

# Lakescabe

Newsletter of the Wabamun Watershed Management Council

No. 36 | Winter 2025



15 FEBRUARY

## Free Family Fun: Kids Can Catch!

## Saturday, February 15, 2025 10 a.m. - 3 p.m.

The Alberta Conservation
Association will host the annual
Kids Can Catch event on Saturday,
February 15, 10 a.m. to 3 p.m.
at the Hamlet of Wabamun main
pier. This free event gives kids of
all ages the chance to try one of the
great outdoor winter lake activities:
ice fishing! No fishing licence
required. Equipment and expertise
is generously provided by ACA's
many sponsors. Also enjoy a free
hamburger or hot dog!



#### In This Issue

Free Family Fun: Kids Can Catch! 1
Chair Report: Change on the Horizon2
Wabamun Waterfront Development 4
Highvale Mine Reclamation Plan5
Lake Level and Water Treatment Plant Operations Update6
Salt-ernatives
Invasive Species Awareness Week 8
Wabamun Q&A: WMP9
Welcome Gordon Wilson9
Wanted: Wonderful Lake Photos!9
Our Supporters10





# Change on the Horizon

By Sue Styles, WWMC Chair

e are now well into the new year. A new year often brings change, and the WWMC is pleased to share that in 2025 we will embark on a new way of doing things that we anticipate will be very positive for our organization. The WWMC is immensely grateful to have received a generous Edmonton Community Foundation (ECF) three-year Environmental Operating Grant. This grant will be used to build the WWMC's organizational capacity by establishing an executive director role to advance implementation of the Wabamun Lake Watershed Management Plan. We thank the ECF for providing this significant opportunity to further protect and steward the health of Wabamun Lake. We are preparing to launch a search for our first executive director this spring. Stay tuned!



While change is on the horizon, the WWMC's dedication to lake stewardship initiatives remains constant as ever. Here are some brief updates:

- The <u>WWMC 2023-2024 Annual Report</u>, as provided at last fall's WWMC Annual General Meeting, is ready for viewing.
- The <u>Winter LakeKeepers 2023-2024 Report</u>, analyzing data from last winter's water samples, is now available. For the current season, two of four Winter LakeKeepers water sampling events have been completed.
- Planning for the upcoming fieldwork season:
  - Development of an education tool: "E-Guide to the Wabamun Watershed: Things to Know and Things You Can Do for Conservation and Lake Health" (grant pending).
  - Wabamun Lake **Aquatic Vegetation Survey** (grant pending).
  - Invasive species weed pull on Wabamun Lake shores, in collaboration with Alberta Environment and Protected Areas and lake municipalities.
  - Year 2 monitoring of **bulrush restoration** sites.

- Stakeholder Engagement:
  - Parkland County: WWMC participated in Parkland County's Municipal Development Plan redesign public hearing and Land Use Bylaws revision draft outreach. We provided feedback to elevate protection of water in the Wabamun Lake watershed and throughout Parkland County. We also continue engagement to assess implications of the Wabamun Waterfront developments on the health of the lake and its ecosystems. WWMC has hired a consultant to review Parkland County environmental reports related to Wabamun Waterfront Development Project A. Recent discussion by Parkland County of the necessity for dredging in the lake for Project A has greatly increased concerns for lake and ecosystem health (more info on page 4).
  - **TransAlta:** WWMC continues to keep apprised of the Highvale Mine reclamation application status, area land-use planning, and Wabamun Lake Water Treatment Plan (details on pages 5 and 6).
  - Fallis: Ongoing engagement and discussion with community members on mutually concerning lakeshore/watershed development.

The WWMC values all our collaborative relationships — with funders, donors, partners, members, and volunteers. Every connection is a mutual opportunity to help maintain, improve, and monitor the health of Wabamun Lake. Thank you for your support! With the hiring of a WWMC executive director in the near future, we hope to improve our organizational capacity, the reach of our message, the impact of our initiatives, and the protection of Wabamun Lake and its watershed.



