

Embracing Change: Navigating Climate, Leadership, Policy, and Our Evolving Lakes

As we usher in another summer, it's a fitting time to reflect on the theme of change—an ever-present force in our lives, our communities, and our beloved lakes.

Change comes in many forms: from the gradual evolution of our climate, to shifts in leadership and policy, to the dynamic state of our waterways. Each of these changes brings new challenges and opportunities, and as stewards of Ontario's precious lakes, it is our duty to navigate these transformations with foresight and dedication.

Leadership changes bring fresh perspectives and renewed energy. As your new CEO, and new Chair of the FOCA Board, we are honored to step into these roles, to help guide and facilitate the legacy of advocacy and stewardship for our lands, lakes and rivers that has been FOCA's hallmark.

In this year's Lake Stewards Magazine, we present new tips from our FireSmart partners aimed at helping property owners reduce wildfire risks, important woodstove safety information, and boating safety regulation reminders to help you and your family enjoy your cottage country time, safely, in good health.

Meanwhile, the health of Ontario's lakes is being monitored through FOCA's ongoing programs like the Lake Partner Program (LPP), Green Shovels, and IsampleON. In this issue, read about the latest LPP sampling stats and new lake data reports, get a recap of the 2023 Green Shovels program to combat invasive Phragmites, and learn more about cutting-edge eDNA sampling techniques to detect invasive species. For our members on the Great Lakes, we hope you'll also enjoy a handy ID guide for invasive Asian carps; you are our eyes on the leading edge of the invasion we intend to prevent!

Climate change remains one of the most pressing issues of our time. Its impacts are felt acutely in our lakes, where changes in temperature and precipitation patterns can affect everything from water quality to the health of aquatic ecosystems. In this edition, we delve into several initiatives aimed at addressing these environmental shifts. FOCA's commitment to well water testing and source water protection is more critical than ever, ensuring that our water remains safe and clean. We also explore the latest changes in land use planning, highlighting the need for FOCA's ongoing work to influence government policy to protect our natural resources.

On the policy-change front, we've included important updates about capital gains taxation and cottage succession planning—topics that are top-of-mind for many of our members. You'll also find an update about the evolving issue of floating accommodations and potential implications for our waterfronts. While some changes are still on the horizon, such as possible boat decibel or wake regulations, it is vital for everyone to be informed and for FOCA to remain proactive.

Our lakes themselves are in a constant state of change, influenced by natural processes as well as human activities. We are excited to present a new model for lake management planning from FOCA's longstanding partner Norm Yan and his colleagues, offering innovative strategies to preserve our waterbodies. And we hope a first-hand account from fellow members on Paudash Lake will provide you with inspiring insights into the process of lake planning, and remind you of FOCA's member resources on the topic.

Land Acknowledgment: We recognize and thank the traditional stewards of the lands and waterways where we work and live. The waterfront lands of Ontario are the traditional territories of many diverse Indigenous peoples who recognize the sacredness of water, the interconnectedness of all life, and the importance of protecting land and water for the generations yet to come.

We are all on a journey towards truth and reconciliation and offer this recognition as an important step in that journey. We live in different locations, and so we encourage each of you to dedicate yourselves to move forward in the spirit of respect, reciprocity, learning and sharing that learning.

Change is inevitable, but it also presents opportunities for growth and improvement. As stewards of Ontario's lakes, we are uniquely positioned to drive positive change and ensure the continued health and beauty of our waterways. Together, we can navigate these changes with resilience and optimism, safeguarding our lakes for future generations.

Looking ahead, we encourage you to mark your calendars for the digital 2024 FOCA Fall Seminar (see page 27), featuring healthy shorelines and related topics. We look forward to connecting with you then.

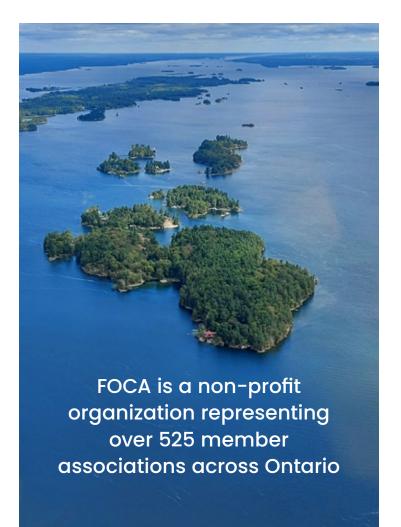
Thank you for your ongoing commitment and support.



Lesley Lavender FOCA CEO



Deborah Martin-Downs Chair, FOCA Board of Directors



In This Issue

| Embracing Change 2 |
|---|
| Hot Topics & Emerging Issues 4 |
| Land Use Planning Updates 8 |
| Lake Management Theory: Engaging Communities 10 |
| 2023 FOCA Award Recipient: LOBA 12 |
| The Importance of Lake Planning: A Member Story |
| IsampleON & eDNA Testing for Water Soldier |
| Lake Partner Program: 2023 Updates |
| Green Shovels: Managing Invasive Phragmites |
| Preventing Asian Carps 21 |
| Wildland Fire Safety 22 |
| Woodstove Safety Tips 24 |
| Lifejackets and PFD Regulations 25 |
| Links We Love |
| Healthy Shoreline Tips27 |
| FOCA Fall Seminar: Healthy Shorelines |
| Inform. Protect. Unite |
| |

Hot Topics & Emerging Issues

FOCA works year-round on issues that affect waterfront Ontario. For regular updates, ensure you have provided your consent to receive the monthly FOCA Elert - our e-news. Sign up on the website: foca.on.ca. Here are a few highlights of ongoing files and recent developments.

Capital Gains Tax Change

On April 16, 2024, Finance Minister Chrystia Freeland tabled a 2024 federal budget including an announcement that the capital gains tax inclusion rate on amounts over \$250,000 would rise from 50% to 66.7%, effective June 25, 2024.

Despite the government's assertion that the tax was targeted at the 0.13% wealthiest Canadian investors, the hardest hit will, in fact, be families with one remaining parent who wants to pass the cottage, camp, or other secondary residence to the kids through gifting or inheritance.

Additionally, setting an implementation date only 2 months from the time of the announcement gave families little time to make an informed decision, and forced them to choose between family legacy and financial security.

On behalf of our members, FOCA fought against this increased tax through phone calls to elected officials, letters to government, and supporting our members and their families to take action using our customizable template letter. FOCA was copied on hundreds of emails from middle-class families and cottage owners to their MPs, each sharing personal stories about how this tax left them negatively affected, and that this tax change could force the sale of the cottage out of the family. In many cases, these are homes that have been passed through generations over multiple decades.

FOCA is disappointed that on June 11th, the "Ways and Means" motion relating to the implementation of the capital gains tax change was introduced in the House of Commons. Passing by a vote of 208-118, we know our message was heard by some MPs.

FOCA remains dedicated to the momentum of advocacy for cottage country, and to keeping our members and our supporters active and actioned. Visit our webpage for links to more information about the tax: https://foca.on.ca/property-taxation-assessment/, and learn more about making your own cottage succession plan.

Cottage Succession Planning

For over 15 years, FOCA has worked with estate lawyer Peter Lillico to deliver seminars about cottage succession planning to thousands of Ontario families. In light of the capital gains tax change announced in April 2024, these sessions are more important than ever for seasonal property owners!

