GREATER SUDBURY WATERSHED ALLIANCE INC.

GENERAL MEETING

Monday, October 16, 2017 @ 7:00 p.m. Vale Living with Lakes Centre, Ramsey Lake Road, Room LL 102

MINUTES

Roll Call:

*Richard Denton, Chair	St. Charles Lake	*Nicole Wittke	St. Charles Lake
*David Young, Treasurer	McFarlane	Rod Chambers	McFarlane
*Elaine Porter, Vice Chair	Ramsey	*Lily Noble	Ramsey
Norm Eady	Wahnapitae	Bill Querney	Nepawhin
*Alex Cieslewicz	Richard	*Richard Witham	Long
*Linda Heron	Vermillion River	Stephen Butcher	Black
*Lesley Flowers	Simon	Dave Furino	Simon
Sandi Willock	Grant	Tim Walker	Panache
*Susan Darling, Secretary	Long	*John Lindsay	Minnow
Markus Bertels	St. Charles	Dave Hodge	St. Charles
Gord Key	Long	Scott Darling	Long
Forbes Stoodley	Long		

Absent: * Nicole Courville (Board/St. Charles), *Margaret McLaughlin (Board/Fairbank), Stu Greaves (Panache), Peter Pula (Black), Terry Fortin (Fairbank), Sarah Woods (Junction Creek), Lori Adams (Long), Dave Petryna (Nepawhin), Craig Hamilton (Richard), Sheri Johnson-Purdon (VRS), Wayne Chabot & Barbara Courjaud (Windy), Claude Nadon (Wahnapitae), Denise Goodmurphy (Whitewater)

- Indicates GSWA Board member
 - 1. Agenda approved by consensus.
 - 2. Approval of general meeting minutes of January 9, 2017. Moved by Forbes Stoodley, seconded by Linda Heron. **CARRIED**
 - 3. <u>Treasurer's Report</u> (attached) Dave Young. Membership fees from most stewardship groups have been received as shown. Major payouts were for the liability insurance for Directors & Officers and for our website administrator, Alyssa Ferreira. Current balance is \$5263.56

Motion to approve Treasurer's Report - moved by David Young, seconded by John Lindsay. **CARRIED**

- 4. <u>Previous Business</u> None raised. It was noted that an email update on GSWA activities was sent to stewardship reps Aug 24.
- 5. Aquatic Invasive Species: Eurasian Water Milfoil Subcommittee report (attached) Chair Nicole Wittke reviewed the mandate given in July to this new committee. There was consensus for the committee to continue its work. Nicole described the nature of meetings with Paul Lefebvre, Marc Serré, France Gelinas, Deb McIntosh, Stephen Monet (CGS Environmental Planning) and Collège Boréal's Andre Ferron (scientist) and Randy Battochio (funding). Team members have

also had phone conversations with Quebec and Ontario researchers and scientists. They have been providing regular updates to the GSWA Board including summary notes on meetings with officials and others.

In terms of funding, the GSWA may want to explore the possibility of acquiring Charitable Status.

MOTION that the GSWA Board investigate the option of Charitable Status. Moved by Lesley Flowers, seconded by Linda Heron. **CARRIED**

The subcommittee of six was congratulated on its excellent presentation Sept 26 to City Council and on its diligent efforts throughout the past three months. AIS-EWM members include Nicole Wittke, Lori Adams, Alex Cieslewicz, Scott Darling, Irene Nizzero and Dave Hodge.

