



# 2023 ALMS Annual Conference

## September 12 & 13







**ALMS**



# Land Acknowledgement





Alberta  
Government







**Welcome from the  
ALMS Board Chair  
Mike Christensen**





## Remembering Mike Conway

*“I want to be involved to ensure that the beauty that I grew up with is there for my children and my grandchildren.”*



# ALMS Scholarship Recipient

*An Experimental Test of the  
Potential for Bull Trout  
Conservation Translocations, via  
Instream Incubation Capsules, in  
Alberta*

Learn more at the ALMS AGM in  
November.







**Join the ALMS Board of Directors!**

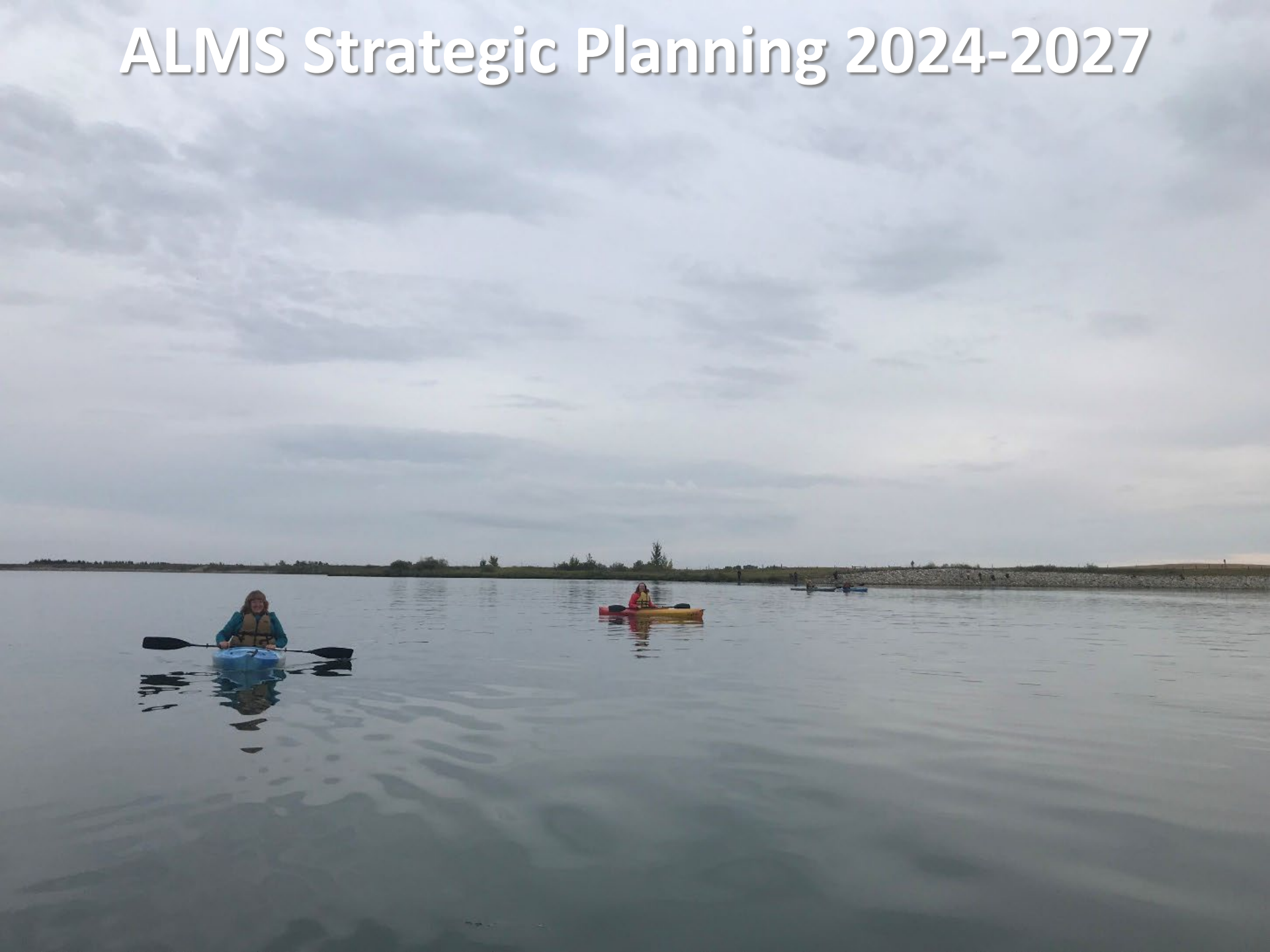
**Bi-Monthly Meetings**

**Two Seats Available**

**Submit a Nomination Form Online**



# ALMS Strategic Planning 2024-2027





# Orientation:

- Venue
- Wifi
- Bathrooms
- Agenda





# Why Sylvan Lake?





SLWSS

R.I.P.

