

GEORGIA PROJECT WET Environmental Protection Division

Volume 3 FALL 2004

CONSERVE WATER GEORGIA

By Mary A. Elfner, Georgia DNR

The role of education regarding water conservation is crucial to future water use habits. Children are very interested in learning about environmental issues, such as water conservation, and can help inform their parents about water use habits, too. There are many good resources available to teachers regarding this subject. Examples include: The Watercourse's *Conserve Water* curriculum, *Conserve Water KIDS* activity booklet, and *The Rainstick: A Fable* storybook. See pg. 4 for more information. Also, see pg. 3 to register for the Conserve Water Georgia Project WET Facilitator Workshop, November 19-20 in Augusta.

TOP 5 THINGS YOU CAN DO

With so many ways to save water, here are the highlights for 5 key actions to help you capture the water savings around your home. Visit the following website for more information: www.h2ouse.org.

1. Stop those leaks!

Check your indoor water -using appliances and devices for leaks. Many silent leaks allow water and your money to go down the drain. To help detect unseen leaks, learn to read your meter. Studies have shown homes can waste more than 10% of water due to leaking, which increases the costs to both you and the environment.

Another large water waster can be leaks in your irrigation system. Fix irrigation system leaks quickly and check for water in the gutters, or mud puddles. Inspect your sprinklers and drip sprayers regularly for leaks during the daytime, since the optimal time to water is in the nighttime hours when you cannot observe leaks. If you have an older irrigation system, over 50% and even more than 75% of the water can be lost due to leaks.

2. Replace your old toilet, the largest water user

inside your home. If your home was built before 1992 and the toilet has never been replaced, then it is very likely that you do not have a water efficient 1.6 gallon per flush toilet. You can check the date stamp inside the toilet by lifting the lid and looking at the back of the toilet for the manufacturer's imprint of the make, model and date of manufacture. **3.** Replace your clothes washer, the second largest water user in your home. Energy Star[™]-rated washers that also have a Water Factor at or lower than 9.5, use 35-50% less water and 50% less energy per load. This saves you money on both your water and energy bills.

4. Plant the right plants with proper landscape

design & irrigation. Whether you are installing a new landscape or slowily changing the current landscaping at your home, select plants that are appropriate for your local climate conditions. Having a yard with 100% lawn turf area in a dry desert climate uses significant amounts of water. Also consider the trend towards Xeriscape[™] and a more natural landscape that incorporates drought-tolerant plants native to your local environment.

5. Water only what your plants need

Most water is wasted in your garden by watering when your plants do not need the water, or by not maintaining the irrigation system. Be attentive if you are using a lawn sprinkler by setting your oven timer or some other reminder to move the water promptly. Make sure your irrigation controller has a rain shutoff device and that it is appropriately scheduled. Most water is wasted in months prior to or just after the rainy season when intermittent rains occur.

EDITORS: Deron Davis, Petey Giroux, Monica Kilpatrick, Kathryn Byrnes and Anna Salzberg WRITERS: Mary A. Elfner, Zack Hall, Sally Pamplin and Alex Size PRODUCTION ARTIST: Jacob Escobedo THE DRAGONFLY GAZETTE IS PRINTED ON RECYCLED PAPER. PASS IT ON TO A FRIEND, AND RECYCLE IT WHEN YOU'RE DONE. The Dragonfly Gazette is publiched bi-annually. It is distributed to Georgia Project WET Facilitators and Educators in April and October:

GEORGIA STUDENTS' WORK FEATURED ON BROCHURES, BOOKMARKS, POSTERS, AND TEACHER'S GUIDES

By Alex Size, Environmental Outreach Assistant, Georgia DNR

Every year the Georgia River of Words (ROW) contest organizers have the challenging task of selecting a handful of national and state winning entries to be highlighted on the annual brochure, poster, bookmark and Teacher's Guide.

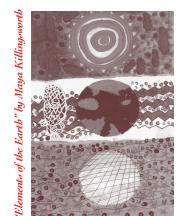
Adorning the 2004-2005 brochure, bookmark and teacher's guide is Maya Killingsworth's painting entitled, "Elements of the Earth". Last school year, Maya was a sixth grader at The Children's School in Atlanta. She was selected as a 2004 state art winner. Also on this year's bookmark is twelfth grader Bethany Bernard's poem, "Rain". Bethany, a 2004 national finalist, graduated from North Gwinnett High School where she was taught by language arts teacher John Bush who is the 2004 Georgia ROW teacher of the year.

