

# Lake Alice Improvement Project

## THE FACTS



Lake Alice is a 39 acre prairie pothole lake in the heart of Fergus Falls. Only an estimated 40% to 50% of original prairie pothole wetlands remain undrained today\*.



A storm water system discharges into the lake, carrying excessive phosphorus, sediment, cyanobacteria, and fecal coliform. Water quality degradation results in impaired ecosystem services in Lake Alice.



This project will remove the primary source of phosphorus and total suspended solids before storm water enters the lake through two major storm sewers, making progress toward meaningful and achievable nutrient load reduction to support aquatic and wetland plant communities similar in abundance and diversity to those of other prairie pothole lakes in the region

\*epa.gov



## THE PROJECT

Construct two sediment traps consisting of a 6 ft by 10 ft by 60 ft precast concrete box culvert with a series of baffles in the storm water system to slow the flow of water and allow sediment to settle out. Replace three storm inlets with catch basins containing sumps and porous baffles for capturing sediments. Include interpretive materials and education with project implementation.



## THE URGENCY

Having failed to meet one or more water quality standards, Lake Alice is now on the TMDL List under Section 303d of the Clean Water Act and is predicted to meet its TMDL by 2025. The Section 303(d) list acts as a "trigger", signaling the need for immediate management actions to address water quality impairments.



## HABITAT RESORATION

The prairie pothole region produces more than 50 percent of the continent's waterfowl due to its high density of wetlands. Dabbling ducks like mallards and teal rely on the rich shallow water of wetlands like Lake Alice where they can tip up to feed. Our project goal is support for Lake Alice's aquatic and wetland plant communities and visiting waterfowl through nutrient load reduction.

**Funds  
Requested**  
\$686,000



## **OUTREACH TO DIVERSE AUDIENCES**

By including interpretation and education in the budget for this project, residents and visitors to Fergus Falls may learn how the city's mitigation tactics aim to restore habitat and support the health of the Otter Tail River watershed. Despite its degraded water quality, Lake Alice remains a popular attraction in the center of Fergus Falls and is a valuable recreational asset for residents and visitors alike.



*The photos of Lake Alice used in this handout are courtesy of Rolando Felizola.*