

# VISUAL SURVEY DATA SHEET

Please check the box next to the "Site #" *if this is a new site and please be sure to attach a map.* (PLEASE PRINT)

Site # \_\_\_\_\_ Stream \_\_\_\_\_ County \_\_\_\_\_

Site Location \_\_\_\_\_

Date \_\_\_/\_\_\_/\_\_\_ Time (military time) \_\_\_\_\_ Rainfall (inches in last 7 days) \_\_\_\_\_ Water Temp. (°C) \_\_\_\_\_

Trained Data Submitter (responsible volunteer) \_\_\_\_\_ Stream Team Number \_\_\_\_\_

Participants \_\_\_\_\_

<p><b>*1. Floodplain land use</b> industrial _____% commercial _____% residential _____%                  pasture/hayfields _____% row crops _____% woods _____%                  other (specify) _____%</p>
<p><b>*2. Riparian cover</b> trees _____% grasses or weeds _____% bare ground _____%                  parking lots/streets _____% buildings _____%                  other (specify) _____%</p>
<p><b>*3. Streambank conditions</b> trees _____% grasses or weeds _____% bare ground _____%                  bedrock _____% pavement/riprap _____%                  other (specify) _____%</p>
<p><b>*4. Bed composition of riffle (or, if alternative habitat, check box <input type="checkbox"/>)</b> silt or mud _____%                  sand _____% gravel _____% cobble (2-10") _____% boulder (&gt;10") _____% bedrock _____%</p>
<p><b>5. Percent embeddedness of cobble substrate</b> = _____ + _____ + _____ + _____ + _____ = _____ / 5 = _____%  <input type="checkbox"/> Cobble substrate not present at site</p>
<p><b>6. Signs of human use</b> _____                  _____</p>
<p><b>7. Algae</b>                  What percent of stream bottom is covered by visible algae? _____%                  Of the algae observed what percentage is:                  (a) close-growing _____% + (b) filamentous (strands over 2" long) _____% = 100%                  (The sum of 7a and 7b should equal 100%)</p>
<p><b>8. Water Color</b> (describe) _____</p>
<p><b>9. Water Odor</b> (describe) _____</p>
<p><b>10. Weather Conditions</b> (cloud cover) _____</p>
<p><b>11. Comments</b> _____                  _____                  _____</p>
<p><b>12. Fish Present</b> (Please mark) Yes <input type="checkbox"/> or <input type="checkbox"/> No</p>

**\*Items 1 thru 4 must total 100%**

PLEASE KEEP A COPY AND SEND ORIGINAL DATA TO: Stream Team Coordinator  
 Water Protection Program  
 Department of Natural Resources  
 P.O. Box 176  
 Jefferson City, MO 65102-0176



Volunteer Monitoring - 12/15

## VISUAL STREAM SURVEY SHEET INSTRUCTIONS

The purpose of the visual survey is to determine if there are any obvious water pollution problems on the stream and to characterize the riparian environment through which the stream flows. If thoroughly done, the watershed map should provide good guidance on which segment of your stream should be concentrated on in your visual survey. This data sheet has been developed to help you collect information during the visual survey of your 300 foot monitoring site. You are encouraged to fill out all of the data sheet items and any additional notes you feel help describe the stream and riparian corridor.

### Data Sheet Items

**Site Number.** You must designate this number. It becomes very important if you choose to monitor more than one site. Number your sites chronologically as you choose them.

**Stream and County.** List the name of the stream as it appears on your map (e.g., a USGS topographic map). Locating your site on a map also ensures you record the appropriate county.

**Site Description.** This refers to a verbal description. Verbally describe where you are on the stream using street or highway names, bridges, approximate distances from landmarks, etc. Please be consistent and use the same verbal description for the same site (e.g., 100 feet upstream of Hwy. P bridge).

**Date and Time.** Please use military time (e.g., 9:00 a.m. is 0900, or 2:45 p.m. is 1445).

**Rainfall.** Enter the amount of rainfall received in inches in the past 7 days.

**Water Temperature.** 0°-34° C *is within the normal range*

Be sure to read water temperature while the thermometer is submerged and shaded.

**Trained Data Submitter.** List the name of the person assuming responsibility for these data.

**Stream Team Number.** Enter the Stream Team number for the Trained Data Submitter.

**Participants.** List the names of all other volunteers.

- 1. Flood Plain Use.** List the dominant land uses adjoining the stream. Bluff to bluff, estimate the percentage.
- 2. Riparian Cover.** For the purposes of this data sheet, the riparian zone is the area extending back from the top of each streambank for a distance of 100 feet. Estimate the percentage of this area that is covered by the various categories listed.
- 3. Streambank Conditions.** The streambank is the area of the land that rises from the streambed and reaches a crest. Such crests are more noticeable when looking at the outside bend of a stream meander. Estimate the percentage of the area of the streambank that is covered by the categories listed.
- 4. Bed Composition of Riffle.** A riffle is an area of shallow, rapid flowing water within a stream. If your stream site contains a riffle, estimate the percentage of streambed within the riffle that is covered by the various sized sediments listed. If you do not have a riffle, check the box and describe alternative habitat substrate.
- 5. Percent Embeddedness of Cobble Substrate.** Estimate the percentage (0-100%) of the surface area of the cobble substrate embedded in the sediment or sand. Randomly pick up five rocks between 2"-10" in size from the riffle and estimate the percentage each rock is embedded. Sum the 5 percentages and divide by 5 to get an average. If cobble is not present, then place a check in the box. Be sure not to choose rocks from areas where you will be sampling macroinvertebrates.
- 6. Signs of Human Use.** Note any signs of human use in the area along the stream (e.g., pull-offs or dirt roads for cars, footpaths, food and drink containers, campfires, fishing equipment, etc.).
- 7. Algae.** Estimate the percentage of the stream bottom covered by visible algae. Of the total algal cover, what percent is: (a) close-growing? (b) filamentous? Remember that (a) + (b) should total 100%.
- 8. Water Color.** Collect a sample of water using a clear plastic container and describe the water color (e.g., clear, brown, green, milky, oily sheen, etc.).
- 9. Water Odor.** Take a whiff of the water from your plastic container. If any odor is present, please describe (e.g., sewage odor, chemical odor, petroleum odor, rotten egg odor, musty odor, organic odor, no perceptible odor, etc.).
- 10. Weather Conditions.** Please describe the cloud cover (e.g., sunny, partly cloudy, etc.).
- 11. Comments.** List anything else not covered on the data sheet such as pipes, drainage ditches, and any changes in conditions since the last survey.
- 12. Fish Present.** Mark "Yes" or "No."