On the inside of this year's brochure, two state winners, Misty Peavy and Connor Clark, were highlighted for their poems "Traveling Rains" and "River Memories" respectively. Misty was an eighth grader at Clifton Ridge Middle School in Macon and Connor attends Chestatee Elementary in Gainesville where he was in Kindergarten. The two pieces of artwork in this year's brochure come from second graders Amanda Baron, a national finalist, and Luke Tassopoulous, a state winner. Amanda, who attends High Meadows Elementary in Roswell, entered her piece, "Wetland Friends", while Luke, who is from Casa Montessori in Marietta submitted , "Loggerhead Turtle Commemorative Stamp Design".

For this year's poster, artist Anna Comstock and poet Killian Dorch were selected for their pieces "Sunset Play" and "Lazy Creek". Anna, a sophomore at Druid Hills High School in Atlanta, was selected as a state winner, as was Killian, who is a rising ninth grader at Clifton Ridge Middle School in Macon.

Together the poems and artwork highlighted in this year's resources make up an impressive collection. We hope you will enjoy the creativity put forth by these students and share their talents with others.

For a copy of the Georgia River of Words Teacher's Guide, the Contest Rules, the ROW/Rivers Alive poster, ROW bookmarks, and information about Project WET, Rivers Alive and Georgia Adopt-A-Stream, send your name, address, telephone number; fax number and email address to Petey Giroux at petey_giroux@dnr.state.ga.us.



Rain

Lightning Jances beneath the tumbling surface of furrowed, thundering clouds and suddenly, the fever breaks droplets pour and collect in my bands. Of all the words in the English language these bave fallen together to form one small gift.

by Bethany Bernard

FROM "COMING INTO THE WATERSHED" DOET found on www.riverofwords.org

A watershed is a marvelous thing to consider: this process of rain falling, streams flowing and oceans evaporating causes every molecule of water on earth to make the complete trip once every two million years. The surface is carved into watersheds-a kind of familial branching, a chart of relationship, and a definition of place. The watershed is the first and last nation whose boundaries, though subtly shifting, are unarguable. Races of birds, subspecies of trees, and types of hats or rain gear often go by the watershed. For the watershed, cities and dams are ephemeral and of no more account than a boulder that falls in the river of a landslide that temporarily alters the channel. The water will always be there, and it will always find its way down. As constrained and polluted as the Los Angeles River is at the moment, it can also be said that in the larger picture that river is alive and well under the city streets, running in giant culverts. It may be amused by such diversions. But we who live in terms of centuries rather than of years must hold the watershed and its communities together, so our children might enjoy the clear water fresh life of this landscape we have chosen. From the tiniest rivulet at the crest of a ridge to the main trunk of a river approaching the lowlands, the river is all one place and all one land.

The water cycle includes our springs and wells, our snowpack, our irrigation canals, our car wash, and the spring salmon run. It's the spring peeper in the pond and the acorn woodpecker chattering in a snag. The watershed is beyond the dichotomies of orderly/disorderly, for its forms are free, but somehow inevitable. The life that comes to flourish within it constitutes the first kind of community.

RIVER OF WORDS TIMELINE



FEBRUARY 15

Annual deadline for entries

APRIL

National winners announced and State winners selected

MAY

Georgia's National and State Winners recognized at Awards Ceremony

JUNE – DECEMBER

ROW exhibit travels to libraries across the state

AUGUST

Georgia ROW brochure produced and distributed

September

Georgia ROW Teacher's Guide produced and distributed

NOVEMBER - JANUARY

Georgia ROW Poetry and Art Journal produced and distributed



Conserve Water Georgia Project WET Facilitator Workshop

Friday, November 19 - Saturday, November 20

Presented by: Georgia Project WET







Registration fee: \$65.00 for Environmental Education Alliance of Georgia members and \$70.00 for nonmembers. Includes the Project WET Curriculum and Activity Guide, the Conserve Water curriculum, facilitator notebooks, educational resources, lunch and snacks both days.

Join us for this exciting 2-day workshop focused on Water Conservation. Learn from the experts why conserving water is important, how you can do it, how Georgians feel about conservation practices, and how community-based programs are working to reduce water consumption.

You will become certified as a Project WET facilitator which will make you a member of the State training team for a national environmental education program! The workshop will begin at 10:00 AM on Friday, and will finish at 5:00 PM on Saturday. 1 PLU/SDU credit will be available. Upon completion of this workshop, you will be certified to teach Project WET to other adults through educator workshops. As a certified facilitator, you will be asked to conduct one teacher workshop per year.

