

**WAY E-NEWS**

*A coalition of stakeholders committed to being innovative leaders  
encouraging watershed-based planning, restoration and protection*



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A PUBLIC-PRIVATE PARTNERSHIP

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- Two College Scholarships Now Available!
- Renew Growing Greener!
- Online workshop for those interested in South Mountain mini-grants – May 25
- Green America Announces Green Sustainability Grants Contest – May 31
- Seed Grants Awarded for Greenways Projects – Jun 15
- Wild Resource Conservation Program Grants – Jun 30
- Now Accepting Applications for Green Roof & Wall Design 2011 Awards of Excellence! Jul 6

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- Free Webinar on Residential Green Roof Performance – Jun 1
- Create An Edible Landscape: Free Workshops – Jun 4
- DEP to Host Free Outdoor Learning Workshop for Teachers – Jun 16
- AGRICULTURE NIGHT at SOVEREIGN BANK STADIUM – Jun 17
- Bioretention / Bioinfiltration 'Ask the Researcher' Summit – Jun 20-21
- DEP to Hold Two Alternative Energy Workshops for Teachers – Jun 22
- Great American Backyard Campout – Jun 25
- Leaf Pack Network® Workshop – Jun 27-28
- Home-Scale Permaculture Design Course starting September 10, 2011

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- Biologically Diverse Streams Best at Nitrate Removal
- Biological Priorities to Endangered Species Listing Process
- Wetlands-At-Risk Protection Tool (WARPT) Website
- BMP and LID Whole Life Cost Models: Version 2.0
- Penn State Ag and Environment Center has posted new Research resources on our website

**WATERSHED CONTACTS****COUNTY PLANNING – (717) 771-9870****CONSERVATION – (717) 840-7430**

- Agricultural conservation planning
- Environmentally sensitive dirt & gravel road maintenance
- Environmental stewardship and watershed protection
- Erosion & sediment control
- Stormwater complaints

**24-HR EMERGENCIES – (877) 333-1904**

- Chemical and oil spills from transport trucks, trains and industrial facilities

**ENVIRONMENTAL – DEP-SCRO**

- General Info 717-705-4700
- Director SCRO 717-705-47047
- Air Quality 717-705-4702
- Energy & Technology 717-705-4703
- Environmental Cleanup 717-705-4705
- Mining (800) 541-2050
- Radiation Protection 717-705-4704
- Waste Management 717-705-4706
- Water Supply Management 717-705-4708
- Water Management 717-705-4707

• Watershed Management 717-705-4704

**FISHERIES – (800) 541-2050**

- Wildlife (fish, reptiles, amphibians) nuisance problems or to report violations
- FISH KILL 1-855-347-4545

**GAME & WILDLIFE – (888) 742-8001**

- Wildlife (mammals or birds) to report violations or nuisance problems

**ILLEGAL DUMPING**

- Illegal dumping on state forest and park lands (877) 772-3673

**ILLEGAL DUMPING YORK COUNTY 840-7687****MUNICIPAL (Phonebook Blue Pages)**

- Air pollution by burning household garbage
- Dumping waste in surface waters
- Floodplain disturbances
- Municipal and residential septic/sewage problems
- Stormwater management

**NOXIOUS PLANTS – (717) 772-5209****RECYCLING – (717) 845-1066****WETLANDS – (717) 249-2522***Updated 4/27/2011*

- Inlets: Collect Water, Nothing Else
- Thirsty Duck Study Released
- Final Effluent Guidelines Construction and Development Turbidity
- New Tech Brief Available Online
- New Tools: Multi-User Feature Live



## **WATERSHED ALLIANCE NEWS**

### **Ag Land Preservation Board of York County** – [www.york-county.org/gov/AUTH/agri.htm](http://www.york-county.org/gov/AUTH/agri.htm)

<> For information about farmland preservation in York County contact Patty McCandless at [pmccandless@york-county.org](mailto:pmccandless@york-county.org) or call 717-840-7400.

### **Carroll Citizens for Sensible Growth** - <http://carrollcitizens.com/>

<> Contact: Deana Weaver at (717) 432-2211 or [admin@carrollcitizens.com](mailto:admin@carrollcitizens.com)

### **Codorus Creek Watershed Association** – [www.codoruscreek.net](http://www.codoruscreek.net)

- Jun 4 – RESCHEDULED Oil Creek Restoration Monitoring at Fuhrman Farm, Gitts Run Rd., near Hanover, from 9:00 AM to 3:00 PM
  - Jul 11 – CCWA Meeting of Members and Board, 7:00 pm, at York Water Co. (Mt. Rose Ave.)
- <> Contact: Jim Leaman at 843-2929

### **Codorus Endowment Implementation Committee** – [www.yccf.org](http://www.yccf.org)

- An advised fund of York County Community Foundation, the Codorus Watershed Endowment (CWE) is a substantial source of charitable support for the stream's improvement and the benefit of the many York Countians who use and enjoy this critical resource - for agriculture, industry, recreation and wildlife, and for drinking water and other municipal purposes.
- <> For more information, contact the York County Community Foundation at 14 West Market Street York, PA 17401-1203. Telephone: York 717.848.3733; Hanover 717.630.1843. Email: [info@yccf.org](mailto:info@yccf.org)

### **Codorus State Park** – [www.dcnr.state.pa.gov](http://www.dcnr.state.pa.gov)

### **Conewago Canoe Club** – [www.conewagocanooclub.org](http://www.conewagocanooclub.org)

- Aug 4 – Club Meeting – Mount Zion United Church of Christ, 7:00 pm, at Ridgewood Road in Pleasureville
  - Red Lion High School Paddling Instruction Schedule online
- <> Questions or comments e-mail me [oc1mike@comcast.net](mailto:oc1mike@comcast.net), but remember you catch more flies with honey than vinegar.

### **Deer Creek Watershed Association** – <http://deercreekwatershed.com/>

- Deer Creek Watershed Association Invites Public to Discuss Watershed Issues at Annual Meeting on May 26 in Darlington
- <> Contact Lee McDaniel at [ldmcdaniel@aol.com](mailto:ldmcdaniel@aol.com).

### **Farm & Natural Lands Trust of York County** – [www.farmtrust.org](http://www.farmtrust.org)

- Jun 2 – RESCHEDULED Annual Meeting at Rambo Run Fishing Club
- Jun 10 – Farm & Natural Lands Trust of York County is coming up on our 3rd Annual Clay Shoot, and this year promises to be the best yet. We highly encourage everyone to register early, as the event will surely fill up. Imagine leaving work early on Friday, June 10th to meet up with four of your friends or colleagues. You and the gang start out at noon with a nice lunch catered by White Rose Bar & Grill, then head out for an afternoon shooting clays at Central Penn Sporting Clays, Wellsville. To obtain a registration form, contact F&NLT below.

<> Contact: Sean Kenny at Farm & Natural Lands Trust of York County • 156 North George Street • Suite 300 • York, PA 17401 • Phone (717) 843-4411 • Fax (717) 854-7452 or [skenny@farmtrust.org](mailto:skenny@farmtrust.org)

### **Friends of Codorus State Park** – [www.friends-of-codorus.org/](http://www.friends-of-codorus.org/)

<> For more information contact Becky Miller at 632-6747 or email [beckymill1@juno.com](mailto:beckymill1@juno.com) or Dave Carbaugh at 637-9875 or email [carbaugh3@embarqmail.com](mailto:carbaugh3@embarqmail.com)

### **Gifford Pinchot State Park** – [www.dcnr.state.pa.us/stateparks/parks/giffordpinchot.aspx](http://www.dcnr.state.pa.us/stateparks/parks/giffordpinchot.aspx)

- Event calendar <http://www.dcnr.state.pa.us/Calendar/list.asp>
- <> Contact Elizabeth Kepley, Environmental Education Specialist, DCNR Bureau of State Parks/Gifford Pinchot State Park, 2200 Rosstown Road, Lewisberry, PA 17339. Phone: 717-432-5011

### **Gunpowder Valley Conservancy** – [www.gunpowderfalls.org](http://www.gunpowderfalls.org)

<> TO VOLUNTEER OR REGISTER FOR FREE or for more information contact Peggy Perry, Program Director for Gunpowder Valley Conservancy at 410-668-0118 or email [little-owl@msn.com](mailto:little-owl@msn.com).

### **Horn Farm Center for Agricultural Education** – [www.hornfarmcenter.org](http://www.hornfarmcenter.org)

- Thoughts of Spring are in the air and new things are “growing” at the Horn Farm. Read all about them in this issue of “Around the Horn.”
- Register Now For Community Gardens at the HFC
  - POTATO PATCH PROJECT AT THE HORN FARM
  - Girl Scout Volunteers Around the Farm

<> Contact: Horn Farm Center for Agricultural Education, 4945 Horn Road, York, PA 17406. Phone: (717)654-0571. Email: [info@hornfarmcenter.org](mailto:info@hornfarmcenter.org). Web: [www.hornfarmcenter.org](http://www.hornfarmcenter.org).

