WEST VADNAIS

VLAWMO
Vadnais Lake Area
Water Management Organization

QUICK FACTS

Lake Catchment Area	**394 acres**
Surface Area	**213 acres**
Maximum Depth	**11.3 ft**
Average Depth	**7-8 ft**

Common Fish

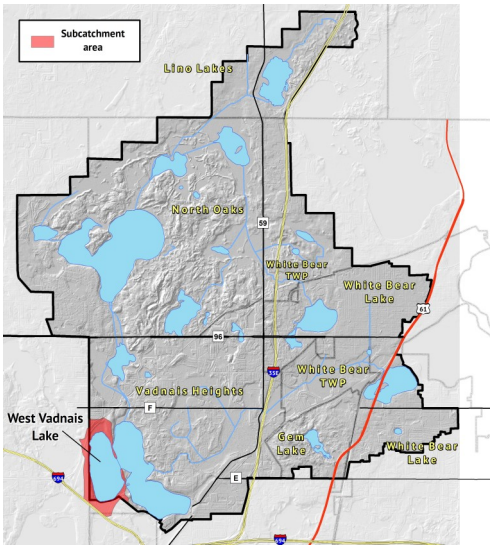
Bullhead, common carp, pan fish

Predominant Vegetation

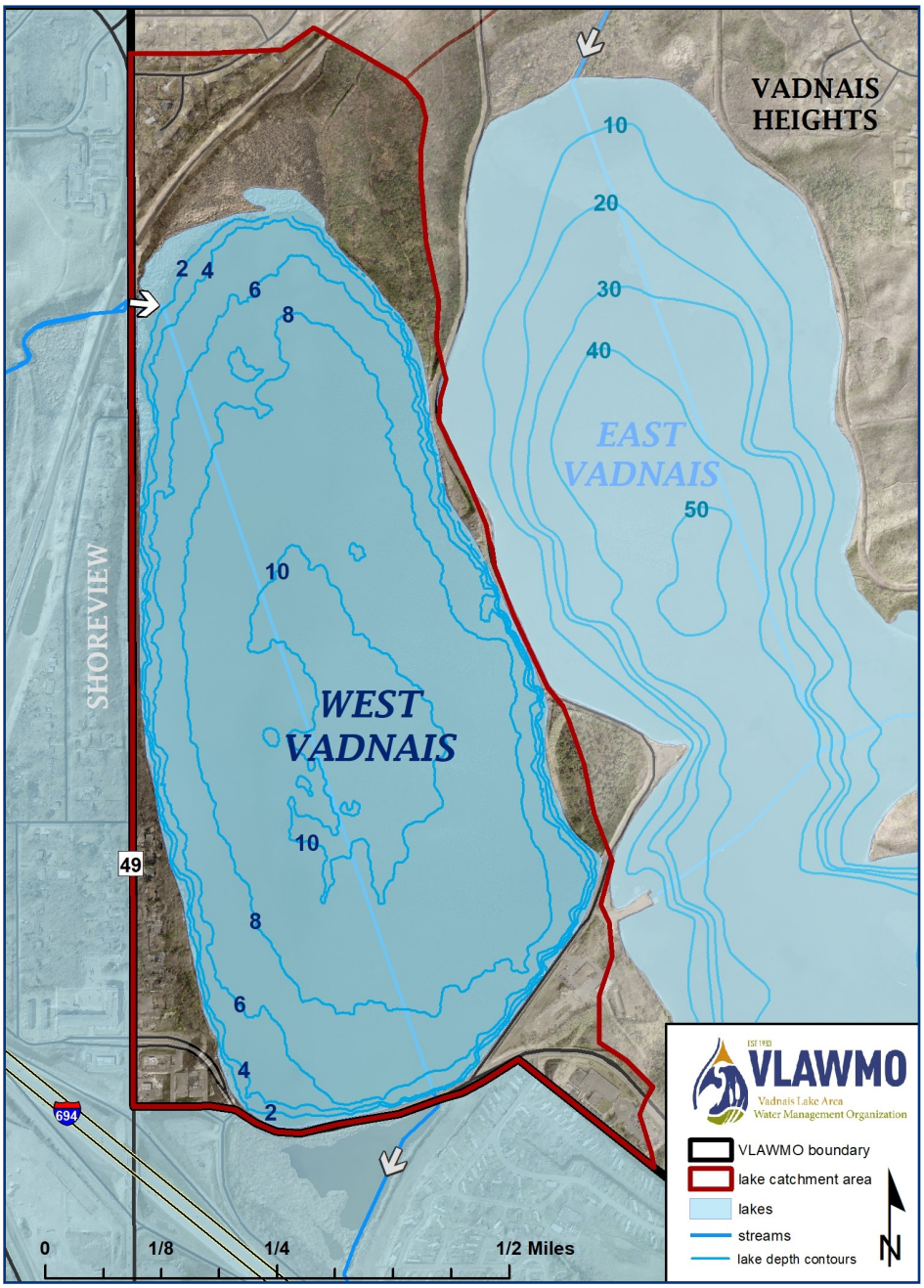
Chara, Coontail, Leafy pondweed, Sago pondweed, White and Yellow water lily

Invasive Species (2019)

