A Note About "Teacher Resources"

WATER in TEXAS

Water is a "hot topic" these days, especially in Texas. During the recent 80th Legislative Session, over seventy (70) water related proposals were presented for discussion. But even if you don't closely follow the political process in Austin, all you have to do is pick up a newspaper and you are likely to find at least one article, editorial, or letter to the editor about water. In the summer months, common topics are about land subsidence or low lake levels, voluntary or mandatory residential watering restrictions, water conservation tips, reports on the economic feasibility of desalinization, rainwater harvesting techniques, pollution related beach closings, fish kills, or the funny taste of the drinking water supply. Other times, the subject may be flash flood warnings, a mechanical failure at the wastewater treatment plant resulting in the discharge of untreated sewage, polluted stormwater runoff, aquifer recharge rates, frequent hydrant flushings, or the pros and cons of constructed wetlands and water re-use projects.

In 2007, the two major organizations for water professionals: American Water Works Association (AWWA) and Water Environment Federation (WEF) both launched programs designed to assist their memberships with the important work of effective public communication. AWWA launched a new website to compliment it's "Only Tap Water Delivers" initiative. WEF is developing ... programs and materials to help its members communicate with their target audiences about key water quality issues. Its goal is to increase an understanding of the direct role water and wastewater services has in the protection of public health, the economy, and the environment.

With all the recent interest in the topic, it's no wonder that there is a truly a plethora of water education materials available via the Internet. A recent Google search using the term "Water Education" brought up **225,000,000** listings. Describing the situation as "overwhelming" is an understatement.

Obviously, the following *Teacher Resources* document is not intended as a complete guide to reliable information and resources. My hope is that it serves as a tool to facilitate access to and selection of "Tex-centric" water education resources.

If you come across a broken link or a website that is no longer available, please let us know. Send an e-mail message to: Bick.karen@epa.gov or call the Region 6 Water Quality Protection Division Communications and Partnerships Team (6WQ-NC) at (214) 665-7191. You can also reach us through the Region's toll free 1-800-887-6063. 6WQ-C will do our best to keep an updated version of this Teaching Resources document available on: www.epa.gov/region6/water/edu.

The inclusion of a link in this document does not constitute an endorsement by EPA of any organization's policies or activities, or of any item for sales. Similarly, non-inclusion does not constitute an unfavorable opinion. This information is provided solely for the reader's convenience. U.S. Environmental Protection Agency Region 6 does not control or guarantee the accuracy, relevance, timeliness, or completeness of this outside information.

TEACHER RESOURCES – TEXAS

(Revised/Updated July 5, 2007)

I) Local Government:

The best place to start looking for information about your water system is "in your own backyard." Many water and wastewater utilities, river authorities, water districts, etc. have educational programs and/or resources available. Examples include:

<u>Arlington</u>

http://www.ci.arlington.tx.us/waterdice/waterquality_treatmentcycle_detaile_d.html

Corpus Christi

http://www.cctexas.com/?fuseaction=main.view&page=1058 (teachers)

http://cctexas.com/?fuseaction=main.view&page=1441 (kids)

Dallas

http://www.trinity-trudy.org/ (kids)

http://eei.dallascityhall.com/EEI-Water.cfm (school programs)

<u>http://www.savedallaswater.com/</u> (conservation - general public)

<u>http://www.wheredoesitgo.com/</u> (storm water pollution - general public)

San Antonio Water System

http://saws.org/education
Check out the VIRTUAL CLASSROOM (H2O University) for Interactive Edu-tainment and more.

II) Local Media

Good source of "real time, real world, place based " connections to the material. Examples in DFW area include:

CBS- Channel 11 - *e-Life* Upper Trinity River Watershed Area http://ktvt.iewatershed.com/index.php (Sign up for newsletter)

Ft. Worth Star Telegram- Partnerships in Education
http://nieonline.com/fortworth/details.cfm?feature=2007waterco
https://nieonline.com/fortworth/details.cfm?feature=2007waterco
http://nieonline.com/fortworth/details.cfm?feature=2007waterco
https://nieonline.com/fortworth/details.cfm?feature=2007waterco

Dallas Morning News- Newspapers in Education

http://www.dallasnews.com/sharedcontent/dws/spe/nie/weeklylessons/stories/20070514-dnnielesson.6b08954f.html

KERA (PBS)- Teacher Resources

http://www.kera.org/tv/productions.lasso#Water (1995) http://www.kera.org/tv/productions.lasso#Water (2003)

III) State Government- Natural Resources Agencies:

Texas Water Development Board (TWDB)

Provide leadership, planning, financial assistance, information, and education for the conservation and responsible development of water for Texas.

