Lakescape

Newsletter of the Wabamun Watershed Management Council No. 39 | Fall 2025

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WEDNESDAY
22
OCTOBER

Annual General Meeting of the Wabamun Watershed Management Council

Wednesday, October 22, 2025
7–9 p.m.

The meeting will be held in person and online via Zoom. Everyone is welcome! Note: Only members are eligible to vote on decisions/motions. If you are interested in becoming a member, please visit wwmc.ca/get-involved.

Keynote Presentation:
Wabamun On Watch: Invasive Species Challenges at Wabamun Lake by local expert Kallum McDonald from the Alberta Invasive Species Council. Kallum's presentation was the talk of the recent Alberta Lake Management Society workshop — don't miss your chance to experience it for yourself!

Attend in person:
Seba Beach Seniors Centre
109 1st Street S

Join via Zoom:
https://us02web.zoom.us/j/88491602520
Meeting ID:
884 9160 2520

To **phone in** (voice only), look for your local telephone number here:
https://us02web.zoom.us/u/kdaSNnI8fW

Wabamun Watershed Management Council


John Lucas

CHAIR REPORT:
Engaged Stewardship

By Sue Styles, WWMC Chair

The Wabamun Lake Watershed Management Plan (WMP) outlines four goals:

1. Good water quality
2. Healthy aquatic ecosystems and biodiversity
3. Wise land use
4. **Engaged stewardship**

Central to all WMP goals is the fourth — engaged stewardship — with further defined objectives as follows:

- Residents and visitors are knowledgeable about how they can lessen their impact on and contribute to lake health.
- The community shares its collective responsibility to be the best stewards of the Wabamun Lake watershed and stewardship programs inspire individual and collective action.

Over the past few months, the WWMC has once again observed the watershed community — both collectively and individually — stepping up to address pressing issues affecting the health of our lake and watershed. This includes actions such as participating in Parkland County public hearings, pulling invasive weeds, participating in watercraft inspection, and removing litter and broken glass from the lake (see story on page 7). We sincerely commend and appreciate every act of stewardship demonstrated by the Wabamun Lake watershed community!

Right now, our watershed stands at a pivotal crossroads. We have a rare, once-in-a-century chance to shape the future health and character of the Wabamun Lake watershed. With the ongoing Highvale Mine reclamation (the reclamation plan is soon to be reviewed by the Alberta Energy Regulator) and the designation of Wabamun Hamlet and Wabamun Country as a priority economic growth area in Parkland County's new Municipal Development Plan (February 2025), it is more important than ever to encourage stewardship. This includes engagement of all lake municipalities, Indigenous communities, business and industry, watershed residents and cottagers, and visitors so that the issues are well understood and the right decisions are made for the health of the watershed. For Wabamun Lake to thrive in the years ahead, we must expand and strengthen engagement in watershed matters. The importance of engaged stewardship cannot be overstated! (The spirit of stewardship was inspiring at the recent ALMS Conference; see story on page 11.)

It was a busy summer field season for the WWMC, filled with activities and meaningful opportunities to connect with watershed stewards. Our new Executive Director, Erica Sivell, had the chance to meet collaborative partners, residents, and visitors, gaining first-hand insight into the challenges facing Wabamun Lake and the shared commitment of the community to safeguard watershed health. Here's an overview of summer's key activities:

- **Water sampling:** WWMC completed the seventh consecutive summer of Alberta Lake Management Society (ALMS) LakeWatch water sampling. The closed water sampling season with the LakeKeepers program will begin when the ice is a safe thickness, typically in late December.
- **Algal Bloom Tracker:** WWMC is currently participating in beta testing of a new online tool that will provide the most up-to-date information available on the presence of algal blooms in Wabamun Lake and five other Alberta lakes. Visit ALMS' Satellite-Derived Algal Monitoring page for project background information.
- **Aquatic invasive species (AIS)** are a key threat to Wabamun Lake and the watershed. WWMC is involved with several initiatives to prevent the spread of AIS:
  - **AIS Canine Unit boat inspection:** Keeping Alberta waters free of AIS is a high priority for the Alberta government and WWMC. Pop-up boat inspections, such as the one held in July at Wabamun Lake Provincial Park, raise awareness of the Clean, Drain, Dry method of preventing the spread of AIS. The AIS inspection team was accompanied by conservation officers, park rangers, members of Alberta Environment and Protected Areas (EPA) administration, the Alberta Invasive Species Council (AISC), Parkland County, and some media personnel. Special thanks to Hilo, his handler Cindy Sawchuck, and Michael Surgenor of the EPA for making the day a huge success. No invasive mussels were found on this day. eDNA analysis for mussels was completed on water samples taken from numerous areas at Wabamun Lake this summer; results indicate mussels were not present. This is good news; however, we must all stay vigilant and always practise Clean, Drain, Dry. We have had a close call: in October 2024, on a lakeshore property, a motorboat from an out-of-province jurisdiction was identified as having mussels on its hull. This vessel did not enter the lake and was decontaminated by the EPA AIS team.
  - **CD3 unit:** In collaboration with Parkland County, the AISC stationed a CD3 watercraft cleaning unit at the Wabamun Boat Launch/Main Pier in early September. This unit aims to enhance public understanding of AIS and offers a convenient, no-cost solution for Cleaning, Draining, and Drying boats and other watercraft. We appreciate AISC's Kallum McDonald for his outstanding efforts in raising awareness about preventing the spread of AIS at Wabamun Lake.
  - **Invasive plants:** Community members actively participated in pulling invasive weeds to protect biodiversity of native plant and animal species.
    - Much appreciation to Jodie Kupchenko (EPA AIS team member) and Kallum McDonald (AISC) for organizing a **plant identification and himalayan balsam weed pull** event at South Seba. Ten bags of himalayan balsam were pulled. This effort will be ongoing.
    - Wabamun Lake, particularly the lake north shore at this time, has an extensive infestation of **purple loosestrife**, designated prohibited noxious under the *Alberta Weed Control Act* and *Fisheries Act*. Under the direction of Nicole Kimmel (EPA AIS specialist), the Summer Village of Point Alison (SVPA) undertook a two-day effort to mitigate the spread of purple loosestrife identified along the SVPA shoreline. Some purple loosestrife was carefully dug up and other plants were mechanically cut down. All dug and cut material was bagged (22 bags' worth) and disposed of in the municipal dumpster. SVPA will continue to monitor the shoreline for this invasive plant and repeat mitigation efforts. Thank you to SVPA Mayor Gordon Wilson for undertaking this effort. EPA will advise regarding an approach to more widely address this harmful invasive plant.
- **Bulrush Restoration Pilot Project:** Year 2 monitoring of bulrush restoration at four sites was completed by Kristen Andersen, wetland scientist/restoration ecologist with Sweetflag Environmental; Kallum McDonald of AISC; and University of Alberta students Lauren Bryan and Amelia Flaherty-Martin. Bulrush colonies provide important ecosystem services, such as food and habitat for fish and birds, improved water quality through reducing suspended sediment and absorbing toxins, and erosion control by dissipating wave energy and stabilizing soil with vegetation root systems. Overall, the Year 2 assessment results are highly encouraging; the planted sites demonstrate expansion and densification of bulrush plants and are becoming diversity hotspots with other aquatic plants and insects in the planted area, suggesting

