



# WATERSHED ALLIANCE OF ADAMS COUNTY

SUMMER 2007

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## Middle Creek Partnership

The Watershed Alliance of Adams County has received \$4,300 to develop a baseline assessment of Middle Creek including surveys of in-stream insects such as mayflies, caddisflies and stoneflies, a survey of existing fish population, collection of water chemistry data, and an evaluation of the streamside habitat.

The Watershed Alliance in partnership with the Adams County Chapter of Trout Unlimited, Strawberry Hill Nature Center and the Adams County Conservation District has developed the following goals:

- To promote the values and benefits of Middle Creek Watershed
- To develop an appreciation of a local resource
- To encourage the continued preservation and protection of the watershed

The Middle Creek Watershed is approximately 24 square miles located along the face of South Mountain in southwestern Adams County. Approximately 7.5 square miles of the watershed is designated a High Quality Cold Water Fishery. It is listed as state approved trout water. Middle Creek is considered one of the county's highest quality streams, by the state of Pennsylvania as well as the local residents and anglers.

One of the best indicators of a healthy waterway is the reproduction capability of aquatic organisms. By measuring the concentrations of these organisms at various locations along the stream, we will be able to better pinpoint potential problems areas. The upper reaches of the watershed currently supports stocked rainbow trout reproduction and in the past supported wild native trout reproduction. The Partnership believes the potential remains for Middle Creek to achieve  
**(continued on pg. 2)**

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Middle Creek- photo courtesy of Strawberry Hill


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Class A wild trout producing stream status.

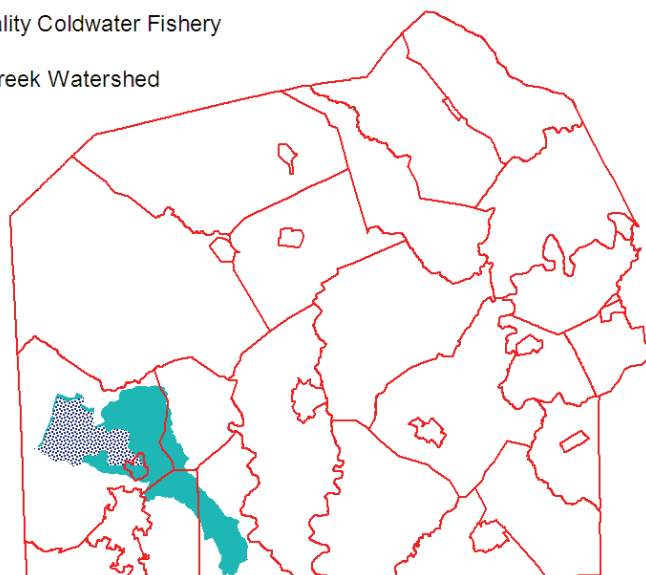
This project will be the initial step in developing a comprehensive watershed evaluation and improvement plan. The study will not only assess chemical, biological and physical indicators of water quality. It will also identify stream blockages for removal by a newly formed stream clearing committee of the Adams County Chapter of Trout Unlimited. These efforts will also serve to build appreciation of the resources within the watershed and to make public the stresses that can be caused by poor management practices.

**Volunteers are needed** to perform monthly chemical monitoring of the stream, to perform the twice annual survey of the in-stream insects, and to perform the stream walks needed to collect the habitat data. All training will be provided. It's a great excuse to get out and enjoy this beautiful watershed. **The first training on chemical monitoring will be held September 22, 2007 at 2:00pm at the Strawberry Hill Nature Center.** For additional information or to become involved, please contact Vy Trinh at 717-334-0636 or [vtrinh@adamscounty.us](mailto:vtrinh@adamscounty.us).

## Middle Creek Coldwater Partnership

 High Quality Coldwater Fishery

 Middle Creek Watershed



## Enemies Amongst Us?

Over 2 million people visit our little community every year, many of them staying at the local campgrounds. Let us hope they all forget one thing: their firewood.

The Emerald Ash Borer (EAB) is the newest of alien invaders. It has infected about 40,000 square miles in Ontario, Michigan, Indiana, Ohio, Maryland and Virginia. On June 21, 2007, EAB was detected for the first time in Pennsylvania in Cranberry township, Butler County. EABs have killed over 20 million ash trees.

