



# WATERSHED ALLIANCE OF ADAMS COUNTY

## NEWSLETTER

SUMMER/FALL  
2006

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## Message from the *NEW* President

As WAAC's new President, I will have a tough job living up to the standards set by my predecessors, Patrick Naugle and Charles Skopic. Under their leadership, in addition to its many accomplishments – such as the now-annual Fishing Expo and the Watershed Academy in June – WAAC became a recognized voice in Adams County for policies to protect not only our water, but our quality of life.

In particular, WAAC played an important role in forming and guiding the Keep Adams Green, the ad hoc organization that resulted in a resolution by the Adams County Commissioners to fund a parks, open space, and agricultural preservation program (County Planning Director Richard Schmoyer called the resolution the most important program since the founding of the Land Conservancy of Adams County). WAAC was also represented on the County's Green Ribbon Commission, whose 2004 report will form the basis of the new program. Currently, WAAC has representatives on the County's Greenways Steering Committee, the Land Use Innovations Committee, the Conservation District Board, the Stormwater Advisory Committee, and the Potomac River Basin Water Resources Committee.

Virtually every conference, workshop, and meeting I attend that deals with the (rapid) growth

in our area ends with a discussion of the need to educate public officials and the general public about the need to better protect our quality of life – including the quantity and quality of our water. And I agree; whether it's Conservation by Design, New Urbanism, Traditional Neighborhood Development, Form-Based Zoning, or Transferable Development Rights, few people have made the connection between these theories and the application of their techniques to what's taking place in Adams County.

Therefore, during my tenure as President, I intend to make WAAC a leader in sponsoring, coordinating, and conducting education programs that will not only support one of our goal, to "help residents better understand the complex watershed issues affecting Adams County," but also encourage better land use and growth management. To this end, I have already met with Dick Mountfort, the President of the Land Conservancy of Adams County; Shannon Harvey, Associate Dean for Academic Affairs at HACC; and Judy Chambers, Extension Agent for Community Development at Penn State Cooperative Extension, about working together.

With your support, WAAC will continue to be an important factor in shaping the future of Adams County.

Mark Berg

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## Board Elections

In the last newsletter we introduced you to some new members of our board. With the new members on board, we held an election of officers at our June board meeting.

Mark Berg was elected as our new President, Bob Greer was elected as Vice President, Bicky Redman was re-elected Treasurer, and Vy Trinh continues on as Secretary. We currently have vacant positions on our board. If you are interested please contact us.