Sue Styles



## **Wabamun Waterfront Development**

By the WWMC Board

The Wabamun Waterfront developments under construction adjacent to the Wabamun townsite include a proposal for an inland marina and swim pond just east of Point Alison. Access to the marina would be via the outflow channel from the former Wabamun power plant. These amenities are designed to attract further residential and commercial developments on the eastern shores of Point Alison.

The WWMC has expressed concerns to Parkland County regarding the impact these developments, which have already been approved by Parkland County Council, will have in this environmentally significant area. We have engaged a consultant to examine the environmental studies commissioned by the County and will provide updates shortly.

In the interim, we encourage interested residents to learn more about the logistical and environmental hurdles facing these projects by contacting the County with your questions. You can reach Parkland County in writing at <a href="https://hellog.parklandcounty.com">hello@parklandcounty.com</a> or by calling 780-968-8888.



Seba Beach Mayor Rick MacPhee inspecting the water level. *Neil Fleming* 



Overlay of Wabamun Waterfront Development Project A. Reg Faulkner



Current view down the outflow channel at the proposed marina site. *Neil Fleming* 

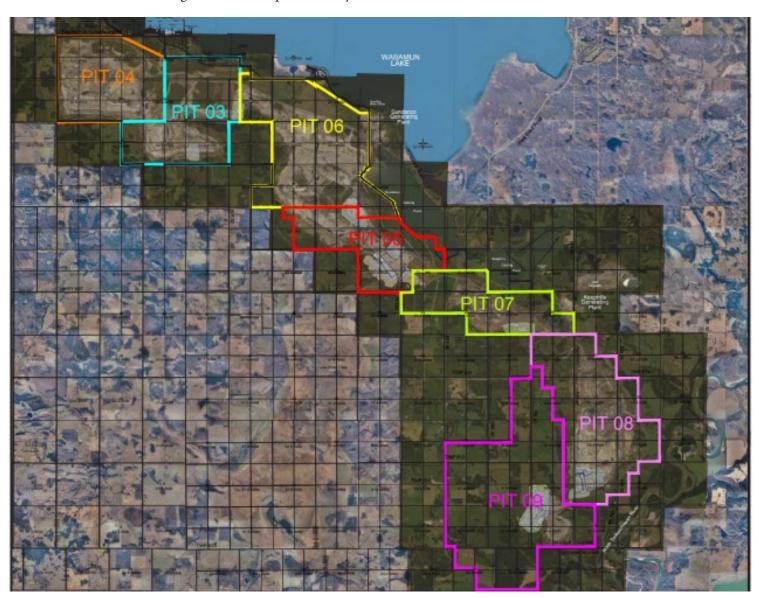
## Highvale Mine Reclamation Plan Update

By Dennis Thomas, WWMC Director

When we last reported on the status of the reclamation plan in the <u>Summer 2024 Lakescape</u>, we understood that a very much modified reclamation plan would be ready for approval by the Alberta Energy Regulator in late 2024. That date has now been extended to late 2025. We are satisfied that the extra time being taken by TransAlta and the regulator to finalize the document is a positive sign and will result in a much better plan and the accompanying approval. We look forward to reviewing the final draft plan and any

proposed conditions of approval, and will report further in the Fall 2025 *Lakescape*.

In the meantime, physical reclamation work progresses, particularly in Pit 9. Work in Pit 4, set for this summer, will be visible from the Tomahawk highway. See the accompanying graphic for the location of those parts of the mine. Reclamation work in the overall mine site will continue for many years to come.

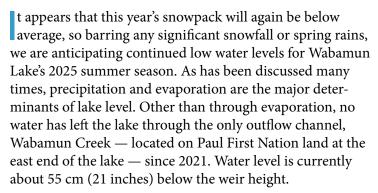


Highvale Mine Layout (2022 Highvale Mine Decommissioning and Reclamation Plan).



