

The Coalition of Haliburton Property Owners Associations - C.H.A.

Protecting our Lakes through Shoreline Protection
Presentation to County Council

March 27th 2019



www.cohpoa.org

Overview

- Why our lakes matter
- Are they threatened
- Importance of Natural Shorelines
- What has C.H.A. done
- Why a by law is needed
- Reasons not to
- Is it Urgent?

Stark Choices



Why our lakes matter

- Preaching to converted
 - Our economy
 - Cottaging
 - Tourism
 - Real estate
 - The trades
 - Name a job that does not depend on healthy lakes
 - Tax base
 - Our way of life
 - The reason people
 - Live here
 - Cottage here
 - Visit here



A Taxing Example

- The CREA has calculated that 1 algal bloom will reduce property values around a lake by an average 30%
- 3 Mile Lake with repeated blooms has lost 40-50%
- Lake Erie properties have faced a similar situation



What if our lakes started having blooms regularly

- 70% of assessed value in county is lakefront
 - Based on 3 municipals avg
- If 40% of the lakes started having blooms and declined in value by 30%
- Assessment in County would fall by \$722 million
- Tax rates would have to be increased by
 - **9.2% on everybody**

Dysart Bloom



Threat - Lake Enemy # 1

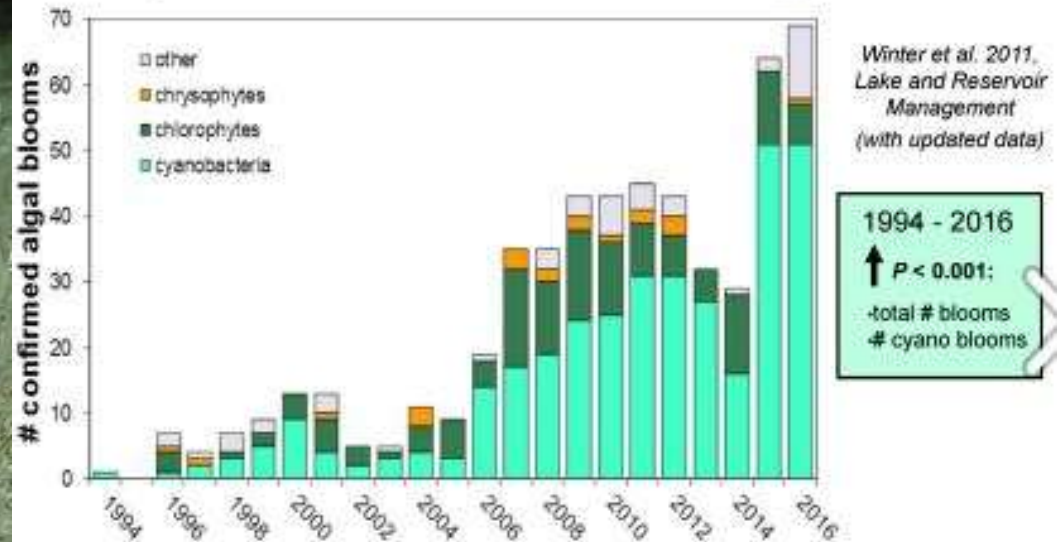
- The number one enemy of healthy lakes is Phosphorous
 - Increased weed growth
 - Lowers oxygen
 - Increased algae & risk of Algal Blooms
- No Longer a defined safe Level of Phosphorous (P)



Threat - The Trends are not good



Reports indicate an increasing trend



- The frequency of bloom reports in Ontario inland lakes is increasing
- The frequency of confirmed cyanobacteria blooms in particular is increasing

Threat- Calcium Decline and Algae

- 200 lakes in Haliburton and Muskoka have calcium levels so low that animals are dying
- One that is threatened is Daphnia





