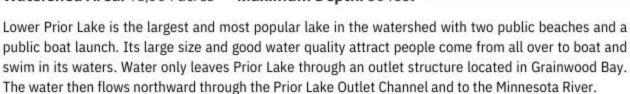
LOWER PRIOR LAKE: 2024 Water Quality Report Card



Quick Facts

Surface Area: 956 acres Average Depth: 13 feet
Watershed Area: 18,904 acres Maximum Depth: 56 feet

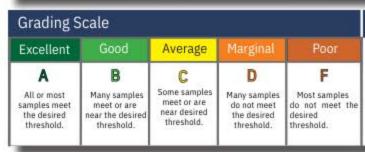


Lower Prior Lake has excellent water quality. This is due in part to a healthy and diverse population of aquatic plants. Over 40% of the lake bed grows aquatic plants including 15 different species of native plants. The District focuses efforts on protecting and preserving the lake's good water quality with projects that reduce phosphorus runoff.

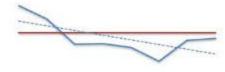
**statistically significant

WATERSHED DISTRICT

Water Quality Indicator	Risk to Water Quality	Grade (2022-2024)	10-Year Water Quality Avg (2015-2024)	10-Year Trend
PHOSPHORUS	Phosphorus is needed by plants and animals to survive but can cause algae blooms if there is too much phosphorus available. Sources of high phosphorus include fertilizer, human and animal waste, and soil erosion.	Α		Improving
Chlor-1 G 5 CHL-A	Chlorophyll-a is a measure of the amount of algae in a lake. Some algae is normal in a healthy lake, but high concentrations threaten aquatic life and can impede on recreation and enjoyment of the lake. Some can even create harmful toxins.	Α		No Trend
Clarity	Water clarity is affected by the abundance of algae and sediment in the water column. It is dependent on factors such as nutrients, temperature, wind, rain, and boat traffic. Low clarity means less sunlight to power photosynthesis in aquatic plants, which help keep the lake healthy.	A		No Trend



Graph Explanation



The **solid blue line** shows the annual change in water quality over a ten year span. The lower the line, the healthier the lake.

The District's goal is for the blue line to be below the red line, which is the water quality standard and the point at which the waterbody is not considered polluted.

The **blue dotted-line** is the trend line. A decreasing trend line shows improvement in the health of the lake over time.

LOWER PRIOR LAKE: Project Highlight

Prior Lake Outlet Pipe Pipe-Lining

The Prior Lake Outlet Channel (PLOC) is the only relief valve for the naturally landlocked Prior Lake watershed, making it essential to flood reduction. The first section of the Prior Lake Outlet Channel (PLOC) is a 0.4 mile long pipe. Water from run-off, streams, and lakes across over 30 sq. miles drain through this pipe (see map to the right).

Built in 1983, the pipe has seen high use and is reaching the end of life. In order to maintain and improve the pipe's function, a liner will be inserted through its existing manholes and cured to the surface of the existing pipe. This technology, called Cured-In-Place-Pipelining, requires no excavation. The result is a new, structurally sound, smooth pipe.

After months of work to secure grant funding (see photo), construction is expected in winter '25/'26, extending the life of the pipe by another 50 years.









