

# Love your Lakes!

## Partners in Lake and River Stewardship

Barbara King  
Executive Director  
[king@watersheds.ca](mailto:king@watersheds.ca)



Watersheds  
C A N A D A

Your Lakes. Your Rivers. Your Future.

[watersheds.ca](http://watersheds.ca)



Watersheds  
C A N A D A

## Our Mission

We work with landowners, communities, and organizations to protect lakes and rivers through developing effective, transferable, long-term solutions.

Your Lakes. Your Rivers. Your Future.

[watersheds.ca](http://watersheds.ca)



# Who are we?

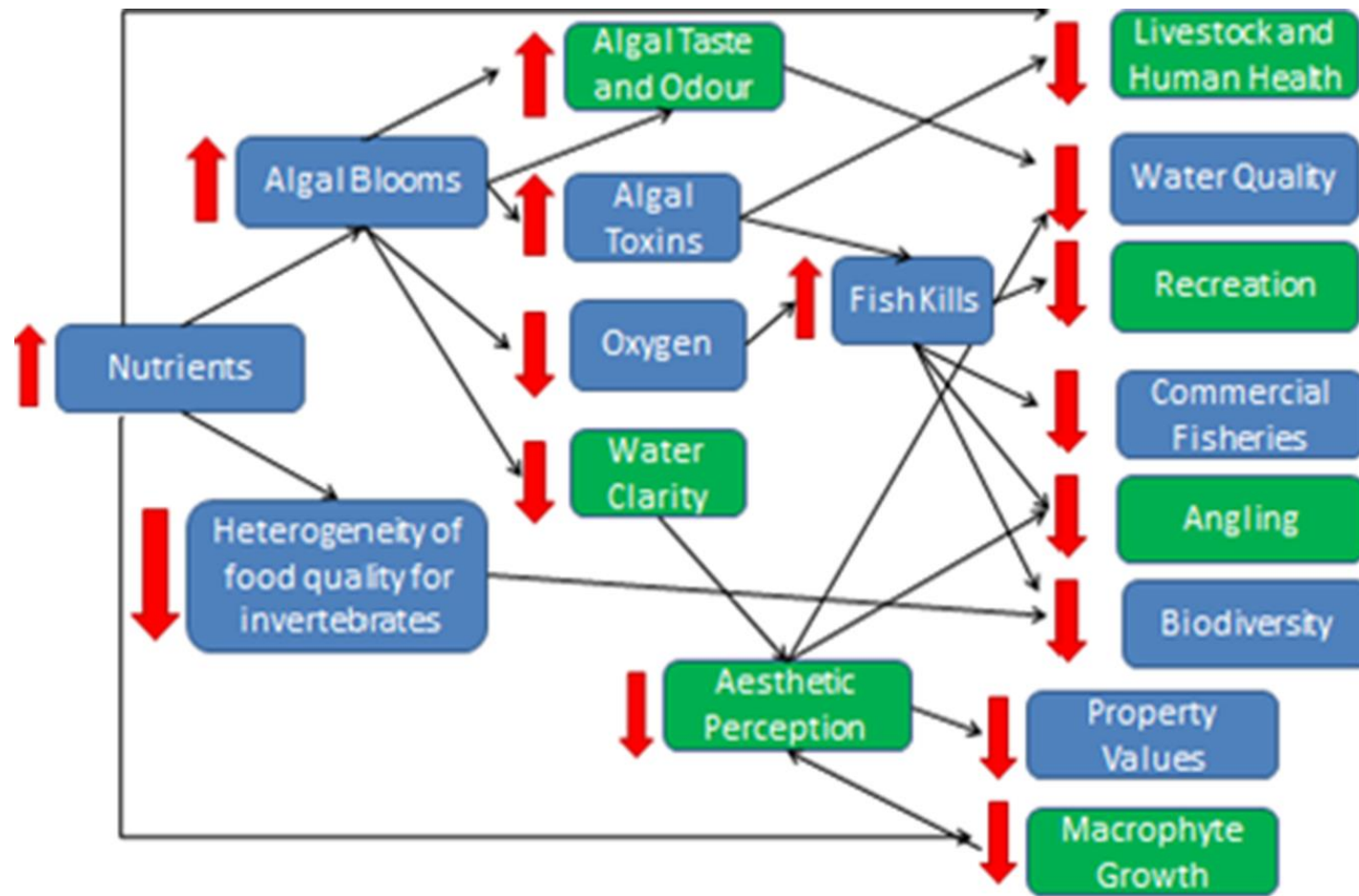
Watersheds Canada has been working with a diversity of landowners, communities and organizations since 2002 to keep our freshwater healthy, beautiful and available for generations to come.

