



*To Enhance, Preserve & Protect  
Pigeon Lake & Its Watershed*

... as a healthy and environmentally sustainable ecosystem for current and future generations.

**ALMS September 27<sup>th</sup>, 2013**



# Role of Watershed Stewardship Groups in Watershed Planning

- Existential
  - Catalyst for public discourse on environmental matters
  - Flashpoint for jurisdictional accountability
  - Recognized entity, mandate and role under Water for Life
- Contextual
  - Spearheaded by concerned citizens
  - Establish science-based, rational discussions
  - Supported by technical experts
  - Manifestation of desire for change





# Formal PLWA Roles & Responsibilities

Roles: Educate; Inform; Advocate & Protect

Responsibilities:

- As a membership association, we are responsible to the members.
- Annually report to the membership via our Annual Report & presentations at the AGM, and on other occasions ask for input.



# PLWA Role - Educate

- Through the delivery of stewardship programs and events, and through the dissemination of educational materials, referrals and others.






of Pigeon Lakes Key Invasive Plants – Remove them but... NEVER put invasive plants in and burn OR bag, seal and dispose in a landfill bound garbage.

Notes	Foliage or Young Plant	Flower
A creeping rosette perennial that grows erect to 1 metre. The flowers range in color from deep purple to pink to white. The only thistle with male and female flowers on separate plants. Control with repeated...		


# Stewardship Education


## Site Consultation

For more information visit [www.pigeonlake.ca](http://www.pigeonlake.ca)



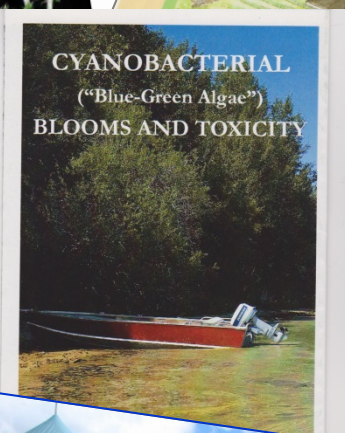
### Birds of Pigeon Lake





### Living at the Edge

YOUR GUIDE TO PROTECTING YOUR LAKE



### CYANOBACTERIAL ("Blue-Green Algae") BLOOMS AND TOXICITY



## Love the Lake!

A Guideline for Landowners in the Pigeon Lake Watershed

Show your Commitment to the Lake in the following ways:

- protect the shoreline by retaining indigenous aquatic plant growth and plant native vegetation in the riparian (shoreline) area
- increase tree and shrub density on your property
- properly compost biodegradable waste
- limit fertilizer use to container gardening
- eliminate the use of insecticides, herbicides and/or fungicides
- store all chemicals safely away from drainage areas
- use phosphate free detergents (dish, laundry, shampoo)
- use proper techniques when fueling equipment like lawnmowers and boats to eliminate contamination of the lake
- ensure appropriate disposal of animal waste
- practice proper maintenance and maintenance of sewage containment techniques to reduce waste water production
- be by attending programs such as the Alberta Environmental PLWA sponsored events and neighbours - let them know how you are encourage them to do the same!

**All Users Can Help Save the Lake**

- plant growth and trees along natural drainage
- insecticides, fungicides and insecticides
- avoid areas from animal use
- and fertilize only as needed
- of all animal waste

2710 or e-mail: [love@pigeonlake.ca](mailto:love@pigeonlake.ca)

**LOVING THE LAKE!**

"A pond" that promotes blue-green algae growth





# PLWA Role - Inform

- Stakeholders about:
  - practices that negatively affect the environment
  - new research that positively effects the environment
  - sustainable environmental practices
  - potential impacts of new legislation on the environment
  - current lake conditions





**Lakewatch**  
THE ALBERTA LAKE MANAGEMENT SOCIETY  
VOLUNTEER LAKE MONITORING PROGRAM

## 2011 Pigeon Lake Draft Report

COMPLETED WITH SUPPORT FROM:



## Pigeon Lake Watershed Association (PLWA) Report to Members & Municipalities

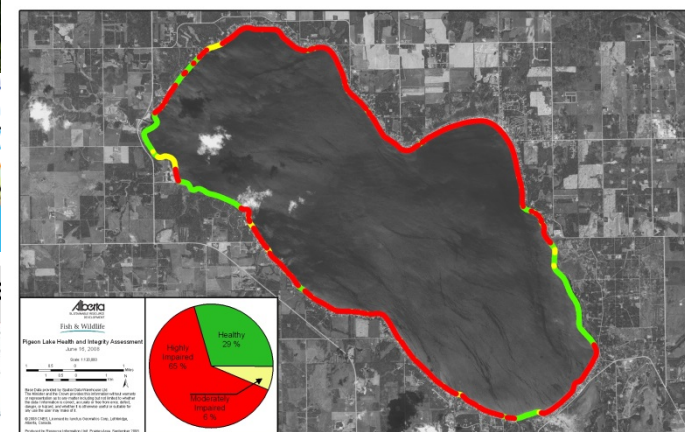


## Pigeon Lake

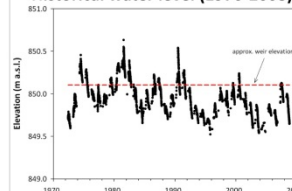


# Pigeon Lake Watershed Association

## Annual Report 2012/2013



### Historical water level (1970-2008)



### Physical Characteristics

Lake Surface Area: 97 km<sup>2</sup>  
Watershed Area: 183 km<sup>2</sup>  
Watershed to lake area ratio: 2 to 1  
Average Depth: 6.6 m  
Outlet control: concrete weir