Your family's succession plan might include consideration of some or all of the following:

- deciding which children are best suited to become the owners and stewards of the cottage for the next generation
- learning how to avoid adversity by creating a Cottage Sharing Agreement that offers many protections
- investigating strategies to address the capital gains tax that is triggered when the cottage is sold or gifted
- considering the use of trust techniques which present several advantages, alongside some additional costs.

FOCA's cottage succession planning seminars have been conducted by webinar since 2020, meaning that you and the extended family can attend from various locations. These events are free to members of our Member Associations and to 'Friends of FOCA' – our annual supporter category.

You can also purchase access to digital recordings of some of Peter Lillico's FOCA talks, in order to review the material with your family at your leisure. Find more information on FOCA's webpage: https://foca.on.ca/cottage-succession/.



Well Water Testing

Most waterfront landowners in Ontario are not on municipal water systems, and are not covered by a Source Water Protection Area. Therefore, they don't benefit from existing policies and programs that keep municipal drinking water safe. For this reason, FOCA has been working on the topic of source water protection since our founding over 60 years ago.

Remember that it is never safe to drink untreated surface water, such as lake or river water, and if you rely on a well on your property for drinking water, it is extremely important that you test your water regularly for bacterial contamination.

For many years, well water testing has been available freely in Ontario, through Public Health units across the province. However, in December 2023, the Ontario Auditor General released a value-for-money report that recommended closing more than half of the existing Public Health Ontario laboratory sites. Subsequent media reports in early 2024 suggested that the Province was phasing out free water testing of private wells, which led to a flurry of public indignation.



FOCA was assured by our contacts at the Province and Public Health that there was no intention to end private drinking water testing in Ontario. We were pleased to hear the Province clarify their stance, announcing officially in mid-April 2024 that the testing continues.

Read FOCA's letter to the Premier, Minister of Health, and Public Health Ontario on the topic from a link on our website, where you can also access important homeowner resources about well water safety: https://foca.on.ca/source-water-protection/.









Images above are courtesy of the Gloucester Pool Cottagers' Association, 2022.

Regulation of Floating Accommodations

FOCA first brought concerns to our membership in early 2022, about floating transport containers being repurposed as on-water dwellings on Ontario waterways.

Since that time, some municipalities have passed local bylaws prohibiting such structures; however, proponents declared that they were exempt from municipal control, claiming status as "vessels" under definitions set by Transport Canada (TC) which has jurisdiction over Canadian waterways. TC has so far refused to reconsider the definition of vessels to exclude these types of structures, or to find ways to enforce construction standards on them (including, but not limited to, proper greywater systems to prevent water quality impacts).

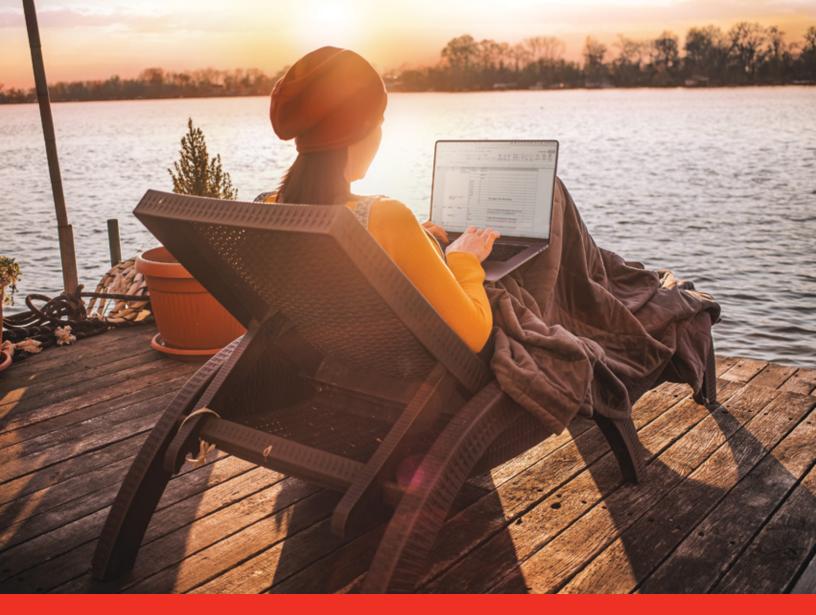
In 2023, FOCA convened a stakeholder meeting with the Province of Ontario, who has jurisdiction over "camping on the water" over Crown lands, so that members and partners could share concerns. Attendees asked the Province to impose tighter restrictions, such as the length of stay permitted in one location (currently 21 days). The Province responded with a public comment period that

resulted in the announcement of a prohibition on floating accommodations – "such as rafts and barges" that contain buildings or structures but are not primarily watercraft or designed for navigation – from docking overnight on provincial waterways, effective July 1, 2023.

There was an additional issue: the Province does not have jurisdiction over waterways overseen by the federal Parks Canada including the Trent Severn Waterway (TSW) - the location of the key structures at the centre of the concerns. After ongoing efforts by the "Float Homes Not Vessels" coalition that includes FOCA members from the Georgian Bay Association and the Gloucester Pool Cottagers' Association, Parks Canada held a public consultation on the topic and finally announced new mooring restrictions for floating accommodations on the TSW and Rideau Canals, that went into effect on May 1, 2024.

Find out what to do if you see a floating home on an Ontario waterway, and get links to related information, on FOCA's webpage: https://foca.on.ca/floating-accommodations/.





Because working from the cottage actually has to work.

With Rogers 5G Home Internet your cottage gets easy-to-install internet with no overages on Canada's largest and most reliable 5G network¹. Try it risk-free for 30 days.

Call 1-833-606-0265 to learn more.



Land Use Planning Updates

Land use planning is a critical component in maintaining sustainable communities and healthy lakes. FOCA encourages associations to engage in the process, as proactive involvement of community members makes the end results much better.

Under the guise of enabling 1.5 million homes to be built over the next 10 years, the Province has continued to make sweeping changes to the regulations governing land use planning in Ontario, many favouring development and recently removing the right of public appeal at the Ontario Land Tribunal in planning decisions including Official Plans and Zoning Bylaws.

Also, as of April 1, 2024 changes to the Conservation Authorities Act have come into effect with a new regulation, Ontario Regulation 41/24 (Prohibited Activities, Exemptions and Permits) that replaces all previously-separate Conservation Authority (CA) development regulations.

FOCA notes the following results of this change:

- · CAs have reduced jurisdiction
- the regulated area adjacent to Provincially Significant Wetlands (PSWs) was reduced from 120 to 30 meters, which significantly reduces protections
- the changes reduce the number of prohibited activities requiring a permit, and remove permit tests related to pollution and conservation of land, although they add tests for unstable soil, health or safety, and property damage
- ministerial authority to issue decisions remains.

In May 2024, FOCA submitted our concerns as comments to the Province's Bill 185, the "Cutting Red Tape to Build More Homes Act, 2024". Read FOCA's letter from our Land Use Planning webpage (see link at the end of this article).



In particular, FOCA is concerned about negative impacts of overdevelopment on community planning and on the protection of water, wetlands, forests, natural heritage, and biodiversity in waterfront-adjacent lands.