## Newest Board Member

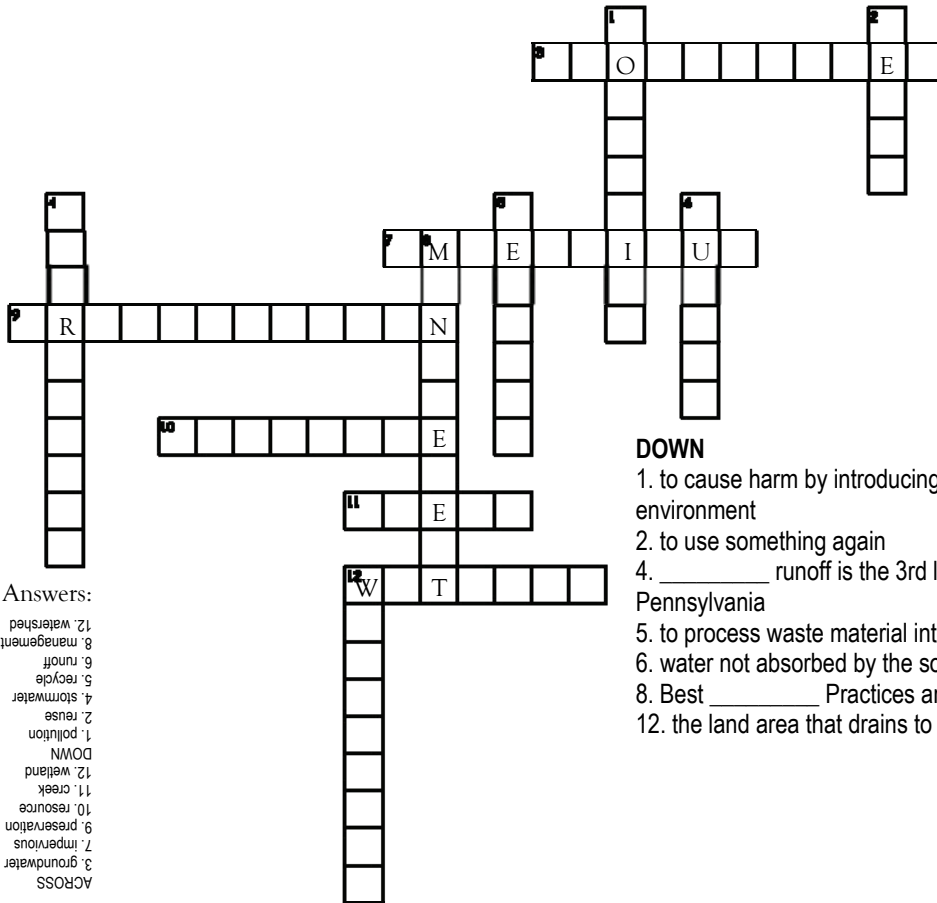
### Phyllis Chant, Director

Watershed Address: Tom's Creek

Biography: Phyllis is the Environmental Engineer for Schindler Elevator. She was appointed by the governor of PA to serve on the Statewide Water Resources Potomac sub-Committee as part of the Water Resources Planning Act. She also is a member of the Sewer and Water Authority in Carroll Valley Borough. Phyllis enjoys traveling, gardening, reading, drawing and painting, and going to the theater.

# Kids' Corner

Hint! Read the other articles in the newsletter for additional clues to the answers.



## ACROSS

3. \_\_\_\_\_ is recharged when water infiltrates back to the water table
7. \_\_\_\_\_ surfaces are impermeable to water
9. maintaining a resource for the future
10. a naturally occurring material that should be protected for the future
11. a stream or small river
12. a natural filter, also good for habitat

## DOWN

1. to cause harm by introducing damaging substances to the natural environment
2. to use something again
4. \_\_\_\_\_ runoff is the 3rd leading cause of impairment to streams in Pennsylvania
5. to process waste material into a useable product
6. water not absorbed by the soil
8. Best \_\_\_\_\_ Practices are used to minimize stormwater impacts
12. the land area that drains to a common water body

## Answers:

- ACROSS
3. groundwater
  7. impervious
  9. preservation
  10. resource
  11. creek
  12. wetland
- DOWN
1. pollution
  2. reuse
  4. stormwater
  5. recycle
  6. runoff
  8. management
  12. watershed

# Innovative Wastewater Treatment System Completed

Mindful of concerns about the purity of Adams County's water supply, the Hundredfold Farm Co-housing Community in Cashtown, PA, has constructed an on-site wastewater treatment facility to purify and recycle the sewage of their proposed 14-home development. The facility, under the supervision of engineer Mike Zavoda of Sundrive, Inc., was completed on Thursday, July 20, 2006.

The community, whose first four modular houses were erected during the first week in August 2006, is intended as a model of development practices in an agricultural setting that preserves farmland and has the lowest ecological and social impact on rural life. "Adams County, which is seeing considerable pressure for unsustainable, large lot development, may benefit from our green

building model," says homeowner and Joint Venture member Joel Plotkin, one of 9 households currently on the community planning board.

This innovative and easily duplicated wastewater treatment system, which cycles wastewater through an artificial wetland in an on-site greenhouse, produces clear water that will be recycled to the houses for flushing toilets and used in drip irrigation on the Seven Springs Tree Farm, owned and operated by the homeowners.

With the water supply for Gettysburg under threat from potential pollution from busy transportation corridors, residential and commercial development, runoff from large asphalted, parking lots, and agricultural chemicals, Hundredfold Farm's wastewater recycling is a step in the right direction to

preserve the Marsh Creek Watershed, and ultimately, the Chesapeake Bay from further degradation.

"This is a modest effort by a small community," says home owner Lou Hammann, "to show that a rural, agricultural district can develop housing that preserves the beauty of the land, sustains farming, and accommodates families who want to be stewards of earth's bounty."

*The purpose of conservation:  
The greatest good to the  
greatest number of people for  
the longest time.  
~Gifford Pinchot*

## The Significance of Imperviousness

Imperviousness can be defined as the sum of roads, parking lots, sidewalks, rooftops, and any other surfaces in the landscape that are impermeable to water. Imperviousness is a very useful indicator to measure the impacts of land development. Most importantly, imperviousness is a value that is quantifiable, can be managed and controlled through each stage of the land development process.

