



Find your table!

Join one of the following groups for the afternoon discussions:

- Government of Alberta
- Municipalities
- WPACs
- WSGs
- ENGOs
- Research and monitoring
- Agriculture and industry

Lake Watershed Management: Alberta Water Council's Project Team

ALMS Annual Workshop
September 2015



The Alberta Water Council



- One of the three *Water for Life* partnerships
- Stewards the implementation of *Water for Life*
- Multi-stakeholder membership
- Uses consensus decision-making



LAKE MANAGEMENT PROJECT TEAM





Background

- Initiative brought forward to the Council by ALMS
- Project team launched in February 2015
 - **Purpose:** to provide recommendations for improved lake management in Alberta to support achievement of *Water for Life* goals
- Alignment with:
 - *Water for Life* outcomes (social, environmental & economic)
 - Water Conversation Action Plan's long-term action "to advance a provincial lake policy"



Project objectives

- Document and assess the **current state** of lake management planning and governance in Alberta
- **Identify gaps, redundancies and opportunities** for improvements in lake management
- Develop **recommendations** towards effective lake management in Alberta, including roles and responsibilities



Who is involved?

PROJECT TEAM MEMBERS

Alf Durnie	Alberta Municipal Affairs
Brett Purdy	AI-EES
Hugh Sanders	Battle River Watershed Alliance
Madison Kobryn	Alberta Agriculture and Forestry
Mike Iwanyshyn	Natural Resources Conservation Board
Peter Aku	Alberta Conservation Association
Peter Pellatt	AUMA
Richard Casey	Alberta Environment and Parks
Robert Nygaard	AAMDC
Ron McMullin	Alberta Irrigation Projects Association
Ron Zurawell	AEMERA
Sharon McKinnon	Crop Sector Working Group
Steph Neufeld	ALMS



Overview

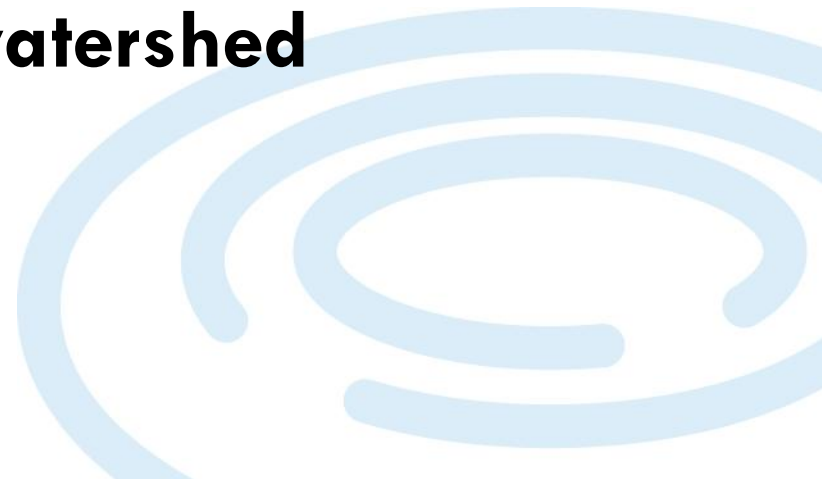
- The lake resource in Alberta
- Current state and key challenges of lake watershed management
- Workshop: Look at 3 challenges in more detail
- Next steps





What is a lake?

- Project Team describes a **lake** as a body of water surrounded by land (its watershed) where the water is usually deep enough to not freeze to the bottom over the winter
 - Includes reservoirs
- Focus to include the **lake watershed**





What is the lake resource in Alberta?

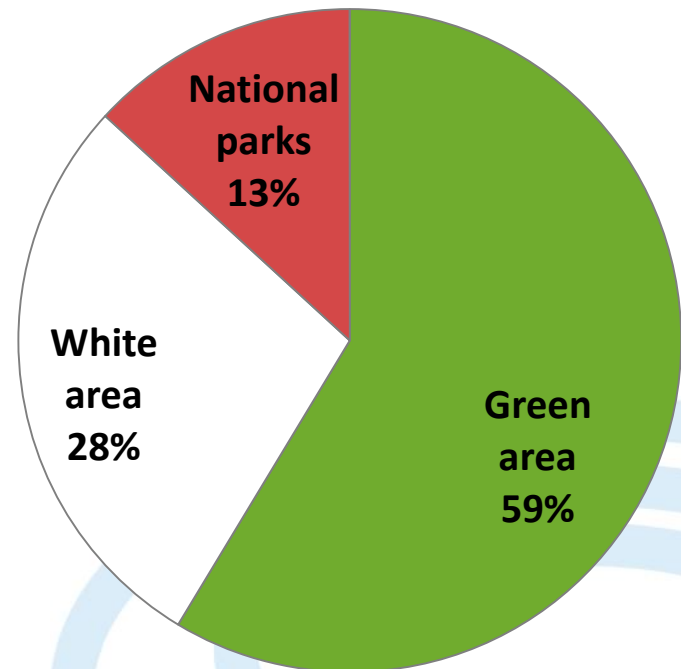




How many lakes and where?