We *love* what we do, and we give it 100% each and every day.



2016 Board of Directors, Watersheds Canada

# Managing Our Freshwater is very Complicated...



# Who is Responsible for Managing our Lakes and Rivers?

- The Canadian Framework around freshwater protection is one that is very complex with shared and sometimes duplicated responsibilities.
- With all the Federal cuts to legislation around water policy, we are relying on municipalities in Ontario to ensure that they take responsible for creating and enforcing policy and zoning bylaws that protect shorelines under direction of the PPS.
- Also private citizens and lake and river groups are stepping up to help take care of our waters.

# Lake/River Level Management Issues

- So much development happens at the lake level.  
Increased development = increased nutrient loading, vegetation loss, increased boating etc.
- Climate change factors, lower water levels, algae blooms, etc.
- Multiple players governing a single water body =  
Confusion
- No clear definition of lake capacity
- Rural municipalities are left vulnerable to developers without strong policies in place to protect their lakes.  
And it is happening.....

# We Can't Reverse Development Once the Damage is Done - Economics



Photo: Scott Brown

***The quality of a lake has a direct economic impact for Municipalities- It is essential to look at long term impacts of development. Studies show that property values decline where water quality or the natural environment has been degraded. Both residential and commercial businesses are negatively affected- which has substantial impacts to the economic development of the area.***

# Lake Eutrophication in the US

## Annual Costs:

Prevention of loss of <b>Biodiversity</b> :	<b>\$44 Million</b>
Lost <b>Fishing</b> :	<b>\$189 – 589 million</b>
Lost <b>Boating</b> :	<b>\$182 – 567 million</b>
<b>Drinking Water (Bottled)</b> :	<b>813 Million</b>
Lost <b>Property Values</b> :	<b>\$4.5 Billion</b>

**Total: \$5.7 - 6.5 Billion**





# What is the Biggest Threat to our Lakes and Rivers that Municipalities Can Address?



**“If the condition of the Sharbot Lake (and I assume other Lakes in the County) continue to degrade at the rate we have seen in the past 5-7 years then I fear that the Lakes will become unsafe to swim in, Lake property values will plummet, tourists will no longer visit our County and hence local businesses and local residents will face tougher economic times.” Sharbot Lake Resident**

# How Important to our Lakes and Rivers is a Vegetative Buffer Anyways?

Min 30 Metres Needed

Why?



Image Credit: Douglas County



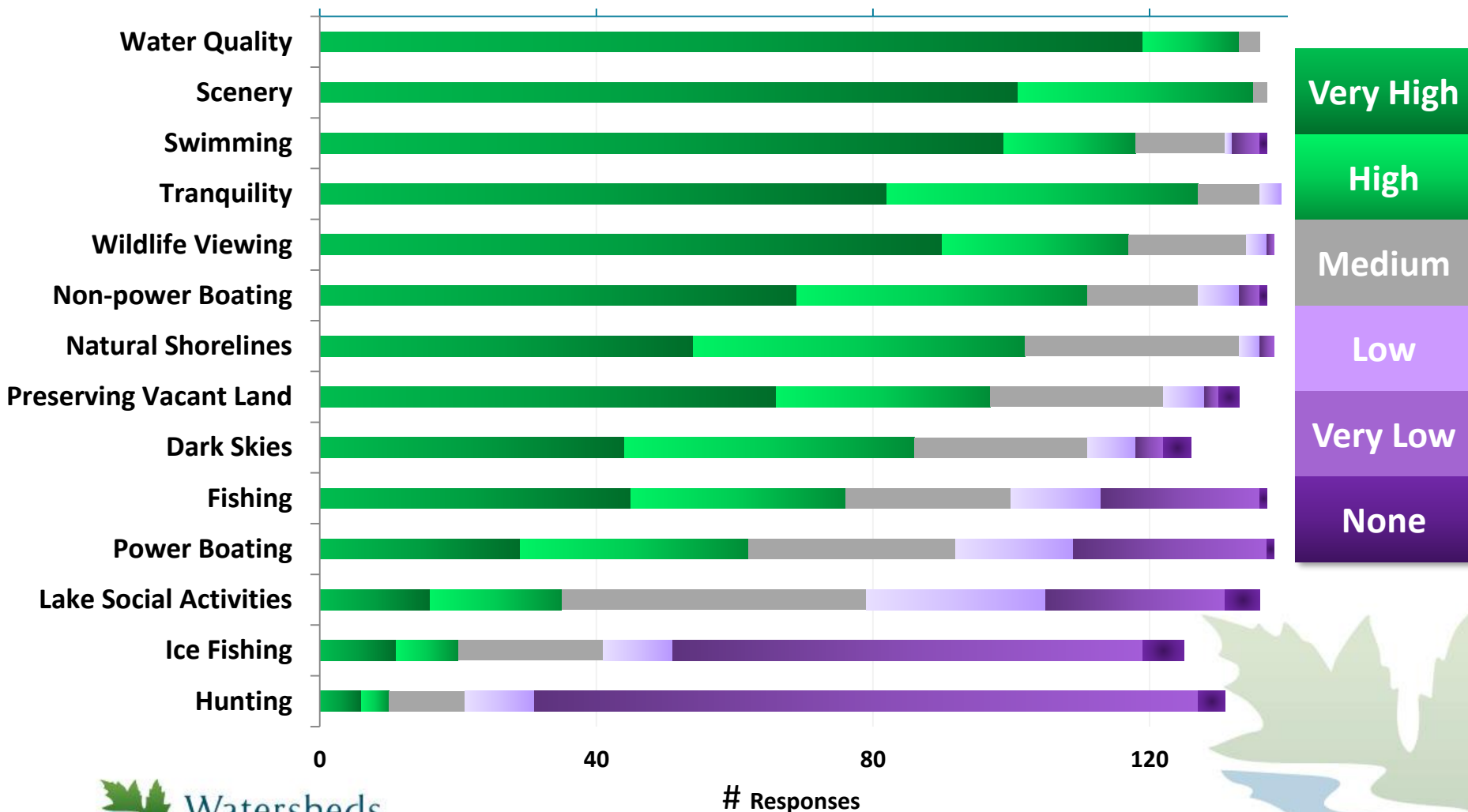
# Shorelines Habitat.....

