

LAMBERT CREEK



QUICK FACTS

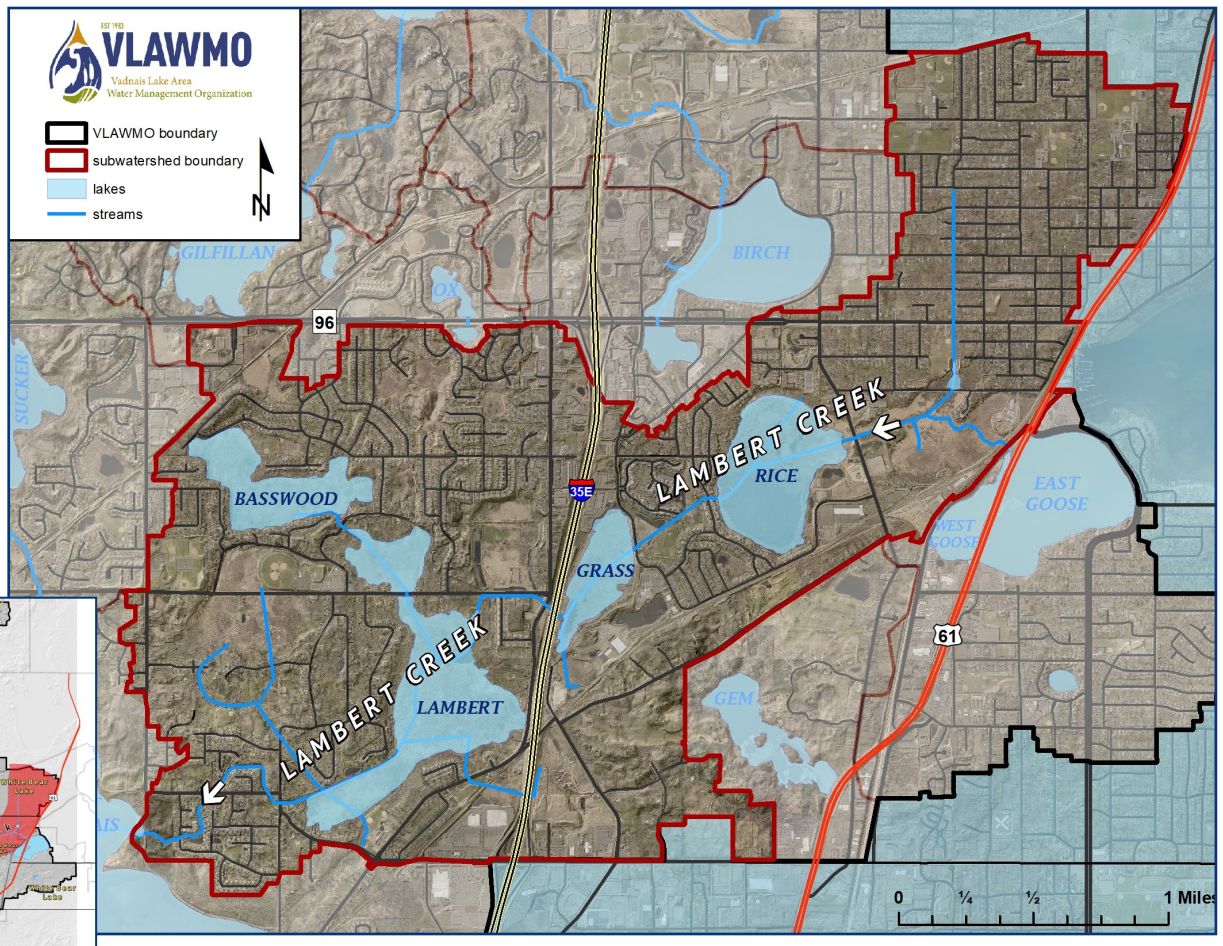
Subwatershed Size	3,658 acres
Length	4.5 miles
Average Depth	1 ft
Water Quality Impairment	
Fecal coliform—E.coli	

LOCATION: Lambert Creek flows through the southern part of the watershed. Its headwaters are both West Goose Lake and Whitaker Pond in White Bear Township, and the outlet is Vadnais Lake. Also known as County Ditch 14, it receives water from branch ditches and stormdrains, and flows through numerous wetland complexes.

Communities
White Bear Lake, White Bear Township, Vadnais Heights

Monitoring Program
6 periodic sample sites, 1 continuous flow monitoring site, 3 flumes for snapshot flow measurements.

Waterbodies within the Lambert Creek subwatershed are former footprints of shallow wetlands and lakes. Lambert and Basswood were formally shallow lakes that were drained in the early 1900's.

