



# **Loving our lakes to death!**

**Working with local government to manage  
human impacts on Buffalo Lake**

Presented by

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# Acknowledgements

- Cartoons and images from the internet
- Sylvan Lake Stewardship Society
- Rochon Sands Heights Community Association
- Pigeon Lake Watershed Association
- Lake stewards everywhere!!!!
- Municipal planners and councils everywhere



“Well I'll be darned! Accordin' to this here zoning law, this town is *plenty* big enough for both of us!”

# Outline

- Where we all want to be in the summer!
- Human impacts on lake ecosystems
- What's important?
- How do we manage our own impacts?
- Working with our local governments
- Comments and questions

Where we all want to be in the summer!



# RV sales spike in Alberta

➤ Global news – February 26, 2017

<https://globalnews.ca/news/3273459/a-sign-of-an-economic-turnaround-rv-sales-spike-in-alberta/>

➤ *RV shows in Edmonton and Calgary drew large crowds — 27,000 people each — and sales were up as much as **40 per cent** compared to 2016. The numbers surprised industry insiders.*

# The summer village dilemma

## **Alberta Municipal Affairs:**

[http://www.municipalaffairs.alberta.ca/am\\_types\\_of\\_municipalities\\_in\\_alberta](http://www.municipalaffairs.alberta.ca/am_types_of_municipalities_in_alberta)

*Generally, the provisions related to a village apply to a summer village except that in the latter, elections and annual meetings are required to be held in the summer. Those who own property in the summer village and others over age 18 and resident in the village on election day are entitled to vote. ... A summer village is the only type of municipality where a person can vote twice in municipal elections: once in the summer village and once in the municipality where their permanent residence is located. There are 51 summer villages in Alberta.*

***Summer villages can no longer be created in Alberta.***

# New Brunswick - Homepage

*Lakes are more than just a simple body of water used by many people to enjoy recreational activities. They are important ecosystems that, when respected and cared for, can sustain a healthy balance of aquatic life, provide us with much enjoyment, and help support our socio-economic needs.*



