

WINTER
2002

WET WORKS

a newsletter of WET in the City...an urban water education program

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Water Education for Teachers

WET in the City is a program of the Council for Environmental Education (CEE).

WET WORKS

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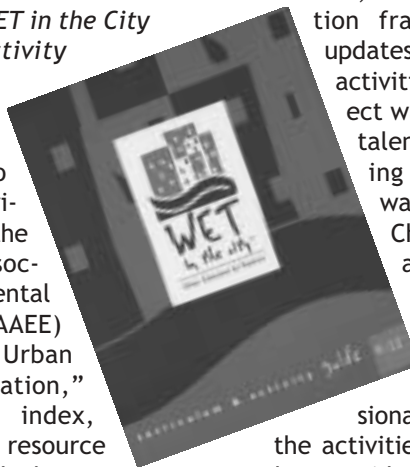


WET in the City Curriculum and Activity Guide Updated and Expanded

See What's New in 2002!

by Elisa Lewis, Council for Environmental Education

This past spring, the Council for Environmental Education released the 2002 edition of the *WET in the City Curriculum and Activity Guide*. The updated and expanded guide includes ten new urban activities, two newly adapted activities, a summary of the North American Association for Environmental Education's (NAAEE) "Guidelines for Urban Environmental Education," an expanded topic index, additional educator resource listings, an expanded glossary, and an educator feedback form.



Additionally, the assessment strategies, skills, and environmental education framework charts contain updates incorporating the new activities. This three-year project was made possible by many talented professionals including urban educators and water resource experts from Chicago, Harlem, Houston, and Los Angeles who collaborated in writing workshops to develop the new urban themes and activities; professional writers who formalized the activities; educators and experts who provided valuable review com-

more "New Guide" page 2

A Meeting by the River

San Antonio Hosts First WET in the City Annual Meeting

WET in the City Coordinators, Sponsors and Program Partners gathered in San Antonio, TX on September 19th - 21st for the first ever WET in the City Annual Meeting. Participants from Houston, TX; Tulsa, OK; Washington, DC; Brownsville, TX; Austin, TX; San Antonio, TX; Corpus Christi, TX; and Detroit, MI joined CEE's WET in the City program staff for three days at the Historic Menger Hotel.

CEE staff greeted travelers Thursday afternoon with a welcome reception and an entertaining and informative program on San Antonio's water system provided by the Youth Education Program staff from the San Antonio Water System (SAWS). Many thanks to Greg Wukasch and Brandon



Cheryl Hayes of the DC Department of Health, Environmental Health Administration visits with Greg Wukasch of the San Antonio Water System about the Edward's Aquifer recharge zone.

more "Annual Meeting" page 2

Annual Meeting (continued from page 1)

Leister for a great program! Afterwards, everyone enjoyed dinner along the Riverwalk and rested up for a busy agenda on Friday and Saturday.

During the meeting, we explored critical program elements for successful urban water education efforts. Topics included reaching urban educators, promoting WET in the City locally, maintaining facilitator networks, creating advisory groups and the importance of localizing WET in the City to address specific water issues in sponsor cities. The meeting demonstrated the breadth of educational possibilities with WET in the City through exciting updates from the WET in the City national office and the WET in the City programs of Tulsa, Houston and Washington DC. The "WET in the City 101" session was particularly helpful to pending cities with information about procedural details and plans for implementing WET in the City through their organizations. Each participant received a WET in the City Urban Water Test Kit, the *WET in the City Curriculum and Activity Guide*, *Making Ripples: How to Organize a School Water Festival*, NAAEE's *Excellence in Environmental Education: Guidelines for Learning*, a WET in the City T-shirt, and a bright blue WET in the City satchel. We extend our gratitude to The Brown Foundation, Inc. and MWH (Montgomery Watson Harza) for sponsoring our inaugural meeting!



Joel Richards, Jr., representing Hogg Middle School and Jacqueline Elliott of MWH participate in "Urban Waterway Checkup" at the WET in the City Annual Meeting.