EAB is an exotic beetle from Asia. It was discovered in southeastern Michigan near Detroit in the summer of 2002. The adult beetles nibble on ash foliage but cause little damage. The larvae feed on the inner bark of ash trees, essentially girdling the tree disrupting the tree's ability to transport water and nutrients.

The EAB's larvae are about 1/2 inch in length, creamy white in color and are found under the bark. The adults emerge in the late



spring from "D" shaped holes in the Ash tree.

The adult EAB is a metallic green insect about 1/2 inch long in length and 1/16 inch wide. Adults are only present from late May to late July.

Infestation of EAB can be difficult to detect until tree canopy die-back occurs – usually the upper third of a tree will thin and die-back. This is usually followed by a large number of shoots or branches arising below the dead portions of the trunk. Evidence of infestation includes D-shaped exit holes on branches and the trunk. Callous tissue produced by the tree in response to larval feeding may also cause vertical splits to occur in the bark. Distinct S-shaped larval feeding tunnels may also be apparent under the bark.

State and federal agencies have made this problem a priority. PA Department of Agriculture has imposed a quarantine in Butler, Allegheny, Beaver and Lawrence Counties to slow the spread of EAB. The quarantine is designed to help slow the spread of the beetle. Pennsylvania's quarantine restricts the movement of ash nursery stock, green lumber and any other ash material, including logs, stumps, roots and branches, and all wood chips from the quarantined area. Due to the difficulty in distinguishing between species of hardwood firewood, all hardwood firewood—including

ash, oak, maple and hickory—are considered quarantined.

The spread of EAB has been linked to the transportation of infested nursery stock and firewood. Help prevent the spread of emerald ash borers by buying local firewood when camping.

Homeowners can help by carefully monitoring their ash trees for signs and symptoms of EAB throughout the year. In the event that the emerald ash borer cannot be contained, USDA, NRCS has entered into an agreement to store ash seed at the National Center for Genetic Resources Preservation in Fort Collins, Colorado. If the ash tree population is completely decimated by the ash borer, the stored seeds can be used to re-establish the ash tree for future generations.

Vy Trinh

*To report possible infested trees in Pennsylvania, contact:  
The Pennsylvania Department of Agriculture at 1-866-253-7189, or  
The Department of Conservation and Natural Resources, Bureau of Forestry,  
Division of Forest Pest Management  
(717) 948-3941.*

*For more information on emerald ash borer, visit: [www.emeraldashborer.info](http://www.emeraldashborer.info)*

## Message from the President

Every year, the Board of Directors reevaluates WAAC's Strategic Plan, its goals and objectives, so that we can continue to address the water-related issues that result from the rapid growth taking place in Adams County. This year, we believed we would do better if we could draw on the experience of someone with more experience in strategic planning. Judy Chambers, Extension Agent - Community Development with Penn State Cooperative Extension of Adams County, agreed to work with us. Judy reviewed our previous plans, and showed us where our efforts have and have not been consistent with our mission and with the best management practices of non-profit community organizations such as WAAC. As a result of Judy's efforts, the Board is completing a Strategic Plan which will serve us well as we pursue our mission.

Our goals remain essentially the same, just a little less wordy. They are:

- 1) *Help residents better understand the complex watershed issues affecting Adams County;*
- 2) *Encourage sound water management and land use practices that will promote a sustainable watershed resource;*
- 3) *support a county-wide water monitoring program and data base to evaluate water resources;*
- 4) *Identify and implement watershed improvement projects;*
- 5) *Maintain the viability and sustainability of the Watershed Alliance of Adams County.*

There are three objectives under Goal 5 that are critical to WAAC's success: First, create a committee structure to accomplish WAAC's objectives; second, raise sufficient funds to sustain the organization; and third, recruit and maintain a membership base that provides funds, volunteers, and other resources for the organization.

This is where you, the WAAC members, have a most important role to play. I encourage you to become active in your organization by joining a committee, helping us raise funds, and/or recruiting new members.

On behalf of the Board, thank you for being a WAAC member. We hope to see you soon.

*Mark Berg*

*Would you like to know more about how you can become an active participant in the Watershed Alliance? Please email me – [Mark@MarkBerg.org](mailto:Mark@MarkBerg.org) – or call me – 642-9404 – and let me know what you're interested in.*

## Green Space Program Update

The Watershed Alliance of Adams County (WAAC) is pleased to support the new Green Space Program being provided by the Adams County Commissioners. WAAC is represented on the Green Space Advisory Committee by Chairman Patrick Naugle and Charles Skopic, both past presidents of WAAC, and Bicky Redman, WAAC's Treasurer, serving in her capacity as Adams County Director of Environmental Services.