**Izaak Walton League York Chapter #67** - [www.yorkchapter67iwla.org/](http://www.yorkchapter67iwla.org/)

- Calendar of events - [www.yorkchapter67iwla.org/id21.html](http://www.yorkchapter67iwla.org/id21.html)
- Club Open Meetings are held the Third Tuesday of each month at 7pm in the Clubhouse.

<> Contact: York Chapter #67 IWLA, 7131 Ironstone Hill Road, Dallastown, PA 17313. Club Grounds Phone: 717-428-2000 \*Leave a message for the Committee Contact or Club Officer you are trying to reach. Committee Contacts & Club Officers are listed on the Club Information Page. If no phone or email address is listed contact club grounds phone number.

**Lower Susquehanna Riverkeeper** - [www.lowersusquehannariverkeeper.org](http://www.lowersusquehannariverkeeper.org)

<> Contact: Michael Helfrich, Lower Susquehanna RIVERKEEPER®, York, PA. Cell phone: 717-779-7915 E-mail: [lawsusriver@hotmail.com](mailto:lawsusriver@hotmail.com).

**Maryland's Upper West Shore Trib Team** - [http://www.dnr.state.md.us/bay/tribstrat/upper\\_west/up\\_west\\_shore.html](http://www.dnr.state.md.us/bay/tribstrat/upper_west/up_west_shore.html)

<> Contact: RupertRossett, Tributary Team Coordinator, e-mail: [RupertRossetti@aol.com](mailto:RupertRossetti@aol.com)

**Mason-Dixon Trail System, Inc.** - <http://www.masondixontrail.org/>

<> Contact: James Hooper at 717/252-3784 or [j.e.hooper@ieee.org](mailto:j.e.hooper@ieee.org)

**Mid-Atlantic Ecological Landscapes Partnership [MAEscapes]** - [www.maescapes.org](http://www.maescapes.org)

- July 25 - Advisory Board meeting, 6:30 pm, York County ANNEX

<> Contact: 717-840-7408 or Connie Schmotzer at [cxs51@psu.edu](mailto:cxs51@psu.edu)

**Peach Bottom Concerned Citizens Group Inc.** - [www.pbccg.com](http://www.pbccg.com)

<> Contact Maria Payan by email [pbccg@hotmail.com](mailto:pbccg@hotmail.com) or mail: Peach Bottom Concerned Citizens Group, P.O. Box 307 Delta, PA 17314. PBCCG, Inc is a nonprofit organization supported solely by volunteers and donations.

**Prettyboy Watershed Alliance** - [www.prettyboywatershed.org](http://www.prettyboywatershed.org)

- Hiking Trails - Time to get out and enjoy the Prettyboy and to let you know two trails - Hemlock Gorge and Prettyboy - have been described and can now be [downloaded](#).

<> Contact: Nancy Shaper at [nshaper@ihmi.edu](mailto:nshaper@ihmi.edu)

**Sierra Club - Gov. Pinchot Group of PA** - <http://pennsylvania.sierraclub.org/pinchot/>

- Monthly meetings will be held the last Tuesday of the each month at 6:30 pm in the Community Room at the Giant at 2300 Linglestown Rd, Harrisburg, PA 17110. All members are welcome!

<> Kim Anderson at [sgfornyc@aol.com](mailto:sgfornyc@aol.com).

**Shank's Mare Outfitters** - [www.shanksmare.com](http://www.shanksmare.com)

GO PLAY OUTSIDE!

- Susquehanna House
  - Lock 2 Cafe
  - Outdoor activities <http://www.shanksmare.com/html/activities.html>
- <> Shank's Mare: Call Us: 717-252-1616. Email us: [Shanksmare@comcast.net](mailto:Shanksmare@comcast.net)

**Spoutwood Farm Center for Sustainable Living** - [www.spoutwood.com](http://www.spoutwood.com)

- Board of Directors meeting July 8, 2011, 7:00 PM, at the farm

<> Contact Rob & Lucy Woods at Spoutwood Farm at 717-235-6610 or [spoutwood@comcast.net](mailto:spoutwood@comcast.net).

**Sunnyside Farm CSA** - <http://www.sunny-side-farm.com/>

We are the first farm to raise poultry and receive Food Alliance certification. We are very proud to be certified in our farm practices by this well respected group. Welcome to the virtual home of Sunnyside Farm, your go-to place off the I-83 corridor for pasture-based, intensive graised grass-fed beef, pork, chickens, farm fresh eggs, turkeys (for Thanksgiving) and raw honey. We also offer salmon, wild caught in Alaska. Located between York and Harrisburg in southern Pennsylvania, Sunnyside Farm welcomes visitors, just requests that you call before visiting. Homer Walden and Dru Peters have been farming for years on leased land, and in August 2009 acquired the property that is now Sunnyside Farm.

<> Contact: Dru Peters [drupeters@yahoo.com](mailto:drupeters@yahoo.com)

**Susquehanna Gateway Heritage Area** - <http://www.susquehannaheritage.org/>

<> Contact Mark Platts, Susquehanna Heritage Corporation, 1706 Long Level Road, Wrightsville, PA 17368. Office: 717-252-0229. E-mail: [info@lyhr.org](mailto:info@lyhr.org).

**Susquehanna Greenway Partnership** - [www.susquehannagreenway.org](http://www.susquehannagreenway.org)

<> For more information about the Susquehanna Greenway, please contact: The Susquehanna Greenway Partnership, 201 Furnace Road, Lewisburg, PA 17837. Phone: 570-522-7211. Email: [greenway@susquehannagreenway.org](mailto:greenway@susquehannagreenway.org)

**Trout Unlimited Codorus Chapter #558** - [www.codorustu.org](http://www.codorustu.org)

- June 8 - Monthly Chapter Meetings 2nd Wednesday, 7:00 p.m., at Gander Mtn. (winter)

<> Contact: Tom Finenze at 840-1372 or [tom@codorustu.org](mailto:tom@codorustu.org). Cancellations due to winter weather will be announced here, and on WSBA Radio, 910 AM.

**Trout Unlimited Muddy Creek Chapter #575** - <http://muddycreektu.org/>

- June 15 – Chapter Meeting at [Collinsville Fish & Game](#)
- <> Contact: Ron Heuston, President MCTU, 244-1851 or [Heuy1955@aol.com](mailto:Heuy1955@aol.com)

**Watershed Alliance of Adams County** - <http://www.adamswatersheds.org/>

- Meet the 3rd Wednesday @5pm.
- <> Contact: Adam McClain, Ph: 717-334-0636; E-mail: [stilden@adamswatersheds.org](mailto:stilden@adamswatersheds.org)

**Watershed Alliance of York** - [www.watershedsyork.org](http://www.watershedsyork.org)

- July. 6 – Annual Meeting of WAY Board of Directors, 7:00 PM, at 324 W. Market St., York, PA.
  - GoodShop Deals for WAY - <http://www.goodsearch.com/goodshop.aspx>
  - WAY E-News – Published by the Watershed Alliance of York, Inc. to inform the public about news and information that affect York County watersheds and beyond. PLEASE SHARE WITH YOUR MEMBERSHIP AND E-MAIL LIST. Contributions of news, events and information relating to watershed education, funding, planning, restoration, protection, and stewardship welcome. Send contribution to and contact us for mailing list additions/changes to the e-mail address below. Distribution: electronic (1,850). Frequency: bi-weekly. Subscription: No charge. Editor: Gary R. Peacock.
  - You can make [www.goodsearch.com](http://www.goodsearch.com) and be sure to enter WAY as the charity you want to support.
- <> Contact: Watershed Alliance of York, Inc. (WAY), C/o York County Conservation District, 118 Pleasant Acres Road, York, PA 17402. Phone: (717) 840-7430. Facsimile: (717) 755-0301. E-mail: [gpeacock@yorkccd.org](mailto:gpeacock@yorkccd.org)

**Wecology – NEW!**

**Yellow Breeches Watershed Association** - [www.ybwa.org](http://www.ybwa.org)

- YBWA is sponsoring a pilot event with planning and coordination provided by Brook Lenker and Sara Nicholas from DCNR. We are running a youth sojourn on the Yellow Breeches June 12-14 (if it's below flood stage by then!) , focused on middle & high school students.
  - BOARD OF DIRECTORS MEETING Wednesday, June 1, 2011, Messiah College Library-Athenaeum Room 6 PM.
- <> Contact: Deborah Goetz, at [deborah.p.goetz@gmail.com](mailto:deborah.p.goetz@gmail.com) or phone 717-697-4734

**York-Adams Regional Smart Growth Coalition** - [www.yorkadamssmartgrowth.org](http://www.yorkadamssmartgrowth.org)

<> Contact Shanna M. Wiest, Government Affairs Director, REALTORS Association of York & Adams Counties, Inc. 901 Smile Way York, PA 17404. Phone: (717) 843-7891. Fax: (717) 854-0720. <http://www.rayac.com>

**York Audubon Society** - <http://www.yorkaudubon.org/>

<> Contact Tom Smith at 717-246-9767 or [ts35@psu.edu](mailto:ts35@psu.edu).