## LAKE LEVEL AND WATER TREATMENT PLANT OPERATIONS UPDATE By Neil Fleming, WWMC Director **LAKE LEVEL OPERATIONS**

By Neil Fleming, WWMC Director



TransAlta provides monthly updates to the WWMC, including the following memo on their water treatment plant pumping operations, which indicate that they anticipate meeting their required pumping volumes for the foreseeable future. These volumes include additional amounts required to meet their water debt from being offline for an extended period. Also of note is that the last operational Sundance power plant unit will be temporarily shut down April 1, 2025, meaning there will no longer be any power generation at the Sundance plant as of that date.



Sundance Power Plant. Sue Styles



View of the Water Treatment Plant outflow outlet. Sue Styles

The Wabamun Lake Water Treatment Plant's annual target for 2024 was 2.2 Mm<sup>3</sup>. This target was reached in 2024. The target for 2025 is 4.4 Mm<sup>3</sup>.

Continued efforts are being made to increase the reliability of this plant to achieve the targets including increased capital spending and maintenance to improve efficiency of the plant. The annual diversion from TransAlta's operations is updated annually by a thirdparty engineering company based on precipitation, evaporation, and climate. Pumping targets to the lake are set in collaboration between the engineering company and TransAlta.

On November 5, 2024 TransAlta announced the temporary mothballing of Sundance Unit 6 effective April 1, 2025, for a period of up to two years. During mothballing of this unit, water will not be utilized for operational purposes and allow for an increased amount to be released to the lake, hence the increased target for 2025.

One million cubic metres (1 Mm<sup>3</sup>) of water pumped to the lake equates to about 1.2 vertical centimetres (0.5 inch) in lake level rise. So the 4.4-Mm3 target would work out to about a 5.3-cm (2-inch) rise.

Understandably, lake users look for solutions for the low water levels, including increased pumping from the North Saskatchewan River. The WWMC has produced a position paper to help explain the purpose and history of the water treatment plant and what would be involved in repurposing it for increased production. It's a short, two-page read, well worth a look. Readers are encouraged to visit the Lake Water Level page of our website for a better understanding of the factors controlling lake level.

# - ERNATIVES

#### By the WWMC Board

Wintertime brings unique and wonderful experiences to enjoy at Wabamun Lake. But it also brings challenges. In our efforts to keep our walking paths clear and safe for people, we need to keep the health of the lake in mind, too. De-icing salt may seem like a "quick fix" for clearing a slippery path, but it can negatively impact the health of the lake in the long term.

Salt naturally occurs in the environment and is present in Wabamun Lake. All life requires a certain amount of salt to function. However, excessive salt can be toxic to both plants and animals. Salt enters the lake from runoff over its watershed, especially during storms and in spring. Land-use activities such as spreading fertilizers, poorly maintained septic fields, and using salts on roadways and de-icers on driveways and walkways — add to lake salt concentrations. Because the lake does not have a flow-through river or creek to flush out collected nutrients and pollutants, those materials accumulate.

The most common salt is sodium chloride, table or rock salt. Calcium chloride, magnesium chloride, and potassium chloride are also used as de-icers. They all melt ice and snow on roads and walkways, then dissolve into the melt water and flow into the lake via storm sewers, ditches,

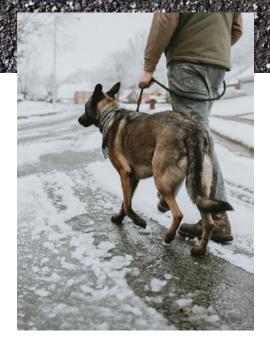
and creeks. You'll note the common element in these salts is chloride. This ion is toxic to aquatic life above certain concentrations, disrupting aquatic food chains and ecosystem stability. Once in the lake, there is no practical way to reduce that concentration. There is no natural process by which chlorides are broken down, metabolized, or taken up by vegetation.

