



The Boone Watershed News

A Publication of the Boone Watershed Partnership, Inc.

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Boone Watershed Partnership Conducts Rain Barrel Workshop

On the morning of November 15, the Boone Watershed Partnership conducted its first Rain Barrel-Building Workshop at the First Presbyterian Church in Elizabethton, Tennessee. Twenty participants constructed 16 barrels, recycling 80 gallon Wesson Oil containers. The barrels will be used at homes throughout the Boone Watershed as well as Girls Incorporated in Johnson City, Tennessee.

What is a Rain Barrel?

A rain barrel is a container that collects rain water from rooftops (this is called stormwater runoff). Rain barrels come in several different shapes and sizes, but they all do the same thing: they save water and decrease stormwater runoff. Placed at the base of a downspout, a typical rain barrel can hold 55-75 gallons of water at one time. When connected to a watering



Participants assemble a rain barrel

hose, a rain barrel can hold a water supply for watering gardens, trees, and even indoor plants.

Why Install a Rain Barrel?

Did you know that during an average rainstorm (1 inch in 24 hours) more than 700 gallons of water run off the roof of a typical home? That's enough water to take 17 baths or 58 showers! Virtually every home or business has a lot of impervious surface (area that rainwater cannot soak into) that affects the quality of stormwater runoff. When rain runs off roofs and lands on impervious surfaces, it cannot soak into the ground. Eventually, it enters a storm drain or a nearby stream or river. A rain barrel helps prevent some of this excessive runoff.



BWP board member Ann Harrison works on a rain barrel

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**Northeast TN
and
Southwest VA
continue to
experience
a drought .**

**Do your part
to conserve
water!**

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Sinking Creek Restoration Project Kicks Off

In 2008, the Boone Watershed Partnership received its first-ever grant award for restoring Sinking Creek, which originates on Buffalo Mountain and flows through south Johnson City and into Carter County. The aptly named creek “sinks” and reappears several times in its 15-mile journey before it ultimately sinks and discharges under the surface into the Watauga River.

The Tennessee Department of Environment and Conservation has identified the lower portions of the creek, near King Springs Rd. and Sinking Creek Church, as contaminated and not suitable for human contact. The main pollutant that has been identified is fecal coliforms, which are derived from human or animal waste. The main objective of the project is to initiate best management practices to reduce the introduction of wastes into the stream.

The scope of the project will include working with landowners on cattle exclusion efforts, working with the City of Johnson City to create/repair adequate buffer zones, and working with residents to transition from septic systems to public sewer. The project will be implemented over a period of 3 years.

The grant, which officially began October 1, 2008, will provide around \$300 thousand of federal and state funds, and approximately \$217 thousand will be contributed in cash and services by local

sources. BWP partners, in large part, will be involved with the implementation of this project. East Tennessee State University, TVA, the City of Johnson City are working together to accomplish the goal of restoring the creek. The project is coordinated by a Project Manager, Sarah Ketron, who began working with the project on November 5.

To date, project activities include a field trip, initial project planning, analysis of sampling data previously collected by ETSU, and a meeting with the City of Johnson City’s wastewater staff. Present efforts include additional mapping/source tracking efforts, coordination with the City for potential buffer improvements, if applicable, and making contact with landowners about potential best management practices that can be implemented on their property.

The project is complex and has a lot of moving parts, such as engineering, studies/data analysis, and community involvement. Boone Watershed Partnership members are optimistic about improving conditions in the creek and are excited to kick off the project. Stay tuned for more updates, and please contact the Project Manager, Sarah Ketron, for information on the project. Sarah can be reached at: (423)220-7480 or sarah.ketron@yahoo.com.

A Day in the Field—A Tour of Sinking Creek

On November 12, 2008, the Boone Watershed Partnership, Inc. coordinated a field trip of Sinking Creek from it's source on Buffalo Mountain all the way to the point where it goes underground in Carter County and even where it discharges into the Watauga River. Sinking Creek is an impaired water with a Total Maximum Daily Load for Fecal Coliforms. The purpose of the trip was to familiarize, or in some cases re-



At it's source, Sinking Creek is just a trickle .



