



Tonetta Lake Advisory Committee

Spring 2007

How we care for our land and lawn in the Lake Tonetta Watershed is of critical importance to the health of our Lake. Nutrients and pollutants enter the Lake by surface runoff, storm drains and ground water.

The installation of new storm water management systems will reduce the amount of nutrients and pollutants entering Tonetta, but will not remove all suspended and dissolved particles. We must be vigilant to keep chemicals, fertilizers and other pollutants from entering Lake Tonetta. Though the Grass Carp that were introduced last season should dramatically reduce the amount of aquatic vegetation, they will not eat or control algae. Algae blooms reduce water clarity and contribute to the decline of the Lake.

In addition to reports of progress and improvements, this newsletter will recommend ways homeowners can protect and improve Lake Tonetta.

Lawncare

By Robert Zubrycki

Phosphorous is the nutrient which is responsible for most of the overabundant growth of aquatic plants and algae. One pound of Phosphorous entering the Lake will yield 1,100 pounds of plant growth. Phosphorous is only important to a new Lawn to encourage root growth. Even the Scotts Miracle-Gro Company has recognized the importance of reducing Phosphorous. The company has a goal for a 50% reduction in Phosphorous applied by the 2009 sales year.

REMEMBER: When shopping for fertilizer, Nitrogen is the first number, Phosphorous the middle and Potassium the third. For example, 4-0-10: N-P-K

Recommendations:

- Test your soil to see if fertilizer is needed
- Shop for very low or no Phosphorous fertilizer. Example: 30-0-4 or 29-2-4
- Seed bare spots to control erosion
- Cut lawns to 3 inches. This cuts down on weeds and watering and increases root growth.
- Leave clippings on the lawn. This will act as mulch and save on watering and the need for fertilizer.
- Leave an unmowed buffer strip at the edge of the Lake.
- If you must fertilize, Fall is the best time.

The "TURF LOVE" program:

The Putnam County Cornell Cooperative Extension is offering a new lawn care program for 2007, "Turf Love". For a fee of \$50.00, residents will receive:

- Spring kick-off workshop
- University Soil Nutrient Analysis
- Master Gardener and Professional Site Analysis at your home
- "Best Management" recommendations
- Follow-up phone calls
- Fall Workshop (with refreshments!)

Call the Cooperative Extension Office at 278-6738 to participate in this valuable program.



Carp Released in Lake Tonetta!!!

By Councilman Paul Johnson

On June 22, 2006, after years of effort in securing the necessary approvals from the New York State Department of Conservation, the Town of Southeast, with the assistance of the all volunteer Tonetta Lake Advisory Committee (TLAC), deployed 475 triploid grass carp into Lake Tonetta. "This has been an arduous process, having first submitted the application in November 2004," said Councilman Paul Johnson, Town Board liaison to the Tonetta Lake Advisory Board, "and we are looking forward to seeing the carp address excessive aquatic vegetation and hopefully improve water quality." Another 10 carp (plus 6 replacement carp for carp fatalities) were released on October 20th

by 5th Graders from C.V. Star Middle School. Residents around Lake Tonetta are reporting a "big difference" in certain areas of the Lake.

Storm Water Testing

By Karl Lebitsch

In August 2005 the Town of Southeast purchased an ISCO Water Sampler machine to sample stormwater runoff entering Tonetta Lake. The TLAC has established 6-8 sights that are to be sampled as rain events occur. The sample is taken over a 24 hour period at which time the sample is collected and submitted to a lab for analysis. When the analysis comes back we see the amount impurities the ISCO machine has captured. Past samples have indicated the presence of phosphates, nitrates, fecal coli form.

