CEDAR LAKE PROTECTION
AND REHABILITATION DISTRICT
P.O. Box 93
Star Prairie, WI 54026
cedarlake-wi.org

ALUM TREATMENT UPDATE

The lake management plan identifies an alum treatment as the primary method for achieving water clarity improvements and removing the lake from the impaired waters list. From the plan summary: *Phosphorus is the main nutrient that leads to algae growth in Cedar Lake. Significant improvements in water clarity will result only if the release of phosphorus from the lake sediments is controlled. An alum treatment is recommended to reduce phosphorus release from lake sediments by 90%. Clear water is not possible if sediment phosphorus is not controlled.*

The Board is awaiting lake management plan approval from the Department of Natural Resources. With this approval in hand, DNR grants will be sought to support the treatment. Grants currently being pursued include a large scale Targeted Runoff Management Grant and a Lake Protection Grant. Meetings with grant officers, board representatives and our grant writer began in November 2013. ■

WEB/EMAIL NOTICES

To receive this newsletter and other lake notices electronically, subscribe to our email list!
Go to http://cedarlake-wi.org and join our list in the upper right corner of the home page.

Volume 1 • First Edition A NEWSLETTER FOR OUR FRIENDS AND NEIGHBORS January 2014

BOARD NEWS

Remembrance of Stuart Nelson

It is with sadness that we share the passing of Stuart Nelson on November 7, 2013. Stuart worked with great dedication to guide the development and acceptance of the Cedar Lake Management Plan. He was also an ardent supporter and active participant in local conservation organizations including Star Prairie Fish and Game and the Star Prairie Land Preservation Trust – including helping to establish the McMurtrie Preserve on Cedar Lake.

Stuart asked that donations in his memory be made to the Star Prairie Land Preservation Trust to support the Preserve (http://starprairielandtrust.org). We pledge to implement the lake management plan in Stuart's memory. ■

NEW BOARD MEMBERS

Kent Rebeck

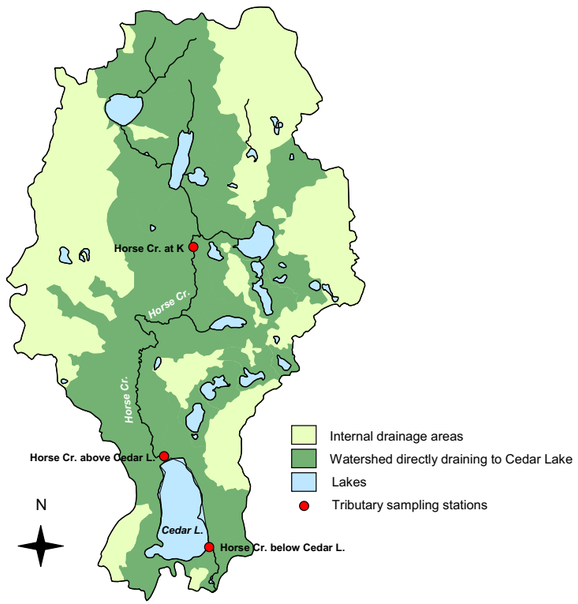
Kent Rebeck, a lake management plan committee member and lake resident was appointed by Board Chair, Brad Johnson to fill out the unexpired term of Stuart Nelson to represent St. Croix County on the Board. This appointment was approved by other board members.

Polk County appointed Joe Demulling to fill the vacancy created with the passing of Neil Johnson.

Due to the circumstances, these board members were both appointed. With the expiration of board member terms, regular elections are held at lake district annual meetings. The board of commissioners consists of 3 elected from St. Croix County and 2 from Polk County. The appointed Polk County Commissioner and Town of Alden Supervisor make up the remainder of the board. ■

PHOSPHORUS IN THE WATERSHED - ON FARM AND ON THE WATERFRONT

Phosphorus leads to algae blooms in Cedar Lake, and while lake sediments are the primary source of this phosphorus, an understanding of watershed phosphorus is still important. Eric Wojchik with the Polk County Land and Water Resources Department studied farm and residential soil phosphorus levels in the watershed that drains to Cedar Lake. His report, Horse Creek Watershed Soil Fertility and Phosphorus Index Assessment May 2013, is available on the Cedar Lake website (http://cedarlake-wi.com under Lake Studies/Reports).



Cedar Lake's watershed includes agricultural and residential areas.

