




# THE MEMPHRÉ



## Memphrémagog Conservation

MAY 2025

Fitch Bay, Lake Memphremagog. Source: Nawfel Touil

 [memphremagogconservation](#)  
 [memphremagog.conservation](#)  
 [www.memphremagog.org](#)

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**15 hectares  
protected  
in perpetuity**

Source: Corridor-appalachien



# President's message

Dear readers,

You are holding the 2025 edition of our annual Newsletter. Since 1967, MCI's mission has animated our team, be they volunteers, employees, or interns. This edition is a testament to that! While we are proud of our successes, achievements, and projects, we also want to share our concerns about our role in protecting Lake Memphremagog and its watershed.

In the current political context where water is coveted and sometimes threatened, it is crucial to remind everyone of its value. Borders and international treaties are subject to questioning, and a sense of unease is looming. Canada holds 20% of the world's freshwater resources, and Québec holds 3%. Our water, a source of life, is a precious treasure.

Did you know that the water from Lake Memphremagog, sharing a border with the United States, supplies nearly 185,000 Canadians every day? These people live in Sherbrooke, Magog, Pottou, and elsewhere.

Did you also know that the quality of this water depends directly on how we use the land within the Lake Memphremagog watershed, which covers nearly 1,800 km<sup>2</sup>? As water travels through mountain peaks, marshes, fields, roads, buildings, cities, golf courses, contaminated sites, etc., it picks up various components that eventually reach Lake Memphremagog. Therefore, the quality of our water depends on the status and use of its watershed.

This global vision allows us to identify our current issues and address them as opportunities for concrete action. This newsletter is proof of that.

That is why we are developing the Lake Memphremagog watershed conservation plan, actively participating in the protection of natural environments and emphasizing healthier riparian zones. We are also concerned with the threat posed by the Coventry landfill site, the only landfill site in the state of Vermont. Our numerous collaborations testify to our commitment. MCI's message has never been more relevant.

I would like to acknowledge and thank the generosity of our members, donors, and numerous partners. You are essential to our work. Thanks to you, we can hire a dynamic team of employees who are dedicated to our mission. Please note that we have also set up a new user-friendly and dynamic donation platform. Continue to support us!

We hope that the following pages will convince you of the importance of our mission! Happy reading!

**Johanne Lavoie**, Volunteer President



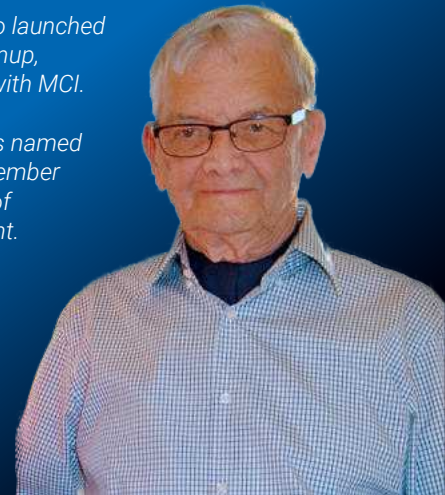
## Convocation to the annual general assembly

The members of MCI are invited to the annual general assembly which will be held on Saturday, June 14, 2025, from 9:30 a.m. to 11:30 a.m., at the Ovila-Bergeron room of the Magog community centre located at 95 Merry Street North in Magog. On the agenda: the review of the year 2024-2025, our various projects planned for 2025 as well as our struggles and achievements. Register now on our website at: [memphremagog.org](http://memphremagog.org). We look forward to seeing you there!

MCI wishes to pay tribute to the late Marcel Courchesne, one of the first active members of the organization alongside the founders.

In 1973, he also launched Operation Cleanup, in connection with MCI.

In 2017, he was named an honorary member in recognition of his commitment.





# Members of the Patrol 2025

For the 53rd year, the members of the MCI patrol will be active in carrying out various projects aimed at protecting Lake Memphremagog and its watershed. Re-vegetation of riparian strips in residential areas, water quality sampling, citizen awareness, and much more: the team will have a busy summer!

This year, the patrol team will consist of a project manager in ecology, a bioecology technician, and three ecology students.

We invite you to contact us for any observations on the lake during the summer season, by phone at 819-620-3939 or by email at [patrol@memphremagog.org](mailto:patrol@memphremagog.org).

Thank you for your valuable collaboration!



Claudie Ouellet, field agent 2024, sampling the lake's water quality.



**Chanel  
Racine-Mineault**

A graduate in ecology from the University of Sherbrooke, Chanel is a biologist and has been a project manager at MCI for over two years. This summer, she will coordinate the patrol and be responsible for several projects, including the re-vegetation of riparian strips in residential areas.



**Gabrielle  
Bousada**

A bachelor's student in ecology at the University of Sherbrooke, Gabrielle is interested in the environmental issues of aquatic environments. Enthusiastic about working in a team, she joins MCI this summer as a field agent. Welcome to the team, Gabrielle!