The objective of the Green Space Program is to "identify and protect locally significant lands for agricultural preservation, open space and natural resource preservation, parks and recreation, and historical/cultural resources." It is a grant program in which \$1,000,000 will be made available as matching funds for projects submitted by any of the Adams boroughs or townships, as well as by non-governmental organizations that have a similar objective and can meet the grant criteria. (Note that this represents \$600,000 in new money to increase what the County already allocates for ag land preservation.) The proposals must be limited to the purchase of land or easements.

Specifically, entities seeking County funds may use other government or private grants as their portion of the matching funds. The money will be available in 2008.

The process for approval begins with a pre-application meeting with the Green Space Advisory Committee to discuss the scope and intent of the proposed project, which should be generally consistent with County and municipal Comprehensive Plans. The Advisory Committee ranks the proposal to compare it with the other proposals, then submits it with a recommendation to the Commissioners for their review; the responsibility for final approval lies with the Commissioners.

Use of funds is allocated by priority: 60% to agricultural land preservation, 20% open space, 10% to parkland/recreation, 8% to historical/cultural land; 2% is allocated to outreach and administration.

WAAC views this development as beneficial to our watersheds in several ways. First, undeveloped land provides our chief source of water, groundwater – more land, more precipitation infiltrates the ground, more

groundwater. Second, fewer impervious surfaces – streets, driveways, roofs, parking lots, etc. – means slower runoff of precipitation into streams, so more water is retained for use. Third, preserved lands reduce the amount of development, limiting the need for new water hook-ups and wells. Finally, water passing through open space ground tends to be of better quality because it is naturally filtered and does not require as much (expensive) treatment before it can be used.

WAAC played a key role in bringing about the Green Space Program. Several WAAC members helped organize Keep Adams Green in 2005 which worked with the Commissioners to secure matching funds to carry out the recommendations in the 2004 report of the Green Ribbon Commission. This led to the Resolution passed by the Commissioners in July 2006 which created the Green Space Program.

*Mark Berg  
R B Lasco*

## More than Just Saving Water!

**Saving Energy** can be as easy as switching to compact fluorescent light bulbs or CFLs. CFLs can be 4 times as efficient as incandescent bulbs. Don't get sticker shock because CFLs are more expensive than incandescents. I recouped my expenditure for nine bulbs the first month. They help keep your house cooler in the summer because they don't heat up like incandescent bulbs. Speaking of heat, hot water heaters usually use the most energy in a home. Consider replacing your hot water heater with an energy efficient model, either an Energy Star model or another alternative such as a tankless/on-demand model, or a solar heated system. If your finances are like mine and replacement is not an option, try just reducing your use of hot water by taking a shorter showers or running washing machines on the cold or cool cycles. Insulate your water heater tank and pipes to reduce heat loss. You can also try lowering the water temperature to 115°–120°F. This will reduce scalding hazards as well as slow mineral build-up and corrosion in your heater and pipes making

your heater more efficient. Other energy wasting culprits include air leaks in windows, doors, fireplaces, outlets and switchplates that compromise your heating or cooling efforts. Finding these leaks and sealing them may save you up to 30% energy use a year.

**Recycling** one glass container can save enough energy to light a 100 watt light bulb for 4 hours. Imagine if you used a CFL! Recycling one aluminum can can run a TV for 3 hours. Hopefully you have better things to do than watch 3 hours of TV but I digress... Recycling one ton of paper saves 17 trees, 60 lbs of air pollution and 7000 gallons of water. OK, so we are talking about saving water again. If we recycled every plastic container we used, we could keep 2 billion tons of plastic out of landfills. Apparently we use enough plastic wrap every year to wrap all of Texas. Possibly a cost effective and greener option to building a fence? But again I digress.