Field Trip Participants

familiarize folks with the creek's characteristics and location and identify possible sources of pollution. BWP Board Member, Ingrid Luffman led the trip and noted various sites where monitoring had taken place. The participants gained knowledge about the watershed and the trip was helpful for kicking off the Sinking Creek Restoration Project, which began in October 2008, with funds from an EPA 319 grant, administered through the Tennessee Department of Agriculture. According to Project Manager, Sarah Ketron, "...the project will include working with landowners on cattle exclusion efforts, working with the City of Johnson City to create/repair adequate buffer zones, and working with residents to transition from septic systems to public sewer."



Possible Cattle Exclusion and/or Bank Stabilization Projects



The creek is posted at Sinking Creek Church.

Top Ten RiverSmart Tips

Much of our tap water comes from rivers. And we all do things around the house every day that can affect our rivers and streams – the very water we drink. Remember, your rivers are closer than you think. **Be River-Smart** about the things you do by following these easy tips:

1. Repair leaky faucets and toilets right away.

Leaky sinks and toilets can waste 50 gallons of water in one day, depleting our rivers. For a leaky faucet, look for a faulty o-ring or valve seat. Toilet leaks aren't always so obvious. Try pouring colored liquid into the tank. If after 15 minutes you see dye in the bowl, you may need to replace the flapper.

2. Turn off the tap while brushing your teeth and washing the dishes. You can save 3-5 gallons each time you brush your teeth. Try using a cup when brushing and shaving. And fill up the sink first when washing vegetables or doing a load of dishes. It's a small change that will make a big difference.

3. Run the washing machine and dishwasher only when they are fully loaded. You can save between 300-800 gallons of water each month.

4. Dispose of household cleaners, paint and other chemicals safely. Many cleaning products found in our homes and garages are too dangerous to be disposed of in the trash or down the drain. Read the label: anything marked "Poison" or "Danger" should be taken to your local hazardous waste center. Use water-based paints and dry off excess paint with a paper towel before rinsing your paintbrush.

5. Sweep off – instead of hosing – the driveway, patio or sidewalk. Hosing for 15 minutes wastes 150 gallons of water. Water run-off from our driveways or sidewalks carries contaminants, such as dirt, motor oil, fertilizers and animal waste into our rivers.

6. Install water-saving showerheads and high-performance, low-flush toilets. An outdated showerhead wastes 20 extra gallons a day or 7,200 gallons a year – and that's just for one person! An average family of four can save 14,000-17,000 gallons of water a year by replacing pre-1993 toilets with new high-efficiency ones. High-efficiency toi-

lets, washing machines and dishwashers not only save our rivers, they save us money.

7. Fix car leaks promptly. Leaky cars leave drips or puddles of motor oil and other fluids on our streets and driveways. When it rains, these contaminants run down our streets, through the storm drains, and into our rivers. So clean stains on your driveway or street and fix car leaks right away. Preventing polluted run-off will help keep our rivers and drinking water safe.

8. Take care when changing your car's motor oil and dispose of the oil safely. One quart of motor oil can pollute 250,000 gallons of river water, so use a large pan if you are changing motor oil yourself. Never pour leftover oil down a storm drain or into the trash – instead, drop it off at your local hazardous waste center.

9. Water your lawn and garden only in the morning or evening. Water evaporates quickly during the middle of the day. Remember, a lawn only needs 1 to 1.5 inches of water per week, and you can set out a can to measure for you. Watering less creates deeper, stronger roots and a healthier lawn. Or you could try letting the lawn go brown, as nature intended during summer months. Another option is to plant native plants or xeriscaping that require less water altogether.

10. Buy and use environmentally friendly products. Choose safer, multi-purpose cleaners marked with only a "Caution" warning, rather than products with "Poison" and "Danger" on the label. Avoid chlorine, phosphate products and solvents like paint thinner

For more Information about the **RiverSmart** Program, see: <http://www2.rivernetwork.org/index.cfm>



