THE CORPORATION OF THE TOWN OF GEORGINA

ENVIRONMENTAL ADVISORY COMMITTEE

AGENDA

Thursday, May 11, 2017
7:00 PM
Council Chambers

1. CALL TO ORDER

2. ROLL CALL

3. INTRODUCTION OF ADDENDUM ITEMS

4. APPROVAL OF AGENDA

5. DECLARATIONS OF PECUNIARY INTEREST AND GENERAL NATURE THEREOF

6. ADOPTION OF MINUTES

   Pages 1 - 4
   (1) Minutes of the meeting held on April 13, 2017.

7. DELEGATIONS/SPEAKERS

8. PRESENTATIONS

   (1) Canada 150 Celebrations

9. CONSIDERATION OF REPORTS ON THE AGENDA

10. COMMUNICATIONS

    Pages 5 - 6
    (1) Ontario Protecting Endangered and Threatened Species

    Page 7
    (2) Markham homeowners can’t dispose of textiles at curbside

    Pages 8 - 40
    (3) Aquatic Plant Presentation (that was given to the Waterways Committee on March 30th).

11. OTHER BUSINESS

(1) Committee Appointments

(2) Cooking event to spread awareness about edible invasive species discussion

(3) Updating work-plan

12. CLOSED SESSION, IF REQUIRED

13. MOTION TO ADJOURN

(1) Next Meeting Next Meeting:
Date: Thursday, June 8, 2017
Time: 7:00 PM

(2) Motion to Adjourn

THE CORPORATION OF THE TOWN OF GEORGINA

ENVIRONMENTAL ADVISORY COMMITTEE

MINUTES

Thursday, April 13, 2017
7:00 PM
Council Chambers

1. CALL TO ORDER

The meeting was called to order at 7:02 PM

2. ROLL CALL

The following Committee members were in attendance:
Katie Davis, Chair
Councillor Dave Neeson
Mary Mallany
Debbie Molnar

The following Committee members were absent with regrets:
Hailey Punt

The following guest was in attendance:
Harry French, volunteer for the IRRP for York Region

The following staff members were present:
Sarah Brislin, Committee Services Coordinator

3. INTRODUCTION OF ADDENDUM ITEMS

4. APPROVAL OF AGENDA

Moved by Debbie Molnar, Seconded by Mary Mallany

RESOLUTION NO. GEAC-2017-0008

That the agenda for the Georgina Environmental Advisory Committee meeting of April 13, 2017, be approved.

Carried.

5. DECLARATIONS OF PECUNIARY INTEREST AND GENERAL NATURE THEREOF - *None*

6. ADOPTION OF MINUTES

(1) Minutes of the meeting held on March 9, 2017.

Moved by Mary Mallany, Seconded by Debbie Molnar

RESOLUTION NO. GEAC-2017-0009

That the minutes of the Georgina Environmental Advisory Committee meeting held on March 9, 2017, be adopted.

Carried.

7. DELEGATIONS/SPEAKERS

8. PRESENTATIONS

(1) On Northern York Region Climate Change and Energy Use.

Harry French, a volunteer from Ontario Sustainability Services, provided a background on the The Independent Electricity System Operator (IESO) and discussed with the Committee current initiatives and potential initiatives. The Committee was invited to attend the next IESO local advisory Committee in Aurora on April 25, 2015.

Moved by Debbie Molnar, Seconded by Mary Mallany

RESOLUTION NO. GEAC-2017-0010

That the Georgina Environmental Advisory receive a presentation on Northern York Region Climate Change and Energy Use.

Carried.

9. CONSIDERATION OF REPORTS ON THE AGENDA - *None*

10. COMMUNICATIONS

(1) Boosting Competitiveness for Greenhouses through Innovation

(2) Anti-litter campaign, email from Councillor Sebo

(3) How Many Trees Can You Plant This Year?