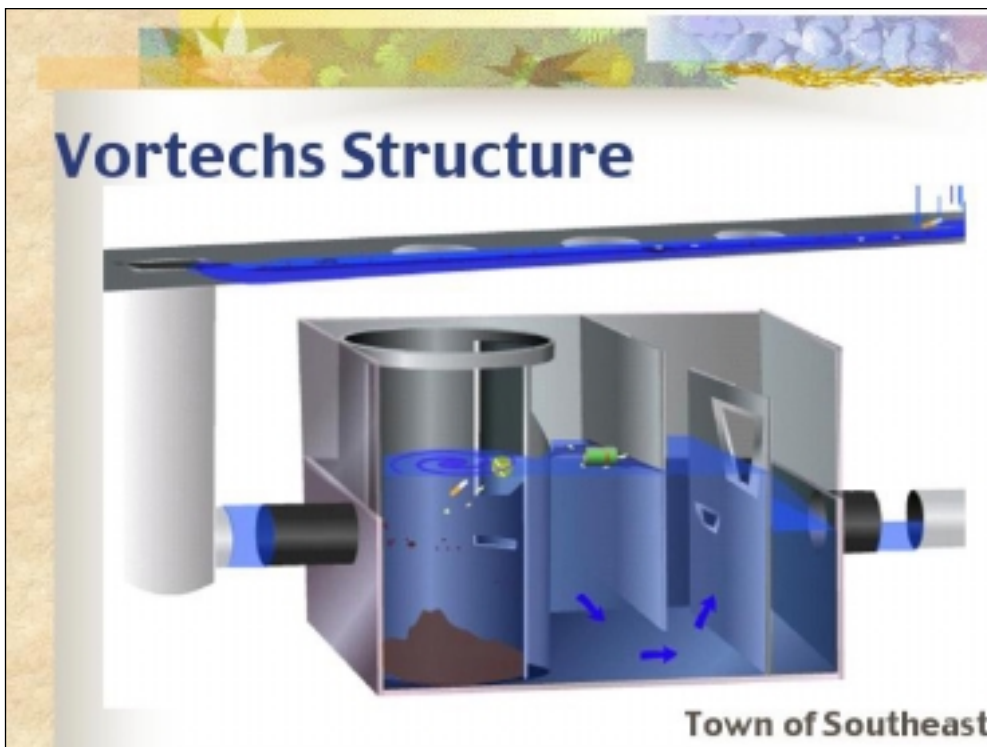
In 2006 we were able to take one sample. In order to increase the number of storm samples taken during rain events for the coming year the town is looking to hire a wetlands inspector.

Preserving our Lake

By Ralph Woodgate

Much of the work to improve the quality of the water in our lake is largely unseen. Over the past year the Town has changed the way that the run off drains into the lake and the final effect is visible to anyone who looks at the clarity of the water. Instead of draining directly into the lake via the numerous drains, gullies and ditches, every run off now passes through a crushed rock bed or small sediment pit where the grit and other dirt drops out of the water. This very simple system has proved to be extremely effective, especially when combined with the more complex and modern "vortek" systems where the water is processed underground and is comparatively clean before it moves on into the lake.

The "carp" which we finally added to the lake after hours of discussion, seem to be cleaning out the water based growth and it appears that the decision to place them in the lake was correct. We will see the results much more clearly when the Spring comes around but certainly the weed growth is lower now than at any time in the past years.



Specifically, improvements include the following:

1. *Upgrading of existing storm drainage on Tonetta Lake Way and installation of a Vortechs Stormwater Treatment Structure at the drainage outlet (see diagram). These improvements have been completed by the Town of Southeast*
2. *Upgrading of existing storm drainage conveyance systems on Shore Drive and Lakeview Drive. These measures, including replacement of existing catch basins with open bottom deep sump catch basins to promote sediment removal/infiltration, and upgrading of outlet protection measures, have been constructed by the Town of Southeast Highway Department.*

I think the past year has shown us all just how fragile our lake has become and how important it is that we watch carefully the progress of all of the work so far put into the conservation programs. It is a wonderful place and must be preserved at all cost.

In addition, treatment measures are being constructed in areas where major piped stormwater conveyance systems discharge to the Lake.

Stormwater Quality Improvement project

By Town Engineer Tom Fenton

The Lake Tonetta Stormwater Quality Improvement project includes several elements specifically related to stormwater management and storm drainage improvements. There are several locations around the lake where drainage inlet structures have been modified to promote sediment removal and infiltration of stormwater runoff.



The new carp fence to keep the carp from escaping.

3. *Installation of a Vortech Stormwater Treatment Structure and associated storm drainage improvements and improvements to the outlet channel at the 18" culvert on the north end of Shore Drive.* These improvements have been completed by the Town of Southeast Highway Department.
4. *Construction of a stormwater treatment basin north of Lakeview Manor on the west side of Shore Drive.* This stormwater basin will provide water quality treatment at the outlet of the most significant storm drainage conveyance system cur-

rently discharging to the lake. This portion of the project is in the permitting phase and should be completed this construction season.

5. *Reconstruction and stabilization outlet swale from North Brewster Road.* This portion of the project will rehabilitate and stabilize an eroded swale that carries stormwater runoff from North Brewster Road to the lake. This portion of the project will be completed by the Putnam County Highway Department.

Dear Resident,

We are excited about the prospects for improving Lake Tonetta. With the deployment of one of the most comprehensive stormwater treatment infrastructures in the County and sterile, grass eating carp, we hope to see an improvement in the lake's water quality. We hope that you find this newsletter prepared by the Tonetta Lake Advisory Committee to be informative.

Sincerely,
 John J. Dunford, Supervisor
 Paul Johnson
 Dick Honeck
 Pat Bonanno
 Lorraine Mitts

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Sponsored by the Town of Southeast Town Board
Tonetta Lake Advisory Committee

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