- 6. Website demonstration Linda Heron presented the new GSWA website. She has worked closely with Alyssa Ferreira to create a new website and Blog at http://www.gswa.ca/blog. Visitors to the Blog will find posts dating back as far as 2010, as well upcoming and recent events, presentations, Meeting Notes, approved Minutes of General Meeting, and submissions on key issues of concern. Visitors can either use the search box at the top right, or find topics of concern quickly in the list of Categories to the right of the page. Stewardship reps are encouraged to send linda.heron@rogers.com notices and/or flyers of upcoming events if you would like them to be posted on the Blog and Events Calendar. The website will continue to undergo minor improvements. Select photos of GSWA events can also be forwarded to the same address. Linda was thanked for her many hours of work on behalf of the organization.
- 7. <u>Early Detection Rapid Response</u> Colin Cassin from the Ontario Invasive Species Centre outlined the successful workshop of the previous day at the Vale Living w Lakes Centre. There were a variety of guest speakers on both terrestrial and aquatic species, and an explanation of the EDRR network.

Colin asked that we familiarize ourselves with Water Soldier and to report sitings as Ontario still has a chance at eradicating this plant. It looks like the top of a pineapple or an aloe vera plant. Eurasian Water Milfoil has spread considerably and our expectation should be to manage not eradicate. The Emerald Ash Borer is pervasive and we simply have to learn to live with its presence. Colin advised that education is key – know your enemy, work together.

The IS Centre does workshops throughout the province including to MNRF staff in various districts; Sudbury office has not yet been visited. Assorted handouts were available.

8. Conservation Sudbury's Strategic Plan 2017-2021 – General Manager Carl Jorgensen. Conservation Sudbury was previously named the Nickel District Conservation Authority and is one of 36 in the province. Carl explained how CA is funded (mainly from the city) and considers it "grassroots government". It sought community input when developing its strategic plan for 2017 – 2021. Carl shared a brochure that describes CA, what it does, the legislation that it follows, the challenges it faces: climate change, engaging youth ages 15 – 25, and staying current and relevant as an organization. He reviewed CA's mission and values, its interest in collaboration, sustainability, education, and watershed stewardship.

GIS (geographic information system) is now used for interactive mapping, e.g. helps citizens learn whether a permit is required for certain work near water bodies. The CA uses the City's sub-watershed studies and integrates this to develop a big picture approach.

CA has on its website a Links Page and will add gswa.ca to its list of non-government agencies.

Regarding a question on the increasing levels of road salt in our lakes, Carl agreed it is an issue. The City has put application plans and techniques in place that allow for the judicious use of salt, which is a good mitigation measure to take. Greater Sudbury is not the only municipality with this challenge. He said it is important to realize that many large paved areas are not owned by municipalities but are in private hands (industrial areas, businesses, and shopping malls). These businesses apply salt to prevent accidents and injuries and make their properties safe in winter. One can assume that they want to obviously avoid slips and falls for both customer service and insurance reasons.

9. Other

Question whether GSWA has been active regarding mandatory re-inspections of septic systems. Comments: Although not an issue this year, it has been previously. The Drinking Water Committee made a recommendation to the previous City Council in July of 2014 to initiate mandatory septic inspection, with no response. This committee's work and report can be viewed on-line. Unlike some areas of the province, the SDHU is the Principal Authority not the City. The CGS must work through the SDHU; this can get complicated and changes are slow. The City has made an effort to address lake health issues in its Official Plan, e.g. site plan agreements will be required for construction near water bodies, along with follow-up inspections for compliance.

Some attendees from Long Lake were concerned about boat launch signs disappearing. Other lakes are not experiencing this and Long Lake Stewardship is not aware of the three signs it helped install disappearing. It seems unlikely that the city would be removing the signage it helped fund and support. Possibly the vandalism is exclusive to Kantola Road park/launch.

Next scheduled general meeting is February 5, 2018.

Recorder, Susan Darling, Secretary

GSWA-AIS Sub-Committee Report to Board Meeting October 16, 2017

Committee formed following a Motion by the Board on July 18, 2017 "to address issues specific to EWM, including but not limited to preparation of a dossier, approaching scientists, lobbying politicians and pursuing funding."

