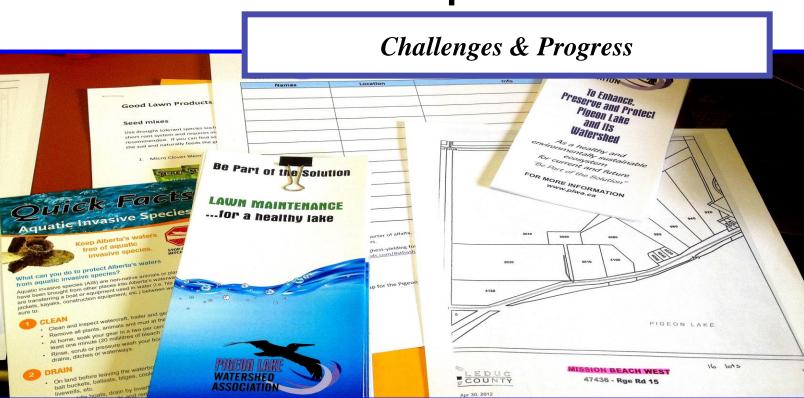
Pigeon Lake Watershed Association

A Registered Charity

Annual Report - 2013 / 2014



See Us - Website: www.plwa.ca

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Pigeon Lake Watershed Association (PLWA)

Annual Report 2013 – 2014

President's Message

A year of challenges, a year of progress.

This spring, poised for action to help prevention of threat of aquatic invasive species, and to make on-the-ground progress to control nutrients from entering the lake. Then word came, a new Watermere Resort application had been received by the Leduc County for a large complex development in an important area of peat. Do we count on the Council to do right by the lake? No. While good people, one can never be sure. We rolled up our sleeves, resolved to attend to that development application, and still launch our work as planned.

Having some money in the bank, and thinking that we would have at least one of our long-term funders come through we forged ahead to crank up the work. We set about hiring summer staff and, with 60 people signed up for the Living By Water Homesite Consultations, a commitment was made for two consultants. Then, with the staff hired, a Lawn Maintenance brochure produced, we were poised to do what people had told us we needed to do: Go door —to-door putting into hands the information for them to learn that the privilege of living in our beautiful watershed goes hand-in-hand with stewardship responsibilities to keep the lake healthy. With some wind, we started to sail, then the health advisory came out, right at the beginning of the summer!

But forge ahead we have.

Some of the PLWA Directors had worked through the winter with the Pigeon Lake Watershed Planning (PLWMP) Committee and were determined to take the learnings and to use the research; to listen to the input from the surveys; and to implement the recommendations given to the PLWA this summer.

The PLWMP committee had delivered on the first two topics: A Model Land Use Bylaw and and cosmetic / lawn fertilizer and maintenance recommendations. Land use has many complexities even when the setting is not in an already well developed, watershed surrounding a fragile lake. We are encouraged that at least two and maybe three municipalities are using it as intended; as a guide document to review their bylaws and to incorporate it or parts for new developments and re-development within 800 meters of the water. A few consultants have picked it up and it may prove to be instrumental in new land use standards for development along shorelines in other jurisdictions.



While we learned that many people have already stopped using fertilizers on their lawns, we also learned that 1 lb of nutrients entering the lake, will produce at least 500 lbs of algae. This shocking but well-grounded fact has galvanized us to reach, educate and motivate the rest of the folks towards healthy-lake lawn care practices and to push ahead on dealing with the next topics.

The reports on what the Alberta Environment and Sustainable Resource Development's indepth water studies can tell us are starting to come out. So far, we have confirmation for the paths chosen and decisions made. Launching the next PLWMP topic: Stormwater / Surface runoff is important as is further efforts to restore and protect the shorelines. We now know, that alongside the nutrients going into the lake beyond our control, there is also a significant amount that we can control, with the will.

The work of the PLWA alongside the municipalities work on the Pigeon Lake wastewater system, and further investigations for the nutrients residing in the lake, has gained momentum and support from our government and many other organizations. The work by each resident on their lot is an important contribution that will add up.

Personally, it is a path of enlightenment, learning of our connected place in nature no matter where we live but much more obvious here in our watershed. Our journey to protect, enhance and restore Pigeon Lake has brought me fascinating insights and life lessons for ourselves and as our 1st Nation friends remind us, for our next generations.

Many more people have been connected with the PLWA this summer, and our directors cannot begin to express our gratitude for all the support, participation and donations. While the health of the lake is a shared responsibility, it is up to us to make it as healthy as possible, as soon as possible.

Our on-going path has become clearer, the challenges make the going interesting, but with us pulling together we only see progress ahead.





Background Information

PLWA Overview

The Pigeon Lake Watershed Association was registered as a Society in 2007. A membership organization, we are governed by an administrative board. Volunteers and contracted personnel move the planning, programs and activities forward. We are semi and permanent residents, seniors, agricultural and small business owners.

We are a charitable, non-profit environmental advocacy group.

PLWA is non-political. We strive to coordinate and work with all the Pigeon Lake stakeholders who share our goals.

Our Mission

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

Our Primary Roles

To Inform, to educate, to advocate and to protect the lake and the watershed.

Our Primary Work

Restoration and preservation of the natural ecosystems and water quality such that the water quality and water levels of the lake and its tributaries at optimum levels.

PLWA identifies, promotes and advocates for environmentally sustainable land use working to instill smart decisions based on the Pigeon Lake Model Land Use Bylaw and other practices that are conducive to minimal biophysical impacts on the total ecosystem within the watershed, the lake and its tributaries.

Engagement of stakeholders in environmental best practices such that residents, business, industry and municipal agreements located within the Watershed (or indirectly affecting the watershed) learn, commit and move towards best practices in all activities in planning, utilizing and maintaining Pigeon Lake and its environment.



Report to Members

PLWA 2013-14 Priorities & Deliverables

- On-going Multi-Pronged Strategy
- Fortifying Coordinated Action
 - Leaders & Watershed Experts & Organizations
 - o Additional PLWA Events & Key Meetings.
- Watershed Management Plan (WMP)
 - o Goals, Progress, Deliverables
 - Next Steps
- Stewardship Priorities & Deliverables
 - o Healthy-Lake Lawn Maintenance Campaign
 - Living by Water Homesite Consultations
 - Education Initiatives
 - Kids / Family Programs
 - Other Educational Activities
 - Aquatic Invasive Species
 - Shoreline Restoration
 - Lake Reeds
- Water Monitoring
 - Annual Water Monitoring / Lakewatch Report
 - ESRD Reports on the 2012 13 in-depth water sampling
- Land Use Update
- The Association
 - o Communications & Outreach
 - o Membership & Connecting to the Watershed Community
- Financials



On-going Multi-Pronged Strategy

The in-depth water studies conducted in 2012 and 2013 have confirmed that we require both watershed work and in-lake work to help the lake.

