

## **Teacher Resources: Watershed Lesson Plans and Teaching Tools**

### Adopt-A-Watershed

Curriculum units are organized by grade level online. Each curriculum unit features projects, field study projects and community action materials. Call 1-530-628-5334 or visit [www.adopt-a-watershed.org](http://www.adopt-a-watershed.org)

### Rivers of Life, Center for Global Environmental Education

A full model for contextual learning; a flood of projects, adventures, and resources to help K-12 teachers and students learn about and from their watershed. <http://cgee.hamline.edu/rivers/>

### Online Classroom Projects, The Center for Improved Engineering and Science Education

The CIESE has several collaborative online classroom projects that allow students from around the world to compare the quality of their local waters. Projects include: Global Water Sampling Project, Down the Drain, Bucket Buddies, Take A Dip, etc. <http://k12science.stevens-tech.edu/collabprojs.html>

### A resource site for wetlands education, Ducks Unlimited

Activities about wetlands issues: plants, animals, ecosystems, water quality, weather and more. Lesson plans include art projects, worksheets, experiments and outdoors activities.

[www.greenwig.org/dueducator/alph\\_educator.html](http://www.greenwig.org/dueducator/alph_educator.html)

### Freshwater Wetlands Teaching Guide, Environmental Media Corp./Snyder Productions, Ltd

*Freshwater Wetlands Teaching Guide* contains six-programs, each 10 minutes long. Wetlands topics addressed include lakes, ponds, pools, marshes, forested wetlands, rivers, streams, floodplain communities and water use. [www.envmedia.com/guides/freshwater\\_wetlands.pdf](http://www.envmedia.com/guides/freshwater_wetlands.pdf)

### Office of Wetlands, Oceans and Watersheds, Environmental Protection Agency

Activities, projects, information magazines and curricula on wetlands, water resources, ecosystems, watersheds, wildlife and more. Links to educational resources produced by other organizations are also provided. [www.epa.gov/owow/wetlands/education](http://www.epa.gov/owow/wetlands/education)

### Watershed/NPS teaching tool, Protecting Our Watersheds, Non-Point Source Curriculum

Curriculum includes teacher guides, activity books, posters and tip cards. The watershed model demonstrates how water pollution comes from a variety of sources within the watershed landscape.

[www.envirosapes.com](http://www.envirosapes.com)

### Global Rivers Environmental Education Network (GREEN)

This site provides resources and links for teachers seeking training in watershed education and watershed lesson plans. Information about identifying watershed problems, monitoring water quality, watershed science and water policy are explored. [www.green.org](http://www.green.org)

### American Wetlands Campaign: Educational Materials and Technical Assistance

Izaak Walton League. 1-800-BOG-IWLA or [www.iwla.org/sos/awn](http://www.iwla.org/sos/awn)

### Hands-On Save Our Streams Curriculum

Izaak Walton League. [www.iwla.org/sos](http://www.iwla.org/sos)

### Map the Mississippi Watershed

Mississippi National River and Recreation Area, National Park Service

The Mississippi National River and Recreation Area has a variety of other activities related to the Mississippi River as well. Check out [www.nps.gov/miss/programs/brj/resources.html](http://www.nps.gov/miss/programs/brj/resources.html) for more information.

[www.nps.gov/miss/programs/brj/brjactivities/mapping.html](http://www.nps.gov/miss/programs/brj/brjactivities/mapping.html)

The Fragile Fringe: A Guide for Teaching About Coastal Wetlands  
National Wetlands Research Center. [www.nwrc.usgs.gov/fringe/ff\\_index.html](http://www.nwrc.usgs.gov/fringe/ff_index.html)

Access Nature and Nature Scope, National Wildlife Federation  
*Access Nature* curriculum offers hands-on habitat based activities. *Nature Scope* features 15 hands-on activities covering habitat basics, plant growth, soil, food webs, biodiversity, and habitat loss.  
[www.nwf.org/schoolyardhabitats/natureactivities.cfm](http://www.nwf.org/schoolyardhabitats/natureactivities.cfm)

North American Association for Environmental Education  
This website provides links to lesson plans and educator guides which have been suggested and evaluated by other educators. [www.eelink.net](http://www.eelink.net)

United States Department of Agriculture  
This website features links to wetlands information for middle and high school students produced by USDA. Links to education programs used in other states and programs produced by the EPA are also available. [www.ct.nrcs.usda.gov/educators.htm](http://www.ct.nrcs.usda.gov/educators.htm)

National Wetlands Inventory, U.S. Fish and Wildlife Service  
This site provides resources and additional links for teachers on many environmental issues. It also has links to fun and educational online activities for kids. [www.nwi.fws.gov/educator.htm](http://www.nwi.fws.gov/educator.htm)

Water Education Posters, USGS Water Resources Outreach Program  
Topics include wetlands, water use, wastewater, navigation, groundwater, and water quality. The reverse sides of the color posters contain educational activities: one version for children in grades 3-5 and the other with activities for children in grades 6-8. The black-and-white posters are intended for coloring by children in grades K-5. Call 1-888-ASK-USGS or visit <http://water.usgs.gov/outreach/OutReach.html>