Site plan control should be an important tool for municipal government to achieve larger community goals that include the protection of water sources and the reduction of erosion and flood risk during extreme weather events. These powers should be maintained to preserve the livability and sustainability of our communities.

FOCA did note the new regulations set out certain low-risk development (such as small seasonal or floating docks) as exempt from permit requirements. They also allow for stiffer penalties for those who are found in violation of the Act and Ontario Regulation 41/24. Key changes include the following:

- individual landowners are now liable for a fine up to \$50,000, possible imprisonment of up to three months, and an additional fine of up to \$10,000 for each day the offence continues
- corporations are now liable for a fine up to \$1,000,000 and an additional fine of up to \$200,000 for each day the offence continues.

Over the past year, FOCA has noted several examples of fines issued against property owners who have flaunted permit requirements, including:

- in August 2023, a cottage owner was fined \$45,000 for altering Georgian Bay shorelines in 6 areas without a permit from the Ministry of Natural Resources and Forestry
- in December 2023, a northern Ontario man was fined \$48,000 for damaging turtle habitat during road work conducted without a permit in a wetland conservation reserve in McDougall, north of Parry Sound
- in May 2024, a Chesley Lake landowner received a fine and an order for restoration, after the unlawful placement of material and site grading without permission from the Grey Sauble Conservation Authority.

Get link to these news items, land use planning updates, resources for municipalities and homeowners, and peer stories of your fellow members who have raised their political voices to advocate for responsible planning and development in their own local rural communities: https://foca.on.ca/land-use-planning/.





Lake Management Theory: Engaging Communities

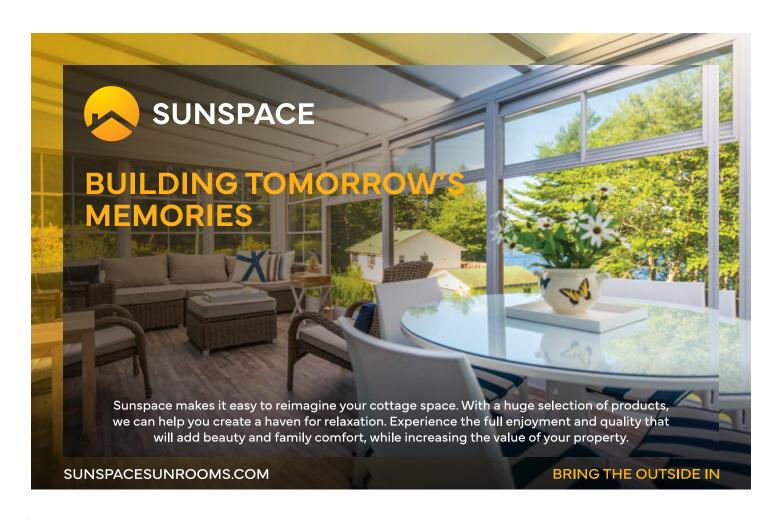
A team of respected scientists from three continents – led by Jacob Cianci-Gaskill in the US, and including Norman Yan of the Friends of the Muskoka Watershed – recently published an article in the Lake & Reservoir Management journal of the North American Lake Management Society. The article proposes that decades of traditional efforts to manage and protect lakes worldwide have often fallen short, leaving freshwater resources at risk. The team recommends a new lake management framework that prioritizes a combination of monitoring, restoring, and protecting lakes through community engagement.

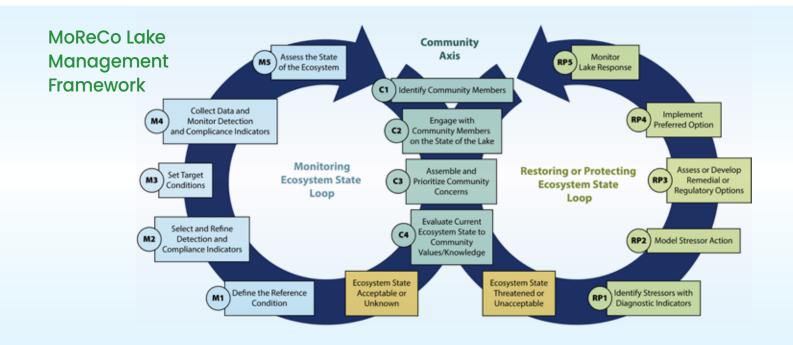
FOCA members: take note!

This new proposed framework is titled 'MoReCo' (for Monitoring, Restoring/Protecting, and Community Engagement) and it offers a promising solution by placing community engagement at the forefront of lake management.

As outlined in the article, the MoReCo framework recognizes that successful lake management requires more than just regulations and technical expertise. It requires the involvement of local communities in the process, from monitoring lake health to implementing restoration projects. By actively engaging citizens, the framework aims to address emerging stressors and prevent further degradation of our lake ecosystems.

One key aspect of the MoReCo framework is its dual-loop structure (see the illustration). The monitoring loop helps detect emerging threats to lakes, while the restoring/protecting loop focuses on addressing existing stressors before they can cause irreversible damage. This proactive dual approach encourages lake managers to remain active even when no emerging threats are apparent, to ensure the long-term health of lake ecosystems.





FOCA has often heard from our members that it can be hard to keep a lake community motivated in the absence of a threat like a new invasive species or sudden water level changes. Perhaps this new model helps us to forge a path forward, to ensure our lake communities are prepared for future moments of sudden need, with engaged volunteers at the ready.

Community engagement is central to the MoReCo framework, with mechanisms for communication, consultation, and participation all outlined. By involving local stakeholders in decision-making processes lake managers can prioritize goals, evaluate ecosystem conditions, and determine the most effective management strategies.

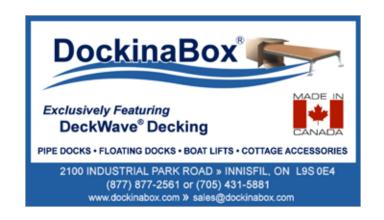
To operationalize community engagement, the MoReCo framework provides a four-step process: identifying community members, engaging with them on lake issues, assembling and prioritizing concerns, and evaluating ecosystem conditions based on community values.

Overall, this proposed framework offers a holistic and adaptable approach to lake management that empowers communities to become stewards of their local ecosystems.

By working together, we can protect and restore our freshwater lakes for future generations to enjoy.

Read the abstract of this article online here: https://www.tandfonline.com/doi/full/10.1080/10402381.20 23.2299868, and learn more about lake planning and related FOCA resources for lake communities, on the next pages.





2023 FOCA Award Recipient: LOBA

At the Annual General Meeting earlier this year, the Board of Directors announced that the annual FOCA Achievement Award has been renamed the "Terry Rees Achievement Award" in recognition of FOCA's longstanding Executive Director who retired in March 2024.

This Award is presented to a member association each year, to celebrate the successes of the FOCA community and encourage us all to share success stories and best practices.

The 2023 nominations highlighted initiatives by member groups across the province including community events and anniversary celebrations, engaging kids to appreciate their natural environment, emergency safety initiatives, and invasive species management efforts, among others.

