



A time of self assessment at MCI

Dear friends,

For several months now, the volunteers at MCI have been getting ready for the 2016 season, one that brings with it a number of challenges, not the least of which is the impact of global warming on the lakes of the region.

Your Board of Directors is putting together a few activities to celebrate our 50th anniversary in the summer of 2017, honouring the work of our founders, our members and the experts who counsel us. We are in a period of reflection regarding our mission and the priorities that will guide us over the coming years. We will be speaking more about this at our annual general meeting. Please attend! Our bylaws have not been updated since our founding in 1967. We will be reviewing them, making any necessary adjustments, taking into account new laws governing non-profits such as ours.

Our main work continues to be preserving the lake, one of the most beautiful in Québec.

We will be continuing our collaboration with our American friends at the MWA, our equivalent on the American side of the lake. We will also continue to be a strong voice on the Québec-Vermont committee. MCI, thanks to the quality of its people, its media presence and its studies, is now more than ever recognized as a leading environmental player in the region. We will continue to surround ourselves with the foremost experts in biology and ecology, and take public positions on those issues we deem to be most important to preserving the health of the lake.

By reading the newsletter's articles, you will see that we have actively continued the Conservation program as well as the Healthy Fitch Bay project.

I would like to take this opportunity to thank the members of the Board of Directors for their remarkable dedication. I would also like to note the departure of our ex-president, Mrs. Claude Bernier, a volunteer with us for many years, and Mr. Pat Trudel, our

ex-treasurer, who leaves us after decades of volunteer work, leaving us in excellent financial shape.

We are delighted to inform you that the Board of Directors now includes four young university graduates, including two biologists, a lawyer and a communications professional, representing 30% of our board.

More than ever now, on the eve of our 50th anniversary, our strength comes from our members.

Thank you for your support!

Robert Benoit
Volunteer President



2016 Annual General Meeting

MCI's Annual General Meeting of members will take place on **Saturday, July 9th, at 9:30 AM at the LAMRAC** (69, Roy Road, Magog) interpretation centre in Magog. The meeting will review the results of the

2015 season, discuss the work of our patrollers, and review recent successes in our Conservation program. We hope to see you all there!

Patrol

Review of 2015 and Preview of 2016



Santiago Doyon, Anaïs Messier and Louis-Philippe Cyr

MCI is pleased to welcome back last year's patrol coordinator Anaïs Messier, holder of a Bachelor in Environment degree from the University of Sherbrooke and MCI patroller in 2014, as coordinator again this year. Her team consists of Louis-Philippe Cyr and Santiago Doyon, students in the Bachelor of Environment and Bachelor of Ecology programs at the University of Sherbrooke, respectively. The patrollers had been on the lake since the beginning of May, and will carry out water sampling programs for the MDDELCC, the MRC and the City of Magog. As well, they will be undertaking various studies as part of the Healthy Fitch Bay project and will be collecting important information on the health of the lake.

Our patrollers conducted some interesting studies in 2015. An assessment of the City of Magog shoreline was carried out, showing that the majority of the shoreline in Magog does not satisfactorily protect the lake. It is thus important to keep working towards the preservation and improvement of the shoreline buffer zones.

