1. Call to Order

2. Certification of Quorum

3. Chair’s Remarks

4. Review of Agenda

   THAT the agenda for the General Membership Meeting be approved as circulated.

5. Declarations of Pecuniary Interest

6. Minutes of the Previous Meetings

   THAT the minutes of the General Membership Meeting of February 28, 2020 be approved as circulated.

7. Business Arising from Previous Minutes

   a. Appointment of Member to Audit Committee - Motion Required

      The Chair will call upon a volunteer to sit on the Audit Committee from April 24, 2020 until the next Annual General Meeting. Motion is required to appoint members.

      THAT the following Member be appointed to the Audit Committee from April 24, 2020, until the next Annual General Meeting: (volunteer to be named)

8. Hearing of Delegations

9. Presentations
10. **Correspondence**

THAT Correspondence from Drew McKillop regarding the Ontario Federation of Snowmobiling Clubs Economic Impact Study, and from Peter Raspberry and Jim Hamilton regarding the Sugar Shack at Laurel Creek Conservation Area, and from the Town of Milton regarding Conservation Authorities, and from John Kemp regarding Giant Hogweed mitigation efforts, and from the Ministry of Environment, Conservation and Parks regarding Conservation Authorities during COVID-19, be received as information.

   a. Drew McKillop - pages of OFSC Economic Impact Study

   This correspondence was submitted as follow up from the delegation regarding snowmobiling at the February 2020 meeting.

   b. Peter Raspberry - Laurel Creek Sugar Shack

   c. Jim Hamilton - Laurel Creek Sugar Shack

   d. Town of Milton - Council Resolution

   e. John Kemp - Giant Hogweed Mitigation Efforts on the Grand River

   f. MECP - Direction for Conservation Authorities during COVID-19

11. **1st and 2nd Reading of By-Laws**

THAT Grand River Conservation Authority By-Law 2-2020 be read a first and second time.

12. **Reports:**

   a. GM-04-20-22 - Cash and Investment Status

   THAT Report Number GM-04-20-22 Cash and Investment Status – March 2020 be received as information.

   b. GM-04-20-21 - Financial Summary

   THAT the Financial Summary for the period ending March 31, 2020 be approved.

   c. GM-04-20-24 - Cottage Lot Curbside Garbage and Recycling Materials Collection, Processing, and Disposal Contract 2020-2022

   THAT Report Number GM-04-20-24 – Award of Cottage Lot Curbside Garbage and Recycling Materials Collection, Processing, and Disposal Contract be received as information.
d. GM-04-20-27 - Replacement Tractor Purchase

THAT Report Number GM-04-20-27 – Replacement Tractor Purchase be received as information.

e. GM-04-20-28 - General Insurance Renewal 2020-2021


f. GM-04-20-31 - Development, Interference with Wetlands and Alterations to Shorelines Regulation

THAT Report Number GM-04-20-31 – Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation, be received as information.

g. GM-04-20-25 - Proposed Amendments to Regulations and Standards under the Aggregate Resources Act

THAT Report GM-04-20-25 – Proposals to amend O.Reg.244/97 and the Aggregate Resources of Ontario Provincial Standards under the Aggregate Resources Act (EBR 019-1303) – be received as information;

AND THAT this report be forwarded to the Ministry of Natural Resources and Forestry through Environmental Registry Number 019-1303.

h. GM-04-20-26 - Potential Trail and Area Closures Due to Ash Hazard Tree Risk

THAT Report Number GM-04-20-26 – Potential Trail & Area Closures Due to Ash Hazard Tree Risk be received as information.

i. GM-04-20-30 - Environmental Assessments

THAT Report Number GM-04-40-30 – Environmental Assessments be received as information.

j. GM-04-20-29 - Brantford Ice Jam Study

THAT the Grand River Conservation Authority receive the Brantford Ice Jam Study, dated April 2019 and prepared by KGS Group Consulting Engineers as information;

AND THAT the Grand River Conservation Authority work with City of Brantford staff to carry out a feasibility study that provides an analysis of the technical and financial options to mitigate future Ice Jam Flooding.

k. GM-04-20-20 - New Hamburg Flood Mitigation Study

THAT Report Number GM-04-20-20 Completion of the New Hamburg Flood Mitigation Study be received as information.
THAT Report Number GM-04-20-23 – Current Watershed Conditions as of April 14, 2020 be received as information.

