

The watershed that surrounds your school offers wonderful opportunities to teach about the natural world. Study of this intricately interconnected



water system reveals beneficial ecological lessons and nurtures environmental stewardship.

Watershed Education, developed by the DCNR Bureau of State Parks, helps teachers utilize their nearby natural resources as a valuable teaching tool. It is an educational, watershed-based, interdisciplinary curriculum for students in grades 6-12. It promotes classroom and field research, multi-modal ecological investigations, networking, partnerships, stewardship, and community service. By combining interdisciplinary classroom instruction with field investigation, *Watershed Education* guides your students toward a lifetime of responsible environmental stewardship.



effects both past and present factors may have on watersheds.

Networking with students and teachers across the state allows students and teachers to compare discoveries. Groups can then develop problem-solving skills by confronting real-world, local environmental challenges through service learning projects.

Watershed Education also takes a comprehensive approach to learning, allowing students to analyze the



Access for People with Disabilities

If you need an accommodation to participate in park activities due to a disability, please contact the park you plan to visit.

With at least five days notice, interpreters for people who are deaf or hard of hearing are available for educational programs.

For more information,



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pennsylvania
DEPARTMENT OF CONSERVATION
AND NATURAL RESOURCES

"If there is magic on this planet, it is contained in water."

Loren Eisley,
The Immense Journey.



Watershed
EDUCATION

Hands-on Activities

Educators can choose to complete any or all of a number of *Watershed Education* components including:

Go On A Watershed Tour: Students explore their own watershed via a bus trip, hike, or a virtual tour. They identify clues relating to the culture and history of their area, uses of local water resources, and impacts (both positive and negative) on the watershed.

Stream Monitoring: Discover the fascinating world of stream ecology and monitor the impacts of natural and human activities occurring within their watershed. Students choose a stream and learn to measure its physical, chemical, and biological parameters.

Network with Other Schools: Students use the *Watershed Education* online database to share data, discoveries, experiences, and ideas with other participating schools. **WE Database-**
<http://wedatabase.dcnr.pa.gov>

Interact With the Community: Through research, networking, and stewardship projects, students become active community members.



How to Get Involved

To participate in this program, teachers must...

First

- Attend a one or two-day WE teacher training workshop.
- Secure approval from your school.
- Get permission from any landowners of any property you will visit.
- Obtain an “Educational Aquatic Field Studies Permit” from the Pennsylvania Fish and Boat Commission.

Second:

- Schedule field and classroom training with Bureau of State Parks’ Environmental Educators (optional).
- Help students monitor their study site.
- Enter data into the WE database.

Additional Options include:

- Development of classroom and student watershed portfolios.
- Development of and participation in a service learning project.

PA State Parks Will Provide

Educators will receive...

- The **WE Curriculum**, which can be supplemented by classroom and field training on watersheds, water basins, and data collection.
- Loaner water testing and biological sampling equipment, if needed.
- **Access to the Watershed Education website** <http://watersheded.dcnr.pa.gov> with program information and an interactive database <http://wedatabase.dcnr.pa.gov>
- Suggestions for communicating, networking, and developing community partnerships and stewardship projects.
- A professionally trained educator who can answer your questions.