MAIN WEBSITE:

http://www.twdb.state.tx.us/

OF SPECIAL INTEREST

<u>Raising Your Water IQ</u> (Interactive on-line lessons Grades 6-7)
<u>Major Rivers</u> (Classroom curriculum Grades 4-5)
<u>Know Your Water</u> (Coloring/ activity book Grades K-3)

http://www.twdb.state.tx.us/assistance/conservation/education.asp

http://www.twdb.state.tx.us/kids/index.htm

Maps Available for download or purchase at cost; approx \$ 15 for full color 36 x 36)

http://www.twdb.state.tx.us/mapping/index.asp

Texas Commission on Environmental Quality (TCEQ)

As the primary environmental agency for the state, TCEQ's mission is to protect our state's human and natural resources consistent with sustainable economic development. Its goal is clean air, clean water, and the safe management of wastes.

MAIN WEBSITE:

http://www.tceq.state.tx.us/

OF SPECIAL INTEREST:

Take Care of Texas http://www.takecareoftexas.org/

A statewide awareness campaign designed to involve all Texans in lifestyle and habit changes that will help improve air and water quality, conserve water and energy, reduce waste, and save individuals a little money in the process.

Classroom Activities/ Lesson Plans

http://www.tceg.state.tx.us/nav/resources/env_resources.html

Air, Water, Land: Find Out What You Can

This a 25-page coloring book is a popular resource for kids

http://www.tceg.state.tx.us/comm_exec/forms_pubs/pubs/gi/gi-

270.html

Texas Parks and Wildlife Department (TPWD)

The mission is to manage and conserve the natural and cultural resources of Texas and to provide outdoor recreation opportunities.

MAIN WEBSITE:

http://www.tpwd.state.tx.us/

OF SPECIAL INTEREST

http://www.tpwd.state.tx.us/learning/resources/.

"Loaner trunks" on wetlands and coastal environments, special webcasts, handson training classes, and more. Project WILD, Nature Trackers, Outdoor Education

<u>http://www.texasthestateofwater.org/</u>
Hour long documentaries airing on PBS

Texas: The State of Springs (2007) Texas: The State of Water (2003) Water (1995)

Texas State Soil & Water Conservation Board (TSSWCB)

Administers Texas' soil and water conservation law and coordinates conservation and pollution abatement programs throughout the State

MAIN WEBSITE

http://www.tsswcb.state.tx.us

OF SPECIAL INTEREST

Classroom resources, Teacher workshops, Annual contests http://www.tsswcb.state.tx.us/infoedu

Texas General Land Office (TxGLO)

Serves the school children, veterans, and all people of Texas by preserving their history, protecting their environment, expanding economic opportunity, and maximizing state revenue through innovative administration and prudent stewardship of state lands and resources.

OF SPECIAL INTEREST

Adopt-A-Beach: Clean-up, *Treasures of the Texas Coast*: Children's Art Contest (K-6)

http://www.glo.state.tx.us/adopt-a beach/learningzone/index.html

(Adopt-A-Beach events are held in April and September)

Texas State Energy Conservation Office (SECO)

SECO helps Texas make the most of domestic energy, reduce state and local government energy costs and promote cost-effective clean energy technologies. Mission is to maximize energy efficiency while protecting the environment.

OF SPECIAL INTEREST

Infinite Power (Teacher Resource Guides/ Lesson Plans) http://www.infinitepower.org/reswater.htm

Kids Links

http://www.seco.cpa.state.tx.us/seco_links-kids.htm

Texas Department of Transportation (TxDOT)

Responsible for planning, designing, building, operating and maintaining the State's transportation system. Mission is to work cooperatively to provide safe, effective and efficient movement of people and goods.

OF SPECIAL INTEREST

Water Quality Coloring Book

http://www.dot.state.tx.us/services/environmental_affairs/educational_materials/default.htm

IV) State-based Organizations:

Keep Texas Beautiful - The Lake and River Cleanup Program

Joint effort with TCEQ. The program is designed to help communities and organizations establish waterway cleanups and litter prevention activities to improve and maintain the quality of surface water.

http://www.ktb.org/programs/LR/index.htm

Texas Watch

Network of trained volunteers and support partners working to gather information about the natural resources of Texas. About 40 % of the water monitoring groups are teachers and students.

http://www.texaswatch.geo.txstate.edu/educators.asp

Texas Water Matters

Collaborative effort of three prominent environmental organizations: National Wildlife Federation, Environmental Defense, Lone Star- Sierra Club.

http://www.texaswatermatters.org/

A large selection of well written, downloadable publications

Texas A&M University: Texas Water Resource Education

Agricultural Experiment Station, Cooperative Extension. A wide variety of resources addressing a wide variety of water issues.

http://texaswater.tamu.edu

Bureau of Economic Geology

Provides wide-ranging advisory, technical, informational, and research based services to industry, non-profits, and Federal, State and local agencies. Resources for teachers and students of geology and related earth sciences.

http://www.beg.utexas.edu/mainweb/edu01.htm

Upper Trinity River Watershed Partnership (UTWP)

An informal association of organizations and individuals in the Upper Trinity River Basin (DFW Metroplex) committed to addressing shared water/watershed public education goals through networking and sharing resources.

http://www.trinitywatershed.org/Resources.asp (Sign up for newsletter)

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