- **Of ~3,200 water bodies** in Alberta (Fisheries Management Information System, 2007):
 - **Over 2000 named lakes** (Canadian Geographical Names Database)
 - **810 fish-bearing lakes**
- Lakes cover ~2.5% of the province land area

Distribution of total lake area

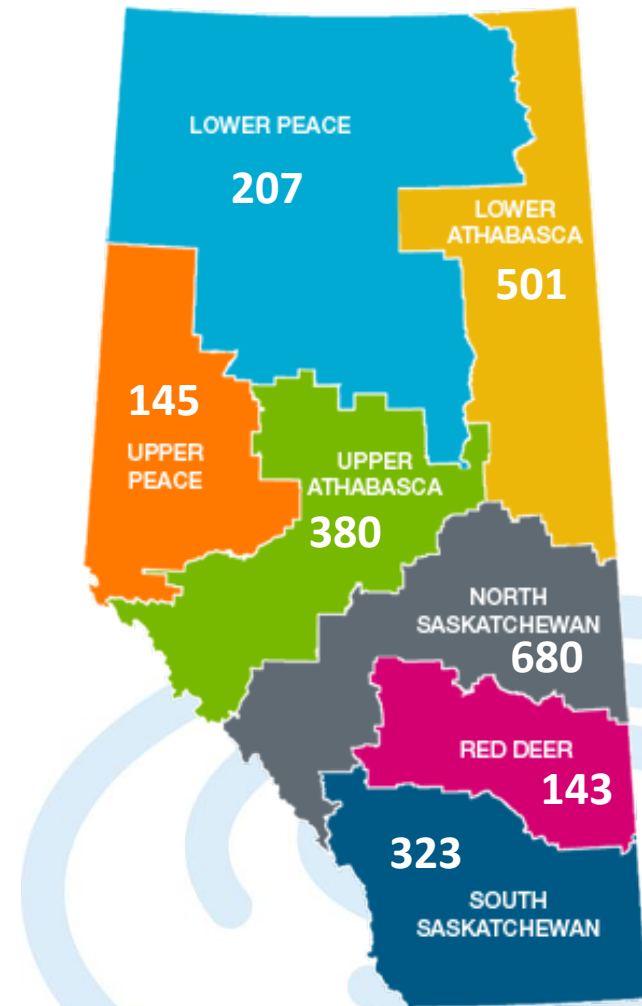




How many lakes and where?

Number of permanent named lakes and reservoirs per land use region

Source: *Regional Landscape Assessments*
(AEP, 2012)





What do we know about Alberta lakes?

