

*and students' role in it, aquatic invertebrates and their place in the ecology of healthy streams, BMI sampling and identification techniques, and calculation of BMI parameters used in the evaluation of stream health. Schools retain electronic files and paper copies of results as well as the preserved, identified and sorted aquatic insects from their sample as a set of voucher specimens for use in future BMI monitoring activities. All fully-participating students receive a certificate from CSI.*

### **Initial Classroom Visit**

- CSI BMI representative (BMI rep) visits class prior to stream sampling event.
- BMI rep provides the class with an introduction to the principles of environmental monitoring, aquatic insects and their relationship to ecosystem health, a "virtual tour" of CSI and the CSI website and database, and training for aquatic insect sampling that will happen on another day.

### **Field Sampling**

- BMI rep meets class and teacher at sampling site (equipment provided).
- Class participates in a sampling event for 2 replicate samples and records physical data following CSI protocols (facilitated by BMI rep). Samples are preserved for later identification in the lab.

### **Identification Sessions**

- BMI rep meets student volunteers at school lab during class, lab session and/or after school on designated days.
- BMI rep explains the process of random sampling and identification of aquatic insects to tier 2 and 3 Hudson Basin River Watch standards.
- Student volunteers and BMI rep work together to sort and identify samples and then record their findings.
- BMI rep introduces and explains the calculation of parameters used to evaluate stream health.

### **Follow-up and Final Classroom Visit**

- BMI rep finalizes and verifies identification of samples and reports results to the class.
- Students use collected data to calculate parameters related to stream health.