

Appendix G.

Methodology for field surveys of large wood and logjams (from Latterell and Naiman 2007).

A census of all visible, naturally-deposited and artificially-placed large logs (>0.6m diameter) in the study segment will be conducted in sampling years. End dimensions, length, and species will be noted. Large logs are important but rare, making a census logistically feasible. All large logs will be tagged with a unique identifier and relocated in subsequent sampling events using GPS coordinates to evaluate retention rates. All newly deposited large logs will be tagged when first observed to determine large log turnover rates.

A census of all naturally-formed and artificially-placed logjams will be conducted simultaneously. Jam thickness (to 0.1 m) and the number of trapped logs ≥ 1 m long and 10 cm diameter will be measured with a single transect across the center of mass, from the key piece rootwad to the upstream jam margin. Each trapped log will be tallied and the diameter at the point of intersection measured (to 10 cm) to approximate the size distribution of wood in the jam. These measurements will be used to calibrate remote sensing data. Jam thickness will also be measured from digital imagery and correlated with the number and size distribution of trapped logs in the jam to estimate reach and segment level wood storage. The presence and extent of alluvial sediment deposition will be visually assessed in the field for each logjam.

The presence and extent of forced pools (including scour holes in the floodplain) will be visually assessed in the field for each logjam. Pool area will be estimated visually and as a factor of jam size (for example, $\frac{1}{2}$ of jam size). Pool depth will be estimated where it is safe to do so. The presence and rough dimensions (length, width, approximate depth) of forced side channels will be field measured field for each logjam.