1999 - 2021

Steward of  
the Lake





**Friends of Little Beaver Lake Society**



# Muriel Lake Basin Management Society





# How Do We Survive?

## Lake Stewardship COP





# Staff and Programs

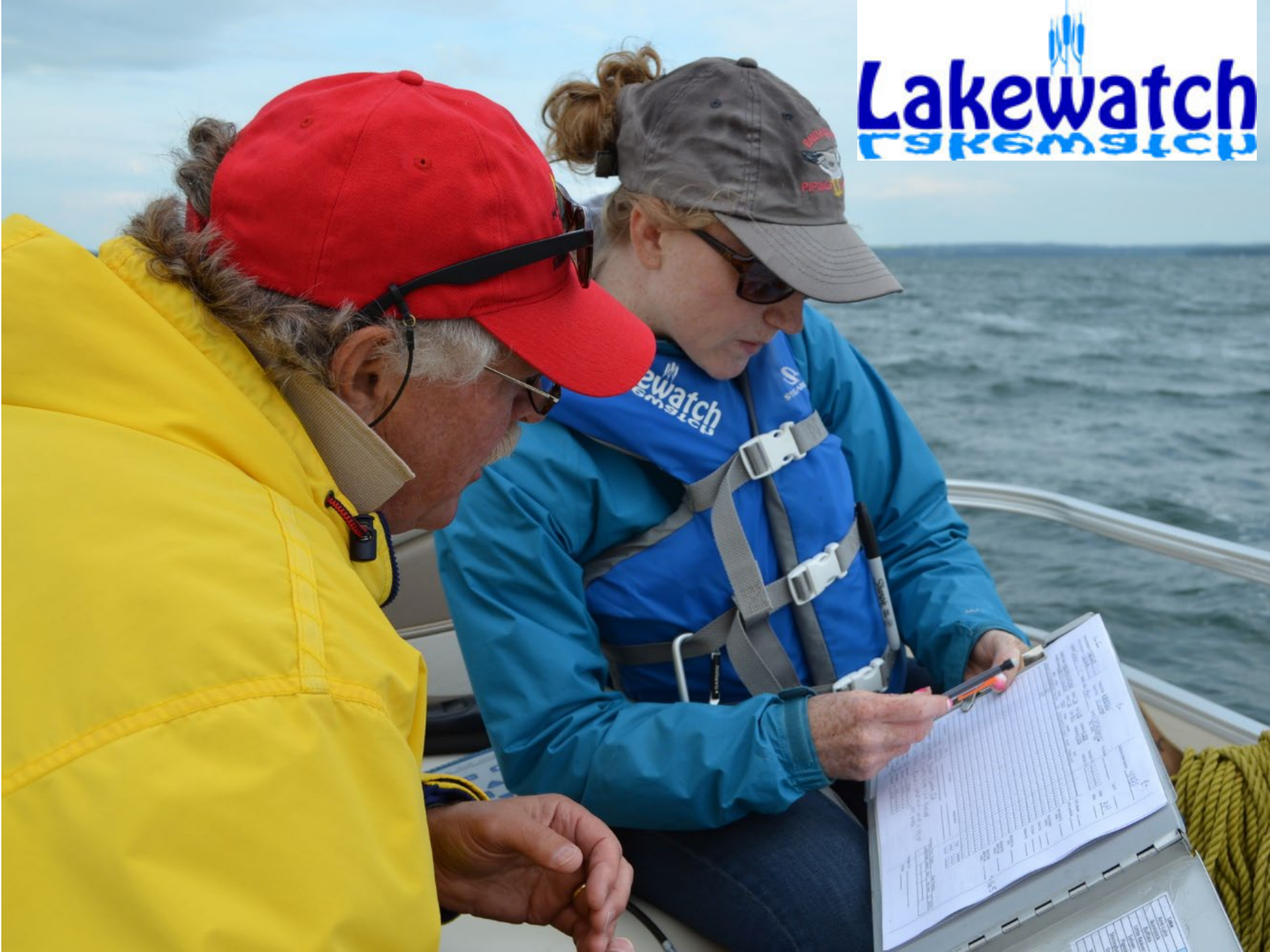




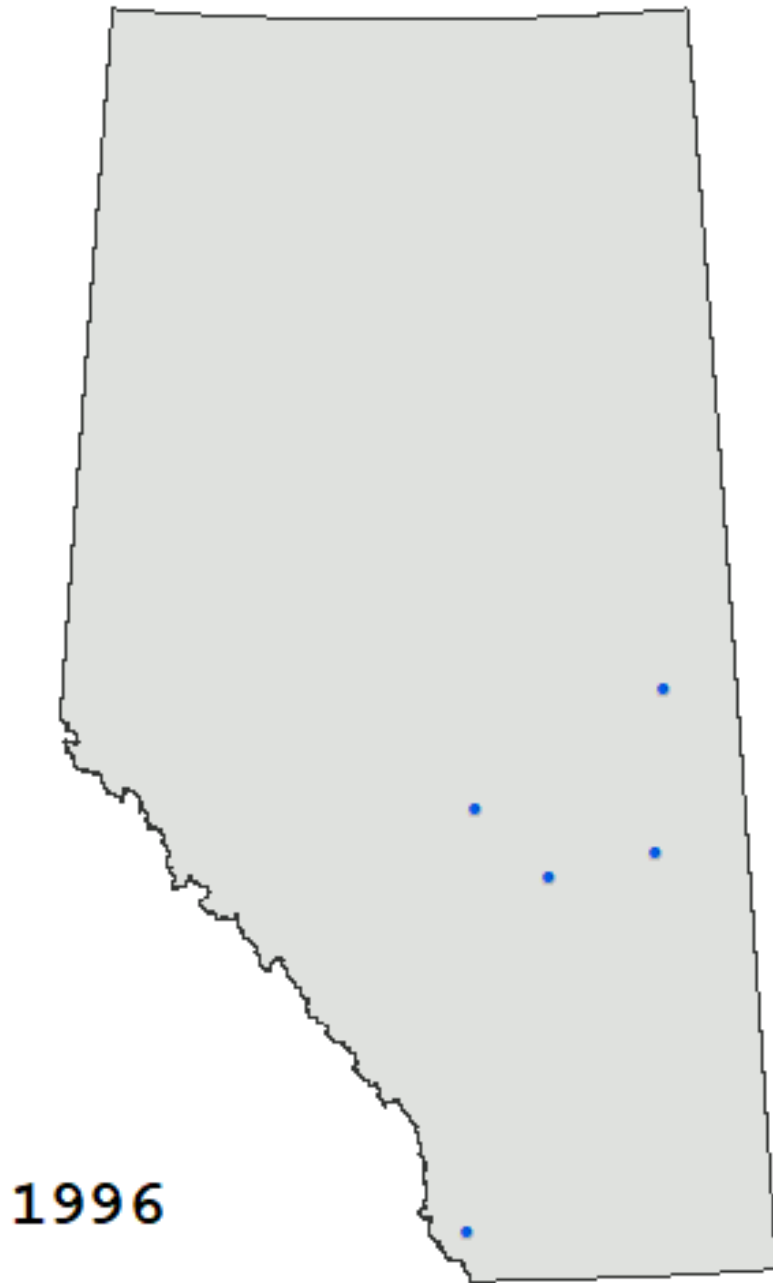
Outgoing PM: Caleb Sinn  
Incoming PM: Brittany Onysyk











- Participatory program
- Established in 1996
- Currently intensive monitoring on 30 lakes annually.
- Long term trends in water quality.
- Thank you EPA and LICA!



Maddie Koning



Kirsten Letendre

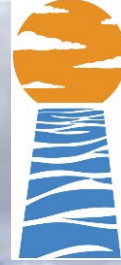




# Indigenous Community Based Monitoring in the Oil Sands Region







# LakeKeepers



- More traditional citizen science approach.





