

# Turtle Creek Watershed District



## Geneva Lake News

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## Geneva Lake Drawdown A Success

The start of the planned Geneva Lake drawdown was delayed by the county replacement of the 7' x 14' reinforced concrete box bridge crossing on Freeborn County #26 downstream from the Geneva Lake Dam. The low stream flow of Turtle Creek created by the dry summer expedited the Freeborn County construction project. The start of the drawdown would have created by-pass problems for the bridge construction. The drawdown effort started soon after the bridge completion. On Monday August 16<sup>th</sup>, the DNR arrived with ample manpower, 120+ feet of 12" plastic tubing, a pump used for fire control, and a firm conviction the siphon drawdown would work.

I admit I developed reservations about the success of the siphon project. The first problem encountered was in filling the 120 foot length of the siphon tube. A high ridge area at the entrance of the inlet to the bay prevented the removal of all the air from the long tube. Another problem appeared to be the weight of the long 12" tube filled with water. Removal of all air from the tube, removal coordination of the caps for holding water to start the siphon, and maintaining pipe connection

seals were major problems incurred. Offers to rent a concrete saw were heard from the full gallery of "roadway observers."

After a long hard day of unsuccessful efforts while standing in the dark pea-green mucky waters of Geneva Lake, the DNR team drew on their experiences learned and regrouped. Adjustments were made, equipment was modified, and tools were developed. The team returned the next day and by mid afternoon on Tuesday August 17<sup>th</sup>, the first siphon began flowing.

The restoration project is well on the way to the 18" draw-

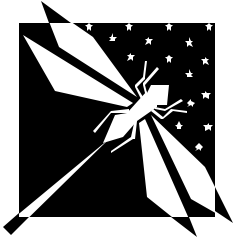
down goal developed in the Geneva Lake Restoration Plan. Jeanine Vorland's firm conviction to not modify the original Geneva Lake concrete dam structure was severely tested. Ms. Vorland and the DNR team have developed and constructed the siphon flow technique for the Geneva Lake Dam drawdown which has started the Geneva Lake Restoration Project on the way to success.

Tom Butler  
Chairman, Turtle Creek  
Watershed District



Siphons in place at the Geneva Lake water control structure, August, 2003.

## Buffers-Common Sense Conservation



Conservation buffers are a common sense way for you to protect your most valuable asset- your land and demonstrate your personal commitment to conservation.

Through the continuous Conservation Reserve Program (CRP) sign-up, the idea of conservation buffers has become economically attractive. Signups are taken any day at the Freeborn County USDA Service center without having to make a competitive offer as required during the general CRP sign-up. Your offers will be automatically accepted if all eligibility requirements are met.

Conservation buffers are best described as strips or small areas of land in permanent vegetation that help control potential pollutants and manage other environmental concerns. Filter strips, field borders, grassed waterways, field windbreaks,

shelterbelts, contour grass strips and riparian (streamside) buffers are all examples of conservation buffers.

Conservation buffers can be used along streams and around lakes or wetlands. They can also be installed at field edges or within fields. Buffers are most effective or course, if they are planned as part of a comprehensive conservation system.

To maximize their effectiveness and your overall conservation program, buffers should be combined with other proven conservation practices, such as conservation tillage, nutrient management, and integrated pest management. Working together, these practices will provide you with an effective yet profitable conservation program.

Here in Freeborn County many producers have take the oppor-

tunity to become a part of the conservation efforts. There are over 5000 acres of conservation buffers enrolled into the continuous CRP and the potential of more acres is great.

Rental rates range from \$92.00-146.00/ac in Freeborn County, depending on the soil type. If you are interested in knowing more about the buffer strip program, please call or stop by the conservation office in Albert Lea (507) 373-5607.

Patti Jackson Kelly  
District Conservationist  
Freeborn County NRCS

*In Freeborn  
County, over 5,000  
acres of conservation  
buffers are enrolled in  
the continuous  
CRP program.*



Buffers help filter storm runoff and waste water by trapping sediment, fertilizers, pesticides and other potential pollutants.

Buffers are strategically located to protect natural elements of the landscape.

# Efforts to Reclaim Geneva Lake Underway

Last August, the Minnesota Department of Natural Resources (DNR) initiated efforts to restore aquatic habitats in Geneva Lake. By reducing or eliminating large populations of carp and other undesirable fish species, desirable aquatic plants will come back and provide better habitat for wildlife and fish.

The combined effects of abundant rough fish, several years of prolonged flooding, and poor water clarity due to suspended silt and algae blooms have nearly eliminated the once abundant aquatic plants. As a result, comparatively little wildlife visits the lake and some desirable fish species are severely limited by competition for food and lack of good habitats.

Submergent plants generally come back if water clarity improves and they aren't being rooted up by the feeding actions of carp. The lake has also lost many acres of emergent plants, such as rushes and cattails that provide important habitat and water quality functions of their own. These plants are adapted to the natural cycles of drought and most species require exposed lake bottom to grow from seed.

Creating conditions for a fish winterkill is a key first step in the reclamation process. The DNR installed a system of siphons over the dam last fall in order to lower water levels during the fall and winter, making the lake more susceptible to a winterkill.

Drawdowns mimic the effects of natural drought to rejuvenate shallow lakes. And, in this case, the managed drawdown has been assisted by a natural drought. In anticipation of a



Vegetation began to take root soon after mudflats were exposed following the lowering of water levels, August, 2003.

winterkill, the DNR opened the lake to liberalized fishing to allow winter anglers to utilize as many fish as possible. Snowfall in late January and February finally began to encourage winterkill conditions. While there is evidence of winterkill the extent and effectiveness is unknown at this time.

Lowering the lake also lowers water levels in the lake's inlets so undesirable fish cannot find refuge in adjacent streams. Screens will also be placed at the dam to prevent carp from jumping the dam and returning to the lake from downstream sources.

In order to re-establish emergent plants the water management plan calls for continuing to lower water levels about 18 inches to 2 feet during the growing season to expose bottom soils around the lake margins. The amount of lake bottom exposed will vary from several yards to up to a few hundred yards in the shallow north bay. It is anticipated that water levels

will be allowed to recover naturally beginning in mid to late summer.

Notes: Changes in the law in 2003 made it illegal to operate an off-highway vehicle (OHV) in unfrozen public waters. OHV riders need to use extra caution during drought or drawdowns. While the water may be gone, the boundary of the public water remains.

Aquatic plants are crucial components for maintaining the health of the aquatic environment and the DNR recommends letting plants grow. Some removal may be allowed. Most aquatic plant management in public waters require a permit. Contact DNR Fisheries at 261 Hwy 15 S, New Ulm, MN 56073, telephone (507) 359-6000.

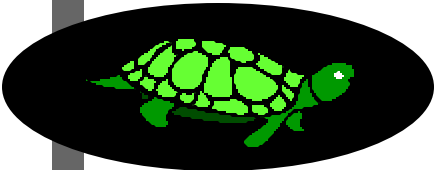
Check out the DNR Website [www.dnr.state.mn.us](http://www.dnr.state.mn.us). For more information, contact: Jeanine Vorland, DNR, 8485 Rose St., Owatonna, MN 55060, telephone: (507) 455-5841



*Drawdowns mimic the effects of a natural drought to rejuvenate shallow lakes.*



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