Chris Teichreb the limnologist that headed up the Pigeon Lake water studies with assistance from the ALMS and PLWA volunteers, was quoted in the Edmonton Journal as saying:

"If we do not do the watershed work the in-lake work will be a waste of money."

As reported at the 2012 AGM, the PLWA announced a two-pronged strategy on a foundation of working together, science and applied learning:

- <u>Prong 1: Watershed Efforts</u> Move more of the watershed community to implementing better or best watershed practices so that we live, work and play in the watershed as healthy lake stewards restoring and protecting the watershed, minimizing the nutrients and contaminants entering the lake.
- <u>Prong 2: In-lake Projects</u> Support the on-going work of investigating and finding ways to address the significant amounts of nutrients that are already residing in the lake sediments.
- <u>Foundation: Working Together, Science & Applied Learning:</u> Work together as partners, with the current science and measurements to be able to know what difference we are making.

This strategy in no way contradicts the road that the PLWA has been on since the 2008 when the State of the Pigeon Lake Watershed Report was completed and the PLWA and watershed community had clear recommendations:

- **Planning** Have an ongoing, watershed management planning process which includes a regulatory approach.
 - See Pigeon Lake Watershed Management Plan (PLWMP). In this report.
- **Stewardship** On-going community involvement of education and awareness, use of cottage owners and agriculture best practices. Bulk of PLWA work and see PLWMP.
- **Reclamation and Restoration** Riparian restoration, replanting and restoration of critical lacustrine marsh areas and riparian vegetation and watershed plan.
 - See report Shoreline restoration. A PLWMP priority topic, yet to be tackled.
- **Data gaps** Fill the significant data gaps for the Watershed Management Plan. (e.g. Drained wetland inventories, and an updated and measured nutrient budget.

See <u>www.plwmp.ca</u> Some ESRD reports have been or are being released soon. The PLWA is participating in an Environmental Sensitive Areas process for the Leduc portion of the watershed.



A depiction of the collaborative working relationships of PLWA, APLM

Wide bands = lead

& AE/SRD to move the water quality forward.

Fortifying Coordinated Action

After the PLWA 2012 AGM, key work was shared between the PLWA, the APLM and ESRD.

The working relationship for coordinated action with Alliance of Pigeon Lake Municipalities

Overview Water Quality Work

Watershed Controls

In-Lake Options

(APLM) and the Provincial Government has been visually described with this graph.

- A past Director and a current Director sit on the APLM 'In-lake" committee.
- PLWA Directors attend the APLM meetings.
- In 2012, the PLWA opened up the board nominations to be able to accept as
 Directors people who are also serving in an elected position related to the Pigeon Lake watershed (e.g. municipal councillors).
- The APLM have two representatives who sit on the PLWMP committee. Other watershed councillors sit on various committees.
- ESRD has completed most of the in-depth water studies to support all of the work, and staff sit on the committees or attend meetings to provide support.
- Many other Provincial department staff, and staff from other "healthy-lake / water" organizations who are working on water issues are working with us. Other experts are brought in by committees on an as need be basis to help people to understand and learn the options that are best Pigeon Lake ecology.

In addition, the PLWA strives to keep the working relationships strong and the voices of the leaders and supporters speaking from the same foundation of knowledge by hosting events and attending key meetings. This year these included:

1. Alberta Lake Management Society – 20th Anniversary

The PLWA was pleased to co-host this important annual conference, held in the fall of 2013. The work at Pigeon Lake was showcased along with a number of presentations from different perspectives. This two day conference had many great presentations relevant to lake health by scientists, other Alberta watershed associations and some municipal leaders.

2. PLWA Annual Party

The last two years the PLWA has had an annual party for Pigeon Lake, municipal councillors, key administrators and volunteers, PLWA directors and spouses. One way to build relationships so that we move the work forward together. This January party had about twenty people attend.



3. Meeting with the Honourable Minister Robin Campbell – February 2014

The PLWA met with the Minister along with the Battle River Watershed Alliance (BRWA) and the Alberta Lake Management Society (ALMS) to introduce our organizations and challenges. A fall follow-up meeting is planned. PLWA Directors meet with the ESRD Director twice a year.

4. Meetings with Summer Village Councils – February through June.

The PLWA has an annual meeting with Summer Village Councils to give them the opportunity to hear from and to give us input. We give a presentation and request their support for their participation, funding, communications and attendance at our two key events (the Annual Leaders Session and the PLWA AGM). This year we met 8 of the 10 councils.

5. County Council Meetings

The PLWA endeavors to give a presentation updates to each of the County councils. This year we are looking to give updates in the fall.

6. Pigeon Lake 101 for Municipal Leaders – February 9th 2014

This year the municipal elections brought new elected leaders with varying levels of understanding about the state of the watershed and lake, so the PLWA held a workshop for all municipal councillors and PLWA Directors. See Stewardship Other Education Activities further on in this report and see the session presentation in www.plwa.ca under Education & Resources.

7. The Annual Leader's Session – April 2014

Thirteen municipal leaders; two native band leaders; the Leduc Mayor, Councillor and the County PLWA staff liaison (joined with twelve PLWA Directors and the Alberta Lake Management Society to hear the progress reports; discuss and get input on:

- Pigeon Lake Watershed Management Plan (PLWMP) Committees updates
- Review the planned PLWA Summer Program.
- Hear from the Alliance of Pigeon Lake Municipalities In-Lake Committee.

Received regrets from the County of Wetaskiwin Reeve and the District Councillor and from the Pigeon Lake ESRD limnologist. All had serious personal reasons that kept them from attending.



The PLWA is attempting to make this a key annual opportunity for Pigeon Lake's leaders and key supporters to come together. View pictures on the www.plwa.ca website.

8. The Annual CARL (Central Alberta Recreational Lakes) Conference – May 2014 ESRD Respect Our Lake staff hold an annual conference to bring together watershed organizations. The timing allowed us to include our newly hired staff. View the PLWA presentation.



PLWA 2013-14 Priorities & Deliverables

Priority - Watershed Management Plan

The Pigeon Lake Watershed Management Plan's goal is to promote the watershed's natural environment and water quality by recommending action-oriented watershed policies and beneficial practices that support the long-term health, protection and restoration of the watershed.