> Space is limited, and you must be able to attend the entire workshop to be certified. Registration deadline is October 29, 2004.

Confirmation information (including directions and workshop details) will be emailed or faxed to all registered participants. Participants are responsible for their own lodging - hotel information/suggestions will be included with the confirmation packet.

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Please return this form with check made payable to:	Name:
	Organization:
EEA/Georgia Project WET, c/o Deron Davis,	Address:
Environmental Protection	City: State: Zip:
Division, 4220 International Parkway, Suite 101, Atlanta,	Phone: W H Fax
Georgia 30354	Email:
Questions?	Are you a member of the Environmental Education Alliance of Georgia?
Call 404-675-1638.	YES \$65 Registration Fee NO \$70 Registration Fee
	Have you taken a WET educator workshop? YES NO
	Are you a Vegetarian: Are you a Vegan?
	Do you need us to process your PLU/SDU Credits?

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What is the Watercourse? Established in 1989, the Watercourse is a not-for-profit water science and education program specializing in the development of educational materials on water and water-related management issues. Publications include curriculum such as Project WET, Wonders of Wetlands, and Conserve Water, as well as materials for students such as the Kids in Discovery series. To order these materials, visit www.projectwetusa.org or call Deron Davis at 404-675-1762 to receive an order form by mail or fax.

Conserve Water Educator's Guide \$21.95

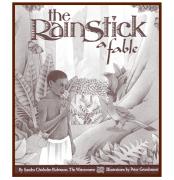
We all know the value of water quality. What about water quantity? Why conserve a resource that often seems so readily available to us? The Conserve Water Educator's Guide provides teachers of middle school and high school students with the ins and outs of water conservation. Background information offers a hydrologic primer; past, present, and future water conservation issues; and case studies ranging from a rancher in west Texas to an ice cream factory in Massachusetts. These real-life examples encourage students to use critical thinking skills to examine different sides of each situation.

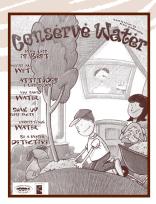
KIDS (Kids in Discovery Series): Conserve Water

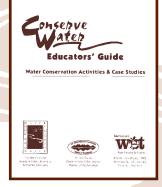
Sets of 30 are \$18.00. Discounts are available for orders of 1000 or more. This colorful, 16-page activity booklet is written and illustrated for eight through twelve-year-olds. It features creative and hands-on investigations, demonstrations, science experiments, educational games and stories. Kids test their water IQ by matching familiar plants and animals with their water content, then they get outdoors to learn "catchment," and think about their own neighborhoods in the "Water Detective."

The Rainstick, A Fable \$9.95

In this children's book, a young boy's journey from a savanna to a rain forest begins with the riddle, "A slender staff touches earth and sky at the same time." Stunning illustrations accompany the boy as he fulfills a quest to bring back the sound of rain to his West African village.







This section of the Dragonfly Gazette recognizes Project WET Facilitators, Teachers and Schools and provides a place for them to share their ideas and accomplishments.

Soaking Wet



"It's Raining Multiple Intelligences: Making Rainsticks Using ALL of Your Brainpower."

BY: SALLY PAMPLIN, Curriculum Specialist SHAKERAG ELEMENTARY SCHOOL

Many of the attendees at the 2004 Environmental Education Alliance of Georgia conference experienced a taste of Shakerag Elementary School's enthusiasm for environmental education in a session entitled, "It's Raining Multiple Intelligences: Making Rainsticks Using ALL of Your Brainpower." Sally Pamplin, Curriculum Specialist and Christine Burton, a 4th Grade Teacher at the Fulton County school demonstrated how all of Howard Gardiner's "Multiple Intelligences" are activated through the Project WET lesson, The Rainstick (p. 442 in the Project WET Curriculum and Activity Guide).

Session participants took a test that revealed their dominant intelligence or preferred learning style, and most likely, their preferred teaching style too. Most were not surprised that they learned best through kinesthetic experiences, musical integration, artistic expression, naturalist leanings, verbal/linguistic OR mathematical/logical approaches, but many were surprised to find out that it is very easy to teach the different learning styles with The Rainstick, and other "Project WET" lessons that lend themselves so perfectly to reaching all learners.

There was no shortage of talent from the participants, who spent the last hour of the workshop in hands-on mode. With authentic African music in the background, students, teachers and a professor joined in to create their own unique rain sticks, from painted to feathered, all making the nourishing sound of rain, and reflecting the problems that were created by drought in the lives of one West African village.