- **Riparian ecosystems are a true ribbon of life** supporting a multitude of interconnections among land, water, air, plants and animals.
- **Shorelines are one of the most ecologically productive places on earth.** In fact, 90% of all lake life is born, raised and fed in the first 10-15 metres from shore.
- And these areas are **up to 500% more diverse** in plants and animals than other areas found upland.
- **Supports fish spawning, rearing and feeding**
- The more species of plants that are present, the **greater diversity of wildlife** that can be sustained.



# Community Values- Good News!

## Waterfront Resident Values



Gananoque River Watershed Community Questionnaire. (Sample size = 148 ; response rate =29.5%)



# What Municipalities Need do to Protect our Lakes and Rivers?

- Ensure policies and bylaws are in place/ use site plan control- Target 30 metre native plant buffer requirement with a limit of less than 25% clearing at shore.  
(Can require landscape plan with development proposals)
- Strictly enforce bylaws on vegetation removal and ensure inspectors, during compliance inspections are **required** to report any infractions with respect to bylaws
- Ensure bylaws state “Tree and **shrub** cutting” not just tree cutting to protect understory vegetation
- Educate Landowners on ‘who is responsible for what’ and how they can protect their lakes through proper shoreline management practices. Ensure that they are provided with environmental requirements contained in by-laws

# What Municipalities Need to do to Protect our Lakes and Rivers?

- Be good example...ensure municipal lands are well vegetated and use them as demonstration sites for education
- Know your lakes and rivers and be prepared for developers
- Septic inspections should be mandatory for entire waterbodies
- When more than one municipalities exists on a waterbody, create consistent policies with each other and meet to discuss any potential development applications
- Partner with Conservation Groups, Lake Associations and Watersheds Canada to carryout Shoreline Stewardship Actions
  - Meet regularly, create committees around lake stewardship, bring in funding for restoration, education and more....

# Opportunities for Stewardship Partnerships

## How you can do a lot through Strategic Partnerships with the Community!



# Lake Links

Helping Lake Associations & Decision Makers  
Protect their Lakes



Lake Links

- Lake Links is a one day workshop held every October, in Perth, Ontario.
- Each year we address the lake issues that matter most to our communities
- Planned by a steering committee of many different stakeholders