13. Committee of the Whole

14. General Business

15. 3rd Reading of By-Laws

THAT By-law 2-2020 be read a third time and adopted by the General Membership, to take effect on April 24, 2020;

AND THAT By-law 1-2020 be repealed on April 24, 2020;

AND THAT a copy of By-law 2-2020 be forwarded to the Ministry of Natural Resources and Forestry and the Ministry of Environment, Conservation and Parks and posted publicly on Grand River Conservation Authority’s website.

16. Other Business

17. Closed Meeting

THAT the General Membership enter a closed meeting to discuss a confidential matter regarding labour relations or employee negotiations.

   a. Staff Report - Labour Relations or Employee Negotiations

18. Next Meetings

   General Membership - Friday, May 22 at 9:30 a.m.

19. Adjourn

   Regrets only to:

   Office of the Chief Administrative Officer, Phone: 519-621-2763 ext. 2200
Hi Eowyn,

Thank you arranging the excellent meeting this morning. In response to Sue’s question, I attached the most recent OFSC Economic Impact Study. District 4 is shown on page 44, District 5 is shown on page 45 and District 9 is shown on page 49. Would it be possible for you to get these pages to the Board of Directors for their review and inclusion as part of their package?

Thanks and Regards,

Drew
### District 4

Table 48: Inputs of Expenditures by Snowmobilers in District 4 by TREIM model category

<table>
<thead>
<tr>
<th>Visitor Spending</th>
<th>Expenditure(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel Service</td>
<td>$562,148</td>
</tr>
<tr>
<td>Private Transportation - Rental</td>
<td>$37,250</td>
</tr>
<tr>
<td>Private Transportation - Operation</td>
<td>$10,404,378</td>
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<tr>
<td>Accommodation</td>
<td>$650,970</td>
</tr>
<tr>
<td>Food and Beverage - At Stores</td>
<td>$325,583</td>
</tr>
<tr>
<td>Food and Beverage - At Restaurants</td>
<td>$1,347,372</td>
</tr>
<tr>
<td>Recreation and Entertainment</td>
<td>$133,589</td>
</tr>
<tr>
<td>Retail - Clothing</td>
<td>$783,008</td>
</tr>
<tr>
<td>Retail - Other</td>
<td>$927,376</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$15,171,674</strong></td>
</tr>
</tbody>
</table>

Table 49: Total Visitor Spending, GDP, Employment and Total Taxes, District 4

<table>
<thead>
<tr>
<th></th>
<th>2018-2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gross Domestic Product (GDP)</strong></td>
<td></td>
</tr>
<tr>
<td>Direct</td>
<td>$7,045,151</td>
</tr>
<tr>
<td>Indirect</td>
<td>$1,196,329</td>
</tr>
<tr>
<td>Induced</td>
<td>$1,755,151</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$9,996,631</strong></td>
</tr>
<tr>
<td><strong>Employment (Jobs)</strong></td>
<td></td>
</tr>
<tr>
<td>Direct</td>
<td>98</td>
</tr>
<tr>
<td>Indirect</td>
<td>11</td>
</tr>
<tr>
<td>Induced</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>121</td>
</tr>
<tr>
<td><strong>Total Taxes</strong></td>
<td></td>
</tr>
<tr>
<td>Federal</td>
<td>$1,861,314</td>
</tr>
<tr>
<td>Provincial</td>
<td>$2,223,087</td>
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<tr>
<td>Municipal</td>
<td>$290,592</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$4,374,993</strong></td>
</tr>
</tbody>
</table>
**District 5**

**Table 50: Inputs of Expenditures by Snowmobilers in District 5 by TREIM model category**

<table>
<thead>
<tr>
<th>Visitor Spending</th>
<th>Expenditure(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel Service</td>
<td>$1,186,756</td>
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<tr>
<td>Private Transportation - Rental</td>
<td>$78,638</td>
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<tr>
<td>Private Transportation- Operation</td>
<td>$21,964,798</td>
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<tr>
<td>Accommodation</td>
<td>$1,374,271</td>
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<tr>
<td>Food and Beverage- At Stores</td>
<td>$687,342</td>
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<tr>
<td>Food and Beverage- At Restaurants</td>
<td>$2,844,452</td>
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<tr>
<td>Recreation and Entertainment</td>
<td>$282,022</td>
</tr>
<tr>
<td>Retail- Clothing</td>
<td>$1,653,017</td>
</tr>
<tr>
<td>Retail- Other</td>
<td>$1,957,795</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$32,029,089</strong></td>
</tr>
</tbody>
</table>

