

# Friends of McFarlane Lake Stewardship Group

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## **Sudbury City of Lakes – Preserve Our Lake Background for Priorities Committee**

*Meeting of February 18/2009*

### *Friends of McFarlane Lake Stewardship Action Items*

1. McFarlane Lake to be categorized as a unique 'Study Lake'
2. Non Use of Cosmetic Fertilizers for Lawn Care – Formal Resolution to City Council
3. Septic System – Testing, maintenance & inspection
4. Assertive Shoreline Education Visitations and Stronger Advisory Panel Leadership
5. Clean Water Protection Act – More effective inclusion of private water intake from lakes

### **Background & Detail to Action Plan**

#### **1. McFarlane Lake – Study Lake**

Since the early 1950's, McFarlane Lake has been a base of Provincial government activity. Their initial use of the water body began with the introduction of the Lands and Forests fire fighting fleet of airplanes. A facility to house staff along with building maintenance structures was built about the same time. In 1959, the Provincial government went through an extensive project to build a waste water treatment facility on the premises and excavated a sewage line down to the end of Leedale Avenue with the final output of treated sewage expelled into McFarlane Lake. The provincial government facility locally referred to as 'Little Queen's Park' has grown to include many building structures and the regional OPP offices. This facility is managed by the Ontario Realty Corporation and along with their management; our Stewardship committee remains involved with any Ontario Realty Corp. changes or transformations which affect the water body of McFarlane Lake.

In 1969 another large provincial institution (Cecil Facer Youth Centre) was constructed and with a capacity of up to 82 young offenders who are placed in secure custody. A staff population of up to 140 persons works at the facility. The sewage and wastewater from this busy complex is routed through the Ontario Realty Corporations sewage treatment building and thus ending up in McFarlane Lake adding significantly to the nutrient load.

Other influences on our lake come from properties long ago rezoned for Industrial land use. Urethane Elliot Systems – a division of Industrial Products has been located on CKSO Road for

over 25 years. It is understood that the business was recently sold and that the property was under an environmental cleanup order (Golder Associates). A nearby creek flowing into McFarlane Lake exists. Having an industrialized operation that specializes in the use of chemicals to produce plastic and rubber products has been very disconcerting from an environmental standpoint for residents in the area.

St. Christopher Catholic School was built at least 30 years ago in the community along CKSO Road. It is understood that the septic system has been maintained over the years and poses no immediate threat to the watershed in McFarlane Lake.

In the early 1980's, the Ministry of Environment classified McFarlane Lake as an 'at capacity' lake and that future new development would not be approved. McFarlane Lake has higher nutrient levels than many Sudbury area lakes and is affected by intensive housing development in its watershed including the Algonquin secondary watershed. It was one of the first lakes in Northern Ontario to be invaded by an invasive growth of Eurasian milfoil.

The Ministry of the Environment (MOE) had advised the Sudbury & District Health Unit that test results of water samples taken from McFarlane Lake on October 3<sup>rd</sup> and 7<sup>th</sup>, 2008 were positive for the blue green algae (cyanobacteria). The samples appear to have contained a number of species of cyanobacteria which can produce toxins.

During our Stewardship public information meeting of January 22<sup>nd</sup>, 2009 over 150 people from the community attended. Guest speakers provided insight into blue green algae concerns.

Dr. Charles Ramcharan (Professor of Biology at Laurentian University) provided the resident's with a profile of McFarlane Lake as compared to other lakes in the region.

Mr. Al McDougall from the Sudbury & District Health Unit explained the testing methods used by the MOE and provided some facts to residents with concerns about the blue green algae.

Mr. Brad Bowman (Geo Scientist N.A.R. Environmental Consultant) presented a statistical overview of phosphorus levels in McFarlane Lake over the years (1975-2007). Note that McFarlane Lake is a mesotrophic lake. These lakes are commonly clear water lakes with beds of submerged aquatic plants and medium levels of nutrients. These lakes are also characterized by moderate nutrient concentrations such as nitrogen and phosphorous. It is understood that scientifically speaking, mesotrophic lakes are not highly prone to this type of toxic blue green algae. However there were blue green algae readings this past October that are potentially serious problems for McFarlane Lake and other lakes in our watershed.

All speakers agreed that use of cosmetic fertilizers on the lake and throughout the watershed could be contributors to this situation but that other factors such as those mentioned above are concerned items attributing to the lake quality issues.

It was felt at this presentation that the data provided by the MOE test results were ultimately inconclusive because the MOE test results were contradictory.

MOE 2008 Sample Results (two samples taken separately):

Oct 3/08 – dense bloom ELISA index of 93

Oct 7/08 – less dense bloom concentration, ELISA index of 66

Water quality monitoring is an important component of lake stewardship activities. It provides a scientific basis for understanding lake characteristics and how activities around the lake impact water quality. It is fundamental to develop a comprehensive, cost effective rehabilitation plan to

save McFarlane Lake.

THEREFORE, it is the inclination from the Friends of McFarlane Lake Stewardship Group that a Monitoring Program or Study be formed as follows

- \* Establish a Monitoring Working Group composed of Master Students (Laurentian University / Biology) and a team of student volunteers and resident lake volunteers
- \* To determine whether the water is safe to drink; kitchen tap samples should be regularly tested by the Sudbury & District Health Unit
- \* Bi-Weekly assessments of Phytoplankton community taken from the lake
- \* Both of these sampling programs will required direct measurement of toxicants by a laboratory

## **2. Non Use of Cosmetic Fertilizers for Lawn Care**

According to provincial legislation in The Pesticide Act (RSO 1990) and more specifically the revision by the Ontario Government (Chapter P.11) as it relates to the Cosmetic Pesticide Act, municipalities in Ontario are no longer able to process their own bylaws banning use of pesticides/fertilizers. THEREFORE, the Friends of McFarlane Lake Stewardship Group is asking our City Council to request the Ontario Provincial government to pass a resolution supporting regulations dealing with cosmetic use of fertilizer control. This could eventually lead to a prohibition on use of cosmetic fertilizers on properties affecting the watershed.

