

Cedar Lake Conservation Club | Water Quality Committee

2017 Year in Review

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2017 Water Quality Values on Cedar the Best in Decades

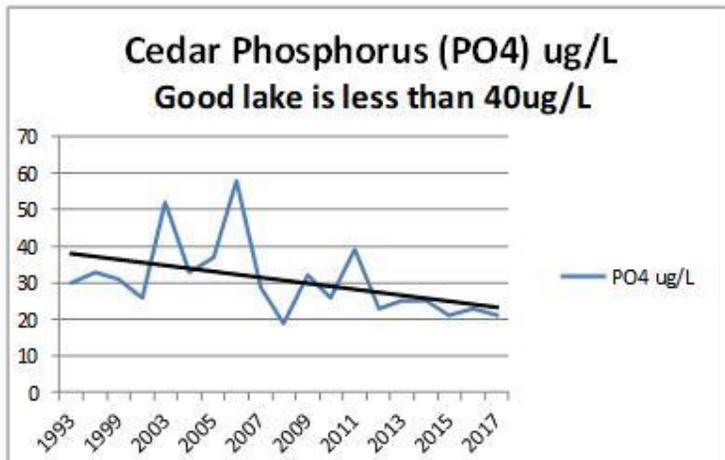
The results are in! Samples are regularly taken from our lake during the summer months by the Clearwater River Watershed District. Analysis is done by a laboratory.

We again had outstanding water quality values on Cedar in 2017. This year's cooler temperatures can contribute to seasonal improved water quality, but our trend towards outstanding quality is very strong. Many commented on how clear the water was this year. Some found sunglasses and wrenches that had been lost in the water long ago. Clearly, our Clearwater River Watershed District project implemented in 2006--and with recent enhancements-- is delivering results, even with several years of multiple inch rain events.

Here's a summary of our 2017 values:

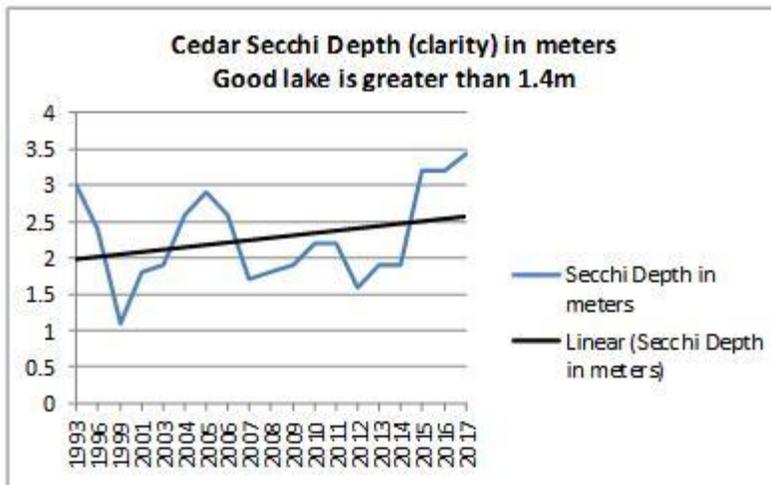
- ◇ The gold standard for monitoring lake water quality is the phosphorus level. A good lake is considered to have a level less than 40ug/l. The average 2017 phosphorus level in Cedar was 21 ug/L which is very close to our project goal of 20 ug/L.
- ◇ The big news was the outstanding secchi depth (clarity) reading of 11.3 feet (3.4meters). This beats the latest record in 2016 and is the best clarity since we started regular monitoring in 1993.
- ◇ The chlorophyll was 6 ug/L which indicates limited algae blooms.

We should take delight that all our stewardship has manifested in significant improvement in water quality. Each of our individual actions is important; from financial support for projects to mindful enjoyment of our beautiful lake.