For information on *The Rainstick, A Fable*, a children's book published by The Watercourse as a companion to the Project WET activity *The Rainstick*, see pg. 4 in this newsletter.

Make A Splash with Project WET

Centennial Place Elementary School in Atlanta, the 2004 Georgia Project WET School of the Year, hosted a Make A Splash with Project WET water festival on September 17. The 5th grade teachers used the EIC Model to make water the integrating context for their first semester lesson plans. During the festival, the 5th graders shared the concepts they learned by leading younger students in activities about water. The 2nd grade teachers highlighted water during their unit on gardens and their students presented a play they developed on the topic during the water festival's opening ceremony. In addition, Centennial Place welcomed special guests from the Georgia Environmental Protection Division and the Georgia Aquarium. Georgia Project WET's Mamma Bass and the Mudsliders performed for the students and they met the environmental superhero, Captain Planet.

Make A Splash with Project WET is a national day of water education. It is celebrated across the United States with water festivals, which are educational, fun and interactive water celebrations where students explore a diversity of water-related topics. The events are sponsored by Nestle Waters North America. Centennial Place Elementary School received \$3,000 to host their event. To nominate your school as the next Georgia Project WET School of the Year and host next year's Make A Splash with Project WET water festival, complete the form on pg. 10 in this newsletter.



Last year, students at Allen Elementary School in Columbus discovered stream invertebrates at the Make A Splash with Project WET water festival coordinated for them by students from Arnold Magnet Academy, the Georgia Project WET School of the Year.

NOMINATE THE GEORGIA PROJECT WET SCHOOL/TEACHER OF THE YEAR

Each year Georgia Project WET recognizes a School and Teacher of the Year at an Awards Ceremony at the Environme Education Alliance of Georgia's annual conference. The Georgia Project WET School of the Year also receives funding organizational assistance to host a "Make a Splash with Project WET" Water Festival. To nominate a school or teacher, complete the forms below, answer the questions on a separate sheet and submit to Georgia Project WET, 4220 Internation Parkway, Suite 101, Atlanta, Georgia 30354.

POSTMARK DEADLINE FOR NOMINATIONS IS FEBRUARY 15, 2005

PROJECT WET SCHOOL OF THE YEAR NOMINATION

Please note: Elementary, Middle and High Schools are eligible.

Name of Project WET School of the Year Nominee: ____

School address:				
City:	State:		Zip:	
Phone: Day ()	Evening ()	
Website address: _			Fax:	
Your name:		P	hone:	

Your Email address: _____

Please answer the questions below on a seperate sheet of paper 1) Why do you feel your school deserves to be the School of the Year?

2) What kind of water education projects or programs have your students engaged in? How many students are in your school? How many of them have been involved in these projects or programs?

3) How many teachers are at your school? How many of them have been involved in water education training (i.e. Project WET, Adopt-A-Stream, River of Words etc.?)

4) Is the Project WET Curriculum and Activity Guide being used at your school? If so, by how many teachers?

PROJECT WET TEACHER OF THE YEAR NOMINATION

Name of Project WET Teacher of the Year Nominee: ____

School address:		1
City: State:	Zip:	
Phone: Day ()Evening	()	
Nominee's Email address:	Fax:	
Your name:	Phone:	
Your Email address:		
Please answer the questions below on a seperate she 1) Why do you feel this person deserves to be honor	eet of paper. red for their teaching in water education?	
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2) How does this person involve his or her students in learning about our water resources? What kind of water education projects or programs has this teacher engaged students in? How many students are involved in learning about water through this teacher?

3) What kind of water education training does this person have? (Project WET, Adopt-A-Stream, River of Words, etc.)?

4) If Project WET certified, how does this person use the curriculum in their teaching?

* NEWS, NOTES AND UPCOMING EVENTS

GET YOUR STUDENTS INVOLVED WITH RIVERS ALIVE

Your students can help make their community a cleaner place and improve water quality at the same time. During the month of October, Georgia citizens young and old will remove hundreds of pounds of garbage from our waterways. Join a group in your community. Visit www.riversalive.org.

4TH GRADE TEACHERS IN THE COOSA/ TALLAPOOSA/TENNESSEE RIVER BASINS Register now for Winning Water Festival

Tuesday, March 8, 2005, Dalton State College, Dalton

Students will explore water through interactive and dynamic activities. The event will bring the topics of drinking water, groundwater, watersheds, surface water, and water quality to life. There is no cost for the event, but due to space limitations, all classes that return the registration form will be entered into a drawing. Visit www.winningwater.org to download a registration form, and visit www.epa.gov/surf and click "Locate Your Watershed" to make sure your school is in the Coosa, Tallapoosa, and/or Tennessee River basin. All classes will be notified about their selection status in early October 2004.

