#### May 2010 Volume 7

Issue 1



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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.



### President's Message - Dr. Ralph Cioppa

The Pennsylvania State Constitution, Section 27, Article 1, states: "The people have the right to clean air, pure water, and to the preservation of the natural scenic, historic, and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to com. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people."

The mission of the Twin & Walker Creeks Watershed Conservancy is to promote a better understanding of the Twin and Walker Creeks Watershed and its ecosystems and to protect, restore and enhance the watershed through proper management and watershed stewardship. The Conservancy was established in 2000 and incorporated in 2001. We have been very successful in meeting our mission.

Education is one of our primary goals. Education in the context of drilling for gas is our present thrust. Drilling for gas deep within the shale formations in our watershed is potentially destructive to our environment. Past experience has proven that many problems can arise. There is no need to enumerate them here. We are on the edge of the Marcellus shale deposits into which drilling (fracking) may occur. Should the gas companies insist on carrying out their agenda, we must try to insure that the pollution issues associated with fracking do not happen.

I repeat my statement from the previous President's Report. We will continue our educational efforts, insuring that our community is able to understand and be aware of these problems. Our first thrust is prevention of problems, second is control, and third holding the parties contributing to problems responsible. These parties may include our landowners, our legislators, workers, and enforcers. We can no longer be sure of support for our environment. Our State claims it will inspect, and enforce but the rules have been weakened. Agencies do not have enough trained staff to enforce whatever laws apply. If drilling ensues, we must insure that compliance with environmental concerns are met, and to strengthen our legislative process to formulate rules which insure oversight and enforcement.

The Pike County Conservation District's Annual Report for 2009 states "While we understand the potential benefits of developing cleaner, more sustainable energy resources for a growing population, our mission requires that we diligently examine all of the potential impacts of gas drilling, and advocate for policies and regulatory oversight that will truly protect our land and water resources." We fully support this statement.

Our next general meeting will discuss both sides of the issue of gas drilling. Glyn Eisenhauer, Shirley Masuo and Peter Wulfhorst will be there to present this educational program. We are sure that it will be time well spent and urge that you take the time from your busy life to attend.

Save June 12, 2010 for this meeting at the Walker Lake Clubhouse, 100 Walker Lake Road, Shohola, PA at 10 AM.

# Update on Marcellus Shale Natural Gas Drilling What \*You\* Can Do: - Shirley Masuo

A lot has happened with gas drilling since our last newsletter. On the federal level, the FRAC (Fracturing Responsibility and Awareness of Chemicals) Act, to bring hydraulic fracturing under regulation of the Safe Drinking Water Act, continues to gain co-sponsors in the house; and the EPA has announced a two year study to investigate the potential impact hydraulic fracturing might have on water quality and public health.

On the state level, Rep. George has introduced House Bill 2213, which would provide further protection to surface land and water supplies from natural gas drilling activities, including requiring the gas drilling industry to provide both a list of chemicals used in wells drilled, and the chemical compounds and concentrations of each chemical. The bill would also clarify local governments' traditional authority to regulate oil and gas activities.

On the local level, an open forum was held on gas drilling with Shohola supervisors present, for Shohola residents to express questions and concerns. The first forum took place on Thursday, May 6<sup>th</sup>, at 6:30 P.M. at the township municipal building. Gas drilling will most likely be coming to our area soon, and we will need to be prepared to maintain the best local protection possible for our watershed.

Also on the local level, the area premiere of the award-winning film, GasLand, by Pennsylvania documentary film-maker, Josh Fox. The film will be shown at the Delaware Valley High School Auditorium, June 14<sup>th</sup>. Tickets are \$5.00. For further information, contact Shirley Masuo at 296-2240 or e-mail at shirleym@ptd.net.

# 2009 Water Quality Monitoring Report for Walker Lake, Twin Lake and Little Twin Lake - Kirk C. Mackey

The primary purpose of the monitoring program is to characterize the tropic state of our three lakes based on the following measurements: Secchi Depth, Total phosphorus, Chlorophyll <u>a</u>. The monitoring program consists of volunteers collecting lake samples from the photic zone, gathering Secchi depth readings during the months of June, July, August and September. The water samples are the sent to FX Browne Inc., where total phosphorus and chlorophyll <u>a</u> analysis is conducted.

The results of the testing for the year 2009 are summarized as follows:

TWIN LAKE - Twin Lake can be classified as eutrophic with respect to the total phosphorus and mesotrophic with respect to chlorophyll <u>a</u> and transparency during 2009. The phosphorus TSI value was the highest of any study year, but was elevated by the high August phosphorus value. The chlorophyll <u>a</u> TSI value was lower (improved) in 2009 compared to recent years. The Secchi disk TSI value at Twin Lake was generally comparable to recent study years.

