

**Greater Sudbury Watershed Alliance Inc.**  
**General Meeting Minutes**  
**February 17, 2014**

Vale Living with Lakes Centre, Ramsey Lake Road, Sudbury, Ontario

**I. Call to Order**

Chair Lesley Flowers called the meeting to order at 7:00 pm.

**II. Roll Call of Stewards**

Circulated list of participants (some names were illegible so may be misspelled):  
Stephen Monet (City of Greater Sudbury), Kyle Borrowman (EnviroScience Inc.), Jan Linnquist (McFarlane), John Lindsay (Minnow), Lin Gibson (McFarlane), Doug Turcotte (Long), Susan Turcotte (Long), Brad Conlon (Long), Nadine Conlon (Long), Jack Fraser (Long), Larry Hautamaki (Silver), Mary Faris (Long), Richard Witham (Long), Darlene Zylberberg (Long), Philip Zylberberg (Long), Ron Swiddle (Long), Andre Ferron (College Boreal), Tom Truskoski (McFarlane), Lily Noble (Ramsey), Bob Walinga (McFarlane), Vic Fabbro (Long), Al Keller (Long), Stephen Bull (Nepahwin), Sandra Willock (Long & Grant), Scott Darling (Long), John Maki (Long), Louise Maki (Long), Peter Costigan (Long), Jane Costigan (Long), Don Gibson (McFarlane), Rodney Chambers (McFarlane), Andy Brunet (St. Charles), Alex Cieslewicz (Richard), Craig Hamilton (Richard), Claude Nadon (Wahnapiatae), Roger Labonte (Long), Ed Debicki (St. Charles), Ruth Debicki (St. Charles), Dave Hodge (St. Charles), Tammy La'nci (Long), Gergely La'nci (Long), Jessica Tann (Simon), Sherry Purdon (Vermilion), Lesley Flowers (Vermilion), Jillian Smith (St. Charles)

**III. Adoption and Approval of Agenda**

Moved and Seconded.

CARRIED

**IV. Presentations**

**Stephen Monet: City of Greater Sudbury – Manager of Environmental Planning Initiatives**

Summary:

City staff was invited by lake stewardship groups to a meeting in Naughton during the fall of 2010 to discuss increases in the invasive plant, Eurasian watermilfoil. As a result of the meeting, the City's Lake Water Quality Program decided to jointly hold its 2010 Water Gathering at Science North with the lake stewardship groups and the Greater Sudbury Watershed Alliance. The 2010 Water Gathering featured Gord Miller (Environmental Commissioner of Ontario and aquatic macrophyte specialist) and Marty Hilovsky, President of EnviroScience (to speak about milfoil weevils as a biological control agent). The GSWA held meetings and eventually brought forth a Eurasian watermilfoil abatement project for consideration by city council.

The milfoil weevil project came under the management of the City because the project needed to be tendered through the formal Request-for-proposal (RFP) process in accordance with the City's Purchasing By-law. The proposal submitted to the City by EnviroScience Inc. did not vary in terms of work plan from the proposal initially submitted to the Greater Sudbury Watershed Alliance.

Although the City managed the project, opportunities were provided to allow stewardship groups to interact with EnviroScience Inc. field staff, participate in the selection of weevil culture facilities, receive project updates and annual results, and participate in project communications planning efforts. A kick-off meeting occurred in April of 2011 at which lake stewardship were invited to interact with EnviroScience Inc. field staff. Lake stewardship groups were also invited to meet, ask questions, and express concerns to EnviroScience Inc. field staff in June, 2012.

Though eight lakes were initially proposed for weevil stocking (Long, Grant, Hannah, Middle, St. Charles, Richard, McFarlane, Simon), Hannah and Middle were later removed due to research considerations. Local aquatic biologists and DFO advised that Hannah and Middle are critical long-term research lakes utilized for assessing chemical and biological recovery of stressed ecosystems. Thus, weevils intended for Hannah and Middle were reassigned to Long, Richard, and St. Charles – a decision based upon assessment of need.

Lake locations selected for stocking were based upon the degree of expected results with available resources. Though several sites were geo-referenced, not all were necessarily selected for stocking. For example: one particular site in a Long Lake bay was selected for concentrated stocking effort because it was deemed to have the greatest probability of success. Considering that this was a trial, pilot project for the Sudbury area, 'probability of success' could only be based upon experience gained in Espanola and locales farther south. Stocking concluded in the summer of 2013 after three successive years of stocking (though not all lakes were stocked each year).

### **Kyle Borrowman: EnviroScience Inc.**

#### **Background:**

Eurasian watermilfoil has been found in Ontario lakes since the 1960s and is now prevalent across North America. Its primary mode of colonization is by fragment establishment (after movement or introduction by boat traffic, mechanical removal, etc.). Eurasian watermilfoil can negatively affect water quality, fish habitat, and property values. Though there are six milfoil species in Ontario for native weevils to feed upon, these weevils are also capable of feeding on the invasive plant. When burrowing and feeding occurs during the larval stage, the plant weakens and falls into the water column, thereby decreasing its photosynthetic potential to proliferate.

Milfoil Solution is a product offered by EnviroScience to use biological control (native weevils) to mitigate Eurasian watermilfoil proliferation. EnviroScience opened a Sudbury lab at College Boreal to culture native weevils in 2011; once native weevils were procured from local lakes, double (or more) of the original numbers were returned to lakes as eggs. A total of 145,700 weevils were stocked.

