





### Who We Are

#### Introduction

The LGIA exists for the sole purpose of monitoring the lake and maintaining and improving its well-being.

Members and volunteers collaborate with other organizations, to monitor the quality of the water, eradicate and control terrestrial invasive plants and shrubs and provide boat washing and boater education of aquatic invasive species with the assistance of the U.S. Forest Service and Bergland Township.

We proudly partner with organizations and stakeholders to help us achieve our goals including local, state municipalities, Tribes, federal, agencies and policy makers.

### What we do

Introduction



Monitor

Health of the lake including lake levels, water quality, controlling and preventing invasives, sustaining

species and resilient habitats.

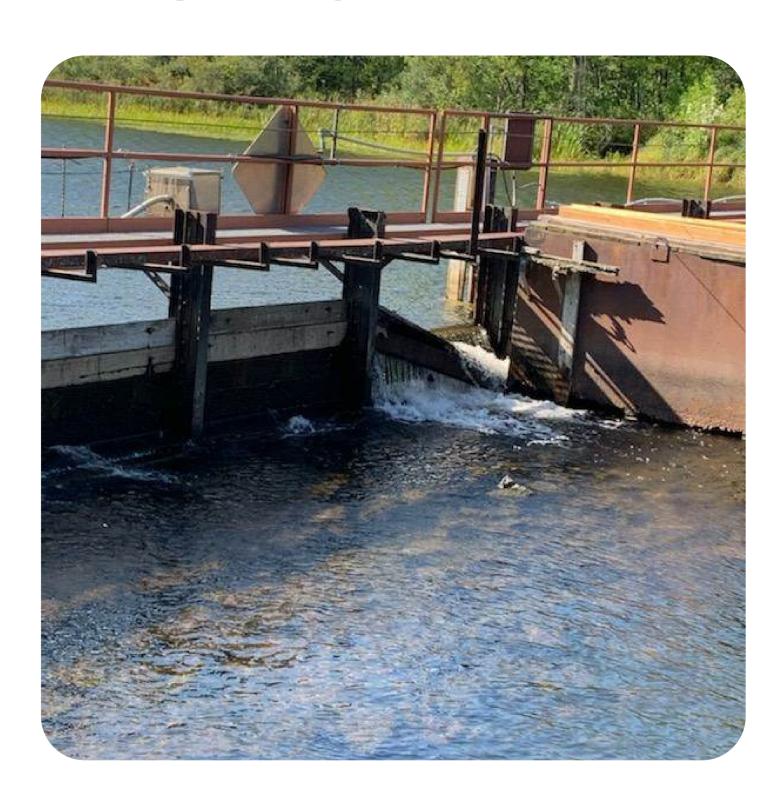
- Partner
  With organizations and volunteers to help us achieve our goals, through education, funding and grants.
- Advocate & Educate

  For the lake by providing members tools to maintain healthy shorelines, protect species and prevent/control invasives from entering the lake.

  We communicate with one voice to partners, stakeholders and legislators.
  - Take Action

    Members and volunteers remove purple loosestrife, cull buckthorn, establish habitats for fish and birds, maintain Adopt-a-Highway locations, wash boats and educate boaters on water quality safety.

# The Dam



Lake levels

UPPCO is tasked with maintaining the lake level between an upper and lower limit spanning 30 inches.

We estimate the lake level should not allow for the level to be 15 inches below the upper limit.

02 Integrity

In the Spring of 2022, damage to dam structure resulted in the lowest lake level residents remembered and stayed that way throughout the summer and into the fall. Besides the serious consequences for the ecological health of the lake the problems associated with docks, boat lifts and underwater boulders now nearer to the surface have impacted safe boating, as well as loss of revenue to business owners.