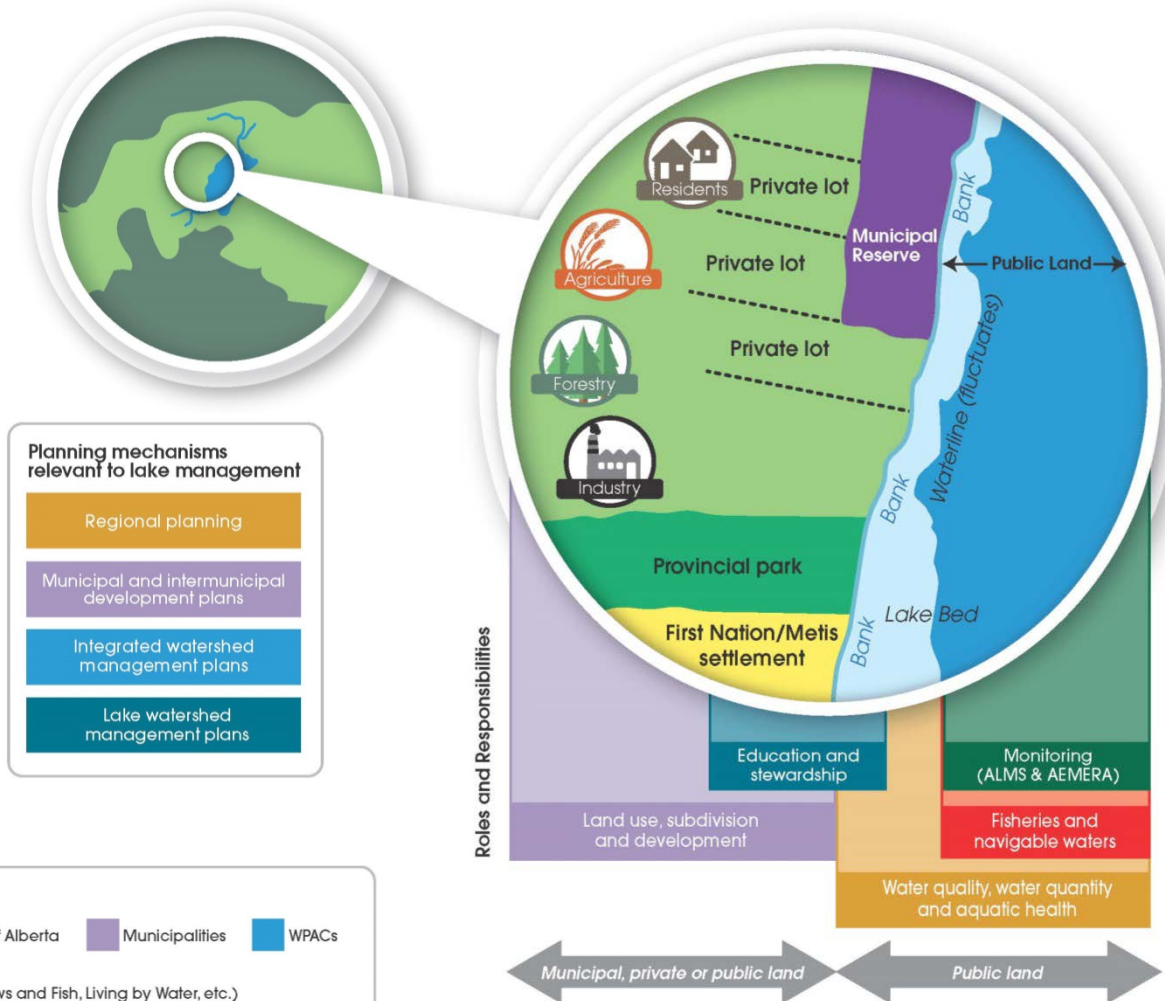
- **14 lake State of the Watershed** reports completed or in progress
- **~110 GoA/AEP reports** on the ‘health’ of individual lakes
 - E.g. water quality conditions and trends, lake nutrient budgets, etc.
- **~800 lakes and reservoirs monitored** since the 1960s

CURRENT STATE OF LAKE MANAGEMENT

- 
- Lake watershed governance
 - Lake stewardship
 - Lake watershed management planning



1) Lake watershed governance: the big picture





1) Lake watershed governance

- A variety of statutory and non-statutory roles
- Many players involved
- Collaborative
- No clear lead for lake watershed planning and management

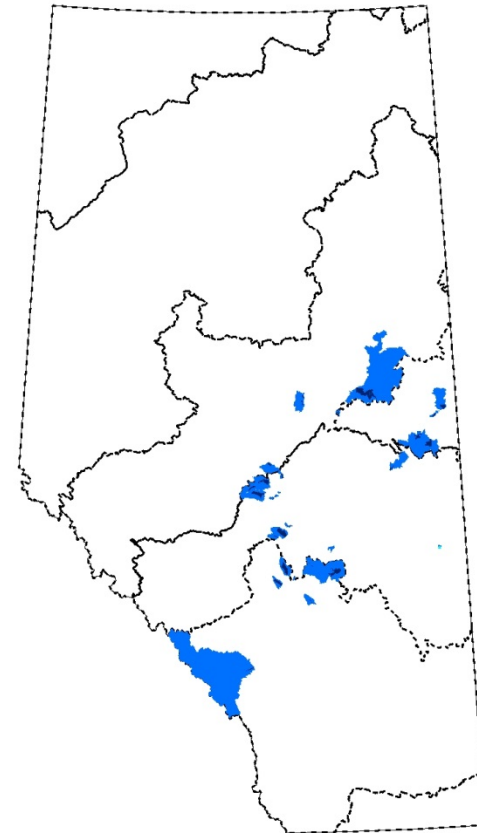




2) Lake stewardship

- ~25 lake stewardship groups engaged in stewardship activities
- Play a major role in identifying and bringing attention to lake issues
- Voluntary and advisory

Lake Stewardship Groups



Draft, Alberta Environment and Parks



3) Lake watershed management planning

WATERSHED MANAGEMENT PLANNING PROCESS

Figure 5. Watershed Management Planning Process showing six stages and 16 detailed steps of planning. (From: Guide to Watershed Management Planning in Alberta, ESRD 2013.

