

# A word from the President

2007 marks the 40<sup>th</sup> anniversary of the founding of Memphrémagog Conservation Inc! We will celebrate this happy event with a cocktail party on June 9th to which all our members are invited. We are very proud of what our volunteers have accomplished over the years since MCI was first created. We have made progress towards the cause of the environment since 1967 but the appearance of cyanobacteria this past summer forces us to accept the reality that there are still many non-point pollution sources and that there has clearly been a deterioration of water quality. The appearance of cyanobacteria (blue-green algae) created a shock wave in the region as the water was declared unfit for human consumption in several sectors of the lake. This threat was taken very seriously by citizens and elected officials. There is much to do to inform people, among other issues, to make the notion of the drainage basin widely understood. It is very important for us all to understand that all human activities in the drainage basin of the lake have an impact on water quality and all residents of the territory are called upon to do their part.

To help us, the MCI has been very fortunate to have Mr. André Hade, an expert in the chemistry of natural surface waters who has prepared an article for our newsletter entitled « Lakes, Trees and Cyanobacteria. » We are proud of what we accomplished in 2006-2007: the renaturalization of Weir beach in Ogden, in cooperation with the municipality; the conference in May 2006 with inspectors, councillors and associations where erosion control at which renaturalization and the results of the SAGE program in Fitch Bay were among the topics discussed. Following the recommendations of the Operation Healthy Lake study, MCI asked the Université de Sherbrooke to carry out research on the northern end of the lake. At the invitation of several of the lake property owners' associations, we have made presentations on various problems that impact the lake, and possible solutions. The Vermont Operation Healthy Lake study and our participation in the Québec-Vermont committee have allowed us to develop important contacts with our American neighbours. The professionalism of our marine patrollers throughout the summer is also a real asset for MCI.

Here is a brief overview of our work in 2007: development of an action plan dealing with cyanobacteria, tree replanting courses, meetings with associations and residents, information meetings, active patrols of the lake and surveillance, meetings with elected officials at all levels of government, and continuing contacts with our American partners.

MCI is following closely all activities and projects that might affect water quality in the lake. This is why we continue to play an active part in the protection of Mount Orford provincial park to preserve a mature forest that is very important in maintaining the equilibrium of the lake ecosystem, as does any mature forest in its own drainage basin. Proposals to enlarge the waste disposal landfill site at Coventry, VT and at Magog are very much a concern because we believe that no landfill sites should be operating within the drainage basin of the drinking water reservoir for the Estrie region.

For more information on these very topical issues, please visit our website at www. memphremagog.org. We invite you to add your name to receive our INFOLETTER so you will get the most up-to-date news as quickly as possible.

In conclusion, may I thank the members of the board for the gift of their time and their good counsel. A special thanks to Mr. Donald Fisher who, through his diplomatic skills and professional approach has been able to develop an excellent working relationship with our American neighbours.

On behalf of the members of the board of MCI, I would like to take this opportunity to thank you, the members, for your support and I encourage you all to take an active part in protecting our majestic Lake Memphremagog.

Gisèle Lacasse Benoit, President

#### **Cyanobacteria**

The appearance of cyanobacteria, in addition to the proliferation of aquatic plants and other algae..

Page 3



#### **MCI actions in Ogden**

In collaboration with the municipality of Ogden, MCI has invested in the restoration of the natural state of Weir beach



#### **General Assembly 2007**

This year our Annual General Meeting will be held at the Austin City Hall on Saturday August 4th beginning at 9:30 AM. Come out and meet



the Board and talk about the issues that are important to you.

Web Site: memphremagog.org Ema

#### MEMPHRÉMAGOG CONSERVATION

# Lake Patrol 2007



Summer 2007 will soon be here. As you know, for the past few years we have been focusing on training our patrollers so they will have the skills they need, and we have redefined their responsibilities. Now their work will be organized and focused on environmental surveillance.

An intensive program was put in place so our patrollers on the lake can serve as the "eyes" of the municipal inspectors. They report actions that do not comply with the by-laws, and this will enable us to help the municipalities to enforce them whenever we have occasion to do so.

