

Field Audit Checklist for: FS 7420. Stream Condition Index Sampling (SOP Revision Date: February 1, 2004)

_____ Did the samplers properly complete the Physical/Chemical Characterization Field Sheet (FD 9000-3) or equivalent?

_____ Did the samplers properly complete the Stream/River Habitat Sketch Sheet (FD 9000-4) or equivalent?

_____ Did the samplers properly complete the Stream/River Habitat Assessment Field Sheet (FD 9000-5) or equivalent?

_____ Did the samplers have sampling equipment appropriate for SCI sample collection?

_____ Did the samplers delay sampling if flood conditions prevented access to substrates that are inhabited by invertebrates?

_____ Did the samplers properly determine the number of sweeps to perform in each habitat type out of the twenty total sweeps per station according to the list below?

_____ If one productive habitat is present, perform 10 sweeps in that habitat and 10 sweeps in a minor habitat (e.g., sand).

_____ If two productive habitats are present, perform 7 sweeps in each of those habitats and 6 sweeps in a minor habitat.

_____ If three productive habitats are present, perform 5 sweeps in each of those habitats and 5 sweeps in a minor habitat.

_____ If four productive habitats are present, perform 4 sweeps in each of those habitats and 4 sweeps in a minor habitat.

_____ If five productive habitats are present, perform 3 sweeps in each of those habitats and 5 sweeps in a minor habitat.

_____ Did the samplers properly perform 20 discrete 0.5 m sweeps with the D-frame dipnet?

_____ Did the samplers properly apportion the 20 sweeps as determined previously?

_____ Did the samplers capture invertebrates without sample loss according to the guidelines below?

_____ In streams with sufficient water velocity, the most effective way to capture invertebrates is to place the bottom rim of the dipnet downstream of the area to be sampled. Disturb, agitate, or dislodge organisms (with hands and/or feet, or brush, where appropriate) from substrates (snags, etc.) at a distance of 0.5 m upstream of the net. When performing an upstream/downstream type of study, sample the downstream station first to prevent upstream invertebrates from drifting into a location they did not originally inhabit. If you are sampling from a boat, you can get out of the boat and wade in shallow shore areas to obtain the sweeps. You can also approach a habitat with the boat from downstream, agitate and sweep the reachable portion of the habitat (typically by leaning from the bow of the boat), to capture organisms.

_____ For areas without flow, disturb an area of substrate that is one dipnet width wide and approximately 0.5 m long, and sweep the net over the area a few times to ensure the capture of organisms which were living there. Several passes (three or more) over the same 0.5 m area are recommended to make sure all organisms are captured. This sampling effort in a discrete 0.5 m spot is considered as one sweep.

_____ For heavily vegetated areas place the net at the base of the vegetation and dislodge organisms using your hand or a 0.5 m sweeping motion with the net. Where a continuous 0.5 m sweep is impossible, take two 0.25 m sweeps of the same habitat to attain a full 0.5 m sweep.

_____ Sample leaf packs (if present) by disturbing leaf pack areas with hands or feet before scooping 0.5 m worth of material into the net. When sampling leaf mats, make sure that only the top 2 cm of material is collected, and especially make sure that anaerobic leaf material is not included.

_____ Sand, muck, mud, and silt (non-major habitats) can be sampled by agitating the top 2 cm of substrate (with hands, feet, or brush) and taking three 0.5 m sweeps over the area. If the net is pushed into coarse sand or coarse detritus, very little of the sand or detritus will be washed through the net, resulting in a sample that contains few organisms and is hard to process, thus compromising the quality of the entire sample.

_____ Did the samplers reduce the sample volume after each discrete sample by dislodging organisms from larger debris (but retaining invertebrates in the net) and discarding the debris?

_____ Did the samplers save finer debris plus organism mixture in large wide-mouth jugs?

_____ Did the samplers make every effort to reduce enough of the sample volume in the field so that no more than four liters of material were collected? **OR** If this was not possible, did the samplers put the material into additional jugs?

_____ Did the samplers prevent loss of organisms collected during sample reduction and transfer?

_____ Did the samplers properly preserve the sample with 10% buffered formalin? **OR** If the sample will be sorted within 24 hours, did the samplers immediately ice the sample?

_____ Did the samplers document the number of sweeps for each habitat on the Physical/Chemical Characterization Field Sheet (FD 9000-3) or equivalent?

_____ Was the sample container labeled with permanent ink?

_____ Was the site identified on the sample container?

_____ Was the collection date identified on the sample container?

_____ Was the collector identified on the sample container?

_____ Was the sample type (SCI) identified on the sample container?

_____ Did the samplers indicate on the label in how many jugs the entire sample is contained (e.g., "1 of 2," "2 of 2")?

_____ Was the preservative information identified on the sample container?