**Table 51: Total Visitor Spending, GDP, Employment and Total Taxes, District 5**

<table>
<thead>
<tr>
<th></th>
<th>2018-2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gross Domestic Product (GDP)</strong></td>
<td></td>
</tr>
<tr>
<td>Direct</td>
<td>$15,209,913</td>
</tr>
<tr>
<td>Indirect</td>
<td>$3,064,885</td>
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<tr>
<td>Induced</td>
<td>$4,247,889</td>
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<tr>
<td><strong>Total</strong></td>
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<tr>
<td><strong>Employment (Jobs)</strong></td>
<td></td>
</tr>
<tr>
<td>Direct</td>
<td>209</td>
</tr>
<tr>
<td>Indirect</td>
<td>29</td>
</tr>
<tr>
<td>Induced</td>
<td>30</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>268</td>
</tr>
<tr>
<td><strong>Total Taxes</strong></td>
<td></td>
</tr>
<tr>
<td>Federal</td>
<td>$4,117,399</td>
</tr>
<tr>
<td>Provincial</td>
<td>$4,821,030</td>
</tr>
<tr>
<td>Municipal</td>
<td>$721,689</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$9,660,118</strong></td>
</tr>
</tbody>
</table>
To the Board of Directors of the GRCA

My name is Peter Rasberry, I am a retired Outdoor Educator having spent 34 years with the Waterloo Region District School Board. I worked, and made maple syrup, at Laurel Creek in Waterloo for 6 years in the 1980’s and made syrup at our other Waterloo program site, Camp Heidelberg, from 1992 until my retirement in 2016. I have recently spoken publicly about my disappointment with the GRCA’s decision to cancel the maple syrup program at the Laurel Creek Conservation Area. My understanding from statements given by the GRCA to CBC KW and The Record is that the building is unsafe and that it will be “removed” rather than repaired or rebuilt.

This program dates back to the 1970’s when it was run solely by the (then) Waterloo County Board of Education. With the opening of the Nature Centre in 1977, the Waterloo County Separate School Board also conducted syrup programs for their students and shared in the cost of running the program. The GRCA only became involved, I believe, when it took over Outdoor Education programming for the SS Board.

The GRCA appears to no longer be interested in conducting maple syrup programs at Laurel Creek, that other program priorities have been identified. So my goal would be to investigate any possible means to continue to provide maple sugar bush experiences for WRDSB students as we have done for decades. Given that all the other resources are already there - the evaporator, buckets and spiles, storage tanks, historical artifacts (all owned by the WRDSB), and of course the trees - the logical solution would be to upgrade or rebuild on the same site. **Since the GRCA does not want to do this, would it allow renovations if private funding could be secured? I have to believe that support could be found to accomplish this.**

Maple syrup making is central to the character of Waterloo County, with 60,000 visitors being drawn to Elmira every spring for the Maple Syrup Festival, and hundreds of local syrup producers within our Mennonite and agricultural communities. We also have a local Indigenous history dating back 9,000 years, the first people to make sugar from the sap of a tree. It would be a shame to allow such a valuable, hands-on program of local significance to become a footnote of history itself.

**I would ask you to consider allowing the continuation of the program for school children at the Laurel Creek site, with funds for the repair or replacement of the sugar shack to be sought privately.** I understand that the contents of the sugar shack may be removed shortly, with demolition to follow sometime this spring, so the window for intervention is short if this is to be considered.

Thank you very much…

Peter Rasberry
On behalf of a number of former Outdoor Educators, friends of Outdoor Ed, and in support of Outdoor and Environmental Education for students in the Region of Waterloo.
March 12, 2020

To: Board of Directors
Grand River Conservation Area
400 Clyde Road, PO Box 729,
Cambridge ON, N1R 5W6

I’m writing to voice my disappointment in the GRCA’s decision to end the nearly 50 year practice of Maple Syrup education at the Laurel Creek Conservation Area.

This program has been very well received by students, parents and educators alike. It has provided a sound pedagogical experience in many area’s including indigenous and pioneer history, natural sciences, and agriculture while simultaneously supporting mental and physical wellbeing from qualified and experienced educators. Having volunteered for many years at the facility and attended commercial sugar bushes, there is no comparison to the Laurel Creek experience.

