

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

**Meaningful Watershed Experiences  
for Grade 6 Students**

**Created by:**



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The NOAA Bay Watershed Education Training (B-WET) Program**



**In partnership with:**



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



# ***Data in the Classroom***

## Water Quality Monitoring Using Real Data

### **Overview:**

These lessons and accompanying online tools will introduce students to water quality monitoring using real data. There are five lessons that increase in level of sophistication. They incorporate real data from NOAA to help students understand how water quality parameters are monitored and how these factors affect biological systems.

### **Teacher Background:**

Background information and complete lesson instructions can be found in the **Data In The Classroom** teachers guide in the appendix. For additional information visit [www.dataintheclassroom.org](http://www.dataintheclassroom.org)

From Data in the Classroom web site:

“These lessons and accompanying online tools will introduce students to water quality monitoring using real data. First, students need to understand how to access and interpret water quality data, and how to look for patterns and changes over time. Ultimately, they will examine the impacts of physical water quality factors on species that live in a given environment, using the Atlantic sturgeon as an example. The lessons deal primarily with the following water quality parameters: water temperature, dissolved oxygen, and salinity. However, students can use the online tools to extend their investigations by examining other parameters as well. The goal is for students to experience different kinds of data and data accessing tools, so that, by the end of the module, they can continue to explore data sets driven by their own inquiry.”

### **Materials:**

- Computer with Internet access and web browser
- NOAA Data in the Classroom Teachers Guide (located in appendix or at [www.dataintheclassroom.org](http://www.dataintheclassroom.org))

### **Setting the Stage and Acquisition of Learning:**

Follow directions for lessons in teachers guide. There are five complete lessons.

### **Note to teachers:**

*Will add PEREC sonde data and NOAA CBIBS integration during the PLC in January, 2010  
Please visit [www.school2bay.pbworks.com](http://www.school2bay.pbworks.com)  
for up to date information*