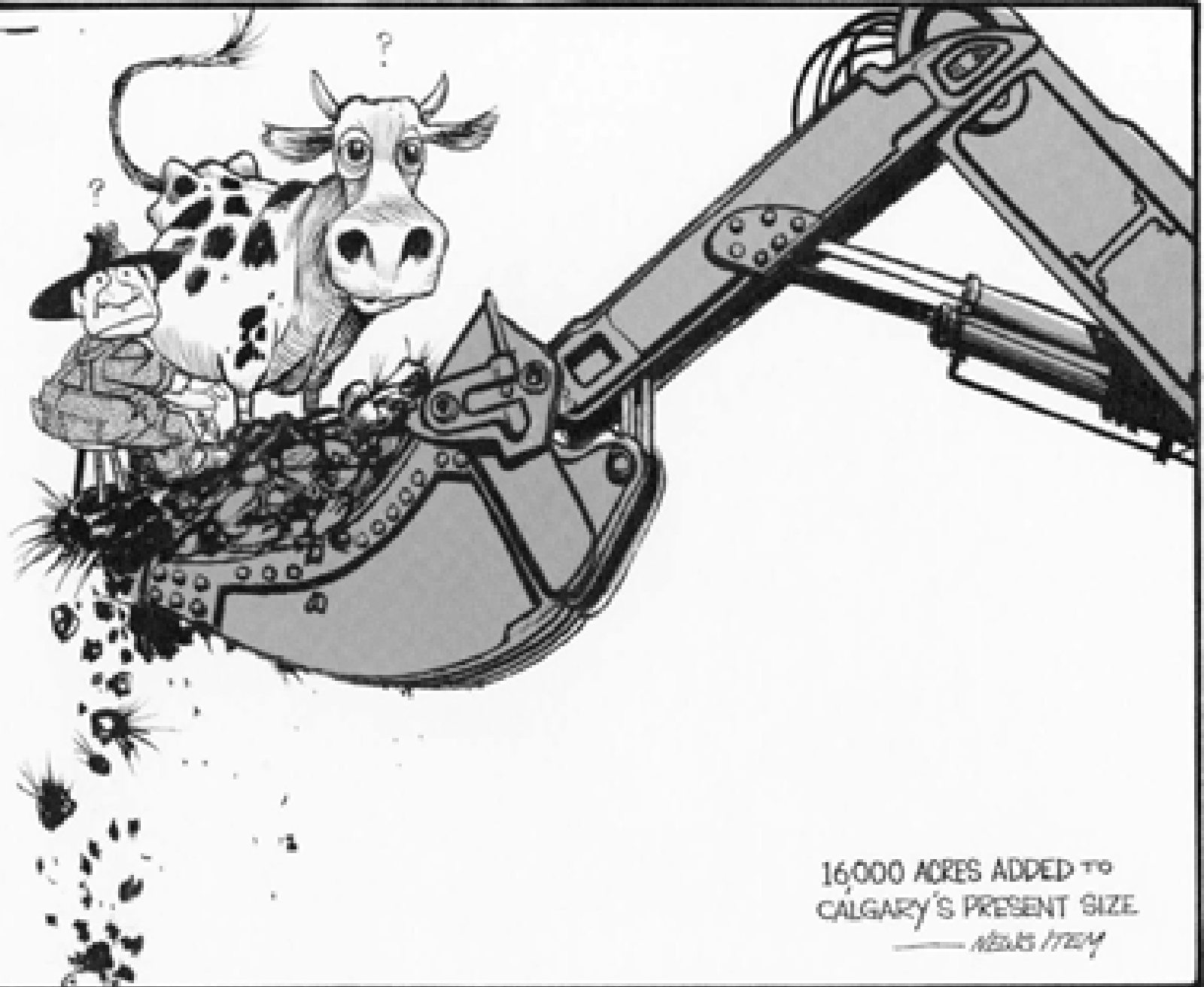
# Alberta – Respect Our Lakes

*Lakes are one of the most treasured aspects of the Alberta landscape. They have become an integral part of many lives, whether you are a long-time lake resident or someone who visits lakes occasionally for boating, fishing or wildlife watching.*

# Alberta – Respect our Lakes



EVANS  
FOR RESULTS



16,000 ACRES ADDED TO  
CALGARY'S PRESENT SIZE.  
— EVANS 1/20/04



# Human impacts on lake communities

- Water quality impacts
- Removal or riparian vegetation and soils
- Shoreline modifications
- Nutrients
- Eutrophication
- Cyanobacterial blooms
- Water quantity impacts
- Loss of biodiversity – habitat and pollution
- Invasive species

We destroy the very things we love!



# What's important?

- Managing human waste
- Managing human diversion and use of water
- Managing dust and particulate matter in air
- Storm drainage collection and treatment
- Shoreline modifications
- Managing human access to bed and shore
- Riparian lands – vegetation and soils
- Wetlands
- Tributaries
- Setbacks and reserves
- Providing habitat, food and water for other living things

# *Pigeon Lake Model Land Use Bylaw*

## 2014 - Themes

- Restricted Land Uses within the Lakeshore Environmental Development Area
- Building Development Setbacks from the Legal Bank
- Construction Management and Landscaping
- Storm Drainage and Rainwater Harvesting
- Riparian Lands and Wetlands
- Reserve Lands



# Rochon Heights Appeal

- Dwelling Unit Density
- Lake Boating Capacity
- Marina
- Roads
- Environmental Reserve and Public Lake Access
- Path System
- Natural Environment Considerations
- Emergency Services
- Solid Waste Disposal

JUST  
remember  
WHAT'S  
important

A hand-drawn illustration featuring the words "JUST", "remember", "WHAT'S", and "important" arranged vertically. The word "JUST" is in a tall, blocky, hand-drawn font with two small birds perched on top of the letters. "remember" is written in a cursive script. "WHAT'S" is in a tall, blocky font with decorative flourishes. "important" is in a tall, blocky font with two small birds perched on top of the letters. Small clouds are scattered around the text.

©Kathy Weller

# Ten ways local stewards can be involved in lake management

1. Set buildings back from the shoreline
2. Retain nature's riparian vegetation and soils
3. Retain nature's shoreline
4. Mow – but not to the water's edge
5. Use no fertilizer-plant landscapes not grass!

6. Use low impact development technology to control storm drainage
7. Collect and treat and use your storm drainage on-site
8. Keep your lands free of contaminants and debris like oil cans and old cars
9. Remove invasive species – flora and fauna
10. Use community water and wastewater systems if available.

# Working with our local governments

- Promote and abide by Stewardship Standards
- Sylvan Lake Watershed Stewardship Society
- Identifies 5 key strategies
  - Land use
  - Natural runoff inventory and control
  - Toxic spills
  - Community responsibility
  - Public consultation and stewardship accountability

# Land Use

## **Adopt land use guidelines**

Encourage your council to adopt guidelines for use and development of private lands

## **Assess development impacts**

Encourage your council to assess impacts of population expansion and land use footprint on watershed water balance and water quality before development permit is approved.

# Natural runoff inventory and controls

**Evaluate land use in watershed**

Encourage your council to evaluate, designate and map diffuse and point sources for release of nutrients and contaminants by natural tributaries, ditches and natural runoff flow pathways.

**Monitor cumulative affects of surface runoff**

Encourage your council to identify point discharge into the lake and ensure that contaminated storm drainage and runoff do not exceed loading limits approved by AEP.

# Toxic spills

## Potential for spills

Encourage council to identify transportation corridors with potential for toxic spills by surface and subsurface flow pathways.

## Develop an emergency response plan

Encourage your council to create and implement a toxic spills emergency response plan for all potential toxic spill sites.



# Community Responsibility

## Contain and control contaminants

Store all contaminants used on your site in containers and keep away from riparian lands and the water's edge. Dispose of contaminants in a safe manner.

## Use land and water responsibly

- Use low impact development and retain storm drainage on-site.
- Conserve water.
- Manage risks of contaminants leaving your site and reaching the lake.

# Public consultation and stewardship accountability

- Encourage your council to create and implement a public consultation and engagement policy.
- Through an council appointed but independent stewardship board help develop codes, guidelines and best management practices that reflect community standards for watershed management.
- Participate in annual audits of cumulative effects of land use impacts and evaluation of performance indicators.

# Be proactive

- Get in at the earliest stages of planning
- Form a community association
- Have solid watershed management information at your fingertips
- Build relationships of trust by attending meetings and having your say – appear as a delegation – be prepared to compromise.
- Appeals of development permits and subdivision approvals are no fun.