The recipient of the inaugural Terry Rees Achievement Award for 2023 accomplishments is the Lake of Bays Association (LOBA), a FOCA member group representing over 1200 families in the Huntsville area. Wendy Gibson is pictured with Terry Rees.



FOCA Association Insurance



Complete coverage for your lake, land or road association.

As a member of FOCA, your cottage, lake, road or land group is eligible for the FOCA Association insurance program. This program gives you and your volunteers peace of mind as you carry out your important work, including regattas, water hazard marking, hosting education and social events, maintaining your community's road and more! Policies are available at exclusive FOCA Member pricing and are customized to meet your needs, able to provide General Liability, Directors & Officers Liability and Volunteer Accident Coverage.

cadeinsurance.com/FOCA
1 844 CADE 1ST

clientservices@cadeinsurance.com

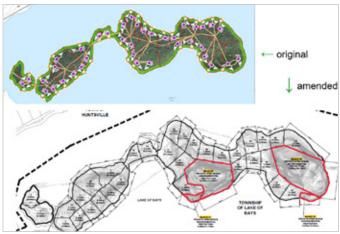
Request a quote today!

Cade Associates Insurance Brokers Underwritten by Aviva Insurance Company of Canada LOBA was celebrated for efforts related to a local land development plan. In 2018, when they learned of a development proposal on Langmaid's Island (one of the largest undisturbed properties on Lake of Bays, designated as a Muskoka Heritage Area in the Lake of Bays and District of Muskoka Official Plans) LOBA partnered with a sister organization, the Lake of Bays Heritage Foundation, to weigh-in. The proposal would have seen Langmaid's Island subdivided into 36 residential lots with mainland access from two waterfront landings nearby.

LOBA's 5-year community effort focussed mainly on ensuring conformance with the Lake of Bays and District Official Plans as they pertain to this property, and the core values that the Muskoka Heritage Area designation represents. The organization hired lawyers, attended countless meetings, and ultimately sought party status in a 23-day appeal hearing launched by the developer, at the Ontario Land Use Tribunal (OLT).

In June 2023, and after 5 years of ongoing efforts, LOBA and the Heritage Foundation communicated their overall disappointment with the OLT decision which was in favour of the application to redevelop this heritage site. So – if the development is still going ahead – why the award?

LOBA and partners achieved some significant wins that would not have happened without their participation as parties to the OLT process. In all, 30 conditions must be fulfilled for final project approval to be granted.





Wendy Gibson, President of LOBA, received the Award on behalf of the association at the FOCA Spring Seminar in March 2024. In her remarks, she stated that participating in a land tribunal appeal is nothing she could recommend to any fellow association, describing the process as costly, adversarial, and heavily-favouring development. Nevertheless, LOBA offered the following tips for fellow associations that might be facing land development proposals:

- 1. As an association, sit down and have a serious conversation as soon as possible (even before you're facing a threat) to set a clearly articulated mandate about when and when not to get involved in development issues. This will help you choose your battles and prevent knee-jerk emotional responses once the process is underway.
- 2. LOBA maintains an Action Fund from voluntary donations; the option is on their annual member renewal form. This reserve allows them to respond quickly to development issues as they arise, and hire professional help when needed.
- 3. Initially, without spending any money, LOBA took their concerns to local professional planners to get some objective opinions about whether LOBA's position was a defensible fight worth undertaking.
- 4. LOBA attempts to keep a professional planner on their board committee; look for one in your community and try to get them on your board as a resource.
- **5.** Spend time crafting transparent communications to keep everyone informed and engaged in the fight.
- **6.** LOBA undertook considerable fundraising efforts for this specific campaign.
- 7. If you have large areas ripe for development that are currently unprotected, work now to secure their preservation through a land trust or conservation easement. The Official Plan designation did not protect this land, as it can be challenged or amended over time.

Please continue to share your association successes with FOCA, as you undertake your own activities throughout 2024, and watch the Elert (our e-newsletter) for FOCA's call to nominate your own great association for the 2024 Award. We all benefit from your shared stories!

Aerial photograph courtesy Rob Stimpson

The Importance of Lake Planning: A Member Story

by Valerie Hunnius, PLCA

The Paudash Lake Conservation Association (PLCA) celebrated its 50th anniversary last year, and it provides an opportunity to recall some of the conservation successes of the past five decades!

The association was born out of concerns about water levels on this headwater reservoir lake in Haliburton and North Hastings counties, but those who formed the association had no idea of their prescience in specifying 'conservation' as a goal in the name. Almost immediately, PLCA became an organization focussed on water quality, shoreland preservation, species protection, and ecological integrity.

Among many successes of the association was the development of a lake planning process resulting in the Paudash Lake Management Plan, an ongoing living enterprise for perpetual implementation.

While opposing a development proposal that would have seen a wetland dredged to create a settlement of three dozen lots, the association hired an environmental consultant to prepare an ecological study of the whole of Paudash Lake. This study, produced in 1993, became the basis upon which a great number of our ecological achievements were built, even as provincial guidelines for the significance of wetlands came under review and change.

In 2002, PLCA applied for and received an \$18,000 Trillium grant to create a lake management plan, by and for the lake community. We were not the first lake association to undertake such a project; French Environmental Services had already

created a couple of lake plans in Muskoka, but we believe we were the first in Eastern Ontario. The lake plan was intended as a living document: a plan for the present and for the future, with which to enhance municipal and provincial planning, based on environmental values. It was a way of making use of all our knowledge for future generations – a celebration and a milestone and a belief in the future.

The process involved two meetings each of stakeholders in the community: one for residential property owners, and the other for businesses or commercial establishments on the lake to define values and strategies and to engage in a visioning process with everyone. It also involved surveys of all property owners and of boating activity on the lake. Many other variables were considered including protection of fisheries and the ribbon of life through natural shorelands, noise and light pollution, and so on.

The implementation of the Lake Plan in 2006 focussed our attention on enhanced water quality testing, increased pressure on municipalities to undertake regular septic system inspection, introduced us to benthic testing of aquatic "bugs in the mud" in the streams feeding the headwater lake, and allowed us a place at the table in the creation of the new Official Plan for the Municipality of Highlands East.





And this was only the beginning.

PLCA went on to do shoreland protection and rehabilitation, and participated in 2006 in FOCA's "Dock Talk" program focussed on education of shoreland owners on issues such as septic system care, pollution prevention, wildlife habitat enhancement, erosion control, and other environmental issues. We have also participated in the Love your Lake program of Watersheds Canada, which provided a snapshot report available to each property owner, about the degree of naturalization or loss along the shoreline.

We wish to recognize the contribution provided to the PLCA over the years by some of our leaders and organizers. Without the incredible commitment of time and energy provided by former Presidents Bill Davis, Gerry Hunnius, and Jim Sangster we would not have achieved the accomplishments we have written about in this brief summary.

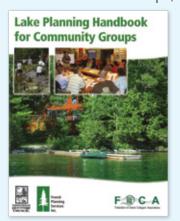
Thinking about creating a lake plan?