- 6-member committee, including Lori Adams, Alex Cieslewicz, Scott Darling, Dave Hodge, Irene Nizzero and Nicole Wittke
- Dozen meetings, including

- 1. MP Paul Lefébvre contacted DFO, suggested Province is road block; media coverage forwarded to DFO; will see if DFO can influence MNRF, now that it is a municipal priority
- 2. MP Marc Serré very well informed on EWM; will advocate & support application for permit with MNRF; suggested a petition, involve FNOM
- 3. MPP France Gélinas strong relationship with MNRF; contacted within a week with 2 questions-MNRF concerned with individual permits & early results from jute burlap installations; encouraged continued conversation between GSWA & MNRF (Bruce Richard); FG eager to assist
- 4. Stephen Monet, Manager of Environmental Planning Initiatives need for scientific partner, CGS to do mapping
- 5. Dr. André Ferron, Professor, School of the Environment interested in designing research project & collaboration with Trent U
- 6. Randy Battochio, Applied Research Manager to draft funding applications
- 7. Councillor Deb McIntosh suggestions for PPP to Council, agreed to table motion
- Several telephone and email conversations with

Dr. Eric Sager, Trent University

Dr. John Gunn, Living with Lakes Center

Giorgio Vecco, ABV des 7

Rob Perrins, Block-Aid – applied science application

Presentation to City Council on September 26, 2017 was well attended, resulting in a unanimous vote to table a motion in support of a pilot project/study to control EWM by providing a letter to

The Honourable Kathryn McGarry, Minister of Natural Resources and Forestry,

France Gélinas, MPP for Nickel Belt, and

The Honourable Glenn Thibeault, MPP for Sudbury

- Presentation well reported in Sudbury Star by Mary Katherine Keown, September 27, 2017
- Radio-Canada by Benjamin Aubé, September 25, 2017
- CBC's Morning North interview with Marcus Schwabe, September 28,2017

Proposed Pilot Project - Why?

- EWM a threat to natural balance of our lakes, recreational enjoyment, and property
- Once established, capable of altering biological environment, including
 - 1. Decrease in richness & diversity of aquatic plants & organisms, such as clams, crayfish & snails
 - 2. Degraded fish habitats
 - 3. Reduced levels of dissolved oxygen and sediment nutrient
 - 4. Increases mucky layers, while holding & recycling nutrients that cause its massive growth in the first place

2 different EWM biotypes in Sudbury lakes:

- a. EWM 1 Long, McFarlane, Ramsay more bedrock, deeper most common in province
- b. EWM 2 Hannah, Richard, St. Charles smaller, shallower higher concentrations of metals in sediment

Who?

GSWA working to develop a proposed pilot project to control/manage EWM invading our lakes

- grassroots committee members are not scientists, committed to protecting our lakes
- at a fact-finding stage in the process
- reviewed different projects conducted in both Quebec & Southern Ontario; advocating for pilot project in Northern Ontario, i.e. Sudbury Lakes
- seeking input & suggestions from scientists & biologists (Gunn, Sager, Ferron, Vecco)

MNRF requires scientific research data before issuing occupational authority or approvals

- replied to MPP France Gélinas that they
 - 1. encourage continued conversation between GSWA & MNRF
 - 2. will liaise between various MNRF divisions to explore research options on EWM control in Sudbury District lakes

Scientific Partners will define project design

What?

Purpose:

- To develop management plans for areas of high boat traffic, boat launches, and docks/decks
- To control EWM
- To plant native aquatic plants to help ecological restoration in treated sites

Method: Proposes use of jute burlap and/or coir fiber as EWM control method

Result:

- Minimal ecological disturbance
- Protect public value, including enjoyment of recreational activities and property values
- Reduce the spread of EWM within and between area lakes
- Enhance native aquatic vegetation

Related Research Findings

- **1.** Lac Pemichangan, Gatineau area, 2012 (11,000 sq.m) and subsequently due to encouraging results, Lac Lovering in Magog, 2014 (6,000 sq.m.) based on a study conducted in Ireland, 2009-2013 (Caffrey et al, 2010)
 - 95% success rate in reducing EWM when jute burlap installed correctly
 - Native aquatic vegetation re-established within 2 months
 - Jute burlap biodegraded gradually over 1 3 years, resulting in minimal ecological disturbance
 - \$4-\$5/sq.m.
- 2. Mechanically-installed jute burlap by Block-Aid designed prototype in 2015 Lac Philippe, NCC Gatineau Park 2016 (20,000 sq.m.) – jute burlap and coir fibers tested