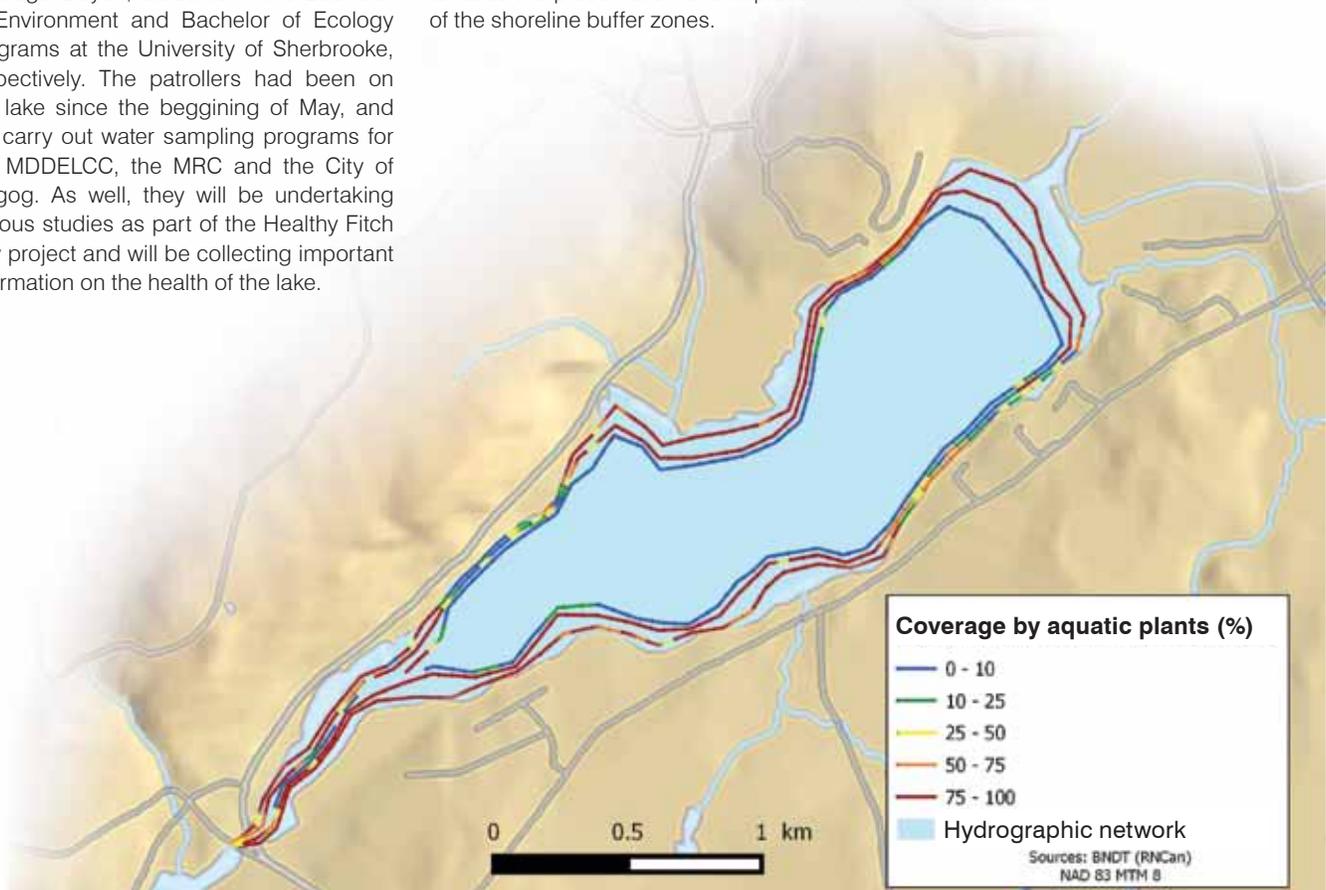
Another study evaluated the bacteriological quality of the water of the North East sector of Fitch Bay, and the consequences this could have on the uses of the water. The study concluded that the water of Fitch Bay meets Québec's Environment Ministry (MDDELCC) norms for all recreational uses.

The third study looked at the extent of aquatic plants and sediments in the Bay. From 2005 to 2015, the coverage by aquatic plants has increased from 41% to 55% of the area of the bay. The map below highlights one of the conclusions of the study.

These studies carried out by our patrollers can be found on our web site at <http://www.memphremagog.org>

Do not hesitate to contact the patrol at any time with any questions, comments or observations you may have by phone or text at 819 620-3939 or by email at patrol@memphremagog.org

*Catherine Roy, B.Sc. M.Env.
Patrol Coordinator*



MCI Looks to The Future

Strategic Plan

On the eve of the 50th anniversary of MCI's founding, the Board of Directors of MCI has concluded that the time is right to undertake a strategic planning exercise, in order to ensure appropriate management and positioning of the organization for the next 50 years.

