

# in depth

west virginia

department of environmental protection

Vol. 23, No. 6

September 2015

Reminder!  
DEP Employee  
Appreciation  
Picnic is  
Sept. 30  
at Oakes Field!

## Taking The Green Out Of The Greenbrier

Sometimes “Going Green” Isn’t A Good Thing

by Jake Glance

The DEP is continuing a years-long effort to make sure the Greenbrier River remains beautiful - even if it means we have to take the “green” out of it.

A few years ago, algae blooms and nutrient issues in the river were interfering with recreational uses of the picturesque waterway. After many surveys, it was determined the river was impaired, meaning over 40 percent algae coverage at any location or 20 to 40 percent coverage for at least three times stream width at any location.

“As part of our restoration plan, we collected water chemistry samples at 10 designated sites and monitor for algae at 17 designated sites along the river from Marlinton to Talcott,” said James “Jamie” Peterson, an environmental resources analyst with the Division of Water and Waste Management. Jamie said the main nutrients of concern are phosphorous and nitrogen.

“DEP is working with point sources of such nutrients, such as the sewage treatment plants. White Sulphur Spring has already made upgrades to its plant with more to come. Ronceverte is going to upgrade its entire plant. Alderson is going to make upgrades as well. All of these upgrades should come in 2016 and 2017.”



This algae on the Greenbrier River is cause for concern. DEP is monitoring the river as nearby towns make improvements to their water treatment facilities.

Jamie said only time - and continued monitoring - will tell if these upgrades will make a difference.

Weather - especially rain - also plays a role in algae, he said. This year and 2013 were rainy so algae wasn’t as much of a concern. But 2014 was hot and dry, meaning the river flowed slower and gave algae more of a chance to grow.

The main algae of concern is filamentous green with some blue-green. Blue-green algae is the type creating issues in the Ohio River recently.

See ALGAE, Page 5

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## DEP Teaming With Habitat’s ReStore To Recycle Paint

Effort aimed at keeping unused paint out of rivers and landfills

by Jake Glance

It is a pretty safe bet that if you have a garage or a basement then you also have some unused paint collecting dust.

If you’re guilty of that, you’re not alone. The U.S. Environmental Protection Agency estimates that every homeowner in the country has at least three gallons of unused paint, and at least 10 percent of that paint will never brighten a room or give new life to a piece of old furniture. Instead, it will go to the local landfill.

The West Virginia Department of Environmental Protection and Habitat for Humanity of Kanawha and Putnam County are teaming up for the third year in a row to recycle some of that unused paint.

“This is a worthwhile project because we are providing a means that creates a sustainable solution for disposing of many gallons of unwanted paint,” said the DEP’s Tammy Thornton, the event’s organizer.

There are several important guidelines to remember when donating paint to the ReStore. While the latex paint can be of any color, the paint cans should be at least one-quarter full and still usable.

By filtering, straining and blending the donated paint, the Habitat ReStore will create a new, useful product.

See PAINT, Page 5



### Paint Recycling Drive

Just bring your **unused latex paint** and drop it off in the garage area in the back of DEP Headquarters in Kanawha City on Oct. 23

**Oil based paints cannot be accepted!**



# “It Sounds Like The Rain Forest In There”

## Recycled Materials Used To Protect DEP’s Rain Garden

by Jake Glance

At one end of the DEP’s parking lot is a lush green space. It has all sorts of plants and flowers that attract bees and butterflies, and the occasional squirrel can be seen scurrying about attending to its squirrely business.

And it is all protected by eels.

Not the electric eels that slink through the seven seas, but by heavy black erosion eels that are stuffed full of chunks of recycled tires.

“The eels are to stop sediment, oils, antifreeze, or anything else that drains out of the parking lot and into the rain garden,” explained Jon Michael Bosley, a stormwater permitting supervisor with the Division of Water and Waste Management.

“Before the eels, we had some rocks set up to help prevent that, but during this winter with all of the snow removal, they all got pushed down into the rain garden.”

DEP’s rain garden has been in place for several years. And Jon Michael said all construction projects are encouraged to incorporate a rain garden into their plans.

In Fairmont, a rain garden is being



Larry Board, an environmental resources specialist with the Division of Water and Waste Management, places a new erosion eel beside the DEP’s rain garden to help keep pollutants out.

planned at the site of a former restaurant that was recently torn down. The rain garden will be several hundred square feet right in the middle of the downtown area.

“Part of the reason we want to maintain a good rain garden is to set a good example for others. How can we hold others to a high standard if we don’t hold ourselves to it?”

The DEP’s large parking lot drains a large area. That means a great deal of rocks, cinders, and other material gets washed toward the lowest point - where the rain garden is located - every time it rains.

