WATERSHED ALLIANCE OF YORK

WAY E-NEWS

A coalition of stakeholders committed to being innovative leaders encouraging watershed-based planning, restoration and protection
www.watershedsyork.org

Volume 8, Issue 5

February 25, 2008

QUOTE OF THE WEEK – "Live Where You Work will be a key component in maintaining the vitality of our communities as well as assisting those in the middle class who are seeking homeownership opportunities." -- N.J. Department of Community Affairs Commissioner Joseph Doria

WATERSHED CONTACTS

COUNTY PLANNING – (717) 771-9870

ENVIRONMENTAL EMERGENCIES – (800) 541-4741
- Chemical and oil spills from transport trucks, trains and industrial facilities

ENVIRONMENTAL PROTECTION – (877) 333-1904
- Air Pollution – Burning materials other than household garbage
- Illegal dumping of wastes
- Encroachment on surface waters and floodways
- Groundwater Contamination and
- Industrial sewage problems
- Mining/quarrying operational problems (800) 541-2050
- Pollution of water supply wells
- Underground storage tank failures

FISHERIES PROTECTION – (800) 541-2050
- Wildlife (fish, reptiles, amphibians) nuisance problems or to report violations

GAME & WILDLIFE – (888) 742-8001
- Wildlife (mammals or birds) to report violations or nuisance problems

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

MUNICIPAL (Phonebook Blue Pages) –
- Air Pollution – Burning household garbage
- Dumping waste in surface waters*
- Floodplain disturbance
- Municipal and residential septic/sewage problems
- Stormwater management

NOXIOUS PLANTS – (717) 772-5209

RECYCLING – (717) 845-1066

SOIL & WATER CONSERVATION (717) 840-7430
- Agricultural operations
- Erosion & sediment control
- Stormwater complaints
- Watershed protection

WETLANDS PROTECTION – (717) 249-2522

INSIDE THIS ISSUE...

Alliance for Aquatic Resource Monitoring (ALLARM) – www.dickinson.edu/allarm
<> Jinnie Woodward, Assistant Director, woodwarj@dickinson.edu or 717.245.1021. ALLARM Phone: 717.245.1135 fax: 717.245.1971

Carroll Citizens for Sensible Growth - http://carrollcitizens.com/
<> Contact: Deana Weaver at (717) 432-2211 or admin@carrollcitizens.com

Codorus Creek Improvement Partnership – www.codoruscreek.com
- Feb 28 – Next meeting, 7:00 PM, at 324 W. Market St., York, PA.

<> Contact: Karen Noll, President, Codorus Creek Improvement Partnership, at 324 W. Market St., York PA 17401. Ph: 717-718-5431. E-mail: info@codoruscreek.com

Codorus Creek Watershed Association – www.codoruscreek.net
- Apr. 14 – CCWA Board of Directors meeting 7:00 PM at York Water Company (Mt. Rose Ave.)
- HELP-Buffers Program accepting applications for 2008 projects

<> Contact: Jim Leaman at 843-2929.

Codorus Implementation Committee
<> Contact: Genevieve Ray, Coordinator, 848-3320 or creekstudy@aol.com

Conewago Canoe Club – www.conewagocanoeclub.org
- Mar. 6 – Next meeting of club, 7:00 pm, at Mount Zion United Church of Christ at Ridgewood Road in Pleasureville.
- Check web site for pool schedule and other activities

Deer Creek Watershed Association – ldmcdaniel@aol.com
- Deer Creek Watershed Restoration Action Strategy FINAL – www.harfordcountymd.gov/PlanningZoning/WRAS.

<> Contact Pat Pudelkewicz, Harford County Department of Planning & Zoning, Bel Air, MD. Ph: (410) 638-3135.

Friends of Codorus State Park – www.friendsofcodorus.org
<> Contact Codorus State Park, 2600 Smith Station Road, Hanover, PA 17331. (717) 637-2816. Warren Werntz, Manager

Friends of Loch Raven Reservoir – FriendsLochRaven@aol.com
<> Contact: Nate Thompson 410-667-9825 (home) or natect@gmail.com

Greater Hanover Alliance – pwingert@legacycaps.com
<> Contact: G. Paige Wingert, President, Greater Hanover Alliance, Inc., Hanover, PA 17331. Ph :(717) 630-0892.

Gunpowder Valley Conservancy – www.gunpowdervalley.org/
<> Resource: http://www.gunpowderfalls.org/2006/08/sept_16th_join_.html

Izaak Walton League York Chapter– www.yorkchapter67iwla.org/
- Mar. 11 – Board meeting, 7:00 pm, at Clubhouse
- Mar. 19 – Club meeting 7:00 pm, at Clubhouse

<> Contact Lee Irwin 428-9368

Izaak Walton League Pinchot Chapter
- Meets second Tuesday of each month at Clubhouse

<> Contact: Colin L. Wolfe crccwolfe@aol.com

Lancaster-York Heritage Region – www.lyhr.org
<> Contact Mark Platts, Lancaster-York Heritage Region, 1706 Long Level Road, Wrightsville, PA 17368. Office: 717-252-0229. E-mail: info@lyhr.org.

Lower Susquehanna Riverkeeper – www.LowerSusquehannaRiverkeeper.org
- 2/28 Columbia, PA 11:30 am- Rivertownes Plan unveiling
- 2/29 Baltimore 9 to 5- Maryland School of Law Stormwater and Construction Enforcement Training
- 3/1 Donegal, PA 4 pm – Donegal Sportsman's Show

<> Contact: Michael Helfrich, Lower Susquehanna RIVERKEEPER®, York, PA. Cell phone: 717-779-7915 E-mail: lowsusriver@hotmail.com.

Maryland's Upper West Shore Trib Team – www.dnr.state.md.us/bay/tribstrat/index.html
- We are pleased to provide you with the second issue of Maryland's BayStat Newsletter. To help us expand our subscriber base, we again encourage you to forward this new publication to your own contacts – stakeholders, family & friends -- who may be interested in receiving free monthly updates on our Bay restoration programs, policies and progress. Subscribe at www.baystat.maryland.gov

<> Contact: Patty Larson, Tributary Strategies Program Coordinator, Maryland Department of Natural Resources, 580 Taylor Ave E-2, Annapolis, MD 21401. Phone: 410-260-8723.