New Guide (continued from page 1)

ments; educators who organized and/or conducted field tests and provided evaluations; and illustrators, photographers, graphic designers, editors and publication experts who brought the publication together. Please see the updated acknowledgments section for a complete listing. We thank everyone involved!



CEE Manager of Education Programs, Elisa Lewis, acted as Project Manager for the update and expansion of the WET in the City Curriculum and Activity Guide.

CEE staff introduced the new WET in the City urban activities at many conferences and workshops including the 1st WET in the City Annual Meeting, the 31st Annual Conference of NAAEE, the WETeach teacher workshop held during the annual

Water Environment Federation Technical Exposition and Conference (WEFTEC), and the 2nd Environmental Education Conference of the Texas Environmental Education Partnership (TEEP). As you incorporate new activities into WET in the City workshops, let us hear your comments! Email us at info@wetcity.org or fill out the feedback form found on the last page of the new guide. Your comments are important to us!

The Brown Foundation, Inc. Joins WET in the City Effort

The Council for Environmental Education is the proud recipient of a grant from The Brown Foundation to support the growth of WET in the City. The Brown Foundation, Inc. based in Houston, Texas, supports non-traditional and innovative educational approaches which are designed to improve public education primarily within the State of Texas. WET in the City and the urban audience we serve were the perfect fit!

Special emphasis is placed on bringing WET in the City to more Texas cities. The grant also provides funding for several additional projects including a Spanish translation of WET in the City student pages, a new WET in the City exhibit, "Know Your City's Water Issues" fact sheets, WET in the City website development, promotional activities at Texas water conferences and environmental education events, and the production of promotional print materials. As a result of the Brown Foundation support, CEE anticipates four new Texas cities will join the WET in the City network during the upcoming year. New CEE staffer, Jennifer Paschke will help coordinate WET in the City efforts.



Jennifer Paschke, Coordinator, WET in the City, joins the WET in the City team.



Team WET[®] Schools



James S. Hogg Middle School Teams Up for Water!

by Jennifer Paschke, Council for Environmental Education

The Council for Environmental Education is proud to announce the launch of its newest urban water education initiative, Team WET Schools, a program designed to expand WET in the City program offerings while bringing local water issues and water stewardship to the forefront in school buildings.

In May 2002, CEE and the City of Houston/Harris County Storm Water Management Joint Task Force teamed up to welcome and designate James S. Hogg Middle School, an urban school located near downtown Houston, as the first Team WET School in Houston and in the nation.



Team WET Schools partners (from left to right) Jennifer Paschke, Dimetra Hamilton and LaWanda Howse present Lois Richards with educational resources and special gifts.

During a special ceremony Leonel Castillo, Education Liaison for Houston Mayor Lee P. Brown, spoke of the important role Hogg students can play in protecting Houston's water resources. Following his remarks, Castillo presented Principal Deborah Crowe and student representatives with a certificate designating Hogg a "Team WET School."

CEE presented Lois Richards, Hogg's Team WET Schools Coordinator, with a Team WET Schools Kit containing *Making Ripples: How to Organize a School Water Festival*, published by the Groundwater Foundation, a WET in the City Urban Water Test Kit produced by LaMotte and other resources designed to assist with implementing a student-driven water stewardship project on school grounds or in the local community. As part of the program all interested teachers receive training in use of the *WET in the City Curriculum and Activity Guide*.

After the ceremony, the celebration continued with a mini-water festival held in the school's cafeteria foyer. Hogg's 900 students had the opportunity to visit educational displays, participate in hands-on activities and sample a refreshing snowcone during their lunch periods.

The students and teachers at

Hogg Middle School plan to host their own water festival in April 2003. Hogg students will educate fellow students, parents and members of the local community after participating in WET in the City activities throughout the year.

To help them reach their goal, staff from CEE and the City of Houston Water Conservation Program presented a "How to Host a School Water Festival" workshop for key Hogg teachers. The school plans to offer an elective class this spring designed to help students take a leadership role in planning and implementing a successful festival.



From left to right: Hogg Middle School students and Principal Deborah Crowe accept a Team WET Schools certificate and pose with Pat Smiley, General Manager - Harris County Storm Water Quality Section; Leonel Castillo, Education Liaison for Houston Mayor Lee P. Brown; Paul Nelson, Assistant Director of the City of Houston Public Works and Engineering Department.

