

Frequently Asked Questions Regarding Prussian Carp and Lake Stabilization Projects

Background

Alberta Environment and Parks, Operations Infrastructure Branch, owns and operates two lake stabilization pumping projects in the Red Deer River basin

The Gull Lake pumping project, commissioned in 1976, is designed to pump water from the Blindman River into Gull Lake to help stabilize lake water levels primarily for enhanced recreational opportunities. The pumping window from the Blindman River to Gull Lake is usually April to November and is based on lake level triggers and sufficient flow in the Blindman River.

The Parlby Creek-Buffalo Lake Management Project was commissioned in 1994 and was designed to pump water from the Red Deer River to provide agriculture flood control, fish and wildlife habitat enhancement, and to help stabilize the water levels in Buffalo Lake. The project involves pumping water out of the Red Deer River, through wetland habitat, Alix Lake, Parlby Creek, Spotted Lake, and eventually into Buffalo Lake to help stabilize lake levels. There is also various water structures along Parlby Creek designed to promote spring back-flooding onto adjacent hay and pasture land. The pumping window is typically from May to October inclusive, and is based on lake level triggers.

Why was the pumping license suspended?

The lake stabilization water license associated with each pump station has been suspended for five years (until August 2023) by the Provincial Water Act regulator because Prussian Carp have been found in the Red Deer River and Blindman River directly adjacent to the lake stabilization pump houses that pump into Gull Lake and Buffalo Lake. If pumping were to occur, the Lakes ecosystem health would be at a significant risk of being negatively impacted by facilitating the direct transfer of Prussian Carp into both Lakes.

When did AEP last pump into the lake?

Environment and Parks has **not** pumped into Buffalo Lake since 2010 or Gull Lake since 2011, due to naturally high lake levels remaining well above the trigger elevations for pumping.

What will happen to the lakes if pumping does not occur?

The water levels in the lake are primarily influenced by natural evaporation and annual precipitation. Lake levels will continue to fluctuate naturally.

What are Prussian Carp?

Aquatic invasive species are non-native animals or plants that can cause economic or environmental harm in waterways where they are introduced. Prussian Carp are native to central parts of Europe and Asia. They are commonly considered a type of wild goldfish that can thrive under diverse environmental conditions, is a harmful aquatic invasive species eventually outcompeting and displacing native fish species.

Are there currently Prussian Carp in Gull or Buffalo Lake?

Prussian Carp have **not** been reported or caught in Gull Lake or Buffalo Lake to date. AEP Fisheries continue to conduct fish population surveys in both lakes, the most recent in both Gull and Buffalo lakes in fall 2017, and again in Gull Lake August, 2018.



What are the environmental impacts to the lakes should Prussian Carp be introduced?

Prussian Carp invade aquatic ecosystems and pose severe threats to aquatic habitats and native fish populations. If introduced, they will have a significant negative impact on native fish populations in the lakes and will quickly become the dominant species. This could pose negative economical and sociological impacts as it relates to fisheries and recreational use in Alberta lakes and rivers.

Has AEP developed a monitoring plan for these lakes?

AEP is committed in actively managing regional waterbodies and rivers, including both Buffalo Lake and Gull Lake, by various fisheries assessment techniques to assess sportfish population status and trends, along with detection and confirming if aquatic invasive fish species are present. Assessments on major recreational lakes generally occur ever three to five years. Additionally, AEP staff will respond to calls and reports to Alberta's Invasive Species Hotline at: 1-855-336-BOAT (2628).

What options has Alberta Environment and Parks explored for Prussian Carp exclusion?

AEP commissioned an independent engineering study to evaluate the risk associated with transmitting Prussian Carp through the current pump works. The study concluded that there is a risk that Prussian Carp, primarily eggs and fry, can be transmitted through the existing pumping works. The study concluded that no economically viable engineering solutions (or combination of) were found to completely eliminate the risk of transmitting Prussian Carp through the existing infrastructure and pumping works.

What conditions would have to be present for the Provincial Regulator to allow pumping again?

The regulator has requested that **100%** certainty of Prussian Carp being excluded from the pumping works with fish exclusion technology.

How are you going to keep the local community informed?

AEP staff will continue to work with the Buffalo Lake Management Team and the Gull Lake Stabilization Committee to keep stakeholders informed of future fisheries survey results, developing engineered fish exclusion technologies, aquatic invasive species risks, and lake levels.

Where can I go for more information?

For further information regarding Prussian Carp, please refer to the following:
<http://aep.alberta.ca/fish-wildlife/invasive-species/aquatic-invasive-species/fish.aspx>

To report an Aquatic Invasive Species please call the Hotline number: 1-855-336-BOAT (2628)



Alberta