The job descriptions of the patrollers include taking water samples at various places along the shore in both Canadian and American waters for the MDDEP and the MRC, offering courses about renaturalizing the shores, exhaustive follow-ups of aquatic plants and sedimentation of the littoral, and last but not least, continuing to offer education programs at summer day camps.

Last year we found that aerial photos were a very useful tool. We are going to use this strategy again after heavy rains, to identify tributaries which are carrying sediment loads.

This summer, we will have a new, better quipped boat with a GPS unit, cell phone, digital camera and a laptop computer.

Our patrollers will watch for the appearance of cyanobacteria and they will support citizen members of the oversight committee set up by MCI.

The patrol will be under the responsibility of Emmanuelle Dansereau who worked for MCI during the summer of 2005. She was an undergraduate student in biology at Université de Sherbrooke, with a concentration in ecology. She is presently studying veterinary medicine at the Université de Montréal.

The members of the patrol will be happy visit you and your neighbours and friends to discuss the lake, the problems it faces and the efforts we all must make to solve them. At these meetings they will give out brochures on renatauralizing (replanting) the shores, soil erosion, sources of phosphorus and MCI's actions. The patrollers and board members are available to speak to the various lake-front associations about environmental problems. Please contact us if we can be of help.

Our patrollers are outgoing and dynamic, professional and environmentally-concerned. We invite you to get to know them, and to discuss your concerns with them.

They will be on the lake from June 15 to August 24. You can reach them at 819-620-3939.

Pat Trudel, Treasurer Robert Benoit, Board Member

## **Quebec-Vermont**



MCI was active in 2006 working towards a greater working relationship with the State of Vermont. MCI Vice-President, Donald Fisher and Board member, Robert Benoit, sit as "observers" on the Québec-Vermont Steering Committee which "is responsible for the implementation " of the *Environmental Cooperation Agreement on Managing the Waters of Lake Memphremagog and its Watershed*, an agreement between Québec and Vermont signed by both parties in December of 2003 (and commonly referred to as the "Québec- Vermont Agreement"). MCI is an "observer" owing to the current lack of a mandatory Vermont-based environment association to represent Vermont.

In addition, MCI (Donald) sits on the *Monitoring* and Assessment Work Group reporting to the Steering Committee. One of the most pressing current issues, is to coordinate an action plan to battle cyanobacteria on both sides of the border.

We have been fortunate in recruiting as a Board member, Susan Watson, a Vermonter living in Newport and a former State Director of Audit Compliance. Susan has become active in helping to organize in Vermont a volunteer watershed watchdog association. Now in its very early stages, we hope it will blossom into the organization that will sit on the *Steering Committee* alongside MCI.

During the year, MCI has been following the proposed Phase V expansion of the Coventry dumpsite. As we go to press, Casella, the waste management company that is the applicant has yet to deposit its application pending clearance by the *Solid Waste Division* of the *Vermont Department of Environmental Conservation*. In the meantime MCI has applied for party status at the Act 250 hearings to be initiated when Casella deposits its application. We may or may not be granted party status. If not, there is a "second best" outcome: "friend of the commission". Either of these categories carries greater weight than simply joining others in speaking up at the hearing meetings.

In 2007 MCI will continue to contribute its efforts to help make the Québec-Vermont Agreement an effective tool for environmental improvements with respect to the health of Lake Memphremagog and to monitor developments closely as they evolve with respect to the proposed expansion of the Coventry dump site. Additionally, we will be active in generating enthusiasm for the creation of a Vermont-based volunteer watershed organization (such as MCI) to join in the battle to protect the health of the Lake.