Lac a la Tortue, 2017 (30,000 sq.m.) – jute burlap, coir, & geo-textiles are being compared

- Improved accuracy & coverage of installation
- Decreased cost of installation at \$2/sq.m.
- 3. Trent River use of jute had differing results
 - Degraded quickly and/or floated up
 - Increased sediment settled on top of jute, resulting in EWM growth
- 4. Big Cedar Lake in Kawartha Lakes Region, 2017 (100 sq.m.) association in partnership with Dr. Eric Sager, Ecological Restoration Program, Trent University conducting *A Healthy Lake Program*

- To control EWM using weevils & special coir matting
- To enable ecological restoration by planting native aquatic vegetation within the weave of the coir matting
 - Creative use of 3 layers of coir fabric: 2 outer coarse with finer inner in inserting native aquatic plants
 - 1-year trial using coir mat still too early to know long-term application
 - Preceded by clearing area with milfoil extractor tool (raft converted with a vacuum pump head to extract milfoil & filter system to collect residue)

Dilemmas:

Questions posed to MNRF from France Gélinas

1) What are the MNRF's concerns with this approach and why did they not allow a permit?

The MNRF's primary concerns stem from uncertain environmental impacts and potential liabilities that may arise from the unmonitored use this experimental Eurasian Milfoil control method in Sudbury District lakes, including: product breakdown resulting in clogged water intakes, effects on boating and other general recreational activities in the lake. Breakdown of the burlap may also disturb the lake ecology or wash up on shore. Installation of this product on large areas of lakebed by the general public on developed lakes may cause adverse impacts to the lake's physical, chemical and biological properties. Research resulting from testing in Quebec lakes recommends that "it is best to ban motorboats, swimming and fishing on the treated sites as waves, trampling and hooks can disturb the burlap". The report also indicates "the impact of the burlap on physicochemical parameters (...) and sediments under the tarpaulin should be measured over time". (Excerpts taken from page xxxvii of *Control of Eurasian Watermilfoil in Lake Pemichangan using Jute Burlap – Experimental Project dated June 2015*). The MNRF is not prepared to issue occupational authority or approvals to residents for personal use as there is not sufficient research or documented evidence to support the effectiveness or impacts of this product.

2) What would the Watershed Alliance have to do to get permission from Sudbury MNRF to proceed with this research project, especially given that it is the understanding of the Watershed Alliance that the MNRF in Peterborough has approved the same thing for lakes there?

Trent University is running experiments in Big Cedar Lake (north of Peterborough) using the jute method. We encourage continued conversation between the Alliance and the MNRF. They can contact Bruce Richard, Resources Operations Supervisor -Sudbury District (705) 564-7849 who will liaise between various MNRF divisions to explore research options on Eurasian Milfoil control in the Sudbury District Lakes.

From: Rob Perrins (Block-Aid)

Sent: 9/28/2017

RE: burlap process and milfoil management

Here are a few key points to use in future discussions related to our burlap process and milfoil management