development of rich fish habitat in only two years. Consideration is being given to expanding the number of bulrush restoration sites. Lakeshore property owners interested in bulrush restoration are asked to contact WWMC for more information at info@wwmc.ca.


Sue Styles

- **Sunshine Bay Shoreline Vegetation Map:** Kallum McDonald (AISC) completed an aquatic vegetation survey of Sunshine Bay by kayak this summer and entered the shoreline emergent and floating vegetation data into a Google Earth map; he also posted photos of each plant to iNaturalist. Kallum's hope is that this information benefits public understanding of the well-being of the Wabamun shoreline and serves as a tool to monitor changes in plant populations over time. WWMC is grateful to Kallum for so generously sharing his knowledge and work. As the map is a new public tool, Kallum welcomes feedback; you can reach him at ais@abinvasives.ca.
- **Western Grebe Nesting Survey:** Cindy Kemper, EPA Species-at-Risk Biologist and member of the EPA Western Grebe Recovery Advisory Group, introduced this initiative to gather data on western grebes — their presence, absence, nesting area, and whether they are producing chicks. Data was collected from June to September, with several volunteer citizen scientists participating. A summary report will be provided to WWMC; this survey initiative will be ongoing.
- **TransAlta combined Highvale Mine decommissioning and final reclamation plan application:** These materials are soon to be reviewed by the Alberta Energy Regulator (AER). WWMC remains attentive to the AER review process and will endeavour to keep lake stakeholders and rightsholders informed. (See article on page 12.)
- **TransAlta AI data centre development:** WWMC also remains attentive to the possible submission of a TransAlta AI data centre development application to Parkland County. At the public hearing held September 3 and 4, 2025, Parkland County Council approved amendments to the Highvale Mine End Land Use Area Structure Plan and Land Use Bylaw to facilitate data centre development. WWMC and numerous other community members provided written submissions and verbal presentations to the public hearing. The efforts of the Community on Keephills Environment and individual property owners did not go unnoticed by WWMC; we recognize and value your engagement in matters of lake health concern. (See article on page 13.)
- **Parkland County Wabamun Waterfront Development: Project A (Marina and Swim Pond):** Research by the WWMC reveals that extensive dredging proposed as part of this project will release unacceptable levels of harmful contaminants into the lake and will also destroy a large area of important fish habitat. We continue to question whether this project should proceed.
- **Paul First Nation engagement:** WWMC Board members attended Remembering the Children Day on September 29 and Orange Shirt Day on September 30 at Paul First Nation. We appreciate the invitations to attend these important events and are grateful for the opportunities to deepen connections and strengthen trust with our Indigenous neighbours so we may care for the lake and watershed together.

Engaged stewardship was threaded throughout the activities and events of the past summer. Let's keep the momentum going! I close with gratitude for the always incredible engagement and contribution of the WWMC Board of Directors, Representatives, and our Executive Director, Erica Sivell.

Stay engaged with us! wwmc.ca is an excellent source of information, and you can follow us on Facebook and Instagram for the latest updates. Reach out to us any time at info@wwmc.ca

Our Lake, Your Vote:
Parkland County Election 2025

By Erica Sivell, WWMC Executive Director

In the lead-up to the upcoming election on October 20, the WWMC reached out to the mayoral and councillor candidates in Divisions 5 and 6 — those directly within the Wabamun Lake watershed — to ask a few important questions about their views on the health and future of our lake. We believe our members will be very interested in where the candidates stand on issues that affect Wabamun Lake and its watershed, and we are pleased to share their perspectives with you. As residents and stewards of the lake, your vote has a direct impact on its protection and sustainability — this is a must-read before you cast your ballot.

QUESTION 1: Wabamun Lake and its watershed are central to the health and well-being of our community. If elected, what is the one thing you would do to safeguard the watershed for residents today and in the future?

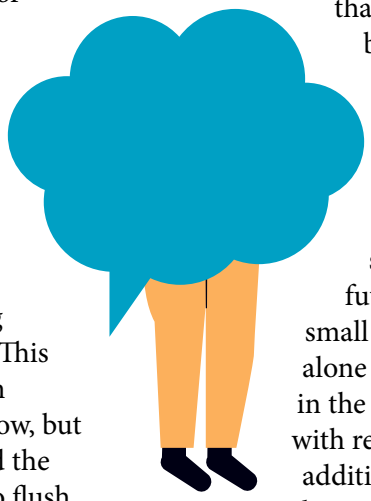
Parkland County Mayoral Candidates:

Allan Gamble (Incumbent): "I will work to ensure development is concentrated in key areas (i.e. the village of Wabamun), and that the shoreline in undeveloped areas remains intact where possible. Parkland county also recently implemented policies to protect environmentally significant areas in the County."