Donald Fisher , Vice-President

## **Municipal inspectors**

Austin : 819 843-2388 Stephen Nicholson

**Canton de Potton :** 450 292-3313 Marie-Claude Lamy : ext.: 224 Charlène Blais : ext.: 226

**Canton de Stanstead :** 819 876-2948 D. Gélinas

Magog : 819 843-7106 Sylvain Thomas, chef de service, Christian Lamoureux Daniel Charron Daniel Couture

**Ogden :** 819 876-7117 Dominique Gagnon

**Stanstead :** 819 876-7181 Pascal Yergeau

### **Useful Telephone Numbers:**

#### Ministère de l'environnement de l'Estrie :

819 820-3882 Emergencies: Yvan Tremblay, poste 248 Information: Richard Smith, poste 253

Lake Patrol MRC Memphrémagog : 819 620-7669 / 819 821-0435

Emergencies-Environment: 1-866 694-5454

Emergencies-Wildlife : 1-800 463-2191

MCI Lake Patrol: 819 620-3939

#### Μ Ρ Η R Μ Α G 0 G С 0 Ν S E R V Т 0 Α

#### Cyanobacteria



The appearance of cyanobacteria, in addition to the proliferation of aquatic plants and other algae already noted in our study Operation Healthy Lake 2005, is an indicator that the aging process in the lake is speeding up. This indicator is all the more serious because some of the algae produce toxins. In 2006, a number of municipalities were warned not to use the water, including Ogden, Potton, St-Benoit-dulac, Stanstead Township (Fitch Bay sector). The notices from the department of public health banned the consumption and use of water in showers or the preparation of food. The presence of cyanobacteria also caused areas to be closed to public use for swimming and water sports, a loss of property values, and threatens to disturb the local economy.

Cyanobacteria are aquatic micro-organisms, also called blue green algae. They occur naturally in water, but become a problem when certain conditions are found together, including the warming of the water caused by climate change, the degradation and denaturalization of the shores, the carrying of nutrients by soil erosion (or eroded soils) and most importantly, by a surplus of phosphorus carried to the lake by human activities. The heavy rains of the 2006 summer were also a contributing factor.

The major sources of phosphorus are organic and chemical fertilizers used for residential lawns and gardens, agriculture and golf courses; municipal waste water and freestanding domestic septic tanks "whether or not they conform to the municipal by-laws"; storm water runoff; detergents; leaching from landfill; industrial wastes and sewage from boats. Soil erosion is mainly due to abusive woodcutting practices in the forests, tree clearing and urbanization of land not being farmed, road ditches, and the erosion of the shore or banks of watercourses in the drainage basin caused by the disappearance of the shoreline buffer zone.

The most important actions to take are to eliminate the sources of phosphorus and to control soil erosion caused by human activities throughout the drainage basin of the lake. It is of the utmost importance to preserve trees and vegetation along the shoreline area and replant the shores of the lake and all its tributaries.

You will find more information about this important subject in the excellent article by

Mr. Hade and in the brochures from RAPPEL and the Ministère de la santé.

Every citizen has a role to play, but the municipalities have a central role in protecting the water in Lake Memphremagog and its tributaries. They have the power to regulate, to oversee and to sanction, by ensuring that the laws and by-laws are enforced to diminish the environmental impact of development.

Last year, we set up a surveillance network for cyanobacteria and reported our observations to the MDDEP. In 2007, the action plan of MCI includes creating a new surveillance network, communicating our observations to the MDDEP, holding information meetings for citizens, distributing a brochure for residents in the drainage basin, continuing to offer courses on replanting trees and publishing information about soil erosion and reducing sources of phosphorus.

We will be holding two conferences: the first on Saturday, June 23<sup>rd</sup>, at 1:30 pm at the Murray Memorial Hall in Georgeville and the second on Saturday, June 30<sup>th</sup>, at 9:30 am at the Austin City Hall.

Gisèle Lacasse Benoit, President

# Project at the North End of the Lake

Based on the recommendations contained in its 2004 study, Operation Healthy Lake, MCI provided financing for a research project by the environment and sustainable development observatory at the Université de Sherbrooke. The purpose of the project was to better understand the problematic situation identified in Magog Bay so that appropriate environmental actions could be taken.

Last December, a report prepared by Guillaume Junqua, under the direction of Olivier Thomas, entitled Réalisation d'un outil d'évaluation de l'impact des activités humaines existantes ou en projet sur la qualité des eaux de la zone nord du lac Memphrémagog (Development of an instrument to assess the impact of present or proposed human activities on water quality in the northern end of Lake Memphrémagog) was presented. This is summarized below.

