clear ☐ Overcast ☐ Rain ☐ Storm Other: _____

Weather in past 48 hours: ☐ Clear ☐ Overcast ☐ Rain ☐ Storm Other: _____

Water Level: ☐ Low ☐ Normal ☐ High ☐ Flood Other: _____

Types of habitat sampled: ☐ Riffle ☐ Sediment ☐ Bank ☐ Pool Other: _____

Additional Notes: _____



Macroinvertebrate Pollution Tolerance Index

Place a ✓ next to any taxa group found during the sample



GROUP 1: TOLERANT

☐ Pouch Snail

☐ Gilled Snail

☐ Orb Snail

☐ Limpet

☐ Fingernail Clam

☐ Freshwater Mussel

☐ Rat Tailed Maggot Larva

☐ Water Snipe Fly Larva

☐ Horsefly Larva

☐ Crane fly Larva

☐ Midge Pupa

☐ Blackfly Larva

☐ Leech

☐ Tubifex Worm

☐ Planoria or Flatworm

☐ Horsehair Worm

☐ Midge Larva

☐ Threadworm

☐ Copepod or Cyclops

☐ Ostracod or Clam Shrimp

☐ Daphnia or Water Flea

☐ Total Number of Taxa - Group 1

GROUP 2: SOMEWHAT SENSITIVE

☐ Crayfish

☐ Amphid or Scud

☐ Isopod or Aquatic Sowbug

☐ Water Mite

☐ Fishing Spider

☐ Riffle Beetle

☐ Water Scavenger Beetle

☐ Predaceous Diving Beetle

☐ Whirligig Beetle

☐ Crawling Water Beetle

☐ Water Strider

☐ Giant Water Bug

☐ Backswimmer

☐ Water Boatman

☐ Water Scorpion

☐ Total Number of Taxa - Group 2

GROUP 3: SENSITIVE

☐ Caddisfly Larva

☐ Pyralid Caterpillar

☐ Water Penny

☐ Dragonfly Nymph

☐ Caddisfly Larva

☐ Caddisfly Larva

☐ Alderfly Larva

☐ Dobsonfly or Fishfly Larva

☐ Stonefly Nymph

☐ Mayfly Nymph

☐ Domsellfly Nymph

☐ Total Number of Taxa - Group 3

Place a ✓ next to additional biological indicators observed.

☐ Rusty Crayfish

☐ Aquatic Plants

☐ Zebra Mussel

Group 1 Total x1

+

Group 2 Total x2

+

Group 3 Total x3

=

Stream Rating

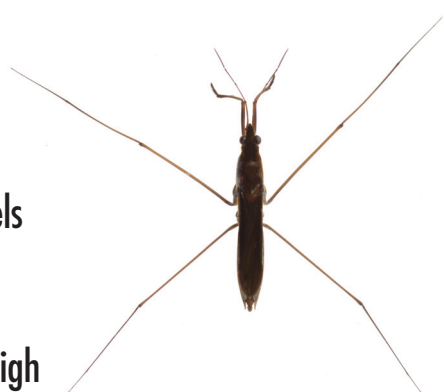
Stream Rating

- >22: Excellent
- 17-22: Good
- 11-16: Fair
- <11: Poor



Water Quality Designations

- Exceptional Value- Has abundant sensitive macroinvertebrates, cold year round, low nitrogen and phosphorus levels
- High Quality- Mixture of all three levels of macroinvertebrates, likely contain a variety of fish species
- Fair Value-May have some sensitive species, but likely composed of somewhat sensitive and tolerant species
- Impaired- Abundant tolerant species, water likely warm during summer months, nitrogen and phosphorus levels high



Stream Rating

>2: Excellent
17-22: Good
11-16: Fair
<11: Poor



Macroinvertebrates Field Guide

LANCASTER COUNTY
CONSERVATION DISTRICT

- Shredders - break down leaves
- Collectors - eat fine particles while drifting
- Grazers - feed on plants and algae on rocks
- Predators - eat other macroinvertebrates