Mid-Atlantic Ecological Landscapes Partnership [MAEscapes] – http://york.extension.psu.edu/Horticulture/events.html

- Mar 29 – MAEscapes through the Season's 'Spring' workshop. To register contact Penn State Cooperative Extension below.
- Mar 29 – Grand Opening of "The Gardener of the owl Valley! Native plants, trees and shrubs, garden books, gifts, tools, and more. Located at 765 Owl Valley Rd., near Hall am. Open weekends 8:30 am to 4:30 pm. For more information, contact Judy at 717-751-0195.

<> Contact: 717-840-7408 or Connie Schmotzer at cxs51@psu.edu

Prettyboy Watershed Alliance – www.prettyboywatershed.org

<> Contact: Nancy Shaper at nshaper@jhmi.edu

Shank's Mare "Go Play Outside" – www.shanksmare.com

- Check our calendar of events link to our Website at for more information or call us toll free at 877-554-5080. All programs require advance registration and payment. "Member" rates are offered to our Adventure Club participants ($25/year/household dues give a 10% in-shop discount, 5% additional discount on sale items, and "Member" rates on all programs).

Spoutwood Farm CSA – www.spoutwood.com

- Spoutwood Farm Announces 2008 Work and Learn Program (Apprenticeship/Internship) – Spoutwood Farm Center, Inc., an Educational and Community Supported Agriculture (CSA) farm in Glen Rock, PA, in southern York County, is proud and excited to announce the launch of its 2008 Work-and-Learn Program. We are actively seeking Apprentices, Interns, and Stewards in Training to assist in our 100-member CSA (Community Supported Agriculture project) and in other areas of our Farm operations. Apprentices are typically college graduates or persons with an equivalent amount of life experience, who have both interest and some experience in gardening, farming, and/or sustainable agriculture but are seeking a fulltime, hands-on experience in the field. Apprentices receive a small stipend, fresh vegetables in season, housing, and both theoretical and hands-on learning in exchange for 40-50 hours/week (typically Tuesday-Saturday) with the CSA and related Farm operations (including festivals). At this writing, we are seeking two additional apprentices for our 2008 CSA season. Interns are typically college students with an interest in sustainable agriculture, who are seeking a hands-on learning experience in sustainable agriculture, education, astronomy, administration, planning and design, information technology, or physical plant/ infrastructure. Interns are not paid a stipend, but we will work with their college or university to ensure that they receive credit for the internship, if desired. Interns commit to 120-300 hours throughout the season. Stewards in Training provide high school junior or seniors the opportunity to work, learn, and have fun assisting the Spoutwood Farms staff, apprentices, and interns. Stewards in Training receive experience in agriculture, the environment, and public education, while assisting the CSA or other aspects of Spoutwood Farm Center operations. SITs typically receive student service learning hours in exchange for their service, but no other reimbursement or lodging. Spoutwood Farm Center is a non-profit educational farm in Glen Rock, PA, close to the Mason-Dixon Line, 45 minutes north of Baltimore, MD, 25 minutes south of York, PA and convenient from Lancaster, Harrisburg, Hanover and Gettysburg, PA as well as Westminster, MD. The Farm is home to the annual May Day Fairie Festival (May 2-4, 2008), the annual Mother Earth Harvest Fair (October 5, 2008) and operates a CSA (Community Supported Agriculture) project, offering organic vegetables by subscription. Spoutwood Farm is committed to connecting people with nature and each other and modeling sustainable living practices through community-supported agriculture, public festivals, and education program. Contact: Tom Harbold Tuesday, February 5, 2008 edu@spoutwood.com or 717-235-6610.

<> Contact: www.spoutwood.com or contact: Rob Wood, 717-235-6610, Spoutwood@supernet.com

Sierra Club – Gov. Pinchot Group of PA – http://pennsylvania.sierraclub.org/pinchot/

<> Kim Anderson at sgfornyc@aol.com.

Susquehanna River Basin Commission – www.srbc.net

Trout Unlimited Codorus Chapter #558 – www.codorustu.org

- Mar 12 – Chapter meeting, 7:00 pm, Gander Mtn., York

<> Contact: Tom Finenze at 840-1372 or tom@codorustu.org

Trout Unlimited Muddy Creek Chapter #575 – http://muddycreektu.org/

- Mar 12 – General Meeting 7:00pm at the Collinsville F&G Club.

<> Contact: Ron Heuston, President MCTU, 244-1851 or Heuy1955@aol.com

Watershed Alliance of Adams County – www.adamswatersheds.org/pages/5/index.htm

- Mar 12 – Members meet, 4:30 pm. at the Adams County Ag Center, Gettysburg

<> Contact: Michelle Kirk 717-677-4628 or email at: mkirk@adamswatersheds.org

Watershed Alliance of York – www.watershedsyork.org

- DONATE – GoodSearch.com is a new search engine that donates half its revenue, about a penny per search, to the charities its users designate. You use it just as you would any search engine, and it's powered by Yahoo!, so you get great results. Just go to www.goodsearch.com and be sure to enter *WAY* as the charity you want to support. WAY earned $10.32 in 2007, let's make it $1,032 in 2008!
- Apr. 2 – Next Board Meeting, 7:00 PM, at CCIP (324 W. Market St., York, PA).
- WAY E-News is 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 (1,000+). Frequency: bi-weekly. Subscription: No charge. Editor: Gary R. Peacock.

<> 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

Yellow Breeches Watershed Association – www.ybwa.org
- Next Meeting: YBWA meetings listed on web site.

