

# WaterWise Tips for Lakeside Living

A joint initiative of the *Friends of Stoco Lake* and the *Municipality of Tweed*

The ideas suggested below will help protect and improve the quality of Stoco Lake and other lakes and rivers in our municipality.

## Use phosphate-free, biodegradable products

Phosphorus and non-biodegradable substances (like petroleum-based synthetics) are commonly found in many household cleaning agents and personal grooming products such as shampoo. These substances cannot be fully broken down by your septic system or the local sewage lagoon. As a result, groundwater, streams, rivers and lakes can accumulate these substances. This can lead to excessive growth of aquatic weeds and algae, contamination of waterways, and sickness in fish and wildlife populations. Instead, use biodegradable products that don't contain phosphates. Or you can make your own cleaning products by combining natural ingredients like baking soda, vinegar, and lemon. *Think about what goes down your household drain!*



Harvester fully loaded with weeds - Stoco Lake

## Conserve water

Water is a precious resource. Most of the water we use comes from groundwater sources, as well as rain and snow. The amount of our groundwater sources is largely unknown – but one thing is for sure, we're using it faster than it can be renewed. The following suggestions will help to reduce the use of water in and around your home: don't let water run unnecessarily (e.g., when brushing your teeth, washing the dishes); take quick showers; fix leaky faucets; install low-flow showerheads, low-flush toilets and water-efficient appliances; only turn the dishwasher and washing machines on for full loads of dishes and clothes; wash your vehicle using a bucket of water (as opposed to continuously spraying water from a hose); and use a rain barrel to capture rainwater for watering your lawn and garden. *Be conscious of water consumption!*

## Don't use hazardous pesticides, synthetic fertilizers, and other products

Pesticides often contain harmful chemical compounds that can indiscriminately kill many different plant and animal species and cause illness in people, pets, fish, birds, insects and other wildlife. Synthetic fertilizers tend to have high levels of phosphorus and/or nitrogen – the two agents for plant growth that can result in the growth of aquatic vegetation when runoff from your lawn or garden enters a nearby body of water. Instead, use natural fertilizers that contain lower levels of phosphorus and nitrogen, like compost and manure. Safe, effective and economical alternatives to pesticides can be readily found (e.g., [www.gca.ca/pesticides.htm](http://www.gca.ca/pesticides.htm)). Be cautious of how you use and dispose of household hazardous products and wastes such as paints, solvents, antifreeze, kerosene, etc. These can contaminate water supplies and devastate fish and wildlife populations. They can also be harmful to the health of those who enjoy recreational activities like swimming, fishing and boating. *Minimize your use of hazardous products!*

## Maintain your septic system

A poorly maintained septic system can result in *E. coli* contamination and increased phosphorus and nitrogen in ground and surface water. Remember that your septic system can influence your well and nearby waterways via groundwater flow. *E. coli* from contaminated sources of water that we drink or swim in can cause infections, diarrhea and other illnesses. Increased levels of nitrogen and phosphorus in water also leads to excessive growth of aquatic weeds and algae - choking the supply of oxygen needed for fish. Remember, it's much cheaper to have your septic system serviced regularly than to replace a faulty one that has stopped working – not to mention the damage that can be caused to your home (e.g. sewage backup). *For more information, see 'Smart Septic Advice and Water Wise Ideas' at [www.friendsofstocolake.ca](http://www.friendsofstocolake.ca).*

## Leave a buffer zone

A buffer zone is a shoreline that is in its natural state – containing native species of grasses, shrubs and trees left to grow on their own or planted as part of a shoreline restoration project. A buffer zone acts as a filter, absorbing runoff that may contain potentially harmful substances such as pesticides, fertilizers, or spilled gas. It provides habitat for fish, birds, frogs, turtles, and salamanders; prevents shoreline erosion due to runoff, heavy rainfall and wave action (vegetation stabilizes shorelines by slowing water flows); and means less time spent mowing the grass! Approximately 90% of life found within a lake ecosystem begins in and depends on a healthy natural shoreline environment! *It is recommended that at least 75% of a homeowner's shoreline be left natural. The wider the buffer zone, the better!*

# WaterWise Tips for Lakeside Living

## Build shoreline-friendly docks and boathouses

Pipe, cantilever and floating docks and boathouses minimize habitat alteration in and around shorelines, as they minimize disturbance of the lake bed and allow free flow of water beneath them. Avoid treated woods (which can contaminate water) and structures that make use of pre-fabricated and/or poured concrete (which disrupt lake beds and water flows). Untreated cedar and hemlock are ideal building materials that can last a lifetime. Beyond docks and boathouses, all other residential development should be as far away from the shoreline as possible. *Be sure to contact Quinte Conservation before constructing your dock or boathouse. Certain guidelines must be followed and a permit is normally required.*

## Watch your wake

A wake is the disturbed column of water around and behind a boat or other watercraft as it makes its way through the water (e.g. waves). A wake generates wash - loose and broken water that is made airborne and thrown behind from propeller action and waves that roll off the sides of the craft. Wakes can cause injury to people near and far from your craft, erode shoreline habitat, and disrupt habitat at the bottom of lakes and channels. To minimize the effects of wakes and propeller action, operate as close to 'dead slow' as possible when in the vicinity of shorelines, docks, swimmers, wildlife and other craft (especially small craft like kayaks and canoes). Also be mindful of other environmental considerations by opting for low-emission engines, reducing engine noise and avoiding fuel spills. *Please drive carefully!*

## Be aware of fish spawning and bird nesting periods

Fish and some species of birds depend on a healthy shoreline buffer zone to spawn and nest in the spring through to the end of June. These are crucial periods for the maintenance of populations. Any activities that may disturb the fragile shoreline environment should be especially avoided during these periods of time. *For specific spawning and nesting dates of different fish and bird species, contact your MNR office or Quinte Conservation (see contact information below).*



## Don't dredge

Dredging the lake or river bed around your shoreline property destroys the most productive and important zone of a lake or river by damaging crucial habitat that maintains ecosystem health. Dredging is often associated with the construction of docks and boathouses and creation of beaches. By opting to construct in a shoreline-friendly way, and leaving the shoreline in a more natural state, dredging becomes unnecessary. Do not attempt to dredge channels leading into and out of lakes that have become un-navigable. This is beyond a property owner's jurisdiction and often requires special permits to do so (including post-restoration efforts) due to potential environmental impact. *Any proposed shoreline alterations must first be discussed with Quinte Conservation.*

## Minimize surface runoff

Runoff from impervious surfaces such as pavement and concrete eventually leads to shoreline erosion. To reduce this effect, use porous materials like gravel and mulch when landscaping your home, redirect flow to settling areas (e.g. gardens, devices for capturing rainwater) away from the shoreline, and create winding driveways and pathways that further slow water flow. All these measures increase groundwater supplies - the major source of our freshwater supply for drinking, farming, cooking, washing, etc.

## For additional information...

Friends of Stoco Lake  
[www.friendsofstocolake.ca](http://www.friendsofstocolake.ca) (see 'Links & Resources' for more details on living around water)  
[info@friendsofstocolake.ca](mailto:info@friendsofstocolake.ca)

Quinte Conservation  
(private septic inspection, drinking water/ groundwater, shoreline modification & naturalization advice)  
613 968 3434  
[www.quinteconservation.ca](http://www.quinteconservation.ca)

Ontario Ministry of Natural Resources –  
Peterborough  
1 800 667 1940  
[http://www.mnr.gov.on.ca/en/STEL02\\_168326.html](http://www.mnr.gov.on.ca/en/STEL02_168326.html)



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