The amount of impervious surfaces affects the amount of stormwater runoff that occurs. Runoff from an acre that is completely paved would logically be significantly more than say an acre of forest, meadow or farmland. The velocity of the runoff and peak discharge increases, and the quality of water is decreased due to chemical and physical changes that occur during the runoff process. And because infiltration is reduced in impervious areas, groundwater recharge is reduced. This is the heart of stormwater management.

In Pennsylvania, stormwater runoff is the 3<sup>rd</sup> leading cause of impairments to streams. The number one cause is abandoned mine drainage, which we don't have in Adams County, and number two is agriculture. Precise figures for Adams County do not currently exist. State conducted assessments of the county streams have only been performed mostly in the Potomac portion of Adams County. The Susquehanna drainage from Adams County is still mostly unassessed.

Of the streams that have been assessed, streams have been identified as being impaired caused by stormwater, agriculture, sometimes both.

On June 21, the Watershed Alliance cosponsored with several other local and state organizations a Better Stormwater Management through Site Design workshop. It was a comprehensive course to help municipal officials, engineers, and interested individuals review and critique proposed land development projects with respect to stormwater management. Participants learned about the basics of stormwater including the affects of impervious surfaces, its impacts on the stream, and the cumulative downstream flooding issues. Most importantly participants learned about stormwater management principles. The old adage of "an ounce of prevention is worth a pound of cure" applies. Stormwater management should be integrated early on in the site planning process. Sensitive areas and important resources such as wetlands, streams, steep slopes, limiting soils, existing forests, and other significant features should be identified and protected rather than mitigated. Non-structural approaches to stormwater management like minimum disturbance practices, clustering and conservation by design to reduce imperviousness were promoted. What impacts that can't be prevented through non-structural management should then be mitigated

through structural Best Management Practices like the use of porous pavement, infiltration beds and basins, rain gardens and bioretention basins, vegetated swales and filter strips, dry wells or seepage pits, constructed wetlands, and even green roofs.

A portion of the workshop focused on the special challenges in Adams County, such as a lack of a stormwater management plan for the Conewago Creek Watershed that encompasses parts of both York and Adams Counties. Adams County also has soil restrictions such as the poorly draining clay soils that exist through much of the county. On the other end of the spectrum there also exists in the county pockets of limestone geology that are prone to sinkholes. These limitations as we learned can be overcome with proper research and planning and by implementing the appropriate Best Management Practices.

Lastly, the participants put to use their new found knowledge and applied it by reviewing land development plans and making recommendations based on principles described above. Traditional stormwater management treated stormwater as a waste product to be disposed of as quickly as possible. We need to start treating water as a precious resource, managing for the health of our streams, managing for our groundwater, managing for the future.

Vy Trinh

# Time to Update Our Strategic Plan

Every organization must periodically review its strategic plan and ask, what has changed in our environment or about our organization? Do these changes require us to update our strategic plan? If so, how?

The mission statement of the Watershed Alliance of Adams County is “to improve and protect water resources within Adams County.”

Our stated goals are:

- To conduct educational and public information programs to help residents better understand the complex watershed issues affecting Adams County;

- To promote a sustainable watershed resource for the future through encouraging sound water management and land use practices;

- To establish a county-wide volunteer water quality monitoring program and maintain a data base on water quality; and

- To identify and sponsor ecologically sound watershed improvement projects with funds from government, foundation grants, businesses and private donations.

**What do you think?** Is that still our mission? Are we meeting our goals? If not,

why not? Or should our goals be different now?

The Board of Directors wants to know what you and every other member think WAAC should be doing now and for the near future. WAAC is a membership organization, and to keep our members, we must align our mission and goals with the objectives of at least the majority of – if not all – our members. And please, volunteer to serve on the Strategic Planning Committee.

You can contact me at [markberg@blazenet.net](mailto:markberg@blazenet.net), or 642-9404. Better yet, please come to our next Board meeting!

## Summertime Tips

Swimming pools and hot tubs use chemical disinfectants to prevent bacterial growth. However, **ponds and streams contain bacteria that can increase to levels that may create health concerns** during hot weather when flows and water levels are low.