The variety of exhibits, participation in the syrup production and recreation is a very unique and memorable experience.

As a parent, my child was thrilled to participate in school trips to Laurel Creek and still remembers the experience fondly. She’s disappointed that others will miss the opportunity.

I believe in today’s world, as a community we should be looking to maintaining and growing such experiences as the Laurel Creek Sugar Shack for it’s truly unique particularly being within such close proximity to our community and schools. Our young people often do not have the opportunity to visit a natural sugar bush or a GRCA facility with their family; a school trip becomes their only possibility.

I ask the GRCA to:

1) **pause** the cancellation of the Laurel Creek sugar shack program and demolition of the facilities.
2) provide a report of the Health and Safety concerns indicated in media reports
3) provide opportunity for community consultation for creative solutions and
4) ensure the equipment and building are carefully maintained as for much of it, its irreplaceable.

There is a growing community group in support of the Laurel Creek Sugar Shack, many of us can be found on our group’s Facebook site, “Save the Sugar Shack”.

Thanks for your consideration and thought for our present and future generations.
Sincerely,

Jim Hamilton
Date: March 30, 2020

Moved by: Councillor Cluett

Seconded by: Councillor Hamid

BE IT RESOLVED:

WHEREAS the Municipality of Milton is a member of Conservation Halton (CH), the Credit Valley (CVC), Grand River (GRCA) Conservation Authorities (CA) and is represented on their Board of Directors;

WHEREAS the municipally appointed board of directors determines the policies, priorities and budget of the CAs;

AND WHEREAS the Municipality of Milton has been well served by these Conservation Authorities;

AND WHEREAS the CAs are watershed-based organizations providing programs and services that contribute to a safer, sustainable environment and address climate change;
AND WHEREAS the CAs have flood management programs employing a watershed-based approach that monitors stream flow, water levels and climatic conditions, forecasts flooding, issues flood warnings, regulates development activities in natural hazards, educates the public about flooding, operates flood management infrastructure, protects natural cover and manages stormwater that helps reduce the impacts of flooding;

AND WHEREAS the CAs are partners with municipalities in developing the science and policy to manage drinking water source protection;

AND WHEREAS the CA owns, manages and operates a valuable network of conservation areas that provide access to green space and family friendly recreation activities for our growing communities, contributes to the local economy, provides jobs for youth and promotes health and wellness for our residents. It also provides outdoor experiential education to local school children and encourages communities to embrace and value our natural and scenic assets;

AND WHEREAS the CA undertakes reforestation and landscape restoration and aids landowners to make changes on their properties in support of naturalization or water quality protection within the watershed;

AND WHEREAS the CAs provide the Region with technical expertise in support of its planning and infrastructure delivery, education and health programs;
AND WHEREAS CAs are important partners in on-the-ground and cost-effective initiatives to address climate change;

AND WHEREAS the Municipality has service agreements with each CA for planning and other services;

AND WHEREAS the CA must be able to charge fees, and derive revenue from its facilities, programs and services as appropriate to reduce the burden to the tax levy;

AND WHEREAS the Ontario provincial government has cut 50% from their $7.4 million Natural Hazards Transfer Payment Grant (Section 39) to Ontario conservation authorities that supports flood and erosion control infrastructure, flood forecasting and warning, watershed planning projects and technical studies, and the new act has the effect of downloading additional responsibilities to the CAs to be paid for by municipalities;

NOW THEREFORE BE IT RESOLVED that the Council of the Municipality of Milton request that the Provincial Government restore or improve their funding of Conservation Authorities to provide a more stable funding base that would prevent further downloading of costs to municipalities and allow maintenance of hazard programs;
THAT the Provincial Government ensure that the programs and services of the CAs maintain their watershed focus and allow for the flexibility of including programs and services important to local circumstances;

THAT the Province include experts from Conservation Authorities, staff of the Ministries of Natural Resources and Forestry, Environment Conservation and Parks as well as Municipal Affairs and Housing and municipalities when developing the draft regulations;

THAT the Province not dictate the form, content or duration of the MOU’s or agreements, allowing for municipalities to support non-mandatory programs in a manner that suits local circumstances;

AND FURTHER THAT this resolution be forwarded to the Premier, the Minister of Environment, Conservation and Parks, the Minister of Natural Resources, Minister of Municipal Affairs and Housing, all local MPPs, all local Conservation Authorities and Association of Municipalities of Ontario.