**York County Conservation District** - [www.yorkccd.org](http://www.yorkccd.org)

- Board meets 2nd Friday, 11:30 a.m. (December-March) and 2nd Thursday, 7:00 p.m. (Apr.-Nov.), at the York County ANNEX
  - Rain Barrel Sale! Visit our website for more information and prices.
- <> Contact: YCCD at 717-840-7430 or [yorkccd@yorkccd.org](mailto:yorkccd@yorkccd.org)

**York County Parks & Recreation** - [www.YorkCountyParks.org](http://www.YorkCountyParks.org)

- Featuring 11 parks and approximately 4,300 acres, the York County Department of Parks and Recreation awaits your visit. Trails, lakes, pavilions, streams, and creatures of all kinds eagerly look forward to seeing you. So bundle up, pack some hot cocoa, and bring the family out to hike the trails, sled on the hills, watch the stars, and breathe in the crisp, fresh air of the New Year.
- <> For more information, contact York County Department of Parks and Recreation, 400 Mundis Race Road, York PA 17406-9721. Phone: (717) 840-7440. E-mail: [Parks@York-County.org](mailto:Parks@York-County.org). Web: [www.YorkCountyParks.org](http://www.YorkCountyParks.org). Nixon Park Nature Center, 5922 Nixon Drive • York PA 17403. Phone: (717) 428-1961. E-mail: [NixonCountyPark@york-county.org](mailto:NixonCountyPark@york-county.org).

**York County Planning Commission** - [www.ycpc.org](http://www.ycpc.org)

- Meets 1st Tuesday at 7:30 p.m., except Wed. Nov. 1 at 7:30 and Tues. Dec. 1, 6:00 p.m., at 28 E. Market St., 2nd Floor.
- <> Contact YCPC at 717-771-9870 or [planner@ycpc.org](mailto:planner@ycpc.org)



## **WATERSHED EDUCATION & OUTREACH**

**NOAA: Weather, Climate Extremes Punctuate Warm, Very Wet April**

Historic flooding, a record-breaking tornado outbreak and devastating wildfire activity made April 2011 a month of historic climate extremes across much of the United States, according to scientists at NOAA's National Climatic Data Center (NCDC) in Asheville, N.C. The average U.S. temperature in April was 52.9 degrees F, which is 0.9 degrees F above the long-term (1901-2000) average. April precipitation was 0.7 inches above the long-term average, the 10th wettest April on record. This monthly analysis, based on records dating back to 1895, is part of the suite of climate services NOAA provides. Read article... <http://www.erosioncontrol.com/the-latest/noaa-weather-climate.aspx>



### **How weather affects the health of the Chesapeake Bay**

With such drastic changes in the weather over the past year, including the hottest summer on record, a colder than normal December and January, and a wetter than normal spring, Doug and I got to wondering exactly how the weather affects the Chesapeake Bay. To get this question answered, we headed down to Piney Point, Md, to interview a group of scientists that work for the Maryland Department of Natural Resources. Weather and climate play an enormous part on the health of the Chesapeake Bay. Just this past winter, a third of the adult Blue Crab population was killed off because of the colder than normal December and January. Not only were crustaceans affected, but also fish, as nearly 2 million spot fish died in December in the Bay, as they did not migrate south in time after a mild November. So we know that wildlife can be affected by changes in the weather patterns, but what about water quality? The Chesapeake Bay Watershed spans 6 different states and contains drainage from more than 100,000 rivers, creeks and streams. Since rainfall has been well above normal this year for areas north and west of the Bay, runoff becomes an increasingly bigger problem. Excess nutrients such as nitrogen and phosphorus from farms and even your lawn often move downstream into the Bay which can harm everything from wildlife species to underwater grasses. Another problem from runoff is the excess sediment it carries into the Bay which can act to cloud the water and limit sunlight to the sea grass beds. Why are sea grasses so important? They are an indicator of the health of the Bay. The sea grasses such as widgeon grass and eelgrass act not only as habitats for a number of species of crustaceans and fish, but can also limit erosion, and slow water flow to promote more light and photosynthesis into the waters of the Bay. They also improve water quality by filtering out sediments, absorbing nutrients from the water and producing oxygen. At one point in time, the Bay supported about 185,000 acres of sea grass beds. Restoration projects have been going on for years to try to increase coverage. The weather plays a big role in how the grasses perform. Very high temperatures like last summer can kill the grasses. Also, excessive runoff from heavy rain clouds the water, which can really hurt the grasses by limiting sunshine, especially during the peak growing season from April through October. If we have another summer like last year, there is also the potential for algae blooms and low-oxygen dead zones which are a big threat to the Bay. The scientists at the DNR have sensors and instruments at specific locations in the bay that measure temperature, dissolved oxygen, salinity, conductivity and pH every 15 minutes, 24 hours a day, 7 days a week. They monitor the Bay on a daily basis, and will try to continue to improve conditions by growing sea grasses, implementing programs to teach residents living in the watershed and its tributaries, and improving policy to help continue to protect the Bay for the future. Source: WJLA-TV

### **Bay Grass Acreage in Chesapeake Bay, Rivers Decreases 7 Percent in 2010**

April 2011 – [Underwater bay grasses](#) covered 79,675 acres of the Chesapeake Bay and its tidal rivers in 2010, according to data from scientists with the Chesapeake Bay Program. This is a 7 percent decrease from 2009, when bay grasses covered 85,914 acres of the Bay's shallows. Despite the drop, the 2010 bay grass acreage estimate ranks as the third-highest Bay-wide acreage since 1984, when the annual survey began. Read article... [http://www.chesapeakebay.net/news\\_baygrassesin2010.aspx?menuitem=57559](http://www.chesapeakebay.net/news_baygrassesin2010.aspx?menuitem=57559)

### **UMCES Releases 2010 Chesapeake Bay Report Card**

The University of Maryland Center for Environmental Science recently released its Chesapeake Bay Report Card for 2010. Overall health in the region declined slightly from 2009. The place in the Bay region that had the best grade on this Report Card was the Upper Bay – the part of the mainstem Chesapeake (not including tidal tributaries) from about the Bay Bridge north to the Susquehanna Flats near Havre de Grace, Maryland. The grade was a C+. To put this “highest grade” into context, the numerical grade was 57 out of 100 – not exactly a report card you’d want to bring home to your parents. The worst, according to the report card, is the area known as the Lower Western Shore, which includes the tidal tributaries of the Magothy, Severn, South, West and Rhodes Rivers – all of which are in Anne Arundel County, Maryland. This area received a grade of F, which was well earned, with five of the six indicators scoring an F. [Click here to see the full report card.](#)

### **Health Of Chesapeake Region Streams Improving, But Many Still Degraded**

The U.S. Geological Survey [this week reported](#) nutrient and sediment levels in many tributaries of the Chesapeake Bay region have improved over the last twenty- five years. Nitrogen and phosphorus levels have decreased at almost 70 percent of the 32 monitoring locations in the watershed, while sediment amounts decreased at 40 percent of the sites. In this analysis, a decreasing trend may indicate improving conditions, since it means that smaller amounts of these pollutants are entering rivers that flow into Chesapeake Bay. Although this information indicates long-term improvements, the annual 2010 loads of nitrogen, phosphorus and sediment to the Bay were higher than in 2009 due to more rain, snow and river flow. Overall, the loads remain consistently too high in relationship to Chesapeake Bay Program goals in restoring the Bay. Healthy freshwater streams support a diversity of fish, wildlife and habitats and are intrinsically linked to healthy rivers and a healthy Chesapeake Bay. The average stream health scores in 7,886 of sites sampled (between 2000-08) indicated that 3,584 were in fair, good or excellent condition and 4,302 were in very poor or poor condition. This relatively new system for measuring stream health provides citizens and groups with a uniform manner in which to evaluate the health of local waterways across state lines and in the context of the entire Bay watershed. Scientists determine the health of freshwater streams and rivers by studying the many tiny creatures that live in these waters. The abundance and diversity of snails, mussels, insects and other bottom-dwelling organisms are good indicators of a waterway’s health because these creatures can’t move very far and they respond to pollution and environmental stresses. In general a healthy Bay watershed would have a majority of streams ranked as fair, good or excellent. Based on the location of streams sampled, those in natural environments such as forested areas tend to be in good to excellent condition and those in areas with more pollution- generating land uses, including urban and some agricultural areas, tend to be in very poor to fair condition. For more information, visit the [2010 pollutant](#) webpage, the [watershed health](#) webpage and the USGS [Chesapeake Bay Activities](#) webpage.