(4) Ontario Eliminating Drive Clean Test Fee Strengthening Program

(5) York Region Environmental Advisory Committee Exchange Forum report

Mary Mallany reviewed the initiatives that were shared at the March York Region EAC

Moved by Mary Mallany, Seconded by Debbie Molnar

RESOLUTION NO. GEAC-2017-0011

That the Georgina Environmental Advisory receive the following Communication Items:

1. Boosting Competitiveness for Greenhouses through Innovation
2. Anti-litter campaign, email from Councillor Sebo
3. How Many Trees Can You Plant This Year
4. Ontario Eliminating Drive Clean Test Fee Strengthening Program
5. York Region Environmental Advisory Committee Exchange Forum report

Carried.

11. OTHER BUSINESS

(1) Member resignation

Moved by Debbie Molnar, Seconded by Mary Mallany

RESOLUTION NO. GEAC-2017-0012

That the Georgina Environmental Advisory receive the resignation of former Committee member and Vice Chair, Amanda Bacci.

Carried.

(2) Cooking event to spread awareness about edible invasive species discussion - *deferred*

(3) Outstanding/Earmarked items (work plan)

- Creating a new logo in 2017
- Earth hour

- Invasive Species Campaign
- Anti-Littering Campaign
- Cooking invasive species event

12. CLOSED SESSION, IF REQUIRED

13. MOTION TO ADJOURN

(1) Next Meeting Next Meeting:
Date: Thursday, May 11, 2017
Time: 7:00 PM

(2) Motion to Adjourn

Moved by Mary Mallany, Seconded by Debbie Molnar

RESOLUTION NO. GEAC-2017-0013

That the Georgina Environmental Advisory Committee April 13, 2017, meeting be adjourned at 8:45 PM.

Carried.

_____
Katie Davis,
Chair

_____
Sarah Brislin, Committee
Services Coordinator

Sarah Brislin

From: Ontario News <newsroom@ontario.ca>
Sent: April-10-17 10:27 AM
To: Sarah Brislin
Subject: Ontario Protecting Endangered and Threatened Species

News Release

Ontario Protecting Endangered and Threatened Species

April 10, 2017

Province Investing in 105 Projects to Help At-Risk Plants and Animals

Ontario is protecting species at risk and promoting their recovery by investing to create and rehabilitate habitats, conduct research on recovery efforts and threats and educate youth about at-risk plants and animals in their area.

Now in its eleventh year, the Species at Risk Stewardship Program helps find solutions to problems such as reversing the decline of pollinators in Ontario, preventing the spread of White Nose Syndrome among bat populations and determining what kind of artificial habitats can be installed to host barn swallow.

105 projects are receiving support this year. Work includes:

- Using science to monitor and conserve endangered bats in Ontario
- Protecting and restoring rare oak savanna habitat for multiple species at risk at St. Williams Conservation Reserve
- Recovering wood turtle populations in Huron County
- Creating habitat for 22 species at risk in and around the Sydenham River
- Enhancing the genetic diversity of the American chestnut tree and expanding seed colonies to continue to bring back this iconic tree.

Investing in the conservation and protection of biodiversity in Ontario is part of our plan to create jobs, grow our economy and help people in their everyday lives.

QUICK FACTS

- Ontario is investing approximately $4.5 million in the 2017–18 Species at Risk Stewardship Program to support 53 new stewardship projects and 15 new research projects. Another 37 stewardship and research projects that began in previous years are receiving continued support.
- Over the last 10 years, the Species at Risk Stewardship Program has funded more than 968 research and stewardship projects across Ontario, helping to restore 33,500 hectares of habitat for species at risk while creating 2,600 jobs and involving 28,000 volunteers.
- This year's projects focus on badgers, bats, birds, fish, insects, plants, pollinators, snakes, turtles and wolverines, and various habitats.
- The Species at Risk Stewardship Program invites applications each fall from Indigenous communities and organizations, academic institutions, Conservation Authorities, individuals, businesses, consulting companies and industry organizations, landowners and farmers, municipal and local governments, and non-governmental organizations.

