## Activity name: Developing Water Quality Index

This activity is meant to provide a real-world application of the ATEEC Recommended Core Curriculum's math, science, technical, communications, or critical thinking knowledge and skill concepts, which have been identified by the ATEEC Fellows as necessary preparation for environmental technology occupations.

Appropriate for which course(s)? HS environmental biology, CC bio/ecology

*Concept/skill learned (i.e. from K/S Tables):* Draw conclusion, discover rules; identify microorganisms, concept of indicator species

Approximate time to complete activity: 3 class days

Source of idea or activity (for published source, please include author, title, publisher, date): none

*Materials/resources needed (equipment, print media, electronic media, videos, supplies, etc.):* Field guides to freshwater diatoms, glass slides, water quality chem tests and equipment

## Description of activity:

- 1. Students place glass slides in several natural water sites 2 weeks prior to investigation.
- 2. Students collect water samples and do chem analysis.
- 3. Students collect slides and use field guides to identify species.
- 4. Students try to correlate species with chem analysis.
- 5. Students take correlated results and apply to new test areas to predict, verify if indicator species concept holds.

Activity submitted by Babe Willey

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