Rod Shaigec: "We're fortunate to have an abundance of lakes, rivers, streams, and unique ecosystems in Parkland County Wabamun Lake being one of our most significant natural assets. There needs to be a focused, multi-stakeholder approach to protecting Wabamun Lake; my priority is to maintain and enhance water quality for future generations. This will include protecting and restoring the riparian areas, and through responsible land-use planning and development. I strongly believe that cumulative impacts must be part of every environmental and land-use decision near Wabamun Lake."

Division 5 Councillor Candidates:

Beverly Sharon Muirhead: "Wabamun Lake has always been important to me since I moved here 35 years ago, and I wish I knew more about the watershed. Wabamun Lake is a very valuable resource for the beauty of the lake, and as a place to vacation, boating, fishing, waterskiing, swimming. One thing I would do is to make sure all the cabins along the shoreline are using septics and not draining any waste into the lake. This might have already been taken care of, I don't know, but I have never understood the concept that it is okay to flush waste into lakes, streams, rivers, and groundwaters."



Kristine Olson: "I will support, promote and participate in continuing educational opportunities in schools, for landowners and users of the lake and its watershed in partnership with groups like WWMC, Mayatan Lake Management Association and NSWA. Education is the foundation and the path forward in safeguarding our natural assets now and in the future."

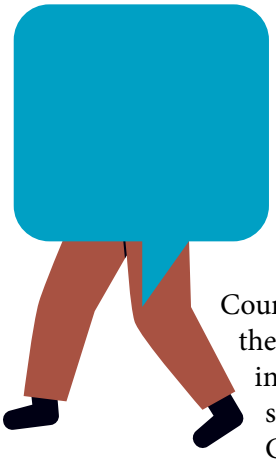
Rob Wiedeman (Incumbent): "I would bring to council ideas for controls on future development (through well-thought-out development agreements) around Wabamun that would ensure that there would be no negative impact on the lake."

Division 6 Councillor Candidates:

Spencer Clarke: "I believe that council and groups like this play a key role in bringing support or concern from local residents and business to the discussion when developments are being proposed and it would be my goal to ensure that these concerns would be heard with equity along with support to find the unbiased path forward in this democratic process. That being said, a blind safeguard blocking any future development large or small around Lake Wabamun alone would not be equitable in the eyes of democracy but with research and consensus additional considerations can be implemented for those properties closest to all of our wetland ecosystems. The one thing I would do is stand up for unbiased and fair democracy within our municipal government."

Reg Faulkner: "Advocate for no further development within the riparian zone around the lake and to cancel the proposed 220-slip marina."

John Alexander McNab: "As past chair and current vice chair of the



Committee on Keephills Environment (COKE), I appreciate working alongside the Wabamun Management Council. This type of collaboration has proven to be both effective and impactful, drawing on our strength together. Continuation of these two groups' collaborative efforts will not only safeguard the Wabamun Lake watershed through an environmental lens, but it also adds to a social and community support network that results in real impacts on protecting the watershed."

Trevor Weiss: "Regarding your inquiries I am in support of any community built around a lake having supports to maintain the health and well-being of the community. Division 6 has multiple bodies of water and communities that are built around them. I respect that the health of the water is important to the families that surround them especially."

QUESTION 2: If elected, will you commit to standing up for Wabamun Lake and its watershed by supporting independent review, public hearings, and active County involvement in the reclamation approval process for the Highvale Mine?

Parkland County Mayoral Candidates:

Allan Gamble (Incumbent): "I will commit to ensure that we steward our lakes, rivers, streams, wetlands, and environmentally sensitive areas. It is imperative that we involve all stakeholders for reviews, public hearings, and process of reclamation decisions."

Rod Shaigec: "I fully commit to supporting independent scientific reviews and meaningful public hearings. While the final regulatory approvals for mine reclamation falls under provincial jurisdiction, I fully support Parkland County taking an active role in the reclamation approval process including, if necessary, the submission of Statements of Concern."

Division 5 Councillor Candidates:

Beverly Sharon Muirhead: "Yes, I most certainly do and would continue to stand up for Wabamun Lake and the watershed. I would support independent reviews, public hearings and Parkland County Council should have been and should be involved in the care and maintenance of Wabamun Lake and the watershed. When I first moved here there were loons, a variety of ducks and geese. When they stop coming to the lake you know there is a problem."

Kristine Olson: "If elected, it is my duty to stand up for Division 5 and the challenges within, including the protection and health of its waters and surrounding environmentally sensitive lands. Specific to Wabamun Lake, I am committed to taking an active role in working with WWMC, public engagement, transparency in the public hearing process and facilitating increased educational efforts."

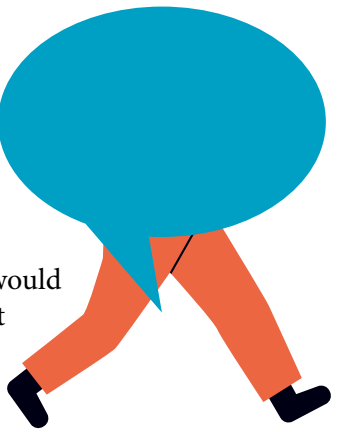
Rob Wiedeman (Incumbent): "I have always stood up for Wabamun Lake and have held TransAlta to account for their actions and activities and will continue to do so. Unfortunately, Parkland County has limited authority with the reclamation process, which is where I think we should try to change the process to allow municipalities proper standing."