**2016 Lake Links will be held on October 22<sup>nd</sup>, 2016 in Perth**

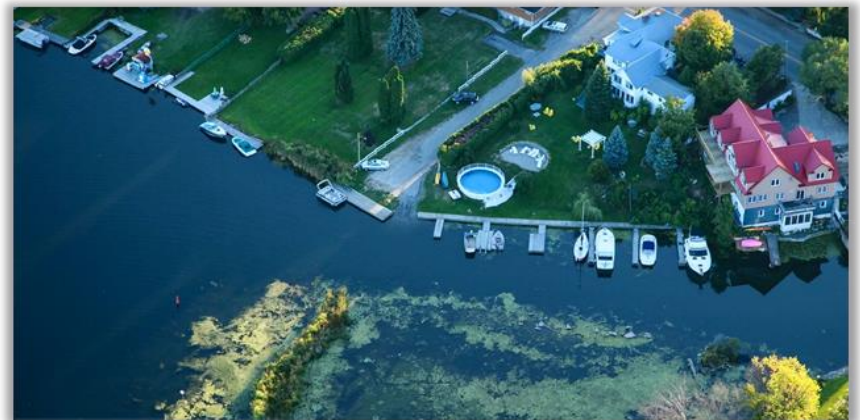
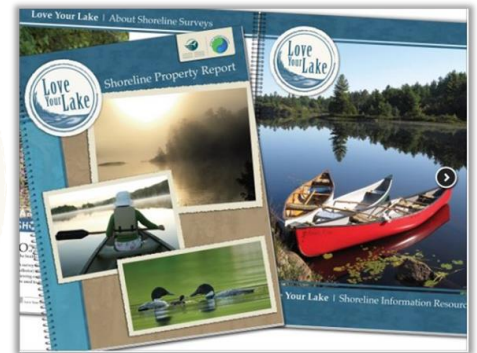




Watersheds  
C A N A D A

## Love Your Lake

- Packaged shoreline assessment & educational stewardship program
- Partnership with Canadian Wildlife Federation
- Every Property on a lake is assessed and receives a shoreline report full of recommendations to protect their lake



Your Lakes. Your Rivers. Your Future.

# Lake Level Reports

Love Your Lake Shoreline Survey Datasheet												
Lake Name:						Database Report #:						
Datasheet #:						Shoreline Length (m):						
Property Address:						Mailing Address:						
Assessment #:						No Report Generated <input type="checkbox"/> (check reason if applicable)						
911 Pin #:						<input type="checkbox"/> Landowner Request <input type="checkbox"/> Crown Land <input type="checkbox"/> Vacant Land; No Landowner <input type="checkbox"/> Uninhabited Island						
Digital Photo #:												
Classification (rounded to nearest 10%)						Erosion <input type="checkbox"/> (check if present)			Present		Action Req'd	
Degraded		Ornamental		Regenerative		Natural		Surface (rill, gully, rain, exposed soil)			<input type="checkbox"/>	
%		%		%		%		Mass Mvmt/Slumping (angled veg)			<input type="checkbox"/>	
								Undercut Bank (scouring/wave)			<input type="checkbox"/>	
								Ice Push (earth pushed into mound)			<input type="checkbox"/>	
Building Setback <input type="checkbox"/> (check if present)						Aquatic Cover <input type="checkbox"/> (check if present)						
Can't See	No building	Vacant	Under Construction	≤ 5 m	5-10 m	10-30 m	≥ 30 m	Emergent	Floating	Submergent	No Cover	Algae Bloom
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shoreline Development (rounded to nearest 10%)						Aquatic Substrate <input type="checkbox"/> (check if present)						
Structures (# of each type, if any)						<input type="checkbox"/> Bedrock (exposed) <input type="checkbox"/> Sand (0.05-0.19 cm) <input type="checkbox"/> Pelagic <input type="checkbox"/> Boulder (>25 cm) <input type="checkbox"/> Silt (<0.05 cm) <input type="checkbox"/> Not visible <input type="checkbox"/> Cobble (17-25 cm) <input type="checkbox"/> Clay (~0.01 cm) <input type="checkbox"/> Rubble (6.4-16.9 cm) <input type="checkbox"/> Muck or Organic <input type="checkbox"/> Gravel (0.2-6.39 cm) <input type="checkbox"/> Hardpan						
Deck	Building	Shed	Beach	Stairs								
#	#	#	#	#								
Boat Launch	Boat Ramp	Boat House	Boat Lift	Boat Slip								
#	#	#	#	#								
Docks (# of each type, if any)						Other Observations						
Cantilever	Floating	Post Non-Permanent	Post Permanent	Solid	Commercial    Farm    For Sale    Island    Controlled Waterway							
#	#	#	#	#	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>							
Crib – Wood    Crib – Steel    Raft    Unknown    Combo – Dock						Invasive Species Observations <input type="checkbox"/> (check if present)						