<> Contact Bob Edwards, Secretary, at redwa218@comcast.net or (717) 761-2756

York Audubon Society – http://www.yorkaudubon.org/
- Check out our new web site!
- Monday, March 10, 2008 —7:00 P.M. — Monthly Meeting. "Dream Gardens: Destination New Zealand." Carol Warner, owner of Draycott Gardens, offers an overview of a recent trip to the North and South Islands of New Zealand. Her slides include gardens, scenic attractions, and even a few birds! Meeting at Luther Memorial Evangelical Lutheran Church

<> Contact 717-428-3673; liriodendron@netzero.net

YorkCounts - yorkcounts.org
- YorkCounts' February 2008 E-Newsletter is online! In this issue: Updating progress on Metro-York… Metro-York volunteer ranks swell… Summit will feature speakers with amazing stories… Our schools and the governor's 2008 budget. The newsletter is housed on the YorkCounts website's blog -- so you can link straight to or from the newsletter… and add comments! http://yorkcounts.blogspot.com/2008/02/yorkcounts-e-newsletter-february-2008.html

York County - www.york-county.org

<> Contact the Board of Commissioners, Administrative Center, 28 East Market St. York, PA 17401-1588. Phone: 717-771-9964.

York County Agriculture Land Preserve – www.york-county.gov

<> Contact Patricia McCandless, Director, 118 Pleasant Acres Road (Suite F), York, PA 17402. Hours of Operation (for business office): 8:00 a.m. - 4:30 p.m. Phone: 717-840-7400. E-mail: PMcCandless@york-county.org

York County Community Foundation – www.yccf.org

<> Contact Jane Sload at 717.848.3733 or jsload@yccf.org.

York County Conservation Alliance - www.yorkcountyconservationalliance.org
- Check out our new web site!

<> Contact: Jane Heller at info@yorkcountyconservationalliance.org or 717-845-3797, or mail to YCCA - 543 Dupont Ave, York, Pa. 17403

York County Conservation District – www.yorkccd.org
- Annual Tree Sale – Beginning in January 2008 our annual tree seedling sale information, pricing and order forms will be posted on our web site.
- Mar 14 – Next meeting of District Board, 11:30 am, at ANNEX
- Mar 19 – RESCHEDULED Lower Susquehanna River & Mason-Dixon Tributaries Rivers Conservation Plan public information meeting, from 7:00 to 9:00 pm, at the York County ANNEX (room #1)

<> Contact Mark Kimmel, District Manager, 118 Pleasant Acres Road, York, PA 17402. Phone: 717-840-7430. E-mail Yorkccd@yorkccd.org. Office hours: 8:30 AM-4:30 PM weekdays.

York County Planning Commission – www.ycpc.org
- New York County GIS website is up and running, URL: www.yorkgis.org
- Mar 5 – Next Meeting of Planning Commission, 7:30 pm, York County Administrative Center, City of York, PA

<> Contact: 717-771-9870 or e-mail planner@ycpc.org

York County PSU Cooperative Extension – http://york.extension.psu.edu/

<> Contact Jeff Myers, Director, 112 Pleasant Acres Road, York, PA 17402-9041. Phone: 717-840-7408. Office Hours: 8:00 to 4:30. County Email: YorkExt@psu.edu.

York County Environment Corps – www.watershedalliance.org

<> Contact: Gary Bartell. Ph: 751-2412.

WATERSHED EDUCATION & OUTREACH

Rivers Form Larger Component of Global Carbon Cycling Than Previously Thought

In the science world, in the media, and recently, in our daily lives, the debate continues over how carbon in the atmosphere is affecting global climate change. Studying just how carbon cycles throughout the Earth is an enormous challenge, but one Northwestern University professor is doing his part by studying one important segment -- rivers. Aaron Packman, associate professor of civil and environmental engineering in the McCormick School of Engineering and Applied Science, is collaborating with ecologists and microbiologists from around the world to study how organic carbon is processed in rivers. Packman, who specializes in studying how particles and sediment move around in rivers, is co-author of a paper on the topic published online in the journal Nature Geoscience. The paper evaluates our current understanding of carbon dynamics in rivers and reaches two important conclusions: it argues that carbon processing in rivers is a bigger component of global carbon cycling than people previously thought, and it lays out a framework for how scientists should go about assessing those processes. Much more is known about carbon cycling in the atmosphere and oceans than in rivers. Evaluating large-scale material cycling in a river provides a challenge -- everything is constantly moving, and a lot of it moves in floods. As a result, much of what we know about carbon processing in rivers is based

on what flows into the ocean. In order to understand how carbon cycles around the globe -- through the land, freshwater, oceans and atmosphere -- scientists need to understand how it moves around, how it's produced, how it's retained in different places and how long it stays there. In rivers, carbon is both transformed and consumed. Microorganisms like algae take carbon out of the atmosphere and incorporate it into their own cells, while bacteria eat dead organic matter and then release CO2 back into the atmosphere. Packman was introduced to the co-authors of the paper -- ecologists who study how dead leaves and soil drive stream ecology and who come from as far away as Spain and Austria -- about 10 years ago through the activity of the Stroud Water Research Center in Pennsylvania. Since then, they have collaborated on many similar projects around river structure and transport dynamics. They are currently working on a project funded by the National Science Foundation on the dynamics of organic carbon in rivers and trying to understand how carbon delivered from upstream areas influence the ecology of downstream locations. The lead author of the Nature Geoscience paper is Tom Battin of the Department of Freshwater Ecology at the University of Vienna in Austria. Other authors are Louis A. Kaplan, Stuart Findlay, Charles S. Hopkinson, Eugenia Marti, J. Denis Newbold and Francesc Sabater. Adapted from materials provided by Northwestern University.
<> Resource: http://www.sciencedaily.com/

Strategic Conservation Planning Using a Green Infrastructure Approach – Mar 12
A new Green Infrastructure course, Strategic Conservation Planning Using a Green Infrastructure Approach, is being offered April 14 - 18, 2008 at the National Conservation Training Center in Shepherdstown, WV. There is a lot of interest in this course, so please register by March 12, 2008 to secure your spot! More information about this course can be found on the attached course announcement and online at web site below.
<> Resource: http://www.conservationfund.org/node/239

'Going Greener: Renewable Energy Realities' conference – Mar 12
Kings Gap Environmental Education Center is hosting its 19th annual environmental issues conference at Shippensburg University. The conference will highlight a selection of existing and potential programs and processes that envision a future where oil dependency and energy consumption, as well as associated pollution and political ramifications, will be significantly reduced. For information, call (717) 486-3799, or visit the environmental education center web site.
<> Resource: http://www.dcnr.state.pa.us/stateparks/parks/kingsgap.aspx