**S  lina  
Rodrigue**

In the process of obtaining a bachelor's degree in ecology at the University of Sherbrooke, S  lina wants to develop her field skills and deepen her knowledge of invasive exotic aquatic species. Committed to public awareness, she joins MCI this summer as a field agent. Welcome to the team, S  lina!



**Ang  lique  
Guillemette**

A graduate in bioecology techniques, Ang  lique worked for MCI in 2020 as part of the study on sport fishing. Passionate about the conservation of aquatic environments, she returns this summer to supervise field activities and support Chanel in coordinating the patrol.



**Ma  lie  
Mass  **

Currently a bachelor's student in ecology at the University of Sherbrooke, Ma  lie wants to gain experience in conservation. Passionate about outdoor work, she joins MCI this summer as a field agent. Welcome to the team, Ma  lie!

## Evaluation of the carrying capacity of recreational boats on Lake Memphremagog

Following the submission of the MCI brief "Navigating Troubled Waters: The Case of Boating on Lake Memphremagog," which examined the issues of usage conflicts and environmental impacts related to the waterway's traffic, MCI has launched a new project to evaluate the carrying capacity of recreational boats on Lake Memphremagog. MCI is proud to welcome Ms. Dulce Krystal Mendoza P  rez, a graduate in natural resource management and a master's student in international ecology at El Colegio de la Frontera Sur, who will work on this project until the fall of 2025.



**Dulce  
Mendoza Perez**



# Riparian Action:

## A Sustainable Initiative to protect the Lake

Since its launch in 2023, MCI's Riparian Action project has aimed to revegetate residential riparian (shoreline) zones to reduce phosphorus inputs and improve the quality of Lake Memphremagog's water. This initiative also supports local biodiversity by restoring riparian environments in Lake Memphremagog and its watershed.

### 2024 Results

In its first year, 2024, the project revegetated six riparian zones covering an area of 2,392 m<sup>2</sup> by planting 5,355 plants and sowing 734 m<sup>2</sup> of native herbaceous plants.

### Project Growth in 2025

This year, the project has gained in popularity among residents! About ten new property owners have expressed their willingness to revegetate their shores, demonstrating the positive impact and increased interest in this initiative. Last summer, several properties were analyzed by MCI's field team, and development plans tailored to the specific needs of each property were developed.

This spring, from mid-May to mid-June, about ten plantings will be carried out by members of MCI's patrol, in collaboration with the property owners. As in the previous year, a wide variety of native plant species adapted to the shore will be planted.

MCI's team, students from La Ruche's CFER, city of Magog staff and residents of the Club Memphr , working together to revegetate Club Memphr 's shoreline on June 5th, 2024.

Source: Dany Jacques, Le Reflet du lac.

Thanks to the commitment of the residents and the sustained efforts of MCI's team, this project continues to generate tangible results that will benefit Lake Memphremagog for years to come. Riparian Action has also contributed to informing and raising awareness among various stakeholders, such as residents, volunteers who participated in the plantings, citizens present at a webinar on riparian zones, as well as those influenced by our various communication tools such as publications on our social networks, newsletters, and our website.

If you are a shoreline property owner on Lake Memphremagog or one of its tributaries, or if you are in the watershed and wish to benefit from support for the revegetation of your riparian zone, do not hesitate to contact us at [bandesriveraines@memphremagog.org](mailto:bandesriveraines@memphremagog.org).



2024 planting effort







## Join the Flow project

MCI is proud to be the main partner of the Join the Flow project, an initiative of COGESAF. Members of our team will analyze rainwater management on your property and provide practical advice to improve your impact on Lake Memphremagog.

# Together, let's protect Lake Memphremagog!

Are you a shoreline property owner on Lake Memphremagog?  
Join the brand-new Join the Flow project!

The Join the Flow program invites you to take simple and concrete steps to preserve the quality of the lake's water through better rainwater management on your property. By joining this movement, you will have access to practical advice and tools to better protect our (your) precious environment.

### 1. Obtain a free analysis

At no cost and obligation-free, obtain a stormwater management analysis for your property.

### 2. Discover the best practices

Our experts will help you identify them to reduce your environmental impact and protect the lake.

### 3. Sign up today!

To learn more and schedule an appointment!  
[cogesaf.qc.ca/projets/joignezreseau](https://cogesaf.qc.ca/projets/joignezreseau)



Ce projet a été réalisé avec l'appui financier de  
This project was undertaken with the financial support of



Agence de l'eau  
du Canada

Canada  
Water Agency



## Long-term water quality monitoring on Lake Memphremagog.

For the past 25 years, MCI has had a team on the lake taking water samples in partnership with the ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs (MELCCFP). Below is a summary of their latest results.