ADDITIONAL RESOURCES

- Community projects supported in 2017–18
- Species at Risk in Ontario
- How species at risk are protected

QUOTES

"Our government understands how important it is to conserve and restore our natural ecosystems and biodiversity. We do this by supporting communities and organizations who are championing these important causes across the province. I am always struck by the dedication of Ontarians who take part in actively helping to protect and recover species at risk."
— *Kathryn McGarry, Minister of Natural Resources and Forestry*

"The Schad Gallery of Biodiversity at the Royal Ontario Museum opened in 2009 and was one of the original recipients of the Species at Risk Stewardship Fund. These funds helped promote conservation awareness and were a catalyst for advancing the ROM's internationally-recognized research. Congratulations on this important 10-year milestone and for the positive impact that the Stewardship Program has had conserving

metrolandmedia
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YorkRegion.com

As of April 17, Markham homeowners can't dispose of textiles curbside

Tim Kelly

Markham Economist & Sun | 21 hours ago

As of Monday, April 17, Markham residents will have to recycle all of your textiles, which principally include clothes and shoes but also other household items, as the city won't pick them up in curbside collection.

Instead, residents must drop off textiles at specified locations around the city.

Those clothes deemed suitable for reuse will be resold through the Salvation Army Thrift Store, as well as Value Village locations. Proceeds from the program will help local food banks, shelters, children's camps and addiction treatment facilities.

Recycled textiles not suitable for resale will be repurposed as industrial rags, furniture padding, insulation, car seats, fabrics and other products.

Drop off textile recycling at local fire halls, recycling centres and Angus Glen Community Centre. For free home pickup service, call Diabetes Canada at 1-800-505-5525, the Kidney Foundation at 1-800-414-3484 and OFCP (Cerebral Palsy) 1-877-244-0899.

As of Monday, April 17, you'll have to recycle your textiles -- largely clothes and shoes -- in these separate bins found beside fire halls, recycling centres and Angus Glen Community Centre in Markham.

Tim Kelly is a reporter with the Markham Economist and Sun. He can be reached at tkelly@yrmg.com . Follow him on Twitter and YRMG on Facebook

DIY Aquatic Weed Removal

- *Why*
- *Issues*
- *Who Else*
- *Our Thoughts*

Credits…

Google is a tremendous source of information on Lake Simcoe
And Aquatic Plant concerns in North America.
Contents of this presentation are examples of information readily available.

Why we are doing this…

2013

2016

Changes in 3 years…

2013

2016

Health of our family & pets…

2013

2016

Why in only certain areas…

- Clarity & depth of the water
- Early drawdown allows sunlight to reach plants during key growing period
- Soft lake bottom full of rich nutrients (sediment) allows plants to grab hold and flourish
- Wave action in protected regions of the lake is reduced so ideal area for plant growth
- Invasive plants that fragment with boat activity
- No removal of decaying weed matter

Sediment

Depending on the size of the particles in suspension, sedimentation may be prominent for some distance from the mouth. This sedimentation process has allowed a rich soft substrate to accumulate, thus enhancing conditions for weeds.

Each season as weeds die more organic matter is contributed to the substrate and nutrients made available for plant growth.

LSRCA states decaying weeds are landowner responsibility to remove.

Issues…

Aquatic plant management…

- **<u>Plant harvesting</u>:** ▫ No removal of roots ▫ Cut off at top or scoop off surface (equivalent to mowing or raking a lawn) ▫ Plants are spread by fragmentation and wind

Aquatic plant management…

- **<u>Herbicides</u>:** don't treat underlying problem! - Nutrients are used by toxic algae or resistant plants! - Invasive starry stonewort is resistant
- There is an upside to starry stonewort. It quickly chokes out eurasian milfoil and everything else. It also clears up the water like zebra mussels. The thing is, starry stonewort chokes out just about everything and squeezes large fish bedding areas. It is not a good weed to have in your lake…not at all.

An Aggressive Invasive Species:

Starry Stonewort

"There's a problem there, and it's just not the people that live on the lake — it's not just their problem. It's everybody's problem. I would say that 50 percent of the people or more that use the lake don't actually live on the lake. And if it comes to the point where we can't boat, we can't do recreational things out on the lake, we're all going to suffer."