The PLWA is committed to do this as encouraged by ESRD under the Water for Life Strategy. Find the full terms of reference, list of topics, survey reports and more at www.plwmp.ca

2013/14 Priority/Goals	Status/Progress/Milestones ✓ = Completed	2013/14 Deliverables / Outputs
Pigeon Lake WMP Terms of Reference Goal: Finalize	 ✓ Watershed community endorsed ✓ two workshops in 2013 ✓ survey in 2013 ✓ All Summer Villages Councils that met with PLWA Directors (spring 2014) stated endorsement for the PLWMP ToRs 	 ✓ The PLWMP Terms of Reference were finalized ✓ Posted on www.plwmp.ca
Secure funding to complete next topic.	 Provincial funding is no longer available. Two non-government grants were applied but not approved for the PLWMP (most granters want to fund the implementation costs and stuff, rather than planning or people /staff. 2014 – No grants pending Major Donor Campaign pending resources. 	 ✓ RBC Blue Water Grant of \$25K was secured in 2012 ✓ Alberta Culture Grant of \$35K was secured in 2013 ◆ PRIORITY – Looking to municipalities for help as the Stormwater/Surface Runoff Topic requires substantial funding.
Cosmetic Fertilizers & Soil Management	 ✓ Research - current science ✓ Research - what is working elsewhere ✓ Watershed survey - beliefs, practices & inputs for change (education, information, guidelines and/or regulations). ✓ BMP's for lawn maintenance Reference Guide Pesticides & herbicide recommendations. 	✓ Committee Email Update summarizing findings sent in May & posted on www.plwmp.ca ✓ Lawn fertilizer recommendations for PLWA, Municipalities & Province and for committee to further exploration on pesticides & herbicides. (See the Email update)



	Status/Progress/Milestones	
2013/14 Priority/Goals	✓ = Completed	2013/14 Deliverables / Outputs
Module Land Use Bylaw	 ✓ Best Management Practices for development within 800 metres of the shore. ✓ Related laws – Stewart (lawyer (municipal & water)) ✓ Submitted by the PLWA for consideration the Municipal Gov Act Review process. 	✓ The Module Land Use Bylaw has been finalized✓ Posted on www.plwmp.ca
Stormwater / Surface Runoff (including related Low Impact Development)	 Identified as the next topic Drafting the Terms of Reference & determining the scope of this committee. Searching for funding 	
Riparian / Shoreline Restoration & Management	✓ Identified as a priority	
Land Conservation & Protecting Priority Landscapes	 Identified as a priority 2 PLWA Directors are taking part in an Environmental Sensitive Areas process including identifying areas for protection in the Leduc County's part of the PL watershed. 	
Stewardship by the Watershed Community Members		
Land Development Practices (Beyond 800 metres / MLUB)		
Agriculture Best Practices		
Oil & Gas Sector Best Practices		
New Pigeon Lake Atlas	Maps and information are being collected as work is being done.	



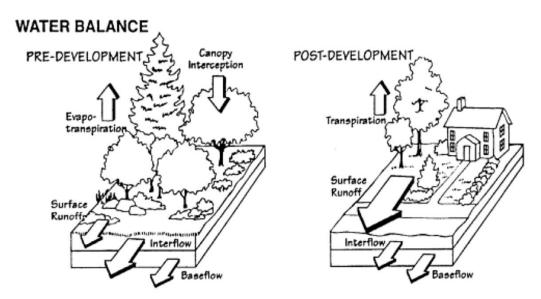
Watershed Management Plan - Next Steps

With funding the PLWA will support further work on the PLWMP though they have to balance the planning with the on-going implementation of watershed work for the health of the lake.

The next PLWMP topic is the Stormwater / Surface Water (Runoff) Topic. The committee terms of reference are at the initial stage of being defined and drafted. The scope could include determining the opportunities that could make the greatest difference individually and/or collectively:

- Individual land owners (e.g. cottage lots, estate lots, golf courses, etc.,)
- Municipal
- Provincial

Since runoff has been shown to be the greatest purveyor of nutrients (natural as well as human added) into the lake, it is great that the majority of people surveyed think this is what we need to do. The PLWA is excited by the range of creative possibilities for individual lot owners and municipalities to make their spaces both more enjoyable and environmentally responsible.



Notes:

This topic will include looking at what golf courses can do to address their runoff and
coming onto the PLWA Board is one of the golf course grounds managers e topics will
proceed in the order that the watershed residents supported unless opportunities and or
resources arise. All work is dependent on securing the funds required.



Stewardship

The privilege of living in a watershed is accompanied by responsibilities. Our stewardship programs and services help individuals to learn and enjoy being responsible lake stewards.

Over the last 50 years the accumulation of all our actions has aged the lake prematurely. The PLWA is supporting the community to change and restore what we can for current and future generations.

This year the PLWA decided to kick up the stewardship programming and outreach; to act on the recommendations issued by the PLWMP and to be a visible resource to the watershed community.





To resource this decision, the PLWA hired our first Summer Program

Coordinator, Dawn Doell and with the help of a Canadian Summer Job Grant a Summer Student,

Andrew Koller.

2014 Education Priorities:

- Pigeon Lake 101 for Councillors (completed in spring);
- Healthy-Lake Lawn Maintenance;
- Living By Water Homesite Program; and
- Love the Lake Day.

PLWA Long-Term Goal: Watershed residents voluntarily engage in environmental best practices. All residents and organizations are healthy-lake stewards.



Healthy-Lake Lawn Maintenance Campaign



Lawn maintenance and moving the community to the complete elimination of lawn fertilizers was determined to be a 2014 PLWA priority.

PLWA the Directors opted to honour the work, findings and recommendations of the PLWMP Cosmetic Fertilizer & Soil Management Committee's. With the committee findings from current science that even small amounts of nutrients (both phosphorus and nitrogen) produce large amounts of algae, and research telling us that a combination of annual education and regulations is what has worked best elsewhere; the PLWA made it a top priority is to provide the watershed community with lawn education that moves watershed residents towards the elimination of lawn fertilizers and promoting of lake-healthy lawn practices.

The PLWA also recognize that:

- A number of people enjoy their lawns, and that these lawns contribute to their sense of cottage-life with friends and family,
- 77% of the Cosmetic Fertilizer survey responders wish to bring in regulations to eliminate
 the use of fertilizers, and of this group half want this done immediately and half wish to
 bring in regulations in a staged approach.
- Of the 77% almost all want consistent regulations throughout the watershed.
- While many of the people have already willingly changed their practices, many people whose practices are not good for the lake need further education, options and in the near future regulations.

The PLWA strongly applauds a resolution made by the Alliance of Pigeon Lake Municipalities (APLM) calling on municipalities to consider by-laws that prohibit the use of residential lawn fertilizers. The PLWA also advocates that municipalities move towards regulating the use of lawn fertilizers.

The PLWA recognized that some municipalities, such as Itaska in 2008 and Grandview this year, had the community support to enact bylaws banning the use of all lawn fertilizers. The PLWA also recognizes that some municipalities may require a staged approach, and determined to support them with the information and tools to move away from the worst fertilizers (synthetic fertilizers suppress the web of life in the soil), and allow better specific 'soil-building' specific organic products such as those listed on the PLWA website during a transition period. As per the survey, a staged approach might consider specific limited exemptions, such as new lawns and sites with severely depleted soils.

