



# Targeting Long Lake

## July 2016 Snapshots



Rice Creek Watershed District (RCWD) received a \$3 million Targeted Watershed Demonstration (Clean Water Fund) grant from BWSR in 2014 to reduce pollutants to Rice Creek, Pike Lake, and ultimately Long Lake in New Brighton. The Targeted Watershed Program focuses on watersheds where the amount of change necessary to improve water quality is known, the actions needed to achieve results are identified, and a majority of those actions can be implemented within a four-year time period. The Rice Creek Watershed District grant is the largest competitive grant ever awarded by BWSR.

Long Lake is a high priority for RCWD and its residents. Long Lake Regional Park is located on its eastern shore. The park is visited by nearly 500,000 people annually and includes a busy boat ramp and swimming beach. The Rice Creek Regional Trail and Rice Creek Water Trail are two additional noteworthy resources for park visitors. Unfortunately, Long Lake is not meeting state water quality standards due to excess phosphorus and is subject to severe algae blooms each year, limiting recreational use.

This grant will help fund some of the highest priority and largest impact projects identified in a decade's worth of reports and studies within the Rice Creek Watershed. The proposed projects are on public property and are estimated to provide 30-40% of the total phosphorus reductions needed, or 200-300 pounds, to meet water quality goals for the south basin of Long Lake; and a 25-35% sediment reduction, roughly equivalent to 230-340 pounds of phosphorus, to the north basin of Long Lake. Secondary benefits of these projects include increased wildlife and pollinator habitat, reduced frequency and duration of flooding after rainstorms, and improved aesthetics and recreation opportunities by reducing algae blooms.

"The District's goal with this initiative was to find high-impact, multi-purpose, regional projects to advance through the Targeted Watershed Demonstration Program that will have lasting and measureable improvements on Long Lake and the surrounding area," explained Kyle Axtell, RCWD Water Resource Specialist and Project Manager.



*Pictured top: A landscape architect's rendering of the proposed Iron-Enhanced Sand Filter at Hansen Park.*

*Pictured bottom: A new meandering creek channel is excavated (left) alongside the previously channelized Rice Creek (right) through the former TCAAP property.*

There are four major projects within this grant. The Middle Rice Creek Restoration Project will create nearly 2,000 feet of new stream within the former Twin Cities Army Ammunition Plant. Once completed, the project will reduce stream erosion, improve stream habitat, and decrease sediment and nutrient delivery to downstream Long Lake. Two large-scale stormwater management projects are planned in New Brighton (Hansen Park) and St. Anthony (Mirror Pond) to enhance flood storage and improve water quality treatment. This work will include removing contaminated sediment at both sites and constructing a large iron-enhanced sand filter in Hansen Park to remove additional phosphorus and suspended sediment from Pike and Long Lakes.

The RCWD is partnering with the University of Minnesota and Carp Solutions to conduct research that will inform development of a carp management plan. The project may include building barriers, aeration, adult removals, and/or other techniques determined by the study.

“This is a well-rounded effort including stream restoration, stormwater management and retrofit practices and even fisheries management,” added Axtell, “all working together to meet multiple goals shared by the RCWD and its municipal partners. We are thrilled that BWSR has been able to support these projects through the Clean Water Fund.”

All projects will be completed by the end of 2018.



*Harvesting large quantities of adult carp through winter netting is one of the several options being looked at to reduce the ecological damage caused by large numbers of carp in the Rice Creek Watershed.*