"The long-term monitoring of Lake Memphremagog by the Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs (MELCCFP), in partnership with MCI, aims to monitor the lake's trophic status. Trophic state is used to classify a lake according to its level of biological productivity. A lake's trophic state can range from ultra-oligotrophic (low productivity) to hyper-eutrophic (high productivity). Since 1999, concentrations of total phosphorus, chlorophyll *a*, and dissolved organic carbon, as well as Secchi depth (lake transparency) have been monitored at ten stations in Lake Memphremagog on four occasions in the summer.

Data collected in 2023 indicate that trophic status was more advanced in the southern sector (mesotrophic to eutrophic) than in the northern sector (oligotrophic to mesotrophic) of the lake. Since 2016, the MELCCFP has observed several exceptionally high values of chlorophyll *a* at eight of ten monitoring stations (Figure 1). The ministry will explore possible causes of these observations in the coming years."

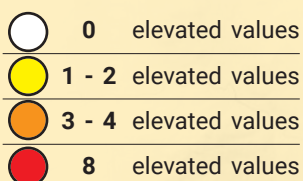
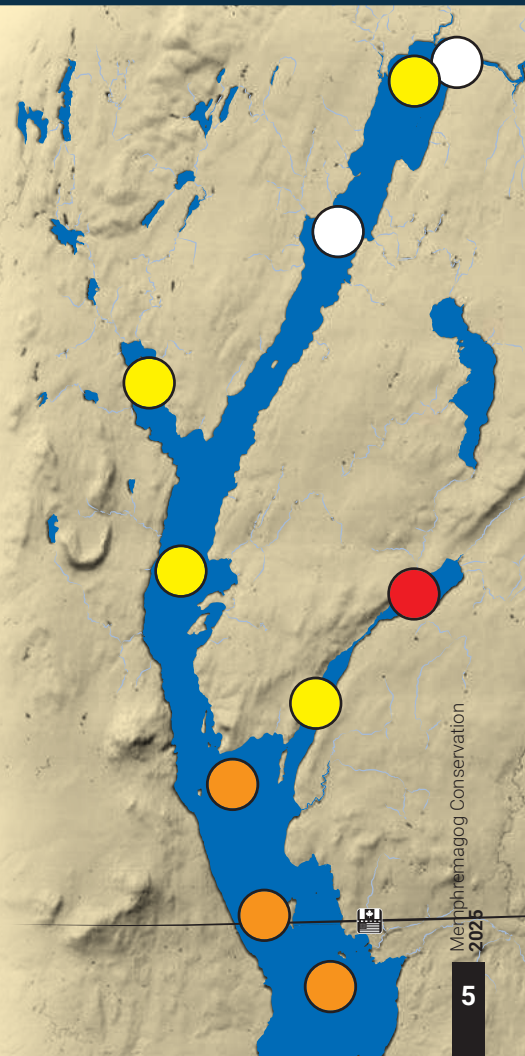


Figure 1. Number of values of chlorophyll *a* collected between 2016 and 2023 that were significantly greater than long-term historical means (1999 to 2015).





