

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

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>.



Pack Your Bay Backpack

www.baybackpack.com



The Bay Backpack is an exciting web site for teachers and environmental

educators. This one-stop shop provides tools to give students hands-on outdoor experiences learning about the Chesapeake Bay watershed.

Teaching Resources

Use Bay Backpack to learn some creative ways to integrate the Chesapeake Bay and environmental issues into your classroom lessons. Search through the Bay Backpack's books,

multimedia, curriculum guides, individual lesson plans, and online data sources. Check back often for new and innovative resources.

Field Studies

Bay Backpack can help you find a place to take your students on a field trip to learn about the Chesapeake Bay and its streams and rivers.

Trainings

Prepare yourself to teach about the Bay and environmental issues, from climate change to water pollution. Use the Bay Backpack training calendar to find an upcoming opportunity.