In addition to supporting municipalities, PLWA launched a Healthy-Lake Lawn Maintenance Campaign, to support individual homeowners who are on a path to making their lawns more lake friendly. This campaign was crafted based on the science, research of what works elsewhere, and the survey of watershed residents voices.



The Cosmetic Fertilizer survey responders said:

- The best communications methods are:
 - A seasonal series of "Caring for Your Lawn";
 - A brochure with an overview of information; and
 - Word of mouth neighbours to neighbours.
- Many of the comments included, putting the information into peoples' hands.
- The best education methods included a lawn and soil-maintenance hand-book of recommended practices (what, why and how to's); local examples and community workshops.

Healthy-Lake Lawn Campaign Components

Components / Premise / 2014 Goal

Overview Brochure – Given out throughout the Summer

Premise: Based on the survey responses, a way to get into the hands of people that are not connected with the PLWA. Brochure will serve as a first step, directing to the additional

resources on the website.

Goal: Put a brochure with key information on what, why and how, into the hands of as many watershed residents as possible.



2014 Results & 2015 Forecast

About 2000 brochures were given out.

<u>Door-to-door campaign:</u> PLWA summer staff and many volunteers gave out the brochures on the following beaches and areas:

Sunset Harbour, Gilwood, Mitchell, Mission, part of Sundance, Cape Kerr, some of Moonlight Bay, Itaska, a few parts of Johnsonia and Golden Days, Argentia, Mulhurst, Silver Beach, MaMeO, parts of Norris, and a smatter given out at other beaches.

Also given out at <u>Farmer Markets</u>. most <u>Summer Village Annual Information Meetings</u> and the Lakedell Fair Aug 30th.

Cosmetic Fertilizer & Soil Management Committee (CF&SM) Update - May 17th, 2014

To fulfill the PLWMP commitment to keep watershed residents informed about the work progress of the PLWMP an update was sent out of the key highlights / findings including:

- The science -
 - What the research told us.
 - o What the in-depth water studies tell us so far.
- The social What people in the watershed told us and want
- The high level committee recommendations.

The PLWA sent on behalf of the CF&SM Committee the update (authored by the PLWMP Engagement Committee) to 777 watershed residents.

39% opened this email.



PLWA Spring Into Action - How to Maintain a Healthy Lake Lawn Email - May 30th, 2014

Premise: Based on the survey responses this was the first healthy-lake lawn maintenance information disseminated.

Goal: Get as many people as possible informed about healthy-lake lawn maintenance as possible so that:

- 1. They can use this information
- 2. They can tell their neighbours about this information.

Sent to 806 watershed residents - 38% were opened.

Over 300 watershed residents on what lawns need in spring that will not harm the lake including the how to's of: de-thatching; aerating; lawn mowing; mower maintenance; over seeding and recommended seed mix; watering; patches of winter kill; and a little on composting and soil health.

Other Resources

A PLWMP website page informs people about the work on Cosmetic Fertilizers & Soil Management.

www.plwmp.ca/cosmetic-fertilizer-topic/

A PLWA website page has been dedicated to Healthy Lake Lawn Care:

- 1. Why is healthy-lake lawn care is so important
- 2. The Pigeon Lake Watershed Management Plan (PLWMP) Recommendations

How To's - Resources & Answers at Your Finger

Find at this site links to the **additional resources** listed to the right.

Find on the website:

- Committee Terms of Reference
- Committee May Update
- Cosmetic Fertilizer Survey Report
- Research completed on the banning of cosmetic fertilizers with Phosphorus
- Presentation made at the ALMS conference
- Leaders Session Presentation on Cosmetic Fertilizers.

1. The PLWA's Answers to Key questions about Healthy-Lake Lawn Maintenance

- 2.12 Step Add info for dealing with dandelions: alternatives for pesticides & herbicides.Lawn Care Program
- 3. Spring into Action Getting to the Root of the Matter. How to Maintain a Healthy Lawn
- 4. PLWA Board Position on the Elimination of Lawn Fertilizers in the Watershed

Future Goals will be to:

- 1. Send out a fall email on how to prepare your lawn for winter.
- 2. Create an alternatives to herbicide and pesticides.
- 3. Create a guide for composting in a watershed.
- 4. Move towards pulling the bits together a comprehensive little handbook that people can download.

5. Send out two annual reminders

Our Water Watershed Our Voice www.plwa.ca



rta Training Day at Pigeon Lake

Living By Water Homesite Consultations - Priority

Priority/Deliverable	2014 Status/Progress	2014 Results & 2015 Forecast
Goals: •80 Consultations completed. • 50 people signed up for 2015.	 Hired 2 Nature Alberta Consultants. Started well with 50 sign-ups. After the AHS Advisory was posted, some people were no longer available for the consultation. 	 59 Consultations completed Total 335 of LBW Consultations in Pigeon Lake since 2008 2015 goals: Continue with program getting more visible signage up by more people, to show watershed stewardship is critical.

This was the PLWA's 6th year partnering with Nature Alberta to bring to the watershed doors the positive, educational living-by-water assessments to help people to learn the many ways to be healthy lake stewards. Many recommended actions are small and easy, some are bigger and people are supported to do what they can over time. All actions for the lake add up and will make a big difference.

This service is highly valued. Nature Alberta secures the funding to hire, train staff and offer up to 10 free assessments to most lakes. With Pigeon Lake being such a big lake with a summertime population of about 5800, the PLWA arranges consultants who are dedicated to our watershed so we have as many consultations completed as possible.

Here are the numbers.

- 2014 59 consultations (projected) completed
- 2013 57 consultations completed
- 2012 30 consultations completed
- 2011 23 consultations completed

One resident who recently had his follow-up visit said:

"It was good, really good. Before the first visit, I thought that we

were already doing everything right and we learned there were a few more things we could be doing. Then I thought at our follow-up we'd hear that we are doing everything right, and again we learned a few more things. It is a process this learning to be good stewards. This service is really good and interesting." Full-time lake shore resident

Past funding for the Living By Water Homesite Consultations was secured by two provincial community grants, no longer available, and by an Alberta Stewardship Network (ASN) grant. , We did not get the ASN grant this year, in large part due to the inordinate number of grant applications they received. So this year the services were solely dependent on the Summer Village, individual donations and Poole Family donation via the Edmonton Foundation. Over the winter, we will work to get people signed up and funding secured for 2015.

A PLWA website page is dedicated to this priority program, and people can sign-up from there. http://www.plwa.ca/pages/stewardship-education/consultation





PLWA AGM & Open House

Nature Alberta and organizations (ALMS, BRWA, and others) are very important to the PLWA. They bring expertise, resources and support for our efforts. Alongside our Annual General Meeting, is our **Annual Open House** where a number of them set up table displays around the hall and we provide coffee and a time for people to talk with these experts about the many areas of interest concerning living by water, plants, water, nature, and more in the watershed and lake health.