### **Pollution Diet In, Goodlatte Amendment Out**

A big thanks to everyone who wrote or called Hill offices opposing the [Goodlatte Amendment!](#) We’re happy to report the Goodlatte Amendment was stripped from the final 2011 funding bill that passed Congress and was signed by the President last month. The amendment, introduced by Congressman Bob Goodlatte (R-VA), had the potential to stop the Chesapeake Bay Pollution Diet in its tracks right as it is about to go down to the most local level to help protect our waters. Although the Goodlatte amendment is gone for now, we anticipate other Congressional attempts to hinder/kill the Pollution Diet. Right now opposition points to this as a one-size-fits-all federal overreach, which in fact the Pollution Diet, for the first time in Bay Restoration efforts, brings local officials together to discuss and plan for clean water in their community. As for the 2011 budget, final budget numbers are not yet available for all programs, but there is relatively good news for some, including the EPA Chesapeake Bay Program, which saw a modest increase in funding to \$54.5 million. Also, the Farm Bill’s Chesapeake

Watershed Initiative was fully funded at \$72 million. We are still waiting to hear how other key Chesapeake programs will end up in 2011 – strange considering we're more than halfway through the fiscal year.

### **EPA Applauds Maryland Lawn Fertilizer Bill for Helping Meet Chesapeake Bay Pollution Diet Goals**

(PHILADELPHIA - May 19, 2011) - EPA today applauded Governor O'Malley and the Maryland House and Senate for passing legislation that will minimize polluted runoff from lawns and achieve measureable reductions in nitrogen and phosphorus to local waterways and the Chesapeake Bay. The bill will help the state meet its commitments as part of a rigorous pollution diet or TMDL for meeting water quality standards in the Chesapeake Bay and its tidal tributaries, and restoring local rivers and streams throughout the 64,000-square-mile Bay watershed. Maryland, Delaware, New York, Pennsylvania, Virginia, West Virginia and the District of Columbia are expected to have all nutrient-reduction practices in place to meet the limits in the pollution diet by 2025, with 60 percent of the effort completed by 2017. For more information about the Chesapeake Bay TMDL visit: <http://www.epa.gov/chesapeakebaytmdl/>

### **Natural Gas Development Putting Clean Water at Risk for Millions of People**

American Rivers 2011 Most Endangered River is the Susquehanna River. Location: New York, Pennsylvania, Maryland. One of the longest rivers in America, the Susquehanna River provides over half of the freshwater to the Chesapeake Bay and drinking water to millions of people. Communities and businesses depend on the river for drinking water, commerce, hydropower generation, and recreational boating. Now this resource is at risk of contamination. Read more... <http://www.americanrivers.org/our-work/protecting-rivers/endangered-rivers/endangered-susquehanna.html>. America's Most Endangered Rivers is more than a list. It is a call to action to engage concerned citizens in the fight to protect rivers. With public support, we can directly impact the fate of these rivers and save them for generations to come.

### **So What's The Wake-Up Call We All Need to See?**

The Susquehanna River supplies drinking water for approximately 6.2 million people. And it's not just the Susquehanna River. Our freshwater rivers and streams flowing to the Chesapeake Bay – including the Shenandoah, Potomac, James and others – provide drinking water to millions in the region. Whether it's pollution from fracking, from fertilizers, from human and/or animal waste and various other sources – all of it puts our sources of drinking water at risk and should not be tolerated. People have far too long looked at pollution only through the lens of the Chesapeake Bay, not the local rivers and streams flowing near them. All of it is connected to the Bay. WE need to be the stewards for our local part of it, not necessarily because it helps the Bay, but because it helps us and our community. We need local people, organizations and businesses banding together to protect local waters, fixing those waters that are impaired and preserving those that are pristine. All governments – federal, state and local – have a part to play, too. What's one way you can be part of the solution? Engage in your local Pollution Diet process. You can be our eyes and ears in your local community. There may be hundreds of meetings going on throughout the Chesapeake Bay watershed, so we want to make sure folks know about every single one. Pay attention in your local community for news on community meetings related to Pollution Diet/TMDL/Watershed Implementation Plans (all different names for the same thing). We'd love for you to attend, but even if you can't please forward us the information on the local meetings. Whatever you find, please send it to us at [info@choosecleanwater.org](mailto:info@choosecleanwater.org).

### **Let's Make Sure Every River, Creek and Stream Has A Voice**

Choose Clean Water Coalition is [180+ organizations](#) working together to clean and protect the rivers and streams flowing to the Chesapeake Bay. Our vision for protecting local waters requires voices from all six states and the District of Columbia. If you know of any groups that may benefit from being a part of the Choose Clean Water Coalition, please contact our Outreach Coordinator Ryan Ewing ([ewingr@nwf.org](mailto:ewingr@nwf.org)). Resource: <http://www.choosecleanwater.org/cms/>

### **Wet Spring Magnifies The Benefits Of No-Till**

It is not unusual for Pennsylvania to experience plenty of April showers but this year was exceptionally wet. Some areas of Pennsylvania set new records for April rainfall. All of this moisture made it very difficult for farmers to keep their spring work on schedule. However producers who have adopted No-Till production practices had an advantage over farmers using conventional tillage. With long term No-Till practices water infiltration and drainage improves. The soil develops a structure that is filled with macro-pores allowing for quicker water absorption and rapid drainage through the soil profile. This allows for the soil to dry out more quickly and enables planting or other tasks such as manure or commercial fertilizer application to resume sooner after the rain stops. The improved soil structure with the No-Till system also will reduce the risk of soil compaction which can cause major damage to crop potential especially in a wet year as this one. Yield losses in seriously compacted soils can range from 15-50 percent. So any reduction in compaction will be a major improvement. Several factors in No-Till circumstances contribute to the lower risk for soil compaction. There is a buildup of soil organic matter both on the surface and in the soil profile which provides better soil structure. If the No-Till practice is combined with cover crops the plant roots from the cover crops contribute to organic matter build up substantially. The living roots of the cover crops also act as a glue holding soil particles together in a stronger soil structure. If compaction does occur cover crops with large tap roots can essentially act as a drill boring hoes through compacted layers. This allows for better water infiltration and enables crop roots to penetrate the compacted layer. In addition the better soil structure and quicker drainage will enable No-Till producers to begin planting earlier. With the many rain delays this year this is a very crucial advantage. Corn yields start to drop in most places in Pennsylvania if the planting date is later than May 15-20. With the high price of corn in the current markets losing yield to planting delays is very expensive and very hard on a farms bottom line. Of course No-Till practices provide soil conservation benefits which are especially evident during high rainfall periods. With faster infiltration of rainfall, greater soil cover and soil particles bound tightly by greater organic matter the soil loss is greatly reduced. Saving the topsoil has great environmental benefits downstream but also improves current and future productivity on the farm. No-Till production is truly a win-win for all. For more information on No-Till see: [Steps to a Successful Transition to No-Till](#). Source: Leon Ressler, Lancaster County Extension Director, Penn State Cooperative Extension

### **Litter and Trash Impact Water Quality**

We are all familiar with roads where litter is scattered or a property that has some sort of dumping on it. Anytime it rains or snows the precipitation percolates through dump sites conveying the pollutants directly into ground water and into runoff. Education and community involvement are the best solutions to cleaning up and preventing litter and dumping. Dump sites can be illegal roadside dumping, farm dumping and private or municipal dumping. Items found at dump sites can be anything from yard waste to items considered hazardous waste.

All dumping impacts water quality. Penn State has a publication available about [Roadside Dumps and Water Quality](#). Yard waste such grass cuttings dumped along a stream bank becomes excess nutrients that create algae blooms which eventually die and remove dissolved oxygen from the water. I'm sure anyone who goes fishing would prefer this not be the case. Fish and many other aquatic life forms depend on dissolved oxygen. At the very least some debris is an eyesore. These items include tires, furniture, carpeting, construction debris and other household trash. Many of these items can collect water and eventually breed mosquitoes. Other items such as old appliances, paint cans, batteries, fuel and waste oil can leak and contaminate miles of a stream or a creek. Household hazardous wastes such as pesticides, wood preservatives and solvents can also be found at illegal dump sites. All of these items can be recycled, composted or properly collected and disposed of in Pennsylvania. Residents are advised to contact their local municipality for information about annual collection dates.

