Field Site Information Survey

Please note: teachers can use this survey with students in anyway they want (class project, independent research, senior research, all at once, portions at a time, not at all). PLEASE SEND IT TO CREEK CONNECTIONS EVEN IF YOU DO NOT COMPLETE ALL QUESTIONS. This information will be posted on the website. Any information you can give us will be beneficial.

School Name: _____

Teacher Name: _____

Site # _____ Name of waterway: _____

Site Name: _____

Date this survey was completed:

_____

GEOGRAPHY

1. What roads/bridges are near your testing site?

2. What is the latitude and longitude at your site? (If Known, Optional)
This can be obtained from a topographical map or GPS unit.

Lat. _____._____'_____" Long. _____._____'_____"

3. How long is your creek (if known)?
This can be obtained from laying a string over the path of your waterway on a topographic map, then measuring the length of the string. Or you could use a map wheel (available from Creek Connections).

4. How many miles upstream from your waterway's mouth (ending) is your sampling site?

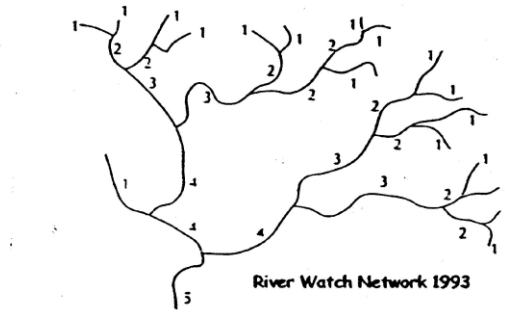
5. What is the **stream order** at your site?
See side bar to find out how to determine this.

6. What are the major tributaries to your waterway, upstream of your site?
Be as specific as you would like.

7. What is your waterway a tributary to (where does your waterway flow to)?
Be as specific as you would like.

8. What is the drainage area of your waterway UPSTREAM FROM YOUR SITE? *(if known)*
To determine this, ask Creek Connections for an instructions sheet.

A FEW WORDS ABOUT STREAM ORDER: Stream order is a way of describing a stream by its position in the hierarchy of tributaries. First order streams have no tributaries. Second order streams are streams whose tributaries are only first order streams. A stream that is third order has only first and second order streams as its tributaries and so on.



LAND USE

9. What is the land use at your sampling site?
What types of land use surround your site (200m.), check **ALL** that apply.

__ Wetlands
__ Forest
__ Overgrown Shrubs/ Small Trees
__ Cropland
__ Pasture
__ Residential
__ Commercial
__ Industrial - operating
__ Industrial - unused/ abandoned
__ Mining operation / oil wells
__ Park/ Recreation Area
__ School Campus
__ Other: _____
__ Other: _____

Which of the above is the dominant land use? _____

10. What land uses exist in your watershed, upstream of your sampling site (these land uses may have an effect on your water quality)?

__ Wetlands
__ Forest
__ Overgrown Shrubs/ Small Trees
__ Cropland
__ Pasture
__ Residential
__ Commercial
__ Industrial - operating
__ Industrial - unused/ abandoned
__ Mining operation / oil wells
__ Park/ Recreation Area
__ School Campus
__ Other: _____
__ Other: _____

Which of the above is the dominant land use? _____

11. How much litter is present at your testing site?

__ Large amounts
__ Medium amounts
__ Low amounts
__ None

WATERWAY CHANNEL CHARACTERISTICS

12. Average height of stream channel? (Not depth of water, but how high can the water rises before it floods its banks).

_____ m.

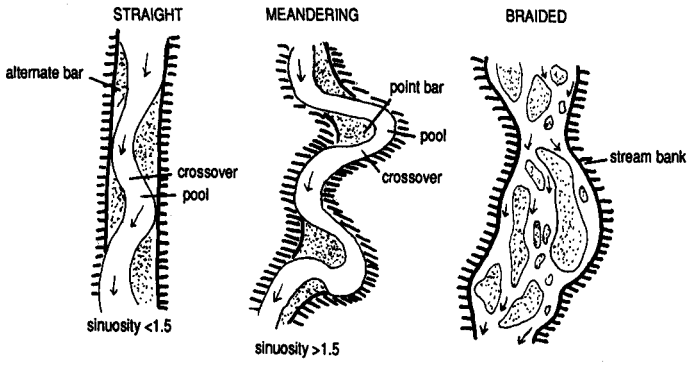
13. What is the average width of the stream channel at your testing site? (Not width of water, but bank to bank).

_____ m.

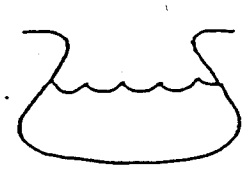
14. Look up and down your testing site. Choose all that apply to your test site.

a. The stream channel is…

___ Straight
___ Meandering/curving
___ Braided (small islands formed)
___ Channelized (man made sides or bottom)
___ Dredged for navigation uses