Over recent years, water samples have shown a steady increase in salt concentration in Wabamun. We have recently started to collect data on water electrical conductivity, which can be correlated to salt concentration.

For the health of the lake and the species that live in it, we need to minimize the surface sources of salt, including the application of de-icers. Here are some simple things we can do help minimize salt runoff:

- Shovel snow early, before it builds up and becomes hard and slippery.
- Use sand, rock chips, ash, or kitty litter as traction instead of using chemicals to melt snow and ice.
- Cut back on or eliminate chloride as a de-icer. Use only if necessary in the icy spots. Aim for three inches between granules, and sweep up any extra. Brining salt





and applying it with a watering can helps reduce the quantity you need to apply.

- Use pet- and eco-friendly de-icers with either sodium acetate, calcium magnesium acetate, or magnesium chloride in their formula.
- If you must use a chloride-based de-icer, bear in mind that they are not all created equal. If you're not applying the correct formulation for the outdoor temperature, you're literally throwing your money away! (And adding to the surface salt load for no appreciable benefit.)
  - Potassium chloride won't melt ice when the temperature is below –4°C.

- Sodium chloride only works down to -7°C.
- Magnesium chloride works down to -25°C.
- Calcium chloride works down to -32°C.

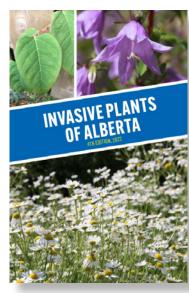
With the temperature fluctuations we get in our Alberta winters, deicers often provide a very temporary solution. Snow and ice may melt quickly, but the slush left behind can refreeze, and you're back where you started with a slippery surface. The "salt-ernatives" detailed above both enhance safety and reduce pollution. Thank you for doing your part this winter to help keep Wabamun Lake clean and clear.

## **Invasive Species Awareness Week**

This year's annual **Invasive Species Awareness Week** (ISAW) takes place from February 24 to March 2. The goal of this campaign is to come together to increase awareness about the impacts of invasive species and how we can protect natural spaces.

Visit invasivespeciescentre.

ca to learn more. And have a look at Invasive Plants
of Alberta, an excellent resource from the Alberta Invasive Species Council filled with images and advice for dealing with pest plants. View the digital version at the link, or check out a print copy, available at the Seba Beach Public Library.



SAVE THE DATE | Monday, February 24- Sunday, March 2
Invasive Species
Awareness Week

Join the conversation on social media using the hashtag #InvSpWk to promote

awareness of and work together to prevent and manage invasive species!

Help protect our environment, economy and society from invasive species.

(1) (a) (b) (c) (c) (d)



## WABAMUN **Q&A**

By Sheila Smith, WWMC Director

WWMC board members are often asked questions about lake health, wildlife, and other lake-related topics. We'll feature your questions and the answers here in Lakescape. If there's something you want to know, please email your question to info@wwmc.ca.

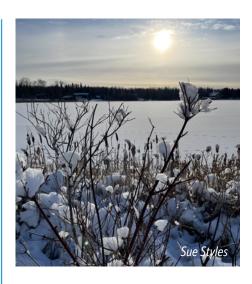
## Watershed Management Plan

What Is a Watershed Management Plan?

Although about three years old now, the short video A Watershed for All provides a great little primer on the Wabamun watershed and the Watershed Management Plan that the WWMC collaborated on with many others to produce. If you haven't already seen this great video, about five minutes is all you need to learn more about the lake and what needs to be done to protect it. Many thanks to Michael Short of Let's Go Outdoors for this production.







# Wanted: Wonderful Lake Photos!

Did you capture some amazing images this year? We always welcome beautiful photos of lake landscapes, shorelines, wildlife, or vegetation, from all seasons, to share in our newsletters and on our website. Please send your pictures, in as high-resolution format as possible, with your name, the date the picture was taken (approximate is fine), and the location to communications@wwmc.ca. Please note that pictures of people will require their express consent.



