



Gull Lake Stabilization Project

Background, status, and next steps

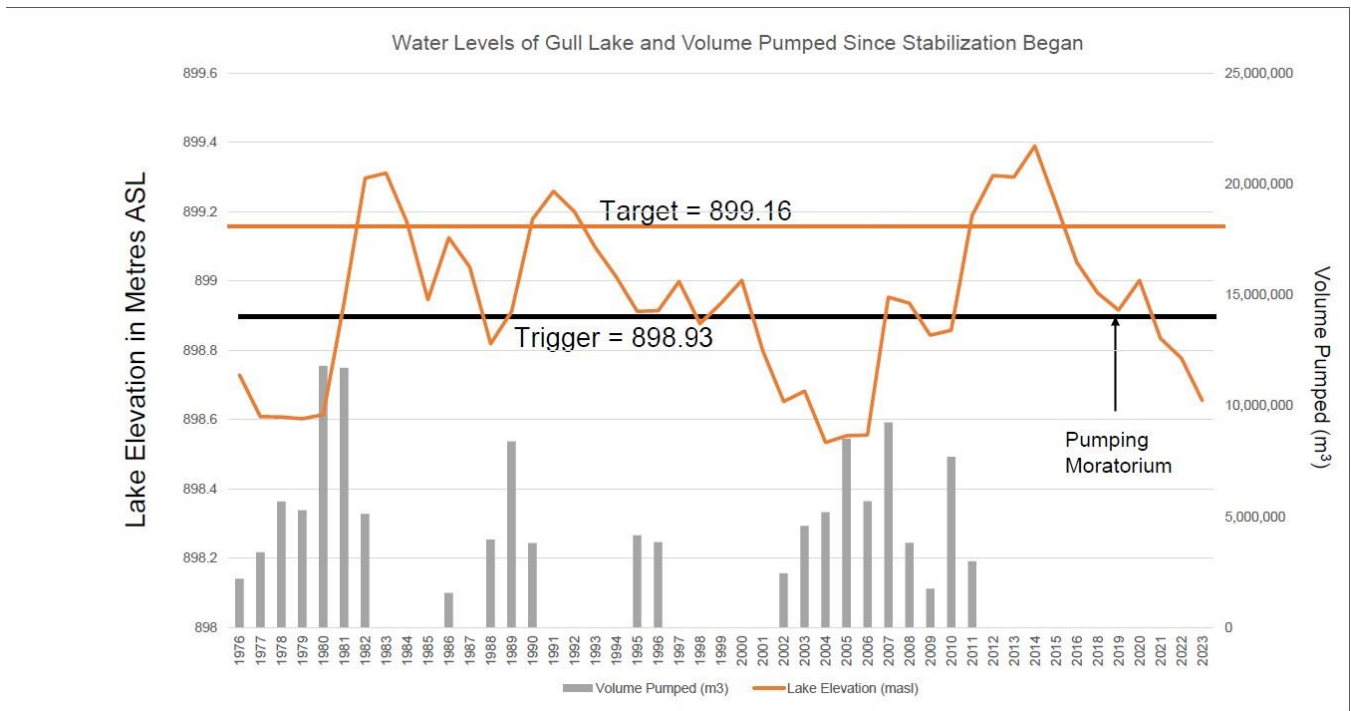
Alberta Agriculture and Irrigation (AGI) is sharing an update about the Gull Lake Stabilization Project to inform Albertans about the status, opportunities, issues, and next steps related to the lake stabilization project.

Background information

The Gull Lake stabilization project was built in 1976 and is designed to pump water from the Blindman River - via a pumphouse, pipeline, and open canal - into Gull Lake to help stabilize lake levels to help maintain recreation value and habitat.

The project has pumped varying amounts of water for 23 years out of the last 47 years, adding about 122 million cubic meters into the lake, almost 30 per cent of total lake volume. Lake levels were generally thought to be higher prior to 1976, decreasing about 2.7 meters from 1924 to 1976.

FIGURE 1
Gull Lake levels from 1976-2023 and volumes pumped into the lake via the stabilization project from 1976-2011



Status of lake stabilization

Pumping ceased in 2011 due to the lake reaching adequate target levels. The lake continued to rise above target elevation until 2014, and began declining thereafter, falling below pumping trigger levels in the fall of 2021.

In 2018 the water licence was suspended due to the presence of invasive Prussian Carp in the Blindman River and with no solution to exclude them from the pumped water.

The levels in Gull Lake are currently low, but they have been lower in the past, even with pumping. In recent dry years, little or no pumping would have occurred due to lack of available flow in the Blindman River, which was under a water shortage advisory in 2023. The primary driver of lake levels is precipitation in the watershed and evaporation rates. The pumping infrastructure does not have the capacity to prevent lake level decreases over a series of dry years, but it does help reduce the impacts of dry years and ultimately contributes to lake levels.

Prussian Carp



Prussian carp are a prolific invasive fish species that have contaminated the Blindman River.

Prussian carp could have catastrophic ecosystem impacts to Gull Lake if they were introduced.

Contamination of the lake would be irreversible.

For more information about Prussian carp click [here](https://www.alberta.ca/prussian-carp). < <https://www.alberta.ca/prussian-carp> >

Prussian Carp (*Carassius gibelio*)

Gull Lake Watershed Society testing of pressurized filter.



Gull Lake Watershed Society members testing a smaller scale Forsta pressurized filter.

The Government of Alberta is working with the Gull Lake Watershed Society (GLWS) on a pressurized filter system to potentially exclude Prussian carp and their eggs from the water pumped into Gull Lake, via the pump works.

The society has submitted a preliminary design for the pressurized filter system for the government to consider.

To implement the proposed filter system, Agriculture and Irrigation must apply to the *Water Act* regulator (Environment and Protected Areas) to review the system.

If approved, the licence amendment would remove the current suspension and allow for installation of the filter.

Next steps

AGI would apply to EPA in the fall 2024. In advance of this application, your views and perspectives are sought. There are many ways to find out more information and to voice your views.

Visit <https://www.alberta.ca/gull-lake-stabilization-engagement> or email AGI.GullLakeStabilizationProject@gov.ab.ca with questions and concerns.