Daphnia vs Holopedium



Daphnia

Holopedium

PLANKTON COMPETITORS

High calcium demands

Low calcium demands

High phosphorus demands

Low phosphorus demands

Efficient grazer of algae

Less efficient grazer of algae

Vulnerable to invertebrate predators

Less vulnerable to invertebrate

Loss of *Daphnia* results in increased algae in lakes

Causes "jellification" in lakes



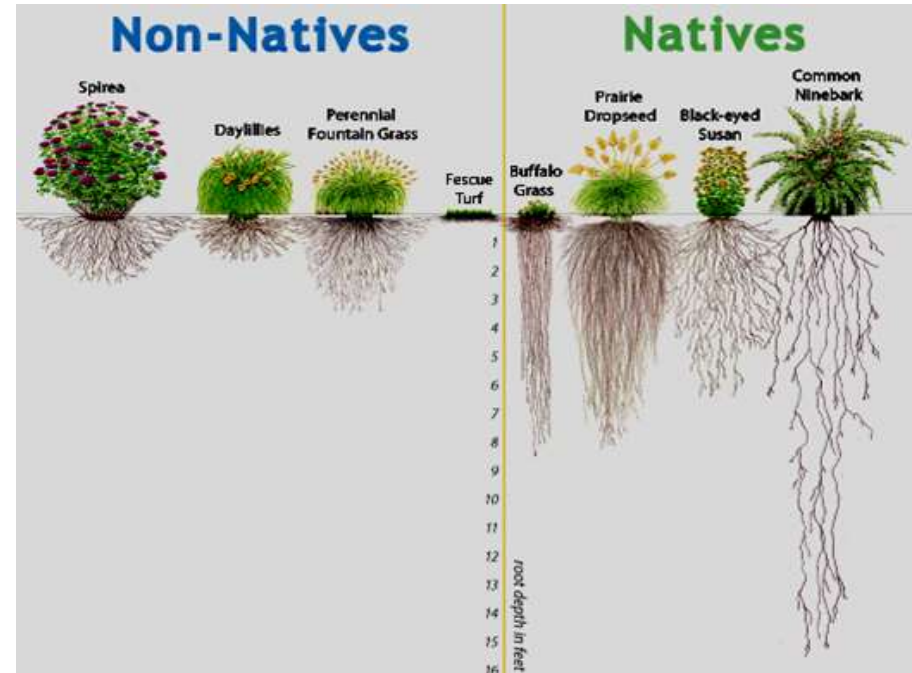
The Bottom Line

- Water Quality In Any Lake Below The 75% Minimum Natural Shoreline Is Headed Down
- Climate Change Is Changing The Rules In Ways We Don't Fully Understand
- Add in the Multiple Stressors such as Calcium Decline and the situation gets worse
- How Long Will 75% Be Good Enough??
- How much time do we have?



Why - Natural Shorelines

- Direct relationship to lake health
- 80-90% of all lake life depends on Natural Shorelines at some point in their life cycle
- Reduce natural shoreline and impact
 - Water quality
 - Fish
 - All wildlife
- Minimum = 75% lake back 30 metres



Natural Shorelines & Phosphorous

Septics

(working well) = The major source of Phosphorous

- 30-35% captured by tank
- 30-35% captured by tile bed
- 30-35% released

The only major way to capture that last 30-35% is deep rooted Natural Shorelines

Rainfall/Runoff

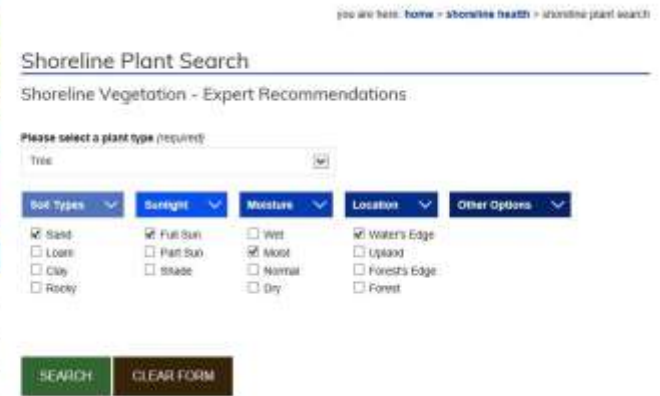
- Concentration of Phosphorous in rain is 10X that of the concentration in lake water
 - Watershed area much larger than lake area
 - Gull 122,600 ha vs 996
 - Kash 22,586 vs 817
 - Boshkung 77,945 vs 716
 - Glamor 2276 vs 194
- On average watershed (4 lakes) is 82 times the lake area*

The only major way to capture the Phosphorous in that rain/runoff is deep rooted Natural Shorelines