#	#	#	#	#	Eur. Milfoil    Purple Loose-strike    Zebra Mussel    Eur. Frogbit    Water Soldier    Fan-wort    Phragmites    No data							
#	#	#	#	#	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>							
Dock System <input type="checkbox"/> # Slips						Other (specify):						
						Slope <input type="checkbox"/> >1:1 <input type="checkbox"/> 1:1 <input type="checkbox"/> 2:1 <input type="checkbox"/> <3:1 <input type="checkbox"/> Flat						
Shoreline Retaining Walls						Other Observations/Notes						
Length of all walls (rounded to nearest 10%)												
Wood	Gabion Basket	Armour Stone	Concrete	Steel								
#	#	#	#	#								
Riprap	Loose Rock	Unknown	Other (specify)									
#	#	#	#									
Wall Failing	Railroad Ties	Treated Wood	Other Structure acting as retaining wall (deck/dock)									
#	#	#	#									
Recommendations & Restoration Opportunities												
Buffer	<input type="checkbox"/> Create buffer		<input type="checkbox"/> 30 m wide difficult		<input type="checkbox"/> Expand buffer		<input type="checkbox"/> Great as is					
	<input type="checkbox"/> Cliff		<input type="checkbox"/> Bedrock		<input type="checkbox"/> Thin soil		<input type="checkbox"/> Sand					
Lawn	<input type="checkbox"/> Mowed lawn to water		<input type="checkbox"/> Mowed lawn with buffer		<input type="checkbox"/> Regenerative lawn		<input type="checkbox"/> Pine needles					
Land Use	<input type="checkbox"/> Garden		<input type="checkbox"/> No/few young trees		<input type="checkbox"/> Using boat racks		<input type="checkbox"/> Recommend boat racks					
	<input type="checkbox"/> Create curved path on slope		<input type="checkbox"/> Create path – no slope		<input type="checkbox"/> Curve & cover present path		<input type="checkbox"/> Curve path, but good cover					
Pathway	<input type="checkbox"/> Good curve, but cover path		<input type="checkbox"/> Good curved & covered path		<input type="checkbox"/> No slope, but cover path		<input type="checkbox"/> No slope & good cover					
	<input type="checkbox"/> Install stairs on slope		<input type="checkbox"/> Stairs in retaining wall		<input type="checkbox"/> Stone steps		<input type="checkbox"/> No stairs visible					
Stairs	<input type="checkbox"/> In ground & closed		<input type="checkbox"/> In ground & open		<input type="checkbox"/> Raised & closed		<input type="checkbox"/> Good – raised & open					
Drainage	<input type="checkbox"/> Not visible <input type="checkbox"/> No eaves		<input type="checkbox"/> Eaves to surface <input type="checkbox"/> Eaves to unknown		<input type="checkbox"/> Eaves to natural area		<input type="checkbox"/> Eaves to rain barrel					
	<input type="checkbox"/> Cavity tree		<input type="checkbox"/> Dead standing tree		<input type="checkbox"/> Terrestrial logs		<input type="checkbox"/> Aquatic logs					
Habitat	<input type="checkbox"/> Overhanging vegetation		<input type="checkbox"/> Upland forest		<input type="checkbox"/> Wetland		<input type="checkbox"/> Brush Piles					
Surveyed By:						Entered By:						
Survey Date:						Entered Date:						