Many groups have already expressed interest in Hogg's water festival. Reliant Energy and MWH (Montgomery Watson Harza) have offered support, and the Texas Education Agency (TEA) plans to send its "Eye on Texas" film crew to cover the event for statewide broadcast.

We know that Hogg will prove to be an exemplary first Team WET School and model for the nation. Go Hogg!



Catfish and Egret, the Storm Water Management Joint Task Force "Clean Water Clear Choice" mascots help Hogg Middle School students declare they are "Proud to be a Team WET School!"

Team WET Schools is currently being piloted in Houston, Texas with support and generous funding from Storm Water Management Joint Task Force members, the City of Houston Public Works and Engineering Department Water Conservation Program and the Harris County Public Infrastructure Department - Flood Control District. CEE greatly appreciates the support of the City of Houston and Harris County for this worthwhile water education program.



Houston WET in the City Expands Its Facilitator Network

by Brenda Templeton, City of Houston Water Conservation Program

The City of Houston is proud to announce the Greater Houston Area has 20 newly certified WET in the City facilitators who are ready and willing to provide urban environmental education to concerned citizens and local educators. An exciting and informative two-day facilitator training workshop was presented by Houston WET in the City Coordinator, Dimetra Hamilton; Council for Environmental Education (CEE) Manager, Elisa Lewis, and CEE's WET in the City Coordinator, Jennifer Paschke. The City of Houston Water Conservation Program sponsors WET in the City in Houston and nationwide.



Dimetra Hamilton, Community Liaison for the City of Houston Department of Public Works and Engineering Water Conservation Program serves as Houston WET in the City Coordinator.

Workshop participants included teachers from the Rice University Model Lab and employees of conservation groups, The City of Houston, Harris County and non-profit organizations. Those organizations include Friends of Hermann Park, Bellaire Nature

Discovery Center, the Houston Museum of Natural Science and the Museum of Health and Medical Science. Each facilitator is required to present a least one six-hour WET in the City training workshop annually to local educators.

"Facilitators are the backbone of the WET in the City program," said Dimetra Hamilton. "Their commitment allows environmental education to be disseminated almost exponentially. Two facilitators can train up to 30 teachers per workshop. Those 30 teachers then incorporate the WET in the City activities into their lesson plans and inspire thousands of urban children to protect their water environment."

The enthusiastic group dove right into the *WET in the City Curriculum and Activity Guide*. Everyone enjoyed the new WET in the City activity "A Recipe for Clean Water," an activity that can be adapted for almost every grade level. Educators examined labels on well-known cleaning products. After analyzing each product's directions for use, chemical composition and safety warnings, the group used simple "homemade" recipes to create non-toxic household cleaning products and compared their effectiveness to the commercial products. The group also performed water quality tests on the water from Hermann Park Lake near the Houston Medical Center. With easy-to-use tablets and plastic beakers, educators measured the lake's levels of lead, oxygen, phosphates, pH and copper.

A big WET in the City "Thank You" to the staff and Board of the Houston Museum of Natural Science for the generous use of their training facilities. To register for the next facilitator workshop in Houston, contact Dimetra Hamilton, Water Conservation Community Liaison and WET in the City Coordinator, at 713-837-0421.



The Class of Fall 2002: Houston WET in the City Facilitator Workshop participants gather outside the Houston Museum of Natural Science.

City and School Partnerships: Earth Camp Austin

Austin, Texas - This year, 500 Austin fifth graders participated in Earth Camp Austin, the award winning four-day watershed education program that focuses on the water quality of Austin's 45 watershed districts. Earth Camp, celebrating its 9th anniversary this year, is a City of Austin program funded by the Watershed Protection and Development Review Department in partnership with the Austin Independent School District (AISD). Implemented in AISD's Title I schools, Earth Camp provides science based outdoor environmental education correlated to the Texas Essential Knowledge and Skills (TEKS). Students participate in hands-on lessons in the classroom and at field stations to learn about the geography, natural history, water quality, wildlife, hydrology, and geology of Austin's watershed.