Zebra mussels, Curlyleaf pondweed, Common carp



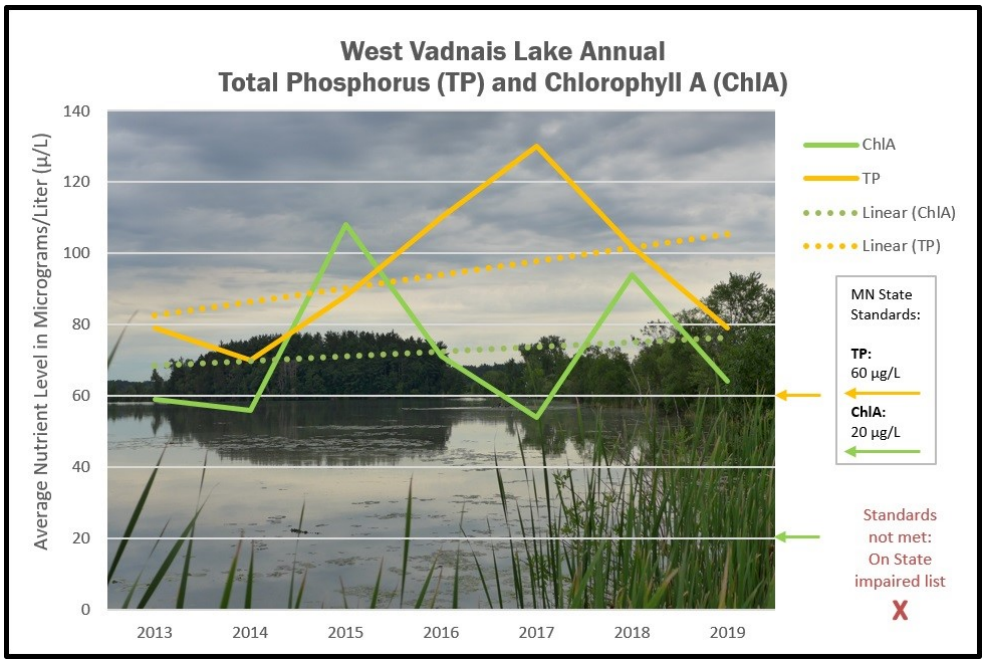
LOCATION: West Vadnais Lake is located in the southwest corner of the VLAWMO watershed. It has a small subwatershed area. The surrounding land use is park and residential. The connection to East Vadnais was filled before 1940.



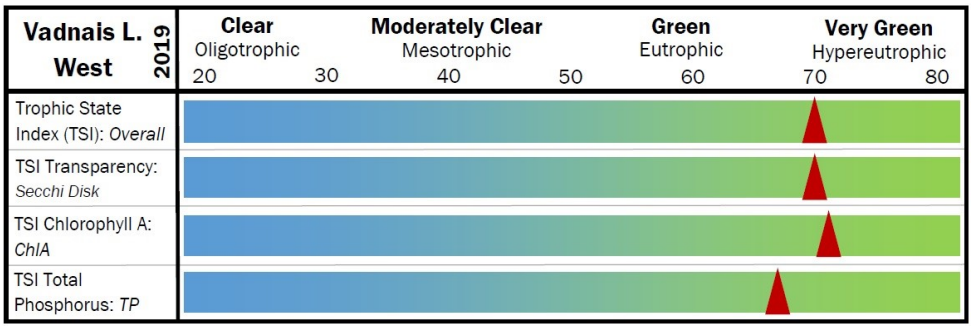
LAKE SUMMARY: Most of the focus on West Vadnais since 2017 has been for water storage. Grass Lake flows into West Vadnais, and West Vadnais empties south via a 15” pipe to the south. Water quality monitoring began in 2013. Lake management planning is scheduled in 2020. Common carp biomass was surveyed in 2017 and is higher than other connected waterbodies at 248 kg/ha. With the management threshold being 100 kg/ha, carp management is warranted for West Vadnais. VLAWMO works with RWMWD to manage the lake.

NUTRIENT SUMMARY:

West Vadnais levels for Total Phosphorus (TP) and Chlorophyll-A (Chl A) are above State standards, which puts West Vadnais on the State Impaired List. In addition to nutrient levels, West Vadnais Secchi depth is low at 0.5m, which means visibility only reaches an average of 0.5m. The State Secchi depth standard is 1 m.



Left: High nutrient levels cause potentially harmful blue-green algae blooms in W. Vadnais during the summer.



Trophic State Index (TSI):

A TSI rating is a calculation based on lake data averages. These values are used to compare lakes using a consistent scale.

LAKE LEVEL LOWERING:

Due to high water levels in Snail, Grass, West Vadnais, and over Rice Street in 2018-2019, an effort to lower West Vadnais' outlet elevation is underway to increase water storage capacity. An Environmental Assessment Worksheet (EAW) to consider lowering the normal outlet elevation by 0.8 feet was completed in Summer, 2019, in cooperation with the Ramsey Washington Metro Watershed District (RWMWD) and the State of Minnesota.

High lake elevations show an 11.3' max. depth in 2019. Aquatic vegetation and bathymetry studies were completed in 2019 and will be used to develop a Sustainable Lake Management Plan (SLMP) in 2020. An invasive carp removal effort is in early stages with Carp Solutions and RWMWD.

Visit VLAWMO.org/waterbodies for more information on West Vadnais Lake.