



ACBVLB
Conservons le Lac Bromont

BROMONT
INSPIRE L'ACTION

COMMUNIQUÉ DE PRESSE
Pour diffusion immédiate

A positive 2nd year for Lac Bromont

Bromont, 3rd August 2020 - More than two years after its application, the Phoslock® treatment continues to keep its promises by significantly reducing the concentrations of total phosphorus in the deep layers of Lake Bromont while controlling episodes of cyanobacterial blooms.

Total phosphorus loadings measured at the pit have decreased by more than 70% compared to at the concentrations before the application of Phoslock®, despite the duration and extent of oxygen deficit at the bottom of the lake during these periods. "This oxygen deficiency should normally have created the optimal conditions for intense release of phosphorus from sediments," said Dolors Planas, researcher and professor emeritus at the University of Quebec in Montreal. On the other hand, the preliminary results of the research team of Professor Raoul-Marie Couture, from the Department of Chemistry at Laval University, show that this phosphorus was indeed sequestered in large quantities in the sediments of the lake after the treatment.

In addition, the decrease in phosphorus concentrations also favoured a change in the species composition and dominance of the algal community and decreased the frequency and the intensity of cyanobacteria blooms. To this end, Michelle Champagne, president of the ACBVLB, mentions that in 2017, 114 days were observed with the presence of blooms cyanobacteria compared to 44 days in 2018 and 31 days in 2019. "Last year the number of cyanobacteria blooms observed decreased by almost 80% compared to 2017 "he said she adds.

Despite these encouraging results, there is still a lot of work to be done to ensure the sustainability of treatment at Lake Bromont. The ACBVLB team, in collaboration with researchers Dolors Planas and Raoul-Marie Couture, is currently studying the influence of external phosphorus inputs from tributaries on the effectiveness of long-term treatment and the fate of the phosphorus complex. lanthanum in the sediments of Bromont Lake. This research is made possible thanks to the financial support of the Innovation program of the Ministry of Economy and Innovation.

About Phoslock®

Phoslock® makes it possible to quickly and sustainably capture the phosphorus dissolved in suspension in the water column as well as that present in the upper layer of the sediment. By settling at the bottom of the lake, lanthanum, the active compound of Phoslock®, continues over time to capture the dissolved phosphorus released by the sediments, thus limiting its bioavailability for cyanobacteria which, in large quantities, force the closure of beaches.

The use of this restoration technique is a first in Quebec. The Ministry of the Environment and the Fight against Climate Change has approved the application of Phoslock® in Lake Bromont, thus becoming an important pilot project with a view to repeating the treatment in other lakes in Quebec. . On the other hand, the authorization certificate issued by the MELCC obliges the City of Bromont to carry out a monitoring and follow-up program for a minimum of 5 years in order to document the possible impacts of the project on the quality of the water as well as on the flora and fauna of the lake and to implement the actions provided for in the master plan for the conservation of Lake Bromont 2017-2027. The application of Phoslock® was funded by the City of Bromont at a cost of \$ 650,000.

Source:

Conservation action of the Lake Bromont watershed (ACBVLB)

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