# The Essential Tool for **conservation** in the Lake Memphremagog Watershed

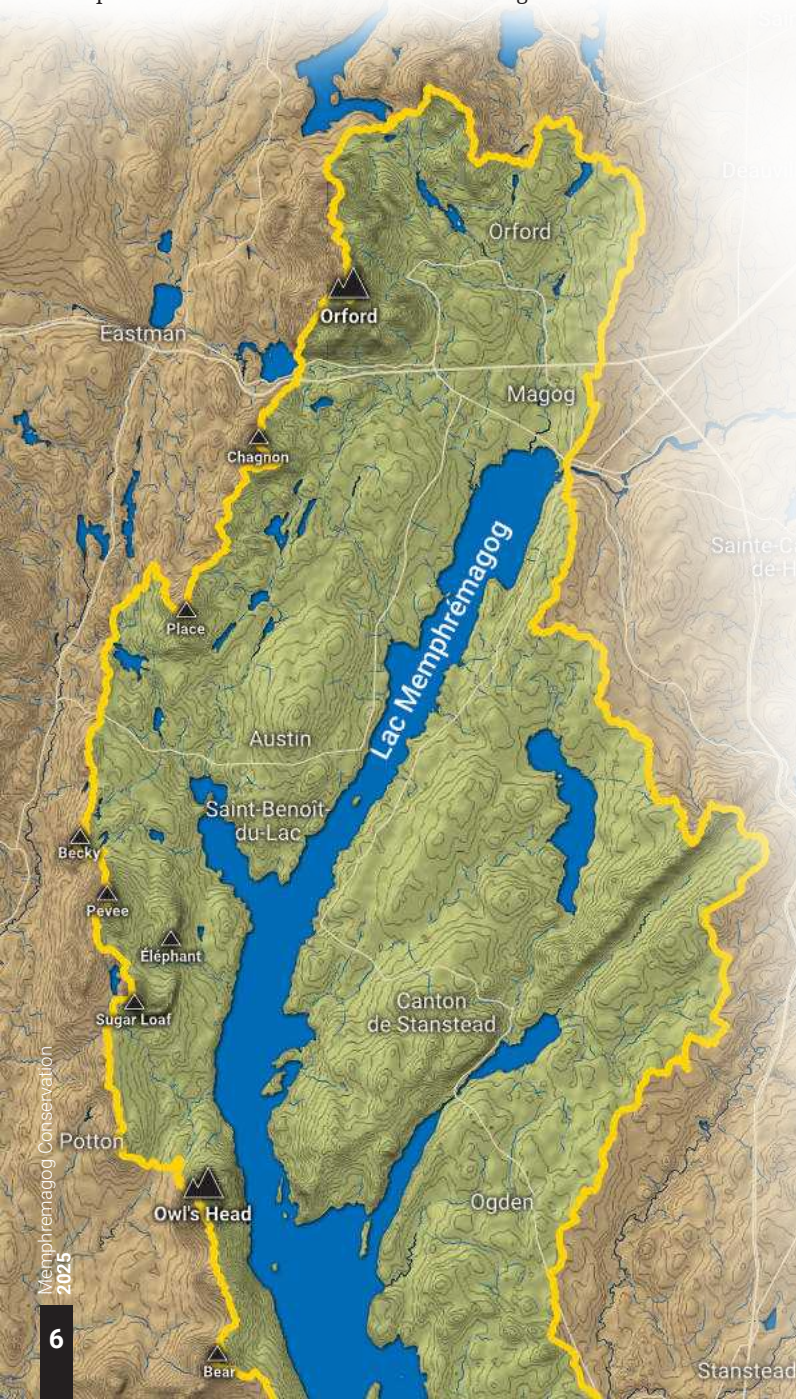
MCI is in the process of developing a conservation plan for the Canadian portion of the Lake Memphremagog watershed. This important document, scheduled for 2026, will present an overall portrait of the distribution of elements of ecological interest on the territory, identify natural environments of high ecological value or sensitive to certain forms of development, and establish priority conservation targets for the years to come. The conservation plan will include, among other things, a strategy and an action plan that will serve as a decision-making tool.

MCI has long identified the importance of developing such a tool to better oversee and accelerate its conservation initiatives in the watershed. This was in line with one of the recommendations of the International Joint Commission (IJC) study, written and coordinated by MCI and the Memphremagog Watershed Association (MWA), on nutrient inputs and their impact on Lake Memphremagog (2020). The study indicated that it was imperative to take swift and decisive action to reduce nutrient loading throughout the watershed and recommended the development of a natural environment conservation plan. To do this, it is necessary to identify the natural environments of the Lake Memphremagog watershed that provide the essential ecological services, prioritize these and implement programs and incentives to conserve and restore these environments.

To carry out the conservation plan, which turned out to be a major undertaking, MCI called on its team of experienced biologists as well as a geomatics consultant experienced in the analysis of geomatics data. A technical committee made up of the Nature Conservancy of Canada (NCC), Appalachian Corridor, the Conseil de gouvernance de l'eau des bassins versants de la rivière Saint-François (COGESAF), the Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs (MELCCFP) and the Agence de mise en valeur des forêts privées de l'Estrie (AMFE) also provided essential expertise to the content and quality of the work. To develop the strategy and action plan, other stakeholders working in the watershed from the agricultural, forestry and municipal sectors will be called upon in the coming months.

This project received financial support from Environment and Climate Change Canada as part of the project "The Northern Green Mountains: Towards Land Use Planning for the Protection and Recovery of Species at Risk", coordinated by ACA. It was also made possible thanks to the financial contribution of the MELCCFP, as part of the Natural Environment Partnership Project.

*Francine Hone, Biologist*



Québec

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This project is funded in part by the Government of Canada



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# Concrete actions in the Tompkin's Creek sub-watershed!

Tompkin's creek wetland. Photo Credit: Neils Jensen.

The watershed of Lake Memphremagog, in its Canadian portion, is an immense territory of nearly 516 km<sup>2</sup>. Although MCI is concerned with the entire territory, certain sectors have been the subject of sustained efforts for several years. This is the case of the Tompkin's Creek sub-watershed located in the southeastern portion of Lake Memphremagog.

It is a territory with undeniable ecological value, characterized by large areas of wetlands and forests, as well as numerous watercourses and bodies of water. Conservation actions are even more important today given the impacts of climate change, which could lead to changes in the balance of ecosystems and impact biodiversity. This pressure is added to other threats, including real estate development, which has seen a significant increase in recent years in the Lake Memphremagog watershed.

## Better understanding the territory

One way to support conservation is to acquire new ecological knowledge to better guide conservation actions. This is what MCI and the Memphremagog Nature Foundation (MNF) achieved in 2024 by conducting inventories to characterize certain natural environments and confirm the presence of certain species, some of which are endangered.