MAYOR G. A. KRANTZ
Giant hogweed is a poisonous (on contact) plant that has been invading the shorelines of the Grand River watershed since approximately 2012. Acceleration of the population count is probably still manageable at this point in the growth curve. Last years confirmed reports are identified on the following map. GPS coordinates, landowner details, and site history for each population is documented by the Giant Hogweed Mitigation Project.

This map represents significant increase from 2018 of ~ 3 x locations and 50 x plant count.

This invasion is considered to be a possible deterrent to tourism – IF the river becomes known for giant hogweed. This Project has established a guiding principal of ‘do no harm to tourism’. To that end the news released has been about the successes - and for education, not a negative hype. Also, the Invasive Species Plant Council’s recommended tool of EDDMapS is being avoided and records are being maintained (in some degree of confidence) by the Giant Hogweed Mitigation Project as the EDDMapS system does not allow for removal of a reported population. Consequently, the River would be shown as very infested in a few years time.

Few people have been burned by the plants at this point in time - as the populations are usually in hard to access locations or locations of little interest; so far. (Brant County Health unit does not have records for giant hogweed or poison ivy cases.) Plants that grow in populated areas are generally recognized as weeds and removed before they reproduce. Few are grown for ornamental value in this area – unlike the Halton Region experience.

Very large population growth potential exists in the seed bank, as established in the large isolated colonies. These seeds can be subsequently relocated from flooding events.
Some locations have been identified or confirmed by satellite imagery ... Yes you can see these monsters when they are in bloom from space. The photo below is from the un-owned island in Glen Morris in 2018.

In 2019 the patch had spread. No new image is available from Google Earth but the on-the-ground personnel mapped the patch in 2019 July. During plant removal efforts. Only about ¼ of the plants were removed due to lack of volunteers and time. The remaining seed back is estimated to be about 15 garbage bags full of seeds (i.e millions of them).
Volunteer Efforts
Giant Hogweed Mitigation Project Volunteers have assisted landowners by:
- locating plants in hard to access or hard to see areas by boat
- locating plants in hard to access or hard to see areas by hiking,
- By assisting to remove young plants
- by removing mature plants.

Over 200 volunteers have been involved to date from the following groups:
- Guelph Kayaking Club,
- Waterloo Wellington Canoe Club,
- Ancient Mariners Club,
- Grand Experiences,
- Grand River Rafting,
- Grand River Environmental Group,
- Friends Of The Grand River,
- Brant Rod & Gun Club,
- Brant Fly Tiers,
- various individuals.

Public Education
In 2019 the attached four-page colour flyer “Landowners Requested …” was distributed to each riverside mailbox between footbridge road and wills dam.

A portable exhibit – a young plant in an aquarium was used as show & tell for a variety of groups in 2013 and in 2019.

An outdoor exhibit was maintained between the trans Canada Trail and the River near Brantford at a naturally seeded location in 2019. The plants were destroyed before seeding down.

Presentations were made at the Invasive Species Plant Council Annual General Meeting in Jan 2020. Including a draft paper Natural Watershed Seed Relocation Model for Giant Hogweed Seeds

Giant Hogweed Mitigation Project exhibited at the Brant Rod & Gun Club Ecco Conference this spring.

News articles have been published about this work in Brantford Expositor 2013/Apr, St. George Lance 2019/Jan, Ayr News 2019/Jan, Brantford Expositor 2019/Jun/27.
John Kemp presented the OFAH material *Giant Hogweed Workshop 2013/Apr* at Freedom House in Brantford.

**Land Owners**
Landowners have been awesome. Some individuals are too feeble, some (mostly corporate) are absent and unaware, some large property owners like GRCA are understaffed for this invasion profile. The Giant Hogweed Mitigation Project has been able help.

**The Action Plan Model**
The Irish fisheries department identified a problem with giant hogweed in the Mulkear River in Ireland. This turned into a success story with a four-year action plan by Joe Caffrey. Joe is retired now. His coworkers were contacted with no response. GRCA might have more influence in sharing experiences with the Irish Fisheries Ministry.

Correspondence with three levels of government are ongoing to reign in this invasion. (See attached). There have also been conversations with the office of Brian May. Waterloo Weed Control has been non-responsive. The group r.a.r.e has been a help - and are actively controlling their properties.