Love Your Lake Shoreline Survey Datasheet – June 2014

- Reports summarize the data collected along the entire lakeshore of each lake
- These reports are used as a baseline for future comparative studies in addition to providing recommendations to the lake associations and other partners



Watersheds  
C A N A D A



The  
NATURAL  
*Edge*

Restoring the  
*Ribbon of Life*



# The Natural Edge

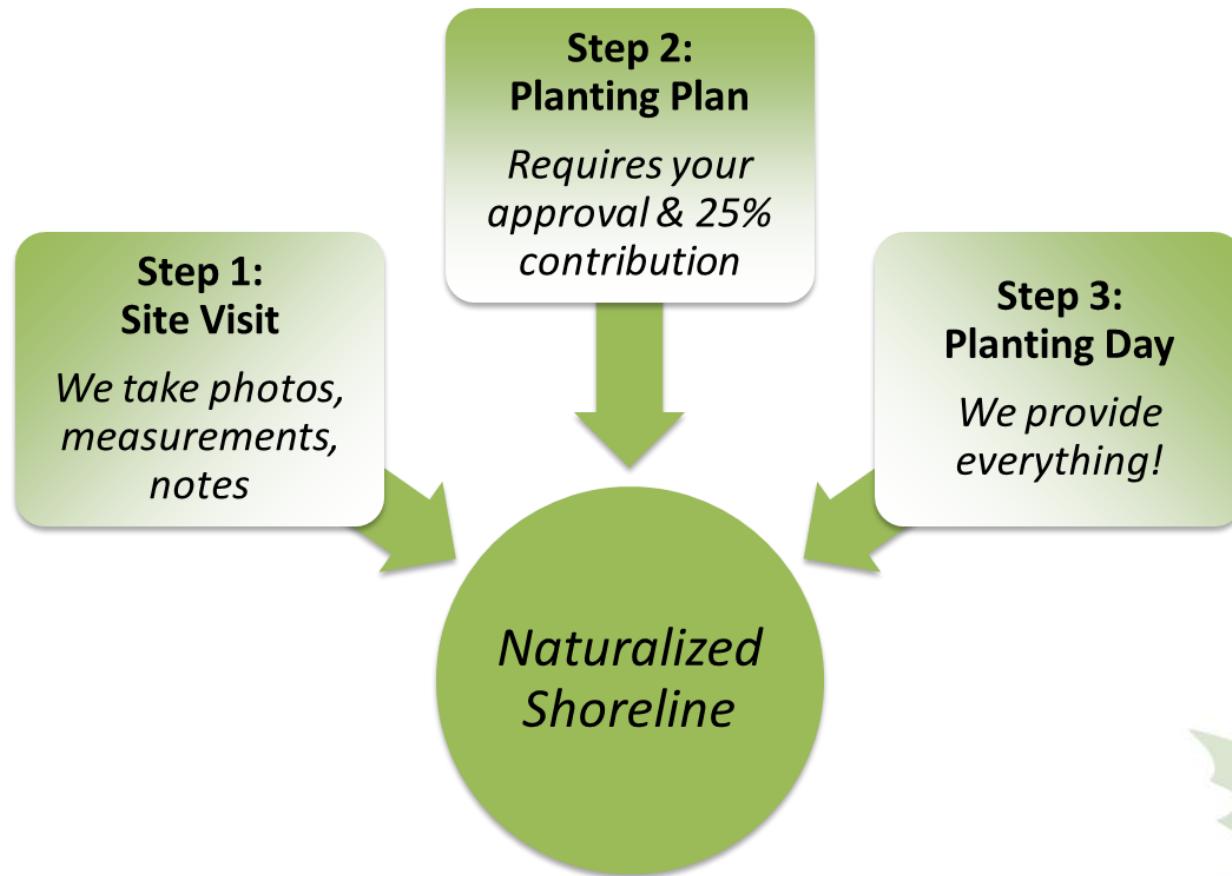
- Shoreline naturalization program available to waterfront property owners to plant native trees, shrubs, groundcovers, wildflowers, and grasses along the water's edge.

## In 3 years...

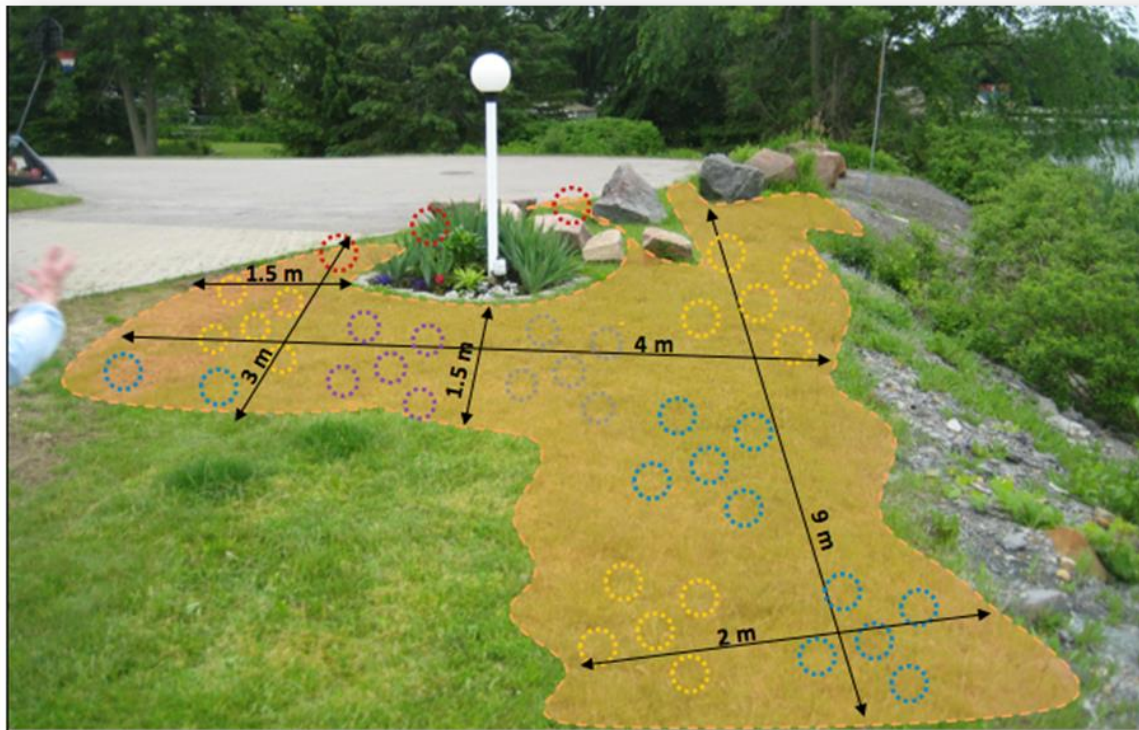
- Planted over 11,550 native shrubs and trees
- On 18,500 square metres of shoreline
- On 42 different lakes, rivers and creeks
- For 122 property owners!