At the Feb. 18<sup>th</sup> Priorities Committee meeting, Steering Committee members, will formally provide the following resolution to City Council for approval. . We have met with Mr.Ron Swiddle, the City of Greater Sudbury legal counsel, to discuss this motion on February 11/09.

**Whereas** the use of cosmetic fertilizers has a deleterious effect on our watershed, and

**Whereas** over 4% of people in the region of Sudbury take household water directly through private intake, and

**Whereas** the use of cosmetic fertilizers has the potential to encourage the growth of toxic blue-green algae and other negative organisms in the waterways where these private intakes are located

**Therefore be it resolved that the Council of the City of Greater Sudbury request to the Minister of the Environment to make a regulation under the Pesticide Act regulating or prohibiting the sale or use of cosmetic fertilizers in the upcoming provincial regulations dealing with cosmetic pesticides.**

## **3. Septic System for Households affecting the Watershed – Testing, Monitoring & Inspections**

An on-site sewage system is clearly different than city provided sewage disposal lines. The major difference is that the property owner is responsible for the proper maintenance and operation of the septic system. Consequently this brings the issue of responsibility for the environment into people's backyards and homes. The effect of operation and maintenance of septic systems, if done improperly

can extend beyond the backyard and affect public health especially as it relates to our watersheds. The condition of existing septic systems is therefore important for a wide range of reason.

Since 2005, our Stewardship group has provided households in the McFarlane Lake area with articles on the importance of a well maintained septic system in the Newsletter format which is prepared and distributed at least twice a year. Additionally, pamphlets and brochures on the subject of septic systems have been dropped off door to door by volunteers as a welcome package for new homeowners on the lake. We shall continue to provide this type of education to residents however; the effectiveness of a more vigorous maintenance program is required in light of the recent attention to our lake quality.

THEREFORE, the Friends of McFarlane Lake Stewardship Group requests that

a) through the skilled personnel from Sudbury & District Health Unit, education sessions pertaining to proper septic system maintenance are set up in areas that have a high installation of septic systems. This education could be simply setting up information tables with expertise at locations such as the Southridge Mall, South End Library, etc.

b) through SDHU, Mail out's or Door to Door brochures be delivered to homes on septic systems for a more direct campaign and

c) that the City of Greater Sudbury reintroduce the monetary rebate to resident's to encourage them to have their septic holding tanks emptied at the least bi-annually.

#### **4. Assertive Shoreline Vegetation Home Visits – Role of Advisory Panel Reviewed**

Through the City of Greater Sudbury – Lake Quality Program and during the summer months, interns hired by the City have in past years made visits to home's upon request, to discuss proper shoreline vegetation practices.

In light of the 2008-2009 lake quality issues, our Stewardship group feels that this program could be more effective. A more aggressive home shoreline visit program would help by adding the much needed education regarding vegetation buffers along the shoreline and the important role it can play in lake quality. Our Stewardship volunteers would be willing to work alongside the City summer staff to encourage as many residents to participate in this viable education program.

Additionally, our Stewardship committee feels that the role of the Greater Sudbury Lake Advisory Panel as appointed by City Council has not been effective with our Stewardship issues and concerns. The mission statement for this Panel is to serve as a watchdog on behalf of all citizens in the community and actively promote and protect the ecological health of the lakes within the City of Greater Sudbury through: social and scientific research, public education, policy advocacy, community partnerships, and strategic community initiatives THEREFORE, it is our feeling that a panel that can provide better direction, leadership and effectiveness is outstanding and that City Council needs to re-evaluate the roles of this Advisory Panel.

#### **5. Drinking Water Source Protection Act**

The majority of residents on McFarlane Lake have a private intake from the lake for their household water use. Through easements , a fair number of roadside residents also get their household water through private intakes taking in lake water. The remainder of residential homes have private wells.

As a result of the warning issued October 10, 2008 by the Sudbury & District Health Unit after test results from the MOE for blue green algae were released, have signaled residents and the Stewardship group to ask our various government representatives to prioritize the provision in any one of these 'Acts'.

THEREFORE, the expectation will be that through the City of Greater Sudbury Councilors and NDCA, higher prioritization is used to address in writing to the Ministry of Environment, emphasis for the inclusion of 'private water intake' under the Drinking Water Source Protection Act for Clean Water...

For information purposes, under the Drinking Water Source Protection Act there are numerous 'Acts' pertaining to drinking water. Listed below are a brief summary of 'Acts' as they pertain to private resident's drinking water:

- Clean Water Act – drinking water source protection (municipal systems & other systems)
- Safe Drinking Water Act – regulation of municipal & private drinking water systems, etc)
- Environmental Protection Act – spills, discharge that may cause adverse effects & MISA regulations
- Health Protection & Promotion Act – regulation of municipal & private drinking water systems and small drinking water systems.
- Ontario Water Resources Act-dealing with wells, sewage works >10,000L/day, safeguarding & sustaining Ontario's Water Act

**Presented by the Friends of McFarlane Lake Stewardship Group**  
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