The erosion eels are stuffed full of chunks of recycled tires. The eels are designed to let water pass through but to catch the material that would otherwise pollute and clog up the rain garden.

As Jon Michael stood beside the rain garden explaining its benefits, his voice was drowned out by the sound of insects.

“It sounds like the rain forest in there, doesn’t it?,” he stated.

It is a small rain forest, being protected by recycled material, just feet away from the hustle and bustle of West Virginia’s Capital City.

## WV’s Beauty Best Seen From a Kayak

by Colleen O’Neill

During the work week, he is part of DEP’s legal team. But on the weekends, he transforms into a kayaking free spirit.

“When I’m kayaking, I am in total control, and seeing the beauty of nature close up is awe-inspiring,” said Jeremy Davis, lead paralegal for DEP’s Office of Legal Services. He joined the agency in 2012.

“I have seen many different types of wildlife, everything from turtles, otters, beavers, bald eagle, blue heron, and many types of fish. I prefer slower moving water so that I can enjoy the scenery and the wildlife without having to constantly keep my eyes on the water for obstacles.”

Jeremy is happy to share this soothing activity.

“I belong to a group on Facebook called Kayak West Virginia,” he said. “I have met a lot of interesting people on that site. In the past, I have posted ‘open kayak trips’ and would invite anyone that wanted to come along. It’s great, because some people are not from this area and really enjoy having a guide to help them figure out where to put in and get out of the river. It also gives me an opportunity to travel to other parts of the state to see waters that I am not familiar with; plus, I meet new friends.”

What started as a weekend exertion with “the boss,” turned into a deep passion.

“I got involved with kayaking because of my prior boss, Roger Forman,” Jeremy said. He explained how Roger had law offices in both Charleston and Marlinton.

see KAYAK, Page 5



DEP’s Jeremy Davis says kayaking is the perfect way to relax after tough work weeks.

## Kanawha River Shining Brightly Thanks To Volunteers

by Jake Glance

Even when West Virginians were known as “Western Virginians,” the Kanawha River was a vital part of the lives of the people here. It is impossible to know how much coal and other goods have floated down this waterway over the years. But one thing is known - it has to be protected.

Dozens of volunteers did just that during the Great Kanawha River Cleanup earlier this month.



Old tires, wood, and assorted junk - this is just a small sampling of what was recovered during the Great Kanawha River Cleanup earlier this month.

Sites that were focused on included Winfield Beach, St. Albans Roadside Park, the South Charleston boat ramp, Magic Island in Charleston, and Kanawha Falls at Glen Ferris.

“Events like the GKRCU are important because they raise awareness of the problems associated with improper disposal of litter and they foster

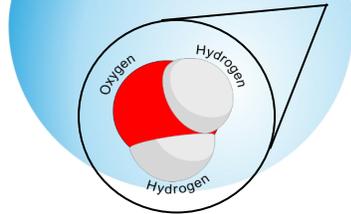
a sense of community and pride in the areas in which we live and play. Without such events we, as individuals and communities, are at risk of taking our beautiful state for granted,” said DEP’s Terry Carrington, the event organizer.

During this year’s event, 106 volunteers collected approximately 2.3 tons of trash, including 18 old tires.

# Students Get To Know H<sub>2</sub>O

## Water Festivals Highlight the Importance of Clean Water

by Jake Glance



More than 150 school children from Kanawha County spent a humid morning at the state Capitol learning about the importance of clean water.

The DEP's Water Education for Teachers - Project WET - partnered with the DEP's Division of Air Quality, the West Virginia Division of Forestry, the National Park Service, West Virginia Save Our Streams, and West Virginia American Water to host the event on Sept. 3.

Garrett and Jessica, two students from Ruthlawn Elementary, learned two valuable lessons at the Water Festival.

"Clean water is very important. It can save lives," Garret said.

"Without clean water, we would all die," Jessica said.

In addition to learning about clean water when it comes to human health, the students also learned about the impact clean water has on the environment. The Division of Forestry took children through the life cycle of a tree; the DEP's Watershed Assessment Branch showed how macroinvertebrates are affected by water pollution, and the National Park Service showed how all organisms are connected and share the need for clean water.

Additional water festivals were held in the last couple of weeks in Fayette and Nicholas counties, and at Marshall University in Huntington.



A student holds a crawdada at the Watershed Assessment Branch display, where children learned the effect water pollution has on macroinvertebrates.



Laura Jennings and Rex Compston of the DEP's Division of Air Quality help children understand the connections between air pollution and water pollution.



These students aren't squeamish when it comes to getting their hands dirty and learning about how the smallest bugs can be the biggest indicators of the presence of pollution in water.



Students also learned about the life cycle of trees from the Division of Forestry.