## The Dam



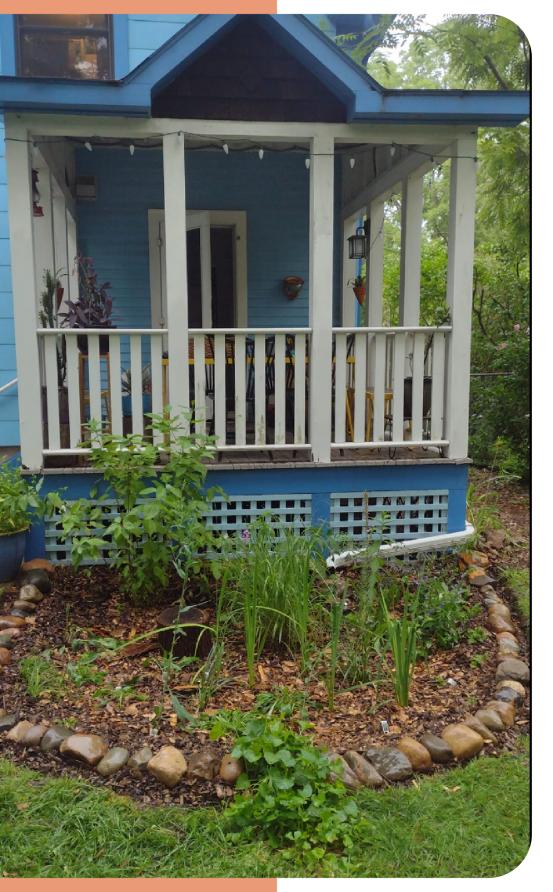


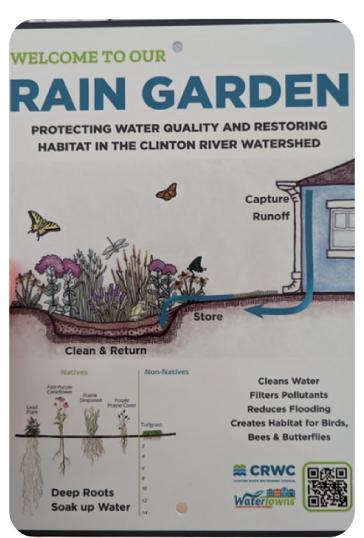


#### The Request

LGIA would like to present our concerns with the Bergland Dam and the Lake Gogebic water levels to FERC.

We ask Michigan Attorney
General Dana Nessel to
intercede on our behalf to
provide the initial interface
with the Federal agency FERC
whereby LGIA can present our
concerns.











# Rain Filtration

#### Teamwork Is The Key









# **Muncipalities**Partner

Provide guidance on grant applications
Facilitate tax credits when earned
Administrative support



# **LGIA**Partner

Identify opportunity
Identify partners
Engage members/landowners
Review projects







# Ottawa National Forest MiDNR Lac Vieux Desert Partner

Provide guidance on grant applications
Facilitate native plant selections
Review projects and plan approvals