Eric found that soil phosphorus levels on both farm fields along Horse Creek and waterfront properties are similar – averaging about 50 ppm. These levels are considered high for growing lawns. Turf grasses do not demand as much phosphorus as typical row crops like corn or soybeans.

Waterfront

Composite soil samples were collected in the lawns of 39 lake properties. Phosphorus fertilizer is generally not needed to enhance the growth of lawns on Cedar Lake. In fact, addition of phosphorus for lawn fertilization was prohibited in Wisconsin in 2009. The Polk County Shoreland Ordinance also bans phosphorus fertilizer use on shoreland property (within 1000 feet of lakes and 300 feet of rivers). Exceptions are made to establish lawns where there are low phosphorus test levels.

Runoff carrying nutrients and sediment from lake properties generally comes from areas of bare soil and from impervious surfaces such as roofs, driveways, and compacted lawns with sparse grass. To reduce runoff from waterfront property, consider the following:

- Minimize the amount of impervious surfaces (roofs, driveways, sidewalks) on your lake property.
- Collect surface water runoff using rock pits or trenches, rain gardens, shoreline buffers, and even rain barrels. Detention and infiltration of surface runoff is critical to settle out nutrients before they reach the lake.
- Maintain an adequate buffer area of natural vegetation that is not mowed directly adjacent to the lake.
- Grass clippings contain phosphorus. Keep grass clippings out of the lake and off of impervious surfaces where they may run into the lake. If possible remove grass clippings from lawns and compost them in an area that will not drain to the lake.
- Maintain a minimum of 3 to 4 inches of grass length in lawns at all times and aerate as needed to prevent compaction and encourage infiltration. Maintain grass stand thickness so no bare soil exists and a good thatch layer is present to prevent erosion.

Farms

The objectives of the farm assessment were to gather field soil test data, estimate phosphorus delivery from fields, identify areas of concern, and identify strategies to reduce nutrient runoff to Horse Creek and Cedar Lake. The main drainage to Horse Creek was the priority area of study.

Fields adjacent to Horse Creek had the highest average soil test phosphorus levels of all subwatersheds at 52.4 ppm. However, because of field management practices and field characteristics, delivery of phosphorus to Horse Creek was estimated to be quite low at 1 lb. per acre, per year. Many of these fields had conservation or no till cropping practices which minimize the potential of phosphorus and sediment delivery to water resources. Recommendations for farms focus on on-going data collection and sharing of the data. The lake plan supports a 30 percent reduction of phosphorus runoff from farm fields to be addressed through installation of best management practices and support of the farmer-led watershed council. ■

HORSE CREEK FARMER-LED WATERSHED COUNCIL

The Horse Creek Watershed is home to one of only four farmer-led watershed management pilot projects across the state. Farmers in the watershed are using information from the assessment to identify areas of concern and to develop solutions related to improving soil and water quality to address these concerns. The primary goal of the pilot project is to allow members of the agricultural community an opportunity to become actively involved in the process of developing a strategy to improve water quality, adopting that strategy, and ensuring its success. ■

NATIVE PLANTS SALE

Polk and St. Croix Counties both sponsor sales of reasonably priced native tree, shrub, and prairie plants. Native trees, shrubs, and groundcovers provide habitat next to the water and help to control runoff from waterfront property. For more information and to obtain an order form: St. Croix County Resource Mgmt. Division (715-531-1904) lori.stansbury@co.saint-croix.wi.us
Polk County Land and Water Resource Department (715-485-8699) pattijoa@co.polk.wi.us ■

JAPANESE KNOTWEED

Invasive species continue to be one of our top resource concerns for Cedar Lake. In 2010, the Polk County Land and Water Resources Department secured funding to address Japanese and giant knotweed, very aggressive perennials that pose both terrestrial and aquatic habitat concerns.

In 2012 a stand of Japanese knotweed was identified on 10th Avenue, near the bridge above Horse Creek. In 2013, five additional locations were documented around the lake. Three of these stands of knotweed were treated with herbicide. However, more applications will be needed due to the resilience of this species.

Lake residents are encouraged to familiarize themselves with the appearance of knotweed. If you identify this plant on your property, please contact Eric Wojchik at the Polk County Land and Water Resources Department, 715-485-8644. Lake resident contacts for aquatic invasive species are:
Bob Goodlad (715-248-7276) and
Doug Dixon (715-808-1402)

More information about this invasive is available in the Polk County LWRD project report, Giant and Japanese Knotweed Control in Polk and Burnett Counties found at, http://www.co.polk.wi.us/landwater/reports.asp. ■