



StreamWebs Field and Classroom Watershed Investigation Curriculum

Unit Overview

The unit is designed for 6th through 9th grade but may be adapted for older or younger grade levels.

The StreamWebs Field and Classroom Watershed Investigation curriculum is designed to help formal and nonformal educators use StreamWebs as a platform to conduct meaningful, field-based, student-driven investigations that continue in the classroom. The desired outcomes are to provide science inquiry-based opportunities for students to work collaboratively in the field in ways similar to scientists; to understand that science doesn't only happen in a lab or classroom; to design their own investigative question and research plan; to collect data; to learn how to look for patterns and changes in their data; to make logical conclusions based upon their data; to answer or refine their investigative question and/or research plan; and to understand what the data indicate for their stream over time.

In this unit, you will choose a local stream to study, and identify and work with partners who can support their students' project. The lessons may lead you and your class toward designing and implementing a stewardship project, but the main focus is on field research and engaging students in their environment

through inquiry and student-driven projects. Students will research their watershed, design investigative questions, plan and conduct an investigation, and collect, analyze, interpret, and present data. These lessons focus on water quality and macroinvertebrate data, although StreamWebs offers options for collecting other data as well. These lessons will achieve cross-curricular connections in math, language arts, and science as students develop their data literacy.

Lessons are aligned with the Next Generation Science Standards (NGSS): Each lesson will describe the corresponding Middle School (MS) Performance Expectation and Science and Engineering Practice(s) that connect to those lessons. Special thanks to Amy Hoffman, who did the initial writing, and the many teachers who contributed to these lessons.



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