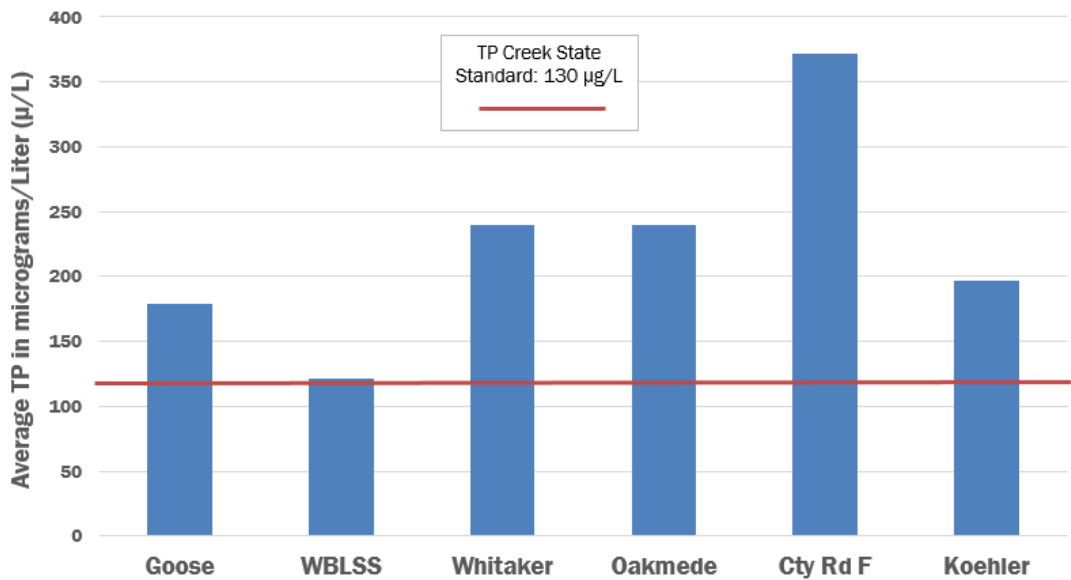


LAKE SUMMARY: Lambert Creek is monitored bi-weekly from May through September. Samples are collected at six sites along the creek and analyzed for bacteria and nutrient levels. Flow rates are monitored at three flume sites, and continuous flow monitoring occurs at Whitaker Pond. Five additional sites are used to analyze E. coli bacteria levels. Studies have shown that E. coli sources are primarily avian. The creek is on the State Impaired List for high bacteria and nutrient levels. A variety of projects have been implemented to improve water quality and reduce local flooding along the creek, including bank restorations, clearing debris, and the creation of holding reservoirs.

NUTRIENT SUMMARY:

While TP in Lambert Creek is above State standards, nutrients levels show to have dropped over the last 20 years. The creation of multiple best management practices (BMPs) likely contribute to this progress. Lower phosphorus levels in Lambert Creek can support East Vadnais Lake and in turn the water treatment process at the Saint Paul Regional Water Services (SPRWS).

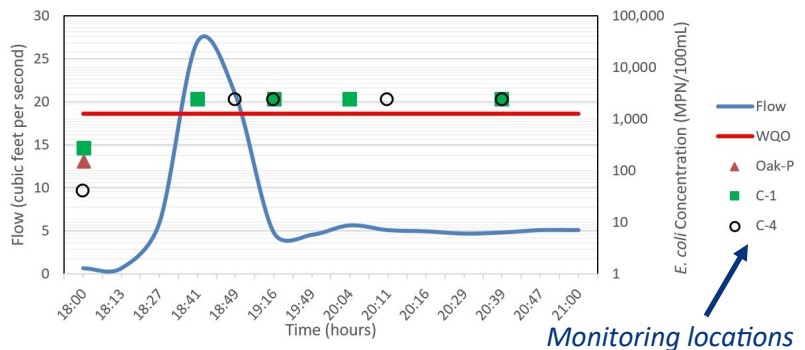
Average Total Phosphorus (TP) of each Lambert Creek Monitoring Site: 2010 - 2019



STORM SAMPLING:

Water quality samples taken during a rain event indicate that pollutants wash into the creek during rain events with high flow rates (blue line). Bacteria levels remain above the state standard (red line) after the flow drops.

Lambert Creek Bacteria Levels at Oakmede: July, 2016



Monitoring locations

PROJECT HIGHLIGHTS:

Three weirs have been constructed along Lambert Creek at sites of former shallow lakes and wetlands. The weirs restore water storage that has been lost from drainage and ditch creation. They also provide a space for sediment to settle out, which reduces sediment loading in the main Lambert Creek channel. Weirs also provide space for wetland functions, which includes storage, a space for water level fluctuations, and groundwater recharge. VLAWMO monitors and maintains these wetland complexes annually to ensure that they're functioning properly and to assess sediment accumulation.



Lambert Creek bank restoration at Kohler Road (2017)



Three bank restorations have taken place from 2011-2017. These projects stabilize worn and degraded spots along the creek. The result is reduced erosion and nutrient input, which keeps the creek flowing efficiently and helps improve the water quality.

Visit VLAWMO.org/projects/project-map for a complete list of Lambert Creek projects.