Drought Eases Over Much of Our Mountain Region

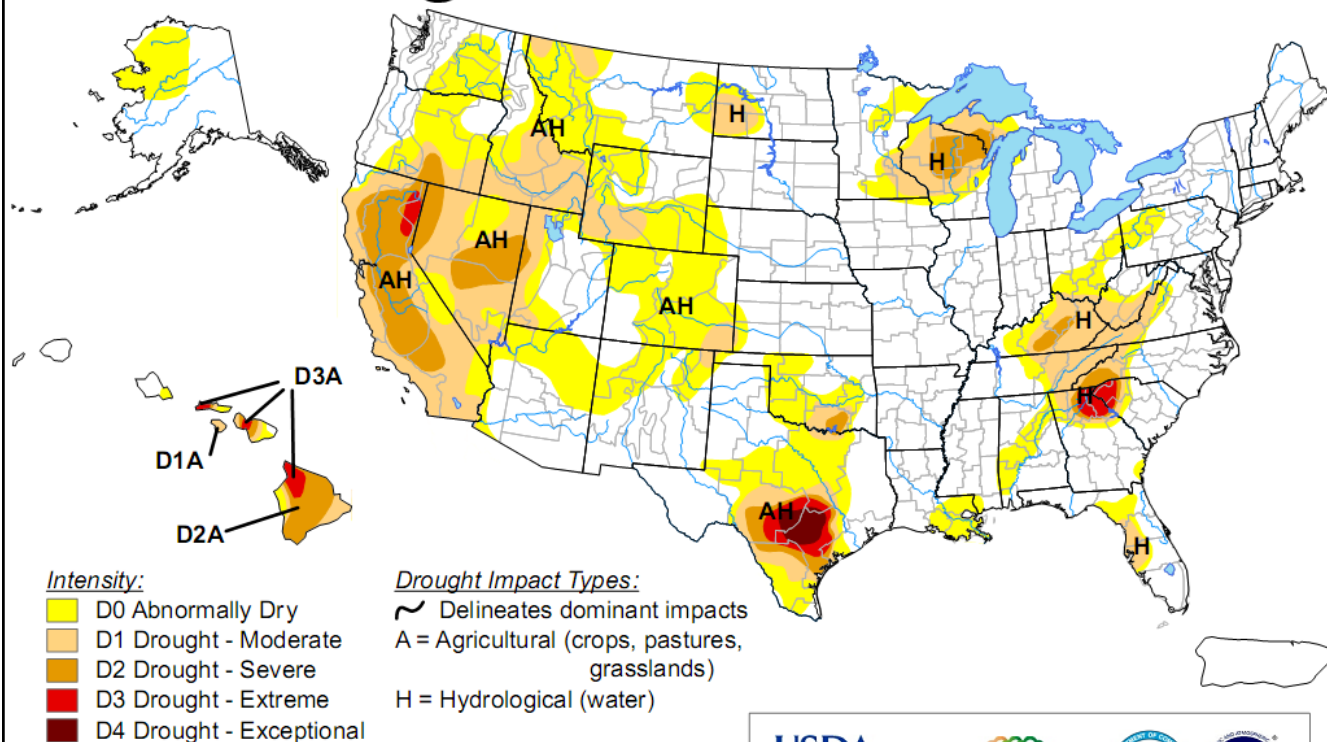
Much to the relief of many local water users, from boat owners and fishermen to homeowners, who rely on spring or wells, the drought is easing in our region. We are still listed as experiencing a moderate drought and therefore conservation measures are in order. According to Drought Monitor, "The recent moisture in the region has allowed many of the short-term indicators to improve, but some of the reservoir levels and stream flows have been slower to respond..."

The Drought Monitor is a synthesis of multiple indices and impacts that represents a consensus of federal and academic scientists. Partners include: ([U.S. Department of Commerce/NOAA/National Weather Service](#), [Joint Agricultural Weather Facility \(U.S. Department of Agriculture\)](#), [National Drought Mitigation Center \(University of Nebraska-Lincoln\)](#) and the [Climate Prediction Center \(U.S. Department of Commerce/NOAA/National Weather Service\)](#)).

U.S. Drought Monitor

December 30, 2008

Valid 8 a.m. EST



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://drought.unl.edu/dm>



Released Wednesday, December 31, 2008

Author: Brian Fuchs, National Drought Mitigation Center



Boone Watershed Partnership Conducts Rain Barrel Workshop (Continued from page 1)

The BWP plans future Rain Barrel Workshops. For more information, contact Gary Barrigar at: barrigarn@embarqmail.com.



First Presbyterian Church member, Jim Gorny and BWP member Bob Fondry build a rain barrel.



A finished Rain Barrel



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To partner with local users, regional, state and federal entities, educators and others to identify and address water resource issues in the Boone Watershed.

We're on the WEB!

<http://boonewatershed.com/>