



# 2022-2023 ALMS Annual Report



# Land Acknowledgement





# Current Staff

- Kirsten Letendre: Program Technician
- Kurstyn Perrin: ICBM Program Coordinator
- Brittany Onysyk: Program Manager
- Bradley Peter: Executive Director



## Outgoing Staff

- Program Manager: Caleb Sinn
- Seasonal Rec Water Technician: Sarah Klimchuk
- Seasonal LakeWatch Technician: Dominic Wong



Thank you for your financial  
support





**LICA**  
ENVIRONMENTAL STEWARDS



Alberta Conservation  
Association



**UNIVERSITY  
OF ALBERTA**

**Thank you for your financial  
support**





**NSWA**  
NORTH SASKATCHEWAN  
WATERSHED ALLIANCE



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Government  
of Canada



**OUTDOOR FUND**

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## Strategic Objective 1

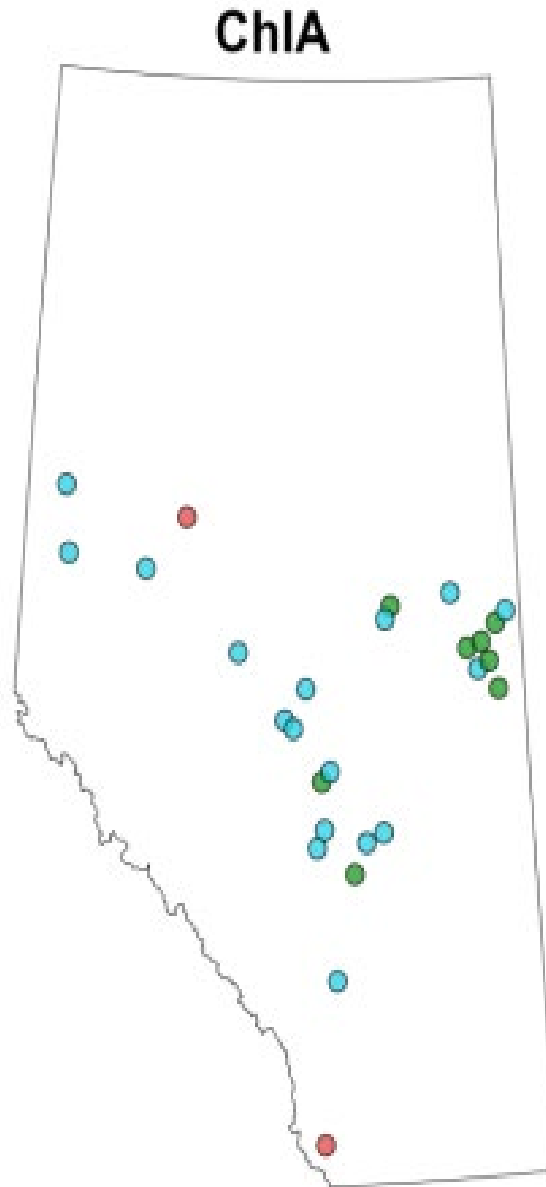
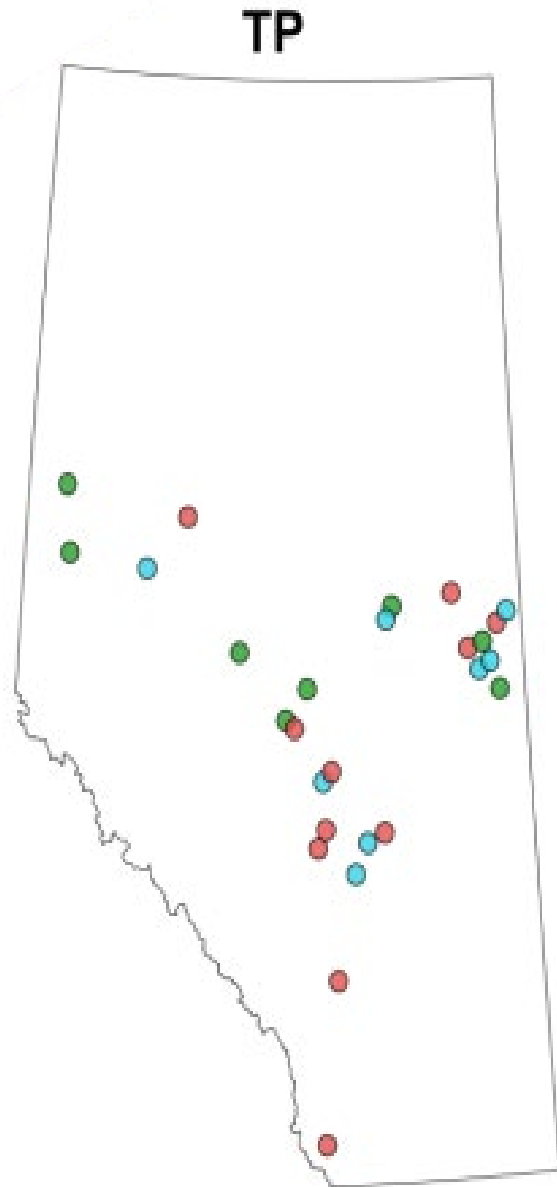
- Monitoring and Research Goals
- Supporting Indigenous Communities
- Foster linkages between water quality and fisheries