# Ten Questions: How Will Application Xtender Help at DEP?

## New Document Management System Means More Efficiency

DEP will soon be switching to ApplicationXtender for the management of documents. Christina Richmond of the Business and Technology Office answered 10 questions about the benefits of the new system and the concerns she hears most.

**1. In one sentence, what does ApplicationXtender do?** ApplicationXtender (AX) is an electronic document management system that allows users to store, manage, and share their documents quickly and efficiently.

**2. What do you think is the best part about AX?** It's instant. A user in a field office can upload a document he/she would have traditionally sent in the mail and a user in another location can open that document up and view it. It also has the ability to search one or more applications at once. There is also a web component that no matter where you are: in the office, the field or at a

meeting at another location, files will be accessible by users.

**3. How will the public benefit from AX?** As we move forward, the public will eventually have access to the system in a web format and they will be able to view files without completing Freedom of Information Act requests (FOIAs) or paying for CDs of copied files. The system also allows users to search across more than one application at once.

**4. What does AX do that will have the biggest impact on DEP's daily mission?** AX will help the agency move toward the Enterprise Model. As divisions and offices go live with the system, they will only have to look in one place for files. AX can also help the agency meet its goal of being more sustainable - instead of printing electronic documents and then filing them as a paper system or scanning them into another system, these documents can be put into AX as simply as dragging and dropping the file.

**5. What is the most common concern you hear about AX and what is the response to that concern?** Many people are afraid that they will not be able to figure the system out. We are trying to make sure that we focus on

training end users on how to use the system and I always tell people that even if you come and ask me the same question four times, I will be glad to answer the question four times. People are also afraid of making a mistake, and the great thing about the system is it's easy to fix mistakes or errors.

**6. How easy is AX to learn how to use?** The system is very easy to use and it remembers what you tell it. We work with sections to import data tabled from systems that their folks use such as ERIS, AirTrax and Access Databases and pre-populate the AX index fields.

**7. What was the motivation to move into AX?** The DEP was fragmented in how documents were stored and managed. An evaluation was done to look at all the systems in place within the agency and the decision was that AX met our need to centralize and streamline document management.

**8. Is all of state government moving to AX?** No, many other state agencies use AX - including the Lottery Commission, the Retirement Board, Department of Transportation and West Virginia University. Our Human Resources group was the first DEP group to use AX and all of our HR files have



Christina Richmond

been stored in the system for several years.

**9. How long did it take you to learn how to use AX?** I have been using the system since last July and within a few minutes I learned how to get documents in and out of the system. It really is that easy. But every day I learn new things that can make our jobs easier.

**10. If people have questions about AX, who should they contact?** They can always call me and I am glad to answer their questions. If a section is interested in seeing a demonstration of AX, there are several of us who can sit down with them and show them the basics of how the system works what they need to do to set up and test their Application to get started.



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## Uses Of Recycled Materials a Focus at State Fair

by Jake Glance

Almost every visitor to the DEP's booth at the 2015 State Fair of West Virginia expressed some degree of disbelief.

Surely those shoelaces were not made from recycled plastic bottles. There's no way those keychains and pencils were made from recycled tires.

But it's true - they were.

In order for fairgoers to get a prize, they first had to answer a question about recycling and environmental protection. The questions posed conun-

drums like how much litter is picked up from West Virginia's highways every year and how much water the average person uses when brushing his/her teeth.

After answering correctly, fairgoers got to spin the prize wheel and take home a prize made from recycled material.

"If we could teach one person something about how they can make a difference in the preservation of our environment, then it is worth our time to promote our message," said Annette Hoskins of the Public Information Office, who handled the planning of DEP's State Fair appearance.

The State Fair of West Virginia added one more day of festivities this year to give people more time to attend because schools in many counties were already back in session.



The prizes given away at the DEP's booth - shoelaces, sunglasses, keychains, and pencils - were made from recycled materials.



DEP's Cindy Lawson watches as a fairgoer spins the prize wheel to see which prize it would land on.

# West Virginia's State Seal Shows History and Future

by Jake Glance

West Virginia's State Seal is celebrating a birthday this month. It was adopted in September of 1863 - three months after [West Virginia was admitted to the Union](#) as the Civil War raged on.

Designed by [Joseph Diss Debar](#) of Doddridge County, the State Seal has never been altered since its adoption.

The State Seal, affixed to official state documents such as executive orders and canvassed election results, is full of symbolism for the Mountain State.

Because it has never been changed, even the first West Virginians would still recognize it today.

[The first proposed name for the state was "Kanawha,"](#) and it was made up of 39 western Virginia counties. Other names considered were "Allegheny," "Augusta," "Columbia," "New Virginia," and "Vandalia."