**Get Off the Gas.** You know the deal. Walk, peddle, carpool where and when you can. It's better for your wallet, better for the environment and better for your health! In

High School, I used to skip my lunch and save my money for gas. I could go to and from school, practice and work for most of the week on my lunch allowance. Now I would have to give up lunch for a month. By the way, the cost of a school lunch has only gone up 25 cents in 16 years. I paid \$1.10 in 1991, my daughter's lunch only costs us \$1.35 now. My daughter has a hard time getting me to pack her lunch for her unless tuna fish is on the menu, then I am sympathetic. Digging up \$1.35 is a heck of a lot easier than finding the food pyramid (don't ask when a square meal turned into a pyramid) in my fridge. School lunch is also a bargain I usually can't pass up considering the rising cost of food and everything else nowadays. Speaking of inflation, driving by the gas station is a cause of great anxiety for me. Should I get gas now and be late for work, or wait and risk the price per gallon going up while I am at work. Returning the car on "E" is no longer an option. Things used to be so simple...

Vy Trinh

## Don't Drug Your Drinking Water

In 1910, Teddy Roosevelt observed that, "Civilized people should be able to dispose of sewage in a better way than putting it in the drinking water." Here it is, almost a century later, long after we put humans on the moon, and we still send our toilet flushings into our drinking water.

Sewage treatment facilities clean up sewage reasonably well, but they cannot remove most drugs that we flush away. Antibiotics, hormones, tranquilizers, pain medications, all pass through our sewage treatment processes unaltered and go directly into our streams and rivers. We are a drug-taking society, and since there are so many of us, lots of drugs (officially considered "emerging contaminants) find their way back not only to us, but to all the other creatures which live in or drink these waters.

Recently, members of the Watershed Alliance of Adams County conducted an informal telephone survey of a sample of hospitals and pharmacies, asking for advice about how to dispose of unwanted or outdated prescription medications. A surprising number advised that these drugs should simply be flushed down the toilet. I hope everyone reading this column now will think twice before doing that.

But how should we dispose of unwanted

drugs? Just two months ago, the Office of National Drug Control Policy, for the first time, issued a federal guideline on this very subject. Here is how they suggest disposing of unwanted drugs:

First, take advantage of community pharmaceutical take-back programs. Some large cities have a community program of this sort, with drop-off points for unwanted medications, but most places don't, including Adams County. Not only that, the Adams County Environmental Services Recycling Information booklet lists only two pharmacies that will accept outdated medications for disposal – CVS and Wogan's. It's also worth noting that Gettysburg Animal Hospital accepts animal medications for disposal.

Second, if you can't find an outside agency to help you dispose of unwanted medications, here's what you can do at home. Put about a cup of hot water into a plastic container with a screw top – an old plastic jar or a 4-cup "zip-loc" container with a screw top will do just fine. Then drop in the pills you want to get rid of; give the pills time to dissolve. Then fill the container the rest of the way with kitty litter – the kind that clumps when it gets wet. Screw the cap on tightly and simply throw the container in the trash. The kitty litter will absorb the water and the

dissolved medication, so even if the container breaks, it will not easily spill out and critters won't be tempted to eat it.

Third, once you've done that, be sure to destroy the label on the empty medication container or ink out your name and the prescription number with an indelible marking pen before throwing it away.

Admittedly, this method may not be

*Civilized people should be able to dispose of sewage in a better way than putting it in the drinking water.*

*~ Teddy Roosevelt*

perfect but it's much better than flushing old drugs down the toilet and sending them right back into our drinking water. In time, hopefully, the pharmaceutical industry will step up to the plate and develop a consumer take-back program similar to the programs being developed by the electronics industry. But in the meantime, remember the kitty-litter solution, and you will help in an important way to improve conditions on our crowded planet.

Bob Greer

# Volunteers Needed for the *Growing Native* Ambassadors Training

Potomac Conservancy, Pennsylvania Department of Conservation and Natural Resources, and local partners will launch its *Growing Native* Ambassador Training for 2007. A training session will be held August 18, 2007 from 9 am – 12 pm in Adams County at Strawberry Hill nature Center.

Ambassadors organize and lead seed collection events in their communities and educate others about this important conservation project. They are trained to identify native trees and their seeds. Ambassadors help to create healthy environments in their communities by improving water and air quality today and creating forests for tomorrow. Becoming an ambassador is easy! Trainings are fun, free, and informative. Join the *Growing Native*

program by becoming an ambassador and contribute to the legacy of maintaining and improving water quality and providing wildlife habitat.

"Becoming a *Growing Native* Ambassador is a fun way to get involved in your community," said Colleen Langan, *Growing Native* Coordinator. "You learn to identify native trees, you help promote clean water, and you meet a variety of people who care about keeping our region clean and green."