#### Our Work

# Habitats and Species



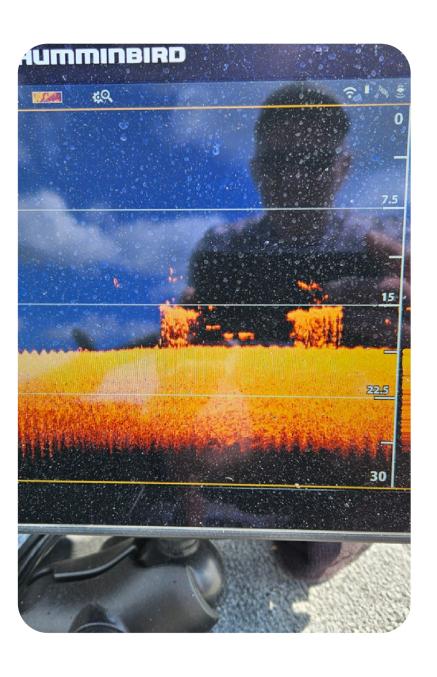
LGIA on the Lake

#### **Fish Cribs**

We work with DNR partners to place cribs into Lake Gogebic

#### Fish Cribs

Verifying the cribs reach the bottom of the lake





#### **Loon Nesting**

LGIA placed nesting platforms in river bed entries to Lake Gogebic



#### **Purple Loosestrife**

LGIA board member removing purple loosestrife from Lake Gogebic

#### **Boat Washing**

LGIA member wash boats and educate boaters about aquatic invasive species





#### **Buckthorn**

LGIA teams with USFS to remove and treat buckthorn from the Ontonagon Park

#### Our Work

# Preventing and Controlling Invasive Species

LGIA on the Lake



#### Problems With Lake Gogebic Dam and Search for Solutions

The following addresses a way that could alleviate the frustrations over many years that the Lake Gogebic Improvement Associations (LGIA) has experienced with the Upper Peninsula Power Company (UPPCO) that owns and is responsible for repair of the dam on Lake Gogebic, in that it is rare for problems with the dam to be addressed in a reasonable and timely way, to deleterious effects on the lake.

Lake Gogebic is one of three reservoirs supplying the hydroelectric dam at Victoria, MI where UPPCO has the capacity to generate 12 MW of hydroelectric power, which is the largest amount of hydroelectric power that UPPCO generates from any of its hydroelectric dams. The Lake Gogebic reservoir, along with that at Bond Falls, has the capacity of approximately 7,300 megawatt-hours, and that at Cisco Dam of 1,800 megawatt-hours, with all of the water flowing as river-run directly to the Victoria Dam. Because water can be stored upstream of Victoria for release on demand, UPPCO is able to operate the Victoria power station about 80 percent of the time. The Bergland Dam is a low-head structure built of vertical steel I-beams and wood plank flashboards and is 179 feet long and 4 feet high.

UPPCO is tasked with maintaining the lake level between an upper and lower limit spanning 30 inches. We currently estimate the lake level for residents and commercial businesses relying on boating does not allow for the lake level to be 15 inches below the upper limit for successful use of their boats. The lake level generally decreases during the summer and this has been problematic for all as this 15 -inch limit on lake level is almost always reached before the end of a boating season that starts mid-May and can reach into October. Failure of the dam integrity can result in even earlier curtailing of boat use.

The LGIA has noted that often, when unexpected and problematic changes in levels of lake water occur, it can be associated with a loss of the integrity of the dam structure. In the summer of 2022, damage to dam structure resulted in the lowest lake level that lake residents ever remembered and stayed that way throughout the remainder of the summer and into the fall. Besides the problems associated with docks, boat lifts and underwater boulders now nearer to the surface that have impacted safe boating, serious consequences for the ecological health of the lake also occur, as well as loss of revenue to business owners.

In the year 2022, as has happened in previous years, LGIA believes that UPPCO has not responded in a timely way in addressing the problem, and in the end LGIA is left feeling that all efforts to raise serious attention are ignored.

Also to be noted, if unavoidable very high lake levels occur and are not attended to, quite serious problems just from erosion of lake banks can occur since many of the banks are a natural clay structure that lends itself to solubilization. One hundred years ago, the setting (for one season) of a newly high lake level resulted in a 25 foot retreat of the bank at one site, resulting in a newly created lake area with the lake bottom becoming ankledeep heavy muck and assorted stones, covering what was once a sandy lake bottom.

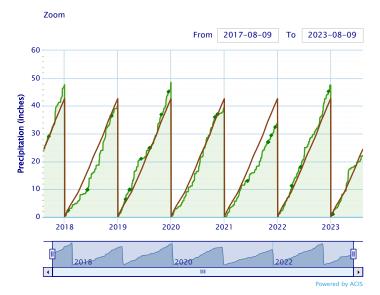
By experience, if successful boating is to be enjoyed for an entire boating season between mid-May and October, then merely controlling the lake level between upper and lower limits as is done now is inadequate. Lake level requirements must be specified with the lower level bound increased during this time to provide a smaller span between limits during the boating season.