The evolution of environmental science requires us to reassess our focus and methods. In 1967, the priority was to sensitize the citizenry to the negative impacts of the prevailing "it's someone else's problem" attitudes, both individual and collective. In 2016, MCI is an active participant in studies aiming to correct damage already incurred, and to prevent future damage. The awareness of the citizenry is now in place, but the environment planning process has become very complex. We must now work in concert with various levels of government, from local to national, as well as with each of you. This planning process will allow us to identify the strengths and weaknesses of the organization through a broad diagnostic exercise undertaken with your participation. It will also allow us to reaffirm MCI's mission, take stock of the current situation, and set objectives for the future. Finally, it will allow us to plan for the growth of the organization in the coming years. A planning committee has been created to oversee this exercise.

The major steps and timeline are as follows:

- In December 2015, the committee and Board of Directors selected Ms. Audrey Meessen-Pinard to carry out the crucial diagnostic step. From January to April 2016, she met with members of the Board of Directors, lakeside municipalities, MCI members and various partner associations.
- She presented her report to the planning committee in mid-March.
- The report was presented to the Board of Directors on May 14, for discussion, resulting in a reflection on MCI's mission, and the creation of an action plan.
- An interim report will be presented at the Annual General Meeting on July 9, 2016 at the LAMRAC interpretation centre.
- The elaboration of the action plan will be completed in September to be implemented in the period up to June 2017.
- Final approval of the planning committee's work by the Board of Directors will take place in June 2017.
- The final plan will be presented to the membership at the 50th anniversary Annual General Meeting in July 2017, for approval of the new statutes and bylaws.

Once the process is complete, MCI will be renewed, energized, and ready for its second half century.

Jean-Claude Duff

Chairman of the Board of Directors of MCI. President of the Strategic Planning Committee

The MCI in brief

To Learn More About What We Do

- An active patrol on the lake from May to September!
- Water sampling for the Environment Department since 1996!
- Collaboration with municipalities, the MDDELCC and the MRC!
- Distribution of more than 2,500 trees each year!
- 1200 members!
- In existence for 49 years!
- A 102 km² lake!
- 75 % of the lake's water comes from the United States!
- More than 775 hectares protected in perpetuity since 2009!
- A 1764 km² watershed!
- A drinking water reservoir for more than 170 000 people!

Heritage Circle members

Abbott, William
Anthony, Karen
Arbuckle Fisher, Alison
The Bannerman Family Foundation
Benoit, Robert
Bernier, Claude
Bombardier, J.R. André
Caron, Trevor H.
Club de golf Memphrémagog
Coughlin, Peter F. & Elizabeth Paulette-Coughlin
Coutu, Jean
Couture, Martin
Cyr, Joanne
Davidson, Howard
deLange, Andrew J
Desjardins, Jean-Guy
Desmarais Jr., Paul
Dumont, Jean
Eakin, Gael
Fondation Huguette et Jean Louis Fontaine
Fondation Howick
Ivory, Joan F.
Ivory, Sarah et Mr. Guthrie Stewart
PALPLUS INC.
Lacasse Benoît, Gisèle
Landry, Jean-Luc
Marcon, Loretta
Milne, Catherine A.
Perrault, Charles
Poulin, Bernard
Savard, Guy
Sirois, Sean
Spencer, Norman
Straessle, Tony
Talon, Jean-Denis
Thorburn, Cynthia Caron
Wilson, Janet & Dr. Michael Quigley

We would like to thank the municipalities of Austin, Magog, Stanstead Township, Potton, the Abbaye Saint-Benoît-du-Lac and Ogden for their financial contributions.



