



STREAM SAMPLING WORKSHEET

TEAM DNR MD STREAMS PROGRAM

Date: _____ **Group**(Circle one): **A** **B** **C**
Stream: _____ **School:** _____
County: _____
Location(note any landmarks): _____

Macroinvertebrate Sample Count

Mark the number(quantity) of stream macroinvertebrates identified in the sample. Types of organisms are listed below in categories based on organisms sensitivity to pollution.

Sensitive Stream Insects

_____ Stonefly nymphs

_____ Dobsonfly larvae

_____ caddisfly larvae

_____ mayfly nymphs

_____ water penny larvae

Somewhat Sensitive Stream Insects

_____ Cranefly larvae

_____ Alderfly larvae

_____ Damselfly nymphs

_____ Dragonfly nymphs

_____ Beetle larvae

_____ Crayfish

_____ scuds

_____ clams

Pollution Tolerant Stream Insects

_____ Aquatic worms

_____ Left-opening snails

_____ Blackfly larvae

_____ Leeches

_____ Midges

Other Organisms Sampled

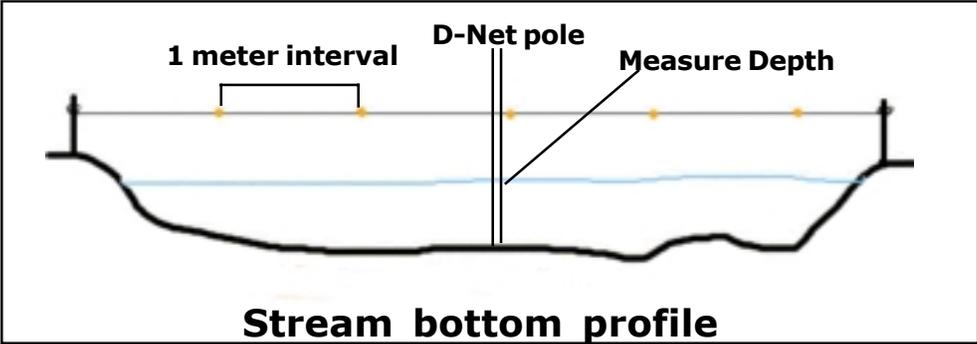


STREAM PROFILE



Stream Velocity: _____ **ft/sec** (Velocity= Distance/Time) convert to meters in class.

Average Stream Depth: _____ **cm** (measure depth across stream at 1 meter intervals and average results)



Water Clarity (circle one): Clear Muddy Black/Tea-colored Oily/Foamy

Describe the vegetation next to the stream? (circle one or more)
Trees Shrubs Grass Bare Soil Field Crops

Stream Bottom Type (circle one or more)

Rocky Bottom Gravel Bottom Sandy Bottom Muddy Bottom

Stream Map

Draw a map of the sampled stream reach. Label important stream features and habitats

What kind of trash do you see in or around the stream? _____

How much of the stream is shaded? (circle one of the following)
no shade partly shaded fully shaded

Is there Algae in the stream? (circle one of the following) **Yes No**



CHEMICAL PARAMETERS



Turbidity: _____ **JTU**(Jackson Turbidity Units, these are interchangeable with the standard Nephelometer Turbidity Units)

pH: _____(compare color to scale, value 0= very acidic ----value 7=neutral----value 14= very basic)

Dissolved Oxygen: _____ **ppm**(parts per million)

Average Stream water temperature: _____ **Degrees Celsius** (Conversion from F is { (F -32).55 })
(measure temperature three times and average)

VEGETATION SURVEY

Survey Data from 1/20 acre circular plot and streamside

Vegetation Types: Ground Cover >75% 75-50% 50-25% <25%

Canopy Cover >75% 75-50% 50-25% <25%

Invasive species covering plot >75% 75-50% 50-25% <25%

Canopy Cover >75% 75-50% 50-25% <25%

Number of root balls in the sampling area(trees with roots in the stream)? _____



Conclusions

What types of data collected will give you clues about stream health? _____

What type of stream insect did you find in the greatest quantity? _____

What are some of the land uses near the stream? _____

Did you find invasive plant species near the stream? _____

What is the most numerous invasive species you found at the survey site? _____

Based on your investigation, how would you rate the health of this stream?

Good **Fair** **Poor**

Are there restoration opportunities at this stream? **Yes** or **No**

Identify the restoration opportunities :