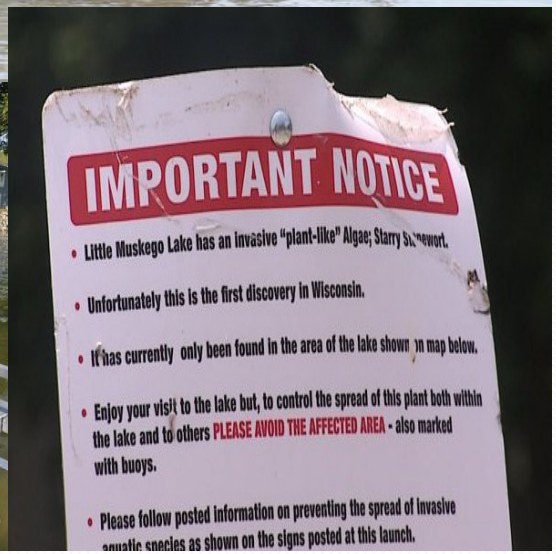
https://www.maisrc.umn.edu/starry-stonewort
https://www.mprnews.org/story/2016/08/31/dnr-aggressive-approach-on-invasive-starry-stonewort
http://fox6now.com/2015/07/05/starry-stonewort-algae-an-invasive-species-that-spreads-fast-its-the-start-of-the-death-of-a-lake/
http://minnesotawaters.org/whitefishareapropertyowners/starry-stonewort/

Starry Stonewort Facts…

- Starry stonewort is actually an algae and not a type of rooted vegetation. It forms a dense "carpet" that grows from the bottom up. Most forms of vegetation in a lake provide vertical structure and habitat for many species of fish. Starry stonewort, however, grows so dense that it doesn't allow fish to swim, hunt or seek refuge in it. It restricts spawning habitat for many species and doesn't provide any habitat for young-of-year fish to avoid predators.
- It's capable of growing 7 feet tall and all the way to the surface in some areas, completely crowding out the water column. In lakes where it has really taken hold, you will find nothing but acres and acres of bottom covered in stonewort. This is not really the monoculture of vegetation that makes a healthy ecosystem.
- From what has been observed, the overuse of chemicals is the main factor that gave the starry stonewort its opportunity to take such a strong hold in so many lakes. It seems it is a lot easier to outcompete other forms of vegetation when there is no vegetation to compete with. Harvesting starry stonewort is another possible method. But since it can be so prevalent and also spreads via fragmentation, it has not proven to be a good form of control.
- Preventing the spread of this plant is something that needs to be of high priority to every fisherman or boater. If you don't have it, you definitely don't want it.

Starry Stonewort Management…

- Vacuuming' Turtle Lake: DNR begins operation to suck out starry stonewort infestation
- The rootless, grasslike aquatic invasive starry stonewort piles up in the back of the Eco Harvester.
- Buoys mark a net that keeps broken bits of the macro alga from floating away and potentially starting another growth.
- Signs posted to warn boaters to stay away from infected areas.
- Some lakes have actually closed ramps to try to stop the spread to other lakes or installed wash stations to clean boats and trailers



Lagoon City

He explained that in order to manage aquatic plants, the underlying issues must be managed as well. Harvesting or removing plants is restricted by DFO and MNRF as the plants provide habitat for fish. Harvesting aquatic plants usually causes them to spread, and using herbicides to kill the plants can allow other plants such as algae to fill the void. In Ramara, treatment of the Lagoon City canals to kill all the aquatic plants resulted in a massive bloom of Cyanobacteria (blue green algae), which is toxic.

Who Else is Doing What…

Kawartha's (37 pages)

Lake Simcoe Region conservation authority

KAWARTHA CONSERVATION

The Canal and Mitchell Lakes, Talbot River, and Whites Creek Subwatershed Plan

Implementation Plan: 2016 - 2021

Kawartha's…

Points of Interest…

- Address local shoreline residents concerns that prolific aquatic plants are deteriorating the quality of their lakes with respect to lake recreation, personal enjoyment, and other key values
- Pilot several small-scale techniques for aquatic plant control
- Remove accumulated aquatic vegetation that has washed-up along shoreline and dispose of as compost either on private properties or at municipal landfills free of charge
- Consider the feasibility of undertaking a coordinated approach to reducing aquatic vegetation to improve access for shoreline residents, which may include dredging
- Host workshop for conservation authority staff, farm community, drainage superintendents, and drainage contractors on managing ecosystem function in municipal drains

Georgina, Fox & Snake Islands (206 pages)

