

Freeborn Lake Update Spring 2019

Efforts to improve water and habitat quality in Freeborn Lake continue. Lake levels are gradually increasing from the extended drawdown that began in the fall of 2017 to facilitate dam replacement and improve aquatic habitats. In spring 2019 there appears to be good progress toward habitat and water quality objectives.

Department of Natural Resources (MNDNR) staff had lowered lake levels as far as possible in fall 2018 for a second winter drawdown to manage rough fish populations. Local observers reported a few common carp had survived the previous winter ('17-'18) dewatering. While DNR staff did not document any carp in fish traps and netting in the lake and adjacent ponds in late summer 2018, black bullheads, green sunfish and various minnows were found. Since undesirable fish populations are difficult to eradicate, a second winter drawdown was implemented. With the heavy snow cover and continuous cold that developed in mid-winter the lake froze to the bottom over much of the basin. Dissolved oxygen samples from deeper water near Arrowhead Point in early March suggested conditions in the lake should have been good for a second fish kill.

Minnesota Department of Natural Resources staff are gradually replacing stop logs in the dam to increase water levels as the growing season progresses. Too much water too early can be detrimental, so water clarity and plant growth are used as cues to govern recovery from the drawdown. As of early June the lake level is about a foot below average conditions for the time of year. With adequate precipitation water levels in the lake are expected to return to normal by mid-summer.

Waterville Fisheries restocked Freeborn Lake with 254,000 northern pike fry and about 800 pounds of yellow perch. The fish species selected for re-stocking were strategic to help support water quality goals. Not all popular game fish are well suited to shallow water ecosystems. Pike and perch are tolerant of low oxygen in winter and, as predators of other fish, they can help suppress more deleterious species. The northern pike and yellow perch should thrive with the improved habitat and water clarity and provide future fishing opportunities. Other fish species that can be a detriment to water quality in shallow lakes should be excluded from returning to the lake from downstream areas by the fish barrier culvert at the County 6 crossing.

The LeSueur River Watershed Network, Freeborn Soil and Water Conservation District and local farmers continue to identify and implement additional strategies to improve water quality in the lake's catchment area. Watershed efforts will compliment "in-lake" management actions.

As with any major lake rehabilitation project there are questions and concerns. The project will take time and continued efforts to see positive changes. One question that regularly comes up involves the predicted changes in the amount of vegetation in the lake. Although the absence of rooted vegetation was a symptom of the lake's degraded condition, vegetation does influence lake views, access and recreational activities. Minnesota law provides for lakeshore owners to obtain permits through the MNDNR to clear aquatic vegetation for reasonable access

to open water and/or maintain a limited area free of submersed plants. Since plants provide habitat and improve water quality, the permit system helps to protect these values in the public water portions of the lake. For more information about aquatic plant management and permitting visit the Minnesota Department of Natural Resources website <https://www.dnr.state.mn.us/apm/index.html> or call the Aquatic Plant Management Permitting Staff in New Ulm at (507) 233-1218.

The rehabilitation project for Freeborn Lake is a cooperative venture with Freeborn County and Ducks Unlimited made possible by Minnesota's Outdoor Heritage Fund, Freeborn County Aquatic Invasive Species funds and a grant recommended by the North American Wetlands Council. Freeborn County continues to own the dam and fish barrier road culvert. The MNDNR will be responsible for aquatic habitat and fisheries management. Additional information can be found on line at <http://www.co.freeborn.mn.us/381/Future-of-Freeborn-Lake>.