b. Are your banks undercut? Yes No

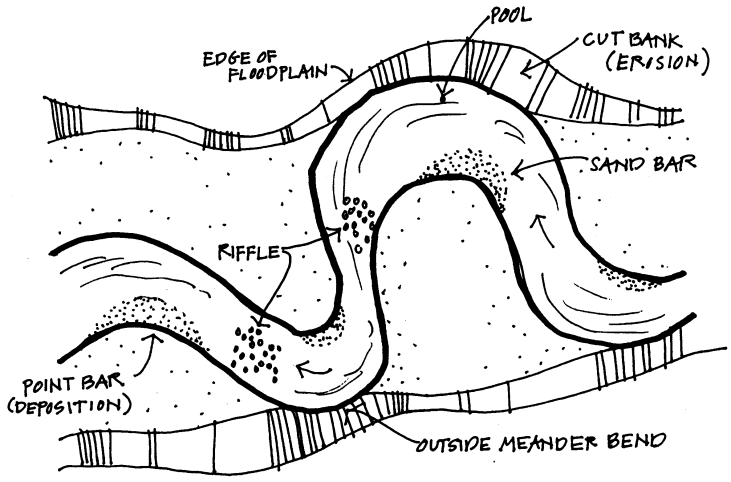


← Banks Undercut

c. Do you think erosion would occur easily at your site? Yes No

d. The waterway contains a…

___ Riffle (shallow, fast, tumbling over rocks)
___ Run (deeper, moving stretches of water)
___ Pool (deep, stationary water)
___ Debris Dam (naturally occurring obstruction in waterway)
___ Beaver Dam
___ Man-made Dam



15. Your samples are taken from which? ___ Riffle ___ Run ___ Pool

16. Mark all of the following that can be seen on your waterway's substrate (bottom).

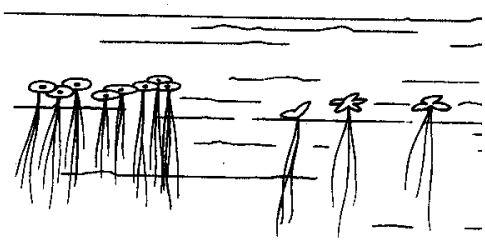
___ Cannot see substrate (inaccessible)
___ Bedrock (sheet of solid rock)
___ Boulders (>25 cm diameter)
___ Cobble (6.25 cm – 25 cm diameter)
___ Gravel (.25 cm – 6.25 cm diameter)
___ Sand (up to .25 cm diameter)
___ Silt (soft, fine particles slightly smaller than a sand crystal)
___ Clay (very fine, with sticky texture, can be suspended in water then settle out)

17. What is the average size of a substrate particle? (To determine this, use the pebble count procedure, see the instruction sheets)

_____

BIOLOGICAL CHARACTERISTICS

18. AQUATIC VEGETATION
What aquatic vegetation is present in the water? (These are plants that need to live in the water.)
___ Algae
___ Emergent Plants (have leaves that extend above water surface)
Examples: cattails, iris, arrowhead, pickerelweed, sedges, rushes
___ Submersed Plants (most leaves growing underwater; only some leaves float) Examples: pondweed, wild celery, milfoil, waterweed or elodea, bladderworts
___ Floating-leaf Plants (rooted plants with leaves that float on surface)
Examples: water lilies, lotus
___ Free-floating plants (not attached by roots, float anywhere- don't count algae Examples: duck weed, watermeal
___ Other: _____
___ No vegetation



Caduto, 1990. Pond and Brook.

19. RIPARIAN ZONE VEGETATION
What types of vegetation are found in the riparian zone? (These are plants that live in wet/dry areas along the bank.)

Remember: Think of what it would be like during prime growing season, July and August, not during winter

___ Old Growth Forest ___ with underbrush
___ Large Trees ___ with underbrush
___ Small Trees ___ with underbrush
___ Mostly brush and short scraggly trees
___ Thick Brush
___ Tall Grass or Weeds
___ Lawn
___ Other: _____

20. Approximately how wide is the streamside forest?
__ >100m.
__ 10-100m.
__ <10m.
__ Not Present

21. RIPARIAN CHANNEL ENVIRONMENTAL INVENTORY:
If you have done a Riparian Channel Environmental Inventory (RCE), please give us the scores:

Date: _____ Score: _____

Date: _____ Score: _____

Date: _____ Score: _____

Date: _____ Score: _____

22.Fish are…

__ seen easily
__ seldom seen

What types of fish habitats are present in your waterway? (mark any that apply)

___ logs, large woody debris
___ deep pools
___ overhanging vegetation
___ boulders, cobble (large rocks)
___ undercut banks
___ thick root mats
___ dense aquatic plant beds
___ debris dams (natural dams of logs, limbs)
___ isolated, backwater pools
___ riffles

23. MUSSELS:
___ mussels (shells) found on banks and/or in water
___ have found live mussels in water
___ never seen a live mussel or empty shells

24. MACROINVERTEBRATES
What types of macroinvertebrate habitats are present in your waterway? (mark any that apply)
___ riffle
___ large rocks (cobble, boulders)
___ coarse gravel
___ sandy, silty, mucky bottom
___ submerged logs
___ leaf packs (clumps of leaves caught in water)
___ aquatic plant beds
___ tree roots

If you have calculated any Pollution Tolerance Index (PTI) scores, please give them to us.

Date: _____ PTI Score: _____

Date: _____ PTI Score: _____

25. OTHER AQUATIC LIFE
What other creatures have you seen or seen evidence of:

___ beaver, river otter, muskrat
___ amphibians (salamanders, frogs) found on banks and/or in water
___ Loch Ness Monster
___ Other: _____

26. STREAMSIDE ANIMAL LIFE

What types of non-aquatic life do you find at your site? (HINT: look for evidence as well as the actual animal. This can include tracks, hair, bones, or droppings)

__ Rabbits
__ Raccoons
__ Opossums
__ Deer
__ Streamside Birds
__ Waterfowl
__ Squirrels/Chipmunks
__ Snakes
__ Woodchuck/groundhog
__ Coyote
__ Bear
__ Fishermen
__ Elephant
__ Other: _____