Vincent Larin

Healthy Fitch Bay Project

Review of 2015 and upcoming activities

Photohelico.com

For the past year, MCI has been concentrating its efforts in the Fitch Bay and Fitch Bay watershed areas, in collaboration with a number of partners, including the municipalities of Ogden and Stanstead Township, the Memphremagog MRC and COGESAF. This large project aims to improve the health of Fitch Bay and its watershed, through the protection and conservation of its ecologically important landscapes, and a reduction in the inflows of phosphorus and other pollutants. Fitch Bay is the most worrisome sector of the lake in terms of water quality, and thus where action is most required.

After one year of concerted effort, a number of actions have already been taken. In order to preserve the biodiversity of the area, MCI has prepared a snapshot of the natural landscapes of the Fitch Bay watershed, as well as a conservation plan for the Municipality of Stanstead Township. In collaboration with the University of Sherbrooke, MCI has developed a cartographic tool to identify areas of erosion on the shores and in the tributaries of Fitch Bay and propose corrective measures. The Municipality of Stanstead Township has also identified non-conforming septic systems and missing shoreline buffer zones around the bay. As well, the patrollers have spent many days in the field, measuring the progression in the quantity of aquatic plants and accumulation of sediments since the last study, Operation Healthy Lake, in 2004. Working together with the MRC and the municipalities, we undertook an awareness campaign regarding safe water sport practices in the bay. Finally, the monitoring of the water quality has been stepped up in order to pinpoint sources of pollution and monitor the results of the various actions taken.

The actions taken in 2015 were only the first steps on the road to meeting the objectives of the project. This year, a number of joint or complementary projects are planned. MCI will produce the municipality of Ogden's conservation plan, and continue to work with private property owners interested in voluntary conservation of their land. A study of the impacts of beaver activity in the Fitch Bay watershed will be undertaken by a Masters level student at the University of Sherbrooke. Also, a group of students in environmental studies at the same university will be identifying areas of erosion around culverts and ditches on the public roads in the watershed, and proposing corrective measures. The municipalities plan to continue monitoring septic systems on their territory, and an inventory of exotic invasive plant species will be carried out on municipal land. Lastly, MCI published a pamphlet promoting best residential practices to improve the quality of the water of Fitch Bay and its watershed and preserve its biodiversity.

The activities planned in the Healthy Fitch Bay project depend on the dynamism of those involved and the allocation of sufficient financial and human resources. Considerable effort on the part of all of us will be required in order to meet the project's objectives and ensure the health of Fitch Bay.

To consult the action plan 2015-2020, visit our web site:
<http://www.memphremagog.org/>

For more information, contact Ariane Orjikh:
ariane.orjikh@memphremagog.org

Ariane Orjikh
Project Coordinator

Congratulations to Austin

MCI would like to congratulate the municipality of Austin, winner of the Federation of Canadian Municipalities' Sustainable Communities — Neighbourhood Development Plan award earlier this year. It won this award for the sustainability action plan that they developed for the municipality. Among the innovative features

of the plan is the concept of sustainable neighbourhoods to sub-watersheds in order to take into account the rural nature of the municipality. The plan is based on a thorough understanding of the forests, lakes and wetlands in the municipality, allowing for an integrated approach to managing the territory. MCI was pleased to

work with the municipality on this project, as well as providing a snapshot of the natural landscapes in the municipality in 2012.



Countering Soil Erosion

There Are Many Solutions!

As you likely know, when it comes to soils, **RAPPEL IS AGAINST NUDITY...** We're talking about bare soils, after all!

Nudity in the normal sense is often quite agreeable, but bare soils are toxic to our lakes, rivers, streams and wetlands. In fact, it is not nature, as our ecosystem spontaneously and quickly covers up bare soils every season. Bare soils are the result of human activity. So, what happens? If control measures are not taken immediately, what follows automatically is an excessive transport of soil particles by water, i.e. erosion. Unfortunately, these soil particles have travelling companions, nutrients like nitrogen and phosphorus. The resulting ecological consequences are well known: over fertilization of aquatic habitats or, in words understood by all swimmers, greenish water, slimy bottom, and glaucous aquatic plants to be avoided.

