

# Meaningful Watershed Educational Experience



*A Meaningful Watershed Educational Experience, or MWEE, enables students to participate in hands-on environmental learning about the Chesapeake Bay watershed. This experience will serve as the foundation for a rich, lifelong relationship between students and their Bay. Throughout the MWEE process, students develop a sense of environmental ethics and*

*stewardship that are essential to the long-term sustainability of the Chesapeake Bay. In addition, studies have shown that hands-on environmental education increases the academic performance of students in a variety of subjects.*

## **What Is a MWEE?**

A MWEE integrates field work in the Chesapeake Bay watershed with multidisciplinary classroom activities and instruction. Students then share their discoveries with local schools and communities, both orally and in writing.

## **MWEEs Are Investigative or Project-Oriented.**

Students investigate questions, problems, and issues related to the watershed. Activities include streambank or oyster restoration projects and planting underwater grasses; water quality monitoring; on-site studies of Bay plants and animals; or social studies that deepen a student's understanding of historical, cultural, or economic interests. Projects may also involve interaction with natural resource personnel.

## **MWEEs Are Integrated within the Instructional Program.**

A MWEE is not a single field trip; rather, the experience reflects an integrated approach to learning. MWEEs align with jurisdictional learning standards and occur where and when they fit into the existing curriculum. They also are effective tools for teaching many subjects—including science, math, history, reading, and art.

## **MWEEs Involve Preparation, Action, and Reflection.**

A MWEE is organized into three phases. First, students research and discuss a watershed issue or problem in preparation for the field component. Second, students take action by observing, measuring, or collecting data during their outdoor experience. Third, students return to the classroom, reflect upon and analyze their project, and reach conclusions.

## **MWEEs Reveal the Watershed as a System.**

MWEEs have an intentional connection to the watershed as a whole. Experiences focus not only on the Bay, rivers, and streams, but also on terrestrial issues such as erosion control, buffer creation, groundwater protection, and pollution prevention.

## **Students and Teachers Sustain MWEEs throughout the School Year.**

In-class preparation and reflection activities are vital to solidify the watershed concept. Thus, an outdoor experience, or extended outdoor project, should be expanded by classroom activities throughout the school year.

## **Did you know?**

*Recognizing the value of hands-on environmental education, the governors of the Chesapeake Bay states and the Mayor of Washington, D.C., signed a commitment in 2000 to provide a meaningful watershed experience for every student in the Chesapeake Bay watershed before graduation from high school.*



[www.chesapeakebay.net](http://www.chesapeakebay.net)

1-800-YOUR-BAY



**Eyes Are Opened, Environmental Ethics Are Formed**

# NOAA B-WET

## Bay Watershed Education and Training Program



*The NOAA Chesapeake Bay B-WET Program provides hands-on watershed education to students and teachers to foster stewardship of the Chesapeake Bay. B-WET supports the commitment of the Chesapeake Bay Program—a partnership for watershed restoration—to provide every*

*student in the watershed with a meaningful bay or stream outdoor experience before graduation from high school. To accomplish this, B-WET focuses on enabling experiences for students and teachers.*

### ***MWEEs for Students***

MWEEs support bringing the outdoors into the classroom through a strong complement of field and classroom experiences. This provides an opportunity to teach science, math, reading, social studies, and even art in an interesting and thought-provoking manner.

### ***Professional Development for Teachers***

By providing teachers with the knowledge and confidence to weave together classroom and field activities to meet existing learning standards, student engagement and achievement is increased.

### ***How to Apply***

The B-WET program provides competitive grants and technical support facilitating MWEEs for students and related professional development for teachers. Typical grants range from \$50,000 to \$150,000. Eligible organizations include:

- Schools and school systems
- Colleges and universities
- Nonprofit organizations
- State and local government agencies

More information on the application process and other programs is available at <http://chesapeakebay.noaa.gov>.



# ChART Your Way to Bay Education

[www.chesapeakebay.net/chart/](http://www.chesapeakebay.net/chart/)



*Chesapeake Academic Resources for Teachers (ChART) is a web site designed to help educators provide MWEEs to their students. It is conveniently divided into three*

*searchable sections: teaching resources, professional development, and field studies. This makes finding information you need fast and easy.*

### ***Teaching Resources***

Use ChART to search a host of great teaching resources including books, data, web sites, and much more.

### ***Professional Development***

Prepare yourself to teach your students about the Chesapeake Bay and its watershed. Browse a large database of professional development training that can help you find the right program for you.

### ***Field Study Programs***

Search our library of field study programs and find opportunities that enable your students to experience the Bay's watershed hands-on.

ChART content has been approved by state departments of education, and wherever possible aligns with standards of learning and/or academic standards.