## A community committed to protecting natural environments

There is an increasing interest within the community for conservation, particularly among certain private landowners and municipalities who want to get involved and carry out concrete conservation actions. MCI supports these actions by providing information on conservation options during meetings with landowners and supporting their efforts to protect their property. In fact, some landowners have already committed to a process that will result in the perpetual protection of their property: a voluntary choice that has repercussions for the entire community!

To carry out this project, MCI received financial support from the Fondation de la faune du Québec as well as from the Government of Canada through the federal Ministry of Environment and Climate Change as part of the project "The northern green mountains: Towards land management for the protection and recovery of endangered species," coordinated by Appalachian Corridor.

*Francine Hone, biologist*



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## Tompkin's creek private nature reserve: an example to follow

In 2014, thanks to the commitment of its owners and the support of MCI, 50 hectares of forests, wetlands, and waterways were protected in perpetuity. The group of neighbors, who bought the land 25 years ago, chose to have most of their property recognized as a private nature reserve. Located in the Tompkin's creek wetland,

this protected area helps preserve biodiversity and maintain the quality of Tompkin's Creek's water, a tributary of Lake Memphremagog. By engaging in a similar approach, other owners could protect the fragile natural environments they care about, while also benefiting from interesting financial and tax advantages.



# MCI and the Memphremagog Nature Foundation unite to protect the natural environments of the Lake Memphremagog watershed!

Memphremagog Conservation (MCI) and the Memphremagog Nature Foundation (MNF) (formerly the Memphremagog Wetlands Foundation), which operate in the same region of the Lake Memphremagog watershed and share a common vision of conservation, will now collaborate thanks to their complementary roles. This new cooperation will undoubtedly promote conservation actions in the watershed and accelerate the pace of protecting natural environments. It should be noted that only 10% of natural environments are protected in the

watershed: a statistic that both organizations would like to see increase in the short and medium term. This new alliance is therefore welcome in a context where many challenges must be met to preserve biodiversity, limit the impacts of climate change, and protect Lake Memphremagog's water quality. For MCI, which has 58 years of experience and undeniable expertise in protecting the environment of Lake Memphremagog's watershed, and MNF, which has been protecting and managing natural environments through legal agreements for

many years, it is a winning formula. Although the two organizations are distinct and independent entities, they are joining forces for specific conservation actions in the watershed.

*Johanne Lavoie, Volunteer President of MCI*  
*Judy Hopps, Volunteer President of MNF*



Memphrémagog  
Conservation



FONDATION • FOUNDATION  
**NATURE**  
MEMPHRÉMAGOG

## New communication tools to inform landowners

Private landowners are at the heart of MCI and MNF's approach to preserving the natural environments of the Lake Memphremagog watershed. To better inform them, our two organizations have partnered to produce pamphlets that cover various conservation options. Thus, legal tools such as the ecological donation of land, the conservation servitude, the sale of land to a conservation organization, and the private nature reserve are presented along with their associated financial and tax benefits. Testimonials from landowners who have protected some or all of their property are proof of the spirit of this personal approach. If you are interested in conserving your property, contact us! MCI and MNF will be happy to answer your questions about protecting the natural

environments of your property. Additionally, if you wish to obtain these pamphlets, they are available on the MCI website at [www.memphremagog.org](http://www.memphremagog.org), and you can contact us to obtain them at [conservation@memphremagog.org](mailto:conservation@memphremagog.org).

This project was carried out as part of the Accelerating Conservation in Southern Quebec (ACSQ) project, for which Nature Conservancy Canada received financial assistance of more than \$144 million from the Quebec government.

*Ariane Orjikh, Executive Director of MCI*



Québec 





# Nearly 15 hectares **protected in perpetuity** in the Lake Memphremagog watershed

The Memphremagog Nature Foundation (MNF) and Memphremagog Conservation (MCI) are proud to announce two new conservation acquisitions in the municipality of Ogden, totaling nearly 15 hectares near Lake Memphremagog. This conservation success is the result of a unique partnership between key partners, including the local community and Appalachian Corridor.

These new protected areas add to the territories already protected by the MNF, many of which have been protected in partnership with MCI. This project was funded in part by Environment and Climate Change Canada through the Community Nominated Priority Places for Species at Risk program of the Canada Nature Fund.

## **The invaluable contribution of the community**

The local community also contributed to the purchase of the properties. Indeed, a turning point in this conservation project was undoubtedly the commitment and participation of individuals from the community, who are also property owners, who pledged to preserve a place that is now part of our protected natural heritage. Their financial contribution, among other things, served as leverage to obtain funds from other financial partners.

## **Water quality and climate change: challenges to be met**

This protected area located in the Lake Memphremagog watershed promotes the quality of the lake's water, a major source of drinking water for the region. Indeed, forest environments, wetlands, and riparian zones of watercourses offer several ecosystem functions such as water flow regulation and filtration of runoff water.

