

A6.1 Measurements

(From QAPP version 0)

Tributaries will be sampled for a number of abiotic and biotic indicators using EMAP methodologies for non-wadeable rivers (Peck *et al.*, in press), with the following exceptions:

1. The reach length will be 40 times the mean wetted width (Section 4.2).
2. Minimum reach length will be 150 m and maximum will be 1000 m.
3. CPCB will not collect plankton (Section 7.3).
4. CPCB will use the CPCB method for collecting periphyton, and thus will have samples *only* for chlorophyll *a* (Section 7.2) collected from 5 transects at each site.
5. CPCB will use the CPCB Horiba/periphyton field sheet to record substrate, transect, etc. (QAPP table).
6. In the field CPCB will preserve macroinvertebrate samples in formalin with rose bengal, rather than ethanol, and transfer the samples to ethanol in the lab (Section 9.2).
7. Vertebrate sampling will be only for fish, not amphibians, etc. (Section 10).
8. Fish species that CPCB cannot identify in the field will be brought to the CPCB lab for identification (Section 10.2.1).
9. We will not calculate the Jacard coefficient of similarity to assess fish sampling adequacy since this relies on identification of all individuals in the field (Section 10.2.1).
10. Field sheets will not be sent to Corvallis for scanning until the fish have been identified during the fall and winter following field work.
11. A 2.5 GPP electrofisher (Smith-Root, Inc) will be used on smaller tributaries; a 5.0 GPP electrofishing unit (Smith-Root, Inc) or equivalent electrofishing unit will be used on larger tributaries (Table 10-1).
12. Clarification of manual: Alternate banks every two transects for periphyton, bugs, and fish: odd # sites, start with left bank, A = left (l), B = l, C = right (r), D = r, E = l, F = l, G = r, H = r, I = l, J = l, K = l; even # sites, start with right bank, A = r, B = r, C = l, D = l, E = r, F = r, G = l, H = l, I = r, J = r, K = r (Table 4-3). Note that for the biological sampling effort, samples are taken at transect K along the same bank as I and J.
13. Clarification of manual: Channel measurements will be taken along only one bank, the left bank for odd # sites, and the right bank for even # sites (Fig. 6-1).
14. Clarification of manual: CPCB will collect *in situ* chemistry measurements at the same place as the chemistry sample, which will usually be the K transect mid-channel (Table 5.2 #8 contradicts Section 5.2).
15. CPCB will collect additional *in situ* measurements (e.g., specific conductance, water temperature, turbidity) and record them on the CPCB Horiba/periphyton field sheet (QAPP table).