The Georgina, Fox and Snake Islands Subwatershed Plan

2017

GEORGINA ISLAND

Lake Simcoe Region conservation authority

Georgina, Fox & Snake Islands…

Points of Interest

- LSRCA reported Three submerged aquatic plant species in Lake Simcoe are invasive: Eurasian watermilfoil first reported in 1984; curly-leafed pondweed also reported in 1984, and starry stonewort first recorded in 2009.
- In addition, the plant community, and ecological benefits to the warmwater fish community, may be threatened by the spread of more resilient invasive species, such as starry stonewort.
- Recommendations include developing and enforcing bylaws around site clearing and sediment and erosion control measures; Creating and Implementing a Management and Removal Plan for invasive species
- Aquatic plant surveys undertaken by LSRCA in 2008 and 2013 showed a doubling in plant biomass off of Georgina Island
- The lake nearshore community around the Georgina, Fox and Snake Islands subwatershed have been identified as an area with some of the highest plant biomass in Lake Simcoe. Sediment phosphorus concentrations are approximately 0.9 mg/g, with the highest concentrations being found southwest of Georgina Island.

Farlain Lake (2014)

TINY TOWNSHIP – Green, feather-like plants have invaded north Simcoe, threading their way through part of Farlain Lake in Tiny Township.

Before they grow big enough to destroy the lake's ecology or hamper residents' water recreation, the Farlain Lake Community Association is stepping in to stop the spread of Eurasian watermilfoil.

Volunteers and contracted commercial divers will hand harvest the aquatic plant this weekend on the west side of the lake off Awenda Park Road.

They will carefully pick out the plants' root balls so they do not break apart and spread throughout the lake, said association president Doug Kirk. The plants will be dried on land and later burned.

"If left unchecked, over the years it will spread," he said. "It's serious and it's more widespread than generally known."

According to the Ministry of Natural Resources, the plant can essentially choke out other aquatic life by reducing oxygen levels in the water, yet make an ideal habitat for mosquitoes in stagnant water. Thick strands can also hinder swimming, boating and fishing.

He said the provincial government is "behind the 8-ball" on managing invasive aquatic plant life, and this will be the first time in Ontario that Eurasian watermilfoil will be harvested in an organized fashion.

Members of the community donated nearly $5,000 for the cost of the plant's removal this weekend. The Township of Tiny contributed $5,000 for the hand harvesting and for follow-up monitoring during the next three years.

http://www.simcoe.com/news-story/4620875-divers-to-weed-out-invasive-plant-in-farlain-lake/

MNRF Meeting…

It was time to see what we could do

Test Site

Time was spent with the MNRF showing photographic evidence of the rapid change to Pefferlaw lakefront communities.

Also shown to the MNRF was a means we believe will assist, be it in a small way, to help restore resident usage, navigation, tourism and the health of the lake.

They have granted permits for tests to 2 private residences and a community park in the middle.