LITTLE TWIN LAKE - Little Twin Lake was mesotrophic with respect to total phosphorus, chlorophyll <u>a</u> and transparency during 2009. Little Twin Lake generally had the best water quality of the three lakes. Little Twin Lake had a higher than average chlorophyll <u>a</u> TSI value in 2009; this average was elevated by a very high July chlorophyll <u>a</u>.

WALKER LAKE - Walker Lake can be classified as eutrophic during 2009. The total phosphorus TSA value in particular was much higher than any of the other study years; this was due at least in part to a high total phosphorus concentration in August of 0.332 mg/L. However, all of the tropic state indicators fell within the eutrophic range in 2009 at Walker Lake

So what does all this mean? The water quality Twin and Walker Lakes showed some improvement in 2009 over past years with respect to chlorophyll <u>a</u> and transparency values. However, total phosphorus TSA values were higher in all three lakes than in recent years. This is most likely due to the high July total phosphorus values, which may have been weather-related. The water quality was better in all three lakes in September than it was earlier in the summer, which may have been related to climatic influences. The first half of the summer was very rainy, which allowed plenty of nutrients to enter the lakes. By the end of the summer, drier conditions prevailed and water quality (especially transparency) improved.

Nutrients reduction strategies that reduce the introduction of nutrients into the lake should be implemented to maintain or reestablish mesotrophic conditions. Such strategies may include septic system upgrades, storm water management strategies and control of Canada geese population.

I am by no means an expert when it comes to the technical analysis when evaluating the water quality of our lakes so I have prepared this summary based on the detailed report issued to the Twin Walker Creek Watershed Conservancy by our friends at FX Browne. It is through the joint partnership formed between the residences of Twin Lake, Little Twin Lake, Walker Lake and FX Browne that we have become proactive rather than reactive in our ongoing efforts to preserve the water quality of our lakes for generations to come. We all know that there is no "I" in "team" and I wish to thank all who have devoted countless hours to the monitoring of our three lakes. Should you like additional information regarding lakes classification I recommend you visit the following website <a href="http://www.mlswa.net/lkclassif1.html">http://www.mlswa.net/lkclassif1.html</a>

### A Pushy Plant, Japanese Stilt Grass - Joyce Laudise

Japanese Stilt grass, Microstegium vimeneum, is found in natural or artificially disturbed areas like roadsides, ditches, woodland borders and stream sides scoured by flooding. It thrives in moderate to dense shade and moist, nitrogen-rich soils that are acidic. Most likely it got to the US inadvertently from its far eastern home in packing material used for transporting Chinese porcelain.

Japanese Stilt grass is an annual that reproduces by seed. It can be identified by its lance shaped alternate leaves about 3 inches long that have a silvery strip of hairs in the center of the top surface. Delicate spikes of flowers appear near the tips of the stalks in late summer. Each plant easily produces 1,000 seeds that can remain viable in the soil for as long as five years.

The problem is stilt grass crowds out native vegetation. Deer don't eat stilt grass giving it an advantage over many native plants. It can be managed in several ways:

- 1. Avoid disturbing vegetation and soil in areas free of this grass.
- 2. If an area must be disturbed be sure to replant using native plants and grasses.
- 3. Pull by hand (in small areas) or use a mower or powered weeder when plant is in peak bloom but before it produces seeds. Dislodge shallow roots completely as plants break off easily and can form new roots.

### Treasurer's Report - Linda Cioppa

As of March 31, 2010 our checking account balance stood at \$5337.52. Our Money Market account has an additional \$5264.20. Since our last newsletter more than 30 watershed residents have contributed to the Conservancy. Thank you!! Please continue to contribute!!

Phase 1 of the Maple Drive project has been completed. The final cost for Phase 1 was \$33803.37, including \$9728.37 for engineering and \$23225 for construction. The Conservancy has recently paid an additional \$850 for repairs and maintenance of the ditches and pond. We will also be contributing to the landscaping costs of the homeowner. WLLA has made an additional contribution to the project of \$6000, which we will place in our Money Market account. There is another phase of the project that we are hoping to undertake shortly. The project has been successful so far in eliminating a substantial amount of the silt deposited in the lake from the north side of Maple Drive. We must take care of these issues to protect the health of our lakes and streams.

We have applied for a second Walmart Community Grant to help defray the costs of our participation in Shohola Elementary Schools Enviro Day and the printing of pamphlets discussing the gas drilling issue. We continue to need your contributions and help!!

## Twin & Walker Creeks Watershed Conservancy

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2010 CO	NSERVANCY CONTRIBUTION
	and quantity of the water resources in our neighborhood and would like to sup- WWalker Creeks Watershed Conservancy through a yearly membership.
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