Division 6 Councillor Candidates:

Spencer Clarke: "Yes."

Reg Faulkner: "Yes."

John Alexander McNab: "As you are aware I have been heavily involved with TransAlta's mine reclamation processes and have identified significant social impacts that go hand in hand with the mine reclamation plans. The Highvale Mine reclamation process is something that the greater community has been pressing the County to be involved in for more than 50 years. The identified Mine Affected Area encompasses a significant portion of Division 6 and Division 5, from the shores of Lake Wabamun to the North Saskatchewan River. The reclamation End Use Plan known as the Highvale End Use Area Structure Plan was an attempt to guarantee the community with some assurances that the social and environmental impacts of coal mining would not be forever lasting. I believe the County has a responsibility to be an active partner in protecting this resource, and I would certainly support exploring an independent review process and the active participation of Parkland County's appropriate departments in the reclamation approval process, specific to long-lasting environmental and social impacts. I believe that standing up for Wabamun Lake isn't just about the environment, it's about protecting the community, economy, and way of life that depend on it."



Trevor Weiss: "In regard to how directly I would support them at this time, I don't think it's fair to be able

to put out promises or ideas directly at this time. I feel I would need more information, and to communicate with the people involved with this council to be able to articulate what is best, and how best to do it for everyone involved."

As Parkland County residents prepare to cast their votes, the WWMC would also like to take a moment to recognize the Summer Villages around Wabamun Lake, which held their municipal elections earlier this summer. We extend our sincere congratulations to all those elected and our heartfelt thanks for their ongoing leadership, collaboration, and commitment to protecting the health of Wabamun Lake and its watershed. Your continued partnership is vital to the stewardship and sustainability of our shared waters.

2025 Summer Village Election Results

Summer Village	Mayor	Deputy Mayor	Councillor
Seba Beach	Rick MacPhee (Acclaimed Incumbent)	Michael Paull (Acclaimed New)	Kevin Campbell (Acclaimed New)
Betula Beach	Rob Dickie (Acclaimed Incumbent)	Monty Wood (Acclaimed Incumbent)	Peter Wilkes (Acclaimed Incumbent)
Kapasiwin	Tim Wiles (Acclaimed Incumbent)	John McIvor (Acclaimed Incumbent)	Tim Kirby (Acclaimed Incumbent)
Lakeview	Earle Robertson (Acclaimed Incumbent)	Doug Willows (Acclaimed Incumbent)	Tom Woodman (Acclaimed Incumbent)
Point Alison	Gordon Wilson (Acclaimed Incumbent)	Derrick Nixon (Acclaimed New)	Tony Currie (Acclaimed New)


Glenn Tremblay

Everyday Action: Caring for Our Lake

By Sheila Smith, WWMC Director

On August 1, 2025, local residents Glenn Tremblay and his friend Blaine took it upon themselves to clean up their favorite part of the lake, south of Wabamun town and Disco Point. After a productive first foray of about 45 minutes on the water, they returned to shore with plenty of litter and glass — then they headed back out to find more. In all, they removed at least half a five-gallon bucket's worth of broken glass and pieces of metal of various sizes. In their words, "This is what we do!" They hope others in the community will pitch in and clean up their favourite spots, too. Everyday acts of conservation add up to a big impact — shoutout to Glenn and Blaine for leading by example and inspiring us all by putting their principles into action!

Blue-Green Algae at Wabamun Lake

By Neil Fleming, WWMC Director

As summer and the open water season at Wabamun Lake draw to a close, it appears we may have fortunately avoided a cyanobacteria (blue-green algae) bloom for 2025, but blooms can still happen late in the year. In August 2024, Alberta Health Services (AHS) issued a blue-green algae advisory for Wabamun Lake; visible algae blooms were reported in areas such as the Provincial Park and Seba Beach, but none have been reported this year.

Key Risk Factors and Insights

- Cyanobacteria are naturally present in Lake Wabamun, but blooms — and the health risks they pose — depend heavily on environmental conditions: warm water temperatures, calm weather, sufficient nutrients (especially phosphorus and nitrogen), and limited mixing of lake water.
- One important structural feature of Wabamun is its drainage and outflow dynamics. The lake has a relatively small watershed and limited inflows; its only outflow, Wabamun Creek, has a weir that restricts flow except during wetter periods. This means that what enters the lake tends to stay in the lake for a long time — particularly nutrients and contaminants. During hot, dry spells when water levels drop, concentrations of these nutrients and contaminants tend to increase. No water has left the lake over the outflow weir since May 2021.
- Monitoring by the WWMC, as well as by AHS, plays a crucial role. The WWMC continues to track advisories and visible blooms, as well as providing information on what people can do in the watershed to reduce nutrient loading, including maintaining shoreline vegetation, eliminating use of fertilizers, and ensuring septic/grey water systems are functioning properly.

What's Underway and What We Need

- **Continued monitoring**, especially through summer and early fall since warm periods are most conducive to bloom formation.
- **Watershed stewardship actions**, including reducing nutrient inputs from agricultural runoff, lawns, and septic systems; maintaining buffers of native vegetation along shorelines; and protecting wetlands that act as filters.
- **Public awareness,** ensuring advisories are clearly posted and that the public is informed about what visible blooms look like, how to avoid risk, and what behaviors reduce the likelihood of blooms.