Horn Farm Ag Center Inaugural Tree Planting – Mar 18
In just a few weeks, the Horn Farm Center for Agricultural Education (HFC) will hold a momentous event that will start what promises to be the beginning of a truly unique experience in agriculture. After many years of planning and countless hours of preparation, the HFC will begin to showcase local agriculture and its heritage in a way that will bring people together to learn, experience and enjoy the many wonders of York's farming community. On Tuesday, March 18, 2008 at 2:00pm, we will kick off what is the first of many community events planned for 2008 and beyond. A new era for the Horn Farm will begin with the planting of a Sentinel Tree. This tree will bring new life to the Farm as it replaces the tree destroyed by the devastating barn fire in 2006. We ask that you distribute this email along with the attached invitation to your Board, committee members, volunteers and anyone else who is interested in preservation of farm land, teaching the importance of healthy eating and/or highlighting the rich agricultural heritage for York County. We look forward to seeing you on March 18th for this inaugural event! Don't forget to RSVP so we know how many friends and supporters to expect. Debbie Krout-Althoff, Executive Director, Horn Farm Center for Agricultural Education, 4945 Horn Road, York, PA 17406. Phone: (717)654-0571. Email: debbie@hornfarmcenter.org.
<> Resource: www.hornfarmcenter.org

SMART GROWTH WORKSHOP – Mar 24
3RD OF A SERIES ON SMART GROWTH PRINCIPLES AND HOW THEY RELATE TO LOCAL LAND-USE ORDINANCES MARCH 24, 2008 6:00 PM, AG CENTER CONFERENCE ROOM, 702 SAWMILL ROAD, BLOOMSBURG, PA. Speaker: Kim Wheeler, Community Planner Department of Community and Economic Development. FREE dinner! RSVP by calling (570) 784-1310 ext. 102 before March 17th! Sponsored by: Columbia County Conservation District & Columbia County Planning Commission. Financial support from Larson Design Group and PA DEP.

3rd Annual Stream Cleaner Environmental Forum - Mar 29 to Apr 25
Cacapon Institute invites you to join the 3rd Annual SCE Forum, an academic activity for high school classes that challenges students to seek solutions to non-point source pollution - a complex issue relevant to their lives. The SCE Forum's off-the-shelf lessons and activities can be used by watershed groups or government agencies to engage students in local issues. Last year more than 500 students from schools in eleven counties across the Chesapeake Bay region participated in the eForum. Teaching is one of the best ways to strengthen your own knowledge. So, share the flyer with a high school teacher and consider being a mentor on the importance of self-education and civic engagement in watershed restoration. In the SCE Forum students role play as stakeholders, consensus builders, and problem solvers, in a moderated peer-to-peer, multi-state dialogue. When coupled with a hands-on outreach, conservation, or research project, the SCE Forum is part of a complete Meaningful Watershed Education Experience (a requirement in D.C., Maryland, Pennsylvania, and Virginia schools). For more information visit web site below.
<> Resource: www.cacaponinstitute.org,

Regional Stormwater Workshop – Apr 28
The Metropolitan Washington Council of Governments (COG) and its Water Resources Technical Committee (WRTC) will be convening a regional, all-day workshop on stormwater management on Monday, April 28, 2008 at the Fitzgerald Theatre in Rockville, Maryland. The working title of the workshop is: "Regional Trends and Issues in Managing Urban Stormwater." The objectives of the of the proposed workshop are twofold: (1) to provide information about developing trends and current issues expected to alter the principles and practices of managing urban stormwater in Maryland, Virginia and the District of Columbia; and (2) to provide a forum for helping shape policies and regulations at the federal and state levels. While the exact agenda is still being worked on, we expect participation by staff from federal and state agencies responsible for developing and implementing stormwater policies and regulations. We also expect to have a session focusing on stormwater funding issues. We will be setting up an online registration system on the COG web site. There will be no registration fee, but expect to have a

(modest) charge for lunch. If you have any questions, recommendations or other comments, please contact me at 202-962-3352 or tgraham@mwcog.org.

Land Revitalization Update
Land Revitalization Update is a quarterly electronic newsletter highlighting news, resources and policies impacting cleanup and reuse of contaminated properties in the Mid-Atlantic region. To go directly to the Fall 2007 newsletter, click on link below.
<> Resource: http://www.epa.gov/reg3hwmd/revitalization/newsletter/winter08/newsletter.pdf

Chesapeake Bay Program Rolls Out Redesigned Website
After a complete overhaul and redesign, the Chesapeake Bay Program is proud to announce the unveiling of its new website, which remains at www.chesapeakebay.net. The URL is the same, but everything else has changed! The new Chesapeake Bay Program website has:

- An improved navigation system with seven major subject tabs, including "About the Bay," "Bay Pressures" and "Bay Restoration."
- A new Bay Field Guide with information, photos and video of bay fish, shellfish, birds and underwater grasses.
- A Resource Library full of photos, maps and publications.
- Increased search capabilities.
- Expanded and updated Bay content and data.

Another new feature is the "Get Involved" section, which offers a host of ways people can interact with the Bay: from joining a local watershed group to engaging in Bay-friendly practices at home, school and work. A calendar of events and Chesapeake places to visit are also featured in this section. Please visit the new site below and let us know what you think! For any questions concerning the new website, please e-mail the website administrator at mland@chesapeakebay.net.
<> Resource: www.chesapeakebay.net

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WATERSHED FUNDING OPPORTUNITIES