Monitor & Report

- Step 14: Monitor implementation and outcomes.
Step 15: Report on implementation and outcomes.

Adapt

- Step 16: Adapt the plan to new information.

START HERE: Understand

- Step 1: Prepare a state of watershed report.

Collaborate

- Step 2: Identify who should be involved in developing a watershed management plan.
Step 3: Determine how participants will work together.
Step 4: Establish the structure under which participants will contribute.

Plan

- Step 5: Identify priorities and the scope and scale of planning activities.
Step 6: Prepare and confirm support for the terms of reference.
Step 7: Develop a communications and engagement strategy.
Step 8: Identify outcomes, objectives, and indicators.
Step 9: Develop, evaluate and select preferred management actions.
Step 10: Draft and confirm support for the plan.

Implement

- Step 11: Build the foundation for successful implementation.
Step 12: Establish an implementation committee.
Step 13: Implement the plan.



3) Lake watershed management planning

- **16 lake/lake watershed management plans**
 - 10 completed
 - 6 in progress
- Variation in the scope of plans
- Advisory
- Little information is available on how well existing plans have been **implemented**

Plan initiated by	# of plans
GOA	4
Watershed Stewardship Group	6
WPAC	1
County/municipality	5



Parallel planning processes

Land planning

Regional and sub-regional plans

Municipal Development Plans

Intermunicipal Development Plans

Industry Plans (e.g. Forest Management Plans)



Water planning

Integrated watershed management plans (WPACs)

Lake watershed management plans

Water Management Plans



In summary: 3 key challenges


- 1) Multiple jurisdictions and no clear lead for lake watershed management
- 2) Lack of integration of decision-making across land use and water planning processes
- 3) Ensuring that stakeholders have the tools (statutory and non-statutory) and resources to implement plans



Challenge #1

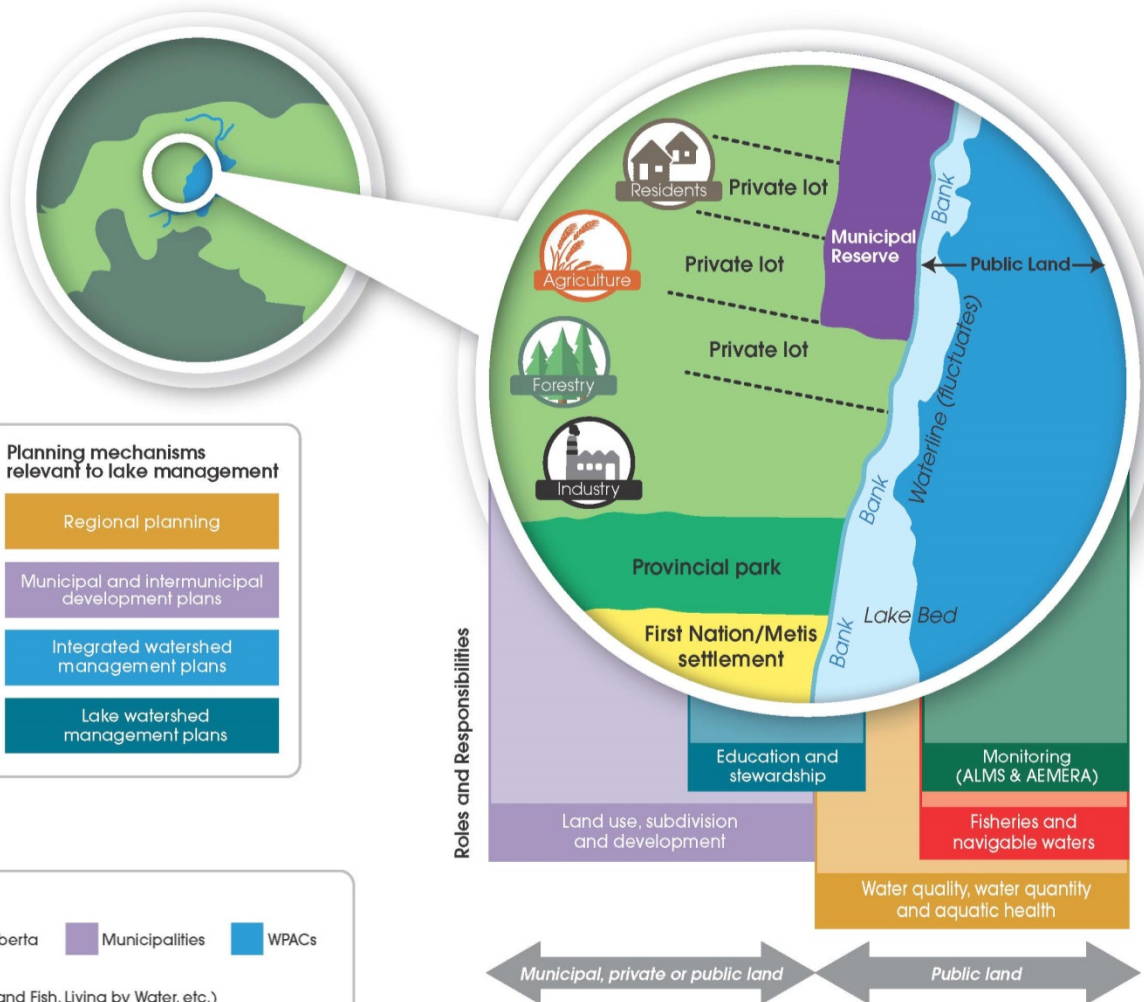
Multiple jurisdictions and no
clear lead
(provincial, municipal or local)