To learn more about Earth Camp and City of Austin outreach programs designed to encourage environmentally responsible behavior, visit the City of Austin Educational Programs web site at www.cityofaustin.org/watershed.education.htm.





WET in the City, LA Style!



MAKING A SPLASH!

Lois Richards, James S. Hogg Middle School

Lois Richards is making a big splash as the Team WET Schools Coordinator for James S. Hogg Middle School where she has been a science teacher for the past thirty-three years of her thirty-four year teaching career. Ever since she initially expressed her desire to have Hogg become the very first Team WET School, Lois has been an avid and enthusiastic champion for the Team WET Schools program and has exceeded expectations in many ways.

Lois actively encourages teachers from across the disciplines to enroll in WET in the City workshops. Due to her efforts, twenty-two enthusiastic Hogg Middle School teachers have been trained to use WET in the City activities with their students. This number is far greater than the minimum of two teachers per grade level required for participation in the program, and many other Hogg teachers have expressed interest in enrolling in future WET in the City workshops.

Using correlations between WET in the City activities and skills and content requirements of local district standards, Lois vertically aligned WET in the City activities with Hogg's science and environmental science curricula. This ensures that students have the opportunity to participate in a wide range of WET in the City activities without risk that they will repeat activities from year to year.

Lois has graciously arranged for Hogg Middle School students and staff to participate in a number of photo shoots for the WET in the City national office. Both the 2002 edition of the *WET in the City Curriculum and Activity Guide* and new marketing materials designed to advertise the Team WET Schools program locally and nationwide now feature smiling faces from Hogg Middle School.

With support from Hogg Principal, Deborah Crowe, Lois recently traveled to the WET in the City Annual Meeting in San Antonio. Her insights and teacher's perspective of WET in the City and Team WET Schools were an invaluable resource to those gathered.

We at CEE appreciate Lois' dedication and enthusiasm for the Team WET Schools program at Hogg Middle School. We look forward to continuing to work with Lois and her colleagues at the school to ensure that Hogg continues to grow as an exemplary model for the Team WET Schools program in Houston and other cities nationwide!



Generation Earth is an environmental education program of the County of Los Angeles that is presented by TreePeople, sponsor of WET in the City in Los Angeles, California since 1999. Generation Earth inspires middle and high school students to make a measurable, positive impact on their environment. Confronting urban environmental issues specific to Los Angeles, students create an environmental service learning action project and experience first hand how their behavior and lifestyle choices directly impact their neighborhoods and their world.

Los Angeles County teachers are introduced to WET in the City curriculum through professional development workshops conducted by Generation Earth staff. In addition, Generation Earth Teacher Facilitators use WET in the City activities in teacher support meetings to aid in planning water-based service learning projects. Many Generation Earth projects focus on storm water urban runoff. Beach and river clean ups, watershed restoration plantings, watershed and storm water education campaigns, campus watershed tours, and a "Trout in the Classroom" program are among the projects designed to stimulate thinking and action about the way we treat our water and water systems.

Before long, the words "storm water urban runoff" will be as familiar to Los Angelinos as "recycling." Generation Earth is proud to be a part of a new gathering of youth who know where their water comes from, where it goes and how to take care of it.

Visit <www.generationearth.com> and <www.treepeople.org> for more information.



WATER ON THE WEB

Each edition of WET WORKS will feature a selected Internet resource focused on water. Share this information with educators looking for new and different ideas to complement WET in the City activities. Submit your favorite "Water on the Web" sites and we will share them in a future edition of WET WORKS.

www.wef.org is the official web site of the Water Environment Federation, a utility member organization supporting the preservation and enhancement of the global water environment.

Clicking on the "Education and Outreach" link brings you to a number of "refreshing" resources that can supplement WET in the City activities. Check out the "Go with the Flow" wastewater plant tour when you do "Sparkling Water," print out the Household Hazardous Waste Disposal Chart found on the "Fact Sheets" page for use with "A Recipe for Clean Water," let your elementary teachers know about the water conservation coloring pages found under the "Elementary Students" link—and much more!