Erosion is a major cause of the degradation of our waterways, and must be dealt with.

When we build, we cut down trees, dig, move earth around, and end up with bare soils. Contractors working on construction sites have a number of simple, yet effective, ways of countering erosion. We are talking about sediment barriers, anti-erosion mats and seeding. Close to sensitive areas, no bare soil should be tolerated. To this effect, since 2000, a growing number of municipalities have adopted bylaws requiring erosion control measures on construction sites. Nevertheless, it is up to all of us to be vigilant.

Notice the ditches on provincial roads. Transport Québec has adopted, since 2002, the bottom third method of ditch maintenance, developed in the 90s by RAPPEL. It is a simple technique, whose guiding principle is to leave the vegetation on the upper two-thirds of the ditch, and only clean out the bottom third when needed. Every municipality must ensure that the contractors they hire are familiar with this technique and use it whenever practicable.

In a populated region such as the Eastern Townships, it is not uncommon for more than 50% of the water of the watershed to flow through a ditch at some point. So you can understand the importance of properly stabilizing all of these artificial canals, too often denuded of vegetation, exposed to the weather, and erosion-prone. Proper environmental management of ditches today consists

of 10 techniques: thresholds, seeding, ledges, rip-rap, sediment traps, etc., practices which must become commonplace to ensure the quality of our water.

Finally, the forests. We cannot imagine the difficulty of properly stabilizing access roads, especially where the trees are large but the understory is practically absent. Imagine a residential development, especially in a mountainous region, where the risks of erosion are higher. A guide explaining some simple, effective and inexpensive techniques for forest roads was created in 2015.

As you can see, there are many ways to control soil erosion.

Jean-François Martel, General Manager, RAPPEL



Erosion control guides produced by RAPPEL

For many years, RAPPEL has offered practical, on the ground training to municipalities and MRCs, as well as to entrepreneurs carrying out construction or road work. This training encourages entrepreneurs and territory managers to apply these tried and true, and often easy to apply, techniques in order to counter erosion and protect our waterways.



Speckled trout spawning bed, Rivière-au-Saumon, Route 222



Spawning bed buried under sediment from an eroded ditch, Route 222

Conservation Program Conservation Actions in 2015

Although MCI works throughout the Lake Memphremagog watershed (433 km²), in 2015-2016, much of the activity took place in 2 areas in particular, the Cherry River watershed and the Fitch Bay watershed.

Cherry River wetlands

To a great extent, the Cherry River wetlands have been protected for a number of years. Nevertheless, the entire wetland is still not fully protected. For this reason, we have undertaken, in collaboration with LAMRAC and the City of Magog, a project aiming to protect the entire wetland, and other natural areas throughout the watershed. Thus, the Cherry River wetlands, as well as their numerous tributaries, continue to be among our priorities, along with the forests, which, together with wetlands, play a crucial role in regulating the water cycle.

All of these areas are a part of what we are calling the Cherry River Natural Corridor or the Cherry River Wildlife Corridor. This corridor creates a link between the Mount Orford Provincial Park, the Cherry River wetlands and Lake Memphremagog.