# Lakewatch

- 103 Sampling Events
- 26 Unique Lakes
- 532 Volunteer Hours
- AIS Monitoring
- 14 Long Term Trend Reports

ALMS technician Dominic Wong collecting zooplankton through the LakeWatch program.



- Decreasing (red)  
increasing (green) and  
no trends (blue)  
detected at lakes with  
more than 10 years of  
data.
- See Annual Trend  
Summary at  
[www.alms.ca/reports](http://www.alms.ca/reports).

# 2022 Volunteer of the Year Award

*Awarded to the Wabamun Watershed Management Council for outstanding contributions to ALMS programs and for advances in lake management planning.*

*Photo (left to right): Caleb Sinn, Stan Franklin, and Sue Styles.*





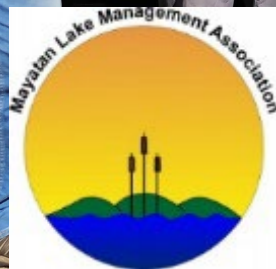
## Summer LakeKeepers Program

- Focus on remote and under-sampled waterbodies.
- 16 Lakes samples
- 26 Monitoring Trips
- Key partnerships with Mighty Peace Watershed Alliance, Mackenzie County, Alberta Conservation Association, and others.

Volunteer Walt Nielson of the Mayatan Lake Management Association conducting summer lake sampling.



- Traditional citizen science program
- Volunteers trained and equipped to collect data
- Involvement of Kehewin Cree Nation
- Furthest north: Wadlin Lake



# LakeKeepers

## Lakes of the Carvel Pitted Delta Project

- 50 lakes sampled by small group of volunteers.
- Development of bathymetric charts.
- Full suite of water chemistry.
- Ion samples revealing exciting groundwater/water quality relationships
- Thank you to Mayatan Lake Management Association.

Left to Right: David Trew (MLMA), Walt Nielson (MLMA), Dave Mussle, and Brian Smerdon (UofA)



- Data available at [www.alms.ca/reports](http://www.alms.ca/reports).
- Drone and underwater footage available on [Youtube](https://www.youtube.com).
- Wide range of water quality conditions in unique geological region.