Giant Hogweed Mitigation Project is continuing to coordinate actions of volunteers and resources.

**Present Activities**
Present COVID-19 requirements are damping the vital springtime searches. Springtime is the best time to look as the plants are obvious now, and they are small enough to deal with without Hazmat suits, and the weather is favourable to humans. Giant Hogweed Mitigation Project Activities for this spring are set now as:

- drone mapping of island populations as a test case for future work,
- professional eradication of two island populations,
- continued search for new and prior populations by landowners assisted by volunteers as applicable,
- confirmation of and mapping the findings.

**Future Actions**
By mid May the native vegetation will mask the giant hogweeds as everything becomes green. The next occasion for giant hogweed hunting is in late June through July - when the plants become tall enough to be seen above the vegetation. This task is challenging with significant PPE required, summer heat, stinging nettles, and the added requirement of dealing with the disposal of hundreds of pounds of seeds & plant materials.

**What Can GRCA Do?**
Since this work began in 2012 GRCA has been a partner in education. GRCA has been a model corporate citizen in ensuring that giant hogweed is dealt with on the GRCA properties. GRCA has been a resource for the riverside landowners. Thank You!

Non-owned properties are the BIG problem with three levels of government declining authority.

1. Glen Morris Absalom’s island
2. Brant Park island (just upstream of the golf & country Club)
3. Footbridge Road Cambridge island – upstream of the bridge

This project requests that GRCA join us in the search for a means of giant hogweed control for these non-owned islands within the river — an entity that can be responsible for the vegetation and seed bank.
Thanks to the Sponsors of the Giant Hogweed Mitigation Project
Sponsors to date are: one anonymous landowner providing funds for Hazmat suits, Freedom House providing administrative functions, Grand River Rafting providing transportation services and significant funding.

Attachments
1) County of Brant Corporate Development Committee Meeting Recommendation “CD-19-05 Giant Hogweed.pdf”
2) Email 2019/ Jul/25 Re Glen Morris Island; John Kemp & Brant County Bylaw Enforcement
3) Email 2019/ Re Ownership of the Islands; John Kemp Phil McColeman MP
4) Email 2020/Jan/27– Giant Hogweed Planning; John Kemp and Will Bouma MPP
5) Landowners Requested to remove Giant Hogweed – four page letter
6) Proposal to Will Bouma MPP re Giant Hogweed Populations
Landowners Requested to Help Remove Giant Hogweed from the Shorelines of the Grand

Giant Hogweed has been found invading the shorelines of the Grand River. Giant Hogweed is a poisonous (to touch) plant with similar symptoms to poison Ivy but the plant is very big – commonly 10 to 16 ft (3 to 5 m) tall. Early spring emergence and the large size can result in whole body burns, so this can be considered to be worse than poison ivy.

A plant grows for 3 to 7 years before it sets seeds. When it seeds down it produces 5,000 or more seeds. Seeds can float for 3 days before sinking. The seeds remain viable in the soil for up to 7 years. All of this translates into a slow and steady growth along a significant portion of the river.

Present working theory is that the seeds have floated downstream during the recent floods from a patch that had been removed a few years ago. If we as a community can stop the plants from those events from producing more seeds then we have the potential to stop the spread. The invasion has only just started with the first plants recorded in about 2010. There is hope to eradicate this from the river.

A project has been established to hunt for these plants to: a) determine the extent of the invasion and then b) to eliminate them as much as possible. Landowners are responsible to remove it from their property per the Weed Act although some are not aware that the plants are growing on their property.

On April 27 and 28 (2019) a large-scale search is being conducted to locate and report the locations of Giant Hogweed plants on the shores of the Grand River in Brant County. Several volunteer groups are involved. Each property owner is requested to inspect their own riverbanks and flood plains on or about the weekend of Apr 27, 28. If you see volunteers out hunting for the weeds please show them your appreciation. If you do not want volunteers walking your shorelines then please post signs at your property limits before April 26 - OR - send the results of your search to gianthogweed@rogers.com

Giant Hogweed sprouts early and grows fast; so at the end of April it will be an obvious green leafy plant in the predominately brown background of last years dead vegetation making this the best time to spot them. The leaf of one plant at the end of April will be from 4 to 15 inches (15 to 40 cm): It is deeply veined with very jagged edges, wrinkly, and will have coarse hairs on the underside of the leaf and on the stalk. The accompanying photos are what you can expect in late April. Other plants that will be around the shoreline to see at that time will be Skunk Cabbage, and Garlic Mustard. Both of these are smaller and look very different.