Addressing roadside litter is relatively easy to tackle by promoting and participating in adopt-a-road programs such as [PennDOT's Adopt-A-Highway](#). Many state roads are available for adoption. The normal length of road for adoption is two miles and you or your volunteer group performs a cleanup event four times a year. Cleanup efforts help the environment, minimize maintenance cost and make Pennsylvania more attractive to tourism and businesses. Some local municipalities also have adopt-a-road programs for local roads. What would you do if you found an illegal dump site while performing a stream restoration project? Of course you would be interested in cleaning it up but who do you contact for help? Some people may know who to contact locally but if not it may be best to first contact [Keep Pennsylvania Beautiful](#). The mission of Keep Pennsylvania Beautiful is to empower Pennsylvanians to make our communities clean and beautiful. Their guiding principles include education, individual responsibility, public-private partnerships and volunteer action. Many counties in Pennsylvania already have a local affiliate. Keep Pennsylvania Beautiful provides assistance, tools and resources to help prevent and clean up litter and illegal dumping and methods to keep those areas clean. Research done has shown that trash attracts trash and when a community is clean, it tends to stay clean. Each one of us has the ability to make a difference for Pennsylvania and clean water. It starts by picking up the next piece of litter we see. Source: Tom Smith, Extension Educator, Penn State Extension, York County

#### **THROUGH A FISH'S EYE: The Status of Fish Habitats in the United States 2010**

The National Fish Habitat Board released a report of the status of fish habitats in the United States. This report explains the challenges and opportunities facing fish habitat conservation efforts. Major sources of habitat degradation include urbanization, agriculture, dams, culverts, pollution and other human impacts. Restoration of these critical habitats can be attained through best management practices, land use planning, and engaging the public in the effort. The report rates habitat degradation from very low to very high across the nation. The report states that 27% of the miles of stream are at high or very high risk of habitat degradation, 29% are at moderate risk, and 44% are at low or very low risk. A National Fish Habitat Action Plan map and data web tool are also provided to allow users to see multiple views of stream conditions and coastal habitats across the country and provide more detailed information. To view the report, visit:

[http://fishhabitat.org/images/documents/fishhabitatreport\\_012611.pdf](http://fishhabitat.org/images/documents/fishhabitatreport_012611.pdf). To view the map, visit:

<http://www.nbii.gov/far/nfhap/>

#### **Smallest Turtle in North America Becomes More Scarce**

ScienceDaily (May 10, 2011) — The Wildlife Conservation Society's Bronx Zoo veterinarians, U.S. Fish & Wildlife Service, New York State Department of Environmental Conservation, and the Massachusetts Natural Heritage and Endangered Species Program have joined forces to answer a perplexing wildlife question: Why are bog turtles getting sick? The dilemma shines a light on North America's smallest turtle; an adult bog turtle reaches only 4.5 inches in length and as many ounces. Wildlife managers working in a few known bog turtle habitats in the Northeast have reported higher than average mortality rates for these threatened reptiles in the past few years. Read article...

<http://www.sciencedaily.com/releases/2011/05/110510161807.htm>

#### **Five Farmers, American Farmland Trust, Donate 4,023 Nutrient Credits To DEP, Agriculture**

Five farmers from Lancaster, Clinton and Northumberland counties this week donated 4,023 nitrogen credits earned by installing best management practices under a program coordinated by the [American Farmland Trust](#) through its [BMP Challenge Program](#) in a special ceremony at the Farm Show Complex in Harrisburg. The BMP Challenge allows farmers to test new conservation techniques, including fertilizer rate reductions, in a risk-free environment. The challenge reimburses farmers if lower crop yields occur as a result. The credits were certified for five years through DEP's Nutrient Trading Program. Municipal sewage treatment plants and communities may use the credits as an alternative, sometimes more cost-effective, solution for reducing nitrogen, phosphorous and sediment discharges. For more information, visit the AFT [BMP Challenge Program](#) webpage. Visit DEP [Nutrient Credits](#) webpage for more information on nutrient trading.

#### **Prevent Your Septic System From Failing**

Failing septic systems can often contaminate private water supplies or nearby water bodies. There are things you can do to properly maintain your septic system. First, you should know where your septic tank and drainfield are located. Protect this area from heavy equipment, impervious surfaces, and trees or shrubbery. It is important to know how your system works and how to keep it functioning properly.

Household chemicals can destroy the beneficial bacteria in your septic tank. Your septic tank should be inspected regularly and pumped out when necessary. Source: [http://extension.psu.edu/water/discoverywatersheds/newsletter/news/2011/prevent-your-septicssystemfromfailingutm\\_source=feedburner&utm\\_medium=email&utm\\_campaign=Feed%3A+agsci-water-watershedwinds+%28Penn+State+Watershed+Winds+Newsletter%29](http://extension.psu.edu/water/discoverywatersheds/newsletter/news/2011/prevent-your-septicssystemfromfailingutm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+agsci-water-watershedwinds+%28Penn+State+Watershed+Winds+Newsletter%29)

[http://extension.psu.edu/water/discoverywatersheds/newsletter/news/2011/prevent-your-septicssystemfromfailingutm\\_source=feedburner&utm\\_medium=email&utm\\_campaign=Feed%3A+agsci-water-watershedwinds+%28Penn+State+Watershed+Winds+Newsletter%29](http://extension.psu.edu/water/discoverywatersheds/newsletter/news/2011/prevent-your-septicssystemfromfailingutm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+agsci-water-watershedwinds+%28Penn+State+Watershed+Winds+Newsletter%29)

#### **Lower Susquehanna Water Trail Information**

As you get your canoe, kayak or boats ready for the season, you may be wondering where to find information on river conditions or access points. Below are some resources which can help get you on the water:

- Susquehanna River Water Trail Map & Guide (Lower Section) - printed on water and rip resistant paper, SGHA's 3-map set is perfect for paddlers and boaters alike. It shows all access points from Harrisburg, PA to Maryland, as well as river hazards and other important information. The map & guide can be purchased through the water trail website, at SGHA's office, or at a variety of local outfitters.
- [Susquehanna River Water Trail \(Lower Section\) Website](#) - this website has additional information and resources to guide you along the Susquehanna.
- Facebook - We now have a [facebook page](#) dedicated to the Susquehanna River Water Trail (Lower Section). This is a place for people to share river conditions, access point information, and other tips and experiences.

- River Water Levels - the US Geological Survey maintains current water levels on their website for 3 areas of the water trail:  
[Water Levels at Harrisburg](#)  
[Water Levels at Marietta](#)  
[Water Levels at Conowingo, MD](#)

**Environmental Tip - What's in your Boat?**

Canoes and kayaks offer us great opportunities to go places most of the rest of the world never experiences. We throw them on the top of our vehicles and in a short time we are paddling or fishing new streams and lakes or revisiting old favorites. To many of us, this is one feature which keeps calling us outside. Yet this same feature also has a dark side. How many of us clean and dry our boats between trips? Unless we do, that little bit of water can provide free transportation contributing to the spread of invasive plants or animals. According to the PA Department of Conservation and Natural Resources, the Susquehanna is currently home to several species of invasive plants and animal. The most common plants are Purple Loosestrife, Japanese Knotweed and Mile-a-Minute, all of which crowd out native plants and destroy the habitat for ducks and other river dwellers. In the animal kingdom, the rusty catfish (which may have come in a bait bucket), zebra muscle and Asian clam are all of concern. Those of us who like campfires must also be aware that the Emerald Ash Borer is a major threat to our forests and firewood should never be transported but only local wood used. What is the next threat and is it in your boat? More information on these and other species is available from the PA DCNR at <http://www.dcnr.state.pa.us> and the Susquehanna River Basin Commission at <http://www.srbcc.net>. Source: Jennifer Brock, Harrisburg Canoe Club

**Sharing Native Habitats**

Restoring the lands natural habitat began in the Fall of 2000 when Thomas and Patricia purchased their home and land of 1.34 acres in Thomasville, Pennsylvania. See what's growing now!

[http://sharingnativehabitats.shutterfly.com/#%26emid%3dsite\\_weeklydigest%26cid%3dSHARE3SXXXX](http://sharingnativehabitats.shutterfly.com/#%26emid%3dsite_weeklydigest%26cid%3dSHARE3SXXXX)

**HOLTWOOD Spring 2011 Environmental Programs**

DATE	PROGRAM	LOCATION*	TIME
Sat., June 4	Eagles/Osprey Walk & Talk of Area Birds	L-12	9 -11 a.m.
Sat., June 4	KTA Training Hike: Lock 12 to Otter Creek Campground	L-12	9 a.m.
Sat., June 11	KTA Training Hike: Pequea Creek Campground to Norman Wood Bridge	PC	9 a.m.

\* Location Code: SF – Shenk’s Ferry Wildflower Preserve Q – Quarryville Library L-12 – Lock 12  
 HEC – Holtwood Environmental Center MU – Millersville University, Roddy Hall PC – Pequea Creek Campground

**BRUNNER ISLAND Spring 2011 Environmental Programs**

DATE	PROGRAM	LOCATION*	TIME
Sun., June 5	Wonders of the Wetlands, Nature Walk	BIW	2:30-3:30 p.m.