# LakeKeepers

## Winter LakeKeepers Program

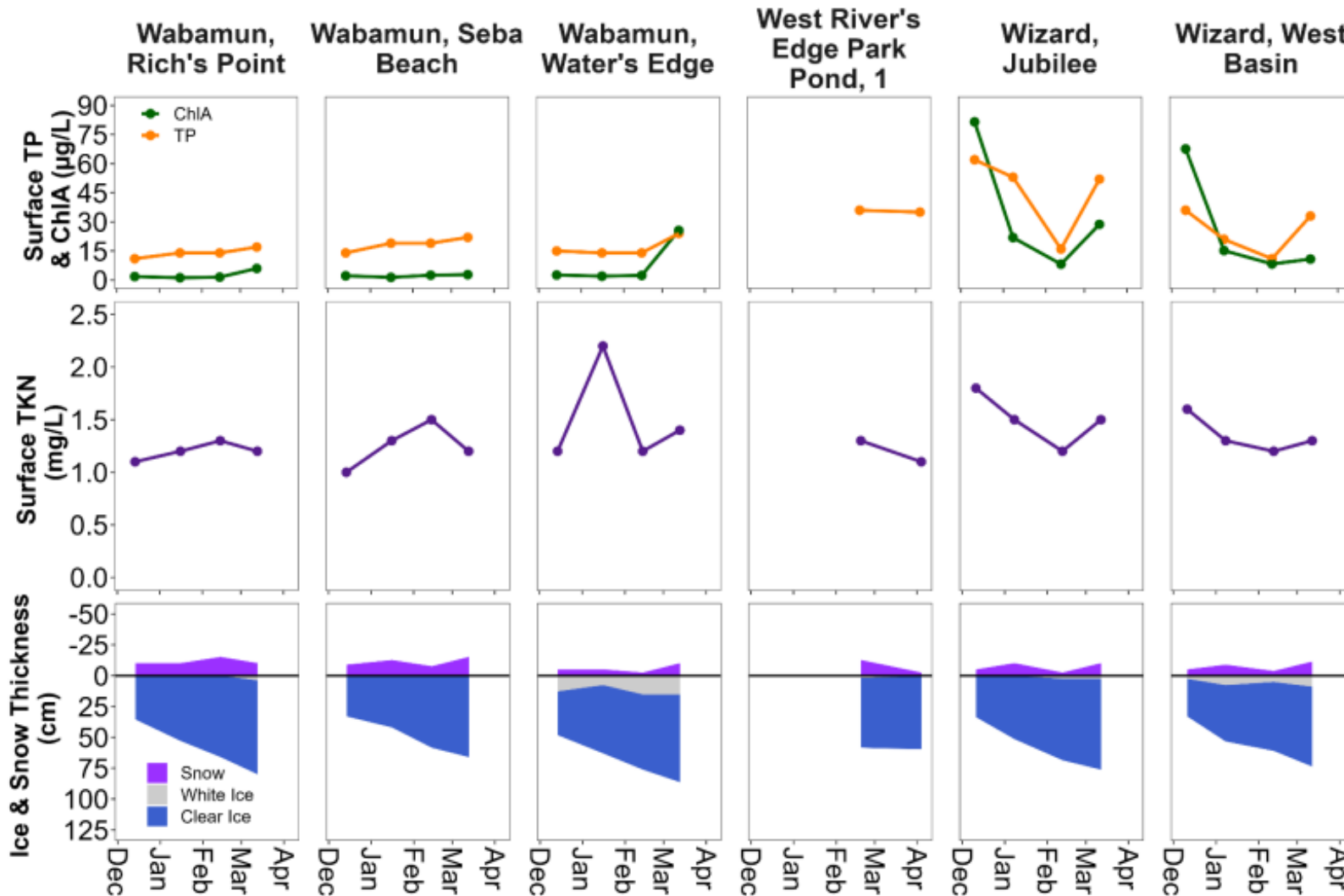
- Nearly 200 monitoring trips per winter
- 99 locations sampled
- 77 unique waterbodies
- 984 volunteer hours
- Filling a major data gap



# LakeKeepers

## Winter LakeKeepers Program

- Report now available at [www.alms.ca/reports](http://www.alms.ca/reports)
- New figures available describing snow and ice thickness.