This photograph of the waters near Betula Beach from August 28, 2025, shows accumulations of *Gloeotrichia*, a strain of cyanobacteria common to Wabamun Lake. Fortunately, the bacteria did not enter their final phase of growth that results in a toxic bloom. *Neil Fleming*

The Bottom Line

- Lake Wabamun is not currently under a cyanobacteria advisory (as of late 2024), but risks remain whenever temperatures are warm, runoff is heavy, and water movement is low. Vigilance is required, both in terms of monitoring and community action. Simple practices in the watershed can help reduce nutrient loading and lessen the severity of future blooms.
- For a deep dive into blue-green algae, read "Seven things you should know about blue-green algae," a quick and engaging article referencing the work of Dr. Rolf Vinebrooke.
- Wabamun is one of six Alberta lakes being monitored with satellite imagery to learn more about algal blooms and how to predict them. This work is also being coordinated by Dr. Vinebrooke, the Alberta Lake Management Society, and the Alberta Biodiversity Monitoring Institute. These groups are also working to develop a web application to track algal blooms. This tool will allow the public to easily access data and observe trends for their lake of interest. In years to come, Albertans may find checking for upcoming algal blooms as easy as checking the weekend weather forecast.

Remembering the Wabamun Lake Oil Spill, 20 Years Later

By Erica Sivell, WWMC Executive Director

On August 3, 2005, Wabamun Lake was the site of one of the largest inland oil spills in Canadian history. The cause was a Canadian National (CN) freight train derailment in which 43 rail cars left the tracks on the north shore near Whitewood Sands. Over 700,000 litres of Bunker C heavy fuel oil and 88,000 litres of pole treating oil were spilled into the lake. The event caused widespread environmental damage, lasting social impacts, and an enduring legacy for the lake.

Cause of the Derailment

The Transportation Safety Board of Canada determined that the derailment was caused by a defective rail. A section of track, installed as a permanent repair, contained an undetected fatigue defect known as a detail fracture. The rail itself was made from older steel that did not meet modern "clean steel" standards, making it more vulnerable to such flaws. Although the track was inspected regularly, the testing technology available at the time could not reliably detect this type of internal defect, allowing the weakness to go unnoticed until the derailment occurred.

Environmental and Human Health Impacts

The derailment released oil southward into Wabamun Lake, spreading across the water and into marshes along the north and eastern shore, where it contaminated crucial habitat for fish, birds, and other aquatic life. Hundreds of waterfowl, including grebes, ducks, and loons, died from exposure to the oil, and early studies revealed deformities in whitefish eggs from contaminated sediments. The spill was catastrophic for western grebes, wiping out hundreds of birds and devastating one of the most important breeding areas for this vulnerable species. Beyond immediate mortality, the spill and its aggressive cleanup methods destroyed the softstem bulrush stands essential for nesting, leaving a lasting scar on the reedbed ecosystem and threatening the long-term recovery of Wabamun's grebe population.

Health officials quickly issued advisories warning residents and visitors not to drink the water, swim, or boat on the lake, and concerns about groundwater contamination prompted CN to establish a monitoring program for local wells. The combined effects on water quality, wildlife, and public health made this one of the most severe inland spills in Canadian history.

Derailed CN cars piled up near Whitewood Sands. *Bull Purdy/The Globe and Mail*

Cleanup and Response

The cleanup effort at Wabamun Lake was complex, costly, and often controversial. Containment booms were deployed in an attempt to control the spread of oil, but strong winds and wave action quickly dispersed it across the lake. Many residents were frustrated by CN's slow initial response and lack of clear communication, leading to a temporary railway blockade in protest. In 2009, CN pleaded guilty under both federal and provincial environmental laws, was fined, and committed to improving its spill response planning. Cleanup and remediation efforts continued for months, with CN spending over $100 million to restore soil, shoreline, and water quality. Despite these efforts, residents reported finding submerged tar balls years later, a lingering reminder of the spill. CN also provided compensation packages to local residents and cottage owners to address the disruption and loss of enjoyment caused by the disaster, as well as a payment settlement to Paul First Nation for damages to land and water.

Long-term Legacy

Two decades after the Wabamun Lake oil spill, perspectives on its lasting impact remain divided. Some stakeholders believe the lake has largely recovered, while others continue to express concern about the adequacy of the cleanup and the absence of consistent long-term monitoring. Because Wabamun is primarily precipitation-fed, with slow water turnover, its ecosystem is especially vulnerable to the lingering effects of residual oil.

In the years following the spill, fish were reintroduced, yet government studies have pointed to growing risks to the sustainability of fisheries. To support ecological recovery, the WWMC undertook restoration initiatives such as bulrush planting to restore habitat, improve water quality, and reduce shoreline erosion. Still, important knowledge gaps persist — particularly around the persistence of oil in lake sediments and its long-term influence on aquatic health.

While provincial studies suggested limited long-term environmental impacts, many residents and WWMC members have continued to raise concerns about residual contamination. In 2012, the WWMC commissioned its own *State of the Watershed* report, which similarly found no measurable lasting effects from the spill. The Government of Alberta echoed this conclusion, declaring Wabamun Lake to be in good health. Yet, for some community members — including Indigenous groups who remain hesitant to use the lake as they once did — questions about the lake's true health remain unresolved.

To help fill these gaps, the WWMC participates in the LakeWatch program, facilitated by the Alberta Lake Management Society. This community-based initiative provides ongoing water quality monitoring, offering valuable insight into subtle or delayed impacts on fish and aquatic habitat. However, the comprehensive testing required to fully understand long-term effects remains beyond the WWMC's current resources.

The derailment also spurred broader regulatory change. As part of the response, CN was required to help develop mapping systems identifying environmentally sensitive areas along

rail corridors — an important step toward improving preparedness and response for future incidents.

Looking Ahead

Twenty years later, the scars of the 2005 derailment have largely faded, yet the memory of the spill remains deeply etched in the community's story. For many, it stands as a lasting reminder of the vulnerability of Wabamun Lake and the importance of protecting it. The lake is not only a recreational treasure, but also an ecosystem that supports wildlife, livelihoods, and community well-being. By carrying forward the lessons of the past — through ongoing monitoring, stewardship, and preparedness — we strengthen our commitment to safeguard Wabamun Lake for today and for generations to come.

Adult western grebe and chicks.