Algae (chlorophyll-a): 17 ug/L  
Nutrients (Total phosphorus): 34 ug/L  
Water clarity (Secchi depth): 2.1 m

### Human Characteristics

Watershed Pop. (approx.): 2,300  
Counties: Wetaskiwin/Leduc  
No. of Settlements (approx.): 15  
First Nation(s): Ermineskin; Louis Bull; Montana; Samson  
Provincial Park(s): Pigeon Lake PP  
Other Protected/Env. Sig. Areas: 3  
Watershed Stewardship Group(s): Pigeon Lake Watershed Association  
Watershed Planning Advisory Council: Battle River Watershed Alliance  
Watershed notes of interest:



# PLWA Role - Advocate

- To local, provincial and federal governments, agencies, regulators, businesses, industry and the general public; best practices in watershed management including:
  - land use,
  - water use and,
  - over-all environmental protection.







- Advocate on significant developments
- Area Structure Plans
- Area Concept Plans
- Industrial considerations
- Opportunities that arise.



# PLWA Role - Protect

- The lake and the watershed by:
  - Advocating positive changes to regulations and land use bylaws.
  - Monitoring land use activities such as: industry, development & indicators of lake and watershed health.





# Clean • Drain • Dry

Attention: Boaters and Anglers

Every time you remove your boat from the water, remember to **Clean, Drain and Dry** your watercraft and equipment.



Zebra Mussel



Quagga Mussel



European water bug

**Clean** and inspect watercraft, trailer and gear. Remove **all** plants, animals, and mud.

**Drain** **all** water from bait buckets, coolers, bilges, internal compartments, livewells, ballasts, transom and motors.

**Dry** watercraft and gear completely between trips. Sponge out standing water and allow the wet areas of your boat to air dry.

Inspect and remove plants, animals and mud.



Report any mussels that are attached to your boat.

1-855-336-BOAT (2628)  
[www.mywildalberta.com](http://www.mywildalberta.com)



Alberta  
Government



TD Friends of the  
Environment  
Foundation



# Role in Watershed Management Plans

- Initiation of process when conditions for success exist
- Establish governance – steering committee and terms of reference
- Manage the process
- Monitor the progress
- Maintain a supporting context





## PLWA Watershed Planning Roles & Responsibilities

■ - Before; ■ - During Planning; ■ - During Implementation; ■ - On-going

- 1 ■ Initiation of the WMP (Forming the steering committee, getting the representation & commitment from key representatives & stakeholders.)
- 2 ■ ■ Building the understanding of the need to do the WMP.
- 3 ■ ■ ■ Creating the process by consensus, then with new players helping them to support the process established.
- 4 ■ ■ ■ ■ Building & maintaining relationships with larger watershed community (other watersheds, ENGO's, WPACs).
- 5 ■ ■ ■ ■ Building & maintaining relationships with watershed community.
- 6 ■ Preparing watershed community to adopt best practices by informing, educating & advocating, and also through providing volunteer opportunities.

■ - Before; ■ - During Planning; ■ - During Implementation; ■ - On-going

- 7 ■■■ Watershed related communications with stakeholders, will become more informed & focused as the recommendations & best practices are produced.
- 8 ■■■ Communications (2-way) of planning related information, activities, recommendations (per topic)
- 9 ■■■ Engagement of watershed planning stakeholders – All three levels (next slide)
- 10 ■■ Governance of the planning process – ensuring that the Steering Committee adheres to the PLWMP Terms of Reference
- 11 ■■ Fiscal responsibilities such as: seeking funding, grant reports, ensuring funds are used as intended by the donors / funders.
- 12 ■ To advocate the implementation of recommendations that are developed / implement the PLWA's recommendation



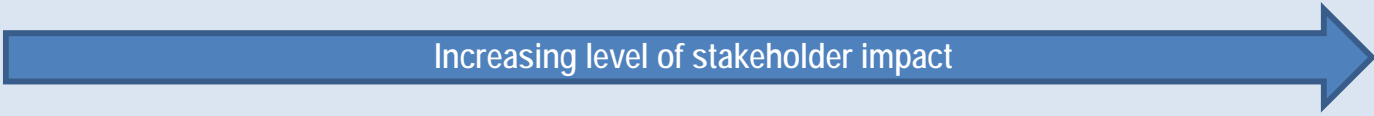
## PLWA Watershed Planning Roles & Responsibilities Continued ...