The objective of the study was to provide a tool to allow the existing and future impacts of human activities and development projects on water quality in Castle Brook, Cherry River and Lake Memphremagog to be estimated. The goal of MCI is to have the instrument which accompanies this document used by the municipalities of Magog and Canton d'Orford to evaluate the impact on water quality of these two tributaries by taking into account present and future developments. A hierarchy of actions to be taken was drawn up to find effective solutions to the real problems related to water quality in Lake Memphremagog.

In particular, a program to reduce the use of potable water and reduce waste onsite at water purification plants in the area under study was deemed necessary. An extension of the instrument developed could be used to visualize the volume of drinking water and waste water saved. At the same time, surveillance of surface and ground water must be developed using inexpensive methods and technologies. This instrument could make it possible to better assess anthropic pressures related to new residential development, and therefore to evaluate the impact of such projects on the environment.

Armed with this instrument, MCI met with elected officials in the municipalities concerned to encourage them to take the necessary measures to enforce the by-laws more strictly. MCI will also encourage them to plan and prioritize preventive actions and initiatives to repair the damage suffered by the environment in the drainage basin of this part of the lake.

Madeleine Saint-Pierre, Vice-President

# **Heritage Circle**

MCI recognizes the generosity of those who enrolled in the Heritage Circle member category in the years 2005 and/or 2006.

Association des propriétaires de Southière sur le Lac Michael H. Belmer **Robert Benoit** J. R. André Bombardier Jean Coutu **Famille Martin et Julie Couture** Jean Dumont **Gael Eakin** Alison Arbuckle Fisher **Donald Fisher** The J. W. McConnell Foundation Fondation Howick Gisèle Lacasse Benoit Jean-Luc Landry **Pierre Loiselle Mary Louisa Miller** Myriam et J. Robert Ouimet **Derek Price** Mr. and Mrs. Henry F. Price Nikola Reford **Guy Saint-Pierre** Jean-Denis Talon

In addition to the above names, 5 donors requested that their gift remain anonymous.

We also want to thank the municipalities of Austin, Canton de Stanstead,

#### Μ Μ Ρ Н R Μ Α G 0 G С 0 Ν S E R 0

# **Magog Dump Site**



After two applications to enlarge the yearly capacity of the Magog (Bestan) dump site by 300,000 and 150 000 tonnes respectively were rejected, the operator of the site has now presented a new application to dispose of 60,000 tonnes of garbage per year for 25 years.

Following the public presentation of the impact study, the Bureau d'audiences publiques en environnement (BAPE) held an information meeting on March 1, 2007.

MCI passed a resolution on January 31, 2006 asking the mayors of the MRC de Memphrémagog to refuse to allow the proposed enlargement of the Bestan site, and to find alternative landfill solutions for garbage outside the drainage basin of Lake Memphremagog.

We are convinced that a garbage dump has no place in the drainage basin of the regional drinking water reservoir, with all the short-, medium- and long-term risks this carries.

We believe that we have significant public support for our position because the Warden Mr. Roger Nicolet declared that the MRC Memphrémagog would present a brief arguing against the proposed enlargement of the site. Furthermore, a regional committee is studying all the other alternatives to meet the needs of the seven MRCs in the Estrie region.

MCI will present a brief at the BAPE hearings when they are held.

Madeleine Saint-Pierre, Vice-President

## Comité de vigilance

MCI is an active member of the toxic contamination watchdog committee (for BCPs, chlorinated dioxins and furans) for lakes Lovering, Massawipi and Magog. The committee is made up of representatives of local environmental associations for the affected lakes and other associations concerned, including MCI. Testing of fish from Lake Memphremagog showed a level of contamination below the critical threshold. These toxic substances are considered as persistent organic pollutants, particularly dangerous because they break down very slowly, have a very long half-life and have the capacity for bio-accumulation in the food chain.