Several jurisdictions with legislated
authority and private ownership are
responsible for managing the lake
watershed





Challenge #1 - Roles and Responsibilities



Adapted from "The law and the lake: navigating Alberta's regulatory framework" (Haekel, 2002)



Exercise #1 - Roles and Responsibilities

- What is your sector's current role in lake watershed management?
- What should it be in the future?
- What barriers are preventing you or your sector from effectively performing your role?
What are the opportunities to improve your ability to undertake your sector's role?



Please take the time to visit the 4
dotmocracy stations around the room!



Challenge #2

Integration

Integrating decision-making processes
across land use and water planning
processes





Parallel planning processes

Land planning

Regional and sub-regional plans

Municipal Development Plans

Intermunicipal Development Plans

Industry Plans



Water planning

Integrated watershed management plans (WPACs)

Lake watershed management plans

Water Management Plans



Exercise #2 - Working with Others


- How does your sector currently work with others to support the implementation of lake watershed management plans?
- How would you like to work with other sectors in the future?
- What barriers are preventing you or your sector from working with others and what are the opportunities for working with other sectors?



Challenge #3

Tools for successful implementation

Ensuring that stakeholders have the tools and resources to implement plans successfully such that goals and objectives are achieved





Exercise #3 - Tools and Resources

- What tools and resources are needed to improve lake watershed management in Alberta? This could include:
 - Agencies and organizations
 - Policies and legislation
 - Regulations and Enforcement
 - Research, monitoring and assessment
 - Education and outreach
 - Etc.





DEVELOPING AN APPROACH TO LAKE MANAGEMENT





Developing the approach: today's workshop and next steps

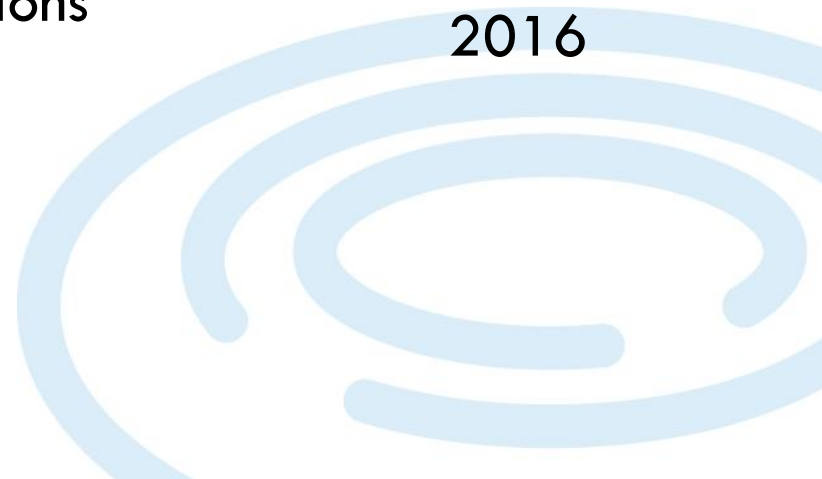
Gathering your
input today



Workshop will
inform the team's
work and
drafting of
recommendations



Final report with
recommendations
is expected to be
submitted to the
AWC in June
2016



The background of the slide is a photograph of a sunset over a calm body of water. The sun is low on the horizon, creating a warm orange glow that reflects on the water's surface. In the distance, a dark silhouette of a forested shoreline is visible. The sky transitions from a deep orange near the horizon to a pale blue at the top. The water in the foreground shows gentle ripples and a small wake-like pattern on the right side.

Final report will be posted on our website:
www.AWChome.ca

Please remember to fill out your questionnaires
and leave them on your table!

**Thank you for your
participation!**