DEP Secretary Outlines Federal Chesapeake Bay Obligations Facing Pennsylvania
Environmental Protection Secretary Kathleen A. McGinty appeared before a Senate panel to outline Pennsylvania's Chesapeake Bay Compliance Plan. The state's plan, she told the Senate Republican Policy Committee, will allow Pennsylvania to meet the federal obligations facing the commonwealth in a manner that is fair, yet provides sources of nutrient pollution with cost-effective options on how to achieve reductions. If the state cannot meet the goals set forth by 2010, Pennsylvania faces the prospect of much more stringent requirements from the U.S. Environmental Protection Agency. The secretary's testimony outlined how the compliance plan includes mandatory reductions from point sources, like sewage treatment plants, and nonpoint sources, such as agricultural and stormwater run-off. With regards to point sources, the secretary described how Pennsylvania's approach does not mandate sewage treatment plant upgrades, only nutrient reductions. She further stated that the permits now being issued to the largest plants in the watershed largely reflect the pollution reduction plans offered by the plants in conjunction with the Pennsylvania Municipal Authorities Association. McGinty told the committee how Pennsylvania's Chesapeake Compliance Plan has placed a proportionate burden on nonpoint sources, and that the state's farmers and real estate developers are stepping up to the challenge. Pennsylvania has met its riparian forest buffer goal of 600 miles by 2010 ahead of schedule—leading all bay watershed states having restored 3,212 miles of buffers over a 35-foot-wide area. Additionally, the commonwealth has enacted extensive water quality regulations instituting sweeping changes for farmers that have resulted in more than 5,000 farms with mandated nutrient management plans, thus increasing the number of highly regulated farms in Pennsylvania by 400 percent. New real estate developments, McGinty said, need to fully offset nutrient discharges if the development creates a new discharge or cannot find capacity in an existing plant. She pointed to the Preserve at Dunn Lake resort community in Ararat Township, Susquehanna County, where the developer entered into a contract with the Red Barn Trading Company, a Lancaster firm that represents farmers who agree to remove manure from their fields and ship it to areas outside of the Chesapeake Bay watershed. The manure would be used as a soil conditioner in nutrient deficient areas outside of the watershed. Pennsylvania's share of the state revolving fund program has been cut by nearly half in the past three years, down $30 million to $27 million, while the president's fiscal year 2009 budget calls for another $330 million in cuts to EPA—largely aimed at wastewater projects. The president's FY 2009 budget requested only $555 million for the Clean Water State Revolving Fund, which would be the lowest level of funding for the program in its history if enacted. For more information on the Chesapeake Bay Compliance Plan, visit www.depweb.state.pa.us, keyword: Chesapeake Bay.

COMING SOON! – Mar 1
Beautiful York and Weyer Community Health Fund grant applications are due. So check the RECEIVE tab at web site below, and learn how you can make an impact in the City of York! Take a look at these grant programs and others at York County Community Foundation, and follow each of the steps under the "How to Receive a Grant" section. Give us a call at 717.848.3733 if you have any questions! Remember, the Nonprofit Community Investment Fund has a year-long rolling application process – NO DEADLINE! Good Luck!
<> Resource: www.yccf.org

Grants Available to Help Coastal Counties – Mar 24
NACo in partnership with the National Oceanic and Atmospheric Administration's (NOAA) Community-Based Restoration Program (CRP), is soliciting proposals for the second year of funding for the Coastal Counties Restoration Initiative (CCRI). The initiative provides financial assistance on a competitive basis to innovative, high quality county-led or supported projects. In 2008, CCRI will provide $500,000 in grants to improve stream, river, estuarine and other important marine habitats. A priority area for CCRI is the removal of fish passage barriers in coastal streams and rivers. Grants will range from $50,000-$100,000, based upon need. The deadline for applications is March 24, 2008. For more information and to access the full RFP and application instructions, visit web site below.
<> Resource: www.naco.org/ccri.

Regional Agricultural Program Dollars Available for Livestock Operations

The Capital Resource Conservation and Development (RC&D) Area Council, Inc. announces the availability of funding for farmers in Southcentral Pennsylvania to install various beneficial agricultural practices. The program, called the Regional Riparian and Ag BMP Initiative, provides cost share dollars for the installation of items such as fencing, watering systems and walkways on livestock farms. Priority will be given to those that incorporate rotational grazing systems in their operations. The project will implement rotational grazing systems, riparian buffers and other agricultural best management practices (BMP's) on eligible farms, with funding from the DEP's Chesapeake Bay Program. The Capital RC&D, in partnership with DEP, the State Conservation Commission, participating conservation districts and South Central Pa. Project Grass, will help to improve the effectiveness of agricultural riparian buffers and support the conversion of crop land to pasture. A limited number of funds will also be used for the promotion of sound conservation planning principles and practices. The program is available within the 17-county Chesapeake Bay drainage area served by the DEP Southcentral Region (see http://www.depweb.state.pa.us for a county list). The Capital RC&D Council is a regional non-profit organization that networks people, resources and projects to promote responsible use and conservation of the region's natural, community and economic resources. Capital RC&D is an equal opportunity employer and provider. For more information or to apply for the RRI program, please contact your local NRCS Grazing Coordinator or Susan Richards, Capital RC&D Program Manager at 717-724-0009 or e-mail susan.richards@rcdnet.net. You may also check the Web site below.

<> Resource: www.capitalrcd.org.

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WATERSHED PLANNING & POLICY

Chesapeake Bay Recovery Faces Many Challenges Due To Proximity to Populated Areas

The Chesapeake Bay is affected by multiple factors, ranging from population growth to climate variability, which will challenge the recovery of this important ecosystem. These findings released today by the U.S. Geological Survey are part of a comprehensive 5-year summary of the major factors affecting the health of the Bay ecosystem and the implications for its management. Population growth and agricultural lands have contributed to an overabundance of nutrients, sediment, and contaminants entering the Bay, and loss of habitats that can retain these pollutants. Climate change and variability have caused water temperatures in the Bay to exhibit greater extremes during the 20th century than the previous 2,000 years. Sea-level rise related to climate change is contributing to the loss of vital coastal wetlands. The cumulative impact of pollutants, habitat loss, invasive species, climate change, and disease has affected the health of fish and bird populations in the Bay and its watershed. Among the key findings on land use and its relation to water quality and habitats:

- Impervious surfaces increased 41 percent during the 1990s compared to an 8-percent increase in population. The rate of increase of impervious surface implies there will be more rapid delivery of nutrients to streams and an increase in sediment erosion.
- There has been a decrease in nitrogen and phosphorus concentrations at a majority of the sites in the watershed. However, concentrations are not decreasing at a rate that would sufficiently reduce nutrient loads to the Bay to meet water-quality standards by 2010.
- Sediment is having an adverse impact on water clarity and underwater grasses in the Bay and stream quality in the watershed. The results imply that actions to address sediment will have to be focused in the high sediment-generating areas in the Piedmont, promote sediment trapping in wetlands and reservoirs, and address shoreline erosion.
- The travel time of nutrients and sediment through the watershed ranges from weeks to centuries. This can result in a "lag time" between implementing management actions and improvements in water quality. Knowledge of travel times can be used to better focus management actions.
- Synthetic organic pesticides and their degradation products have been widely detected at low levels in the watershed, including emerging contaminants such as pharmaceuticals and hormones. The results imply there are opportunities to better integrate nutrient, sediment, and contaminant reduction measures.