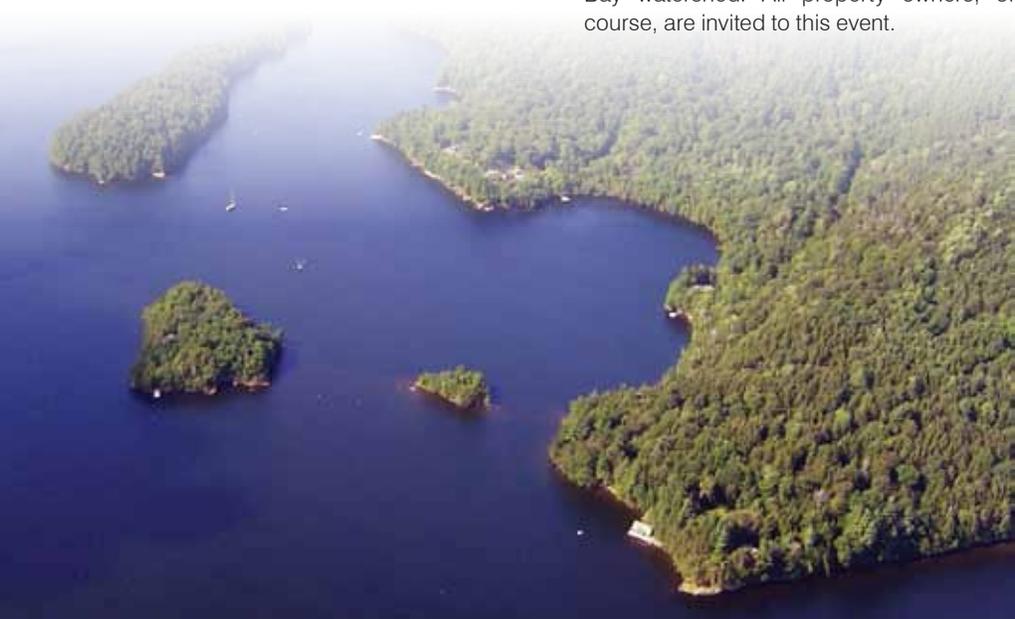
Property owners in that portion of the corridor that falls within the City of Magog have been informed of the importance of their land and invited to contact MCI to learn of the best ways to preserve them. In collaboration with LAMRAC, we consult with property owners to explain the different conservation options available and to answer any questions they may have. All property owners, be they farmers, foresters, private companies, real estate promoters, etc. are encouraged to meet with us individually and confidentially. Over the coming year, in addition to these meetings, we plan to organize a conference on the subject of conservation in the Fitch Bay watershed. All property owners, of course, are invited to this event.

Fitch Bay Area

As with the Cherry River wetlands, MCI has been active in the Fitch Bay watershed. A number of property owners have been informed regarding the Healthy Fitch Bay project, notably those in proximity to Tompkin's Creek and the Marlinton Bog. Meetings have also been held with property owners, some of whom are now negotiating conservation agreements. The property owners that we meet are always enthusiastic about getting information on how they can participate in the protection of their natural heritage.

A conference on conservation was held on February 20th (unfortunately during a snowstorm), which, despite the low attendance, sparked great interest from the participants. Another similar conference will be held this coming June 18 at the Ogden Town Hall.

Finally, it goes without saying that numerous efforts have been made to obtain funding from our various partners. We would like to thank the following partners who have contributed generously to our project: Environment Canada's EcoAction program, Fondation de la faune du Québec, Wildlife Habitat Protection Program, the municipality of Stanstead Township, as well as a number of private donors who take the preservation of the Lake Memphremagog watershed and the quality of its water to heart.