*Growing Native* was started in 2001 as a project of the Potomac Watershed Partnership and is managed by Potomac Conservancy. The Conservancy works to protect the health, beauty, and enjoyment of the Potomac River and its tributaries. The project gives volunteers the opportunity to reforest

streamside forests within their community and, ultimately to enhance the health of the Potomac River watershed. Every fall, volunteers collect seeds from native trees. These seeds are grown in state nurseries. After one or two growing seasons, volunteers will then replant the trees along stream banks and other areas in the watershed.

*For more information on Growing Native, to sign up for the free Ambassador Trainings, or how to become involved in your community, Contact Colleen Langan at (301) 608 – 1188 ext. 211 or [langan@potomac.org](mailto:langan@potomac.org) or visit the website: [www.growingnative.org](http://www.growingnative.org).*

## We Are Under Attack

They arrive by land, by sea, or through the air – not aliens from outer space, alien plants and pests. Sometimes they are imported on purpose, but often they are hitchhikers that stow away inside the hulls of cargo ships or in packing materials carried from distant lands. "Invasive" species are plants and animals that are introduced into new areas in which they are not among the native flora and fauna, and because they no longer face the natural enemies or competition from their places of origin, they spread or reproduce prolifically. Invasive species can be a very, very big problem. Non-native species can cause significant changes to ecosystems, upset the ecological balance, and cause economic harm to our nation's agricultural and recreational sectors.

It is important to note that the vast majority of non-native plants, about 85%, cause little if any environmental damage, other than perhaps taking up space that could be occupied by native species. They politely occupy their place in the landscape and pose little threat to natural areas. Even our food supply is primarily made up of exotic species.

However, some exotics do not act so politely. They reproduce rapidly and spread quickly, especially in areas where the land has been disturbed. They crowd out native plants and transform our vibrant spring forests of Jack-in-the-pulpits, violets, and trout lilies to vast jungles of multi-flora rose, exotic honeysuckles, and mile-a-minute vines.

Why should this concern us? Beyond the

effects on wildlife food and habitat, water quality and quantity issues are affected by invasive plants. Invasives are opportunists; they move in more quickly than native plants, especially when the ground has been disturbed. Increased development pressures are helping to spread invasives. If you've taken notice of the plants that sprout up on new construction sites, you've seen they are not the plants you would have seen in our forests twenty years ago.

Because invasive plants are not native to this area, they are not as good at preventing erosion. They allow increased run-off into our streams, decreasing water quality. In addition, many invasives require more water than native plants, which decreases our water quantity.

What can you do to help stop the spread of invasive plants? Become educated – contact the Nature Conservancy or the Penn State Extension Service for information. Don't plant knowingly plant invasives: Check out native plant gardens at the Agriculture and Natural Resources Center or Strawberry Hill Nature Center for alternatives to invasive plants. Remove invasives from your property, or join volunteer groups at local parks. Go to the Mid-Atlantic Exotic Pest Plant Council <http://www.ma-eppc.org> for more information.

*Yvonne Werzinsky*

*Yvonne is the Preserve Manager at Strawberry Hill and is well acquainted with invasive plant species.*

### Not a member yet? Become one now!

Name \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_

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

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

#### Annual Membership

- \$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

Questions? Call (717) 677-4628

## Where Has All Our Water Gone?

If you don't think this is a problem, wake up. The problem with our water use has been on the rise over the last century. Domestic water use has surpassed industrial use as the county's largest water consumer. What has changed dramatically over the years are the patterns of water use. Our county's population has been rapidly expanded in our rural areas. To keep meeting the demand for water as development continues, we are drilling and using more wells.

Groundwater wells are not only depleting underground aquifers but they also impact our surface flows, directly pumping water out of our streams or interrupting groundwater that would otherwise enter into our streams. Sometimes wells are placed to close to our

streams, severely changing in stream flows, plus causing harm to the fish populations and aquatic life in general. Also changing our flows of groundwater, the in-stream flows get too low and too warm until fish can't survive.

Does this have any connection to a earlier opening day of trout season and all in-season stockings completed before May in Adams County by the PFBC? Our headwater streams, along with our feeder tribs that should be providing clean, cold water from the mountains are drying up in the summer. Because these streams are smaller and their values are less obvious, hardly anyone pays any attention to them when they dry up.

Usually in Adams County, early spring brings an abundance of rainfall and snowfall,

and with these types of precipitations stream levels are healthy. The tribs are also healthy at this time. In-stream flows for fish populations are good in springtime.