- 1. ABV des 7 started testing their burlap process in the spring of 2012. Initially they had only one situation where the burlap floated off the bottom. When they first started installing burlap they were experimenting with the best way to do the installations. In general, the burlap has to be pre-wetted and held down with about 5 kg of sand on a 2-meter square grid. This was not properly done for the burlap that floated off the bottom. Our burlap is 3.8m wide and 3 piles of 5 kg of sand is deposited every 2m. This is roughly 2 kg of sand per m² or on average 1.5mm thick of sand per m². Very insignificant. Lac Lovering also followed the ABV des 7 process and had no burlap floating off the bottom.
- 2. The burlap actually weighs about 1.4 g/cc (water is 1 g/cc), so it will naturally sink in the water when it was pre-wetted. If it is laid on top of the water it will float, since there is air within the fibres. Block-Aid ran a number of tests last fall, where we used our system to install burlap without the use of sand. This can be done and the burlap does stay on the bottom. We inspected that test early this summer and the burlap was still on the bottom with a shallow layer of silt on top. Also, there were a number of cases where the indigenous plants grew through it. However, we do not recommend the installation without the use of sand or pea stone gravel, since it ensures the burlap will stay on the bottom and withstand typical lake bottom disturbances etc. We could also increase the amount of sand used in shallow high boat traffic areas to add an extra insurance for it to stay on the bottom. This would typically change the 1.5 mm of sand to 3 mm of sand per m²
- 3. During the initial installations by ABV des 7, it was thought that boat traffic could disturb the burlap on the bottom. However, in recent years we realize that the burlap is actually quite robust sitting on the bottom. In general, Lake residents should be cautious around an initial installation. It is a good idea to marker it off and use placards to show where the burlap was installed. It is a reasonable assumption to assume that a powerboat with its propeller spinning inches off the bottom could disturb the burlap if it was just installed. It is also assumed that if a fishhook was caught on newly installed burlap, that excessive pulling could lift the burlap off the bottom. It's not clear why a fisherman would want to fish over a new burlap installation, since typically the milfoil has displaced the fish populations out of the area and our inspections over the years have shown that the fish start returning a year or 2 later. Again, placards and communication can address the issue of fishing in the area. After the first year, the burlap becomes integrated into the benthic layer of the lake or river, silt starts building up on it and indigenous plants start growing through it to further anchor it. As it starts to decay it remains embedded in the benthic layer and we have never observed pieces of burlap floating in the lake, since it is also heavier than water. Even in successive years we have observed small pieces of burlap that haven't yet biodegraded, but they are still integrated into the benthic layer. By year 3 there is little or no evidence that burlap or piles of sand were installed. Even sand bags eventually spread across the benthic lair with no sign of ever being there. The 2 attached photos were taken Aug 31st 2016 of the spring 2012 installation. The indigenous plants photo shows the indigenous plants growing through the burlap from a Nov. 2016 installation. The photo was taken about 8 months later. It should be noted that some lakes are heavily mineralized (oligotrophic lakes are the most common in the Canadian Shield) and should normally not have any significant indigenous plant life to begin with. So often when the milfoil is removed no indigenous pants grow back, since there weren't any there to begin with in the area.

- On a side note, excessive milfoil infestations will pump extra phosphates into a given lake and will help to turn the lake from an Oligotrophic type to a eutrophic type, which supports extensive plant growth. Thus dramatically changing the lake eco system.
- 4. One of the strategies used when managing invasive species on land, is to replant indigenous plants immediately after the invasive species are removed, since the fertile ground is still a prime location for the invasive species to regrow. However in the case of Eurasian milfoil, it is highly adaptive and seems to be able to displaced indigenous plants quite well. It also grows quite well in oligotrophic lakes that would normally have a minimal amount of indigenous plant growth. For these reasons it does not make sense to do any replanting of indigenous plants once the milfoil is killed off. The spread of milfoil will only be reduced by reducing the fragmentation in the area. By removing it from high boat traffic areas.
- 5. ABV des 7 ran a number of experiments with different types of coir (coconut) based cloth of varying weaves. After 2 years of testing these test samples did not work as well as jute based burlap and some of them had synthetic netting embedded within the material. We actually remove those sections of material from the test areas yesterday, since the synthetic netting was producing a hazard to the fish. The coir fabric is significantly more expensive than the jute-based burlap and significantly thicker. Our system is designed to effectively install very large rolls jute based burlap, 3.8 m wide by about 1 km long weighing 640 kg. A similar role of coir would be a fraction of that length, since it is 3 to 5 times thicker. In short, the cost to install the coir fabric will be very high and as a result will not be acceptable in the market. As a cost reference, ABV des 7 and Lac Lovering manually installed jute based burlap. The cost was approximately \$4-\$5 per square meter using a low cost labour reference. That cost was clearly unacceptable to the basic market. Block-Aid's automated system installs jute-based burlap for approximately \$2 per square meter. This price point seems to be acceptable to the market.

