## **DATA IN THE CLASSROOM: Monitoring Estuarine Water Quality**

## **Example of Module Integration**

There are many ways to integrate some or all of the lessons in this module into your course. One example, aimed at middle school teachers, is provided below.

**Topic:** Earth Science (Natural Resources / Ecosystem Ecology)

**Grade level:** Middle School (6th-8th grade)

**Example:** This example of module integration uses a course model from the NGSS Middle School Phenomenon Model Course 1 (Bundle 1).

The bundle organizes performance expectations with a focus on the relationship between resource availability and geoscience processes.

## NGSS Model Course 1: Bundle 1 How Important Are Our Natural Resources?

**MS-LS2-1.** Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.

**MS-LS2-2.** Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.

**MS-ESS2-2.** Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.

**MS-ESS2-3.** Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past plate motions.

**MS-ESS3-1.** Construct a scientific explanation based on evidence for how the uneven distributions of Earth's mineral, energy, and groundwater resources are the result of past and current geoscience processes.

## **Monitoring Estuarine Water Quality**

Integrate part of the module into a sequence of lessons on natural resources & ecology.

Example phenomenon:

Monitoring

here

Estuarine Water

**Ouality** can be

integrated into a

course sequence

\* In the spring, some fish species migrate from the ocean to estuaries & rivers to spawn.

Module lessons that support NGSS standard (MS-Ls2-2):

• Level 4 Activity: Spawning of the Atlantic Sturgeon.