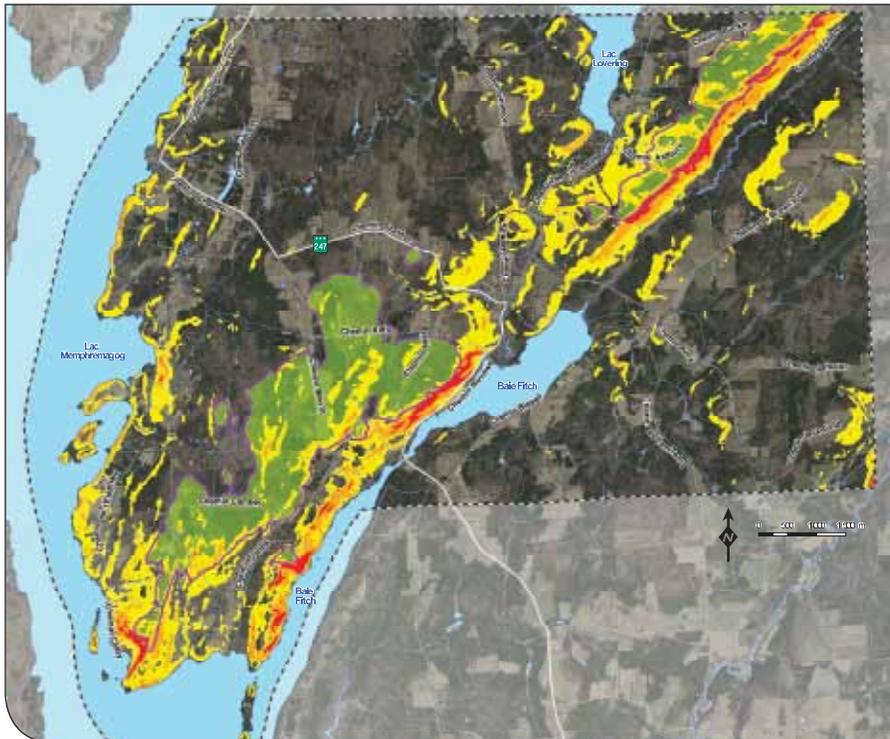
The approach favoured by MCI is one of voluntary conservation on the part of private property owners. They are invited to participate, in a concrete manner, in the conservation of the natural landscapes of their properties, via private nature reserve status or other long term agreement such as donation or conservation servitude. Several property owners have already gone ahead and concluded agreements in order to protect their land in perpetuity.



MCI can help!

If you value the natural landscapes on your property and would like to preserve them, several legal options are available to you. MCI's conservation experts will be happy to answer all of your questions. Our goal is to help you to attain your financial and conservation objectives by developing a scenario which will meet your specific needs. If you decide to proceed, our experts will guide you through the entire process, step by step, in a completely confidential manner.

For any and all questions regarding the conservation of your property, you can contact us by telephone at 819 340-8721 or by email at conservation@memphremagog.org



Steep slopes and areas of altitude of more than 350 metres

Stanstead Township

- Local road
- Street or road
- Stream
- Stretch of water
- Municipality of Stanstead Township's boundaries
- Area with slope of more than 50%
- Area with slope from 30% to 50%
- Area with slope from 15% to 30%
- Area where altitude is 350 metres or more

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 Pentes: Corridor appalachien.
 Photographies aériennes : 2013.

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Pour le compte de :



Stanstead Township: Planning development differently!

This year has allowed us to put in place a solid foundation for conservation within the Municipality of Stanstead Township. MCI prepared a conservation plan for the natural landscapes of the municipality, in support of its urban plan revision currently underway.

Stanstead Township, like other area municipalities, has an important role to play in the protection of its natural landscapes and the environment. By better understanding what areas should be preserved, it is in a position to achieve a balanced approach between preservation and development of its territory. With this information, it can offer an attractive lifestyle, and ensure a healthy environment for its citizens, thereby benefiting from the numerous ecological services provided by the preserved landscapes.

Since the municipality, in similar fashion to the MRC, is responsible for the management of its territory, it has the power to determine the path of its development, while at the same time preserving its natural landscapes. It can thus ensure a balance between development and conservation, and respond to current needs without jeopardizing the needs of future generations.

Planning development differently!

Planning for development while integrating the conservation of natural landscapes and areas with natural constraints is a big challenge, but achievable. The examples of Austin and Magog are cases in point. They both decided to factor the natural landscapes into the revision process of their urban plan. This is a major change in their planning process for which we commend them.

It was with this in mind that we proposed a project to Stanstead Township to produce an ecological inventory of the municipality in support of its planning and management activities. Thanks to the financial support of the municipality, MCI was able to identify areas of ecological interest and sensitive zones. By knowing what areas to preserve, and what sensitive zones to protect from development, the municipality can steer development to certain areas and propose more sustainable ways for that development to occur that are more respectful of the community and the environment.

This initiative, carried out in collaboration with Stanstead Township, is the third lakeside municipality to be inventoried, following in the footsteps of Austin and Magog in previous years. Our aim is to have conservation plans in place for every lakeside municipality on the Canadian side of the watershed of Lake Memphremagog.