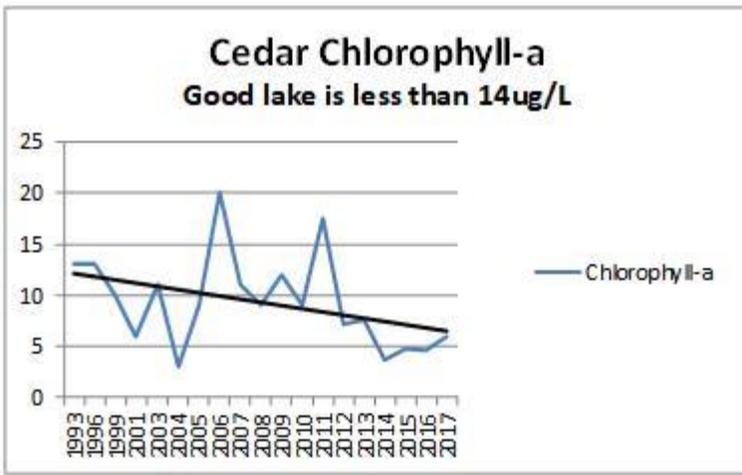
Phosphorus Level

The lower the phosphorus level is the cleaner our lake is. The primary phosphorus source for our lake is the south inlet. Clearwater River Watershed projects (fish barriers, buffer management, and retention ponds) reduce the amount of phosphorus into our lake.



Secchi Depth (Clarity)

A measurement that we all can identify with is the clarity of the water. A secchi disk is a 8-inch diameter disk with alternating black and white quadrants that is lowered into the water column until it can no longer be seen from the surface.



Chlorophyll-a

Chlorophyll-a usually goes hand in hand with the phosphorus level—the lower the better. In general, the chlorophyll-a level rises with the presence of algae blooms.

2017 Treatment of Curly Leaf Pondweed and Eurasian Water Milfoil

2017 AIS Treatment
Yellow Areas | CLP 18.8 acres
Red Areas | EWM 2.5 acres



We once again had a successful year for treating Curly Leaf Pondweed (CLP) and Eurasian Water Milfoil (EWM).

CLP

The CLP treatment was completed on May 9th and 18.8 acres were treated. Though the treatment was in general successful, our latest CLP mapping shows that an area on the northwest side near the CTY RD 6 DNR landing did not respond well to the treatment. We are working with our vendor regarding the situation and expect a credit to be applied to next year's treatment. We expect a similar amount of CLP to be treated in 2018.

EWM

The EWM treatment completed on July 12th and 2.5 acres were treated. The EWM mapping conducted in September indicates we have 8.2 acres to treat in 2018 which is very manageable. The EWM areas to treat in 2018 are in new areas in deeper water (9-11 ft).

The CLP and EWM costs are paid for by a combination of DNR and Wright County grants, and Clearwater River Watershed Projects. Please see the chart below for details.

The treatments, mappings, delineations, and grant applications are managed by the CLCC Water Quality Committee. The Committee works very hard all year long to evaluate and plan for the most cost effective and lake-friendly

2017 Financials		
Curly Leaf Pondweed (CLP) 18.8 acres	Treatment Cost	\$12,485
	2017 Delineation	<u>\$1,050</u>
		\$13,535
	DNR Grant	\$1,300
	WC Grant	\$3,000
	EXPENSE \$9,235	
	(CRWD PO6 Project)	
Eurasian Water Milfoil (EWM) 2.5 acres	Treatment Cost	\$2,100
	2017 Delineation	<u>\$1,050</u>
		\$3,150
	DNR Grant	\$125
	WC Grant	\$1,512
	EXPENSE \$1,512	
	(CRWD AIS Project)	

treatments. Numerous governmental and vendor relationships are skillfully managed.

Manned AIS Inspections on Cedar

As serious lake people know, there is not a magic bullet to prevent aquatic invasive species from entering our lake. Education is the key! In 2017, a total of 1,396 inspections were done on Cedar (CTY RD 6, Schroeder Park). Along with the DNR and Wright County inspections on CTY RD 6, CLCC funded an additional 112 hours of inspections. Additionally, CLCC and Wright County Parks parked funded an additional 174 hours at the Schroeder Park launch.

Wright County AIS Prevention Aid

The Minnesota Legislature allocates \$10 million per year directly to Minnesota counties to help fight the spread of aquatic invasive species. Wright County received \$225K in 2017. Wright Soil & Water Conservation District (WSWCD) is charged with leading this local effort. 2017 areas of focus for the AIS Prevention Aid in Wright County included:

- AIS treatment assistance to lake associations. Cedar received \$4,512 in grant monies from Wright County this year.
- Manned inspections at lake accesses.
- Decontamination program
- Rapid response protocol for early zebra mussel infestation.

Water Quality Committee Responsibilities

The Water Quality Committee is a very active CLCC committee. The committee is responsible for:

- managing aquatic invasive species treatment
- monitoring water quality
- engaging with government entities to preserve and improve water quality
- providing lake community education.