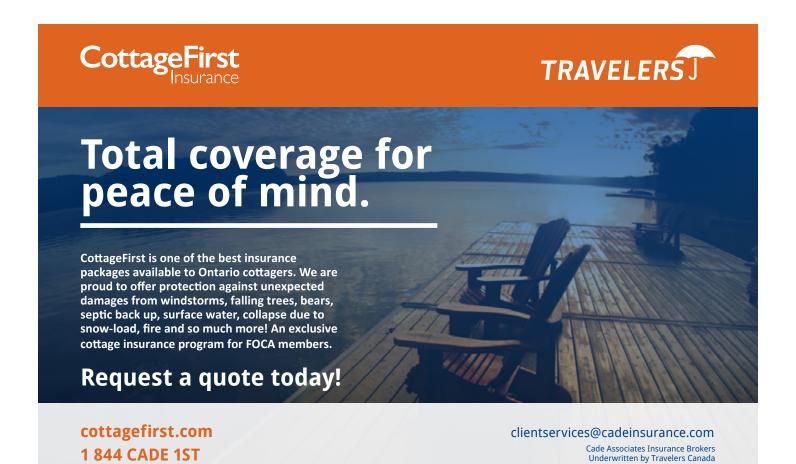
Although every lake plan is unique, there are some commonalities that can help frame your discussions. FOCA supports our member Associations who want to make (or update) a local lake plan, through our digital resource the *Lake Planning Handbook for Community Groups*. This 65-page guide was created from the collective experience of dozens of fellow lake associations across Ontario. It is filled with tips,

templates, and resources that will help you undertake strategic planning and stewardship initiatives.

Access a copy under the member login on FOCA's webpage:

> https://foca.on.ca/ lake-planning/ or contact the FOCA office for assistance.





IsampleON & eDNA Testing for Water Soldier

Since 2021, FOCA and our volunteer samplers have participated in IsampleON (the Invasive Species Awareness and Monitoring Program for Lakes Education Ontario), in partnership with the Invasive Species Centre, and funded in 2023 by the Ministry of Natural Resources and Forestry.

In 2023, over 75 FOCA volunteers collected water samples for lab testing for the invasive species water soldier (*Stratiotes aloides*) in the region of greatest concern for its spread, across ecoregion 5E, roughly from Ottawa through Parry Sound-Muskoka.

Environmental DNA (eDNA) is a groundbreaking technology that has the potential to revolutionize how we monitor the presence and movement of various species in our environment. It is a genetic detective tool for the natural world, that can dramatically improve and expand our ability to monitor aquatic systems. It is non-invasive and allows us to collect tiny fragments of genetic material that organisms leave behind in their environment – things like skin cells, saliva, and waste – that act like a biological fingerprint unique to each species. eDNA is a cost-effective alternative to traditional waterbody surveys, with the ability to detect invasive species earlier which may aid in management efforts.

However, there are some catches. First, for eDNA testing to work effectively, a good reference library of genetic data is needed for the target species. Think of it like trying to identify a criminal using a database of fingerprints; you need a large catalogue or collection to match against.

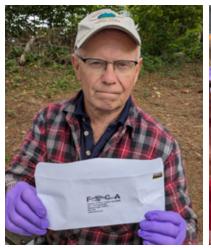
Secondly, eDNA testing is not foolproof, and may not definitively confirm the presence or absence of a species in a waterbody, or determine the abundance of a species or whether positive identification came from a living plant or animal sample, or material that was otherwise transiting through the site but is not established there.

What eDNA can do is point our attention in a direction for further investigation. The hope is that this technology might eventually become a working tool that will help direct resources with greater efficiency. When used to identify animals – a more established use of eDNA technology; for instance, to identify and differentiate between wolf species in an area, or in food surveillance to verify the type of fish being sold – it is possible to compare well-established baseline DNA examples with collected samples with great accuracy.

In the case of identifying plants, the picture is not nearly so clear.

There are currently very few reference samples of Ontario-specific aquatic plants, native or otherwise. The fact that plants will easily hybridize (cross-pollinate between species) further complicates matters, making the genetic identification of a particular plant species difficult, without having a strong understanding of overall community composition. Plants share much of the same genetic material, making it hard for scientists to target unique genetic markers in each species' DNA.

Sampling on Lepine/Greenan Lakes; Mary Lake; Mink Lake







2023 IsampleON Results

The 2023 IsampleON water samples were tested using an eDNA assay specifically designed to detect water soldier.

The lab report said that a quantitative polymerase chain reaction (PCR) assay was developed using sequences for two chloroplast DNA targets specific to water soldier. A lab control was used to test the sample for the presence of chloroplast DNA (an organelle specific to plant cells), while an internal positive lab control was used to detect inhibitors within the sample (specific chemicals that, if present, might inhibit the PCR reaction from working properly). These extra control measures help assess for potential false negative lab results.

Altogether in the 2023 test samples, 3 of the 76 showed trace amplification of one target, but not above the threshold of detection of the developed assay; thus, these three were deemed 'inconclusive' for water soldier, while all the remaining samples were deemed 'negative'. We were reminded by our program partners that positive or inconclusive samples do not indicate if water soldier has established in a particular lake. Conversely, negative samples do not mean water soldier is absent from a lake, but only that it was not captured in the samples.

To verify if water soldier is present in each lake, further visual surveys would be recommended (refer to the photos and illustration shown here, from the forthcoming FOCA guide to aquatic plants).









Photographs of water soldier by Kaleigh Mooney; illustration by Lucy Martin-Johnson

Next Steps

Using the samples collected through the IsampleON program in 2023 by our volunteers across the province, we helped to build the evidence that will hopefully get us to a system that enables us to reliably sample for the presence or absence of target aquatic plant species. Our work to date will also help more definitively structure future sampling design, including the seasonal timing, frequency, and location of sampling required for optimal results.

Thank you to all our samplers for your important work on this and our other water monitoring programs!

Learn more about the ongoing IsampleON program on FOCA's webpage: https://foca.on.ca/isampleon/.

Lake Partner Program: 2023 Updates

by Gavin Vance, FOCA Assistant Lake Stewardship Coordinator

The Lake Partner Program (LPP) of water quality monitoring is delivered through a collaboration between FOCA's volunteer lake stewards, and the scientists and long-term program funders at the Ontario Ministry of the Environment, Conservation and Parks. Over nearly 30 years, this combined effort has resulted in one of the largest spatial and temporal databases of lake water quality data in the world.

Are you the lake steward or water sampler at your lake?

If you are: thank you!

If you're not: find that person and thank them!

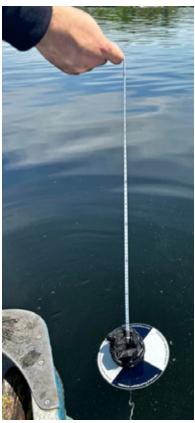


The water quality data collected by the LPP has contributed to numerous scientific investigations on lake health and has been used by government decision-makers to gain insights into environmental trends and patterns, and to inform decisions aimed at protecting Ontario's valued natural freshwater resources. This data set also provides a foundation from which to educate everyone about lake health and the critical importance of maintaining it.

A remarkable 5,857 individual data points were collected though the LPP in 2023 alone!

Since accurate total phosphorus (TP) testing began in 2003, the total number of data points collected is approximately 137,800. This data is accessible to anyone with an internet connection, via the Ontario Open Data Catalogue, which can be reached from a link on FOCA's webpage: https://foca.on.ca/lake-partner-program/.

