

Surface Water Hydrocarbon Baseline Determination

Possible Academic Connections: Chemistry; Civil Engineering; Environmental Studies; Urban Planning

Recommended project length: Semester

Experiential Learning? Likely

Community Engagement? Likely

Remote learning possible? Partial

Connection to OHIO Sustainability & Climate Action Plan: Water

Brief description: Develop sampling plan; collect and analyze surface water samples along the Ohio River for a community group.

Project description:

We Want Clean Water has completed a project through AGU's Thriving Earth Exchange to sample for hydrocarbons in surface water in the Wills Creek Watershed in Guernsey and Noble counties. They would like to expand this program to include the Ohio River to collect baseline data which can later be used to ascertain if spills, leaks and migrations have occurred from horizontal hydraulic fracturing. They have developed and deployed the protocol through work done with Ohio Northern University and need a regional affiliate with GC-MS capabilities. The project includes 1) developing a sampling plan (locations, timing, number of samples, supplies needed) and 2) collecting and analyzing samples.

Resources available to students/faculty to complete project:

- Sampling protocols
- Sampling equipment
- Faculty and staff consultations

Project alignment to OHIO Sustainability & Climate Action Plan:

- [Water](#) (goal #1)

- Increase opportunities for formal, experiential, and community-engaged sustainability learning experiences (Curriculum core)
- Create, enhance & track transformative sustainability engagement ecosystems with University and community partners (Engagement core)

Please send final project deliverables to sustainability@ohio.edu for tracking and reporting purposes.