

Instructions for 'Sediment Characterization Data Sheet'

This form is used to document the conditions and characteristics of the channel bed substrate *at each cross-section location in the sample reach*. Characterization of the channel surface sediments includes describing the habitat quality of the substrate, the degree of organic components within the substrate and determining the grain size distribution from a Wolman pebble count. These data quantify the substrate materials, and help to describe the condition of instream habitat in the sample reach. When these data are compared to similar systems throughout the region, the degree of impact to and quality of each stream's channel substrate can be evaluated.

HEADER INFO

- Stream Name:** Name of stream indicated on topo map, or some indication of nearest named stream if study stream is not delineated (ex: trib to Dry Creek).
- Location:** Segment ID # and 1-2 word description (ex: SR1A, near confluence).
- Reach ID:** Unique 4-character reach ID assigned to this study reach .
- River Basin:** Name of surrounding watershed or higher order stream the study stream is tributary to.
- Investigators:** Names of entire field crew surveying reach.
- Form Completed by:** Name of surveyor who completed the form.
- Date/Time:** Month, Day, Year, Time (indicate am/pm or use 24-hr notation)
- Associated Transect ID #s:** Indicate the ID numbers of each cross-section surveyed in this reach and any associated biological sample ID numbers.

CROSS-SECTION TRANSECT ID #: The unique ID number of the cross-section where the sediment condition is evaluated.

SUBSTRATE QUALITY

- Odors:** Disturb sediment in a depositional area of the cross-section and note the presence of those odors described (or include any other odors not listed) that are associated with the sediment.
- Presence of Oils:** Indicate the term that best describes the relative amount of any sediment oils observed in the sampling area.

Sediment Deposits: Note those deposits described (or include any other deposits not listed) that are present in the sampling area. Also indicate whether the undersides of rocks not deeply embedded are black (which generally indicates low dissolved oxygen or anaerobic conditions).

ORGANIC SUBSTRATE COMPONENTS

Indicate the relative proportion or abundance of each of the three organic substrate types listed. These percentages do NOT need to total 100%. Note off to the side the type and percent of any other organic material present in the sampling area.

INORGANIC GRAIN SIZE DISTRIBUTION

Complete a Wolman pebble count along the cross-section line using the toe-heel method (refer to the USFS publication, 'Stream Channel Reference Sites: An Illustrated Guide to Field Technique', for detailed instructions). Tally the results and determine the cumulative percent (less than) of each grain size category. Plot the cumulative percent versus each grain size on the graph provided to determine standard grain size percentiles (D_{50} , D_{84} , D_{16}).