

## **Lake Owen Association Lake Manager Activities Report Board Update April 15, 2020**

### **Decontamination Station at North Landing**

The US Forest Service approved the permit for construction of a decontamination station at the North Landing for a pilot in 2020 on March 11, 2020. However, the decontamination station construction and operation will not be allowed with a subsequent closure of all recreation sites in the Chequamegon-Nicolet National Forest announced April 10, 2020. This closure includes the North Outlet Landing and Two Lakes Campground and Landing among other facilities.

IN COMBINATION WITH A SUSPENSION OF CLEAN BOATS, CLEAN WATERS ACTIVITIES UNTIL FURTHER NOTICE AND A NEED TO IDENTIFY A MEANS TO SCHEDULE AND PROVIDE PAYROLL SERVICES, AIS PREVENTION PLANNING WILL BE CHALLENGING THIS YEAR.

### **AIS Ordinance**

The Bayfield County amendments to their Aquatic Invasive Species ordinance passed out of committee on February 21, 2020. Next steps are corporation counsel review and presentation to the full board. No recent updates are available at this time. Recent Bayfield County Board activities have focused on COVID 19 response.

### **WDNR Lake Protection Grant Reimbursement**

A second reimbursement request was submitted to the WDNR on January 15, 2020. The lake manager reports served as the grant status report which was approved on the day of submittal.

Total expenses: \$19,136

Reimbursement: \$14,352

Remaining grant: \$110,752

### ***Lake Owen Data Collection Update***

#### **Water Clarity Study**

Our study focused on why Lake Owen has such clear water and low algae growth, even though high concentrations of phosphorus are present in the bottom, cold layer of water. The full report will be available by April 30, 2020. Results and methods are rather technical, so executive summaries will be prepared. The first focusing on Lake Owen water clarity is drafted. The second summary will describe nutrient dynamics and watershed influence across different lake sub basins.

## **Study Recommendations**

Continued monitoring at various locations across the lake is supported by the existing Lake Protection Grant. (Detail is available upon request). New study recommendations are outlined below.

- Begin analysis of groundwater charge into Lake Owen. This will involve using GIS and water budgets to better determine groundwater flow with more precision. In addition, test shallow wells and springs for TP, SRP and chlorides to determine the nutrient loads from groundwater (the chloride is to verify no septic system inflow in shallow wells). This will allow further understanding of the role groundwater plays in the nutrient dynamics in Lake Owen. Results may lead to a more in-depth groundwater analysis in the future using stable isotopes, but we can likely get an accurate groundwater budget with present data. *(Estimated cost: \$16,936 – not included in existing grant)*
- Install thermistor string in south basin deep hole. Since Lake Owen stratifies so strongly, this long-term data can help Lake Owen be a leader in studying the climate change effects on northern WI lakes. This practice is just beginning to be a protocol in some lakes. *(Estimated cost: \$4,455 – not included in existing grant)*
- Establish a cloud location for Lake Owen report and data storage.

## **Plant Survey**

We completed the full lake, point intercept survey in early August. The report and a report summary are available. Excerpts from the report and a link to the full report will be posted on the LOA website including an overall executive summary, a description of invasive species found, and aquatic plant habitat values.

## **AIS Activities**

- Verified yellow iris locations for herbicide application (2019). Will re-survey yellow iris in June 2020 and evaluate the treated sites for effectiveness in June 2020.
- Identified aquatic for-get-me-not in 2019. All locations recorded and mapped. We are not concerned at this point as all are isolated, individual plants.
- Identified invasive phragmites bed on a sand bar on southwestern shore. This small bed should be removed using the best methods available for phragmites.
- Will conduct AIS meander surveys monthly from June-August 2020.
- Lake Owen susceptibility to zebra mussels handout updated.

## **Web Site Recommendations**

Web site recommendations including a list of recommended topics developed with input from the board and Ed Ronkowski are available.

## **Steering Committee**

A Steering Committee meeting of LOA and partners required to guide Lake Protection Grant activities has been postponed until further notice. Steering committee topics are identified in the Strategic Plan Implementation Table.

### **Shoreland Restoration**

Individual consultations and native plant restoration work postponed pending essential work guidance related to COVID 19 response.