Controlling major development, concentrating new business in locations away from our water sources may help to maintain some types of stream flows in the spring that we presently enjoy. Land preservation is growing, but at too slow a pace in regards to the amounts of water losses in our streams. How can you make a difference in Adams County? Get more involved.

*Dave Swope, President  
Adams County Trout Unlimited*

## The Adams County Reservoir

When we wake up in Adams County on a normal day, water has been leaking out of the county all night in the same way that heat escapes from our houses on cold winter nights: silent and unseen. Almost all of us--whether hooked up to a water authority or to a well in the back yard--depend on groundwater.

Only Michigan has more wells per square mile than Pennsylvania. According to the Pennsylvania Topographic and Geological Survey, Adams County has more than 45 private wells per square mile; 81% of us depend on groundwater sources. We all know that many farms and some businesses have their own ponds as either a main or an extra water source. These ponds are the only reservoirs in Adams County.

We use groundwater instead of building reservoirs. There are several advantages to groundwater. First, it is cheaper to access it than to build reservoirs; second, it does not evaporate or run out rapidly; and third, its quality tends to be better than surface water. Recently we have experienced several droughts of varying length and severity. We need to save water for a sunny day the same way that we save money for a rainy day.

The best way to save water is to recharge our groundwater, since that source is effectively our reservoir. Actually we have lots of groundwater, but if we continue to take more out than is being replaced, the water may become difficult or even impossible to access.

Forests are an excellent tool for recharge. Forested areas prevent a large part of our rainfall from running rapidly into our streams and out of the area. But right now we have a problem with the trees.

The Eastern Hemlock is the state tree of Pennsylvania. However we are in danger of losing all of our Hemlocks due to an invasive species called the Woolly Adelgid. This is especially unfortunate, as Hemlocks create a very special streamside environment which holds a high volume of water and, most important, cools stream water. Losing the Hemlocks means we must find new ways to improve groundwater recharge.

Another of our problems is impervious surfaces. Roads, houses, businesses, schools, any part of our area where rainwater runs off very rapidly, is unavailable for groundwater recharge. This loss needs to be considered when planning growth. Also we must save land such as forests and other kinds of plantings which efficiently recharge groundwater as a balance against impervious surface run off.

All of us in Adams County need to be aware of how complex the process is by which we get this most essential resource. Public officials and groups which are working to keep our water clean and plentiful need financial and volunteer support. For example, the Watershed Alliance of Adams County is working on several projects to ensure that the quantity and quality of our water are adequate for current and future needs, and the Land

Conservancy of Adams County acquires land and easements and encourages landowners to maintain habitats which promote groundwater recharge.

*R B Lasco*

## Newest Board Member

### **R. B. Lasco, Director**

Watershed Address: Willoughby Run, tributary to Marsh Creek

Biography: Lasco is retired from Montgomery County (Maryland) Public Schools, where he was an English teacher for 15 years and a school librarian for the remainder of his career. He was raised on a lake in Michigan and took an A.B. and an M.A. degree from Central Michigan University. He also holds an M.S. in Library Science from McDaniel College. Currently Mr. Lasco is a part-owner of the Ragged Edge Coffee House in Gettysburg, and has lived in Gettysburg since 2003. He is a longtime member of Trout Unlimited.

*Also, please welcome  
past President Charlie Skopic  
back to the board! Charlie is  
completing a term vacated by a  
previous board member.*

# Well, Let's Talk Water

There have been a few sprinkles and showers out there, but for the most part, it's been dry this summer. Anyone with a lawn is familiar with the dust and crunchy grass. So at first glance, it should come as no surprise there are municipal folks talking about water and its conservation.

But Highland Township officials have been drafting a well-protection ordinance for several months now and are moving forward with the plan with help from an engineer. The ordinance is meant to ensure residents' wells are not adversely affected by incoming developments or businesses that might withdraw high volumes of water. That could mean restricting allowable uses for some properties and setting standards for well installations.

Highland is all too familiar with the potential problems major developments could have on existing wells. During hydrogeological testing for the incoming 279-home Highland

Overlook subdivision, 500-foot test wells did have an impact along Thompson Lane. Water levels dropped between 5 and 10 feet when the test well was pumped.