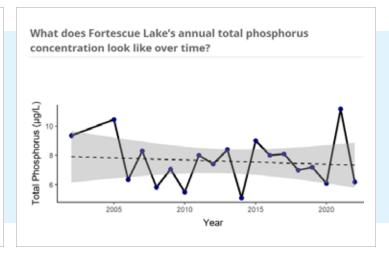








Middle & top right sampling images courtesy Noah Stegman on Lake St. John; Left & bottom right images courtesy Dorset Environmental Science Centre



Lake Data Reports

In appreciation of the LPP volunteers' ongoing efforts, and to help them explain the significance of their annual lake data, we spent much of 2023 working to create a new resource: updated Lake Data Reports.

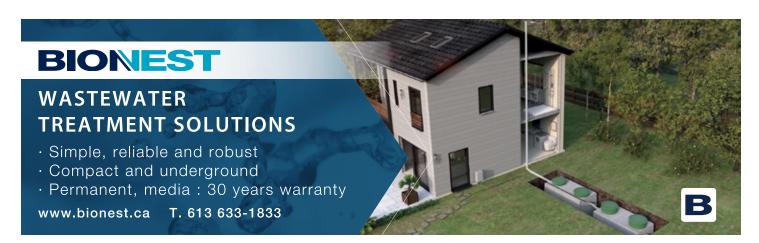
In the past, the LPP could generate some very basic data reports for our volunteers, on an adhoc basis. The reports were limited to basic data visualization without much trend analysis, and were labour intensive as they were created manually. In 2023 we began developing a new and improved version, to facilitate on-demand lake report production generated using the unique LPP lake identification code.

First, we coded two templates – for 'on shield' and 'off shield' lakes – because lakes on the Canadian Shield have water samples taken once each spring, while lakes off the Canadian Shield have water samples taken throughout the season to reflect natural variances in total phosphorus levels in off-Shield lakes during the summer season. As the characteristics of these two types of lakes differ, it would be unproductive to compare results from one type to the other.

We also coded an interactive map that displays the various sample site locations on your lake, which may have changed over time.

Finally, we coded detailed data visualization graphs for each parameter measured by the program today: TP, Calcium, Chloride, and Secchi depth or water clarity. Each parameter has its own section in the updated report, giving more contextual information about the lake health indicators, while a histogram and annual average trend line provides more context about your lake data. Please note that some parameters were added to the program over the years, and historical data is not available for all lakes, depending upon when volunteer samplers have been engaged.

Compare the old (above left) and new (right) report graphics produced for Fortescue Lake in this example illustrating the updated TP trending information in the new reports. While it took a great deal of time and effort to write the code for these reports, we have now greatly reduced the amount of time it will take to produce each one, while also increasing the analysis and support information provided!



Lake Partner Program: 2023 Updates (cont.)

Volunteers Know Best

As we were wrapping up the initial draft of these reports in late 2023 and early 2024, we distributed 'beta test' versions of the new reports to a handful of LPP volunteers to obtain suggestions for improvement. Thank you for your crucial feedback during this initial trial period! Based on your comments we have made some further updates and hope to continue to implement user feedback down the line.

Now, we are excited to announce that the new Lake Data Reports will be available to volunteers on lakes that have 5+ years of continuous data by October 2024. The new reports are available to the volunteers who act as stewards and lake samplers, upon request. Reach out to the LPP by email to lakepartner@ontario.ca and we can let you know if your lake has enough qualifying data to produce a reasonable trend line. We will begin a waitlist, and will start distributing the reports in October 2024.

The lake report material is posted digitally – it will open in a web browser – as it is intended to be interactive; however, these webpages are not searchable or public-facing. We can also provide a PDF version of the report for the sampling volunteer to share with their board or fellow lake association members.

We hope you will share the reports to help property owners understand the important role each of them plays, as a steward of lands around lakes. Access related resources from FOCA's webpage: https://foca.on.ca/shorelines-stewardship/.

Meanwhile, the 2024 sampling season is well underway, and thousands more data points are being collected and returned to us. We extend our gratitude to the more than 600 dedicated volunteers whose support has been vital to the ongoing success of the LPP. Your ongoing participation is one of the real values of the program. We hope you'll find the new data reports as valuable as we find you!



Green Shovels: Managing Invasive Phragmites

Since 2021, FOCA has supported our member associations with funding and technical support for projects that fulfill the goals of the Green Shovels Collaborative.

The Green Shovels Collaborative is made up of conservation organizations that have a shared interest in protecting nature and the economy while addressing invasive species.

Invasive Phragmites has been called Canada's worst invasive species, with high costs for management and eradication. It is a very tall and fast-growing perennial grass that now covers tens of thousands of hectares of shorelines, wetlands, and roadsides. It creates ecological dead-zones for birds, amphibians, and reptiles, impacting atrisk species and reducing biodiversity.

In 2023, six member associations undertook onthe-ground projects that included detection, removal, and management control plans for invasive Phragmites, as well as educational and awareness programming to inform others about preventing the spread of invasive species.

Thank you to our program volunteers, the Ontario Ministry of Natural Resources and Forestry that funds this work, and our partners at the Invasive Species Centre who help to administer the program. Learn more on FOCA's webpage: https://foca.on.ca/phragmites.





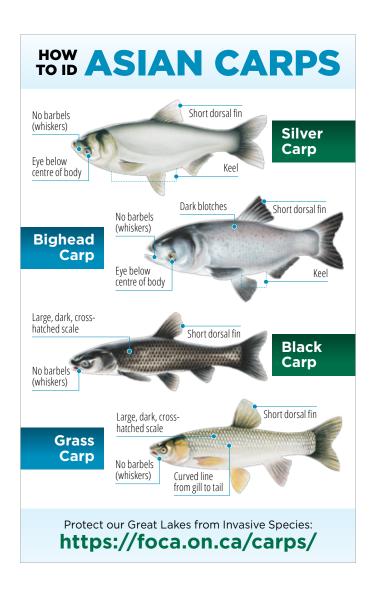
Selective harvesting and protecting biodiversity in Bruce County, courtesy the Greenough Harbour Preservation Association

Preventing Asian Carps

On May 20, 2024, a dead invasive Grass Carp was collected by a member of the public in Rondeau Bay on Lake Erie.

Fisheries and Oceans Canada (DFO) was alerted, but the fish had already been disposed of, and could not be tested. DFO crews are keeping a close eye on the area. This sighting follows captures in June 2023 in the Grand River, July 2023 in the Bay of Quinte, and in August 2023 near Fort Erie.

Please be our eyes on the Great Lakes this season! Learn how to ID invasive carps, and report sightings online at https://www.eddmaps.org or call the Invading Species Hotline: 1-800-563-7711.



Wildland Fire Safety

by our partners at AFFES

The Aviation, Forest Fire and Emergency Services (AFFES) branch of Ontario's Ministry of Natural Resources and Forestry reminds you that updates about active wildland fires in the province, and Ontario's Interactive Fire Map can be found from April to October at: www.ontario.ca/forestfire.

Read onward for important tips for your property, and information about campfires, drones, and interactions with waterbombers. Also, learn how to report fire when you encounter it.