**Kyle Borrowman's Report Summary:**

**Refer to Milfoil Solution Progress Report:**

[http://www.waldentoday.ca/files/Report\\_Sudbury\\_2013.pdf](http://www.waldentoday.ca/files/Report_Sudbury_2013.pdf)

**Grant Lake:** Stocked for 2 seasons; 2012 was a particularly bad year for milfoil (hot and dry); apparent successful weevil overwintering

**Long Lake:** 4 sites were stocked for a total of 44,000 weevils over 3 years; S1 appears most effected; S2 was not stocked in 2013; a new site was selected in 2013; weevil overwintering may be a problem in this lake due to large areas of disturbed shoreline and inadequate overwintering detritus. The large areas with disturbed shoreline can limit the amount of ideal stocking locations.

**McFarlane Lake:** A long history with Eurasian watermilfoil; 3 sites selected for stocking; attention focused on S2 and S3

**Richard Lake:** Milfoil observed to have stunted growth; good overwintering; S1 not stocked in 2013

**Simon Lake:** Stocked for 2 seasons; a dramatic collapse in milfoil was initially observed; no stocking occurred in 2013 because of excessive algae growth

**St. Charles Lake:** Major decreases in density; high weevil counts each spring; large 'holes' of complete collapses

**Question & Answer with Stephen and Kyle**

**Why were weevils stocked at high current sites in Long Lake?**

Fast flow areas are avoided; this site was not deemed particularly fast flowing. Weevils are able to withstand some current and wave action. While this area was expected to see good results, this was, unfortunately, not the case. Biological controls can be unpredictable.

**Do markers adequately pinpoint exact stocking locations or is there variability year to year?**

GPS coordinates match the centre of stocked patches. GPS, together with landmarks, pictures, and maps make it quite easy to return to the same locations year after year. Additionally, milfoil patches do not tend to move much year over year.

**Is S1 in Long Lake truly a significant decrease? (Also a comment that S2 does NOT have less density than S1, as the data suggests.)**

EnviroScience is in the process of updating measurement techniques to obtain more accurate estimates of milfoil and weevil density. The current technique takes only 30 stems of milfoil to assess weevil density per square-metre (of what could be 300 stems/m<sup>2</sup>).

**Why has Long Lake not seen results given the intensive effort?**

Long Lake tends to have large, robust milfoil plants at the beginning of stocking seasons. Furthermore, the lake has very low natural weevil densities, thus, the stocking is essentially 'starting from scratch'.

**Why were no control sites undertaken for study?**

EnviroScience monitors control sites on lakes upon request; this was not the case in Sudbury. From a managerial perspective, the resources were considered of better use in the lakes than in the form of a proper scientific study.

**How long will Hannah and Middle Lake be excluded from such projects?**

These lakes – and the watershed in which they belong – will likely remain research lakes in perpetuity.

**What will happen to phosphorus inputs if milfoil is not available for uptake?**

Ideally, native species will grow in its place over time.

**Why don't native weevil numbers naturally increase alongside Eurasian milfoil densities?**

Weevils are specialist insects. It takes time for native weevils to evolve and adapt to feeding on a new milfoil species. Weevils have adapted to prefer Eurasian watermilfoil as a host; however, Eurasian watermilfoil grows quicker than northern milfoil. Weevil populations take longer to reach densities capable of decreasing the amount Eurasian milfoil. This can be further impacted if the upper portion of the plants (where the weevils are present) become disturbed by harvesting, boat traffic, etc.,

**Is hybridization a threat?**

Hybridization is not a threat in Sudbury at this point. Hybridization may pose a problem in regions where native northern and invasive Eurasian species have coexisted since the 60s.

**What is the main culprit behind fragmentation?**

Cutting and boat traffic are the primary reasons behind fragmentation and subsequent colonization.

**Why isn't Living with Lake staff involved with this project?**

Local scientists have been somewhat involved in giving feedback, however, their research grants and interests are with other important projects.

**Is 'backyard' culturing an option?**

No, it is extremely cumbersome and time-consuming.

**Can associations pool resources for private purchase?**

Yes, this has been, and will likely continue to be an option.

**Clear Lake in Espanola is several years ahead of the Sudbury project; what is their milfoil status?**

There is a report that can be sent for review.

**Comment: Minnow Lake was full of milfoil more than 10 years ago but has little today. Though mechanical harvesting is no longer a recommended abatement strategy, Minnow Lake has seemingly had success with this practice.**

**Where do we go from here?**

Stephen Monet: Admittedly, the EnviroScience data is not compelling. Nevertheless, the city did its due diligence in securing EnviroScience for this project and trusted their knowledge and experience. The city was never in a position to fund a 'science project'. Added controls and enhanced monitoring would have pulled resources from the overall scope of the project. Furthermore, there are not always explanations for booms and crashes in biology. Recommendation: At a minimum, monitor for at least another year to determine weevil survival. Without this knowledge, we will not have information to substantiate future experiences.

**V. Formation of Sub-committee for Recommendations**

Chair Lesley Flowers asked for volunteers from each affected lake to form a sub-committee to make recommendations to the GSWA. Stephen Monet will take these recommendations into account before presenting his proposal re: milfoil project continuance to city council.

Volunteers:

Alex Cieslewicz (Richard), Craig Hamilton (Richard), Sandra Willock (Grant), Richard Witham (Long), Mary Faris (Long), Rod Chambers (McFarlane), Don Gibson (McFarlane), Dave Hodge (St. Charles), Jillian Smith (St. Charles), Jessica Tann (Simon), John Lindsay (Minnow)

**VI. Adjournment**

Chair Lesley Flowers adjourned the meeting at 9:03 pm.

**Upcoming Meetings:**

Lake Advisory Panel Meeting:  
Hutchinson Report on Phosphorus Response/Lake Capacity  
Thursday, February 20, 2014, 5-7 pm  
Room C11 Tom Davies Square

GSWA AGM  
Monday, March 17, 2014, 7-9 pm  
Vale Living with Lakes Centre