We say that, at first glance, water talk should come as no surprise because it seems people around here only seem to care about water supplies when there's a drought. Just think back to the last major drought we had in 2001-02. Local reservoirs were down by almost 50 percent or more. Restrictions on how people could use their water had many residents up in arms, inspiring talk of building moratoriums to prevent new wells from sapping what little supplies were left.

As always, it seems to take a real pinch to the behinds of the average resident to make them pay attention to what's important. That's why we're applauding the work being done in Highland, and also give nods of approval to Oxford and Reading townships, which have

passed groundwater protection ordinances, and to West Manheim Township (York County) and other local municipalities who have studied the issue.

Local residents and businesses - and those yet to arrive - deserve to have their water resources protected. Water resource management is probably the single-most important issue facing our area over the long haul. Talk of subdivisions and traffic improvements all are moot if there is no water to provide a basic standard of living.

We hope Highland's new ordinance comes to pass. And we hope other local municipalities - and their residents - start to take notice, before it gets too dry out there.

*Reprinted from  
HANOVER EVENING SUN  
7/19/2007*

## Kids' Corner

### Did You Know That...

- ◆ There is the same amount of water on Earth as there was when the Earth was formed. The water you drink could contain molecules that dinosaurs drank.
- ◆ Water is composed of two elements, Hydrogen and Oxygen. 2 Hydrogen + 1 Oxygen = H<sub>2</sub>O.
- ◆ Water is the only substance found on earth naturally in three forms: solid, liquid and gas.
- ◆ Water expands by 9% when it freezes, so ice is lighter than water, which is why ice floats in water.
- ◆ Water is the most common substance on Earth, but less than 1% is potable, or drinkable by humans.
- ◆ What's dumped on the ground, poured down the drain, or tossed in the trash can pollute the sources of our drinking water.
- ◆ People who rely on their own private wells are responsible for their own water quality.
- ◆ A child's body is approximately 75% water, so is your brain.
- ◆ A person can live about a month without food, but only about a week without water.
- ◆ More water is used in the bathroom than any other place in the home
- ◆ A dripping faucet can waste up to 2,000 gallons of water a year. A leaky toilet can waste as much as 200 gallons of water a day.
- ◆ Today there are many more people using the same amount of water we had 100 years ago.

### Water Word Search

DRIPPING	HYDROGEN	POTABLE
FAUCET	MOLECULES	RESPONSIBLE
LEAKY	GAS	WASTE
TOILET	LIQUID	BATHROOM
EARTH	SOLID	
OXYGEN	POLLUTE	

T	N	X	T	P	S	M	P	H	M	H	T	M	T	O
Z	E	U	Y	O	U	W	J	S	P	Y	E	X	L	D
I	E	C	L	T	I	O	E	F	P	D	L	O	I	N
O	F	I	U	P	G	L	A	O	A	R	I	T	D	P
D	D	T	D	A	U	K	L	R	E	O	O	I	O	C
A	R	X	B	C	F	L	H	N	L	G	T	U	C	I
L	F	I	E	S	U	Z	E	O	B	E	Z	H	U	R
M	E	L	P	T	A	G	P	S	I	N	P	V	I	H
O	O	A	E	P	Y	G	Z	C	S	X	J	C	M	T
M	B	M	K	X	I	A	H	D	N	J	I	U	E	Q
D	L	D	O	Y	R	N	X	O	O	X	K	A	A	U
S	S	E	L	U	S	N	G	H	P	U	H	F	R	H
B	A	T	H	R	O	O	M	Y	S	R	Y	M	T	F
E	L	B	A	T	O	P	Q	E	E	A	B	O	H	A
L	I	Q	U	I	D	U	G	F	R	E	T	S	A	W

# Calendar of Events

*Board meetings are now held on the third Wednesday of the month at 4:30pm at the Adams County Agricultural and Natural Resources Center.*

**There will be no August Board meeting**

August 18, 2007 - **Growing Native Ambassador Training** Location: Strawberry Hill Nature Center Time: 9am - Noon

September 19, 2007 - **WAAC Board Meeting** Location: Ag Center Time: 4:30pm

September 22, 2007 - **Chemical Monitoring Training for the Middle Creek Partnership** Location: Strawberry Hill Nature Center  
Time: 2:00pm Contact Vy Trinh at (717) 334-0636 ext 344 or [vtrinh@adamscounty.us](mailto:vtrinh@adamscounty.us)

October 17, 2007 - **WAAC Board Meeting** Location: Ag Center Time: 4:30pm

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

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