Among the key findings on the fish and bird populations:

- The health of fish populations in the Bay is affected by multiple factors including degraded water quality, pathogens, and disease. The results imply that improving water quality for fisheries may make them less susceptible to disease and pathogens.
- Fish (principally male bass) in the Potomac watershed have testicular oocytes-- female eggs growing in their testes--a form of intersex. Reproductive abnormalities in fish have been strongly linked with a variety of contaminants that affect the endocrine systems of fish.
- Concentrations of DDT and other selected pesticides have declined since the 1970s, while PCB concentrations remain mostly unchanged. The populations of many fish-eating birds have rebounded but other species remain at risk due to legacy and emerging contaminants.
- Habitat loss, invasive species, and poor water quality have affected the food sources and habitat for seaduck populations, which have declined over the past several decades.

Among the key findings related to climate change:

- Low dissolved-oxygen conditions have been much more extensive and severe during the past four decades than at any time in the past 2,500 years. These conditions are influenced both by climate change and population growth in the watershed.
- Sea-level rise due to climate change and land subsidence will continue to cause losses and landward migration of tidal wetlands during the coming century. Sea-level rise is also causing sediment erosion in low-lying shoreline areas and has an adverse effect on water clarity in the Bay.

The findings imply that new strategies to address climate change have to be developed and integrated with on-going actions to restore the Bay ecosystem. USGS Circular 1316, "Synthesis of USGS Science for the Chesapeake Bay Ecosystem and Implications for Environmental Management," is a product of the USGS Chesapeake Bay studies, which provide integrated science for improved understanding and management of the Bay ecosystem. Adapted from materials provided by US Geological Survey.

Changing Land-Use Patterns Offers Best Hope for Greening the Suburbs

As thoughtful and inspirational as they are, individual and community efforts to embrace "green" solutions and curb greenhouse emissions in the suburbs, where roughly half of Americans live, may do little for long-term sustainability without changes in land use patterns, a design and

mobility problem University of Pennsylvania history and sociology Professor Thomas J. Sugrue explained to New York Times writer Alex Williams this way: "The very essence of the post-Second World War American suburb militates against 'greening.' Given the almost complete dependency of suburbanites on their cars, it's an uphill battle."
<> Resource: http://www.smartgrowth.org/news/article.asp?art=6485&state=52

Request for Applications: Smart Growth Implementation Assistance
Free technical assistance available! Are you trying to encourage specific smart growth techniques like transit-oriented development? Or direct your state department of transportation investments to better support smart growth? Are you looking to use smart growth to reach greenhouse gas reduction goals? Do you need help analyzing guidelines for school investments that best fit your state or community? Do you need to retrofit a commercial corridor? Or coordinate your community's smart growth design with an active aging program? The Development, Community, and Environment Division in U.S. EPA's Office of Policy, Economics, and Innovation is responding to this need by issuing a request for applications for the Smart Growth Implementation Assistance program. Through this program, a team of multidisciplinary experts will provide free technical assistance to communities, regions, or states that want to develop in ways that meet environmental and other local or regional goals. Communities, regions, and states around the country are interested in building stronger neighborhoods, protecting their environmental resources, enhancing public health, and planning for development, but they may lack the tools, resources, or information to achieve these goals. EPA can help applicants overcome these roadblocks by providing evaluation tools and expert analysis. EPA is soliciting applications from communities that want help with either policy analysis or public participatory processes. Selected communities will receive assistance in the form of a multi-day visit from a team of experts organized by EPA and other national partners to work with local leaders. Applications will be accepted until May 8, 2009. For more information and application materials, please go to web site below.
<> Resource: www.epa.gov/smartgrowth/sgia.htm.

Stormwater BMP Performance Webcast Available
On February 6th, EPA sponsored a webcast on Stormwater Best Management Practices (BMP) Performance featuring nationally known experts. The webcast was recorded and is available on the NPDES website below. The webcast introduced EPA's Urban BMP Performance Tool to over 3900 attendees, and provided detailed information on the state of scientific research into the performance of stormwater BMPs. The instructors discussed a wide variety of factors, including pollutant removal, volume reduction, costs, and many other factors that should be considered when selecting permanent (post-construction) stormwater BMPs. Included was a comparison of three common BMP types (traditional wet and dry ponds and newer Green Infrastructure techniques, such as bioretention). The presenters discussed the advantages of the Green Infrastructure BMPs, particularly their ability to reduce the volume of stormwater discharged to rivers, lakes, and coastal waters.
<> Resource: http://www.epa.gov/npdes/training

USGBC Database of Public Policy Initiatives
The U.S. Green Building Council (USGBC) is committed to supporting federal, state and local governments in their pursuit and development of green building programs and initiatives. USGBC and its 70-plus chapter network are involved at all levels of government, helping to educate and advocate for healthier, more resource-efficient and more sustainable buildings for all. USGBC's Database of Public Policies is an online tool that visitors can use to search for existing public policies based on numerous criteria, such as level of government, date of passage, location, type of building, LEED rating system, and whether it was incentive-based or mandatory. Read more at the resource link below.
<> Resource: http://www.usgbc.org/PublicPolicy/SearchPublicPolicies.aspx?PageID=1776