Protect Your Property: Be FireSmart

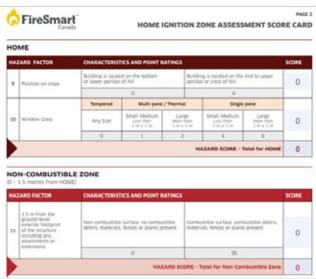
There are many actions you can take to help keep your home safe from a wildland fire. It starts with a simple home assessment, which can be done using the **FireSmart Begins at Home application** (available at the Apple App Store or Google Play) or the **FireSmart Home Assessment Score Card**. Access this resource from the 'Latest News' section of FOCA's webpage: https://foca.on.ca/fire-safety/.

Using knowledge gained through your self-assessment, start with actions in the immediate area around your home and structures to have the biggest impact in making them more resilient to wildland fires. Actions you can take on your property include:

- create a non-combustible zone up to 1.5 metres around your home and deck
- reduce shrubs, conifer trees, and dead material within 10 metres of buildings
- grow fire-resistant plants; consider replacing highly flammable conifers such as cedar and spruce trees within 10 metres of buildings
- thin and prune conifer trees within 10-30 metres of buildings.

If you are ready to adopt more FireSmart principles on your property, consult the free one-hour 'FireSmart 101' online course that outlines the 7 FireSmart principles and explains the 'home ignition zone' in detail. Login with your own email address to access the course here: https://firesmartcanada.ca/programs/firesmart-101/. Return as often as you like, to complete the course at your own pace.





Campfire Safety Reminders

Help us reduce the risk of wildland fires this season by always keeping safe campfire practices top-of-mind. Whether you're planning to roast marshmallows in the back yard, prepare a shore lunch, or simply stay warm on an overnight trip, follow these tips:

- build the fire on bare soil or rock in a location sheltered from the wind
- make certain the fire is a safe distance from all flammable material, including overhanging branches
- keep the fire small and never leave it unattended
- put out the fire thoroughly when you are done.

To ensure the fire is fully extinguished, soak it with water, stir the ashes, and soak it again. Repeat until the ashes are cold to the touch.

Drones & UAV Fire Safety

Flying a drone or unmanned aerial vehicle (UAV) around forest fires is dangerous and illegal. When you fly a drone near a forest fire you put the lives of pilots, firefighters, and other emergency service personnel at risk. The "no drone zone" is any area within nine kilometres of any forest fire.

Before you fly a drone make sure you understand the rules and regulations, as drone pilots must follow Canadian Aviation Regulations. Visit https://tc.canada.ca/en and search 'drone' to learn the rules about drone safety, legal requirements, regulations, and penalties. Remember, you are the pilot of your drone, and you are ultimately responsible. Be safe and stay clear of forest fires.

Watch for Waterbombers

When you are out enjoying Ontario's waterways this season, remember that a waterbomber is an important firefighting tool that needs room to scoop water from lakes.

Boaters who venture too close can obstruct fire-fighting efforts and create a dangerous situation for themselves and the pilots. Waterbombers will not scoop from a lake or river if encroaching watercraft pose a safety hazard. If you see a waterbomber once, assume they may be back soon, and stay off the water for the next while.

How to Report Wildland Fires

If you do encounter smoke or flames in a wildland area, take note of how to report it:

- if the fire is located south of the Mattawa and French Rivers, call **911** to report a wildland fire
- if the fire is located north of these rivers, report it by calling 310-FIRE (no area code is needed)

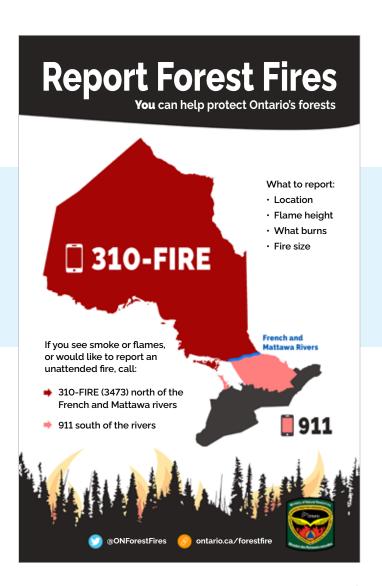


Stay Informed & Share the News

Know the fire hazard near you by regularly consulting the interactive fire map.

Make sure to follow AFFES' social media channels for up-to-date information on Facebook, X (the social media channel formerly known as Twitter) and Instagram using the handle @ONForestFires in English and @ONFeuDeForêt in French. Follow all season for emergency fire information, updates to the current wildland fire situation, and important wildland fire prevention and mitigation tips, including FireSmart information to help make your home or cottage more resilient to impacts from wildland fires.

We are so lucky to be surrounded by this incredible natural landscape, so let's do all we can to keep our communities and properties safe from wildland fires this fire season. Share this information with your family and neighbours, and explore the full set of tips at www.ontario.ca/fireprevention.



Buying or Selling? Get WETT

with notes from Ian Myers (WETT Communications Committee & President of Myers Chimney), and Cade Associates Insurance Brokers

Creosote is a type of black or brown sooty residue that can build up in the inside of your chimney over time, as a byproduct of burning wood or fossil fuels. Creosote is toxic and exposure can lead to negative health impacts including irritated skin or eyes, but also respiratory issues or even cancer, according to studies of long-term exposure. Creosote is also a fire hazard – one of the leading causes of chimney fires internationally – because it is flammable and ignites at a high heat intensity that can weaken masonry or damage the flue lining of your wood burning system.

A Wood Energy Technology Transfer (WETT) Inspection® is an inspection of a solid-fuel-burning system, performed by a WETT-certified professional to determine compliance with applicable codes and standards, as defined by the SITE® (Table) guidelines. It includes an inspection of the condition of the system whether that be a fireplace, fireplace insert, woodstove, pellet stove, or outside boiler.

WETT professionals try to not use terms like 'safe' or 'unsafe', but the writers of Codes and Standards do not have that problem – in fact, all Code requirements are considered the minimums to keep your home or cottage safe. A WETT inspection includes an evaluation of the condition of the system including chimney deposits, but does not replace the need for chimney sweeping.

When to 'WETT':

The best advice that any real estate agent can give a potential cottage seller regarding their woodburning appliances and chimney systems is to get a WETT Inspection® before the property is listed.

Conversely, if you're buying a property with any wood burning system, insist upon a recent WETT Certified Inspection before agreeing to purchase; within 30 days is reasonable, noting that a WETT Inspection® is always a record of current conditions only. The inspection may be a basic visual inspection, or it may be a technical inspection that could include taking apart flue pipes, opening clean-outs, entering the attic to view additional system components, and/or assessing the chimney from the roof.

Buying or selling a property is stressful enough without having to make expensive upgrades at the last minute to complete a sale due to a less-than-thorough inspection performed by someone not WETT-certified®, only to discover the buyer's insurance company insists on this condition before issuing a Home Policy.

Plus, you will have the peace of mind of knowing you've taken the appropriate steps to protect your family's health and safety.