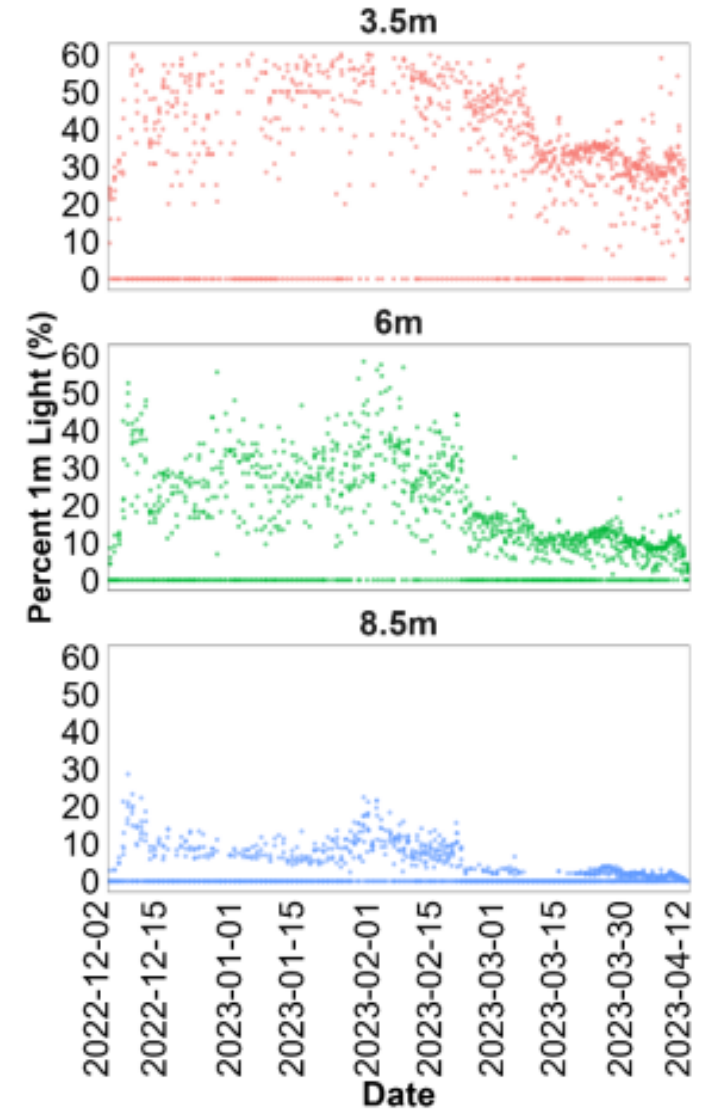
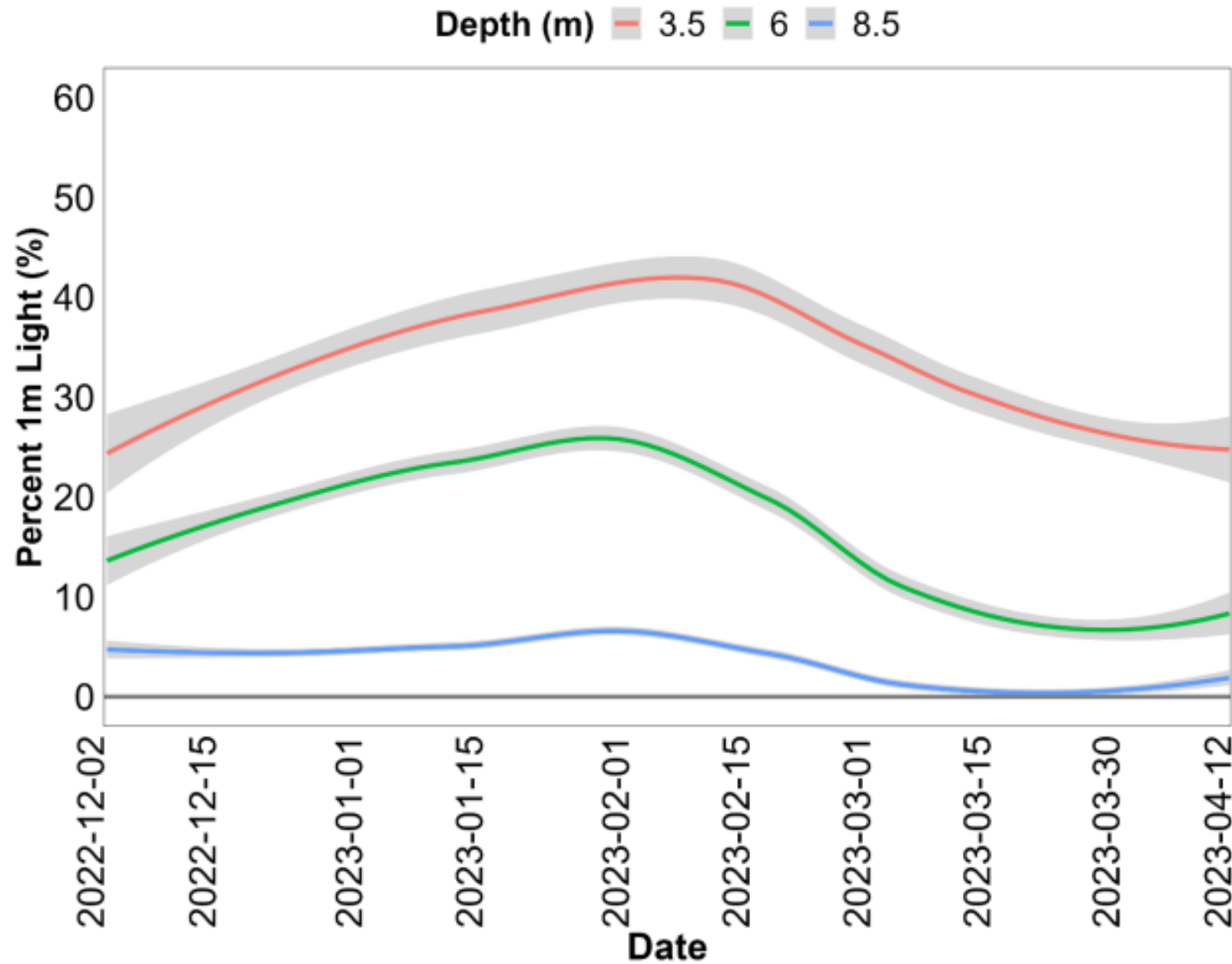