Stewardship Education & Awareness - Kids / Family Programs

Members have encouraged us to have kids programs to do some fun things for the lake. The lake needs people to steward it. People will not steward what they do not value.

1	Priority/Deliverable	2014 Goal/Status/Progress		2014 Results & 2015 Forecast
Lo	Love the Lake Day for Families at the Provincial Park – Aug 9 th			
Pre	emise / Goals		Results & 201	5 Forecast
Pre	emise:		• Approximately	200 people attended!
A day of fun learning activities to connect watershed residents and visitors with the lake and nature in the watershed.		Our Lakes (Aqu model demons	LMS (Water Quality & kits), Respect atic Bugs), Nature AB (Watershed tration) and the Prov Park's AIS	
To help people to more fully realize that nature provides services which contribute to the health of the lake and the water quality.		•	aunch. BRWA and Cows & Fish sent A Directors attended the PLWA	
For nature to be healthy we must understand some of the inter-connected web of life.		2014 Extra Activities: Wildlife expert talk & display, a story teller with environmental stories, a bird expert and a colour your favourite Pigeon Lake		
Go:		t year: more activities for yet lots of important	Critter, get you website.	r picture taken and posted on our
2.	lessons. 2013 had ALMS, Respect Nature AB, Cows & Fish staff support.		qualifying them professionally i	d a form by going to booths to enter a draw to win 3 nstalled bat houses worth \$450. ted on www.plwa.ca/photos/
3. More advertising / marketing: Get more people to attend than last year (about 75).		having a scaver	nave the volunteers to include nger hunt & running around learning nding available.	
The	The Summer Village of Argentia Kids Camps (Mulhurst)			
 2 different ½ days of kids healthy lake activities. PLWA summer staff worked with the BRWA to put on these programs. 		•		



Premise / Goals	Results & 2015 Forecast
 Camp WaHeLo at Pigeon Lake (North) The PLWA Summer Program Coordinator spent a day with kids at WaHeLo early this summer. With the AHS Advisory a later camp was cancelled. The Camp Program Coordinator attended the Love the Lake Family Day. 	Camp WaHeLo was delighted to incorporate some healthy lake learning activities into their program and will probably request again if their camp remains open. • The kids enjoyed themselves and learned a lot. • Work with BRWA and summer staff (if we have) to deliver

Other PLWA Educational Activities

	Premise / 2014 Goal		2014 Results & 2015 Forecast		
١	Water Birds of Pigeon Lake Pamphlet				
S A t	shorelines and littoral areas A positive way to draw atte these areas.	ention the importance of e to restore their shoreline.	This is the second year we've had the Birds of Pigeon Lake brochure to give out. About 200 - were given out, primarily at Farmer Markets People seem interested in the birds and reading the pamphlet.		

Farmer Markets

Premises:

Reach people through the places they go.

Talk with people about key aspects of lake health.

Goals:

- LBW Homesite Consultation sign-ups.
- Inform people about Lake Health
- Disseminate information
- Answer questions



us to provide credible info by having the PLWA booth at the Farmer Markets from May through to the end of August.

Trained summer staff & help from volunteers allowed

- LakeDell farmer market each Friday,
- Some MaMeO Sunday markets.

Marketed programs and events.

Highlighted a different aspect of lake health each week. E.g. Ask us about AIS or about Living By Water.

Pigeon Lake 101 for new Pigeon Lake Municipal Councillors

Premise: Informed Councillors are more likely to make and support changes for the health of the lake, and support and work with the PLWA.

Goal:

Give new Councillors a foundation of knowledge to work from as Pigeon Lake watershed leaders.

Held Feb 9th, 33 leaders and supporters attended.

An intro to Pigeon Lake (history, lake terminology & characteristics); Lake Biology (lake biota and the aquatic web of life); Tropic Status, Lake Productivity & Nutrients; The Draft Nutrient Budget; The Need for Change; Living by Water; and Private Sewage Systems.

Some good discussions.

Presentation posted in Education & Stewardship on www.plwa.ca

Our Water Watershed <u>www.plwa.ca</u> Our Voice 1



New Comer Package

Premise: New Comers often modify their land according to city type standards. They need to get informed and connected before they put money into making changes.

Goal: Get info into New Comers hands asap. Minimize poor lake decisions.

Implemented in late 2013- Packages were given to SV Administrators and a County Councilor, to give to new comers.

2013-14 Silver and Sundance SV's distributed 6 Numbers not known for the other beaches.

Aquatic Invasive Species (AIS)

The PLWA view mussels and other invasive aquatic species as serious threats for Pigeon Lake and that ilt will take the community to prevent them from going into the lake. Everyone needs to be able to keep guests from bringing them in on boats, and to talk it up with fishers and others. The PLWA has worked with the ESRD AIS staff and the Leduc County to get signage out around the lake. For two years emails, phone calls and meetings with requests have encouraged municipal leaders and the administrators to get signage and to help spread the word.

The PLWA has also:

- Borrowed from the ESRD one of the big new signs to attract attention at the booth to encourage conversations about AIS.
- Sat a staff person with a sign, on a couple of busy mornings at the Mulhurst boat launch.
- Distributed the AIS information cards at meetings and at our booth.
- Distributed emails with AIS updates to the watershed community.
- Found 10 volunteers on 10 beaches and supported by ALMS led the Pigeon Lake monitoring program, distributing the PVC mussel monitoring pipes and forms.
- Invited Kate Wilson (lead on the Provincial AIS Prevention campaign) to speak at our AGM.

2015 – The PLWA will continue to highlight and encourage the watershed community to be diligence about AIS.







Shoreline Restoration - Priority

For many, many reasons the shorelines are one of PLWA's priorities.

Lake shorelines are a type of wetland. Because they are so important ecologically regulations exist to protect them but the province do not currently have enough compliance officers to enforce. It is up to us to learn enough to restore and/or protect them.

The PLWA annual goal is to have at least one to three shoreline restorations completed each year.

65% of Pigeon Lakes' shorelines are highly impacted, many hardened off, many with few plants or no diversity. There are many places with rip rap and or retaining walls that hinder these areas from providing the services they do for us, for nature and for the water quality.

The health of the shoreline and littoral areas (shallow waters) is incredibly important for the health of the lake. Shorelines are the final opportunity for runoff of water coming into the lake to be filtered of nutrients and contaminants. With an over 100 year turnover of the water we need to do all we can to keep the water that goes into the lake as clean as possible with as few nutrients as possible. Some 80% of the birds, land critters and water biota (living organisms from fish to little guys too small to see) in a watershed depend on a healthy shoreline for food, nesting, spawning, protection and more. Aquatic plants in the littoral areas provide many services: up take of nutrients, spawning for fish, protection for young fish, some fish eat aquatic plants including some algae.