# The Natural Edge Program



# Example Planting Plan



Note: Image is not to scale.

	Compartment A		Mountain Ash (3)		Ninebark (5)
	Downy Serviceberry (12)		Chokecherry (15)		Gray Dogwood (5)



Watersheds  
C A N A D A



# Lake Planning

Mississippi  
Lake *Plan*



**White Lake**  
*Stewardship Plan*





# Lake Planning is all about Community



**White Lake  
Stewardship Plan**  
Community Meeting

When: Saturday, Oct. 3rd, 2015 10:00 am to 12:00  
Where: Stewart Community Centre, Pakenham

**We Need Your Voice!**

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



**White Lake Stewardship Plan**

**YOUR LAKE. YOUR PLAN.**

Join us at  
Community Meeting  
Saturday, October 3rd, 2015  
10:00 am to 12:00 pm  
Stewart Community Centre  
112 Woodbine St.  
Pakenham, ON

**YOUR VOICE!!!**

White Lake needs your help!

White Lake Stewardship Plan is a community-driven process that will develop a plan for the lake's future. The plan will address the lake's health, water quality, and the needs of the community. It will also provide a framework for ongoing monitoring and management of the lake.

Join us at the Community Meeting on Saturday, October 3rd, 2015, from 10:00 am to 12:00 pm at the Stewart Community Centre, 112 Woodbine St., Pakenham, ON. We need your input!



- Partnering with French Planning Services Ltd.
- Bring communities together – lake residents, municipalities, businesses and organizations to focus on the health of a lake.
- Create a grassroots plan for the lake created by the community together