\*Location Code: MU – Millersville University, Roddy Hall, Room 261 CR – Main Conference Room, Gate A  
 BIFA – Brunner Island Fishing Area BIW – Brunner Island Wetlands

For more information, please visit our Web site at [www.pplpreserves.com](http://www.pplpreserves.com), call 1-800-354-8383 or e-mail [pplpreserves@pplweb.com](mailto:pplpreserves@pplweb.com).



**WATERSHED FINANCIAL ASSISTANCE**

**Two College Scholarships Now Available!**

Please pass on the NEW details of the availability this year of TWO college scholarships to anyone you think is interested. High School seniors may apply if they are attending college this fall. They can also be directed to our website for more information.

<http://www.yorkccd.org/educational-programs/scholarships-2011-2012/>

**Renew Growing Greener!**

Renew Growing Greener is a coalition focused on renewing the Growing Greener program, which has made huge improvements in Pennsylvania. Over the past four years, the program has protected over 33,700 acres farmland, conserved over 42,300 acres of threatened open space, improved public recreation through 234 community park projects, and restored over 1,600 acres of abandoned mine land. A large list of organizations, government entities, and private individuals has shown support by signing the Statement of Support, including F. X. Browne, Inc. Visit the Renew Growing Greener website to learn more about the coalition and sign their Statement of Support.

<http://renewgrowinggreener.org/statement-of-support/>

**Online workshop for those interested in South Mountain mini-grants – May 25**

May 25. An online grant workshop on Wednesday, May 25, from 2-3 p.m. will be available to anyone with access to the internet and a telephone. The South Mountain Partnership mini-grant program provides grants that communities and organizations can use to preserve and promote their natural and cultural assets. The application deadline in July 31. For 2011, \$150,000 in grants is available. The mini-grant program is meant to encourage economic development among local communities by funding projects to build trails, conduct outdoor festivals and develop promotional guides for local agriculture and forest products. Please RSVP to participate by visiting [here](#) or calling the Appalachian Trail Conservancy office at (717) 258-5771. For more information about the partnership visit the [South Mountain blog](#).



### **Green America Announces Green Sustainability Grants Contest – May 31**

Green America announced it will award [four Green Grants](#) to local projects in the United States that support its mission of creating a socially just and environmentally sustainable economy. Green America will provide one Grand Prize of \$2,500 and three First Prizes of \$1,000. Projects do not need to be run by nonprofits. Nominations will be accepted through May 31. Green America's members and the public will then be invited to vote on the top ten nominees (as chosen by Green America staff), and the winners will be selected in July. "Green America is looking forward to providing Green Grants for a second year to innovative green projects around the country," says Green America Director of Corporate Responsibility, Todd Larsen. "Last year's winners used the funds to help a community bike shop, build energy efficient homes for people in need, and start a campus recycling program. We're looking forward to nominations from local schools, civic associations, religious groups, business owners, and anyone else who has a great green project that could use a small financial boost." Projects can use the Green Grant awards to support their work in any way, and will just need to report back to Green America how the grant made a difference in their work. For more information, visit the Green Grants webpage [http://www.greenamerica.org/greengrants/index\\_form.cfm](http://www.greenamerica.org/greengrants/index_form.cfm).

### **Seed Grants Awarded for Greenways Projects – Jun 15**

The annual Kodak American Greenways Award Program offers seed grants for work in expanding America's network of greenways, blueways, trails and natural areas. This year, the program anticipates awarding up to fifty percent of the grants to projects demonstrating the convergence of economic prosperity and the environment. Most grants range from \$500 - \$1,000 with a maximum grant of \$2,500. Projects that are typically funded advance one or more of the following goals:

- Catalyzing new greenway projects
- Assisting grassroots greenway organizations
- Leveraging additional money for conservation and greenway development
- Promoting use and enjoyment of greenways

This year's application deadline is June 15. Visit the following link for more information and to apply online

[www.conservationfund.org/kodak\\_awards](http://www.conservationfund.org/kodak_awards). The program is a collaboration of Eastman Kodak Company, The Conservation Fund and the National Geographic Society.

### **Wild Resource Conservation Program Grants – Jun 30**

Grant applications are now being accepted by the Wild Resource Conservation Program. The deadline for submission is June 30, 2011 at 3 PM. The 2011 Project priorities are as follows:

- Compile and analyze existing population and distribution data for at-risk species
- Identify communities, habitats, and natural systems most at-risk from environmental stressors
- Monitor species and natural systems' responses to environmental stressors
- Develop predictive models for population and distribution changes of at-risk species
- Monitor and develop predictive distribution models for new invasive species and pathogens that may affect our native species and natural systems
- Critical Conservation Needs

For detailed information about the 2011 Priorities, and to apply, go to: <http://www.dcnr.state.pa.us/wrcp/2011grants/index.aspx>. To begin your application, click on the PA state outline on the left side of the page, then Log In/Register, again on the left. Should you have any questions, please contact Deb Miller at 717-787-3212 or e-mail me at [debmiller@state.pa.us](mailto:debmiller@state.pa.us).

### **Now Accepting Applications for Green Roof & Wall Design 2011 Awards of Excellence! Jul 6**

Deadline is July 6th, 2011. Green Roofs for Healthy Cities (GRHC) is pleased to announce that it is now accepting submissions for the 2011 Green Roof and Wall Design Awards of Excellence, presented at CitiesAlive: The 9th Annual Green Roof & Wall Conference in Philadelphia, P.A., Nov. 30 – Dec. 3, 2011. Submission forms for the Green Roof Design Awards and the Green Wall Design Awards are now available at <http://www.greenroofs.org/awardsexcellence>. To submit a project, applicants should download the submission form, prepare a 5-10 slide photo presentation (in PowerPoint or .pdf format) and use the automated online submission service. The submission fee is \$125 US per application for GRHC members and \$195 US for non-members. The Green Roof & Wall Design Awards celebrate excellence in innovative and integrative green roof and wall design, raising awareness of the multiple benefits that green infrastructure can provide clients and the general public. The Awards are selected by a seven-member, multi-disciplinary judging team which includes Architects, Landscape Architects, Engineers and Horticulturists. Submissions are evaluated according to a broad range of weighted criteria including aesthetic, economic, functional and ecological components. There are seven design award categories, three for extensive green roofs, three for intensive green roofs, and one for green walls. Applicants may submit more than one project for the same, or different award categories. Submissions will be accepted until 11:59 PM PST, July 6th, 2011. Applicants will be notified of the judges' decisions by August 9, 2011. The awards will be officially presented December 2nd, 2011 at CitiesAlive: The 9th Annual Green Roof & Wall Conference. For more information and to see the winners of previous years' awards, please visit the awards section of our website at <http://www.greenroofs.org>. For additional information contact Paul Erlichman, 416-971-4494. ext. 223 [perlichman@greenroofs.org](mailto:perlichman@greenroofs.org)



## **WATERSHED FACILITATION ASSISTANCE**

### **Free Webinar on Residential Green Roof Performance – Jun 1**

Tune in to the next installment of the Green Infrastructure Webinar Series on Tuesday, June 1st at 1 pm EDT, as Dr. Bill Retzlaff discusses the performance of a residential green roof project in the Midwest. Dr. Retzlaff is currently the Associate Dean of the College of Arts and Sciences at SIUE, and the research co-director of the St. Louis metropolitan area research collaboration (the Green Roof Environmental Evaluation Network) based at SIUE. He is also the Chair of Green Roofs for Healthy Cities' Research Committee. The Green Infrastructure Webinar Series is free to attend, so invite a colleague. Reserve your webinar seat now at: [www2.gotomeeting.com/register/341363562](http://www2.gotomeeting.com/register/341363562). After registering you will receive a confirmation email with instructions for joining the webinar.

#### **Create An Edible Landscape: Free Workshops - Jun 4**

June 4, 2011, 10 am - 2 pm. Control stormwater runoff, grow your own food, and protect the Chesapeake Bay! Learn how to design and install an edible landscape using permaculture methods. Workshops include hands-on garden installation projects. Location: Jennifer Branch subwatershed, just north of the Baltimore beltway. Sponsored by the Gunpowder Valley Conservancy, the Chesapeake Bay Trust, and the National Fish and Wildlife Foundation. RSVP by May 14, 2011 for the workshop in May 21, and by May 28 for the workshop on June 4. Email [piceglia@gmail.com](mailto:piceglia@gmail.com) to RSVP.

