# **2014 NEW CLMN WATER CHEMISTRY LAKES**

# BIG CHETAC LAKE (WBIC: 2113300)

Sawyer County: 1920 Acres 28 Foot Maximum Depth Drainage Lake (Red Cedar River) Big Chetac Lake, also known as Lake Chetac, is a drainage lake forming the headwaters of the Red Cedar River. The lake is extensively developed and has problematic aquatic vegetation and algae. The Lake Association has a DNR Planning Grant to study the plants and develop an APM plan. Current Citizen Lake Monitoring efforts include expanded (chemistry) sampling in the central basin with secchi monitoring in the north and south basins. In order to supplement data for the grant, the Lake Association, Consultant, and Lake Coordinator would like to expand monitoring in the north basin to include phosphorous and chlorophyll sampling.

### **HALF MOON LAKE (WBIC: 2762700)**

Bayfield County: 106 Acres: 10 Foot Maximum Depth Land Locked Half Moon Lake is a shallow, clear water lake which experiences frequent winterkills. There is a public landing. The lake experiences dense growths of aquatic plants. A harvester has been used in the past. The Lake District is using a DNR Planning Grant to perform a plant study and create an Aquatic Plant Management (APM) Plan. To support this effort, it is necessary to monitor lake water quality, making this a priority request. This would involve expanded testing (total phosphorous, chlorophyll a) since secchi readings are not useful. The secchi disc hits the bottom of this clear, shallow lake. Due to shallowness of the lake, DO & temperature would not be included in the expanded monitoring.

#### **LONG LAKE (WBIC: 2674100)**

Burnett County: 251 acres: 41 Foot Maximum Depth: Land-locked Lake.

Long Lake is a landlocked, seepage lake with occasional winterkills. There is a public landing on this lake. Lake levels fluctuate greatly, and residents report recent reduction in fish populations and subsequent decline in loon nesting. Citizen Lake Monitoring Volunteers have collected secchi data since 1990. The lake is borderline mesotrophic-oligotrophic. The lake clarity has been relatively stable, but the residents would like to know more about the lake. The Lake Association has recruited volunteers and would like to expand to chemistry monitoring (phosphorous and chlorophyll sampling) in order to get a better picture of lake water quality.

# **LONG LAKE (WBIC: 2478200)**

Polk County: 272 acres: 17 Foot Maximum Depth: Land-locked Lake

Long Lake is a rather shallow, landlocked lake with multiple public accesses. Volunteers began collecting secchi data in 1992. During the 1990's the secchi readings were between 5 - 10 feet, and have since decreased to between 2 - 5 feet. Lake residents are naturally concerned about declining clarity and eutrophic conditions. The Lake Association would like to expand monitoring (phosphorous & chlorophyll) in order to get a better picture of the current lake water quality and follow up to past monitoring done as part of a DNR Planning Grant.

# **LOTUS LAKE (WBIC: 2616900)**

Polk County: 246 acres: 15 Foot Maximum Depth: Drainage Lake (Horse Creek): Lotus Lake is a rarity because the American Lotus plant grows in this lake. There is a park with a boat ramp on the north side. The lake is rather shallow and experiences occasional winterkills. Moderate and sometimes heavy summer algae blooms can occur. There is a public landing and park on this lake. Volunteers began collecting secchi data in 1996. Collections were sporadic until 2011, after which they became consistent. The Lotus Lake Association has become concerned over the hyper-eutrophic nature of the lake (TSI 77). In 1961 only 4 cottages surrounded Lotus Lake (then called East Lake). Waterfowl and muskrats were common in the six acres of wetlands adjoining the lake. By 2002, Lotus Lake had 49 parcels. Today there are many riparian homes, Lotus Lake Estates, and subdivisions in the watershed. Waterfowl do frequent the lake, but a local hunter noted it was no longer a prime location for duck hunting. Approximately 20 % of the watershed is agricultural, which likely contributes to the nutrient loading. Polk County Land & Water has a grant to study this lake. The Lake Association believes it has willing volunteers and would like to continue the expanded sampling to include chemistry monitoring (phosphorous and chlorophyll sampling) in order to get a better picture of lake water quality over future years. Due to the shallowness of the lake, D.O. and temperature would not be included in the expanded monitoring.

### **DES MOINES LAKE (WBIC: 2674200)**

Burnett County: 229 acres: 37 Foot Maximum Depth: Land-locked Lake
There is a public access on this lake. The Secchi volunteer retired about five years ago. A new volunteer would
like to assume the responsibility for monitoring the lake. The volunteer will take secchi readings in 2014 and
hopes to be approved to do expanded chemistry sampling in 2015.