

## COLA LAKES MONITORING UPDATE - 2015

### Why should lake associations do water-quality monitoring?

- ascertain status of lake
- identify trends
- assist in diagnosis of water quality problems

### What is history of COLA monitoring?

Among the first things COLA agreed to do – original bylaws, etc

1992 - 20 COLA – Secchi only

1993 – Began TP and Chl-a program – AW Research Labs

2001 – Lab work moved to RMB - major review of monitoring and develop program; emphasis on impairment standards

2005 - Changes in funding - State Water Plan block grants, no longer; COLA phases out funding

Recent History - generally good participation - only 7 of 39 lakes are not currently involved with some monitoring

Most lakes stabilized (no trends) – some improving – better shoreline management, zoning, etc.

#### **COLA's strategy (see COLA positions below)**

Continue Secchi readings - look for changes

Reduce chemistry sampling - perhaps more samples, in fewer years

Expand other monitoring – shoreline, boats, in-flowing streams,

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
# of COLA lakes	41	40	35	35	40	36	38	38	42	40	40	40	38	39
COLA Lakes with monitoring										35	35	36	31	32
COLA lakes w/ 10+ Secchi	26	24	25	22	28	25	25	30	30	29	28	26	26	24*
Total COLA Secchi Obs	666	720	713	680	671	559	630	718	671	764	566	741	551	520*
COLA Lakes w/ 4+ Chl-a	24	8	10	7	11	7	16	18	35	20	15	17	20	20
Total COLA Chl-a tests	130	70	60	68	74	70	109	193	226	134	116	103	116	131
Total COLA TP tests	234	149	113	116	155	131	108	193	228	134	129	103	116	131

Sources: Annual Lake Water Quality Monitoring Reports 2009; 2010, 2011, 2012, 2013, 2014 from RMB, PRWD and CLMP

### Comments:

- I believe some lakes do not report their clarity observation data to CLMP; as a result, the results on number of lakes with 10 or more secchi readings, and the total COLA secchi observations, are somewhat underestimated.
- COLA lakes account for the majority of observations and sampling that occur in Becker County.
- A significant number of both COLA and non-COLA lakes' monitoring activities are supported in various ways by PRWD or CLWD.

### Current COLA Positions on Monitoring

- COLA understands that transparency (clarity) measurements are the most important component of a lake water quality monitoring program. COLA asks lake associations to recruit volunteers to participate in the Minnesota Citizen Lake Monitoring Program (CLMP) by taking and reporting 12 secchi disk readings each year.
- COLA urges lake associations to facilitate monitoring to ascertain the trophic condition of their lake(s). It is understood that this involves obtaining sufficient paired chlorophyll (chl-a) and phosphorus samples; for most lakes this requires 5 samples for each season for three years. The process should be repeated if there is a significant change in transparency.
- COLA will assist lake associations in interpreting data from their monitoring programs
- COLA will help lake associations to employ additional lake-specific monitoring programs to supplement monitoring activities described above.
- COLA will provide information on remedial actions needed to respond to problems identified by monitoring programs.

Citizen's Lake Monitoring Link - <http://www.pca.state.mn.us/index.php/water/water-monitoring-and-reporting/volunteer-water-monitoring/volunteer-surface-water-monitoring.html>

Contact by e-mail for instructions, Secchi discs, forms, - [clmp.pca@state.mn.us](mailto:clmp.pca@state.mn.us)