From: Giorgio Vecco (ABV des 7)

Sent: 09/28/2017

We are happy to provide you with some comments due to our long experience in using burlap as a benthic barrier product for the control of EWM.

From our studies in Lac Phillipe, Lac Pemichangan and Lac Lovering we advise the following:

When it comes for the choice of either burlap or coir fibre we recommend the use of burlap

In reality, and depending on the type of the chosen coir fibre product, there will be some disadvantages related to the use of such product:

- The high density coir fibre product leaves behind some undesirable residues e.g. nylon mesh that needs to be removed after its degradation
- The lower density coir fibre product has bigger stitches then the burlap, which allows the stem of EWM to pass through
- More expensive and hard to install

As for planting of native aquatic plants, we do not see the need of such activities. Planting has its own risks, as we cannot be sure of the real composition and percentages of the native aquatic beds before the proliferation of EWM. Interestingly, the burlap allows the re-growth of the native plants. As you can see from the attached photos from Lac Phillipe and Lac Pemichangan, the native plants pass and develop smoothly through the burlap. Off course if the bay at the lake is already mineralized, have low concentrations of organic compounds, the native plants will not develop even after the eradication of the EWM and in this case introducing species that didn't exist before the proliferation of EWM could alter the biodiversity of the bay.

NEXT STEPS

- Committee meeting planned for October 19th to discuss & plan
- Request to meet has been submitted to Dr. André Ferron to discuss planning for pilot project/study
- Request to meet has been submitted to Randy Battochio to discuss funding applications
- Emails sent to Rob Perrins, Giorgio Vecco, André Ferron & Eric Sager requesting scientific discussions & collaborative sharing
- Irene Nizzero to initiate E-Petition as suggested by MP Marc Serré
- Scott Darling to follow-up re meeting with MPP Glenn Thibeault
- ? meeting with Bruce Richard, Sudbury MNRF, to explore research options on EWM control in Sudbury District lakes
- ? meeting College Boreal + CGS (Stephen Monet) + GSWA-AIS + MNRF

What we need from the GSWA Board:

- 1. Initiate application for Charitable Status; presently Incorporated, Not for Profit
- 2. The committee requests direction from the Board i.e. do we require a new motion to move forward on a pilot project/study

Greater Sudbury Watershed Alliance <u>Treasurer's Report to General Meeting</u> October 16, 2017

Date	Description	Debit	Deposits	Balance
<u>2017</u>	1. Long, 2. St. Charles, 3. Grant,			
Mar 7	4. Wahnipitae 5. Richard 6. Junction have all paid 2017-2018			6947.50
	<i>Membership</i> during previous Treasurer's Report)			
Mar 8	Educational Event-Printing colour notices	145.77		6801.73
Mar 23	Membership 7. McFarlane, 8. Fairbank.		120.00	6921.73
	9. Minnow (2 yrs.) 10. Vermillion 11. Simon			
May 1	Membership 12. Black		20.00	6941.73
Jun 1&9	Membership 13. Windy, 14. Ramsey (2yrs)		60.00	7001.73
May 16	#57 Alyssa Ferreira-Website 25hrs\$500 & Hosting to May2,	676.95		6324.78
	2020 \$176.95 CAD			
June 7	#58 Federation of Ont. Cottages Assoc.	125.00		6199.78
Sep 18	#59 Susan Darling-flash drive, scanning minutes etc.	29.02		6170.76
Oct 16	Gougeon Insurance Brokers Directors & Officers Policy	907.20		5263.56

Greater Sudbury Watershed Alliance Treasurer Report v6.04 2017 October 16