To date, this committee has worked with representatives of MDDEP to try to identify the sources. In collaboration with the environment and sustainable development observatory of the Université de Sherbrooke, a proposal for a study was presented to continue the research related to the Magog landfill site. The committee will continue to pressure the environment ministry (MDDEP) to continue to identify and eliminate sources of toxic contamination.

Tom Fletcher, Secretary

# **Excessive Boat Noise**

MCI wrote to the Federal Minister of Transport requesting policing of the excessive noise from speedboats on Lake Memphremagog. The Minister's response indicated that boaters are required to be responsible on waters and, that because of limited Federal police resources; their recommendation was to contact Sureté du Quebec or local MRC Memphremagog Police.

MCI consequently wrote to the local Sureté du Quebec office. The response and discussions with the SQ indicated the difficulty officers have enforcing the current noise law. Under current laws, in order to issue an infraction, police officers must stop a boat, and, once aboard, visually confirm that the muffler system is, at that moment, manually switched to exhaust above water (noise) as opposed to below water (noise-reduction position by law). Furthermore, SQ police stated that the accuracy of soundmeasuring decibel guns is inaccurate on a lake due to the environment. The police are fully aware of the dilemma caused by the laws.

We conclude at this time that there must be more police presence to curb the excessive boat noise. We encourage increased pressure on the authorities as the most effective tactic to acquire additional police resources on our lake. We therefore urge you to call police when hearing a noisy speedboat in the hope that this increase in calls will provide the necessary pressure to effect change.

Sureté du Québec 310-4141

Patrouille nautique MRC Memphrémagog 819 620-7669 / 819 821-0435

David Monty, Board Member



# Save our trees and our forests

The rate at which we are losing our mature trees is cause for alarm. Between reckless cutting, the loss of 150 acres of a sugar bush for construction of a private golf course; a significant loss to new roads being opened plus residential construction; the forests of Mont-Orford Park that may be cut - all pose a real threat to the forest cover in the drainage basin of the lake. The loss of the forest cover in turn impacts on the water quality of the lake.

Natural areas provide an ecological service that is essential for our survival. Forests and wetlands together carry out a number of functions in maintaining water quality - they filter water and air, regulate temperature and maintain the natural cycles (carbon, nitrogen, water, etc.). They act as giant sponges that slow the flow of run-off waters and thereby reduce the impact of flooding and at the same time replenish the water table. They also have a capacity to absorb and store greenhouse gases and help prevent soil erosion, a very important part of preserving water quality in the lake. Keeping the forests intact makes it possible to mitigate such harmful effects of human activities on the environment as air and water pollution.

The heavy rains of 2006 were a major cause of the proliferation of cyanobacteria because they carried enormous qualities of nutrients to the lake in run-off. The forecasts calling for increases in phenomena like this are alarming. This alone is a good reason for preserving every possible mature tree. Protecting and re-planting the shoreline buffer zone is one step in the right direction but this will clearly not be enough if we cut down the mature trees in the drainage basin.

We need a dramatic change in thinking and in our vision for development of our region. To move in the right direction, we need to tighten up planning by-laws, and reduce the percentage of trees that may be cut for the construction of a residence. Each citizen must protect the trees on his property, and here again the municipalities have an important role to play.

Gisèle Lacasse Benoit, President

#### Lakes, trees and cyanobacteria

André Hade Ph.D. Environnementalist Professeur retraité de l'UQAM

People often think that protecting water quality in our lakes is the exclusive responsibility of those who live along the shore and a few major sources of pollution such as municipal waste water treatment systems or industrial activities. Nothing could be farther from the truth. The quality of the water in a lake depends on all the activities in the drainage basin and all the measures taken to avoid having undesirable substances end up in the lake. So everyone who carries on any kind of activity in the drainage basin of the lake has a direct impact on the protection of the quality of this lake.