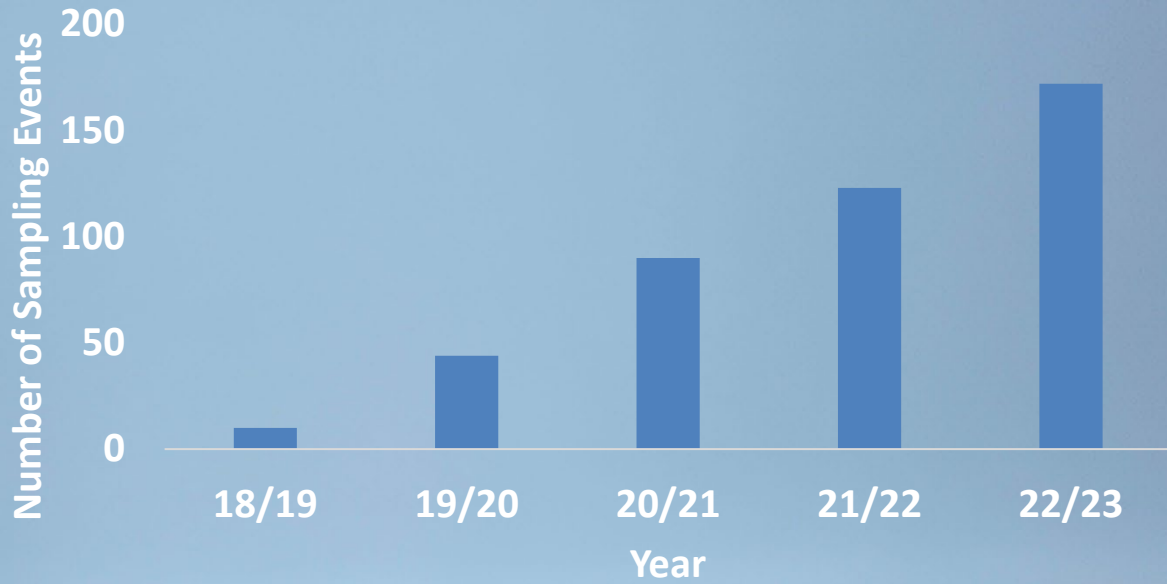
# LakeKeepers



Alberta Conservation  
Association



## Winter Lake Keepers



Report available at  
[www.alms.ca/winter-lakekeepers](http://www.alms.ca/winter-lakekeepers)