# LakeKeepers

## Pigeon Lake High Frequency Sensor

- High frequency buoy installed December 1 2022 to April 12 2023.
- 30 minute dissolved oxygen and temperature readings at 3 depths.
- Hourly light readings at 3 depths.



Changes in water clarity as determined by light intensity loggers attached to a remote high-frequency sensor array during the winter at Pigeon Lake.

# Recreational Beach Water Monitoring

- 182 public beach sampling events for enterococcus and/or cyanobacteria.
- Ten sampling events to Lac Ste. Anne to support enhanced monitoring for Papal visit.





# Indigenous Community Based Monitoring

- Supporting 7 Indigenous Communities in Alberta's Oil Sands Region with winter lake monitoring
- Enhanced monitoring for industrial pollutants.
- Participation in two Indigenous workshops.



# Indigenous Community Based Monitoring

- Site visits to each community and attendance at fish camps at Winefred and Willow Lakes.
- Total sampling events across all communities = 23

The northern lights at a fish camp help at Winnifred Lake.



# Invasive Species Monitoring

- 52 samples for Dreissenid mussels and spiny water flea collected from 26 lakes.
- 31 watermilfoil samples tested genetically for Eurasian watermilfoil.
- 98 aquatic plant samples collected from Lacombe Lake.

No aquatic invasive species detected in 2022.

Thank you to the Alberta Plant Health Lab for genetic testing support.