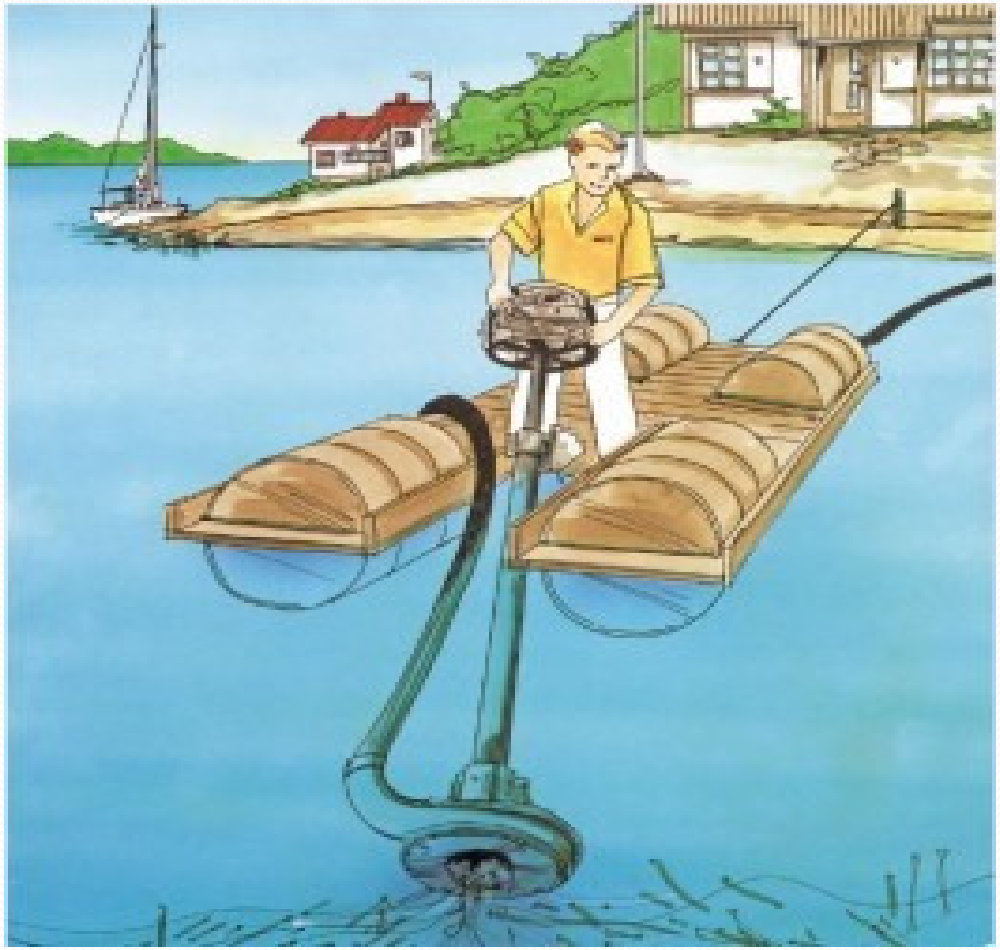
Objectives…

- Show the MNRF this method has little environmental impact
- Allow lakefront homeowners a chance to use their waterfront again
- Improve navigation in rivers and creeks
- Assist with removal of Invasive Plants when called upon by government bodies if required

Target…

- Remove aquatic vegetation using a pin point method vs a strip mining method
- Remove loose nutrient rich sediment
- Remove decaying organic matter
- Remove shoreline build up of weeds at end of season
- Recycle materials collected

Portable Boat Mounted Dredge System



Equipment

The Unit…

Theory…

- Our idea of a portable boat mounted suction dredger is particularly effective in removing silt, and weed growth that ruins the waterfront and prevents one from enjoying the waterfront and costs thousands to hire 3rd party companies to remove.
- The unique design of the Dredge allows you to hover the pump over the bottom which makes it very efficient. The centrifugal pump is equipped with a mill that effectively grinds down the roots of reeds and other seaweeds. The mixture can be pumped up to 450 feet and is excellent for your garden.
- If you are cleaning a modest area, such as lakefront beach area, a dock or boat slip, you can expect to get the job done relatively quickly.
- Shaft length options include: 4' - 5' - 6' - 10‘ and are easily interchangeable so various water depths can be managed.

Collection…

- Waste Bin in the park at the top of a slight declining 20 foot slope down to lake
- Discharge hose secured into waste bin
- Doors slightly ajar to allow water to flow back to the lake
- Doors and opening covered in layers of filter cloth
- Two additional filter cloth barriers on 20 foot slope to waters edge
- Final barrier a containment berm to collect any petroleum by-product that may be present

Disposal…

- Local Peat Moss supplier is anxiously waiting for the first load to assess the material.

- His thoughts are the organic matter and rich sediment mixed with current inventory would be a marketable by-product once stored and inert.

- If all works out well he will take all we can deliver.

No landfill…

Invasive Aquatic Plants

Shown to the right are just 4 examples of invasive plants in lake Simcoe.

- Eurasian water-milfoil
- Water Soldier
- European Frog-bit
- Invasive starry stonewort

-http://www.invadingspecies.com/

Summary…

- We are not making the lake a swimming pool
- We hope others take notice of the effort by residents and what can be achieved
- We stopped complaining and are doing something
- We hope the MNRF approves the method at this scale for other applications

It's not another study or report

We believe it's a solution…