

From the Mountains to the Estuary: From the Schoolyard to the Bay

**Meaningful Watershed Experiences
for Grade 6 Students**

Created by:



**With grant support from
The NOAA Bay Watershed Education Training (B-WET) Program**



In partnership with:



**Occoquan Bay National Wildlife Refuge
Manassas Battlefield National Park**



Introduction to Water Quality

Overview:

Students will learn about different water quality parameters including: pH, temperature, salinity, dissolved oxygen, turbidity, and presence of macroinvertebrates.

Teacher Background:

Visit www.livebinders.com/edit?id=1925 and click on the Water Quality link for lots of great information background information. Also click on Data In Classroom, then go to Estuaries Data for more information on Salinity, Dissolved Oxygen and Turbidity.

Materials:

- LCD projector or smart board to display power point
- Computers with Web browsers
- Introduction to Water quality power point from CD or <http://school2bay.pbworks.com/6th-Grade>
- Composition Notebook for each student

Setting the Stage:

Before class, make up a sample of water that contains some dirt, vinegar, and sulfur (if you have it). Have another container of clean water.

Show your students the dirty water. Have them smell it. Ask if they think it is clean. Do they know how scientists tell if water is clean or polluted?

Acquisition of Learning:

1. As you present power point, have the students take notes on the parameters that scientists can use when they are studying water quality.
2. After the presentation is complete, have each student or group of students pick one water quality parameter to research more.
3. Have students visit www.livebinders.com/edit?id=1925 to find out more about the parameter they are studying.
4. After they have gathered the facts, have them write a paper that includes what the parameter measures and how it can affect organisms that live there.

Closure:

Have students present their findings to the class.