The farmer represents West Virginia's rural agrarian origin.



The state motto, in Latin, translates to "Mountaineers are always free."



The coal miner represents all of West Virginia's mineral wealth and industry, not just coal mining.



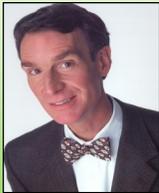
The huge boulder represents our mountains, and is inscribed with the date of our statehood.



The "[Cap of Liberty](#)" and crossed muskets mean freedom was obtained and will be maintained by force of arms.

## "Quotable"

"To leave the world better than you found it, sometimes you have to pick up other people's trash."



Bill Nye  
"The Science Guy"

## ALGAE

*cont'd from Page 1*

Rivers currently listed for impairment due to algae are the Greenbrier, Cacapon, Tygart, and South Branch of Potomac.

"Rivers in the state that we have seen filamentous green algae impairment issues on would be the Cacapon, South Branch, Tygart, Buckhannon,

and the New. The Interstate Commission on the Potomac River Basin is monitoring the Potomac-Cacapon, and the South Branch and North Branch of the Potomac for DEP," Jamie said.

"But of all those, the Greenbrier has had the toughest time of all with algae this year. But we will be keeping a close eye on it to make sure it is safe for everyone to enjoy."

For updates on the Ohio River blue-green algae, click [here](#).

## PAINT

*cont'd from Page 1*

Paint recycling takes on added meaning when the environmental impact of improperly disposed of paint is considered.

The EPA estimates that just one gallon of paint can contaminate up to 250,000 gallons of water. However, small amounts of leftover paint can be allowed to dry and thrown into the trash.

It is also suggested that if you have a small amount of paint left over and don't plan to use it on anything else, either paint a piece of cardboard and throw it in the trash or harden the paint by mixing it with sawdust or scrap paper.

So, what to do with all of that unused oil-based paint or even spray paint that is sitting in your garage or basement?

With spray paint, simply spray the remaining paint onto a piece of cardboard and then recycle the can. Oil-

based paint, which is a hazardous household waste, should never be poured down the drain. One of the best options is to find a group - a theater troop, for example - that will accept the donation of your unused oil-based paint.



## KAYAK

*cont'd from Page 2*

"Roger and his wife have a house on the Greenbrier River and we would stay there when working in Marlinton, or if we were just in the area on the weekends. On many occasions, I was invited to go kayaking with them."

"I fell in love with kayaking, with how I was experiencing West Virginia," he said. "I now own five kayaks. If someone wants to go but doesn't have a kayak - problem solved."

And the feelings are contagious. Lynn Dunlap, friend and OLS co-worker of Jeremy, first experienced kayaking with Jeremy.

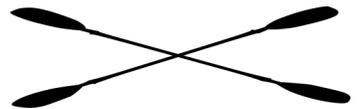
"My husband and I went kayaking with Jeremy on the Coal River," Lynn said. "We borrowed two of Jeremy's kayaks - it was so relaxing and pleasurable that when we got home, we went right out and bought our own kayaks!"

Jeremy's group of friends kayak together.

"We often camp overnight and on one trip we camped at the Little Coal River Campground," Jeremy said. "Luckily for everyone involved, Total Meltdown - my band that I often go kayaking with - had instruments on hand and played music by the campfire that evening."

Jeremy has kayaked various waterways in West Virginia.

"I have kayaked Pond Fork River, the Elk River, the Big Coal River, the Coal, and the Little Coal rivers," Jeremy said. "I try to go out on the water every weekend (Sundays) from spring to fall if possible. We are currently planning on paddling a section of the Potomac River, called the Trough, before this year is over."



### New Hires

**Rick Adams**, Division of Water and Waste Management  
**Brian Ferguson**, Office of Oil and Gas  
**Mason Fields**, Abandoned Mine Lands and Reclamation  
**Jennifer Holmes**, Division of Land Restoration  
**George Martin**, Business and Technology Office  
**Carolyn Norvell**, Business and Technology Office  
**Dean Southworth**, Division of Water and Waste Management  
**Nicki Taylor**, Division of Mining and Reclamation  
**Elizabeth Tichner**, Division of Land Restoration  
**Elizabeth Ward**, Business and Technology Office  
**Joshua Westbrook**, Office of Oil and Gas

### Recent/Upcoming Retirements

**Donna Ammons**, Division of Water and Waste Management  
**Patsy Bailey**, Division of Mining and Reclamation  
**Gary Burdette**, Executive  
**James Mason**, Division of Air Quality  
**Darlene Nestor**, Abandoned Mine Lands and Reclamation  
**Gregory Smith**, Abandoned Mine Lands and Reclamation  
**Michael Warwick**, Division of Water and Waste Management