These newly protected natural environments will help fight climate change thanks to their carbon capture potential and mitigate the effects of extreme climatic episodes, such as heat waves and floods.

These new protected areas also demonstrate that it is possible at the local and watershed levels to address global issues such as biodiversity loss and climate change.

## **Biodiversity protected forever!**

The creation of these new private protected areas will preserve natural environments of interest, including forests, wetlands, and watercourses, in perpetuity.

Several species inventoried in the sector are threatened, such as: the wood thrush and the eastern wood-pewee, two forest birds; the bald eagle, a diurnal bird of prey; several species of bats; and flora such as the Northern Maidenhair Fern and Canada Wild Ginger.

*Johanne Lavoie, Volunteer President of MCI*  
*Judy Hopps, Volunteer President of MNF*

Sheffer-Sladen protected area.

Ce projet est financé en partie par le gouvernement du Canada  
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# Coventry landfill site: The five years of the moratorium

It has now been five years since the efforts of MCI volunteers and the organization Don't Undermine Memphremagog's Purity (DUMP) resulted in the signing of a moratorium on the final destination of leachate, also known as 'garbage juice.' Thus, the leachate collected from the waste site no longer flows into our watershed and cannot be treated at the wastewater treatment plant in Newport on Lake Memphremagog. On the night of October 31 to November 1, 2019, four volunteers, through their efforts worthy of David versus Goliath, negotiated this agreement with a company that has a turnover of nearly \$1.6 billion and has nine registered lobbyists with the state of Vermont.

## But what is happening today?

A leachate pretreatment plant has been operating at the Coventry site since September 2023. In February 2024, a leachate spill occurred in the temporary facility and spread to the nearby environment at the site. After a temporary shutdown, operations resumed in a permanent building. This year, the company submitted a new request to the Vermont authorities to increase the storage of PFAS concentrate from the treatment. A public consultation took place on March 12, and we were present.

## Monitoring

On March 27, 2025, we submitted a document questioning the storage design and raised questions about crisis management procedures. At the same time, we reiterated the relevance of the brief we submitted on December 21, 2023. In short, our two organizations seize all legal opportunities available to us to analyze the documents and hold those responsible to account to ensure that the moratorium is maintained.

## A plant spilling into Lake Memphremagog?

Our main concern is that this plant, which will only treat a portion of the contaminants that are hazardous to health, could eventually dump the treated, but still toxic, leachate into our watershed. It is also legitimate to wonder what will happen to the leachate from other sites managed by the same company, Casella Waste Management, given that this new plant offers new treatment techniques. Will it allow its Coventry facility to treat leachate from other landfills, including its own outside of Vermont?

*Johanne Lavoie B.Sc.A., D.E.S.G., Volunteer President, MCI*

*François Bélanger B.Sc.A., M. Ing. Env, Volunteer consultant to MCI*

*Antonio (Tony) Di Fruscia, ing., M. Ing., Volunteer technical consultant to MCI*

Coventry landfill site.

Source : images Denis Gervais, Noovo Info



## Think about it

Quebec closed its waste site at Lake Memphremagog in 2010. MCI had lobbied for this by filing a brief with the BAPE in 2007. This closure was also the wish of the citizens, whose drinking water comes from Lake Memphremagog and who refused to have their water affected by a landfill. Why would these same citizens accept that their water be polluted by the Coventry site?



## News from DUMP

DUMP's ongoing efforts are focused on restoring and protecting the waters and watershed of Lake Memphremagog from environmental contamination, including the threat posed by the Coventry landfill. DUMP demands accountability from the Natural Resources Agency and policymakers to promote environmental protection and justice for communities in the Memphremagog watershed. Two advances which are attributable to DUMP's efforts.

**Legal opinion:** DUMP is fighting NEWSVT (Casella – owner of the Coventry site) to enforce Act 250 jurisdiction over the installation of the leachate pre-treatment plant at the Coventry landfill. In January 2025, the Act 250 District Coordinator issued a jurisdictional opinion requiring an amendment to the permit for the installation and operation of the pre-treatment system, thereby allowing public participation in March. NEWSVT appealed the decision, forcing DUMP to hire lawyers to continue the fight.

**Crisis lake:** DUMP continue their efforts to have Lake Memphremagog declared a 'Crisis Lake' by the State of Vermont, which would bring more resources for the protection of the lake.

Follow us on our website and Facebook page to learn more and support us. [www.nolakedump.com](http://www.nolakedump.com)

Chris Jacobs, Ed Stanak, Teresa Gerade, Ann Lembo, Gillian Staniforth, Directors of Don't Undermine Memphremagog's Purity

## New Standards for Drinking Water in Canada

In August 2024, Canada adopted new regulations for maximum concentrations of perfluorinated substances in drinking water. Several other countries, such as the United States, have also adopted new standards in this regard. There is a large and growing mobilization to limit their presence. The scientific literature is clear that even at low concentrations, perfluorinated substances are extremely dangerous to health. It is therefore imperative to limit any potential input of such pollutants into a drinking water source. And when we know that PFAS-laden leachates are discharged into a body of water used as a source of drinking water, the presence of these so-called "eternal pollutants in the environment" becomes all the more important.