#### **DEP to Host Free Outdoor Learning Workshop for Teachers - Jun 16**

HARRISBURG -- The Department of Environmental Protection announced today it will host a free outdoor learning center workshop for educators Thursday, June 16, at Mechanicsburg Middle School in Cumberland County. The workshop, co-sponsored by Mechanicsburg School District and the Mechanicsburg Area Parks & Recreation Department, will offer local educators the chance to learn about creating, funding and maintaining outdoor learning areas on school grounds. "Research demonstrates that environmental education improves student learning," DEP Director of Environmental Education Jack Farster said. "But students need not travel far from the classroom to learn how their local environment affects them on a daily basis." The workshop, from 8:30 a.m. to 2:30 p.m., will include presentations, hands-on activities and a field trip to the Trails and Trees Environmental Center. The center is located on school grounds and allows students to learn about the flora and fauna of nearby forests, meadows and streams. Participants will be eligible for five Act 48 credit hours for attending the workshop, which is geared toward K-12 teachers and non-formal educators. Attendees will also learn about funding opportunities, such as DEP's Environmental Education grant program, that would allow them to develop an outdoor learning area at their school. Registration will be accepted on a first-come, first-served basis. RSVP by June 1 to Ann Devine in DEP's Environmental Education Center at 717-772-1644 or [adevine@state.pa.us](mailto:adevine@state.pa.us).

#### **AGRICULTURE NIGHT at SOVEREIGN BANK STADIUM - Jun 17**

York Revolution vs. Lancaster Barnstormers. Friday June 17, 2011 6:30 game start. Come early for agricultural themed pre-game activities! Get your tickets NOW! Neighboring rival team, tickets will sell fast. Contact Mike Chatburn at 801-4485 or [mchatburn@yorkrevolution.com](mailto:mchatburn@yorkrevolution.com) Fundraising ticket options available to support York County Agriculture Business Council, or other participating agricultural organizations. Flyers attached for more information. Please forward and share with family, friends, co-workers, neighboring farmers, social media. Anyone will enjoy and benefit from the farm & food related themed activities. If your agricultural organization would like to have a promotional or educational display, or if your organization or business would like to donate prizes for the evening, please contact Michele Grove at [ycabc@comcast.net](mailto:ycabc@comcast.net) or 246-3578.

#### **Bioretention / Bioinfiltration 'Ask the Researcher' Summit - Jun 20-21**

Date/Location: June 20-21, 2011, Villanova University. Course Objectives: Bioretention design, construction, and maintenance continue to evolve as the practice has become the most popular small-site stormwater control measure in the Mid-Atlantic states. However, design standards, construction specifications, and maintenance plans for bioretention often lag behind what recent applied and lab research has discovered. The purpose of this training is to deliver the most up-to-date research-based information that will lead to perhaps dramatic improvements in how bioretention cells are credited by regulators, designed by engineers and landscape architects, and built and maintained by contractors and maintenance personnel. The course will focus on both volume reduction, modeling, and the reduction of nutrients that are required to be part of the future Chesapeake TMDL. This course was previously delivered in 2010 in North Carolina and Maryland, but has been revised for Pennsylvania requirements. Course Instructors: Dr. Robert G. Traver, Professor, Villanova University; Dr. William F. Hunt, Associate Professor and Extension Specialist, North Carolina State University; Dr. Allen P. Davis, Professor, University of Maryland - College Park. Continuing Education: A certificate for Continuing Education Units (CEUs) for professional engineers will be provided for attendance at the symposium. Note that Pennsylvania PE requirements require the engineer to keep records, and there is no Commonwealth certification. This document is provided to assist you in your record keeping. For more information and to REGISTER ONLINE, please visit the short-course website at: <http://www3.villanova.edu/VUSP/BRG.htm>. Questions? For questions regarding content, Dr. Robert Traver: Email: [robert.traver@villanova.edu](mailto:robert.traver@villanova.edu). For registration questions: Ms. Linda DeAngelis: 610-519-4960; Email: [linda.deangelis@villanova.edu](mailto:linda.deangelis@villanova.edu)

#### **DEP to Hold Two Alternative Energy Workshops for Teachers - Jun 22**

HARRISBURG -- The Department of Environmental Protection announced today it will host two summer workshops to help teachers learn about alternative energy. The workshops, hosted by DEP in conjunction with Waste Management and Fresco Green Building Supplies, will offer presentations and site visits to a landfill and a house built using "green" technology. "As energy and the environment continue to change, it is important that educators know about cutting-edge technology," said DEP Director of Environmental Education Jack Farster. "This information can be put to good use in developing scientific curriculum and in making schools greener." Participants will learn about solar- and wind-power generation as well as alternative fuel sources, such as biodiesel, compressed natural gas and hybrid engines. The workshops will also educate teachers about DEP's Environmental Education grants, which develop environmental awareness through classroom activity. Workshop participants will be eligible for 6.5 Act 48 credit hours. The first workshop will be Wednesday, June 22, at the Grand Center Sanitary Landfill in Pen Argyl, Northampton County. The site visit will allow educators to learn how methane gas the landfill produces can be converted to electricity. Attendees will also tour a wastewater treatment facility. The second workshop is Wednesday, July 20, at Fresco Green Building Supplies in Lancaster, Lancaster County. Participants will tour a home outfitted with alternative energy features, such as solar panels, solar-heated hot water and rainwater capture systems. Both workshops will run from 8:30 a.m. to 4 p.m. Registration will be accepted on a first-come, first-served basis. RSVP by June 1 to Ann Devine in DEP's Environmental Education Center at 717-772-1644 or [adevine@state.pa.us](mailto:adevine@state.pa.us).

#### **Great American Backyard Campout - Jun 25**

Summertime is almost here, when "Marco!" "Polo!" echoes through neighborhood pools and kids build forts and decorate sidewalks with chalk. Or not. Today's kids are more likely to tag a friend on Facebook than in a game of freeze tag. This indoor childhood hurts kids' bodies, minds and spirits. You can help us change that by joining NWF's [Great American Backyard Campout](#) on June 25th. Great American Backyard Campout raises much-needed funds for NWF programs that help get kids outside and get healthy. As soon as you [register](#), you'll receive a link to your personal online Participant Center so you can start planning your campout and have the opportunity to support our mission and fundraise. Check out the [Get Ready](#) section for recipes, activities and crafts that will help you create family moments you'll treasure.

Help make this summer the first of many that kids will spend outdoors while having a great time in the great outdoors with your friends and family! Register today at [www.backyardcampout.org](http://www.backyardcampout.org)

### **Leaf Pack Network® Workshop – Jun 27-28**

June 27-28, 2011 (9AM-4PM). Where: H.M. Levitz Park, 28 Park Dr, Grantville, PA 17028, East Hanover Twp, Lebanon County. Cost: \$30. Seating is limited! (\*Due to the limited number of spaces available; you may want to call to confirm availability, prior to sending in your registration.) The Stroud Water Research Center is providing a stream ecology workshop/training focusing on the Leaf Pack Experiment. Teachers will receive up to 13 ACT 48 HOURS. The Leaf Pack Experiment, a tool used by stream ecologists for many years, was adapted for educational use in the classroom and is just as useful in non-formal settings. The Leaf Pack Experiment provides a unique way to investigate local stream ecosystems which also include studying aquatic insects. Based on student research and findings, results are posted onto the Leaf Pack Network® website where comparisons between different streams, or even seasonal differences, can be seen. These data shed light on the important connection between streamside forests and the ecology of rivers and streams. The Leaf Pack Stream Ecology Experiment Kit from the LaMotte Company contains all the necessary components to create artificial leaf packs to be placed in a stream for a few weeks and then studied for the presence of macroinvertebrates. A video illustrating leaf pack experiments can be viewed at: [www.stroudcenter.org/lpn/video/index.htm](http://www.stroudcenter.org/lpn/video/index.htm) and more information can be found at: [www.stroudcenter.org/lpn](http://www.stroudcenter.org/lpn). *This opportunity has been made possible by the Lebanon County Conservation District, Capital Resource Conservation and Development Area Council, Consortium for Scientific Assistance to Watersheds, Stroud Water Research Center, the Foundation for Pennsylvania Watersheds, the Pennsylvania Association of Conservation Districts and the Hershey Company.*

### **Home-Scale Permaculture Design Course starting September 10, 2011**

Permaculture is a system of designing ecologically inspired landscapes that integrate food production, water management, renewable energy and shelter. This method mimics universal patterns found in nature to create abundant local produce and healthy communities. Permaculture can help people live more sustainably and protect the Bay! Topics include stormwater management with rain barrels and swales; energy efficient site planning for house, gardens, orchard, woodlot and wildlife habitat; farm animal forage systems; beneficial microclimate; urban strategies for food and energy production; sustainable community economics and food security. Earn your Permaculture Design Apprentice Certificate. Six Weekends. Sliding scale \$900 - \$1,100. Early bird discount \$100 if you register by Aug. 10. Sponsored by Heathcote Community and School of Living. Course location - Freeland, MD. For details see <http://www.heathcote.org/cms/content/home-scale-permaculture-design-course>. For more information call 410-357-9523 or email [education@heathcote.org](mailto:education@heathcote.org).