Lifejackets, Personal Flotation Devices and the Law

by John Gullick, Manager of Special Programs, CanBoat

It is sad to say that in about 85% of drowning deaths related to recreational boating, a personal flotation device (PFD) or lifejacket was not being worn and in many cases, there were none onboard the vessel. Nearly half (45%) of these incidents occurred within 15 metres of safety, and even more within 25 metres of safety. That means that if a person found themself unexpectedly in the water and they were wearing a PFD or lifejacket, they would have a good chance of initiating self-rescue or staying afloat and being seen when help arrived.

PFDs come in various styles suited to specific types of boating, so choose one that you will actually wear while on the water and underway. Some important considerations:

- there must be a PFD or lifejacket of an appropriate size and in good working condition for each person onboard any pleasure craft, whether powered or non-powered (including paddle boats and paddle boards)
- when the vessel is under way, all PFDs and lifejackets must be 'readily accessible' – capable of being reached easily and safely under emergency conditions – so don't keep them stored in a locker; have them close at hand, or better yet wear them
- a PFD or lifejacket that is required by the Small Vessel Regulations does not have to be an appropriate size for an infant who weighs less than 9 kg (20 lbs) or a person whose chest size is more than 140 cm (55 in)
- lifesaving cushions are not approved as safety equipment on any boat

Safety Equipment by Vessel Type

For quick access to all the rules and safety equipment required for different types of vessels – paddle, sail, PWC, power boat, etc. – visit https://www.smartboater.ca/, or download the Weather to Boat app (more on that, next page).

- all PFDs or lifejackets in Canada must be approved by the Canadian Coast Guard, Transport Canada, the Department of Fisheries and Oceans or any combination of the above, with the approval label permanently attached or printed on them (note: some PFDs and lifejackets are now approved for use across North America; check the label)
- PFDs and lifejackets cannot be altered in any way that compromises their original structural integrity or diminishes the integrity or readability of the approval label; therefore, if a PFD or lifejacket is badly faded or requires any sort of repair it must be rendered unusable by others, discarded, and replaced (for care and maintenance follow the manufacturer's instructions that are attached to each new PFD, or find instructions online).

Important Notes About Inflatable PFDs

A PFD or lifejacket that is required by the Small Vessel Regulations may be of an inflatable type only if it is worn at all times when under way, as follows:

- in the case of an open vessel: by every person on board at all times
- in the case of a vessel that is not open: by every person on deck or in the cockpit.

A person less than 16 years of age or weighing less than 36.3 kg (80 lbs) must use a PFD that is 'inherently buoyant' (floating without having to be inflated) and therefore cannot use an inflatable PFD where one must be carried onboard a pleasure craft. Finally, inflatable PFDs also cannot be used for white water paddling or onboard a personal watercraft (PWC), as in these cases the floatation device must also be inherently buoyant.

Fines for not having an approved PFD or lifejacket of the appropriate size and in good working condition can be well in excess of \$250 per person.

Final thoughts: PFDs and lifejackets do not work if you are not wearing them. Have a great time on the water this summer, and stay safe.

Links we Love

There are thousands of great apps out there, but here are just a handful of FOCA's current favourites, and – best of all – each of them is free.

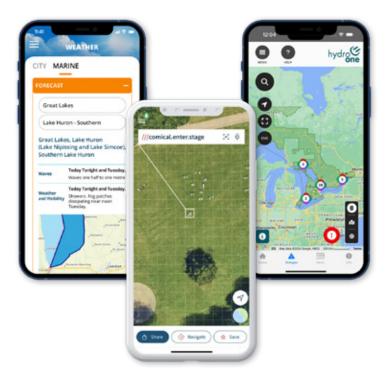
Whether or Not to Boat in this Weather

The Weather to Boat app, created by the Canadian Safe Boating Council, has more than just Canadawide weather updates. It includes loads of information to help make your boating experience safer and more enjoyable including pre-departure checklists, summaries of boat-specific safety equipment, and marina and public boat launch locations. It also has boating tips and videos on topics like preparing for a storm, night boating, stand-up paddleboard tips, and more. Get the app here: https://weathertoboat.ca/.

Preventing the Spread of Invasives: Check your Boat

While we're talking boats, check out the newlylaunched Check-In & Check-Out (CICO) boat cleaning instructions app from FOCA's Corporate Sponsor, CD3 Systems. Use the app yourself as a checklist of steps to clean potentially invasive plant fragments off various types of watercraft. Your association might choose to post a sign or distribute decals featuring a QR code that links to the app and can function as an information program for boaters as they arrive at your public boat access point. There is a paid version (the first month is free) in partnership with Fishbrain that provides boaters with incentives for completing the digital Check-In and Check-Out processes. No special equipment is required for the cleaning steps listed. Learn more about the options from links posted prominently on FOCA's webpage: https://foca.on.ca/boating/.





Hydro One Storm Centre App & Alerts

Hydro One delivers electricity to much (but not all) of Ontario cottage country. Use the free *Hydro One Storm Centre* app to check power outage information around the clock. Hydro One customers can also sign up for email or SMS text alerts when the power goes out, and updates about when you can expect it to be back on. Find details online here: https://www.hydroone.com/power-outages-and-safety/mobile-apps.

What3words Could Find You?

The what3words app is a geolocation system that divides the world into a grid of 3 by 3 metre squares, each identified by a unique combination of three words. It has been praised by first responders for enabling the public to provide a quick accurate description of their location, without relying upon long, complex GPS coordinates. Although a call to 911 still requires cell service, the app will function without a data plan in offline mode. Learn more here: https://what3words.com/.

Healthy Shoreline Tips

What makes a healthy shoreline, and what puts shoreline health at risk? If you know someone who recently bought a waterfront property, please ensure they see this list.

To preserve the lake environment that brought us to the lake in the first place, we need to understand our impacts, and know how to reduce them.

Some decisions can have big implications for water quality. For example, if you remove forested areas on your property, it affects how much rain and runoff sweep into the lake during extreme weather events. This affects wildlife and may lead to algae blooms that prevent everyone from enjoying the water. Consult FOCA's webpage for more information: https://foca.on.ca/shorelines-stewardship.

For more about healthy shorelines, plan to join us at FOCA's 2024 virtual Fall Seminar!

Top 5 Tips

- 1. leave the manicured lawn in the city and adopt a natural vibe at the lake
- 2. reduce nutrient runoff into the lake by keeping a naturalized shoreline as a buffer
- **3.** don't use toxic herbicides or fertilizers that damage water quality and the local wildlife
- **4.** use phosphate-free soaps and avoid antibacterial ones if you're on a septic system; also, never bathe in the lake!
- **5.** learn how to maintain your septic system: https://foca.on.ca/septic-systems.



Register to join us (\$40 members/\$70 non-members): https://foca.on.ca/events/#upcoming

INFORM. PROTECT. UNITE.

FOCA's membership represents Ontario's 250,000+ waterfront property owners through cottage associations, road associations and individual supporters, whether seasonal or year-round residents of their rural communities.

In the face of increasing challenges, our purpose is to empower dedicated stewardship of our lands, lakes and rivers, while protecting Ontario's cottage culture, heritage and way of life. We do this through advocacy, programs and resources.

Support our movement by joining us, donating, subscribing to our newsletter, and following our social channels.









Take action today and make a difference for all road, cottage, camp, and waterfront property owners. https://foca.on.ca



705-749-3622 • info@foca.on.ca https://foca.on.ca