

October

Volume 4

Issue 2



### Inside this Issue

Review of Conservancy  
Activities 2

Lackawaxen/Shobola Compre-  
hensive Plan Meeting 2

The Problem with Lawns in  
Our Watershed 3

How Deep are our Lakes 3

Membership Application 4  
Board of Directors

Joyce Laudise, President  
Peter Loenwigkeit, Vice Presi-  
dent

Joe Messineo, Secretary  
Ralph Cioppa, Treasurer  
Peter Wulfhorst, Past-President  
Jeff Seeds, Webmaster

Linda Cioppa  
Glyn Eisenhauer  
Sheila Hodges  
PD McCullough

Pat Messineo  
Paul Palladino  
Rich Schuster  
Nelvia Wall

The mission of the Conservancy is to promote a better understanding of the Twin/Walker Creeks Watershed and its ecosystems and to protect, restore and enhance the watershed through proper management and watershed stewardship.

## Keeping Rain Water Where It Falls

By Peter Wulfhorst

As residential and commercial development increases in the Twin/Walker Creeks watershed as well as Pike County, the volume of water running across the land into our streams and lakes increases. This water is known as stormwater runoff. In order to reduce this stormwater runoff, communities and homeowners can address the amount of impervious surfaces associated with stormwater runoff. The Twin/Walker Creeks Watershed Conservancy will present "Keeping Rain Water Where it Falls", a program that will focus on designing, installing and caring for landscapes that benefit our local environment by keeping the rain water on site and allowing it to seep into the ground. The water gets cleansed as it trickles through the ground and replenishes our drinking water supply. The result is also less stormwater carrying pollutants to waterways and causing flooding along the way. You will learn how increased impervious surfaces are affecting our watershed and the water quality of our streams, how to design and install a Rain Garden to capture runoff from your home and community, how riparian buffers can prevent nutrients and other pollutants from entering our streams and lakes. You will also learn what plantings are better alternatives to grass in reducing impervious coverage.

**Keeping Rain Water Where it Falls** will take place on **Saturday, October 27 at 10 am** at the **Walker Lake Clubhouse**. The speaker will be **Vincent Cotrone**, Urban Forester/Educator who has been with Penn State Cooperative Extension for 12 years. If you are concerned about water quality and what you can do to keep our lakes clean, you should attend this annual meeting. Everyone will take home a prize that can be used to enhance your yard or your home.

## From the TREASURER By Ralph Cioppa

Approximately 75 members have renewed their membership or initially joined the Conservancy. Twin Lakes Property Owners' Assoc contributed \$1000. The Twin Lakes Park Association contributed \$100. Walker Lake Landowners' Assoc contributed \$450 plus use of their facilities for meetings and the laboratory. There is \$13,011.87 in our checking account. The CD has a value of 12,417.60 as of September 30, 2007.

We will pay \$1250. for the summer series of tests and analysis by F X Browne of the water of Walker Lake and both Twin Lakes. This year we will pay for newsletters and provide needed information and services to the people in the Watershed. We will coordinate the stormwater alleviation on Maple Dr using the grant money we received in June and additional funds. Your generosity since June has allowed us to work for the benefit of the Watershed. We thank you.

# A Review of Conservancy Activities

*By Joyce Laudise & Peter Wulfhorst*

## Water Monitoring

Kirk Mackey, Chet and Pat Dawson completed the fourth sampling on the 3 lakes for the season on September 22. Bill Andrews delivered the samples and data sheets to the F X Browne Laboratory at Marshalls Creek. F X Browne will complete its report in November. The Conservancy now has 5 plus years of data on the watershed since the Watershed Assessment Report was completed in 2003. It is now time to look at the data anew and get suggestions for ways to better protect and enhance the watershed. We are in contact with the Consortium for Scientific Assistance to Watersheds (C-SAW). This organization consists largely of specialists from universities and is mostly funded through the PA Dept of Environmental Protection.

## Stormwater Projects

Maple Dr. near the intersection of Pond Dr. is one of the sites identified in the Assessment Report as a Non Point Source Pollution Problem Area. The Conservancy received a private foundation grant to design and permit a solution utilizing Best Management Practices to reduce runoff into Walker Lake at this site. The Conservancy sent out Requests for Proposals to engineering firms to solicit their services to complete this phase of the project. The Conservancy board is hopeful that the engineering design and permit application work can be completed by the end of 2007. The next step is to seek other grant money to start construction in 2008.

Another site is Walker Lake's Sandy Beach off Twin Lakes Rd. Because the site gets runoff from a state road we have asked Penn DOT to help in alleviating this problem area. In the last few years the Pike County Conservation District (PCCD) has helped with solutions to runoff problems on Big Twin Lake at Sagamore and Twin Lakes Park. The associations affiliated with these sites carried out the recommendations made by the PCCD.

If you have a ditch on your property that flows directly into a stream or lake in the watershed let us know and we can point you in the right direction to finding a way to reduce this runoff.

## Conservancy Members in the Classroom

As part of our mission to promote an understanding of the watershed, Conservancy members including Joyce Laudise, Pat Messineo, Norma and Paul Palladino participated in an Environmental Awareness Day at Shohola Elementary School in May for 4th through 6th graders. Nelia Wall demonstrated the impact of increased housing on a community. A member of the Milford Water Authority spoke to the students about groundwater. Peter Wulfhorst demonstrated the Enviro-scape Non-Point Surface Water Pollution Model. We will do the same in October and expand the program to include 2nd and 3rd graders. Peg Bruton and Joe Messineo will help with the extra load. The topics we will cover are the "Water Cycle" and "What is a Watershed." The Conservancy is developing a conservation trail on school property that educates students about water resources. Ralph Cioppa has already identified significant trees on this old logging road. The Conservancy is working with Shohola Elementary School to obtain funds to complete work on the trail.