Ministère du Développement durable, de l'Environnement et des Parcs

The drainage basin is the vast territory surrounding a lake, extending wherever the natural slope of the land brings water directly or indirectly to the lake. This territory can cover a considerable area and may include hills that are more or less steep; however, in all cases, the drainage basin or tributary basin acts as a huge funnel carrying water into the lake. Precipitation which falls in the drainage basin is carried as run-off on the surface or underground to feed the lake. But the problem is not just the water falling as rain or snow that goes into the lake, but also all the dissolved or suspended substances that this runoff may carry. These substances found on the ground or underground are mainly made up of nutritive materials that are harmful to water quality in the lake. They result from human activities and are carried from all corners of the drainage basin by run-off. So, it is clear that if we are interested in protecting the quality of water in a lake, it is imperative that we take into account all the activities in its drainage basin and limit the harmful effects of ground or underground runoff.

From this perspective, it is important to realize that everywhere in the drainage basin, all activities and human installations must be considered as if they were occurring right at the edge of the lake itself. This means that the development and landscaping of residential lands must take into account this reality, and so must any other potential sources of pollutants such as agricultural and forestry operations, municipal activities, industries and businesses, roads and other infrastructures and leisure activities, etc. Clearly this requires some centralized control and in our system of shared jurisdictions it is the municipalities that have this responsibility. Thus, the municipalities (and the MRCs) have a crucial role to play in protecting our lakes and other bodies of water on their territories. The municipality intervenes directly by setting and enforcing norms and by-laws and it is also directly involved through the attitude it adopts in its own practices related to work it undertakes: maintenance work, the treatment of waste water on its territory and the support it offers for actions taken to protect the environment.

Various measures can be taken to effectively protect the lake. Among these are the development of siting and landscaping norms for residential properties, maintaining the vegetation, making sure that septic tanks are in compliance and that agricultural practices respect the environment; that engineering projects are properly carried out and maintained; that recreational pursuits are in harmony with nature, etc. All these measures will certainly have a positive impact on the environment, but implementing them may be more or less complex and costly. There is one thing that can be done, however, that does not cost anything and has already proven to be very effective. This consists simply of maintaining trees and vegetation throughout the territory and, in particular, mature forests and vegetation on the shores of lakes and watercourses, where the vegetation should be replanted if it has been destroyed. Minimum land use planning norms around bodies of water require that all vegetation be preserved in a buffer zone of 10 to 15 metres from the high water mark. This should apply equally to lakes and rivers and to smaller watercourses, which are the channels that carry surface runoff to the lakes which are their inevitable destination. All bodies of water need to be protected from the dissolved or suspended substances carried in runoff waters and the most effective natural way to do this is simply to maintain a buffer zone of vegetation wide enough to ensure a sufficient holding and filtering capacity to allow runoff water to enter the lake without the nutritive elements it might have carried. Protected by vegetation in this way, runoff water will drop the nutritive substances that cause problems in the lake collected from all parts of the drainage basin before it reaches the lake.

This simple and effective measure is a given in relation to the shoreline. The same principle should also be applied throughout the drainage basin so that run-off (and air-transport) neither destabilizes the soil nor carries harmful nutritiveladen materials to bodies of water. To reach the optimal level of benefits desired, the notion of protection and conservation of vegetation must be extended across the entire territory. Obviously, this also concerns mature trees and



where they are growing, because in addition to their fundamental ecological role, they are also of inestimable value as an important part of our natural heritage. Such a conservation strategy cannot succeed unless everyone involved understands the challenges and the repercussions of careless acts. In particular, municipalities have an important responsibility to ensure that trees and the vegetation across its entire territory are protected. This is a basic environmental measure with an impact at many levels, in particular insofar as the protection of water quality in bodies of water is concerned.