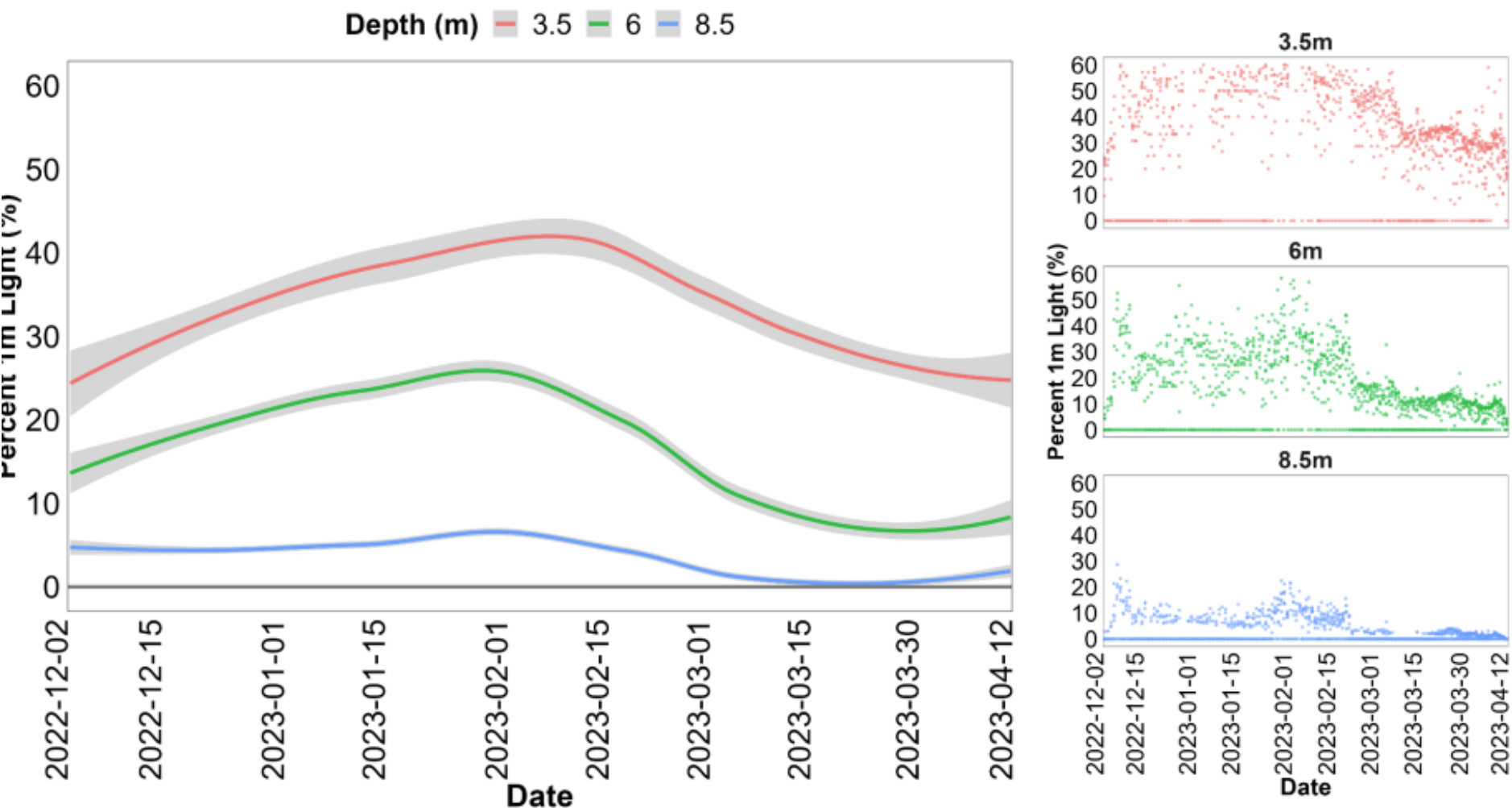
Thank you Don Davidson





# Appendix – Pigeon Lake Sensor Array

While surface light levels are not available to investigate the depth of 1% light penetration like the 'Light Measurement' section of the appendix above, investigating the changes of light at each depth below 1m relative to the light detected at 1m can indicate changes in water clarity through the water column. This analysis indicates that clarity increased from early December and peaked in mid-February, before decreasing again until the end of the season, in line with increases in surface chlorophyll-a (Figure 25), indicating that surface algae growth likely limited light penetration to depths below 1m.



**Appendix Figure 9.** Smoothed (left) and raw (right) percent light relative to light intensity from the 1m light logger (Percent 1m Light; %) at 3.5m, 6m, and 8.5m. Light Intensity (lux) measurements recorded with the light loggers (HOBO Pendant Temperature/Light Data Logger – UA-002-08) at 1m, 3.5m, 6m and 8.5m on a sensor array at the 'Pigeon Lake, Grandview' sample location. Measurements logged every 30 minutes at 1m, and every 1 hour at 3.5m, 6m and 8.5m. The sensor array was deployed on December 1<sup>st</sup> 2022, and removed on April 12<sup>th</sup> 2023. Note that timestamps where lux = 0 at 1m are removed, and that raw percentage have been smoothed with a LOESS trend line. On the left figure, the gray area around each line represents standard error of the LOESS trend, and the 0% level is highlighted with a gray horizontal line.