2014/15 Shoreline Restoration

The PLWA has entered into a working relationship with the Summer Village of Norris Beach (SVNB) to restore the Norris Creek and surrounding Environmental Reserve to a more natural state while still supporting public use of the area. The PLWA has secured a grant from the Toronto Friends of the Environment Foundation to be used on this project and the SVNB is contributing to the project as well. We believe that the active involvement of community members in this project will increase the awareness of, and participation in, good stewardship practice.

The PLWA will use this project as a model for further restoration projects in the watershed.

The PLWA is actively exploring a second possible restoration project.

The PLWA is actively seeking landscaping companies that also have biology /wetland / water health competencies interested in helping residents to design and restore their shorelines in keeping with the Model Land Use Bylaw (MLUB) that the Pigeon Lake Watershed Management MLUB Committee produced.

In 2015, the PLWA will continue with the goal of 1 to 3 restoration projects each year and work to build a gallery of examples and steps for how shoreline lot owners can be encouraged and supported to renaturalize and or restore their lots.



Lake Reeds

There has been a high level of concern expressed by members about the amount of reed beds that are cut. Members know that there are regulations and yet, people cut the reeds thinking that water circulation is important and that the regulations will not be enforced. Given their importance, PLWA Directors discussed the matter with ESRD Director, Randall Barrett. We hope to work with ESRD and with some of the people to see if there are ways to address their concerns while making the situation better for the lake. In the meantime, a brochure explaining the reeds functions, value and regulations is to be created and disseminated. Unfortunately, the AIS program has delayed this work.

The PLWA is looking to make shoreline health a priority in 2015.





Other Important On-going Stewardship Efforts

In addition to the efforts of PLWA is work by others also important for our watershed and lake:

• Eradication of Himalayan Balsam & other Invasive Plants:



Don Davidson, Mayor from Grandview, and past PLWA Director leads this program promoting his pick, break, drop technique to stop the spread of the invasive plants. Don as broadened his scope to include more of the invasive plants. People learn about invasive plants through the Homesite consultations and their yearend report provides some insights, on the commonly found plants. The PLWA has worked with a

botanist familiar with Pigeon Lake to create Pigeon Lake specific resources and these and other links can be found on the PLWA website.

• Shoreline Clean-Up — Peggy Juchli, a past PLWA Director on the Stewardship Committee continues to run this Pigeon Lake Stewards program. Twice annually she calls on and supports the beach teams, who walk the shore and pick up bits of garbage that comes to rest on the lakes shoreline. It is important to remove the garbage as it pollutes the water and can kills birds and other critters.



Peggy collects each <u>beaches' information</u> and compiles it. Last year the way that it was done changed, so comparisons to past years are no longer possible. However, see what is posted on the website. A shocking amount of garbage is collected.



Water Monitoring

In 2012 the APLM recognized the PLWA as the lead organization to ensure on-going water monitoring, as we'd been doing since having water sampling conducted alongside the completion of the State of the Watershed Report.



The Province works with the Alberta Lake Management Society (ALMS), to ensure that the water quality is monitored to be able to assess the long-term water quality trends of Alberta lakes. They rotate which lakes get sampled each year, so each year some lakes are not sampled. The PLWA has an on-going goal of ensuring that the water of Pigeon Lake is monitored annually, so on the off years, we work directly with ALMS and their LakeWatch Program paying for the sampling, analysis and report.

Some of the municipalities also believe this is important and contribute to a water monitoring fund, available specifically for this and other water related requirements.

2013/14 Priority/Goal	Status/Progress	2013/14 Progress Deliverables
Normal annual water monitoring done the summer of 2014		 ✓ PLWA water sampling volunteers ✓ Water samples taken for the normal water quality parameters. The water samples analyzed.Data that will help to see the long-term water quality trends in the lake.
A 2014 Pigeon Lake Lakewatch Report	ALMS is completing the report.	A 2014 Lakewatch Report
Replenish the water monitoring fund.	 Our goal is to have \$5000 in this fund available as needed. \$3500 will be paid out this fall 	Replenish the fund
Keep stakeholders informed on water quality and related	An annual Water Quality Update is usually issued in the spring and this year it will coincide with the release of the Lakewatch Report. The last annual water update was issued March of 2013. This year specific communications have been issued for each of the two water study reports when they were released.	 Continue to work with agencies to gather, monitor and disseminate water quality information, coordinating with the related water related work of the WMP. See the list below of reports issued and expected.



ESRD Reports		✓ Issued P = Pending	Communications
1.	2013 Overview of Pigeon Lake Water Quality, Sediment Quality & Non-fish Biota Report. This report summarizes all of the studies done and includes a bit on the findings. Authored by ESRD with assistance by ALMS.	July 2014	Emailed to Watershed Residents July 25th, 2014 at 7:50pm
2.	Historical Water Quality Report. This report will be about the Pigeon Lake long-term trends in water quality and is important for benchmarking, to show us over time what difference the changes we've made are making to the water quality.		This report which "may be" released as soon as this fall.
3.	Paleolimnology Report. The story from the core sediment samples may help to tell us what water quality is possible. This work has been contracted out to a firm who will produce both a technical report as well as a plain language report.		The report has been drafted and ESRD has yet to review and release it. Hopefully to be released VERY soon.
4.	The Pigeon Lake Phosphorus Budget. The Full Report and an Executive Summary are now available. Keeping in mind that the nitrogen correlation to chlorophyll-a (including algae) is very similar to that of phosphorus, it shows the sources of nutrients going into the lake and in the lake.	√ July 2014	Report and executive summary sent to members on July 22nd, 2014 at 4:14pm
- S	A BATHTUB decision-making modelling tool. This will show the potential results for different initiatives (such as storm water / surface changes) and help to guide decisions and target efforts. ee more at: p://www.plwmp.ca/#sthash.Xhosc4KJ.dpuf		In development. An update on the progress of this is tool is expected in the fall of 2014.



Response to Watershed Threats & Opportunities

Most of the arising Threats and Opportunities, come in the way of development applications.