If you find some Giant Hogweed please record the location (GPS coordinates or a screen capture on your smartphone from a mapping application), take photos of the leaves and stem, post a sign marking the location of the plant, and report all of this by email to the Giant Hogweed Mitigation Project at gianthogweed@rogers.com. Photos provided will be examined to determine if the plants are indeed Giant Hogweed. Each reported sighting is kept confidential. Please do report any findings as it will improve the degree to which we can track the source and remove the total seed bank. Remember that any plants that we don’t find and deal with have the potential to send thousands of seeds downstream.

In May the project will report statistics of the findings and develop an action plan. Tips on how to remove the plants are available at https://www.ontarioinvasiveplants.ca. If you decide to remove plants on your property please still report the location of the plants to help in our ability to track the source and the spread. Your help and consent is important to the success of this project!
Giant Hogweed likes to be wet. It frequently grows in shallow water and is frequently found in the same locations as Angelica and Skunk Cabbage.

Photographed in late April

Note the coarse hairs all over the leaf underside and the stem.

Photographed in late April
A shoe is shown to demonstrate the size of the plant.

Photographed in late April.

Plant frequently grow in patches. Note the dead stalks here from prior years. Center bottom shows a dead seed umbel. Lower right has Garlic Mustard growing at the rock.

Photographed in late April.
March 26, 2020

TO: Conservation Authorities as listed in the attached Schedule “A”

SUBJECT: Minister’s Direction for Conservation Authorities during the COVID-19 Outbreak

As the COVID-19 outbreak continues to evolve locally and globally, I am writing to provide direction on how conservation authorities can continue operations while maintaining a safe physical distance. To ensure conservation authorities can continue to conduct meetings and hearings as necessary, we are giving conservation authorities the ability to amend their administrative by-laws to allow for virtual meetings, including by teleconference.

As such, I am issuing this Minister’s Direction (“Direction”) pursuant to subsection 19.1 (7) of the Conservation Authorities Act. This Direction applies to all conservation authorities in Ontario, listed in Schedule “A” as attached. For greater certainty, this Direction also applies to conservation authorities when meeting as a source protection authority under the Clean Water Act, 2006.

The Conservation Authorities Act requires that, “[e]very meeting held by the authority shall be open to the public, subject to such exceptions as may be specified in the by-laws of the authority.” Further, at any meeting that is held, “a quorum consists of one-half of the members appointed by the participating municipalities, except where there are fewer than six such members, in which case three such members constitute a quorum”. It has been brought to my attention that the administrative by-laws that conservation authorities have adopted pursuant to subsection 19.1 (1) of the Act may create barriers in meeting these provisions of the Act during this time of emergency, where in-person attendance may not be feasible.

The primary purpose of this Direction is to enable conservation authorities to convene a meeting electronically in order to make the necessary amendments to their by-laws to deal with emergencies. This Direction identifies the minimum areas where the by-laws should be amended, in the manner deemed appropriate by the authority, to make provision for emergency situations. However, each conservation authority, depending on their individual by-laws, may identify the need to make other necessary amendments to respond to emergencies.
Accordingly, I am directing that the conservation authority review and amend their by-laws, as applicable, to ensure they comply with the following Direction and take the other necessary steps as set out in this Direction.

**Electronic participation, emergencies**

1. During any period where an emergency has been declared to exist, in all or part of an area over which a conservation authority has jurisdiction, under section 4 or 7.0.1 of the *Emergency Management and Civil Protection Act*, that may prevent members of the authority from meeting in person, the by-laws provide:

   a. That members of the authority be permitted to participate in meetings electronically, which shall include the ability of those members participating electronically to register votes.
   b. That any member of the authority who is participating electronically in a meeting may be counted in determining whether or not a quorum of members is present at any point in time during the meeting in accordance with the requirement in subsection 16 (2) of the *Conservation Authorities Act*.
   c. That any member of the authority can participate electronically in a meeting that is closed to the public.
   d. That any hearing or appeal that is dealt with in the by-laws can be conducted electronically with provisions for applicants and their agents to participate, if the conservation authority holds any such hearing or appeal during any period where an emergency has been declared to exist.