### Welcome Gordon Wilson to the WWMC Board of Directors

The WWMC is very pleased to announce and recognize our newest board member, Gordon Wilson. Gordon brings a wealth of experience and accomplishments to the table. He is the retired past president of several Western Canadian real estate development companies. His board service includes the role of Chairman of Northlands, and he was their volunteer director for 46 years. Other highlights among many volunteer boards and committees he has served on over the years include Glenrose Rehabilitation Hospital Chairman and volunteer director for 15 years, as well as 15 years as Chairman and volunteer director of the Canadian Thoroughbred Horse Society. He has also served as Mayor of the Summer Village of Point Alison for 39 years... and counting! Gordon's experience and dedication to our lake community will be invaluable to the work of the WWMC. Welcome aboard, Gordon!

The WWMC is always interested in adding diverse voices to the board. You don't have to have Gordon's extensive experience; the most important qualifications are a passion for the lake and eagerness to engage! Have a look at the Join Our Board of Directors document on our website for details and reach out to <a href="mailto:info@wwmc.ca">info@wwmc.ca</a> to express your interest.

### **Our Supporters**

#### **Partners**

The WWMC thanks the following governments and organizations for their support of specific WWMC projects:

















#### **Donors**

The WWMC gratefully thanks the following people who have donated to the WWMC to continue our work protecting the health of Wabamun Lake: Kelly & Mary Aldridge, Matt Anderson, Margaret Bakker, Todd Baldwin, Brenda Black, Lyn ter Borg, Ian Burn, Conrad Clement, Rob Cowley, Barry D'Angelo, Gail de Vos, Sandy Drummond, Carol & Keith Epton, Susan Evans, Neil Fleming, Stan & Janet Franklin, George & Jean Haw, Colleen & David Judge, Kobylko family, Maurice Lemieux, Kathy MacDonald, Rick MacPhee, Averie & Carman McNary, Don & Betty Meredith, Nick & Patti Moskalyk, Peter & Jordyce van Muyden, Julia & Tony Nelson, Barb Parker, Cliff Richard, Robarts family, Ron & Patricia Rolfe, Bill & Kate Russell, Ian Simpson, Ingrid & Graham Smith, Jeff Stadnick, Sue Styles, Denny Thomas, Denise & Bernie Wade, Sheila Wynn, Dwayne Zon. Edmonton Community Foundation: McIvor Kent Endowment Fund.

**Remember:** Donors to the WWMC receive a tax receipt. Please visit our Donate page for more information and to support lake health in just a few moments of your time.

#### **Corporate Members**

The WWMC thanks the following businesses, governments, and organizations for joining the WWMC as corporate members and helping the council achieve its goals. Please visit our Get Involved page for more information about Corporate Membership.

#### **Gold Members**











#### Silver Members











#### **Bronze Members**









Heritage Society

## Lakescape

No. 36 | Winter 2025

Box 1005, Wabamun, Alberta, T0E 2K0

**Editor:** Sheila Smith, communications@wwmc.ca

*Lakescape* is a publication of the Wabamun Watershed Management Council. It is published quarterly for the benefit of members as well as other stakeholders in the Wabamun watershed. All material is copyright the WWMC, unless otherwise specified. For more information about the council, visit wwmc.ca.











The Wabamun Watershed Management Council (WWMC) respectfully acknowledges that Wabamun Lake and its watershed are situated on Treaty 6 territory, traditional lands of Cree, Saulteaux/ Ojibway/Anishinaabe, Blackfoot, Dene, Iroquois, Nakota Sioux, and Métis peoples. We acknowledge Indigenous peoples' deep connection to the watershed lands of Wabamun Lake, and thank them for their long history and ongoing role in lake watershed management. In an act of reconciliation, as we consider our role as watershed stewards, the WWMC intends to strengthen relationships with local Indigenous peoples so we may journey together to care for Wabamun Lake and its watershed for future generations.



Wabamun Watershed Management COUNCIL