Priority/Deliverable	Status/Progress	Going Forward – 2014/15
Become a recognized party of interest to receive development applications from the municipalities to enable us to support smart development in the watershed.	Leduc now sends us copies of all the development applications for their portion of the watershed.	 Attain this status with other municipalities Update the PLWA Development Principles. Have developers guided by watershed development best practices, working with us before they spend money.
Watermere Resort Application (threat) - Site concerns - Design concerns - Concerns for the health of the lake.	PLWA with member and Summer Village support were key in bring about the decision, not to allow the application to proceed. PLWA Land Use and Communications Committees work included: Initial submission to Leduc County Jan 2012 — Professional considerations + the voices of the PLWA members. 'Go to' Webpage created Article in the Pipestone Flyer outlining our: Wrong Place? Wrong Design? Wrong Time? Second submission to Leduc County leading up to public hearing Presentation at the public hearing	 Completed a survey to see if this new application has addressed the concerns people had for the application in 2012. Met with Dansol In'tl and Leduc Planning staff to review the PLWA concerns. Represent the watershed residents concerns in front of the council at the next hearing. Help to bring about a decision that puts the health of the lake first.
County of Wetaskiwin Area Concept Plan (ACP) to reflect best watershed development practices. (opportunity)	 The Area Concept Plan was approved this spring by the County of Wetaskiwin Council. The PLWA was expected the focus group (on which one of our Directors sat), to be convened before it would go to council. This did not happen and we were not informed that it was on the agenda. The PLWA did help the ACP to be a better guiding document for development in the CoW, although a number of our suggestions were not incorporated into the ACP. 	 Learn and communicate the decisions of the County of Wetaskiwin's Councilor. Post the ACP on the website. Use the learnings from the commissioning of the review, to inform recommendations and resources to help guide other municipalities in the watershed when conducting related regulatory reviews.

Watermere Resort – Please go to the website and click on Watermere Resort, on the line just under the header, to learn about this application, actions and what we know about meetings.



Communications & Outreach

Overall goals for 2014 was to inform and support our work through value add communications.

Goals	2014/15 Progress / Results / Next Steps	
Website: Keep the website fresh with key information and links over the summer months. Increase the use of the website with resources.	 To better support and communicate the efforts of everyone working on improving the health of the lake. Continue to improve the website. Become a known resource and "Go To" resource for Pigeon Lake. 	
Regular Communications	Electronic Communications – Communications have increased because we provide the means for the PLWMP messaging to	
 Keep members information on key topics. Reach more watershed residents. Be available out in the watershed to give 	 the watershed residents: 1. PLWMP Communications a. Sept 1 – Final Request to Complete the PLWMP Survey b. Sept 24 – News of Provincial Support for PLWMP 	
 information and to hear and answer questions that people have. Have some volunteers / members more informed to help the different beaches to 	 c. Dec 18 – Report on Survey d. Dec 29, Jan 10,16 – Cosmetic Fertilizer Survey Request e. May 17 PLWMP Cosmetic Fertilizer & Soil Management Committee Update 	
informed to help the different beaches to have more accurate information.	 Emails to Watershed Leaders a. Sept – FYI on Experimental Lakes Funding b. Sept 26 – PLWA Progress Report & Request for 	
40 to 50% of our electronic communications are opened – we are working to increase that %.	Participation & Funding. c. Oct 22 - County of Wetaskiwin election results d. Mar 1 – Invite to PLWA Pigeon Lake 101 for Councillors e. Mar 4, 17 & Apr 8 – Invite to Leaders Session f. May 29 – AIS Action Required g. May 31 – Help Prevent AIS h. Aug 1 & 13 – Request to post Living By Water & Events info on municipal websites i. Aug – Request to attend the PLWA AGM	
	 3. Members (Often Subscribers) &/or Everyone a. Sept 26 – Update b. Oct 8 – Request to help with Water Studies, etc c. Nov 10 – Notice of Close to Home PLWA Video d. Dec 22 – Season Greetings e. Jan – January Update – A Lot Has Been Happening f. March 31 – Wastewater Update g. March 24, 25, June 7, 23, 26, July 3, 4, 12 17 – Watermere Resort Updates. h. Mar 13 – Looking for Summer Staff i. May 16 – Welcome Summer Staff 	

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	Electronic Communications to Members (Often Subscribers) &/or Everyone Continued. j. May 17June 14 - Request for Volunteers k. May 30 – Spring Into Action – Lawn Maintenance
	 I. May 31 - Help Prevent AIS m. July 9 – News Alert – AHS Advisory Posted n. July 10 Fishery Update Posted o. July 17 & 19 Raffle Tickets Emails p. July 22 – Water Study Phosphorus Report Released q. July 25 – Water Studies Overview Report Released r. July 25 & Aug 15, 22 PLWA AGM Notices
Goal: Find better ways to collaborate on communications with the Summer	News via the Summer Villages – most SV's did not include a PLWA update in their publications this year – not enough space. Some SV's posted the AGM on their website after a second request.
Villages.	In-Person Communications - Most Summer Village Mayors welcome 1 or 2 update calls from the PLWA President PLWA Directors met with 8 of the Summer Villages in the Spring.
	PLWA were invited to give an update at most Summer Village Annual Information Meetings.

The Association

Membership & Connecting to the Watershed Community

Membership and the participation of members as volunteers are very important to our work for the health of the lake.

The goal this year was to add or reconnect with 200 watershed residents, preferably as members, if not as subscribers. Through the efforts of staff and volunteers, 104 members were added and 148 subscribers.

This brings our totals to 947 Members, 461 Subscribers and 1408 watershed residents now connected with the PLWA.

Our membership reached a high in 2008 of about 1600 and was at low in 2011, mostly due to technical limitations and a policy of dropping people off the list if they did not give us their annual membership fee. The focus is now to retain the connections with people.



Volunteers

The PLWA is grateful for the help of many of our PLWA members and friends. This year people a number of people worked alongside our summer staff.

Types of volunteering	Numbers of volunteers
Love the Lake Family Day	10 volunteers put in 42 hours
AIS PVC Monitoring	10
Farmer's Market	2
Door-to-Door Campaign	20
Selling Raffle Tickets	12
AGM	8
Others including:	6
Total	68 Volunteers

Please note these numbers do not include:

- The countless hours that the PLWA Directors, and other key volunteers, put in.
- The many volunteers and hours that the people working on the Pigeon Lake
 Watershed Management Plan Committee or people with other groups have put into
 helping. Just one example is the time donated by the 30 people that volunteered
 their time to attend the Leaders Session.

The PLWA will need to replace a few key volunteers in 2014: The Membership volunteer and we continue to seek someone to help with the website updates and maintenance who would be supported by the webmaster.



Directors

The volunteer Directors of the PLWA continue to put in numerous hours to do all they can for the health of the lake and watershed.

PLWA have recognized for a few years that it is critical for PLWA's organizational sustainability to hire part-time staff. Ideally, the PLWA would have a part-time Executive Director, part-time administrator and a full time Program Coordinator over the summer months. The work of a marketing / communications professional it is a critical element in the work of educating and shifting the social norms in the watershed towards being good stewards utilizing best watershed practices.

Even when staff are attained, the work and role of volunteers will continue as the changes must be a community effort and because the PLWA is a membership organization and must always be guided in large part by the members and watershed residents.

At this point, the projected budget for 2015, only includes summer staff.