***Lackawaxen / Shohola Joint Comprehensive Plan Public Meeting    October 25 6:30 PM***

***Shohola Township Fire Department, Route 434***

***The Meeting will address the Open Space, Greenways & Recreation Master Plan concept and present elements of the Comprehensive Plan. For more information, contact the Pike County Office of Community Planning at 570 226 6293.***

## The Problem with Lawns in Our Watershed *By Joyce Laudise*

If one has a lawn it gets fertilized. There are many streams, wetlands and lakes in our watershed. The problem is fertilizer, lime, pesticides or whatever else is used on a lawn is carried by rain during a storm to bodies of water. The nitrogen and phosphorus in this stormwater runoff lead to algal blooms. Algae thrive, die then decay. In the decay process lots of oxygen dissolved in the water is used up. The oxygen that fish and other aquatic animals need to survive gets consumed. Equally serious, the growing number of deformed frogs is caused at least partially by runoff. Nitrogen and phosphorus in the runoff fuel a cycle that results in a parasitic infection of tadpoles leading to deformities in adult frogs. The increased algal growth in a body of water causes an increase in the snail population that thrives on the algae. The increased number of snails provides a breeding place for the parasites which are then released into the water where they infect tadpoles forming cysts that inhibit the proper development of their legs.

It is true just a small amount of pollutants may come from one household but the cumulative effect of many households adds up and can lead to serious problems in the waterways of our watershed.

When landscaping consider these alternatives to lots of lawn.

1. If building a new house keep land clearing to a minimum.
2. Maintain a natural buffer zone of vegetation along a shore. Grass does not have deep roots like the plants that tend to grow at the water's edge. The deeper rooted plants absorb runoff and assimilate nutrients before they reach the water. As an added bonus the taller plants discourage geese from feeding and defecating on your property.
3. Reduce the amount of lawn and add color plus excitement to your landscape by planting native plants. Native plants are defined as ones that were here before settlers arrived. Native plants are adapted to the area, are insect resistant and will thrive without fertilizer and watering. The possibilities are many. Follow the link (other resources) to Landscaping with Native Plants on the Conservancy's website, [www.twcwc.com](http://www.twcwc.com) for over 90 showy flowers, trees, shrubs and ferns that covered Penn's Woods and can be a part of your landscape today.

## How Deep Are the Lakes? *By P.D. McCullough*

For many years I had contemplated the idea of mapping the bottom of both Twin Lakes. The opportunity came when I became a Board Member of the newly formed Twin & Walker Creeks Watershed Conservancy (TWCWC). They had a need to map the bottoms of the lakes for determining the volume of water in the lakes and I volunteered to perform the task. With the aid of a GPS and a fishing depth finder I spent the entire summer of 2001 taking readings of both lakes in a 5 ft. square pattern, which eventually was changed to a 100 ft. pattern. This activity continued through the next two summers. More than 2000 readings were taken in all, and I finally finished all the readings at the end of the summer of 2003. I am thankful for the occasional help of Peter Loewrigkeit, Joe & Pat Messineo, John Rowell, Jim Landon and a tremendous amount of data entries by Rich Schuster.

The TWCWC was working with the engineering firm F.X. Brown to obtain help in issues relating to water quality and the environment. I turned all the data over to F.X. Brown whose computer program was capable of determining area, volume, etc. Some interesting data are:

	<u>Big Lake</u>	<u>Little Lake</u>	<u>Walker Lake</u> was mapped in 1994.
Area: Acres	285.5	54.3	109.2
Volume: million gallons	2,222	370.8	244.5
Max. Depth: Feet	44	49	23
Shoreline: Miles	2.91	1.28	2.77
Elevation: Feet	1,342	1,342	

All three lakes were formed during the retreat of the Wisconsin Glaciers which occurred from 17,000 to 22,000 years ago.

Twin & Walker Creeks  
Watershed Conservancy

132 E Shore Dr  
Shohola, PA 18458  
www.twcwc.com

**NON-PROFIT ORG.**  
**U.S. POSTAGE**  
**PAID**  
**PERMIT #15**  
**SHOHOLA, PA**  
**18458**

*Next Meeting 10 am—  
October 27, 2007 at the Walker Lake Clubhouse  
100 Walker Lake Road*

## 2007 ANNUAL CONSERVANCY MEMBERSHIP APPLICATION

*I am concerned with the future quality and quantity of the water resources in our neighborhood and would like to support the conservation efforts of the Twin/Walker Creeks Watershed Conservancy through a yearly membership.*

Name \_\_\_\_\_ Phone \_\_\_\_\_ Email \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

I am interested in learning more about volunteer monitoring efforts

### Check type of membership

Senior/Student—\$5.00       Individual— \$10.00       3 - Year Member - \$30.00

Family— \$15.00       Corporate— \$40.00       5- Year Member - \$50.00

\_\_\_\_ Number in Family

In support of the Conservancy's efforts, I would like to provide an additional gift in the amount of

\$ \_\_\_\_\_ Total Enclosed \_\_\_\_\_

Mail this form with check payable to:

**Twin/Walker Creeks Watershed Conservancy**  
**132 East Shore Drive**  
**Shohola, PA 18458**