



**PIGEON LAKE
WATERSHED
ASSOCIATION**

2022

Annual Report

PIGEON LAKE WATERSHED ASSOCIATION



Vision

Caring for the Lake Together

Mission

To enhance, preserve and protect Pigeon Lake and its watershed as a healthy and environmentally sustainable ecosystem for current and future generations

Mandate

To implement the Pigeon Lake Watershed Management Plan



Land Acknowledgement

The Pigeon Lake Watershed Association acknowledges that we, at Pigeon Lake, are on Treaty 6 territory, a traditional gathering place for diverse Indigenous peoples, including the Four Nations of Maskwacis, whose history, culture, and respect for the land threads through this vibrant community. We mourn for the Indigenous children who lost their lives at residential schools and are reminded action is needed to eliminate the systemic racism and injustice that Indigenous peoples face.

In our endeavor as a community to care for the natural environment around us, we look to nature as the common ground for support and healing. We acknowledge the First Nations, Métis, and Inuit whose footsteps have marked these lands for centuries. Pigeon Lake and its watershed will benefit from working together to achieve a Healthy Watershed, Healthy Lake, and Healthy Community.





Director's Message

Stopping the CFO application was a major milestone. History, law, and politics would have indicated that the odds were against us; but against all odds we prevailed to protect the lake. The 15 years of slow and careful work by PLWA members and others who care about protecting Pigeon Lake, nature, and the environment created a foundation for pushing back against potentially destructive change. Scientifically the PLWA has fostered gathering data and sharing information. That data independently indicated the strong relationship between the nutrients carried by runoff and algae blooms. Ultimately that correlation and other scientific indicators created clear and understandable reasoning to protect our environment.

Extending beyond the science was the social, political, and environmental cohesion that has been created through the Pigeon Lake Watershed Management Plan – the PLWMP. The PLWMP involves a much broader group of stakeholders including Summer Villages, Counties, University Researchers, citizen scientists, and larger authorities including members of government departments. Ultimately, the success against the CFO was based on work by all of us ***who love the lake.***

Success was the result of the many, but there are a few who need to be recognized. Long time PLWA executive member Bob Gibbs fathered and fostered the PLWMP; Catherine Peirce –former PLWA Executive Director who was in charge when the CFO threat occurred - threw herself fully into solving the problem during the time limited window open for response, and she succeeded in doing what had to be done; Rick Melia who stepped up to actively engage on behalf of the PLWA Board; and finally Carson Hvenegaard – the new administrative leader of PLWA staff –who jumped in while all of this was in play.

It is time to welcome Carson aboard, and also to thank the Battle River Watershed Alliance who ‘had our back’ with broader administrative and program support for the PLWA during this year of challenge. The PLWA looks forward to being the central venue to protect Pigeon Lake and its watershed on behalf of the many of us who ‘love the lake’. We can all be thankful that we have managed to protect what is precious.

Best wishes on behalf of the PLWA board, Daniel Kenway

2022 PLWA Directors

- David Crombie
- Michael Gaian (Vice President)
- Bob Gibbs
- Peggy Juchli
- Daniel Kenway (President)
- Betty Ann Lough (Secretary)
- Rick Melia (Treasurer and Defend Pigeon Lake Lead)
- Ian Rawlinson
- Felix Sperling

Retired in 2022

Kevin McKee & Samuel Minde

Caring for the Lake Together!



Message from Staff



Stewardship to reduce pollutants entering the lake was a significant theme in 2022. This also means partnerships were a priority as we engaged with residents, producers, municipalities, Indigenous groups, contractors, businesses, and other stewardship groups to work together and care for the lake. Defend Pigeon Lake was a large focus, but we also provided clean runoff landscaping opportunities for residents, advocated for enhanced environmental measures in municipal land use planning, and hosted workshops to discuss best management practices for road salts, construction, and shoreline restoration.

Please enjoy this report with more highlights of our activities and partnerships this year!

Staff Changes

Catherine Peirce has stepped down as Executive Director:

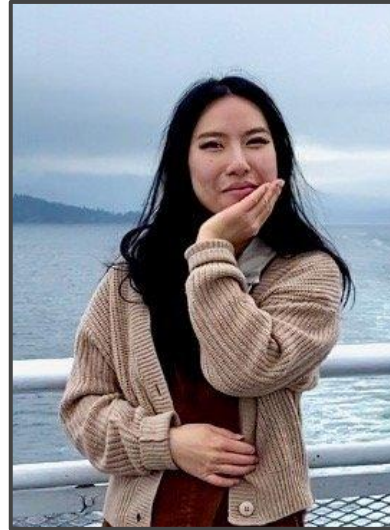
“Reflecting on four years with PLWA, I feel fortunate to be part of the community. Working together you are making a difference for the lake. As I shift to my new role as the Executive Director with the Battle River Watershed Alliance, I look forward to collaborating to further the implementation of the Pigeon Lake Watershed Management Plan and Alberta’s Water for Life Strategy for Sustainability.”



New staff member Carson Hvenegaard has been working with PLWA for the last six months on Defend Pigeon Lake, summer and fall programming, and getting to know the municipalities and residents in the watershed. He previously worked for the Battle River Watershed Alliance and has a background in local collaboration and engagement.

Summer Staff

Special thanks to our summer team Amanda Koot, Helsa Chen, and Brett Hall for their great work. Amanda led our communications and programs, Helsa started our new community science programs, and Brett supported the Defend Pigeon Lake initiative.



PLWA Wins Awards!



PLWA was honoured to receive the McIntosh Bulrush Award from the Association of Summer Villages of Alberta this year. Thank you to Sundance Beach Council for the nomination!

The Pigeon Lake Watershed Management Plan also won two awards in 2021; the APPI Award of Planning Merit and an Emerald Award in the water category.

DEFEND PIGEON LAKE

PLWA.CA/DONATE



KEEP A FEEDLOT AWAY FROM ONE OF ALBERTA'S FAVOURITE LAKES

Thanks to amazing community effort, the feedlot application was denied by the NRCB, recognizing the importance of the Pigeon Lake Watershed Management Plan and the work that has been done to protect and improve the lake. PLWA raised over \$75,000 and collected over 400 letters of support that were used to support water quality monitoring and research, stakeholder engagement, and our submissions to the NRCB.



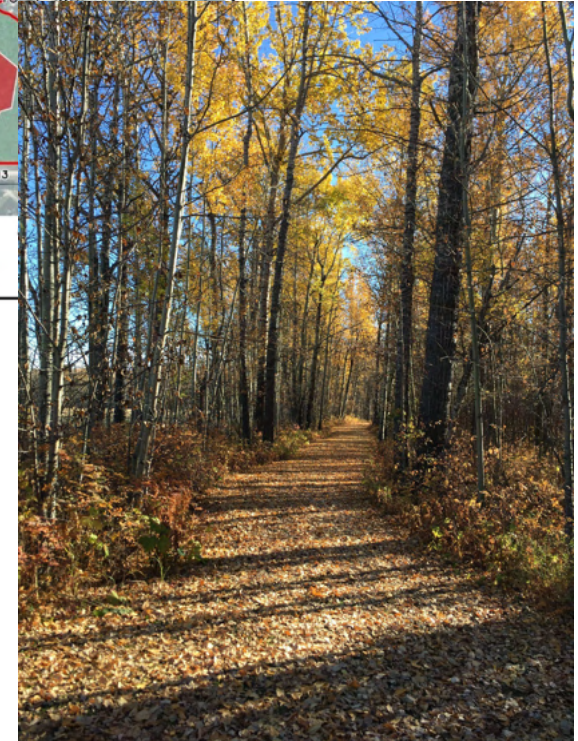
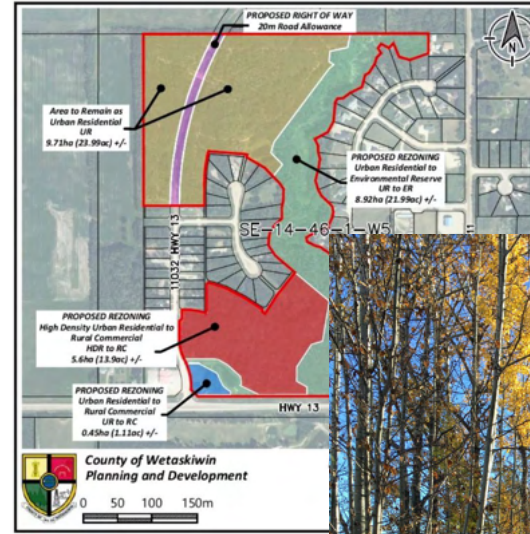
Defend Pigeon Lake brought people from around the lake together! Thanks to Gloria and Randy Booth for organizing this fundraiser at the Mulhurst Bay Legion.



Land Use Planning

Plwa gave feedback on these municipal plans to make sure the health of the lake and watershed were always considered:

- Village West application to develop on the west side of Norris Creek
- Leduc County Recreation and Parks Master Plan
- County of Wetaskiwin Municipal Development Plan



Engaging with Partners



We were so happy to be able to work with all our partners again this year, from our own AGM and Leader's Session to attending municipal Annual Information Meetings and the Alliance of Pigeon Lake Municipalities.

Community Science Programs



LakeObserver

PLWA has recruited 12 LakeObserver volunteers who are collecting information on shoreline changes, significant changes in fish and wildlife, water quality, extreme weather events, and checking for invasive species once a month. During the month of July we had 4 LakeObservers noting heavy rain at Pigeon Lake.

Secchi Dip-In

During our July 30th Secchi Dip-In, boaters around Pigeon Lake collected water clarity data at Pigeon Lake using a Secchi disk. 8 citizen science volunteers gathered an average Secchi depth reading of 258 cm from 27 readings. This data will contribute to the NALMS Secchi Dip-In database.



Community Science Programs



Mussel Monitoring

6 mussel monitor volunteers have been checking for invasive zebra and quagga mussels to control their potential spread into Pigeon Lake. They hung a substrate off the end of their docks where mussels will grow if present. So far, no mussels have been detected at Pigeon Lake!



CreekWatch

PLWA staff have been collecting water samples from 8 creeks around Pigeon Lake. The samples were sent to a lab at the UofA for microbial fecal source tracking analysis. Sunset Harbour Creek and Tide Creek both had ruminant contamination. The amount of phosphorus has also gone up since the last sampling in 2013.

Community Science Programs



Winter LakeKeepers

With our partners the Alberta Lake Management Society and local volunteers, PLWA staff ventured onto the ice once a month to record winter water chemistry data.

Spring Freshet Sampling

Volunteers and staff also conducted our yearly freshet sampling in March. The spring melt carries a large proportion of the yearly nutrients and other pollutants into Pigeon Lake, so it's an important time to collect samples and test the water quality.



Community Science Programs



eBird

Birders at Pigeon Lake can submit their bird sightings to eBird, which will help contribute to conservation decisions and bird research worldwide. eBird provides ways to explore and summarize your data and observations from the global eBird community. 170 species have been seen at Pigeon Lake!



iNaturalist

PLWA has been encouraging community scientists at Pigeon Lake to explore the watershed and share the observations they make and the species they find. Sign up on the iNaturalist website or download the iNaturalist app to contribute and see what others have found.

Community Science Programs



Historical Lake Log

PLWA has been collecting information from news articles, scientific reports, history books, our own monitoring, and residents' memories. These observations form our new Lake Log, a record of life around the lake and changes in the Pigeon Lake watershed's environment.



1968 - Tree Planting at Sundance Beach
Stewardship, Community Planting, Sundance Beach



1957-09-24 - Flock of Sandhill Cranes at Ma-Me-O Beach
Riniversity



Ice On & Ice Off Contest & Results - Updated Annually



1956-11-18 - Lunar Eclipse
Extreme Weather Event, Ma-Me-O Beach



1954-06-09 - High Water Levels at Ma-Me-O Beach
Water Levels, Ma-Me-O Beach



2018 - Water Quality from the PLWMP Technical Report
Water Levels, Water Quality

Thank you to the Summer Village of Grandview and the Government of Alberta through the Alberta Community Partnership Program for funding these community science programs. See our results at www.plwa.ca.

Clean Runoff



PLWA sold rain barrels through a rainbarrels.ca fundraising initiative this spring. Thank you to everyone who supported us!

Why buy a rain barrel? Plants prefer rain water, rain barrels are an extra water source, and they help reduce the volume of stormwater entering the lake.



We joined AWES to plant trees at Camp Bar-V-Nok that will help filter runoff and provide habitat for other riparian species.



Clean Runoff

PLWA sold native plants to residents including Creeping Juniper (*Juniperus horizontalis*), Common Bearberry (*Arctostaphylos uva-ursi*), and bags of native grass seed.

We will have more grass seed available in the spring and can recommend great local suppliers for native plants!

Native plants like these are well-adapted to living here. They are more drought tolerant, have deeper roots to stabilise the soil and reduce runoff, and contribute to native biodiversity in the watershed.



Clean Runoff



The Mulhurst Bay playground got a makeover this fall! Landscaping work improved drainage in the park and created a bioswale and wetland that will help slow and clean runoff, especially once some native plant species are established.

Join us in the spring for a community planting event to put the finishing touches on the park with some native plants and grasses!

Clean Runoff

Property Assessments

Staff continued to visit residents to do clean runoff property assessments and identify how their yards can help keep Pigeon Lake clean.



Landscape Plans

PLWA partnered with McElhanney Landscape Architects to offer landscape concept plans and help residents plan their new low-impact, clean runoff landscaping projects.

Partnerships with Samson Cree Nation



PLWA was invited to a workshop for the Samson Cree Nation's new Aquatic Habitat Restoration project. We presented the Mamawo Mimiw Sakahikan report and discussed how PLWA can help restore riparian areas and engage residents.



This summer, we also brought programming to a camp for Samson youth held at Mound Red Park where we fished, learned about important native plants, and dipped for pond critters!



Workshop Series

PLWA ran a series of workshops for residents, industry professionals, council members, and development officers to discuss Best Management Practices. The workshops covered landscaping and shoreline restoration, residential construction best practices, and road salt management.

Thanks to Familia Brewing and the Lakedell Ag Society for hosting us!



Public Programming

PLWA ran children's programming at the Argentia Beach Kidz Kamp, Bar-V-Nok Camp, and the Ma-Me-O Beach Park Program during the summer. We played games and learned about how to keep our lake healthy.



Love the Lake Trivia



Participants at Silver Beach, Ma-Me-O Beach, Sundance Beach, and the Mulhurst Bay Playground won prizes by answering questions about Pigeon Lake's environment and history!

Thanks to the Land Stewardship Centre for funding these events through their Watershed Stewardship Grant program.

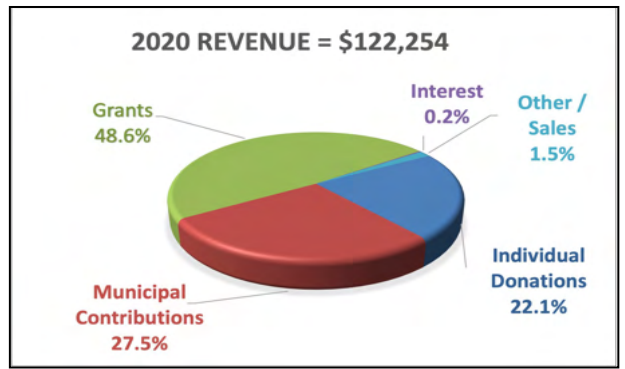
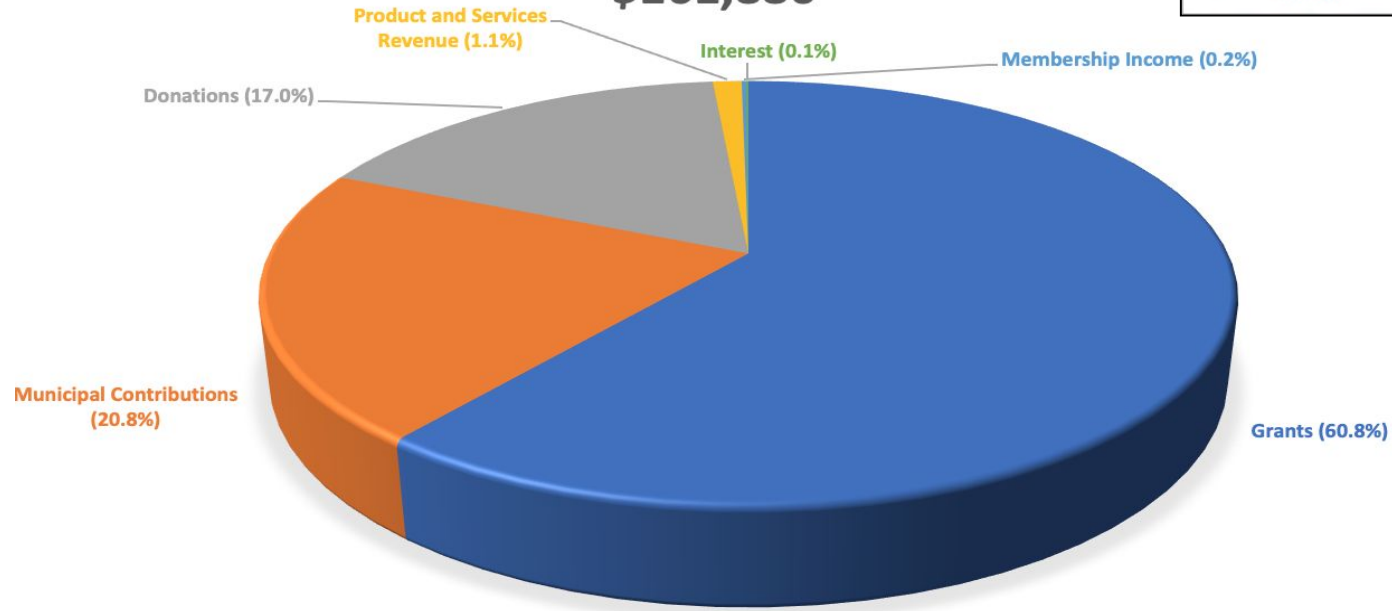
Great Canadian Shoreline Cleanup

Thanks to all our cleanup teams for their hard work! Volunteers around the lake picked up a total of 1565 pieces of trash weighing 64kg.



2021 Audited Financials - Revenue

2021 REVENUE
\$161,880



2021 Expenses

Expenditures	2020	2021
Working Together Program	\$ 28,258.00	\$ 27,820.00
Operations & Development	\$ 32,967.00	\$ 30,307.00
Watershed Lands Program	\$ 25,277.00	\$ 38,598.00
Clean Runoff Program	\$ 14,773.46	\$ 43,520.00
Pigeon Lake Program	\$ 11,936.00	\$ 13,137.00
Shorelines Program	<u>\$ 12,690.44</u>	<u>\$ 8,876.00</u>
	\$ 125,901.90	\$162,258.00

Members' Equity

	2021	2020
ASSETS		
CURRENT		
Cash	\$ 86,121	\$ 18,474
Term deposits	70,063	59,391
Accounts receivable	7,508	30,874
Goods and services tax recoverable	1,030	292
Prepaid expenses	1,854	1,393
	<u>\$ 166,576</u>	<u>\$ 110,424</u>
LIABILITIES		
CURRENT		
Accounts payable and accrued liabilities	\$ 40,973	\$ 18,842
Deferred income	35,299	900
	<u>76,272</u>	<u>19,742</u>
COMMITMENTS AND CONTINGENCIES (Note 2)		
MEMBERS' NET ASSETS	<u>90,304</u>	<u>90,682</u>
LIABILITIES AND MEMBERS' NET ASSETS	<u>\$ 166,576</u>	<u>\$ 110,424</u>

Working with Partners

Please consider the PLWA in your annual charitable donations.
Donations are important to sustain our work for the lake.

Thank you to the municipalities, donors, and event sponsors for your contribution!



Ross McBain
Charitable
Gift Fund



Canada



Thank You, Donors

David Alton
William Brebber
Cassandra Fennell
Zbigniew Chrzanowski
Allan Lundell
Patricia Bjornson
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Dale and Cheryl Green
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Tommaso Gariano
Michael Chapman
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Valerie Lalor
Dianne Pearce
Delena Rose
Karen Halkier

William and Shirley Lakey Family Fund
H.J. Dawe Family Fund
Allan and Donna Lundell Family Fund
Ross McBain Charitable Gift Fund

Municipal Partners

SV of Argentia Beach
SV of Crystal Springs
SV of Grandview
SV of Golden Days
SV of Itaska Beach
SV of Poplar Bay
SV of Silver Beach
SV of Sundance Beach
SV of Norris Beach
County of Wetaskiwin
Leduc County

Healthy Lake Partners

Alberta Biodiversity Monitoring Institute
ALCLA Native Plant Restoration
Alberta Parks and Recreation
Alberta Lake Management Society
Alberta Low Impact Development Partnership
Alliance of Pigeon Lake Municipalities
Pigeon Lake Regional Chamber of Commerce
Battle River Watershed Alliance
Beaverhill Bird Observatory
Alberta Riparian Habitat Management Society
Nature Alberta
Edmonton Native Plant Society
Lakedell Agricultural Society
Mulhurst Bay Fire Department
Pigeon Lake Public Library
Pigeon Lake Provincial Park
Arnica Wildflowers
South Pigeon Lake Fire Department
Vinebrooke Lab
University of Alberta