

Index of biological integrity

The program has adopted several different indexes of biological integrity (IBI) methods to rate stream health. The IBI approach integrates several types of metrics (multi-metric) to determine an overall **stream score**. The methods are slightly different depending upon the level of assessment.

A final integrity rating for the stream or river of optimal, suboptimal, marginal or poor is determined based upon stream index score and in some cases the reference sites as chosen by the volunteers with assistance from the program coordinator. Additional training in the use of the appropriate metrics is provided for groups who participate in the intermediate and advanced workshops.

These results are interpreted based on comparison with known yearly fluctuations of macroinvertebrate community structure, monitors have been instructed to conduct further testing both above and below potential impact sources to identify problems and to work with program staff to develop restoration plans.

To determine that monitors have understood both the monitoring technique and the survey form, monitors are split up into teams, given a kick-seine and asked to: choose a riffle to monitor, conduct a stream survey, identify the organisms in the sample and complete a stream survey form. The coordinator or designated staff will note any problems or mistakes in procedure, observes monitoring teams. After successfully completing the monitoring as approved by program staff, monitors reconvene in a large group to discuss procedures and results. Comparisons are also made between upstream and downstream results.