## Phragmite Control in Fitch Bay

To protect the biodiversity and important wetlands of Fitch Bay, MCI is launching a project to intensify Phragmite control for the next three years. Carried out since 2017, the control activities aim to limit the encroachment of this exotic plant, present in the bay's eastern coastline. The colony measured approximately 6,000 m<sup>2</sup> in 2017, it is estimated that it was less than 2,000 m<sup>2</sup> in the summer of 2024. The aim is to intensify the manual control of phragmite colonies in the shoreline for three years by removing the roots and ensuring proper transport of the removed plants. This project involves a diverse team of MCI members, volunteers, and local partners, all trained to ensure effective interventions. If you would like to participate in this project, please do not hesitate to contact us at [info@memphremagog.org](mailto:info@memphremagog.org). This project was carried out thanks to the financial contribution of the Fondation de la Faune du Québec.

*Ce projet a été réalisé grâce à la contribution financière de la Fondation de la Faune du Québec.*



Chanel, MCI biologist, manually removing phragmites.

Phragmite root system.



## Promotional articles

MCI's promotional articles are once again available!

Discover our selection at [www.memphremagog.org/en/promotional-articles](http://www.memphremagog.org/en/promotional-articles)

To place an order, contact us at [patrol@memphremagog.org](mailto:patrol@memphremagog.org) or at 819-620-3939.



# Studying exotic snails in Lake Memphremagog

Lake Memphremagog is facing the proliferation of invasive exotic species that threaten its aquatic ecosystem. A team of biologists from MCI conducted a study from 2022 to 2024 on the populations of exotic snails, namely the Chinese mystery snail (*Cipangopaludina chinensis*), detected in 2012, and the Banded mystery snail (*Viviparus georgianus*), reported in 2019. The study aimed to assess their abundance and distribution on the Canadian side of the lake and formulate recommendations to limit their impacts on aquatic biodiversity.

## Study results

The project revealed the presence of the Banded snail throughout Lake Memphremagog, with 37,680 individuals collected in 94.4% of the sampled stations. By comparison, the Chinese snail was observed at only one station in Greene Bay in Austin.

Between 2022 and 2024, the abundance of both species increased, which is generally attributable to the absence of natural predators or competitors.

The monitoring also collected data on the habitat of these mollusks, including vegetation and the type of substrate present.



Banded mystery snail



## Chinese Mystery snail mass removal in Greene Bay, Austin

In 2024, MCI's team, accompanied by several volunteers, conducted two days of mass removal of Chinese snails in Greene Bay in Austin to limit their spread to other areas of Lake Memphremagog. This control effort resulted in the collection of 1,249 Chinese snails, as well as 4,175 Banded snails at this site. In the summer of 2025, this mass removal activity will continue. Contact us at [info@memphremagog.org](mailto:info@memphremagog.org) should you wish to participate!

To consult the full report, go to the "Documentation" section under "Studies of the lake" on our website. This project was carried out thanks to the financial contributions of the municipalities of Austin, Pottton Township, Stanstead Township, Ogden, the City of Magog, and the Memphremagog MRC.

## Prevent the introduction of aquatic invasive species (AIS)

AIS threaten the health of our aquatic ecosystems. To avoid their spread, adopt good habits when changing lakes:

- ✓ **WASH** your boat, motor and equipment with a pressure washer or with hot water.
- ✓ **DRAIN** water from all compartments, coolers and outboard motors.
- ✓ **DRY** your boat and equipment completely before launching in a different lake

**Every action counts protecting your waterways!**

## List of aquatic invasive species present in Lake Memphremagog

- Zebra mussels
- Eurasian water milfoil
- Crisp leaved pond weed
- Chinese Mystery snail
- Chinese Banded snail
- White perch

## The White Perch

The white perch is an invasive exotic species found in large numbers in Lake Memphremagog. Its fishing is encouraged, as it helps to control its population and protect local species. This fish, which tastes like yellow perch, is delicious and can be caught in large quantities, with no catch limit. It's also a great family fishing activity





# Wildlife Monitoring by MELCCFP in the Lake Memphremagog Watershed

## Threatened and Vulnerable Species

To ensure the conservation of wildlife in the Lake Memphremagog watershed, the Ministry of the Environment, the Fight against Climate Change, Wildlife and Parks (MELCCFP) carries out various wildlife projects, in addition to the actions taken by MCI. The monitoring of threatened and vulnerable species has been continuously conducted for several years. These efforts have so far allowed the evaluation of the presence of the bridge shiner in the lake, the four-toed salamander in wetlands, and the purple salamander in the watershed's streams. The northern flying squirrel and the northern ring-necked snake have also been searched for in certain wooded areas around the lake. For confirmed sightings, we invite you to consult the carte du Centre de données sur le patrimoine naturel du Québec.