ICBM and LakeKeepers Program  
Coordinator: Kurstyn Perrin





*Emerald*





# Recreational Water (Beach) Monitoring

213 Sampling Events Completed in 2024

Additional 57 by NSWA and Skeleton Lake

Enhanced Monitoring at Moose Lake

Supported by: Alberta Health and the ACFT



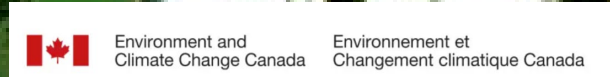
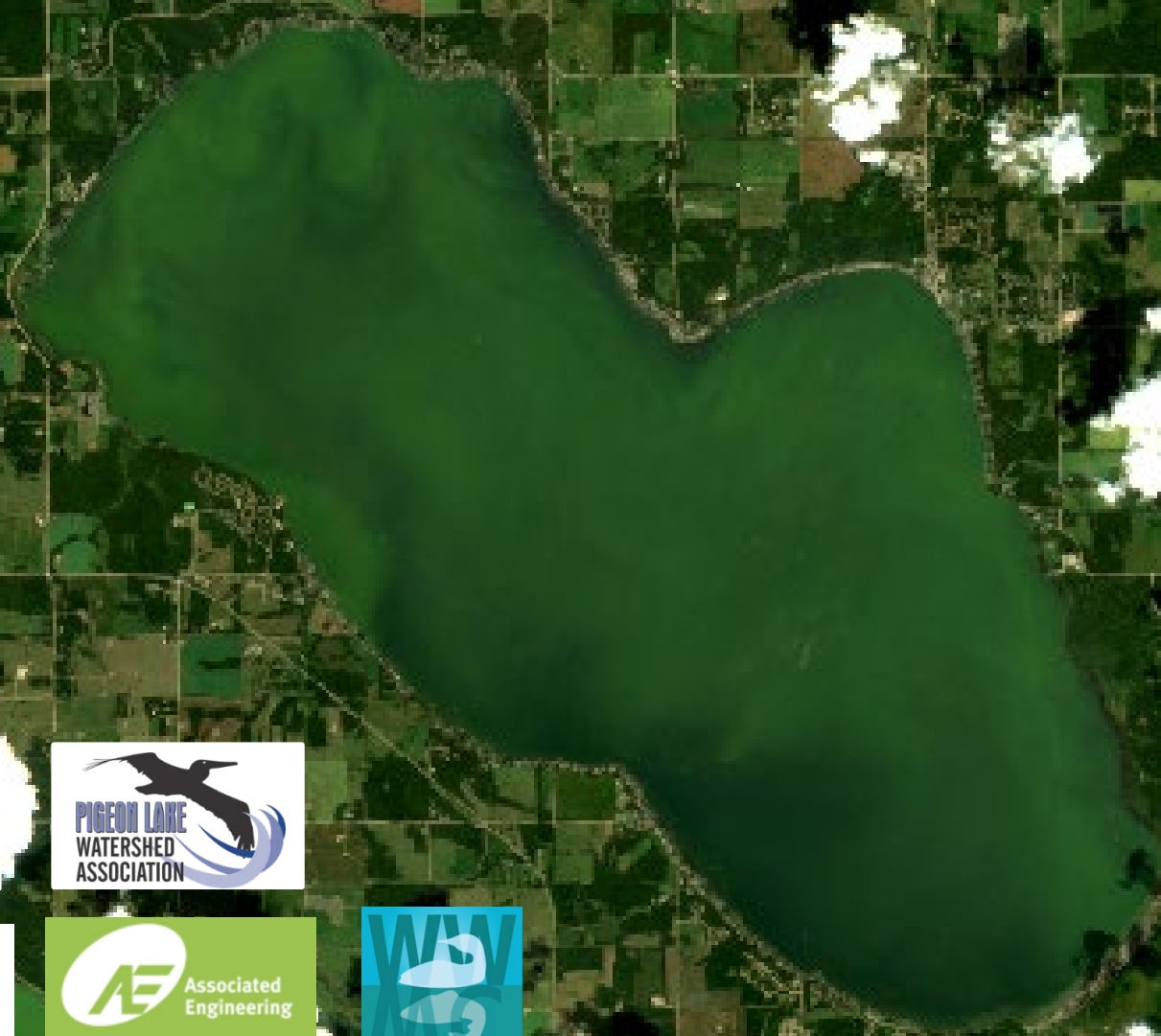


Sarah Klimchuk and Brandon Coull





# LakeWatch in Space







Jordyn Lajeunesse



# Lakes of the Carvel Pitted Delta

- 50 Lakes Samples in 2022
- Report Now Available Online
- Support from Land Stewardship Centre, NSWA, Cabelas & Bass Pro Shops, Stony Plain fish and Game Association, Parkland County, and more.