The following are precautions to reduce the risk of exposure for those engaging in water recreation:

- Never swim in stagnant water.
- Avoid water that is not moving, is very warm or has an odor.
- Do not dive deeply, even in fresh water.
- Hold your nose, or wear nose plugs when jumping or diving into water or water skiing.

The **discharge of swimming pool water into a water of the Commonwealth without a permit is a violation of the Clean Streams Law**, as amended in 1987. The Pennsylvania Department of Environmental Protection policy does not require a permit to drain your home pool if the following Department guidelines are followed. Check with your municipality concerning local ordinances:

- Backwash may not be drained directly into streams, other water bodies or storm sewers.
- Pool water and water used to clean pools must be neutralized before the water may be drained onto any property.
- Neutralized pool water can be discharged over a grassy area to allow absorption, filtration and aeration of the water. The discharge should be at a slow enough rate so as to prevent erosion and optimize infiltration.
- Before pool water is drained onto adjacent

properties, the owner must first receive approval from the adjacent property owner.

Pool service companies are aware of these prerequisites and must take the proper precautions when cleaning and draining pools. Pool owners should ensure that their pool service company complies with these requirements.

For further information, call the Pennsylvania Department of Environmental Protection at 717-705-4700.

**In Pennsylvania, approximately 62 gallons of water is used per person each day inside the home.** Although water use in general has decreased slightly since 1985, total water use continues to increase due to increasing populations.

**Where is the most water used inside the home?** Although technological advances have produced the low-flush toilet (1.6 gal/flush), it is still the largest consumer of water inside the home. The following table shows a breakdown of average indoor household water use:

- Toilets—28%
- Clothes Washer—22%
- Shower/Bath—19%
- Faucets—16%
- Leaks—14%
- Dishwasher—1%

**One reason that people often conserve water is that it usually also means that you are going to save money.** If you have public water, you will save money through both water and energy savings. On a private water

system, you will mostly save money through energy savings. However, there are other significant benefits from saving water. For one, less water use in general is good for your septic system. If you are using less water, then you are going to send less water to your septic system. Another benefit of conserving water if you rely on a private well is that you will conserve your water supply so that your well does not go dry. This is especially important if you have a low-yielding well and water quantity is problematic.

**What are the best methods for water conservation?** Water savings can be achieved through both changes in your daily habits and through installation of new appliances and fixtures. Changing habits such as shortening your showers and turning off the water when you brush your teeth are effective and inexpensive. However, it is very easy to fall back into old habits so this usually only accounts for temporary water savings. An easy way to save water permanently is through water conserving appliances and fixtures in the home. Although this is expensive up front, over the long term, you will save money through water and energy savings. The best part about installing new water saving appliances is that you don't have to change your daily habits at all and you may not even notice the water reduction.

Visit the Penn State Water Resource Extension website at:

[www.sfr.cas.psu.edu/water](http://www.sfr.cas.psu.edu/water) for water conservation and other drinking water publications.

# WATER- becomes a toolbox!

The Interstate Commission on the Potomac River Basin announces a new interactive web-based toolbox called "WATER" - for Watershed Activities to Encourage Restoration. It is an easy to use source of simple, free or low-cost activities that help protect and restore watersheds while creating publicity for watershed organizations. The website is a compendium of projects which community and watershed organizations can do to protect and restore their local environment. The activities were drawn from several sources, including the Watershed Alliance of Adams County, and compiled in one place so that environmental

organizations have one place to go to find detailed instructions on putting together a restoration event. It is full of additional information and resources beyond the projects in the toolbox; and it can be easily updated with new tools and new resources. The WATER toolbox is available online at [www.watershedactivities.com](http://www.watershedactivities.com) and on CD-ROM. The toolkit will be an ever expanding resource with opportunities for groups to suggest or submit their own activities and ideas. Check it out for the profiles on Marsh and Rock Creeks, and if your interest run a bit west of here, there are also profiles of Sideling Hill and Town

## Creeks

The toolkit was made possible by the support of Pennsylvania Growing Greener Program and with input from several partner organizations including Community Commons, Maryland Department of Natural Resources, Pennsylvania Department of Environmental Protection, the Potomac Conservancy, and the Potomac Watershed Partnership.

If you have questions about this project or you would like additional copies of the CD-ROM, please contact Jim Cummins at 301-984-1908x106 or [jcummins@icprb.org](mailto:jcummins@icprb.org).