UPPCO's power line interconnections make it part of the US Electric Power Grid and therefore UPPCO's hydroelectric power generation is under the jurisdiction of the Federal Energy Regulatory Commission (FERC) of the US Department of Energy. FERC is an independent agency and part of its mission is to regulate hydro power and that includes the oversight of all ongoing project operations, including all the dam safety and security inspections, public safety, and environmental monitoring needed for every aspect of the hydroelectric power system. Bergland Dam and the water levels of Lake Gogebic is therefore included as part of the oversights for which the FERC has responsibility. FERC then also has the responsibility for ensuring that UPPCO meets it contractual obligations with FERC to completely and correctly provide for the entire operation of the Victoria hydroelectric project.

Because of the lack of response by UPPCO to LGIA in addressing its concerns regarding the Bergland Dam, LGIA would like to bring its past experiences with the problems of the Bergland Dam and the Lake Gogebic water levels to the attention of FERC in the most effective and participatory way possible. It would be most beneficial, we believe, if the State of Michigan could provide the initial interface with the Federal agency FERC in order to

set up a mechanism whereby LGIA could present its concerns to FERC and have a reasonable expectation that a diligent effort by FERC will be made to address and provide a path for correction of the problems discussed here. The LGIA would be most grateful for such an effort by the State of Michigan that would lead to ultimate success.

#### Accumulated Precipitation - BERGLAND DAM, MI



#### Important for you to know:

• New to WDFN: graph latest data from 5 locations together using Combined Location Graph (page, announcement) and show latest data from single location as graphs using All Graphs (example page, announcement).

IMPORTANT Legacy real-time page

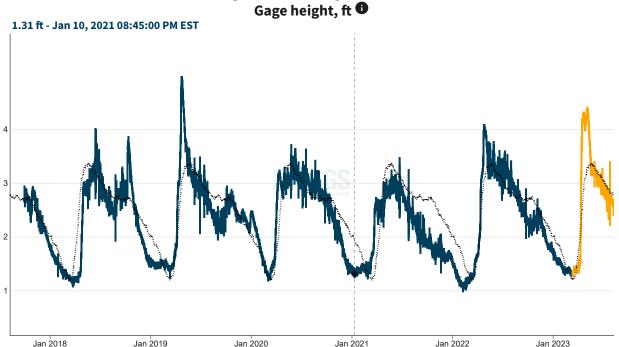


7 days 30 days 1 year

- using custom time span -

#### Lake Gogebic Near Bergland, MI - 04035995

August 9, 2017 - August 9, 2023



Jan 2021

Show legend ∨

Aug 09, 2023 10:45:00 AM EDT Selected 1.31 Approved Jan 10, 2021 08:45:00 PM EST

Value

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Compare

Latest

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Showing data on graph

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2.38	2.66	2.78	2.88	2.77	3.19	

Hide statistics ^

Data may be <u>provisional</u> IMPORTANT

> Change time span

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Provisional

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IMPORTANT Legacy real-time page



- using custom time span -

#### Lake Gogebic Near Bergland, MI - 04035995 August 9, 2020 - August 9, 2023

Gage height, ft • 3.1 ft - Aug 30, 2020 05:45:00 AM EDT 4.0 3.5 2.0 1.5 1.0 Nov 2020 Nov 2021 Nov 2022 May 2023 May 2021 May 2022

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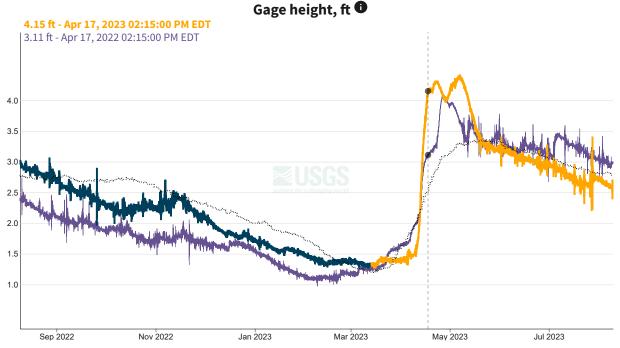
IMPORTANT <u>Legacy real-time page</u>





#### Lake Gogebic Near Bergland, MI - 04035995

August 9, 2022 - August 9, 2023



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Hide statistics ^

Show legend ∨

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Select a date range: