



2020-2021 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 the diverse Indigenous peoples including the Four Nations of Maskwacis Alberta 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.





Providing Leadership

Message from PLWA Directors

Despite all the trials and tribulations of 2021, the PLWA has made significant progress in its most significant goal - the protection of Pigeon Lake and its surrounding watershed.

The work of our Executive Director, Catherine Pierce, with the support of the PLWA board has allowed us to help bring together many diverse levels of government.

Pigeon Lake Watershed Management Plan won two awards – An Emerald Award from the Alberta Emerald Foundation and an Alberta Professional Planners Institute (APPI) Award of Planning Merit.

Since 2007, PLWA Directors have worked with organizations and individuals on this grass-roots Plan. It represents a bottom-up process for collaboration and ongoing care of the lake. Along the way, the plan requires engagement, evaluation, and course corrections. We do this in many ways including providing direction for land use planning, monitoring water quality, reporting and hosting stewardship events including the annual leader's sessions, and stewardship seminars.

The awards in 2021 are an acknowledgment of the unique and outstanding approach of local stakeholders in addressing the lake issues based on a strong science-based *Plan* and shared vision for a ***Healthy Watershed, Healthy Lake, Healthy Community***

We thank the community of Pigeon Lake and partners for their dedication to protecting the lake.

PLWA Directors 2021

New Director

- Felix Sperling
- Ian Rawlinson

Returning Directors

- Wayne Buskas
- David Crombie
- Michael Gaian (Vice President)
- Bob Gibbs
- Peggy Juchli
- Daniel Kenway (President)
- Betty Ann Lough (Secretary)
- Kevin McKee
- Samuel Minde

Appointee

Patrick Melia (Treasurer)



Thank you Wayne!

In 2021, Wayne Buskas stepped down as PLWA President. Wayne was instrumental in navigating the organizational transition from a volunteer-based group to a not-for-profit organization. Wayne has served on the Board since 2017 and will continue as a PLWA Director.

About the Board of Directors: www.plwa.ca/board-of-directors



Pigeon Lake Watershed Management Plan

2021 Alberta Emerald Award Recipient

An environmental award from the Alberta Emerald Foundation recognizes the community's plan and actions for caring for the lake together.
<https://www.plwa.ca/content/pigeon-lake-receives-environmental-award>



Recognizing Environmental Action



Pigeon Lake Watershed Management Plan

2021 APPI Award of Planning Merit

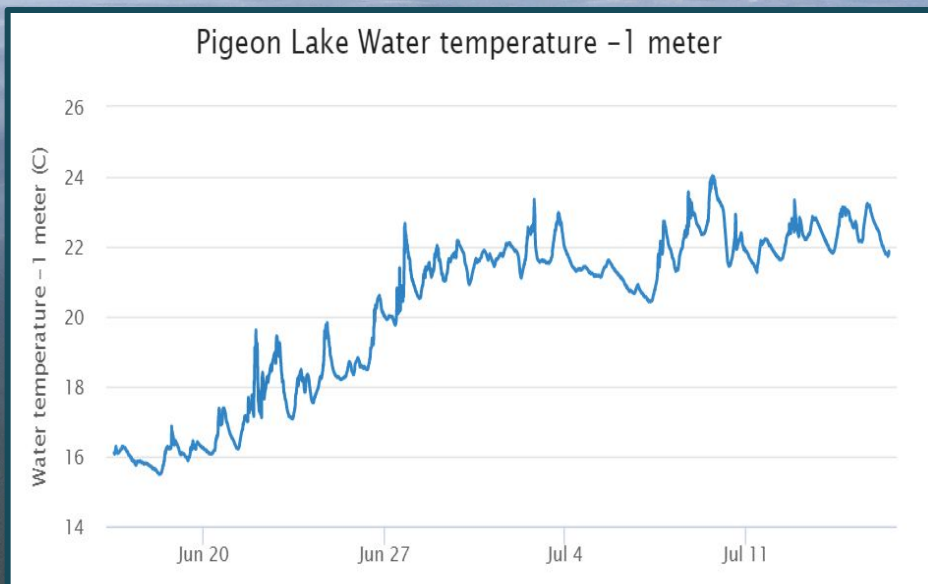
Nominated by Municipal Planning Services and CCP Environmental, this award acknowledges meritorious plans and projects, that significantly contribute to the livability of communities in Alberta.



Lake Log 2021

WEATHER & CLIMATE OBSERVATIONS FROM PIGEON LAKE

- Winter** Light snow cover, warmer temperatures, ice heaves, shoreline damage
- Spring** Ice off
Midge infestation, starting May 26
- Summer** Heat dome, June 26-July 2, July 28-mid August
Lake temperature spikes to 24.02 degrees, July 10
Large number of birds arrive at Zeiner Park Beach, July 14
BC wildfires smoke blankets the lake, July 15
White fish mortality event, Mid July
Drought conditions compared to 1930s, Mid July
Tornado watch, July 22
Fecal bacteria warning, Zeiner Park, July 30
Fewer mosquitoes, more yellowjackets & ants
- Fall** Saskatchewan Wildfire smoke blanket the lake, Oct 5
Ice on
- Winter** Extreme Cold Temperatures, December 24 - January 10



*Dates reflect earliest reported observations from residents or news reports. For specific data such as water temperature check the official sources found through plwa.ca

Stewardship Branding

Coordinating Community Action



You will start to see this image around the lake in the form of window stickers at businesses, street pole signs in municipalities and other places. In addition to celebrating our collective action for the lake this will become a branded link to stewardship materials for visitors and residents.

Caring for the Lake Together

Message from Executive Director

Implementing the Pigeon Lake Watershed Management Plan is more important than ever. Lake water quality degradation, eutrophication, algal blooms and fish kills are not unique to Pigeon Lake. But, as a relatively shallow, well mixed lake it is vulnerable to extreme weather conditions brought on by climate change. In the past year ice heaves degraded shorelines and then an extreme heat wave in the summer took a toll on the white fish and water quality. PLWA staff worked closely with our healthy lake partners and the community to ensure enhanced environmental practices were implemented throughout the watershed. In 2021 there were many examples of stewardship that will help build resilience to strengthen the health of the ecosystem:

- Volunteers planted more than 3100 plants in the watershed.
- Cottage owners worked with PLWA staff to assess the clean runoff characteristics of their properties. And received landscaping recommendations to make changes to improve water quality.
- There were positive examples of shoreline restoration projects that will restore the riparian health, stabilize the shoreline, and slow and filter runoff to reduce phosphorus loading in the lake.
- Municipalities incorporated enhanced environmental policies in land use plans and bylaws, and
- Volunteers monitored the lake for invasive species through the LakeWatch citizen science program.

Please take a minute to flip through the annual report for the highlights of community stewardship.



Caring for the Lake Together



Special thanks to the summer team, Rohit Sangha, Kirsten Chamberlin, and Makenna Graham! PLWA staff worked closely with our healthy lake partners and the community to ensure enhanced environmental practices were implemented throughout the watershed. In 2021 there were many examples of stewardship that will help build resilience to strengthen the health of the ecosystem.

Caring for the Lake Together



Great Canadian Shoreline Cleanup

45 Volunteers **6** Groups **111** kg of Garbage Collected



Thanks to our teams from Poplar Bay, Ma-Me-O Beach, Sundance Beach, Silver Beach, Mulhurst Bay, & Vasa Park for all the hard work!

Caring for the Lake Together

2021 PLANTING CHALLENGE



3100 Trees & Shrubs Planted

Thanks to all the residents who enhanced their properties and participated in this challenge! We exceeded our goal of 2021 plants and added 3100 new trees and shrubs to property throughout the watershed.



Caring for the Lake Together

**Agroforestry and Woodlot
Extension Society**

**Bar-V-Nok Ukrainian Orthodox
Camp**

**Pigeon Lake Watershed
Association**

20 Volunteers **1100** Trees Planted

Pin cherry, dogwood and willow were planted to help stabilize the shoreline and a variety of trees and shrubs were added to the understory of the nature trails at Bar-V-Nok Camp. Financial support from Land Stewardship Centre and ATCO.





Caring for the Lake Together

Demonstration Garden, Swale, & Naturalized Area was designed in consultation with the Mulhurst Bay Revitalization Committee to clean, slow, and filter runoff before it reaches the lake.

Adapting with the Lake



Trembling Aspent



Balsam Poplart



White Sprucet



Lodgepole Pinet



Nannyberry



Water Birch



Saskatoont



Pincherryt



Chokecherryt



Golden Currant

Planting Resource Guide

New resources created for participants who complete Clean Runoff Property Assessments

Property Assessment | Native Plant Guide | Landscape Concept Plan

Monitoring Water Quality

16 Citizen Science Volunteers

- LakeWatch Mussel monitors
- Boat Drivers
- Winter LakeKeepers
- Freshet Water Quality Monitoring

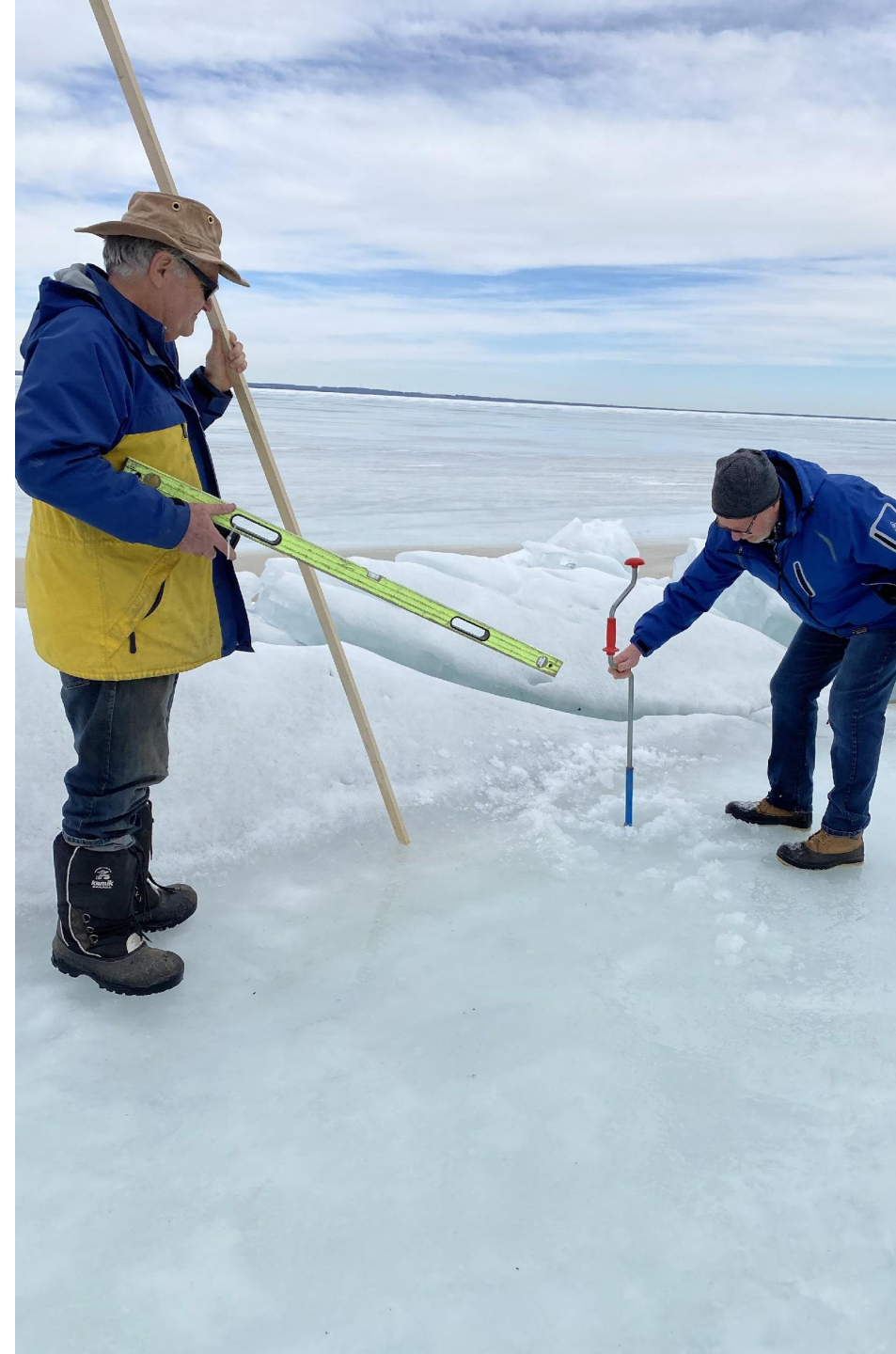
A Special Thanks to Daren Lorentz, a long time boat driver and volunteer, who was named the 2021 Alberta Lake Management Society LakeWatch Volunteer of the year!



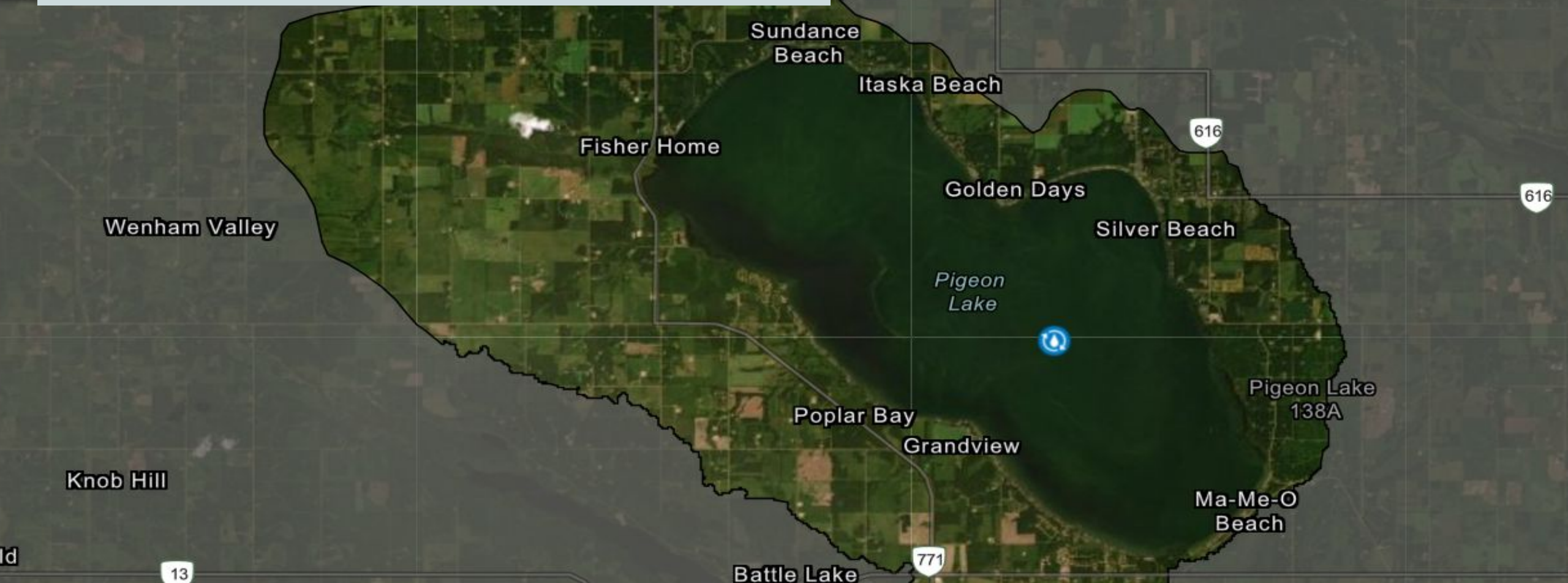
Monitoring Water Quality

4 Water Quality Programs

- Satellite Algal Bloom Pigments Model
- eDNA Beach Sampling
- LakeWatch
- Citizen Science Monitoring
 - Mussel Monitoring
 - Freshet Sampling
 - Winter LakeKeeper Program

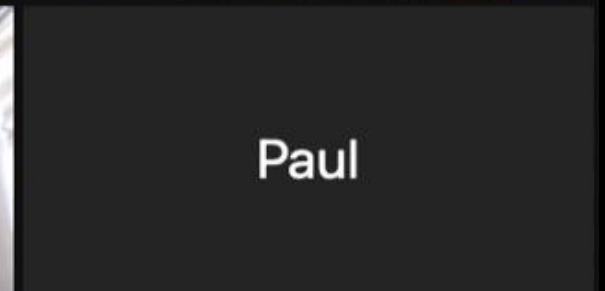
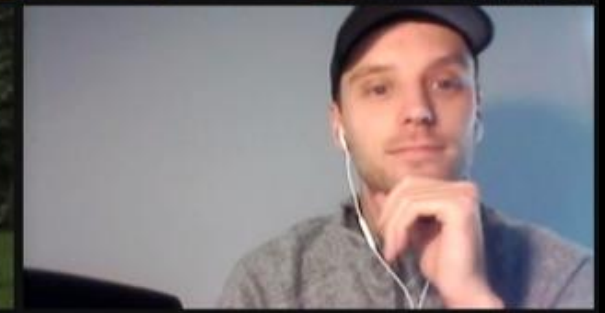


Monitoring Water Quality



Our technical and research involved PLWA Mapping Intern, Rohit Sangaha, working on our Interactive Watershed Mapping project. Go and check it out on our website!

PLWMP Science



PLWMP Science Committee

Experts Groups

The Summer Village of Grandview; Alberta Biodiversity Monitoring Institute; Pigeon Lake Watershed Management Plan Steering Committee; Alberta Environment and Parks; Pigeon Lake Watershed Association; Alberta Lake Management Society; University of Alberta

Advocacy to Reinstate Watercraft Inspections Stations

- PLWA formally requested a meeting with the Minister of the Environment to discuss watercraft inspection stations and call for a provincially-led task force on aquatic invasive species prevention.
- Alberta Environment and Parks ran a watercraft inspection station at Mulhurst Bay boat launch on August 7th. 3 PLWA directors, 3 municipal councillors, and 1 mayor attended to help us advocate for the reinstatement of inspection stations.



Raise Awareness About Aquatic Invasive Species:

<https://www.pipestoneflyer.ca/local-news/pop-up-k9-watercraft-inspection-station-held-pigeon-lake-last-weekend/>

Welcome to the Lake

100+ Welcome Packages Distributed

All Newcomer Welcome Packages include the Alberta clean runoff action guide 2020, and were distributed to new residents with the help of local real estate agents.

Funding to complete this package was provided by The Alberta Real Estate Foundation.



Welcoming New Elected Officials

Municipal elections took place between May and October of 2021. PLWA introduced our watershed management planning priorities to the Alliance of Pigeon Lake Municipalities in the fall of 2021.

Watershed 101



PLWA brought in Dr. Michael Patterson, Senior Research Scientist at the International Institute for Sustainable Development, to provide “Watershed 101”; a workshop that acted as an engagement and learning opportunity for our community members, and as watershed orientation for newly elected officials.



Planning for the Future



Land Use Bylaw Watershed Regulations Workshop

25 Council Members & Staff Participated

Host: Municipal Planning Services & PLWA

Residents Dedicated to Clean Runoff Action

PLWA partnered with McElhanney Landscape Architects to offer landscape concept plans for residents who participated in the Clean Runoff Property Assessment Program.

Thank you to the following residents for their continued dedication to ensuring we have Clean Runoff at Pigeon Lake:

- Anita Gainer
- Barb Funk
- Rick Koch
- Kirsty Lloyd
- Jill Gabriel
- Rick & Shari Melia
- Eric & Rena Backstrom
- Lori David
- Dorianne Bamber & Olivier Du Tré

Different Ways to Engage

PLWA's social marketing reach was 56,000 over Twitter, Facebook and Instagram combined.

PLWA put out 9 newsletters to 1100 members. All messages included the Caring for the Lake branding or messaging. Subjects included living with beavers, clean runoff, aquatic invasive species prevention, shoreline restoration, boat refueling, and the 2021 Planting Challenge.

The latest work has included developing process for businesses to promote stewardship by through PLWA sponsorships and membership.





Different Ways to Engage

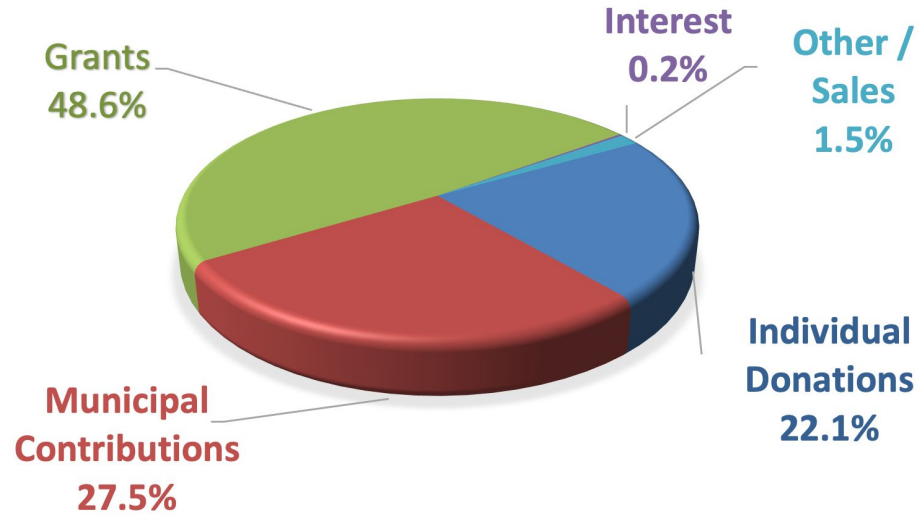
#101BirdProject

Local artist, Margot Soltice, made 101 chickadees to help promote PLWA's Caring for the Lake Together initiative. They were hidden all around the lake over the summer and anyone who found one, got to keep it!

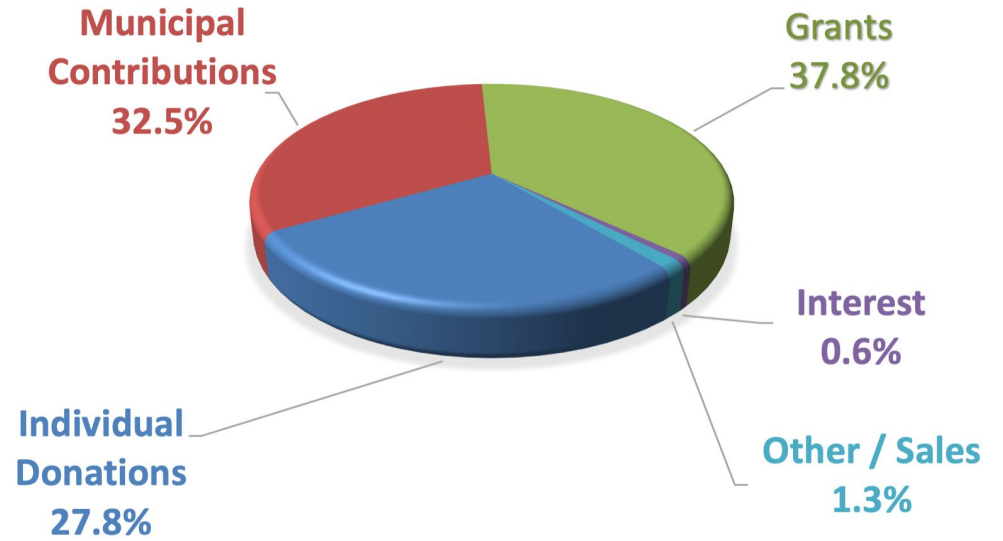
A Special thank you to Margot for the time and effort spent creating this fun summer project in support of a healthy lake and watershed!

2020 Audited Financials -Revenue

2020 REVENUE = \$122,254



2019 REVENUE = \$94,182



Expenses

Expenditures	2019	2020
Working Together Program	\$ 31,146.00	\$ 28,258.00
Operations & Development	\$ 29,545.00	\$ 32,967.00
Healthy Watershed Lands Program	\$ 22,600.00	\$ 25,277.00
Clean Runoff Program	\$ 17,773.86	\$ 14,773.46
Healthy Pigeon Lake Program	\$ 13,180.00	\$ 11,936.00
Healthy Shorelines Program	<u>\$ 10,181.00</u>	<u>\$ 12,690.44</u>
	\$ 124,425.86	\$ 125,901.90

Members Equity

AUDITED STATEMENT OF FINANCIAL POSITION

	2019	2020
ASSETS		
Cash	\$ 27,672.00	\$ 18,474.00
Term Deposits	\$ 74,110.00	\$ 59,391.00
Accounts Receivable		\$ 30,874.00
GST Recoverable	\$ 1,001.00	\$ 292.00
Prepaid Expenses	\$ 1,458.00	\$ 1,393.00
	<u>\$ 104,241.00</u>	<u>\$ 110,424.00</u>
LIABILITIES		
Accounts Payable and Accrued Liabilities	\$ 9,011.00	\$ 18,842.00
	<u>\$ 9,011.00</u>	<u>\$ 18,842.00</u>
Members Net Assets*	\$ 95,230.00	\$ 91,582.00
Liabilities and Members's Assets	<u>\$ 104,241.00</u>	<u>\$ 110,424.00</u>

* Members Net Assets includes restricted funding of \$900.

HAND
EQUIPME
PLEASE KEEP
VEHICLES OUT OF
FOR INFORMATION CONTACT
LEEDS COUNTY PARKS AND
RECREATION AT 780-855-4410

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!





Thank you

Individual & Family Donors

Dorianne Bamber	Karen Gibbs	Catherine Peirce
Len Bistriz	Tom & Shirley Graham	Shannon Plintz
Shari Boese	Amanda Gravel	Dawn Poskocil
Ian & Valerie Bradley	Bruce Hagstrom	Kevin Pratt
Pat Bradley	Stephen & Debora Jarvis	Hugh Read
Craig Braun	Lloyd Johnson	Pebbles Skinner
Christine Costello	Channing Johnston	Sheila Sledz
Patrick Coyne	Bob Krutzfeldt	Sue Styles
David Crombie	Daren Lorentz	Harriet Van Staveren
Lori David	Allan Lundell	Marion Wilson
Don Davidson	Corrie Maceachern	Sandy Wright
Olivier Du Tre	Leslie Maguire-Wabisca	Allan & Donna Lundell Family Fund
Evan Edlund	Patrick Melia	Detheridge Family Fund
Bruce & Violet Fowlie	Darrel & Donna Nixon	William & Shirley Lakey Family Fund
Jacqueline Fry	John Parkins	H.J. (Jock) Dawe Family Fund

Municipal Donors

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
County of Wetaskawin - MRP

Volunteers

PLWA Directors
Great Canadian Shoreline Clean Up Crews
Mussel Monitors
LakeWatch Boat Drivers
Guest Speakers
Grant Writers
Committee & Working Group Members

Healthy Lake Partners

Alberta Biodiversity Monitoring Institute
ALCLA Native Plant Restoration
Alberta Environment and Parks
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 Ag. Society Farmers' Market
Mulhurst Bay Fire Department
Pigeon Lake Public Library
Pigeon Lake Provincial Park
Arnica Wildflowers
South Pigeon Lake Fire Department
Vinebrooke Lab