## **WATERSHED TECHNICAL ASSISTANCE**

### **Biologically Diverse Streams Best at Nitrate Removal: Study found niche partitioning resulted in better nitrate uptake by algae**

Biologically diverse streams are able to remove larger amount of nitrate due to niche partitioning. Each algae species is adapted to a particular habitat with in a stream, known as its unique ecological niche. With a variety of algae species, more habitats are utilized, increasing the nitrate uptake and storage. The study found that the combination of eight different algae species within a stream removed nitrate 4.5 times faster than a single species of algae. The study included eight forms of diatom and green algae that are the most abundant species in North American streams. Source: <http://www.wwdmag.com/index.cfm?fuseaction=showNewsItem&newsItemID=23108>

### **Biological Priorities to Endangered Species Listing Process**

Washington, DC – The Department of the Interior's U.S. Fish and Wildlife Service today unveiled a work plan that will allow the agency to focus its resources on the species most in need of protection under the Endangered Species Act (ESA). The Service is filing the work plan today in a consolidated case in the U.S. District Court for the District of Columbia as part of a proposed agreement with one of the agency's most frequent plaintiffs. The work plan, if approved by the Court, will enable the agency to systematically, over a period of six years, review and address the needs of more than 250 species now on the list of candidates for protection under the ESA to determine if they should be added to the Federal Lists of Endangered and Threatened Wildlife and Plants. Read article... <http://www.erosioncontrol.com/the-latest/endangered-species-act.aspx>

### **Wetlands-At-Risk Protection Tool (WARPT) Website**

This tool provides a process for local governments to develop a plan for protecting at-risk wetlands, which are vulnerable to impacts from development or other land uses. The WARPT process outlines the process of protecting at-risk wetlands by updating wetland maps, estimating wetland loss, identifying priority wetlands, estimating wetland values, and protecting wetlands. This tool was developed by the Center for Watershed Protection under a cooperative agreement from the U.S. EPA, Office of Wetlands, Oceans and Watersheds and was reviewed by an advisory committee of local governments and wetland scientists. Resource: <http://www.wetlandprotection.org/>

### **BMP and LID Whole Life Cost Models: Version 2.0**

The Water Environment Research Foundation has provided spreadsheet tools and a user's guide for calculating capital costs and ongoing maintenance costs to estimate the whole life costs for stormwater management best management practices (BMPs) and low impact development (LID) techniques. Models are provided for retention ponds, extended detention basins, swales, permeable pavement, green roofs, large commercial cisterns, residential rain gardens, curb-contained bioretention, and in-curb planter vaults. Resource: [http://www.werf.org/AM/Template.cfm?Section=Research\\_Profile&Template=/CustomSource/Research/PublicationProfile.cfm&id=SW2R08](http://www.werf.org/AM/Template.cfm?Section=Research_Profile&Template=/CustomSource/Research/PublicationProfile.cfm&id=SW2R08)

### **Penn State Agriculture and Environment Center has posted new Extension and Research resources on our website**

- From the [Lessons from the Land](#) webinar series –Pennsylvania's successes across the landscape in watershed management and water quality improvements are showcased. The intent of this series is to increase dissemination and transfer of innovative approaches that communities and organizations have underway. Available are:

- Monitoring Marcellus in Small Streams – A presentation by Julie Vastine (Dickinson College - ALLARM) and Julie Kollar (Water Resources Education Network)
- The Lycoming County Experience: TMDLS, Farms, WWTPs and Innovations in Environmental Markets – Presented by Marel Raub (Chesapeake Bay Commission) and Megan Lehman (Lycoming County Planning Office)
- Calendar of upcoming events.
- From the [Innovating Policy for the Chesapeake Bay Restoration](#) conference, held March 29, 2011 in Cambridge, MD, the following scientific, technical, and policy presentations are now available, including:
  - The Chesapeake Bay TMDL – Rich Batiuk, US EPA Chesapeake Bay Program
  - Implications of the Certainty of Confronting Uncertainty in TMDLs – Carl Hershner, Virginia Institute of Marine Sciences
  - Benefits, Costs, and Bay Restoration – Ted McConnell, University of MD
  - Incentivizing Pollution Control in Agriculture – Marc Ribaudo, USDA ERS
  - Does Regulating Farmers Work? – Michelle Perez, World Resources Institute
  - Improving Efficiency and Effectiveness of Agri-environmental Policies for the Chesapeake Bay – Jim Shortle, Penn State University
  - Beyond Trading: Practical Applications of Market Principles for Water Quality Management – Leonard Shabman, Resources for the Future
  - Allocating Pollution Load Reductions Between States – Anthony Kwasnica, Penn State University

Website: <http://agsci.psu.edu/aec/webinars-presentations>

### **Inlets: Collect Water, Nothing Else**

In a perfect world, all your jobs would go smoothly. None of your crew would get sick, no equipment would break down, and all needed supplies would arrive on time, in good condition. Most importantly, the weather would cooperate; there wouldn't be a drop of rain until all earthmoving was finished and your vegetation had been seeded. Then there'd be a gentle rain to give your seeds just enough moisture to germinate, grow, and hold onto the soil. But it's an imperfect world, and nothing, especially the weather, fully cooperates. That's why there are so many best management practices (BMPs) available to trap or block sediment from getting into stormwater systems. Inlets and drains are of crucial importance; because they're designed to collect water, everything else that can get into water, such as litter, ends up being collected as well. Read article... <http://www.erosioncontrol.com/may-2011/inlet-protection-programs.aspx>

### **Thirsty Duck Study Released**

Thirsty Duck Ltd. is pleased to announce Reynolds, Smith & Hills Inc. has completed an independent analysis of the stormwater management systems for three Florida transportation projects. For the systems analyzed, the study concludes Thirsty Duck Buoyant Flow Control Devices reduce detention pond area by an average of 44% when compared to a traditional outlet structure. The study evaluated projects located in the Southwest Florida Water Management District (SWFWMD), South Florida Water Management District (SFWMDC) and the St. Johns River Water Management District (SJRWMD). In addition, the system analyzed in the SJRWMD was a Florida Department of Transportation (FDOT) project required to meet the critical duration event criteria specified by Florida Administrative Code chapter 14-86. Read study... <http://www.stormh2o.com/the-latest/thirsty-duck-rsh.aspx>

### **Final Effluent Guidelines Construction and Development Turbidity**

On December 1, 2009, the U.S. Environmental Protection Agency (EPA) published effluent limitations guidelines (ELGs) and new source performance standards (NSPS) to control the discharge of pollutants from construction sites. The regulation is effective on February 1, 2010. After this date, all permits issued by EPA or states must incorporate the final rule requirements. All construction sites required to obtain permit coverage must implement a range of erosion and sediment controls and pollution prevention measures. Beginning on August 1, 2011 all sites that disturb 20 or more acres of land at one time are required to comply with the turbidity limitation. On February 2, 2014 the limitation applies to all construction sites disturbing 10 or more acres of land at one time. These sites must sample stormwater discharges and comply with a numeric limitation for turbidity. The limitation is 280 NTU (nephelometric turbidity units). The December 1, Federal Register notice for the final rule contains incorrect compliance dates for the turbidity limitation for sites disturbing 20 or more acres at one time. This error appears on page 63050 of the preamble to the final rule as well as in the rule text at 450.22(a) on page 63058. Both the preamble and the rule incorrectly state this date as August 2, 2010. The correct date is August 1, 2011. A correction notice to address this error was published on March 8, 2010. Source: <http://water.epa.gov/scitech/wastetech/guide/construction/index.cfm>.

### **New Tech Brief Available Online**

A new issue of our popular Tech Brief series is now available on the National Environmental Services Center (NESC) website at [www.nesc.wvu.edu/techbrief.cfm](http://www.nesc.wvu.edu/techbrief.cfm). The latest Tech Brief is titled "Water Efficiency and Conservation." In it, NESC Engineering Scientist Zane Satterfield takes a look at how water system operators can use less water in the treatment plant and throughout the distribution system. NESC also has a number of resources for those interested in conserving water in their homes. The Future Water website, a joint project between NESC and West Virginia's College of Business and Economics and funded by the U.S. Environmental Protection Agency, has a number of articles, educational products, and other information to help use water efficiently. Visit the Future water site at: [www.nesc.wvu.edu/futurewater/index.cfm](http://www.nesc.wvu.edu/futurewater/index.cfm). As always, we encourage you to call our technical staff with any questions you have. They may be reached toll free at (800) 624-8301.

### **New Tools: Multi-User Feature Live**

[The Conservation Registry](#) is now live with a new feature, the Multi-User tool. If you have ever asked the question, "How can I share my projects with other people in my organization?" this new feature is for you. The Multi-User tool provides an easy way for organizations or other collaborative efforts to manage projects together. Now multiple users can be invited to one account in order to manage project information. Account holders can easily sort projects, making it efficient to find projects, especially when there are hundreds or thousands of projects entered for an organization or portal. It also allows users to create project templates with information that remains consistent among projects, thus making it easier and faster for organizational account users to enter consistent project data. <http://www.conservationregistry.org/>