FROM CITY TO CITY

WET in the City has been on the move! Here's a list of where we have been recently and a forecast of future events:

Recent events:

Governor's Institute for Environment and Ecology

WET in the City and PA Master Teachers
Champion, Pennsylvania
July 28 - August 2, 2002

North American Association of Environmental Education (NAAEE) Annual Conference

Boston, Massachusetts
August 6-10, 2002

Texas Environmental Education Partnership (TEEP) Annual Conference

San Antonio, Texas
September 12-14, 2002

WET in the City Annual Meeting

San Antonio, Texas
September 19-21, 2002

Water Environment Federation Technical Exposition and Conference (WEFTEC) and WEF*Teach* Teacher Workshop

Chicago, Illinois
September 28 - October 2, 2002

Houston Independent School District Community Partners Fair

Houston, Texas
November 6, 2002

Upcoming events:

U.S. Conference of Mayors

Washington, DC
January 22-24, 2003

2003 National Science Teacher Association (NSTA) National Convention

Philadelphia, Pennsylvania
March 27-30, 2003

Texas Water 2003: TAWWA/WEAT Annual Water Conference

Corpus Christi, Texas
March 31 - April 3, 2003

National Service Learning Conference

Minneapolis, Minnesota
April 23-26, 2003

2003 American Water Works Association (AWWA) Annual Conference and Exposition

Anaheim, California
June 15-19, 2003

WET in the City Swims at SECME 2002 Summer Institute

Kudos to Judy Rosenblum, long time supporter and advocate of WET in the City, for training 56 master teachers in WET in the City during the 2002 SECME Summer Institute in Washington, DC this past July. SECME, Inc., is a premier pre-college (K-12) minority alliance that links engineering universities, school systems, and corporate/government investors. Its mission is to increase the pool of historically under-represented, under-served, and differently-abled students who will be prepared to enter and complete post-secondary studies in science, mathematics, engineering, and technology.

SECME's Annual Summer Institute is designed to provide an opportunity for educators to develop plans for implementing the SECME program. Upon completion of the Institute, teachers and counselors will have written frameworks, curriculum enrichment materials, internet competencies and teaching methodologies, course implementation guidelines, effective competition strategies and a renewed commitment to motivating and preparing pre-college students to enter and complete college studies in science, mathematics, engineering and technology. The 2002 SECME Summer Institute marked the third year of WET in the City's participation in this event. Thanks again Judy!

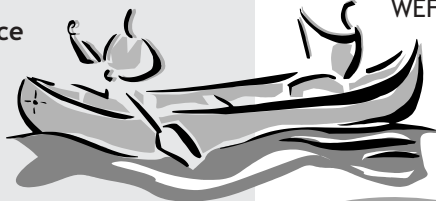
For more information about SECME and the Annual Summer Institute, visit their web site at <www.secme.org>.

WET in the City Makes Waves at WEF*Teach*

by Elisa Lewis and Jennifer Paschke

In September, WET in the City reached over 90 Educators from the greater Chicago area through WEF*Teach*, an intensive full-day teacher training program on the water environment. WEF*Teach*, organized by Loraine Loken and the Water Environment Federation (WEF) Education Committee, is offered at WEF's annual conference, WEFTEC. At WEF*Teach* educators have the unique opportunity to interact with and learn from the experts. WEF member volunteers, water quality professionals from varied disciplines, lead hands-on activities with teachers. We thank WEF volunteers, Sarah Lynn Cunningham, Rupam Soni, Mike Kemp, Linda McConnell, Karen Hansen, Julie Karleskint, Julianne Trowbridge-Duwel, Ricky Dodd, Linda Faulkner-Vaughn, and Samuel McNeilly for joining us this year as we introduced educators to select new urban activities from the *WET in the City Curriculum and Activity Guide*.

WEF*Teach* is made possible through a partnership of corporations, water quality agencies, engineering consultants, and non-profit organizations. This partnership enables teachers to receive over \$200 in educational materials. WET in the City is proud to be one of those partners!



Tulsa's WET in the City Proves to Be a Hit with Teachers

by Anna Parviainen, City of Tulsa Public Works Department

Tulsa's WET in the City program has trained more than 100 teachers through six training workshops since January 2001 and has participants registered for training workshops each month through January 2003.