WATERSHED RESTORATION & PROTECTION

Reducing Nutrient Pollution in Feeder Streams: How to Prioritize Restoration Efforts
To help resource managers improve the health of coastal waters degraded by nutrient pollution, a group of scientists has developed a framework for prioritizing stream restoration efforts aimed at reducing the amount of nitrogen flowing downstream. The framework will allow practitioners to make better informed decisions regarding the design and implementation of restoration projects, which is critical for decreasing the downstream movement of nitrogen. Stream restoration has become increasingly popular across the country, yet efforts to quantify the actual amount of nitrogen removed by these costly projects are only just beginning. By providing natural resource managers with advice for prioritizing and designing projects aimed at reducing the downstream flux of nitrogen, the researchers hope to help local, state and federal restoration officials make larger nutrient pollution reductions with the limited amount of available funds. The framework is based on identifying areas where large amounts of nitrogen loads are delivered to local streams and are then transported downstream without being used by the local ecosystem. Small streams (1st--3rd order) with considerable nitrogen loads delivered during low to moderate flows offer the greatest opportunities for nitrogen removal. The authors suggest restoration approaches that increase in-stream carbon availability, contact between the water and stream sediments, and connections between streams and adjacent terrestrial environments will be the most effective. There is strong scientific evidence that restoration projects are more likely to be successful when properly designed using such a framework. This research is published in the online version of the journal Frontiers in Ecology and the Environment. This research which was led by Palmer and her graduate student, Laura Craig, was supported by the Maryland Power Plant Restoration Program and Versar, Inc. and the US EPA's National Center for Environmental Research. The article, "Stream restoration strategies for reducing river nitrogen loads," represents the consensus views of leading stream researchers from eight U.S.-based institutions. Adapted from materials provided by University of Maryland Center for Environmental Science.

Small Streams Can Be Restored Inexpensively With Dead Trees, Woody Debris
Small streams disrupted by military training activities or commercial development can be restored with simple and inexpensive measures, according to findings of a group headed by Pat Mulholland of Oak Ridge National Laboratory. Researchers from ORNL and Auburn University learned that streams can be adversely affected even if as little as 10 percent of the watershed is disturbed. In their study, conducted at Fort Benning, Ga., the researchers found that revegetating drainage ditches that carry water only during storms and adding dead trees and woody debris to stream channels helped trap smaller organic materials and improve the habitat for stream organisms, including fish. The project was

named Sustainable Infrastructure Project of the Year by the Strategic Environmental Research and Development Program, which funded the work. Adapted from materials provided by DOE/Oak Ridge National Laboratory.

Salamanders Are 'Keystone' Species: Headwater Streams Critical In Food Chain

University of Missouri scientist Ray Semlitsch studies creatures most people don't ever see. These creatures are active only at night and thrive in the shallow, cool, wet surroundings of headwater streams, an oft-overlooked biological environment. A collaborative study, with MU graduate student Bill Peterman, recently published in the journal Freshwater Biology, revealed the biomass (total mass of an organism in an area) of the black-bellied salamander far exceeds any previous estimates, and the contribution of the species and its habitat may be critical in the food chain. While the ecological role of the salamander is not fully understood, radio-telemetry and mark-recapture tracking methods used in the study indicate the salamanders are a critical component in the productivity of headwater streams, possibly ensuring the survival of other species of fauna. These headwater streams, according to the study, are very productive areas for salamanders and Semlitsch advocates the protection of these ecosystems. Semlitsch said the study brings to light the critical importance of salamanders, creatures that most people don't know much about or ever see as compared to birds or mammals. Adapted from materials provided by University of Missouri-Columbia,

Manual 4: Urban Stream Repair Practices Available

This stream repair manual concentrates on practices used to enhance the appearance, stability, structure, or function of urban streams. The manual offers guidance on three broad approaches to urban stream repair - stream cleanups, simple repairs, and more sophisticated comprehensive repair applications. The manual emphasizes the powerful and relentless forces at work in urban streams, which must always be carefully evaluated in design. The manual also presents guidance on how to set appropriate restoration goals for your stream, and how to choose the best combination of stream repair practices to meet them. It also outlines methods to assess stream repair potential at the subwatershed level, including basic stream reach analysis, more detailed project investigations, and priority screenings. Finally, the manual offers practical advice to help design, permit, construct and maintain stream repair practices in a series of more than 30 profile sheets.
<> Resource: http://www.cwp.org/PublicationStore/USRM.htm

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WATERSHED STEWARDSHIP

Intersex Fish Linked To Population and Agriculture in Potomac River Watershed

For several years, scientists have been working to determine why so many male smallmouth bass in the Potomac River basin have immature female egg cells in their testes - a form of intersex. They are closer to finding an answer. Research by the U.S. Geological Survey (USGS) shows that a high incidence of intersex occurs in the Potomac watershed at sites where farming is most intense and where human population density is highest. The study also shows the greatest prevalence of this form of intersex, known as testicular oocytes (TO), occurs in the spring, just before and during the spawning season. Out of the Potomac basin, the most densely populated heavily farmed site had bass with a TO rate of 75 percent, where less habited sites had 14-35 percent of male bass with TO. Sites along the South Branch of the Potomac ranged from 47-77 percent; again the higher percents corresponding with increased farming and human population. Seasonal comparisons are also striking. In the study, the USGS sampled six sites. At every site sampled, the incidence of male bass with TO was significantly higher during the spring pre-spawn to spawning period, ranging from 69-100 percent, compared to the summer post-spawn period, when it ranged from 25-67 percent. The reproductive anomalies in the Potomac's smallmouth bass population are not readily apparent on gross examination of an affected fish -- they were discovered by accident. In 2003, scientists investigating massive fish kills and widespread lesions found many individuals with TO while looking at tissues from the testes of male fish under the microscope. A prevalence of intersex is not unique to the Potomac basin, nor is it unique to smallmouth bass. It has been documented in other wild fish populations including spot-tail shiners in the St. Lawrence River, white suckers in Colorado, shovelnose sturgeon in the Mississippi, white perch from the Great Lakes, roach fish in the U.K and Denmark, sharp-tooth catfish in South Africa, three-spine stickleback in Germany, and barbel in Italy. It has also been noted in marine and estuarine fishes in Japan, the UK and the Mediterranean. At many of these places, it has been associated with known or suspected endocrine disrupting compounds in wastewater effluent, which are not removed during standard sewage treatment, and in runoff from farming operations. These compounds can include estrogen from birth control pills and hormone replacements, pesticides and fertilizers used on crops, and hormones from livestock operations. Scientists are continuing to assess the extent of TO in bass in the Potomac River system. They are examining samples collected at reference sites within and outside of the drainage basin to determine a background prevalence of TO for both smallmouth and largemouth bass, and to identify potential causes. They are also assessing the reproductive and general health of fish at sites with high and low prevalence of TO, and evaluating land use in risk assessment. The article "Intersex (Testicular Oocytes) in Smallmouth Bass from the Potomac River and Selected Nearby Drainages," is published in the current edition of the Journal of Aquatic Animal Health. Studies of fish health are part of the USGS Chesapeake Bay studies, which provide integrated science for improved understanding and management of the Bay ecosystem. The report"USGS Circular 1316, "Synthesis of USGS Science for the Chesapeake Bay Ecosystem and Implications for Environmental Management," is soon to be released by USGS. Adapted from materials provided by USGS.