## Flood Damage

Heavy rains in the central and eastern parts of Pennsylvania at the end of June 2006 caused severe, localized flooding and nine deaths prompting Gov. Rendell to declare a state disaster emergency in 46 counties and to request federal disaster relief in 34 counties including Adams County.

On July 18, Adams County was included among those areas determined to have been adversely affected by the catastrophe declared a major disaster by the President in his declaration of June 30, 2006. Adams County is eligible for public assistance to State and local governments and certain private nonprofit organizations for emergency work and the repair or replacement of disaster-damaged facilities.

Photo: Streambank erosion on Conewago Creek at the Narrows



## Member Benefits

- Member Newsletter
- Member events and field trips
- Satisfaction of protecting water resources
- Joy of community service

Name \_\_\_\_\_

Address \_\_\_\_\_

Phone Number \_\_\_\_\_

E-mail address \_\_\_\_\_

### Annual Membership Dues

- \$10 Student
- \$15 Individual
- \$25 Family
- \$50 Organizational
- \$100 Protector\*
- \$250 Guardian\*
- \$500 Conservator\*
- \$1000 Steward\*

\*Includes all membership benefits plus certificate or plaque and other recognition as appropriate

Make tax-deductible check payable to:

**Watershed Alliance of  
Adams County, Inc.**

P. O. Box 4329  
Gettysburg, PA 17325

(717) 677-4628

# Calendar of Events

**Board Meetings are now on the second Wednesdays of the Month at 4:30PM at the Ag Center.**

August 31, 2006 - **Water and Adams County** - Providing information regarding water planning in Adams County, the hydro-geological basis underlying Adams County, and the functions of the two interstate river basin commissions involved. The speakers will then serve as a panel to address questions and concerns Location: Adams County Emergency Services Facility, 230 Greenamyer Lane, Gettysburg, PA Time: 1pm—4pm Contact: Adams County Office of Planning and Development at 717-337-9824

September 9, 2006 - **Small Woodlot Owners Workshop** - Location: Adams County Agricultural Center, 670 Old Harrisburg Road, Gettysburg, PA Time: 8:30am—4pm Contact: Mildred Musselman at 717-334-0636 x302 or [mmusselman@adamscounty.us](mailto:mmusselman@adamscounty.us)

September 9, 2006 - **Growing Native Kick-off** - Growing Native is aimed at improving the water quality and scenic integrity of the Potomac River watershed. Volunteers of all ages and backgrounds can participate in by collecting native tree seeds and planting trees along streams and rivers across the region Location: Tayamentasachta Center for Environmental Studies, 500 Leitersburg Road, Greencastle, PA 17225 Time: 10am—Noon Contact: Colleen Langan at 301-608-1188 x211 or [www.growingnative.org](http://www.growingnative.org)

September 13, 2006 - **WAAC Board Meeting** - Location: Adams County Agricultural Center, 670 Old Harrisburg Road, Gettysburg, PA Time: 4:30pm

September 15, 2006 - **Watershed Protection Planning in the Greater Hanover Area** - Location: Hanover Wellness Connection, 400 York Street, Hanover, PA 17331 Time: 9am—4:30pm Contact: Sharon Sheppard at 717-632-7383 or [ssmarkoe@earthlink.net](mailto:ssmarkoe@earthlink.net)


September 23, 2006 - **Farm City Day** - Location: Hanover Shoe Farm, Rt.194 S, Hanover, PA 17331 Time: 10am—3pm

October 11, 2006 - **WAAC Board Meeting** - Location: Adams County Agricultural Center, 670 Old Harrisburg Road, Gettysburg, PA Time: 4:30pm

November 8, 2006 - **WAAC Board Meeting** - Location: Adams County Agricultural Center, 670 Old Harrisburg Road, Gettysburg, PA Time: 4:30pm

November 17-19, 2006 - **The first annual Chesapeake Watershed Forum** - An opportunity to keep your watershed organization or local government on top of the best management practices, emerging issues, scientific techniques and organizational capacity building skills through workshops, forums, networking, field trips, labs and social activities Location: U.S. Fish & Wildlife National Conservation Training Center, 698 Conservation Way, Shepherdstown, WV 25443 Time: starts at noon Friday thru 2pm Sunday Contact: Deborah Rudy at 717-737-8622 or [drudy@acb-online.org](mailto:drudy@acb-online.org)

[www.adamswatersheds.org](http://www.adamswatersheds.org)



The Watershed Alliance  
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