

## ReadMe File for Collection Methods

### Water Chemistry

1. Instream – water chemistry measurement is taken by an instrument at the field site.
2. Water Sampler (Other) – water is collected by a depth-integrated sampler and placed in a churn splitter. Staff churns the water as it is dispersed into sterile bottles; the water is chilled and sent to an accredited laboratory for analysis.
3. Water Bottle – water is collected directly from the stream in a sterile bottle, chilled, and sent to an accredited laboratory for analysis.

### Macroinvertebrates

1. Kick Net – one meter by one meter net (typically 500 micron) attached to two poles. The net is placed in the stream and one meter of substrate directly upstream of the net is kicked to dislodge macroinvertebrates; the water velocity flows the organisms into the net. Most commonly, two kicks are taken at a site and composited. Quality Assurance Project Plans provide complete data collection methods.
2. D-Frame – net (500 micron) opening is 0.3 meter by 0.3 meter and shaped like the letter “D” at the opening. One long pole is attached at the opening. The substrate directly upstream of the opening is disturbed to dislodge macroinvertebrates. The net is cone-shaped and captures organisms as they flow into it. Most commonly, six kicks are taken at a site and composited for the sample. Quality Assurance Project Plans provide complete data collection methods.

### Fish

1. Backpack electroshock – equipment is carried by a staff member like a backpack. Two electrodes deliver current to the water to stun fish for capture. The anode is a ring on a long pole carried by the staff member wearing the backpack electroshocker. The cathode is a braided steel cable that trails behind the user in the water.
2. Electroshock (Other) – tote barge electroshocker. Same principal as a backpack electroshocker, except the equipment is pulled in a barge behind the team shocking. This equipment is used on larger streams.
3. Boat-mounted electroshock – Same principal as the tote barge electroshocker, but equipment is mounted onto a boat. Equipment is used on rivers.
4. Otter Trawl – mesh net with weights. Pulled slowly behind a boat in rivers to capture benthic species. Cone-shaped with large opening at the top.

### Habitat

1. Visual Sighting – a numeric score is given to each habitat characteristic by staff members. Total habitat score is a sum of the individual scores. Most commonly used method is a Modified RBP III habitat assessment. Quality Assurance Project Plans provide complete data collection methods.

For complete data collection methods for each data type, please see Quality Assurance Project Plans.