QUTDOOR CLASSROOM COUNCIL PRESENTS DISCOVER THE TREASURES

October 21-23, Berry College, Rome

Register now for two hands-on workshops and the symposium, which feature keynote speakers, concurrent sessions, resource tables and networking opportunities designed for classroom teachers who use the schoolyard as

a focus for their lessons. Visit www.eealliance.org to download the registration materials. Early bird deadline: must be postmarked by October 8.



Email

You might be an environmental educator if you are a/an... classroom teacher • community volunteer • college student • scout leader • aquarium, public garden, nature center, science museum, or zoo professional • curriculum specialist • extension agent • youth development employee • parent volunteer • community outreach professional • environmental specialist • school administrator • university professor • natural resource manager • interpretive naturalist • business representative • garden club member • person who works to create an environmentally literate citizenry

ENVIRONMENTAL EDUCATION ALLIANCE OF **GEORGIA ANNUAL CONFERENCE**



Keys for Successful Partnerships March 11-13, 2005, Unicoi State Park and Lodge, Helen, GA

You will enjoy hands-on sessions, presentations, sharing sessions, workshops, panels, field trips, keynote speakers, social events, silent auction, awards ceremony and discounted registration for EEA members. Scholarships are available. Mark your calendar and submit a presentation proposal today. Postmark deadline: September 22. For a presentation proposal, visit www.eealliance.org.

To receive future EE information by mail and/or e-mail, please subscribe at www.eeingeorgia.org/mail.

FREE FROM PROJECT WET (While Supplies Last)

Make your selections below and fax to Deron Davis at (404) 675-6245.

The Environmental Education Collection: A
Review of Resources for Educators Volume 2 (2 max)The Environmental Education Collection: A
Review of Resources for Educators Volume 3 (2 max)
Name:
Organization:
Address:
Phone: W
H Fax

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Student Wins Award for Learning and Teaching About Water Quality

By Zach Hall, Lowndes County 4-H Club

In July 2003, I had the opportunity to participate in my first Storm Drain Awareness Project through our Lowndes County 4-H Club. We met with Ms. Emily Perry, an Environmental Planner with the South Georgia RDC, at city hall and she explained the reason why we were going out to put decals on storm drains in the downtown area. We also went around to businesses, gave them door hangers, and talked to them about the importance of keeping trash and other objects out of the storm drains. I had never realized that the water runoff from our streets flows straight out into our streams and rivers.

Our club also participated in a Rivers Alive cleanup in October 2003 and I was amazed at the trash we pulled out of the Withlacoochee River as well as the area around the riverbank. We found a hot water heater, a rear axle from a car, a recliner, a door from a car, as well as cans, glass bottles, and plastic containers.

When I started 8th grade this past August, my science teacher, Mrs. Kathy Blanton, told me that I was going to have to do a Science Fair Project. I had heard that there were problems with the water quality in Mud Creek, a creek that runs into a wetland area behind my school, so I talked to my teacher about making Mud Creek my project. Mrs. Blanton was a great help in setting up my experiment, showing me how to use a water testing kit and how to go about taking water samples from the wetland area. Ms. Emily Perry was able to give me information from studies that the EPA had done on Mud Creek. With this project I won first place at the school level and went on to the regional level and won first place. The FFA advisor at Lowndes High School suggested I enter this project in the Georgia FFA Agriscience Fair in Athens this past spring. I won first place there and am eligible to take it to the National FFA meeting in Louisville, Kentucky this fall.

I hope that through these experiences other people in the Valdosta and Lowndes County will become more aware of the water quality problems in our area, and water quality in our lakes, rivers and streams will improve for generations to come.



Zach is cleaning up!



4220 International Parkway, Suite 101, Atlanta, Georgia 30354

What's Inside this Issue?

- Conserve Water Georgia: Top 5 Things You Can Do
- Order your ROW bookmarks, poster, and Teacher's Guide today
- Register now for the Project WET Facilitator Training November 19-20
- Conduct a Water Conservation Audit with your students
- Nominate the Georgia Project WET School of the Year...Win a Water Festival
- Mark your calendars for Rivers Alive, the Outdoor Classroom symposium, and the EEA Conference
- MORE FREE STUFF!!