Give Water A Hand, Wisconsin State University Extension Service  
The guides present plans to organize and execute action oriented projects to address water quality issues in your community. 1-800-WATER 20 or [www.uwex.edu/erc/ey paw](http://www.uwex.edu/erc/ey paw)

Yahara Watershed Education Network  
The Yahara Watershed Education Network is an informal umbrella for K-16 educational activities that focus on local issues using "watershed" and "ecosystem health" as integrating concepts; it is a collaborative effort of Edgewood College, the University of Wisconsin-Madison, the Wisconsin Department of Natural Resources, local teachers and school districts, their students, and other interested educators. <http://danenet.wicjp.org/ywen/index.html>

### *Workshops*

Project Food, Land, & People  
Project Food, Land & People promotes approaches to learning to help people better understand the interrelationships among agriculture, the environment and people. Workshop includes a lesson plan/activity guide and CEUs for teachers. Susan Thompson at the MS Soil and Water Conservation Commission is the Mississippi coordinator. (601-354-7645 or [sthompson@mswcc.state.ms.us](mailto:sthompson@mswcc.state.ms.us)).  
[www.foodlandpeople.org/](http://www.foodlandpeople.org/)

Project Learning Tree (PLT)  
PLT uses the forest as a "window" on the world to increase students' understanding of our environment; stimulate students' critical and creative thinking; develop students' ability to make informed decisions on environmental issues; and instill in students the commitment to take responsible action on behalf of the

environment. Workshop includes a lesson plan/activity guide and CEUs for teachers. Contact Harold Anderson at 601-359-2838 or [anderson@netdoor.com](mailto:anderson@netdoor.com) for Mississippi PLT information. [www.plt.org/](http://www.plt.org/)

#### Project WET (Water Education for Teachers)

Project WET is an international, interdisciplinary, water education program for formal and nonformal educators of students 5 to 18. Workshop includes a lesson plan/activity guide and CEUs for teachers. Georgia Spencer at the Museum of Natural Science is the Mississippi Project WET coordinator (601-354-7303 x 107 or [georgia.spencer@mmns.state.ms.us](mailto:georgia.spencer@mmns.state.ms.us), or [www.projectwet.org](http://www.projectwet.org)

#### Project WILD and Project Aquatic WILD

The projects described fuse national subject area standards with environmental issues. Each project is classified according to major subject area addressed, ecological principals explored, activity time and objectives. Workshop includes a lesson plan/activity guide and CEUs for teachers. Georgia Spencer at the Museum of Natural History is the Project WILD and Project Aquatic WILD coordinator for MS (601-354-7303 x 107 or [georgia.spencer@mmns.state.ms.us](mailto:georgia.spencer@mmns.state.ms.us)). [www.projectwild.org/framework/intro.htm](http://www.projectwild.org/framework/intro.htm)

#### POW!: The Planning of Wetlands, Environmental Concern Inc. and The Watercourse

POW!: The Planning of Wetlands, is designed to guide educators and students in the creation, restoration and enhancement of wetlands in or near schoolyards using natural and/ or artificial water sources. A POW! Guide is also available, which covers the information discussed at the workshop. [www.wetland.org/educ\\_pow.htm](http://www.wetland.org/educ_pow.htm)

#### WOW!: The Wonder of Wetlands, Environmental Concern Inc. and The Watercourse

WOW!: The Wonder of Wetlands, provides creative and resourceful activities, information and ideas about wetlands. A WOW! guide is also available, which covers the information discussed at the workshop. [www.wetland.org/wowteacher.html](http://www.wetland.org/wowteacher.html)

#### *Books*

Bones, D., ed. 1994. Getting Started: A Guide to Bringing Environmental Education into Your Classroom. National Consortium for Environmental Education and Training. Ann Arbor, MI.

Breckenridge, J., A.D. Fredericks, L.V. Loeschig, and M. Mandell. 1998. 365 More Simple Science Experiments with Everyday Materials. Black Dog & Levanthal Publishers. New York, NY.

Churchill, E.R., L.V. Loeschig, and M. Mandell. 1997. 365 Simple Science Experiments with Everyday Materials. Black Dog & Levanthal Publishers. New York, NY.

NAAEE. 1996. Environmental Education Materials: Guidelines for Excellence. North American Association for Environmental Education. Troy, OH.

The GLOBE Program. 1997. GLOBE Program Teacher's Guide. Global Learning and Observations to Benefit the Environment, Washington, DC.

#### *Additional Resources*

Mississippi Environmental Education Resource Guide: This guide by the Mississippi Council for Agriculture and Natural Resource Education identifies a lot of great resources at little or no cost for teachers. Contact: Central Mississippi Research, Conservation, and Development Council, 311 Airport Rd., Pearl, MS 39208, 601-965-5233 x 231 or [chuck.jepsen@ms.usda.gov](mailto:chuck.jepsen@ms.usda.gov)

*This list was compiled by the Gulf Restoration Network on behalf of the South Mississippi Environmental & Agricultural Coordination Organization (SMEACO) for distribution at the 2<sup>nd</sup> Annual South Mississippi Watershed Forum Roundtable and Watershed Fair and subsequent events. For additions or corrections, please contact Vicki Murillo at 504-525-1528 x 204 or [vicki@gulfrestorationnetwork.org](mailto:vicki@gulfrestorationnetwork.org)*