ALMS CONFERENCE 2025

By Sheila Smith, WWMC Director

Seba Beach had the absolute privilege of hosting the Alberta Lake Management Society (ALMS) 2025 Annual Conference on September 24 and 25. WWMC and ALMS are strong partners and collaborate on monitoring Wabamun Lake water quality through their citizen science LakeKeepers and LakeWatch programs.

The two-day workshop included 24 presentations from researchers, students, stewards, writers, even musicians, and others on many interesting and relevant topics. Participants learned about methods to monitor and track water quality through satellite-driven algal bloom tracking, eDNA monitoring, and partnerships with Indigenous communities. Strategic planning techniques were discussed, including attaching monetary value to natural assets and using a freshwater health index. Threats to lakes, including invasive species, were featured in presentations from representatives of the Beaver Hills Biosphere and the Carvel Pitted Delta lakes. But stewards are working hard on wetland restoration in Wizard Lake, artificial beaver dam construction projects, Franklin's ground squirrel conservation, western grebe recovery, and other projects. The event was capped off with a keynote address from Lorne Fitch entitled "From Enlightenment to Science in a Skeptical World." You can find digital versions of presentations on ALMS' 2025 Conference page.

This community of engaged stewards gives us hope for a future with better lake health and biodiversity. To learn more about ALMS and explore their amazing resources, visit alms.ca.

John Lucas

The Future of the Highvale Mine: What It Means for Wabamun Lake

By Denny Thomas, WWMC Director

For nearly 50 years, TransAlta operated the Highvale Mine — once the largest coal strip mine in Canada — on the lands adjacent to Wabamun Lake. This vast operation occupies roughly one-third of the watershed, an area that drains directly toward one of Alberta's most treasured recreational lakes.

For decades, surface runoff from the mine site has been captured, treated, and carefully discharged into Wabamun Lake to prevent contamination. This essential water management process must continue well into the future, until the entire mine area is fully reclaimed, which is expected to take more than 20 years.

Now, a new chapter is beginning. TransAlta is finalizing an updated reclamation plan that will mandate how the mined lands are to be restored and integrated back into the surrounding landscape. This updated plan will soon be ready for consideration by the Alberta Energy Regulator (AER) and hopefully will be subject to a full review in a public hearing before the regulator grants approval.

Why does this matter to the Wabamun community? The reclamation plan will directly influence the future hydrology — or water movement — of the mine area.

TransAlta is finalizing an updated reclamation plan that will mandate how the mined lands are to be restored and integrated back into the surrounding landscape.

An effective plan must restore a natural water balance that sustains healthy inflows and supports stable lake levels. Simply put, the success of Wabamun Lake's long-term health depends on how well this hydrological system is designed, restored, and managed.

The WWMC has been closely following the development of the reclamation plan and will continue to advocate for strong environmental protection measures. However, meaningful community involvement is essential. Residents, cottagers, and all who care about the future of the lake should take part in reviewing the plan once it becomes available.

WWMC will urge TransAlta, Parkland County, the five Summer Villages, and other important stakeholders such as the Paul First Nation to join us in supporting open, local public hearings held by the AER to ensure that community voices are heard before any final approval is granted. We will share updates as soon as the finalized plan is provided to us.

Wabamun Lake's future depends on informed and active stewardship — your participation can make a real difference. Stay tuned, get involved, and help shape the next 50 years of our watershed's story.

Data Centre Zonings Near Keephills and Sundance Approved

By Denny Thomas, WWMC Director

On September 3 and 4, Parkland County Council held statutory public hearings and passed bylaw amendments to the Highvale End Land Use Area Structure Plan (ASP) and the Parkland County Land Use Bylaw (LUB) to allow for the development of large-scale data centres near the Keephills and Sundance power generating stations. These changes will affect two sites within the footprint of the Highvale Mine, as shown in the maps at right from the TransAlta Data Centre Application webpage. (The map headings have been changed here to reflect that they no longer represent proposed changes, but rather approved amendments).

At the public hearings, WWMC made submissions to strengthen the bylaw amendments through the use of mandatory language. Some of these amendments were adopted by Parkland Council.

Our proposal for an open review process for development permits was not accepted, nor was a suggested resolution to require alignment of the amended ASP with the revised reclamation plan for the Highvale Mine.

The amendments to the LUB have the effect of shifting the authority for approving data centres from the County's development officer to Parkland County Council. This change streamlines the permit approval process but will severely limit opportunities for public input and oversight.

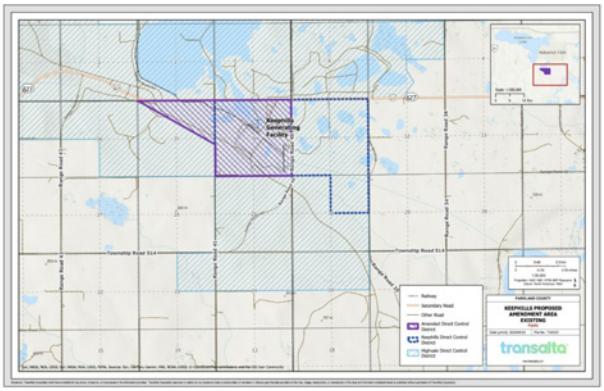
Data centres are massive, warehouse-style facilities that house the servers powering our digital world, including AI applications that demand immense computing power. They require continuous, high-voltage electricity and extensive cooling systems, often using significant quantities of water or air to dissipate heat.

TransAlta is now working to attract a third-party developer to build at least one of these centres. WWMC is on the lookout for development permit applications so we can assess any proposals for adverse environmental effects on the lake and its watershed. Of particular concern are the potential impacts on water use, noise, and whether these developments could delay or disrupt the ongoing reclamation of Highvale Mine lands and the restoration of the area's natural hydrological systems.