Anna Parviainen, WET in the City Coordinator for Tulsa, works with educators at a WET in the City workshop.

The program has been a hit with local teachers, many of whom have visited the City's three-year-old water treatment plant and set up tours for their students.

WET in the City partnered with Tulsa World, a local newspaper, for the largest WET in the City workshop to date. Staff worked with the local newspaper to create an educator supplement entitled "Journey to a Blue Planet." This supplement included activities from the WET in the City program and other water-related activities and information about Tulsa's water system. Through an EPA grant, the City of Tulsa's Public Works Department also provides Internet users with a virtual water tour at <http://e-tulsa.net/watertour.html>. The tour, guided by a character named H2Jo, takes the viewer from the water cycle to waste water treatment and everything in between!

Workshops are held at the City's historical Mohawk Water Treatment Plant. Workshops include a guided tour of the treatment plant, teaching participants about how their drinking water is processed. The Public Works Department is

completing a video history of Tulsa's water to offer educators in conjunction with WET in the City programs.

Tulsa's WET in the City program coordinator is funded through the City of Tulsa's Metropolitan Utility Authority. Coordinator Anna Parviainen facilitates



Is there water on Zork? Tulsa's educators find out during a WET in the City workshop.

workshops and conducts classroom presentations, on-site plant tours, special classes for organizations on local water related topics and activities and festivals with school classes. She regularly attends teacher conventions and hosts exhibit booths to provide information and registration opportunities for WET in the City workshops.

Tulsa's WET in the City program has hosted three water festivals at the Mohawk plant with more than 200 school children attending each time! They recently sponsored "Water Daze," an enrichment program presented at three schools to mark the anniversary of the Clean Water Act and to celebrate National Water Monitoring Month activities.

For more information, contact Anna Parviainen at (918) 591-4051 or WITC@cityoftulsa.org. Tulsa's WET in the City program also has its own web page on City of Tulsa's web site www.cityoftulsa.org/Public+Works/wet.htm. An electronic registration form for workshops can be found at www.cityoftulsa.org/Public+Works/wetregistration.asp.



Educators attending Tulsa WET in the City workshops are treated to a guided tour of the Mohawk Water Treatment Plant.

Teach kids "The Story of Drinking Water"



Kids learn about the water cycle, where our drinking water comes from, and much more, in The Story of Drinking Water color booklet. For grades 1-6. Teacher's Guide and interactive CD-ROM also available.



The Authoritative Resource for Safe Drinking Water™

Call 1.800.926.7337 for more information. Ask for a free catalog of educational videos, pamphlets, and more about drinking water and our water planet.

CEE extends a big thank you for AWWA's support of WET in the City promotion.



WET in the City is a national urban environmental education program of the Council for Environmental Education (CEE) that focuses on water resources. Like other successful programs co-sponsored by CEE, including Project WILD, Project Learning Tree, and Project WET, WET in the City combines field-tested supplementary curriculum with a six-hour professional development workshop for both formal and non-formal K-12 urban educators. WET in the City is delivered at the local level, city by city, and targets urban educators with relevant, localized water education through a network of city partners. For more information on WET in the City and how to bring it to your community, visit our web site at www.wetcity.org or call CEE at (713) 520-1936.

WET Kids™ Workshop Series Is Underway!

CEE is proud to announce a new series of professional development workshops, WET Kids™, for teachers, administrators, parents, students and other partners at Team WET Schools. Workshops in the WET Kids™ series foster increased environmental awareness, provide practical "how to" advice, and offer opportunities for hands-on experimentation and creative brainstorming to help schools implement a student-driven water stewardship action project on their campus or in their community. Topics include hosting school water festivals, implementing action projects, and conducting school water audits. Additional workshops will be developed as Team WET Schools propose innovative action projects for their students. For more information about Team WET Schools and the WET Kids™ water stewardship workshop series call 713-520-1936.



Enthusiasm abounds as Hogg Middle School teachers participate in sample water festival activities at "How to Organize a School Water Festival," the first workshop in the WET Kids™ series.



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