



# AGM Annual Report 2020-2021





**LICA**  
ENVIRONMENTAL STEWARDS



Thank you for financial support







Government  
of Canada



TD Friends of the  
Environment  
Foundation



Invasive  
Species  
Centre



UNIVERSITY OF  
ALBERTA

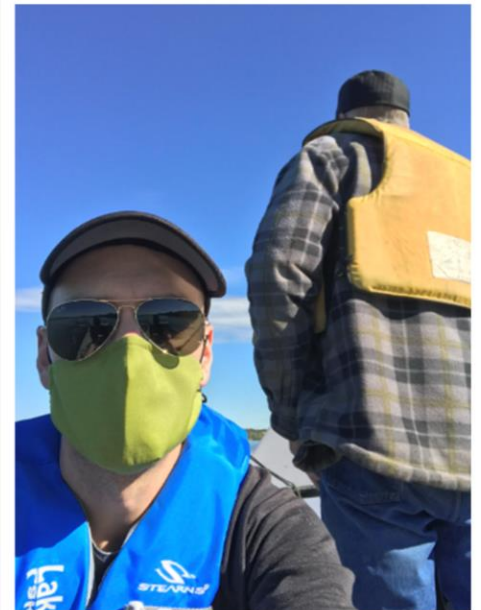
LACOMBE  
COUNTY

Thank you for financial support





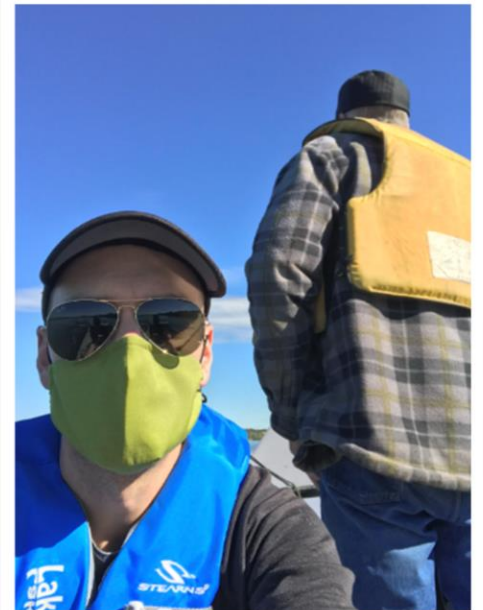
  
**Lakewatch**  
LAKESWATCH







- ✓ 407 Volunteer Hours
- ✓ 25 Lakes
- ✓ 100% sample completion rate
- ✓ 101 sample events





### 2020 LakeWatch:

- First year navigating the COVID-19 pandemic.
- Successfully ran a safe field season with 100% sample completion rate.
- Participated in multi-basin sampling with the Moose Lake Watershed Society.

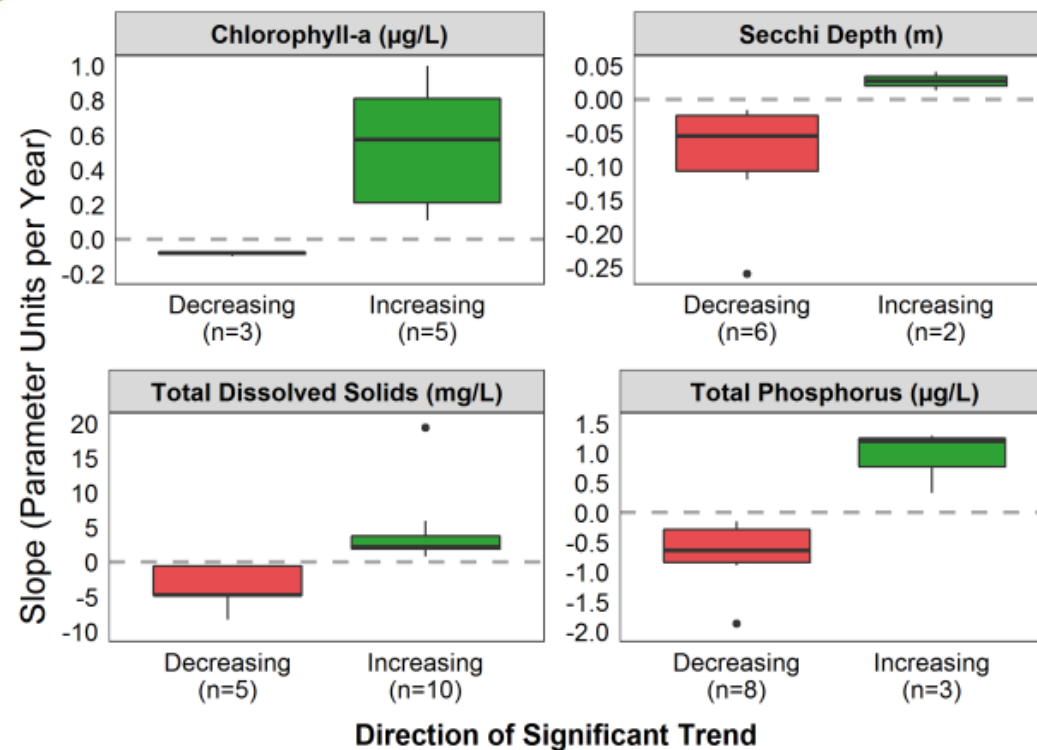
1996

<https://alms.ca/about-lakewatch/>

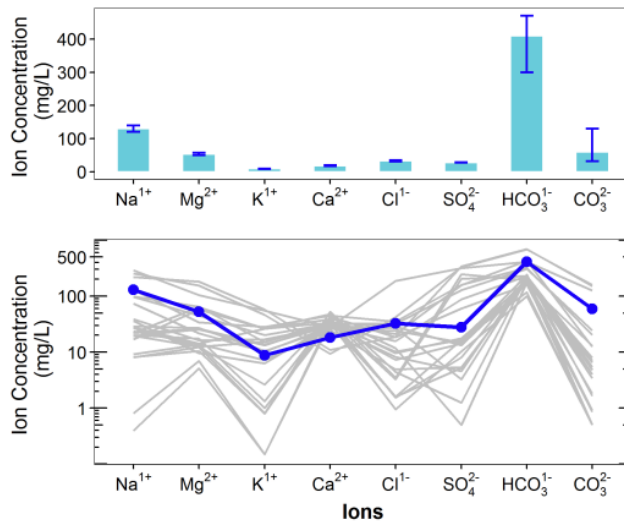


## Data and Reporting:

- All data uploaded into AEP water quality database.
- All data now in reports available at [www.alms.ca/reports](http://www.alms.ca/reports)
- NEW: Trend analysis summary report summarizes the results of all trend analyses conducted in 2020.
- NEW: Enhanced ion analysis for each LakeWatch report.



*Summary of increasing and decreasing trends in 2020.*



*Ion analysis of Crane Lake included in the 2020 Lakewatch report.*

Classification: Public





## 2020 Volunteer of the Year

Richard Normandeau was awarded the 2020 Volunteer of the Year Award which recognizes a volunteer of merit each year.

Richard has since become the first Canadian participant in the Lake Observations by Citizen Scientists and Satellites – an international satellite based water quantity measurement program.

See our recent workshop series to learn more about LOCSS.



**LAKE OBSERVATIONS**  
BY CITIZEN SCIENTISTS & SATELLITES





# ALMS VOLUNTEER OF THE YEAR 2021



# Congratulations Daren Lorentz from Pigeon Lake!

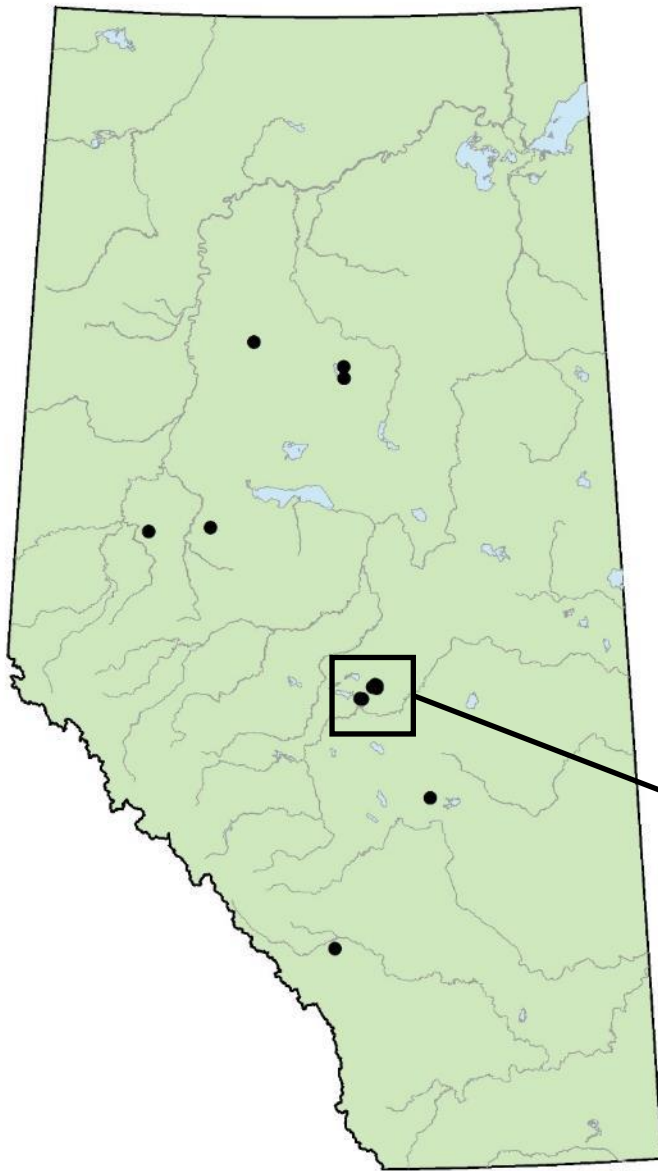




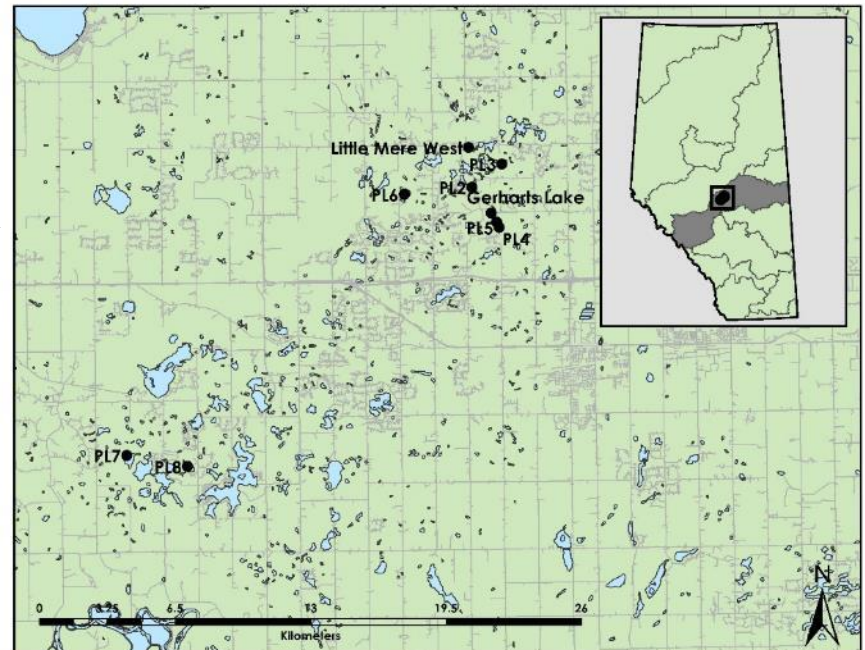


Program included **16** lakes sampled over **30** monitoring trips by **11** volunteers in **3** major watersheds.

Big thanks to the **Mighty Peace Watershed Alliance** for their collaborative monitoring efforts!



## 2020 Sample Sites





# LakeKeepers



## Data and Reporting:

- All data uploaded into [DataStream](#).
- A summary report is available at [www.alms.ca/reports](http://www.alms.ca/reports)



*Above: Post-doctoral researcher Konstanin Von Gunten and Director David Trew sampling lakes in the Carvel Pitted Delta region.*





# LakeKeepers



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Environment  
Foundation

## Winter LakeKeepers

- Engaging Albertans in community based monitoring of lakes in the winter.
- **59** volunteers were trained and equipped to collect **90** samples from **46** unique locations on **41** different lakes.





*Volunteers at Pigeon Lake collecting discrete samples from under the ice.*

Classification: Public



*Three generations of volunteers at Wizard Lake collecting winter samples and filming a segment for Let's Go Outdoors.*



# LakeKeepers



TD Friends of the  
Environment  
Foundation

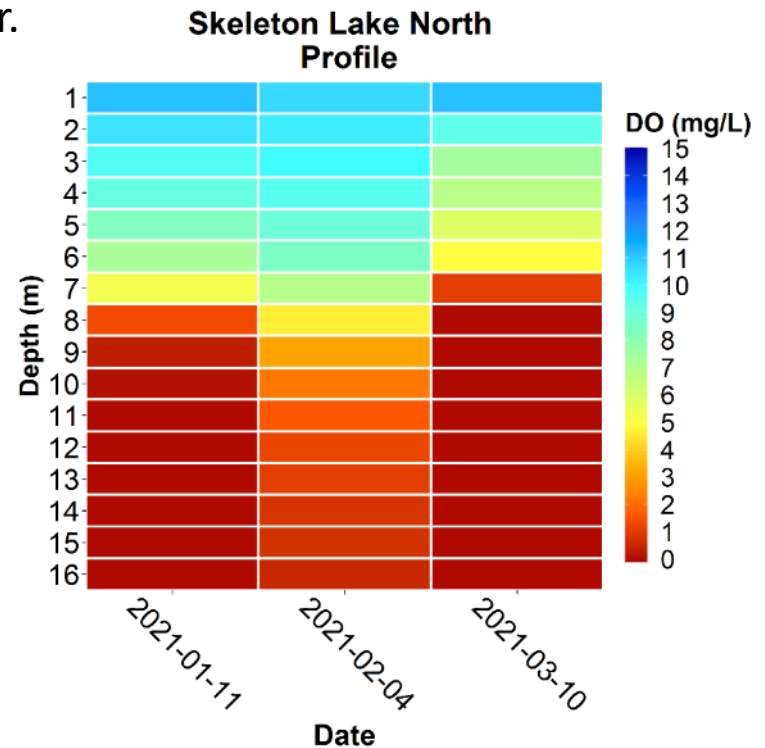


## Data and Reporting:

- Report now available at [www.alms.ca/reports](http://www.alms.ca/reports)
- NEW: Additional water chemistry parameters reported
- NEW: heat maps describing water temperature and dissolved oxygen at lake sampled multiple times throughout the winter.



*Volunteer Walt Nielsen sampling an under ice bloom.*



*New heat map graphs display dissolved oxygen and temperature changes through the winter.*

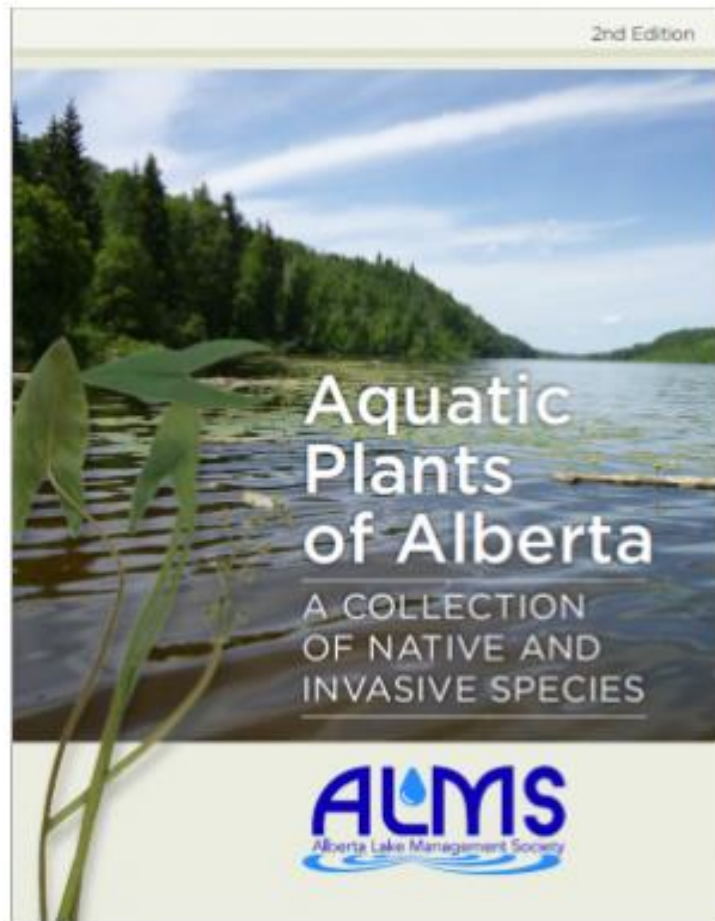


*The Battle River Watershed Alliance  
sampling Battle Lake as part of a team  
bonding exercise!*