Next year, we plan on preparing the conservation plan for Ogden, which will bring us to over 75% of the Canadian watershed territory. For an area that contains one of the most important sources of potable water in the region, it is encouraging to see. We thank the municipalities that have committed themselves to this process!

Francine Hone, Conservation Biologist

2016 Calendar

Don't miss our Upcoming Events!

June 18

Conference on conservation, Town Hall, Ogden

June 25

Austin village party – patrol booth

July 2nd

Georgeville village party – patrol booth

July 9th

Annual General Meeting, 9 h 30, LAMRAC, Magog

September 24 & 25

Project ÉCOSPHÈRE – Environmental fair, Parc de la Baie-de-Magog, Magog

For more information regarding our seasonal activities, do not hesitate to contact the patrol at: 819 620-3939

Towards long term protection for the lake and its watershed

Creating a Municipal Fund Dedicated to the Conservation of Natural Landscapes

The exceptional ecological value of Lake Memphremagog, its renowned scenery, the quality of life that it inspires and its role as a potable water reservoir call for the protection in perpetuity of a significant portion of its watershed.

The creation, by the municipalities, of a fund dedicated to conservation would ensure the protection of land in its natural state, providing ecological services that are necessary for the health of the lake. The forests regulate the water cycle like a filtration plant, minimizing erosion and sedimentation in the lake and its tributaries, slowing and retaining up to 20% of the water flow and storing it in the soil. Wetlands also play a crucial role in the maintenance of the quality of the water. They control or prevent flooding, recharge the water table, absorb and store a portion of rainfall, filter out sediments and toxic substances, and protect against erosion. As well, forests, like wetlands, support a diverse set of plants and animals.

Here in Québec, a number of municipalities have gone ahead with this type of initiative. The best example is the City of Québec, which recently announced that they would be creating a nature reserve on 246 municipal properties, totalling 6.8 square kilometres, in the Lake St-Charles watershed in order to protect the natural landscapes and drinking water for the citizens of the city. A number of other cities and municipalities in Québec have also committed to preserving natural landscapes. The cities of Sainte-Julie, Trois-Rivières, Longueuil and many others have participated in the acquisition of private land or conservation servitudes.

No doubt, the most striking example is that of the city of New York. When the quality of the city's drinking water no longer met the minimum standards, the cost of a new filtration plant was estimated at between 6 and 8 billion dollars, with annual operating costs of 300 million dollars. Instead, the city decided to rehabilitate its watershed at a cost of only 660 million dollars (ESA, 2000). They thus depended on the ecological services of the watershed to carry out the same role as a filtration plant, but at much lower cost.

Currently, on the Canadian side of the Lake Memphremagog watershed, only 10.83% of the land is protected. This represents 4,688 ha (46.88 km²) out of a total of 43,300 ha (433 km²). A concerted effort is needed to increase the percentage of the watershed that is protected. Each municipality should be aiming to protect a minimum of 12% of their territory.

The shoreline municipalities, Magog, Stanstead Township, Austin, Ogden, St-Benoit-du-Lac and Pottou are called on to participate, as are the other municipalities within the watershed, Orford Township and Bolton East. As well, the city of Sherbrooke alone draws the equivalent of 17 olympic sized swimming pools (62,788 m³/day) for its citizens. Thus, they also have an important role to play to ensure the preservation of this resource. All of these municipalities must create a fund dedicated to the conservation of the natural landscapes of the Lake Memphremagog watershed.

What is a drinking water reservoir worth? Let us look to the future and act now!

Gisèle Lacasse-Benoit

Have you renewed your MCI membership for 2016?



Vincent Larin

MCI Board of Directors 2015-2016

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Useful Resources

MCI Lake Patrol
819 620-3939

MRC of Memphremagog Lake Patrol
819-620-7669 / 819-821-0435

Environmental Emergency 24h.
1 866 694-5454

Wildlife Emergency
1 800 463-2191



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