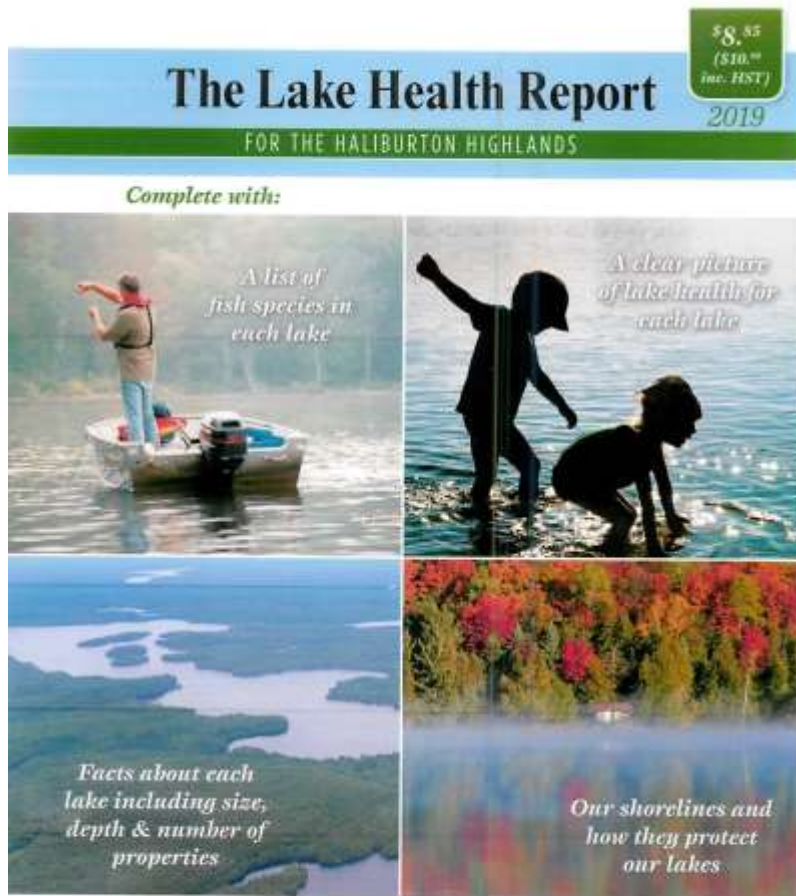


Has C.H.A. done it's part?

- Ribbon of Life Video
- Almost 100 speeches
- Full range of tools & info on website
- 4 year Love Your Lake Assessment - 72 lakes & 13,487 properties
- The plant/tree selection tool
- Dozens of newsletter articles
- Over 5,000 tip sheets
- 2 years of promotion in media
- 35 Demo Lots



C.H.A.'s Part The 2019 Lake Health Report



- Major New Report May 2019
- Designed to
 - Increase awareness
 - Increase understanding
- Provide info
 - 120 lakes
 - Water Quality & Trends
 - Morphometric info
 - Shoreline info
 - Fish info
- 7,000 copies
- Lake Associations Plus
- Major Advertising Campaign



The Report on 120 Lakes in Haliburton County



Do we need a by law

- Can't reach everyone
 - 587 lakes – 100 with lake associations
 - Not all members
- New owners every year
- Problem is real
 - All lakes
 - New lots with new owners



Reason not to #1

- Only a few blooms – lot of priorities – we can wait
 - “If you wait until you know there is a problem – you are too late”
 - The vicious cycle
 - 3 Mile Lake
 - Lake Erie
 - Lake Simcoe



Reason not to #2

“Government has no right to tell me what to do on my property “

Actually – in a democratic country

Government has a right and in fact an obligation to protect the greater good from the actions of a few.



Reason not to #3

Budgets are tight

1. Value of lakefront property = \$6 billion
2. Costs to fix is 100 times greater than cost to prevent

Lake Simcoe – \$100 million

– Source of \$

Lake Erie – \$200 Million & 10 plus years

Imagine not being able to use our lakes for 10 years

3. Our lakes are the foundation of our Economy and our County

If we lose lake health we also lose the ability to pay for other priorities -----



Urgent

- Some Property owners know it is coming and are acting now
- Climate change is changing the rules of lake health
 - No safe level of phosphorous any more
- Multiple stressors increase the risks
 - Example calcium



In Summary

- Without Healthy Lakes Haliburton County is in trouble
- Our lakes are under threat
- The threat is growing
- Natural shorelines are a critical tool in protecting our lakes
- The C.H.A. and member lake associations have done a lot
 - Never sought a \$ of Municipal or County \$
- But we can't finish the job without your help
- A By law is needed
- There are no good reasons to not do this
- Urgency is needed



Lake Health & Shoreline Protection

THANK YOU

