



Activities report 2012

The year 2012 proved to be a relatively good one despite the persistent heat wave which extended over much of the summer. As a result, the water temperature of the lake was quite high and for the first time in many years waterfront owners noticed a significant and sustained drop in water levels. The average level in August was 196 m, a drop of some 16 cm, and this remained throughout the fall. Water transparency was average when compared with previous years. Cyanobacteria appeared sporadically beginning in August but the outbreak was not serious enough to compromise seasonal activities. One cloud on the horizon is the continuing high levels of phosphorous which exceed the levels at the Foster dam outflow, indicating that the quality of the water isn't what it should be.

Improving the health of the lake

Taking into account the precarious health of the lake, the water quality is quite dependent on the intensity of precipitation and the amount of sunshine. We are still, unfortunately, at the mercy of the weather. The municipalities and the MRC are not implementing the recommendations for best practices for road work and ditching quickly enough to ensure good management of runoff waters.



Nevertheless, RLB has noted that the riparian areas of Brome Lake are clearly improved because of the adoption of by-law 488 by the Town, the better awareness of citizens of good practices and the availability of shrubs adapted to the riparian zone. However, the assessment of the 34,000 shrubs planted since 2008 on the banks of the tributaries indicates that the survival rate has been 59% while experts suggest that the rate should be 75%. In 2013, RBL will re-assess its strategy related to continuing this program in 2014.

RBL continued its water quality monitoring program. The results analyzed in the laboratory of the MDDEFP show that once again only the results for Coldbrook

were acceptable. All the other tributaries show higher phosphorus levels, in particular in the tributaries in the urban area, notably in Pearson and Inverness Brooks. The quality of water in the lake was clearly improved throughout the entire season in comparison to the historical average, probably because of low rainfall.

In addition to the water quality monitoring program, other studies and tests were carried out to look at the flow in the brooks, the activity of biomass, dissolved organic carbon, suspended solids (SS), etc. Observations were made at certain sites to recommend the most appropriate interventions to correct problems.

The Foster Mountain file

Even though the water quality of Coldbrook is acceptable, it is, nonetheless, deteriorated. RBL has quickly become concerned about the potential impacts of residential development on Mount Foster as the cause of this degradation. RBL has shared its concerns with the regional office of the MDDEFP, the MRC, the municipalities of West Bolton and St-Étienne de Bolton. A proposal to create a new land use designation of Rural-residential over a huge part of the territory of the municipality, including Mount Foster was the subject of a brief by RBL. We note that the MRC issued a non-compliance notice for the Mount Foster project. This is now under a ban on work by the MDDEFP. A file to watch in 2013.

We also gave a mandate to the Regroupement des associations pour la protection de l'environnement des lacs (RAPPEL) to carry out a diagnosis on the head of the Coldbrook drainage basin. The report which was presented to those primarily concerned confirmed that the roads network in this area is the main culprit for the degradation of the water in Coldbrook. The report proposes improvements on 41 municipal infrastructures in West Bolton to improve water from runoff in its territory.

Sustainable use of the territory

RBL is very interested in sustainable land use in the region and in the conditions that make the human footprint as respectful as possible of the environment. Aside from the Mount Foster file, we are closely watching the revision of the Planning program of the Town of Brome Lake and are working actively to enhance the planning by-laws that will follow. The year 2012 was marked by significant progress, particularly with regard to the rules touching the management of run-off and the protection of wetlands.

To have the best possible understanding of the filtering capacity of natural components, particularly in a watershed, an expert was asked to prepare a report and propose a restoration goal and pathways to solutions to improve water quality. According to the report tabled in December 2012:

- The watershed has lost 5% of its filtration capacity, or an area of 850 ha, in the last 50 years;
- A number of swamps, wetlands and marshes have disappeared;
- Agricultural lands and pastures have reverted to forests or have been used for residential purposes;
- Ponds and small lakes have increased at an astonishing rate.

Turning to the ability of the area to recover its ability to filter the water, RBL would like to see the Town of Brome Lake put in place a 5-year program within a firm and realistic framework, adequate financing and strict monitoring

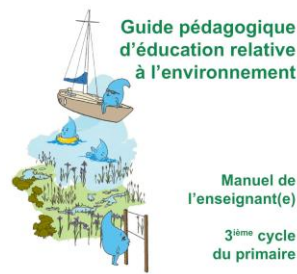
Moreover, we note that with the collaboration of RBL, the Town of Brome Lake was awarded the Homage prize by the Quebec government for its involvement in sustainable development, for the category of municipalities with between 5,000 and 10,000 inhabitants.



Citizen action

The changes we hope to see will never happen without the absolutely essential mobilization of citizens. In 2012,

Eau delà de l'eau d'ici



RBL completed the preparation and publication of a pedagogical guide in French and English, dealing specifically with water quality in the Brome lake drainage basin.

Titled « Eau delà de l'eau d'ici / Water, water everywhere », it was produced with the financial support of the Town and the TD Friends of the Environment Foundation.

The pedagogical guide is intended for students in the schools of Town of Brome Lake: St-Édouard and Knowlton Academy. It consists of a teacher's manual, various sheets for the pedagogical activities suggested and all the material: binoculars, maps, identification sheets, etc.

To encourage water saving and to make the population aware of the precariousness of "Water" as a resource, RBL organized an activity set up in the parking lot of the IGA store selling rainwater recovery barrels. This initiative will be continued in 2013. Finally, RBL and the Town of Brome Lake continued to distribute *Le Petit guide des bonnes pratiques* to shoreline dwellers.

Our intentions for 2013

In addition to the files and issues listed above, we have been following several other issues, among others, our proposal to create a lake management committee for water-based activities, monitoring of the municipal by-laws dealing with golf courses, the Mill Pond and the proposed bridge on Lakeside.

We will begin new projects such as the definition of environmental criteria for municipal specifications, an environmental diagnosis of Quilliams Brook, a joint project with the Université de Sherbrooke concerning surface and underground waters in the watershed, and, of course, water quality.

In this International Year of Water, you may be sure that RBL and its board of directors are committed to pursue with determination and rigour our mission with the collaboration of our members and our partners, and we thank them for their support.