# ALMS Scholarship

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2022 Recipient: Ceilidh Welch

*Assessing the Reliability of a Community-Based  
Approach to qPCR Water Monitoring*





## Strategic Objective 2 & 3

- Be an authoritative voice on lake management in Alberta
- Promote an effective lake management planning process consistent with Water for Life goals
- Influence policy and governance
- ALMS stakeholders are informed and enabled to conduct lake management activities through participation in ALMS programs.
- Raises awareness and involvement of Albertans in lake monitoring and management activities
- Improve Albertan's lake literacy to promote protection and respect of lakes, reservoirs and their watersheds.



# ALMS and Alberta Water Council



- ALMS represents the Lake Conservation Sector on Alberta Water Council.
- Jay White and Steph Neufeld represent ALMS on AWC. Jay White also serves as AWC's Vice President.
- Contributions to:
  - Water for Life Action Plan Project Team
  - Source Water Protection Phase 1
    - THREATS Platform

# Lake Stewardship Community of Practice



- Connect, invigorate, and engage Alberta's lake watershed stewards.
- Quarterly virtual meetings where stewards can network and share information.
- Support community level action to support healthy lakes for Alberta's future.

# Lake Stewardship Community of Practice

Date	Topic
May 2022	<b>Community Engagement</b> featuring Blake Bartlett of the Wizard Lake Watershed Stewardship Society
July 2022	<b>Advocating for your Lake</b> featuring Don Davidson and Catherine Pierce of the Pigeon Lake Watershed Association
September 2022	<b>Lake Management SWOT Analysis</b>
February 2023	<b>High and Low Lake Water Levels:</b> featuring Kellie Nichiporik of the Moose Lake Watershed Society and Peter Cordingley of the Muriel Lake Basin Management Society
July 2023	<b>In Lake Treatment</b> : featuring Richard Normandeau of the Half Moon Lake Residents Association



# 2022 Annual Conference

- Annual conference took place September 28-29 in St. Albert.
  - 18 speakers
  - 80 attendees
  - Indigenous awareness training by Eleven Eleven Consulting
  - Tour of John E. Poole Wetland
- Presentations available online at [www.alms.ca/2022-annual-conference](http://www.alms.ca/2022-annual-conference).



# Thank You to Workshop Sponsors

- The North Saskatchewan Watershed Alliance
- Municipal Planning Services
- E8 Innovations
- Aquality Environmental Consulting
- Wabamun Watershed Management Council

And Alberta Environment and Protected Areas for continued financial support!



# Communications and Outreach

- 32 public outreach events and presentations to nearly 1500 Albertans.
- Quarterly newsletter delivered to nearly 3000 contacts.
- Presentations at:
  - Calgary CWRA Conference
  - Minneapolis NALMS Symposium
  - ACA Citizen Science Forum
  - NSWA Road Salts Workshop





# Communications and Outreach

- Lacombe Lake Aquatic Plant Bioblitz
- Shoreline assessment for native and invasive aquatic plants.
- 98 plant specimens identified.
- No invasive aquatic plants detected.



## Strategic Objective 4

- Build a strong board of directors with a wide range of skills/expertise and with representation from many sectors
- Build resilience for ongoing sustainable operations.
- Improve organization promotion, elevate the ALMS brand, and maintain operational funding.