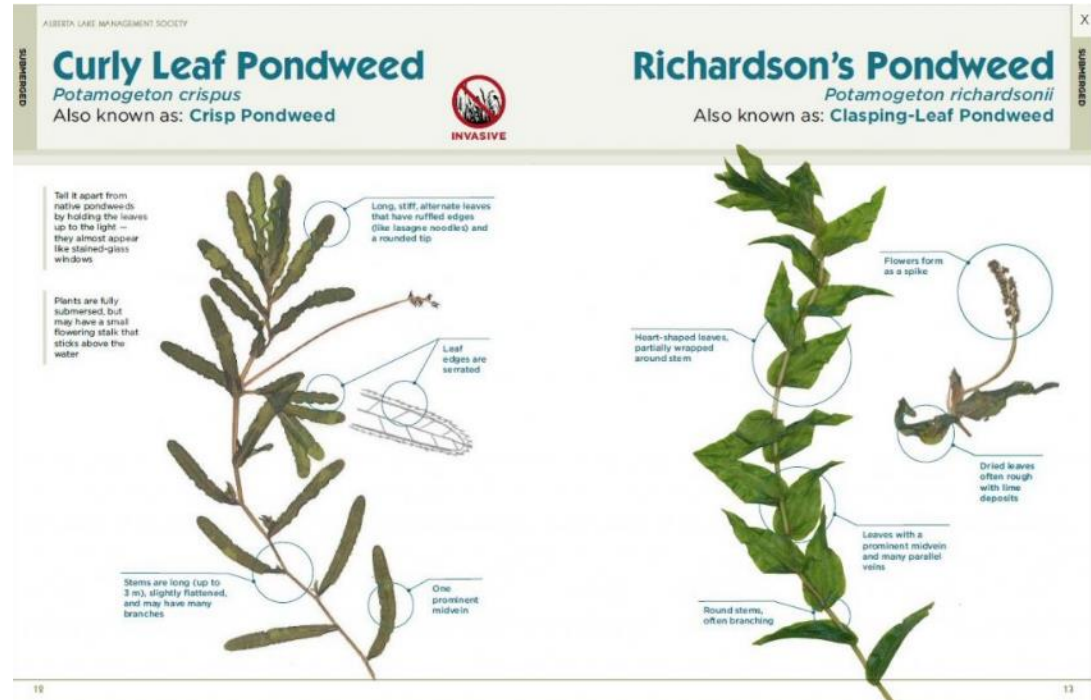


# Invasive Species Monitoring and Education

- Updated Aquatic Plants of Alberta guide!
- Available for view or purchase online at [www.alms.ca/plant-id-book](http://www.alms.ca/plant-id-book).



Invasive  
Species  
Centre



# Invasive Species Monitoring and Education

- Northern/Eurasian DNA Testing  
Via Alberta Plant Health Lab
- Samples from 28 Lakes
- No Invasive Species Detected

Thank you to NSWA for their  
monitoring support!





# Invasive Species Monitoring and Education

- Dreissenid mussels and spiny water flea sampled in each LakeWatch lake.
- No invasive mussels or spiny water flea detected in 2020.