To illustrate the importance of controlling nutrient loading in runoff into lakes, we need only look at the serious problem of cyanobacteria (blue-green algae) which plagued Quebec in 2006. During this record-setting year, no fewer than 80 lakes were affected by this toxic bacteria. Scientists have still not managed to control this complex phenomenon, but various fairly likely hypotheses have been put forward. Thus, scientists generally agree that these naturally occurring bacteria require a high level of nutrients, in particular nitrogen and phosphorus, to proliferate in bodies of water. It is also estimated that the exponential development of these micro-organisms is promoted by high temperatures, calm waters and intense sunshine. These weather conditions were often found during the summer of 2006. However, the high quantity of the nutrient load is not explained specifically by anthropic (or human-related) factors, and especially not for some lakes that were affected that are not at all or are only slightly developed. One of the hypotheses to explain the high number of cases of bacterial proliferation throughout the region last summer posits a link between this phenomenon and the many heavy rainfalls during the summer. These heavy rains generated an exceptionally high level of runoff that caused massive amounts of



nutrients to be transported to the lakes which then became overloaded. Among other factors, this runoff, which was quite warm, remained on the surface, because of thermal stratification which occurred in the lakes during the summer. These nutrients became immediately available and helped support the extremely rapid growth of cyanobacteria in the local environment. This hypothesis therefore proposes that poorly controlled run-off might be a leading cause of the outbreak of cyanobacteria observed in many Quebec lakes in 2006. Thus one could say that for a lake where the drainage basin has been degraded and many of its trees and much of its vegetative cover lost, especially in the waterfront buffer zone, the risk of a problem of cyanobacteria was considerably higher, with all its attendant problems and major inconveniences.

In Quebec, our lakes represent a valuable - and valued - asset for society as a whole. Too often, this is taken for granted and little thought is given to protecting and maintaining it. The 2006 spread of cyanobacteria was a sharp reality check, and reminds us that we must always be vigilant. While it is normal for lakes to age and to change over time, it is not normal to see such disquieting changes happen in such a short period, as has been the case for too many of our lakes. We must end this danger by taking the necessary measures to ensure that our lakes are protected for all to enjoy. This is something we all need to do; in particular all residents of a drainage basin, the municipalities with shoreline properties, and all who practise activities in the region. Certain special protection measures should be planned but simple and effective bylaws to cover protecting the existing vegetation, including mature trees; upgrading septic systems; moderating use of fertilizers and strict control of other sources of potential pollution of the lake should be applied everywhere. Only with general concern and action by all can we hope for a happy outcome for our beloved lakes and bodies of water in our region but even so, they remain very fragile ecosystems.



#### **Biographical Note**

#### André Hade PhD

Dr André Hade is a retired professor of chemistry who taught at UQÀM. His professional work was mainly in thermodynamics, the chemistry of water, the basics of natural and surface water treatment and chemistry. In



chemistry, biochemistry and the environment, he has held various academic posts, principally at UQÀM, but also in international cooperation in Europe, Africa and Asia. His career has been notable for his involvement in services to the community. He is also the author of a book for the general public entitled « Nos lacs : les connaître pour mieux les protéger».

# Have You Renewed Your **Membership?**

For forty years the mission of MCI has been to protect the health and natural beauty of Lake Memphremagog and the surrounding region.

As you will have noted, the challenges remain numerous and require the active participation from all to join in the battle to save our common legacy.

MCI asks for your continued membership providing us with the financial support to carry out the activities that are key to fulfilling our mission.

If you have not already done so, would you take a few moments to renew your membership for 2007? We have included a membership form with return envelope in this mailing. If you wish, you may also complete your membership transaction on line by visiting our website.

We encourage you to recruit friends and neighbours to join us as members and add to our growing membership. All who live within the watershed of Lake Memphremagog have a vital interest in seeing that our lake and region surrounding it, remains healthy in all respects.

Hubert Simard, Coordinator

#### **MCI Board Members** (2006-2007)

Gisèle Lacasse Benoit, President Austin 819 868-1369

**Jacques Charbonneau** 

Donald R. Fisher, Vice-president Austin 819 843-4102

Madeleine Saint-

Pierre, Vice-president Austin 819 843-6063

Pat Trudel, Treasurer

Mansonville 450 292-3550

Tom Fletcher, Secretary Magog 819 868-8890 Magog 819 847-0992

**Jean-Claude Duff** Austin 819 843-2131

Renée Joyal Magog 819 843-5846

Jan Lundgren Austin 450 292-3964

**David Monty** Austin 819 847-2600

Susan Watson Newport 802 334-5173