The path ahead underscores the importance of vigilance and collaboration. WWMC encourages all stakeholders to remain informed, ask questions, and actively participate in safeguarding the integrity of Wabamun Lake's environment as industrial and technological changes unfold.

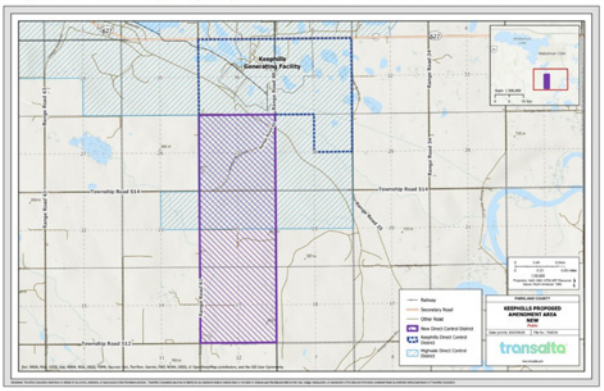
Existing Keephills Generating Station Site

Land Use Bylaw (LUB) – Direct Control District



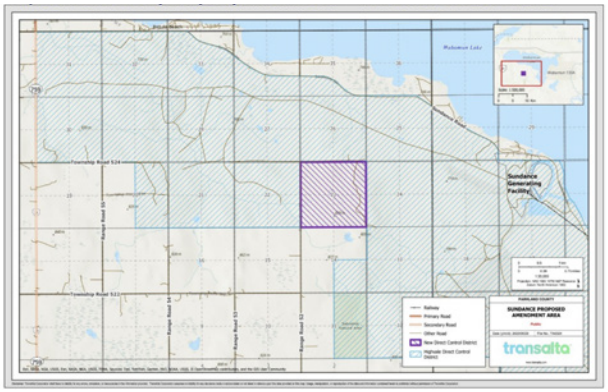
Keephills Site Amendments

Land Use Bylaw (LUB) – Direct Control District



Sundance Site

Land Use Bylaw (LUB) – Direct Control District



Protecting the Hidden Residents of Wabamun Lake Provincial Park

Dr. Jessica Haines' Research on Franklin's Ground Squirrels

By Erica Sivell, WWMC Executive Director

At this year's Alberta Lake Management Society (ALMS) conference, **Dr. Jessica Haines** from MacEwan University delivered a fascinating presentation on her ongoing research into one of Alberta's most elusive and ecologically significant species: the **Franklin's ground squirrel** (*Poliocitellus franklinii*).

Dr. Haines' study takes place right here at Wabamun Lake Provincial Park, a vital refuge for this rare species. The park's dense, undisturbed parkland habitat, with its lush understory and natural vegetation, provides exactly the kind of environment that Franklin's ground squirrels depend on — which has become increasingly rare across Alberta. This connection underscores how preserving and enriching the ecology within Wabamun Lake and its watershed supports not only our lake's health but also the species that rely on it. Protecting these habitats is central to what the WWMC strives to achieve.

A Disappearing Squirrel in Alberta's Parklands

While Alberta is home to five species of ground squirrels, Franklin's ground squirrel stands apart, recognized by its **long, fluffy, grey tail, dusky face, and brownish-grey body**. Often mistaken for the more familiar Richardson's ground squirrel, commonly referred to as "gophers," Franklin's ground squirrel has a very different lifestyle. They prefer dense, shrubby parklands, not the open fields or lawns their cousins inhabit.

Unfortunately, this preference has put them in peril. **Alberta's parkland ecosystem has undergone more human transformation than any other natural region — nearly 79% altered**. As a result, the range of Franklin's ground squirrels has contracted dramatically, with most remaining populations now clustered around lakes and protected areas.

Research and Discovery in the Field

Dr. Haines' research team uses a combination of citizen science data from platforms like iNaturalist and on-the-ground surveys to track where Franklin's ground squirrels are still found. Trail cameras baited with peanut butter have proven remarkably effective, detecting squirrels within two days at known sites.

However, these squirrels are notoriously secretive, making them hard to spot in person. Their cryptic behavior, combined with low population numbers, means that every confirmed sighting adds valuable knowledge to conservation efforts.

Why They Matter

Franklin's ground squirrels are more than just charming inhabitants of Alberta's parklands — they are vital **ecosystem engineers**. Their burrows help improve soil structure and water infiltration, providing shelter for snakes, burrowing owls, and other species. They also serve as an important prey base for raptors like the endangered ferruginous hawk.

The last major study of Franklin's ground squirrels in Alberta dates back to the 1970s, leaving major gaps in our understanding of how their decline affects the broader environment. Dr. Haines' work is helping to fill those gaps — and to inspire a new generation of scientists and citizen naturalists to get involved.

How You Can Help

Dr. Haines encourages everyone to participate in this conservation effort. You can:

- **Submit sightings or photos** of Franklin's ground squirrels through iNaturalist or Nature Alberta's Franklin's Ground Squirrel Project page (scroll down to the "Reporting Past Sightings" form).
- **Share historical records or photos** that may help track long-term changes in distribution.
- **Explore free resources** like squirrel identification guides, educational materials, and even recordings of the Franklin's call you can download and use as your ringtone (also available on Nature Alberta's page).

Every observation contributes to understanding — and protecting — this little-known species.

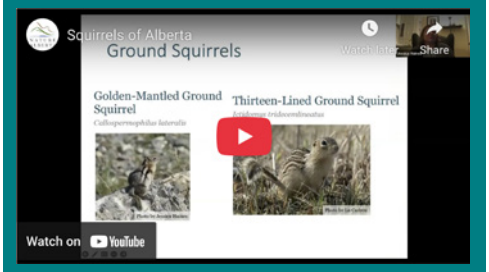
Franklin's ground squirrels have a grey head and tail with a brownish body. The tail is one-third the length of their body.