■ - Before; ■ - During Planning; ■ - During Implementation; ■ - On-going

- |    |  |
|----|--|
| 13 | ■ To help find or develop the resources for people and/or municipalities to implement practices  |
| 14 | ■ To reinforce the what's, why's, how's etc., via information, education, advocacy               |
| 15 | ■ To support &/or advocate for the enforcement of whatever bylaws the watershed associate adopts |

# PLWMP Engagement

*Note: A simplified version of the (IAP2) International Association for Public Participation Model*

	Level 1		Level 2	Level 3
				
	Inform	Consult	Involve	Collaborate
<b>Stakeholder Engagement Goal</b>	Stakeholders are aware of the PLWMP: <ul style="list-style-type: none"> <li>• process</li> <li>• involvement opportunities</li> <li>• information</li> <li>• outputs and progress.</li> </ul>	Stakeholders give input & feedback during the PLWMP process.	Stakeholders interact, question and discuss PLWMP content and recommendations.	Watershed stakeholders support the module recommendations and can explain the thinking behind them.
<b>Opportunities to be Involved</b>	Visit the PLWMP website  Sign-up receive PLWMP communication	Complete surveys Submit comments  Attend public information sessions	Public engagement: <ul style="list-style-type: none"> <li>• Panels</li> <li>• Discussion/Focus Groups</li> <li>• Workshops</li> <li>• Webinars</li> </ul>	WMP Steering Committee and module subcommittees



# Annual Leaders Advisory Session



One way we attempt to get as many leaders, and key stakeholders singing from the same page,

# Branding the Pigeon Lake Watershed Management Plan

Healthy Watershed

- Healthy Lake - Healthy Communities



## PLWA Membership

We encourage you to become a PLWA member to help enhance, preserve and protect Pigeon Lake.

[Access PLWA membership information.](#)

Subscribe to PLWMP Updates

Email

Name

## Welcome to the Pigeon Lake Watershed Management Plan Website

The health of Pigeon Lake is at risk in large part because of how we have lived, worked and played around the lake. It is important that practice good stewardship as individuals and as a community create our plan of actions to restore and protect the health of the lake. This plan will be our plan, the Pigeon Lake Watershed Management Plan (PLWMP); the plan for the lake by the people around the lake, about what we can and are doing around watershed so that we control what goes into the lake.

This is our chance to show Albertans that we love Pigeon Lake creative journey, one that we invite everyone who loves the lake fitting for you.

This PLWMP website has background information, events, how to keep up-to-date with the planning progress. If you a PLWA receive updates, notices and for short on-line surveys to voice

**PLEASE KNOW THAT THIS SITE IS STILL UNDER DEVELOPMENT**

If you have not already... Take the 1st PLWMP Survey: Are We On Track?

Survey now Closed – Results will be posted.

To help make it a plan that is beyond the PLWA to make it a watershed community plan.





# PLWMP

Healthy Watershed Healthy Lake Healthy Communities

Home About Know Your Watershed Topics PLWMP Events How to Get Involved Contact

PLWA Membership

Welcome to the Pigeon Lake Watershed Management Plan Website

[www.plwmp.ca](http://www.plwmp.ca) Website



## 3 Public Engagement Sessions - Surveys



# **Volunteers - *Stepping Up To Be Part of the Solution* & putting their finger prints into the work**

**Over 50\* Volunteers from 16 different watershed + locations**

\* Some volunteers making more than one contribution

<b>Activity</b>	<b># of Volunteers</b>	<b># of Beaches / Locations</b>
WQ Assessment – Boat Providers & Stream Watchers	19	9
Outreach Volunteers	13	8
Board Volunteers	14	10
Other Key Volunteers	6	5
2 Park Education Days	9	6
Farmers Markets	2	2
PLWMP Steering Committee	16 (8-12 reg attenders)	9
Cosmetic Fertilizer Committee	10 approx	6
Model Land Use Bylaw Committee	10 approx	6



# Some Watershed Management Plans Key's

- Work needs to be co-created.
- Need to have enough people with a shared understanding.
- Need to have enough respected sponsors / leaders willing to publicly support at every opportunity.
- Need to build shared ownership.
- Needs to shift the norms of the watershed community
- Needs enough of us watershed stakeholders working together...

# What's Easy ... What's Hard ...

- Finding people with passion about the lake and lake life
  - Interacting with committed professionals and technical experts
  - Seed financing
- Gap between scientific data and human experience
  - Building consensus (so many players)
  - Creating momentum
  - Excessive time and technical needs for volunteers
  - Sustainable financing



# Comments / Questions?



Susan Ellis – [plwainfo@gmail.com](mailto:plwainfo@gmail.com)

[www.plwa.ca](http://www.plwa.ca) for PLWA

[www.plwmp.ca](http://www.plwmp.ca) for PLWMP