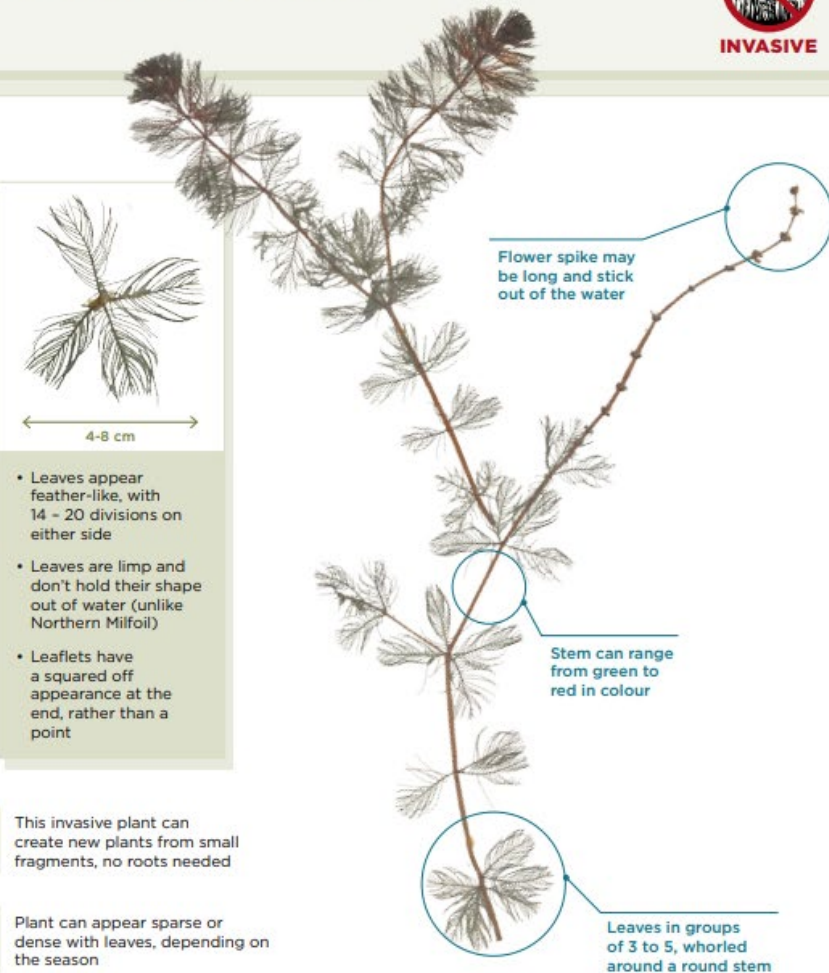




# Aquatic Invasive Species Monitoring

ALBERTA LAKE MANAGEMENT SOCIETY

## Eurasian Watermilfoil *Myriophyllum spicatum*



- Leaves appear feather-like, with 14 - 20 divisions on either side
- Leaves are limp and don't hold their shape out of water (unlike Northern Milfoil)
- Leaflets have a squared off appearance at the end, rather than a point

This invasive plant can create new plants from small fragments, no roots needed

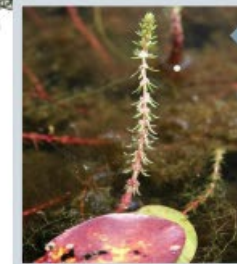
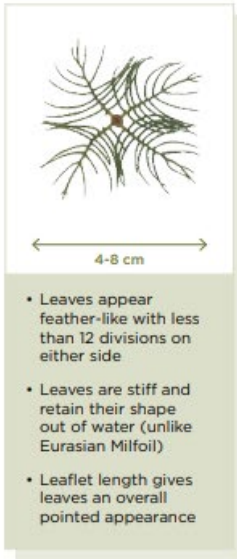
Plant can appear sparse or dense with leaves, depending on the season

## Northern Watermilfoil *Myriophyllum sibiricum*



Plant can appear sparse or dense with leaves, depending on the season

Can hybridize with Eurasian Watermilfoil



**BE ON THE LOOKOUT FOR THIS INVASIVE LOOK-ALIKE**

### Variable-leaf Watermilfoil *Myriophyllum heterophyllum*

The variable leaf watermilfoil looks similar to northern watermilfoil, however the emergent stalk has leaves which can measure up to 3 cm long

Photo: Leslie J. Mehrhoff, University of Connecticut, Bugwood.org

SUBMERGED

SUBMERGED





# Thank You!

Reports: [www.alms.ca/reports](http://www.alms.ca/reports)

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