A Shared Commitment to Stewardship

Dr. Haines' research is a reminder that **healthy parklands and watersheds are deeply interconnected**. By conserving the natural habitats around Wabamun Lake, we also protect the biodiversity that depends on them — from open waters that define our community to the unseen burrows of Franklin's ground squirrel.

The WWMC appreciates Dr. Haines' important work to better understand and conserve Franklin's ground squirrels, a species whose survival reflects the overall health of our parkland ecosystems. Her research highlights why the preservation of natural habitats within the lake and its watershed is so vital.

Through continued conservation, education, and community participation, we can ensure that Wabamun Lake and its hidden residents continue to thrive for generations to come.



Watch Dr. Haines' presentation, "Squirrels of Alberta." Visit naturealberta.ca/ground-squirrel and scroll down to "Watch the Squirrels of Alberta Presentation."

What's on Our Website:
Studies and Reports

By Sheila Smith, WWMC Director

In this newsletter feature, we will highlight information on our website that you may find worthwhile taking the time to read over. We will explore topics of importance to lake and watershed health that you can learn more about with just a few clicks. This time, let's take a look at our collection of **Studies and Reports**.

The Studies and Reports page offers a wealth of information for anyone interested in learning more about the current state of lake health. This includes annual data collection on water quality indicators like the LakeKeepers and LakeWatch reports, or foundational documents like the *State of the Watershed 2013*.

Some of the reports provide technical detail, presenting data in understandable terms. Others present a snapshot in time of significant events, such as the drone flyover report of the 2018 ice heave damage. And others cover specific topics of interest, such as the Boat Launch Study or the Recreational Motorized Watercraft Activity Study. Alongside the *Wabamun Lake Watershed Management Plan* (available in its entirety or as a two-page summary), you'll even find videos that give an overview of what it's all about.

The Studies and Reports page is your comprehensive source for information about the issues and challenges facing our lake. And getting informed is the first step of good stewardship! The conclusion of the *State of the Watershed* report puts it very well:

> "Long-term management, planning and forward thinking is critical to the overall success in achieving goals for the watershed. While the responsibility for enforcement of laws, regulations, and plans generally falls to various levels of government, it is critical that residents and other stakeholders maintain their involvement and ensure that issues within the watershed are not ignored. Continued watershed management planning is necessary to ensure the long-term health and preservation of the Wabamun Lake watershed."

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.*

Pumping Water Into the Lake

Q: Why can't water be pumped into the lake directly from the North Saskatchewan River to address low lake water level?

A: It's a good question, but unfortunately it's not a solution for many reasons. First and foremost, raw water from another water source pumped directly into the lake could harm the lake and its ecosystem because it could bring harmful species and disease, and change the water quality. That is why the small amount of water being put back into the lake by Transalta's Wabamun Lake Water Treatment Plant is treated. This is water that has been diverted from the mine to their cooling ponds and from the North Saskatchewan River. The volume of treated water put into the lake is equal to what would have naturally flowed to the lake had the mine not existed. Other reasons include the time and cost of permitting, constructing, operating, and maintaining a pipeline and pumping plant to draw water from the river.

Cyclic fluctuations in lake water level are part of natural lake function. We must also consider what happens when the lake levels rebound — flooding becomes a risk. Modifying the lake level through unnatural means may have unintended consequences and will take careful consideration so is not a short-term solution.

Please visit our Lake Water Level page for detailed information and our position paper related to lake level and the water treatment plant.

Sheila Smith

A Parting Call to Action: Tell a Friend!

By Sheila Smith, WWMC Director

Thank you for taking the time to read our newsletter and engage with what happens at Wabamun Lake. Please take the time to share this with a friend, neighbour, or relative and ask if they would be interested in joining our small but mighty group of watershed stewards.

General Members of the WWMC are part of a community of passionate Albertans working together to protect one of Alberta's most treasured lakes. Members contribute by:

- **Learning** about lake and watershed stewardship best practices to support long-term lake health.
- **Helping** the WWMC understand local lake and watershed issues.
- **Sharing** information with your community and other stakeholders.
- **Collaborating** on projects that sustain the lake and its watershed.

Membership is **free** and valid for one year, renewed annually by June 30. Members enjoy:

- A subscription to ***Lakescape***, our quarterly newsletter.
- **Timely updates** on lake conditions, watershed initiatives, and WWMC projects.
- The opportunity to **attend WWMC meetings** and share your ideas.
- The right to **vote** at our Annual General Meeting each October and at any Special Meetings.
- Eligibility to **run for a position** on the WWMC Board of Directors.

Membership confirms your support for the vision and mission of the WWMC and consent to receiving newsletters and other information about the lake and watershed.

Become a Member: wwmc.ca/general-membership

Renew Your Membership: wwmc.ca/renew-general-membership

Together, we can protect Wabamun Lake for generations to come. Thank you for being part of this vital effort.

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: Manny & Pam Albert, Kelly & Mary Aldridge, Matt Anderson, Margaret Bakker, Todd Baldwin, Michael Beagle, Terry Bean, Brenda Black, Lyn ter Borg, Ian Burn, Mitchell Byvank, Conrad Clement, Rob Cowley, Barry D'Angelo, Gail de Vos, Sandy Drummond, Carol & Keith Epton, Susan Evans, Neil & Elaine Fleming, Stan & Janet Franklin, George & Jean Haw, Colleen & David Judge, Kobylko Family, 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, Michael Rowland, Bill & Kate Russell, Ian Simpson, Ingrid & Graham Smith, Cynthia Soneff, Jeff Stadnick, Sue Styles, Denny Thomas, Robert Van Soest, Denise & Bernie Wade, Lee Watrin, Sheila Wynn, Dwayne Zon, the Zon and Zon-Bryce families, 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.

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

Lakescape

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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.

Read previous editions of ***Lakescape*** at wwmc.ca/newsletters.

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