Watersheds  
C A N A D A



# Fish Habitat Enhancement Projects

Walleye Spawning Bed Enhancement

Brush Bundles

How to Videos and Protocols for Community Groups on  
Website



# Walleye Spawning Bed Restoration



River Rock on Paris Creek



Loading Barge with River Rock



# Fish Habitat Projects– Brush Bundles



Transporting Christmas Trees



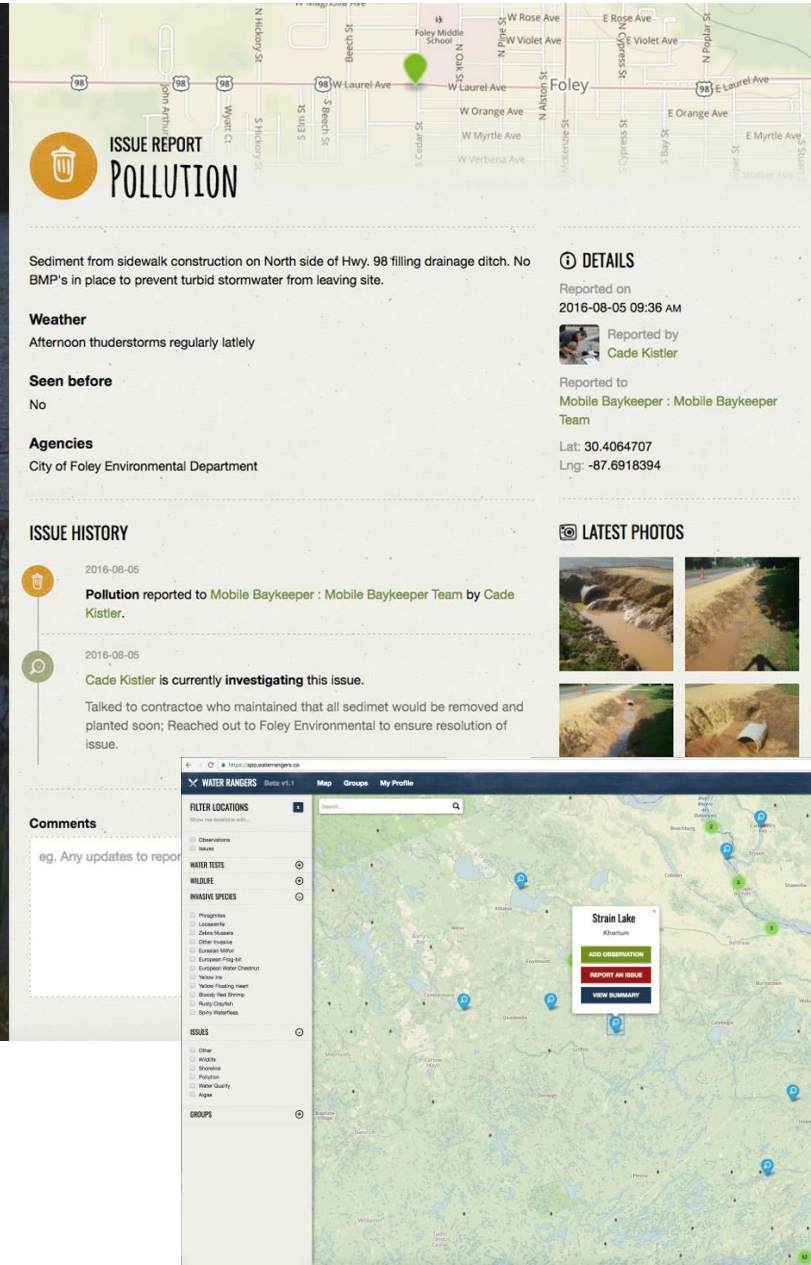
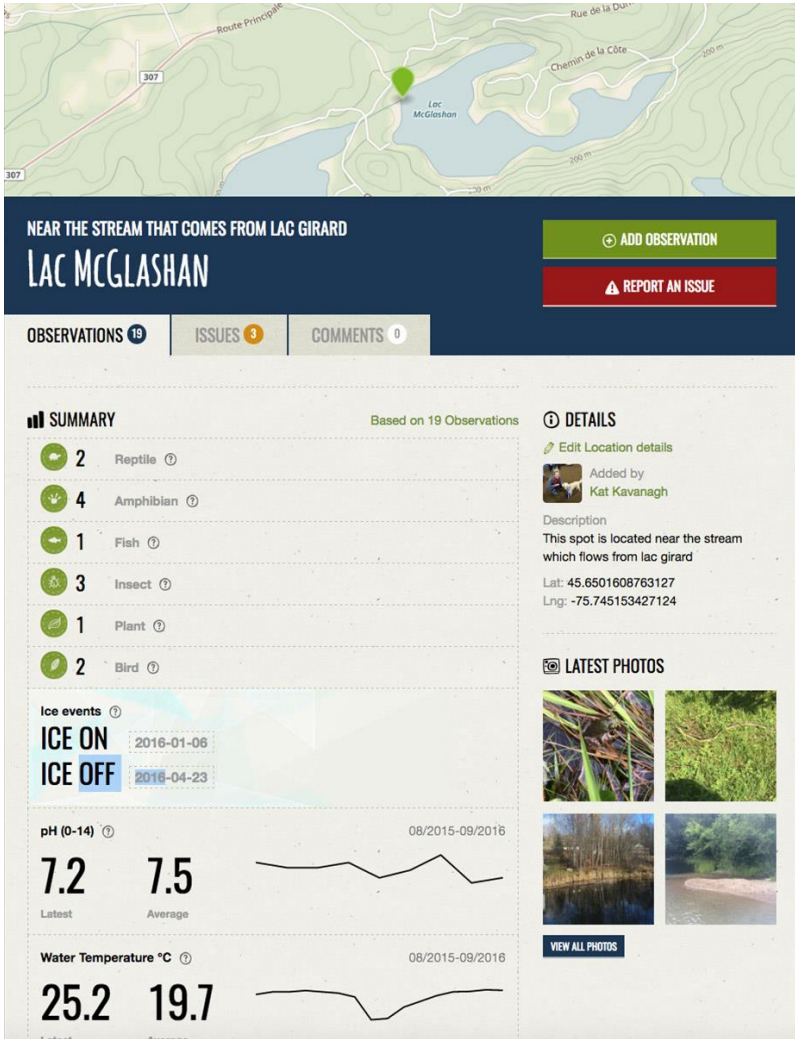
Volunteers







# Water Rangers



# Funding for Stewardship

- TD Friends of the Environment
- Community Foundations
- Great Lakes Guardian Community Fund
- Biodiversity and Education Awareness Network
- Department of Fisheries and Oceans-  
Recreational Habitat Enhancement Program
- County Funding Programs
- Talk to me for many more depending on your  
projects of interest!



Watersheds  
C A N A D A



# Thank You!

**Barbara King**

**Executive Director**

115-40 Sunset Blvd., Perth ON K7H 2Y4

Office: 613-264-1244

[king@watersheds.ca](mailto:king@watersheds.ca) [watersheds.ca](http://watersheds.ca)

Your Lakes. Your Rivers. Your Future.