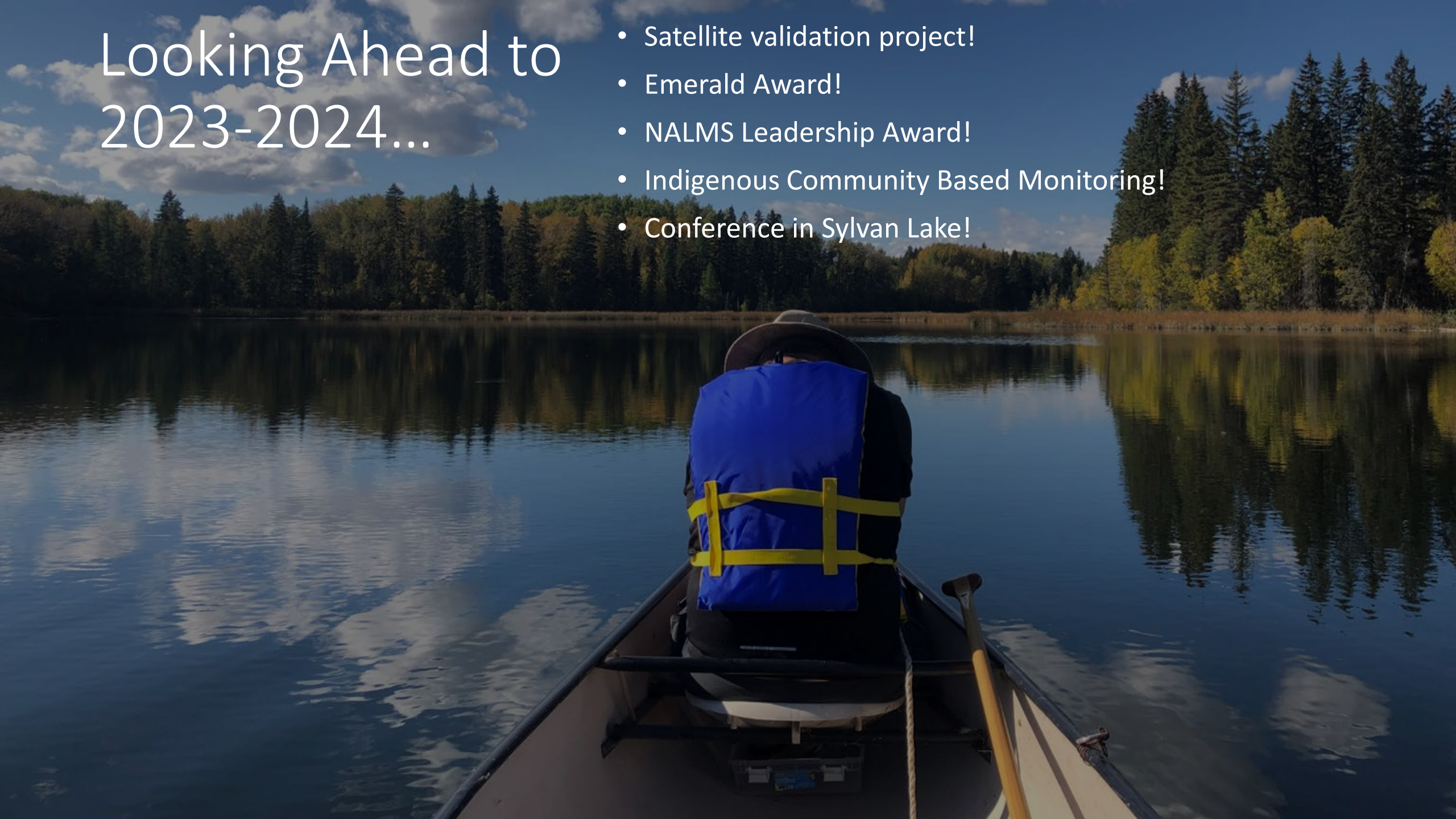
# 2022-2023 Organizational Growth

- Completion of modernized staff HR Handbook.
- Review and update to staff salary bands.
- Nomination of Jennifer Kerr, Mike Conway, and Melissa Logan to the Board of Directors.
- Modernization of ALMS bookkeeping process.
- Development of successful project proposals through Oil Sands Monitoring, University of Alberta, and University of Calgary.
- Successful proposal for increased operational funding through Environment and Protected Areas.



# Looking Ahead to 2023-2024...

- Satellite validation project!
- Emerald Award!
- NALMS Leadership Award!
- Indigenous Community Based Monitoring!
- Conference in Sylvan Lake!





Executive Director: Bradley Peter  
Alberta Lake Management Society  
[info@alms.ca](mailto:info@alms.ca)

