

# Summary of the Staples Lake Comprehensive Management Plan, 2022



## Plan Purpose

In 2021, the Staples Lake District received WDNR grant funding for planning and technical assistance to prepare a comprehensive management plan for Staples Lake. With input from lake and watershed residents through surveys and meetings, the plan assesses lake conditions and water quality, identifies problems and causes, creates a vision and goals for lake improvements, and provides an action plan with management recommendations. The plan will also strengthen the District's ability to secure grant funding for related projects in the future

## The Key Challenge – Algal Blooms



In Summer 2021, the appearance of Staples Lake was green on 75% of the water-monitoring dates and the water clarity depth averaged 2 feet as measured by Secchi disc. The green color is the chlorophyll and other pigments found in algae, which can grow very fast (or bloom) in slow-moving or stagnant waters during periods of high temperatures. Too much algae can cause a host of problems, including reduced water oxygen levels, promote bacteria growth, and create a disagreeable odor. This algae growth not only can degrade fisheries, but can also produce cyanobacteria (sometimes called blue-green algae) as shown in the picture, which can be toxic to humans, pets, and other animals.

Staples Lake is nutrient rich (hypereutrophic), largely due to phosphorus. The 2020 *Staples Lake Phosphorus Report* found that about 60% of the phosphorus in the Lake's water is from external sources (inflow from upstream), while the remaining 40% is internal loading from Lake's sediment. It is believed that the largest percentage of this external loading is from agricultural sources. The plan includes recommendations to explore the use of ultrasound technology to reduce algae blooms, while working with County land conservation offices to reduce external phosphorus loading from upstream. Once significant external-loading reductions are achieved, the Lake District can consider projects to reduce internal loading, such as alum treatment.

## Vision Statement and Goals

**Staples Lake is a relaxing, four-season, outdoor recreation destination. The Lake's scenic shorelines, abundant wildlife, healthy aquatic ecosystem, and clear water make Staples Lake a great place for low-intensity, water-based recreation, such as fishing, swimming, and kayaking, and for friends, family, and visitors to gather, live, and enjoy the "northwoods" setting.**

### **Priority**

**Goal:** Remove Staples Lake from the Wisconsin 303(d) Impaired Waters List due to excess phosphorus and algal growth, while providing a healthy, balanced ecosystem for aquatic plants and fish.

**Goal 1:** Staples Lake water quality and clarity is improved, the number of days that algae blooms occur is decreased, and the Lake is swimmable during most days of the summer.

**Goal 2:** The aquatic plant community of Staples Lake will be healthy and balanced, while not impairing recreational enjoyment and navigation.

**Goal 3:** Staples Lake will have great year-round fishing, with a healthy, balanced fishery and strive towards a distribution of species similar to the 1993 fish inventory with good Walleye, Perch, and Largemouth Bass numbers and size distribution.