Board members are elected volunteers at the Annual General Meeting for a two year service term from the date of the AGM. Directors may be re-elected indefinitely. The board strives to have a healthy turnover of Directors yet, it is also critical to have the knowledge and experience that is only gained over time. We strive to find a balance of both without burning out the Directors.

Keeping the number of Directors around twelve, with a good mix of capabilities works well. Representation from around the lake is important. We've noticed that having active Directors willing to talk to their neighbours and at beach meetings, makes a big difference for the number of people from their villages who are knowledgeable about the lake issues, the work being done and who support the PLWA as members. It is far easier to find and attain Directors from the beaches that are active.

As a watershed association, it is important that the Directors at the table reflect a range of watershed residents and have the connections with different groups and can bring to the table their perspectives.

The PLWA extends to our retiring Directors a deep appreciation for their contributions. All will be greatly missed. 2014 retiring Directors are:

- Emile Beaudry who has served the PLWA since the founding days with a calm, knowledgeable drive and commitment.
- Marcia Mielke who has been an exemplary Treasurer, keeping our funding and books in order, and being a voice of guidance and reason.



- Ruth Harrison who knows no bounds when it comes to serving Pigeon Lake with historical knowledge, Leduc County experience, ties to many important watershed organizations, and with the utmost passion and commitment.
- Hugh Sanders whose resolve for good process and amazing patience for bringing about change over time, provided dedicated help on a number of related fronts as President of the Battle River Watershed Alliance, and serving on the Alberta Water Council. Hugh will continue to sit as a resident and with his various hats on the PLWMP committee.

- Directors with Expired Term, Renewing Until 2016 AGM:

Susan Ellis – President (All Committees)	Itaska
Leonard Standing-on-the-Road – PLWA Liaison with the Maskwacis Band	1 st Nations Elder - Montana Band

- Continuing Directors:

Wayne Buskas – Government Relations Committee, APLM Liaison	Ma Me O Beach
Ryan Devlin – Land Use	Mulhurst
Michael Gaian – APLM In-Lake Committee Rep / Technical & Research Committee	Mission Beach
Bob Gibbs – Chair Watershed Management Plan, Land Use Committee	Silver Beach
Jeff Lloyd – Government Relations Committee, APLM Liaison	Ma-Me-O Beach
John Slater – Watershed Management Plan Committee	Ma Me O Beach
Jim Webb – Governance & Fund Raising Committee	Silver Beach

Retiring Directors

Emile Beaudry	Argentia
Ruth Harrison	Leduc County
Marcia Mielke	Johnsonia
Hugh Sanders	Crystal Springs

- New Directors - Term 2014 to 2016 AGM - Committees TBD

lan Bradley	Itaska
Mike Mahon	MaMeO
Kevin McKee	Johnsonia
Tom Wooding	Argentia
Brent Wyley	Argentia

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Financials

The fiscal year end for PLWA is December. The Financial statements are prepared in conformity with Canadian accounting standards for not-for-profit.

The 2013 financial year end statements were audited by Pennock, Acheson, Neilsen and Devany. The complete financial statements along with the Auditor report can be viewed on the PLWA website at www.plwa.ca.

The 2013 year showed a healthy profit of \$54,113 bringing the equity to \$172,003.

	December 31, 2013	December 31, 2012
Asset		
Cash	\$ 174,305	\$ 119,190
Total Assets	\$ 174,305	\$ 119,190
Liabilities & Members' Equity		
Accounts Payable	\$ 2,302	\$ 1,300
lembers Equity	172,003	117,890
Total Liabilities & Members' Equity	\$ 174,305	\$ 119,190

Pigeon Lake Watershed Association Statement of Operations Year ended December 31, 2013		
	December 31, 2013	December 31, 2012
Revenues	\$112,549	\$ 72,107
Expenses		



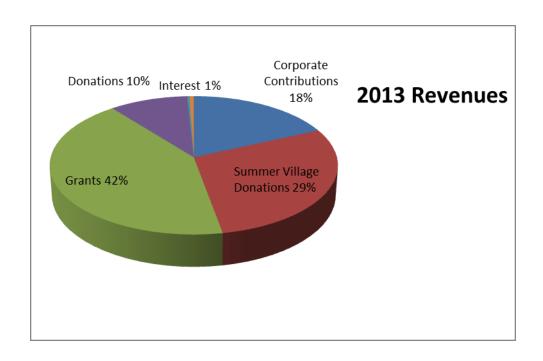
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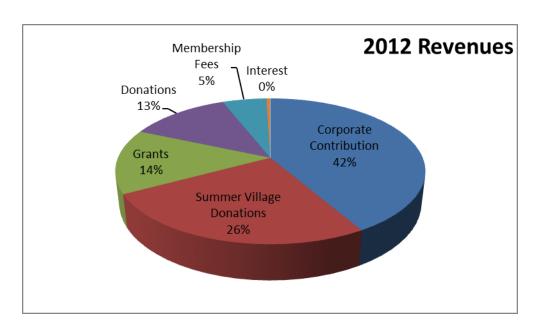
Watershed Management Plan	\$ 27,959	\$ 332	
Homesite Assessments	19,301	8,486	
Stewardship	6,027	3,854	
Professional fees	1,975	1,365	
Administration	1,836	12,300	
Communication, Advertising, Website	1,212	1,564	
Membership & Publications	126	126	
Other		15,595*	
Total Expenses	58,436	43,623	
Surplus (Deficit)	\$ 54,113	\$ 28,485	

[•] LY other includes Area structure plan review and Alberta Riparian Habitat Project

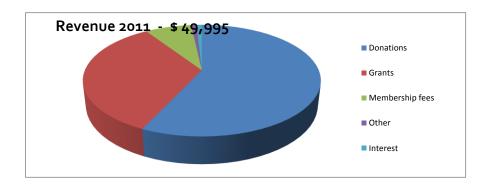
The 2013 revenues were up substantially with large donations received from Community Initiative; Land Stewardship, TD Friends of the Environment, County of Leduc, Edmonton Community Foundation, Pigeon Lake Summer Villages and many generous individuals.



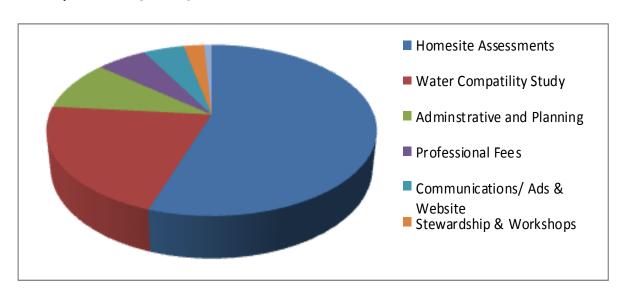








Expenses 2009 - \$ 18,742



Increasing our revenue and capacity is critical to our sustainability.