Chemicals in Our Waters Are Affecting Humans and Aquatic Life in Unanticipated Ways

American and Canadian scientists are finding that out of sight, out of mind can no longer be the approach we take to the chemicals in our waters. Substances that we use everyday are turning up in our lakes, rivers and ocean, where they can impact aquatic life and possibly ourselves. Now these contaminants are affecting aquatic environments and may be coming back to haunt us in unanticipated ways. Derek Muir of Environment Canada and colleagues have determined that of the 30,000 or so chemicals used commercially in the United States and Canada, about 400 resist breaking down in the environment and can accumulate in fish and wildlife. These researchers estimate that of this 400, only 4 percent are routinely analyzed and about 75 percent have not been studied. These "emerging chemical contaminants," or ECCs, are not necessarily all new substances. But with improved detection technologies, their unexpected potential impacts on the

environment and human health are just now coming to light. John Incardona and Nathaniel Scholz at National Oceanic and Atmospheric Administration's Northwest Fisheries Science Center and the West Coast Center for Oceans and Human Health found that polycyclic aromatic hydrocarbons (PAHs) left in Pacific waters after the Exxon Valdez oil spill caused heart defects in herring and pink salmon embryos. PAHs from various sources, including oil spills and urban runoff, remain a threat to fish in coastal areas. The scientists think these chemicals can cause the hearts of fish embryos to beat slower and slower, resulting in heart deformities and a buildup of fluid around the hearts. During the last six years, they tested the effects of PAHs on zebrafish, which medical researchers have determined to have systems comparable to those of humans. The zebrafish embryos' hearts were severely malformed after absorbing PAHs through their skin. Scholz is also finding that although the effects of a single chemical may not be deadly, combinations of chemicals in our environment can be more potent. Pesticides are regulated one by one, but in the environment they can mix with other pesticides and such mixtures are not regulated. Water quality monitoring of rivers and streams has shown that threatened and endangered coho salmon and steelhead habitats throughout the Northwest are widely contaminated with pesticides that have run off from urban areas and agricultural land. The researchers looked at mixtures of five common insecticides and found that some combinations were much more toxic to the juvenile salmon than any one of the chemicals acting alone. The researchers say the enhanced toxicity of pesticide mixtures could be a more important factor in salmon population declines than previously realized. Stain repellents for carpets and nonstick coatings on food packaging derived from compounds known as perfluorinated compounds, or PFCs, are tough. But the same toughness that helps PFCs resist spills and grease also makes them resistant to breaking down in the environment. This means that PFCs can easily contaminate bodies of water and be ingested by wildlife. Jennifer Keller of the National Institute of Standards and Technology (NIST) and the Hollings Marine Laboratory in Charleston, S.C., and her colleagues have monitored PFCs in loggerhead sea turtles along the U.S. East Coast to study the effects of the pollutants on these marine animals. Loggerhead turtles accumulate PFCs in their tissues because they eat filter feeders such as mussels that remove contaminants from the water. Keller's team found that turtles with high concentrations of PFCs showed signs of liver damage and were immunocompromised. Karen Kidd of the University of New Brunswick is testing the effects of estrogen on aquatic life in a laboratory a bit larger than usual--a lake in northwestern Ontario. After Kidd and her colleagues with Fisheries and Oceans Canada added estrogen to the lake in 2001, male fish in this lake started producing eggs or egg proteins and female fish produced up to 115 times more estrogen than normal. During the next summer, the fathead minnow, the shortest-lived fish species in the lake, stopped reproducing until more than 99 percent of its population was lost. This has impacts all through the food chain, ultimately hitting top predators and the entire lake ecosystem. In the next two years, she saw depletions in longer-lived species: the pearl dace declined 86 percent and trout, 30 percent. By 2006, three years after the scientists ceased adding estrogen to the water, the fathead minnow began to repopulate the lake. This suggests that if treatment plants could remove such chemicals from municipal wastewaters before they enter the environment, affected ecosystems could rebound. Steven Bay at the Southern California Coastal Water Research Project in Costa Mesa, Calif., has seen evidence of altered hormone levels in marine fish. The hornyhead turbot, a common flatfish in the coastal waters of Southern California, hangs out on the seafloor where it can be exposed to a chemical cocktail discharged from nearby wastewater pipes. These chemicals range from industrial compounds to pharmaceuticals, some of which could contain substances that interfere with the fish's hormone system. Bay found that up to 90 percent of the male hornyhead turbot tested at some locations had produced egg yolk proteins. They also had estrogen levels as high as females and low thyroid hormone and cortisol levels. Thyroid hormone manages growth, so development of the fish embryos could be impaired. And as cortisol is produced in response to stress, the low levels could actually mean the fish might be overstressed and "worn out," leaving them vulnerable to disease. Most of these responses in the fish were widespread and not confined to the areas around the discharge pipes, so their precise cause and source remain a mystery.
Because most municipal treatment plants do not completely remove chemicals from wastewater, this study could have implications for groundwater and surface water. Treated wastewater effluent is sometimes discharged into rivers and used to replenish groundwater or to irrigate landscapes. If these chemicals are not filtered out through natural processes, they could end up in our drinking water supplies.
A panel of researchers discussed these findings at the AAAS annual meeting in Boston February 16, 2008.