<https://www.flickr.com/people/43788330@N05>



# Recreational Beach Monitoring

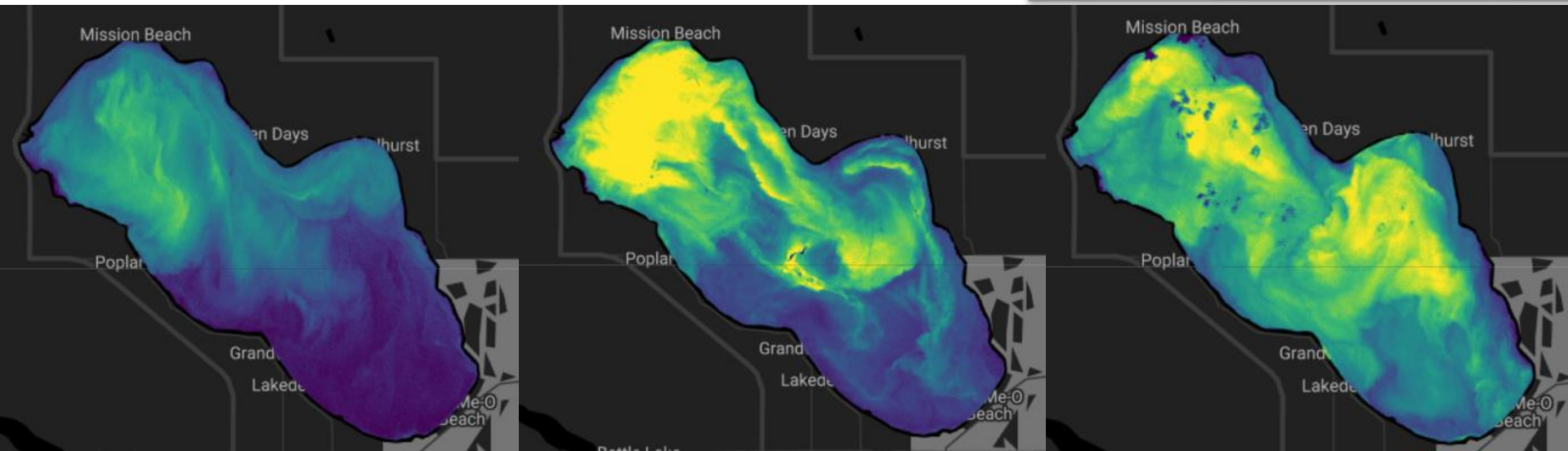
- In 2020, ALMS and partners collected **123** water samples from recreational beaches to support Alberta Health Services' and Alberta Health's recreational beach monitoring program.





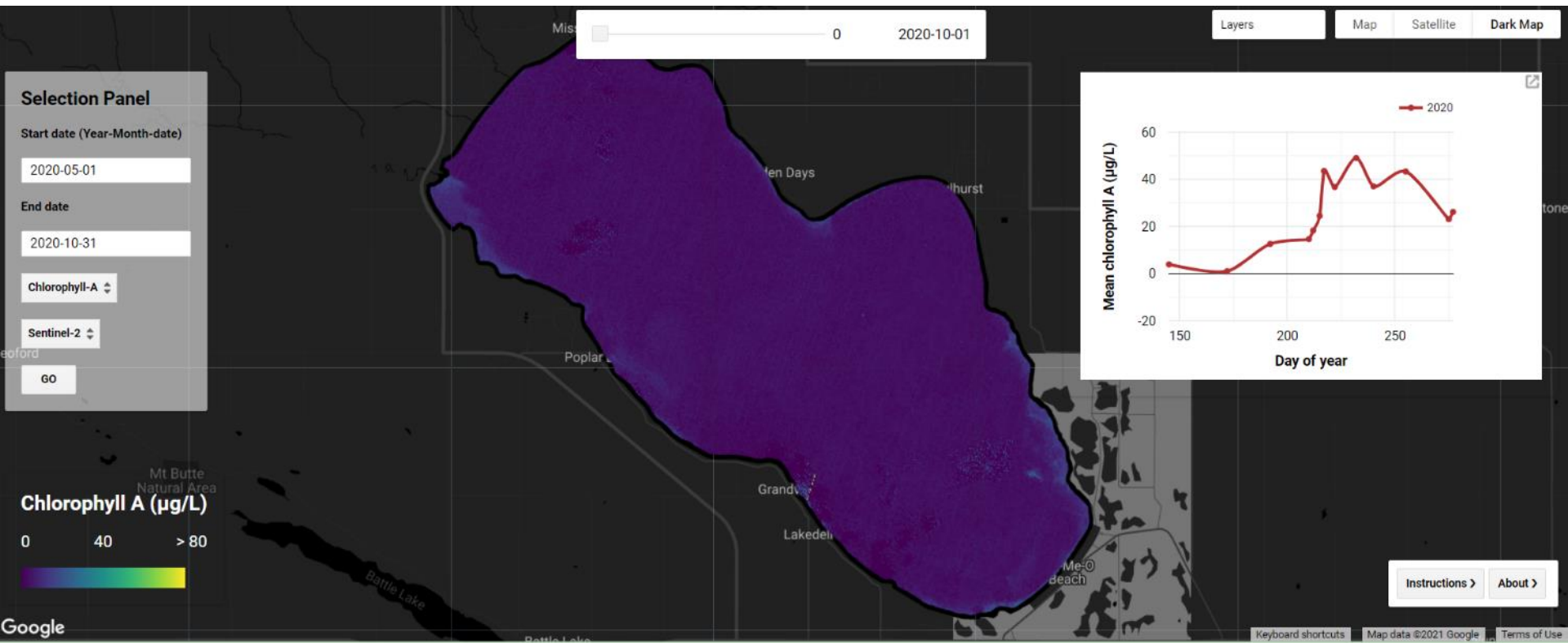
# Collaborative Research:

- Partnership with the University of Alberta, the Alberta Biodiversity Monitoring Institute, and the Pigeon Lake Watershed Association to develop satellite derived visualization of chlorophyll-*a* in lakes.
- **100** samples collected from Pigeon Lake on cloud free satellite-fly-over days to calibrate imagery.




# Collaborative Research:

- Tool prototype allows for the estimation of chlorophyll-*a* variability across the lake and over time.
- Tool may prove useful in calculating the extent, severity, and intensity of cyanobacteria blooms.
- Tool may be calibrated to develop visualizations for additional lakes.





A woman with long blonde hair, wearing a blue raincoat with the hood up, is smiling at the camera. She is standing next to a stream with brown water. The background is a dense forest of green trees and bushes. The sky is overcast.

# 2020 Scholarship Sydney Huculak

*Identifying the limiting nutrients  
driving stream eutrophication within  
Alberta's agricultural watersheds*

[www.alms.ca/scholarship](http://www.alms.ca/scholarship)





Caleb Sinn  
ALMS



Nicole Kimmel  
AEP



Dr. Michael Rennie  
Lakehead University



Dr. Laura Johnson  
Heidelberg University

Annual workshop featured eight speakers throughout September 2020! Recordings available at [www.alms.ca/2020-webinar-series/](http://www.alms.ca/2020-webinar-series/)



Dr. Kristin Bianchini  
Bird Studies Canada



James Littley  
Okanagan Basin Management



Dr. Rebecca North  
University of Missouri



Dr. Brian Smerdon  
Alberta Geological Survey





**Thank you to our volunteers,  
board, supporters, and staff.**



# Chair's Report

2019-2021

Presented to the AGM 2021





# Board (March 2021)

## Executive:

Dörte Köster (Chair), Mike Christensen (Vice-Chair), Adam Norris (Treasurer), Breda Muldoon (Secretary)

## Directors:

Stephanie Neufeld, Jay White, Philip Sutton, Kellie Nichiporik, Rosemarie Ferjuc, Brendan Ganton, Erin Cameron, Dave Trew



THANK YOU

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# Board Members (left 2019-2021)

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- Judy Stewart
- Amanda Doyle
- Francine Forrest
- Rebecca Tasko



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# Governance and Guidance

- Bi-monthly meetings
- Strategic plan update
- Policy Manual Review
- By-laws update



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# Operations

- Occupational Health and Safety Policy Review
- HR Manual (Employee Handbook)
- Executive Director (ED) annual performance reviews
- Supporting ED in day-to-day management
- Salary band analysis for ED and Program Coordinator positions:
  - Framework to improve retention and quality hires
  - Offer staff stability and clarity
  - Policy in the works





# Committees



Scholarship  
Committee



Technical  
Committee



Nomination  
Committee (New)



Workshop  
Committee

# Policy Advice

- Letters to the Minister of Environment and Parks
- Alberta Water Council Board: Jay
- Alberta Water Council Project Teams
  - Source Water Protection (2 teams, Mike, Steph)
  - Lake Watershed Management (Steph)
  - Water for Life Implementation review (Judy, Dörte)
  - Drought Resilience (Judy)





Big Thanks to Staff and  
Volunteers!

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