## Exotic Invasive Aquatic Species (EIA)

Prevention and early detection allow for appropriate interventions to limit and counteract the invasion of Lake Memphremagog by exotic invasive aquatic species. Thus, the MELCCFP ensures monitoring through environmental DNA sampling, a technique used to isolate DNA sequences in water samples. The MELCCFP also participated in a provincial project on the use of Eurasian watermilfoil beds (an invasive aquatic plant) by fish, with some sampling sites in Lake Memphremagog.

Identification of Aquatic Plants in the Project Comparing the Use by Wildlife of Eurasian Watermilfoil Beds and Native Plant Beds in Lake Memphremagog.

## Lake Trout Reproduction Rate in Lake Memphremagog

To understand the causes of the low reproduction rate of lake trout in Lake Memphremagog, a research project was initiated in 2021. The first step involved characterizing lake trout spawning habitat around the lake. The use of the most promising spawning grounds by lake trout was then validated by searching for spawners and eggs. An evaluation of the survival of eggs and larvae was also conducted using experimental devices in which fertilized eggs were placed and protected from predation. This showed that the survival rate of eggs and larvae in such devices was very good. The next step of the project will aim, among other things, to evaluate the survival of eggs under natural conditions.

## New Biologist Dedicated to the Lake Memphremagog Watershed

A new biologist joined the Eastern Townships team of the MELCCFP in 2024. Véronique Connolly will work within the framework of the Quebec Water Strategy, one of the seven aspects of which is to protect and restore aquatic environments. Her work will contribute to the realization of projects aimed at acquiring knowledge about wildlife species in the Lake Memphremagog watershed. She will also ensure continuous collaboration with Vermont biologists and coordinated management of this transboundary lake.

Finally, the MELCCFP wishes to highlight the continuous collaboration of MCI in several of its wildlife monitoring efforts in Lake Memphremagog and its watershed.

*Véronique Connolly, Marie-Josée Goulet, and Jean-Sébastien Messier, biologists, MELCCFP*



Installation of experimental equipment for the incubation of lake trout eggs in Lake Memphremagog





# HERITAGE CIRCLE MEMBERS

## 2025 Calendar

**May 5:** Start of patrol activities

**Mid-May:** Start of water quality sampling and surveillance of protected areas of the lake

**May 17 from 10 AM to 3 PM:** Free tree distribution at l'Association du Marais-de-la-Rivière-aux-Cerises (LAMRAC) in Magog

**Mi-May to mid June:** Planting of shoreline buffer zones in the Action bandes riveraines project

**June 7:** MCI Kiosk at Stanstead Township's neighbourhood party

**June 14:** MCI's Annual General Assembly at the Magog community centre

**Juin 23:** MCI Kiosk at the St-Jean-Batiste celebration at Forand park in Stanstead Township

**June 28:** MCI Kiosk at Georgeville's Canada Day celebrations

**June to August:** Awareness campaign in bays and at boat launch locations

**Beginning of July to end of August:** Phragmite control activities in Fitch Bay

**July 12:** MCI Kiosk at Potton's beach party

**July 18:** Massive snail removal activity in Greene Bay in Austin

**August 9 from 1 PM to 5 PM:** MCI Kiosk at Magog's water festival

**August 10 from 10 AM to 4 PM:** MCI Kiosk at Magog's public market

**August 12:** MCI Kiosk at Vale Perkins' beach party.

**October:** End of activities on the lake

Contact us for more information on upcoming activities this summer at [info@memphremagog.org](mailto:info@memphremagog.org) or at 819-620-3939

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 [www.memphremagog.org](http://www.memphremagog.org)

## A new portal for MCI members!

We are excited to introduce our brand-new online portal! Designed to simplify your experience, it allows you to renew your membership in a few clicks and easily access your information and tax receipts, all online. Fast, convenient and eco-friendly.



Access the MCI Member Portal now! Scan this QR code to become a member, to renew your membership or to donate. Its tax deductible!

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*In addition to those mentioned, certain donations were made anonymously.*

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## THANK YOU TO OUR MAIN PARTNERS!

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Conseil régional de l'environnement de l'Estrie (CREE)  
Nature Conservancy of Canada (NCC)  
Appalachian corridor (ACA)  
DUMP (Don't Undermine Memphremagog's Purity)  
Memphremagog nature foundation (MNF)  
Memphremagog Watershed Association (MWA)  
Regroupement des associations pour la protection de l'environnement des lacs et des bassins versants (RAPPEL)  
Réseau des milieux naturels protégés (RMN)

The municipalities of Austin, Potton Township, Stanstead Township and Ogden,  
The cities of Magog and Sherbrooke  
The Memphremagog MRC  
The government of Québec  
The government of Canada

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