



# Sweeney Lake Improvement Project

## 2020 Activities and Outcomes

It was a busy year on Sweeney Lake! The Bassett Creek Watershed Management Commission completed several tasks related to the Sweeney Lake Water Quality Improvement Project.



### Curly-leaf Pondweed Treatment

In May, approximately 5.6 acres of curly-leaf pondweed (CLP), an invasive aquatic plant, was treated with an herbicide in various locations around the lake. The treatment was performed with the goal of reducing the chances of significant CLP growth after the alum treatment (see below).

### Alum Treatment

The first phase alum treatment was completed October 28<sup>th</sup> - November 5<sup>th</sup> with 37,700 gallons of alum and 18,000 gallons of sodium aluminate applied to Sweeney Lake in the north and south basins. Water clarity is expected to be significantly higher in 2021 as the alum keeps phosphorus locked in the sediments and unavailable for algae growth. The second and final phase of alum treatment is scheduled for the fall of 2022.



### Carp Removal

Over the summer, carp were removed from Sweeney Lake and Schaper Pond using baited box nets. Because carp disturb bottom sediments as they root around for food, it's important to keep their numbers low to reduce the amount of phosphorus released from the sediment – particularly after an alum treatment. Researchers have found that if carp populations are above 100 kilograms/hectare (kg/ha), they can have detrimental effect on water quality.

Summer 2020 Results:

Sweeney Lake: 452 carp removed, dropping population to 68 kg/ha

Schaper Pond: 152 carp removed, dropping population to 75 kg/ha

Surveys of carp movement indicate Schaper Pond is acting as a carp nursery. The BCWMC and the City of Golden Valley are currently evaluating options for long-term carp management. Options being considered include a low voltage electric barrier or non-electric physical barrier between the pond and lake, regular removal of carp, or stocking panfish to eat carp eggs.

Plans for 2021 include water quality monitoring and evaluation of carp management options.

This project is funded by the Bassett Creek Watershed and grant funding from the MN Pollution Control Agency. More information at: <https://www.bassettcreekwmo.org/projects/all-projects/sweeney-lake-water-quality-improvement-project>