**Meetings open to the public**

2. Conservation authorities must continue to implement best practices to make board meetings open to the public in accordance with subsection 15 (3) of the *Conservation Authorities Act*. Where possible, conservation authorities must provide for alternative means to allow the public to participate in any meetings electronically.

**General, emergency measures**

3. If there is anything that is required to be done under the by-laws during the emergency, including the holding of an annual general meeting, that the by-laws permit postponement to a later date.

**Publication of information**

4. The conservation authorities listed in Schedule “A” shall make this Direction publicly available on a website or other electronic means.
5. In accordance with subsection 19.1 (4) of the *Conservation Authorities Act*, an authority shall make any by-laws that are amended in accordance with this Direction available to the public in the manner it considers appropriate.

**Implementation procedure**

6. A conservation authority may hold a special meeting to amend a by-law for the purposes of implementing this Direction.

7. Despite any provision in a by-law made under subsection 19.1 (1) of the *Conservation Authorities Act*, members of the authority can participate electronically in any special meeting that is required to implement this Direction.

8. A member of the authority that is participating electronically in such a special meeting may be counted in determining whether or not a quorum of members is present at any time during the meeting.

**Effective date**

9. This Direction is effective immediately. If it is in the public interest to do so, I will provide further direction or clarification, at a later date, related to the matters set out in this Direction.

If you have any questions related to this Direction, please contact:

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To learn more about how the province continues to protect Ontarians from COVID-19, please visit [www.ontario.ca/coronavirus](http://www.ontario.ca/coronavirus).

Sincerely,

Jeff Yurek  
Minister of the Environment, Conservation and Parks

c: The Honourable Steve Clark, Minister of Municipal Affairs and Housing  
The Honourable John Yakabuski, Minister of Natural Resources and Forestry  
Ms. Kim Gavine, General Manager, Conservation Ontario
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Grand River Conservation Authority
By-Law No. 12-2020
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Administrative By-Law

Introduction

Grand River Conservation Authority is a non-share corporation, established under Section 3 of the Conservation Authorities Act, with the objects to provide, in the area over which it has jurisdiction, programs and services designed to further the conservation, restoration, development and management of natural resources other than gas, coal and minerals.

Under the Act, municipalities within a common watershed are enabled to petition the province to establish a conservation authority. The purpose of the Act is to provide for the organization and delivery of programs and services that further the conservation, restoration, development and management of natural resources in watersheds in Ontario. The Authority is comprised of its Members, appointed as representatives by the Participating Municipalities.

The Members of the Conservation Authority form the General Membership of the Conservation Authority. The Members are bound by the Act and other applicable legislation. The Authority must always act within the scope of its powers. As a non-share corporation, the Authority has the capacity and, subject to the Act and other applicable legislation, the rights, powers and privileges of a natural person. The powers of a conservation authority to accomplish its objects are set out in the Act, including those identified under subsection 21(1).

Powers of authorities

21 (1) For the purposes of accomplishing its objects, an authority has power,

(a) to study and investigate the watershed and to determine programs and services whereby the natural resources of the watershed may be conserved, restored, developed and managed;

(b) for any purpose necessary to any project under consideration or undertaken by the authority, to enter into and upon any land and survey and take levels of it and make such borings or sink such trial pits as the authority considers necessary;

(c) to acquire by purchase, lease or otherwise and to expropriate any land that it may require, and, subject to subsection (2), to sell, lease or otherwise dispose of land so acquired;

(d) despite subsection (2), to lease for a term of five years or less land acquired by the authority;

(e) to purchase or acquire any personal property that it may require and sell or otherwise deal therewith;

(f) to enter into agreements for the purchase of materials, employment of labour and other purposes as may be necessary for the due carrying out of any project or to further the authority’s objects;

(g) to enter into agreements with owners of private lands to facilitate the due carrying out of any project;

(h) to determine the proportion of the total benefit afforded to all the participating municipalities that is afforded to each of them;

(i) to erect works and structures and create reservoirs by the construction of dams or otherwise;
(j) to control the flow of surface waters in order to prevent floods or pollution or to reduce the adverse effects thereof;

(k) to alter the course of any river, canal, brook, stream or watercourse, and divert or alter, as well temporarily as permanently, the course of any river, stream, road, street or way, or raise or sink its level in order to carry it over or under, on the level of or by the side of any work built or to be built by the authority, and to divert or alter the position of any water-pipe, gas-pipe, sewer, drain or any telegraph, telephone or electric wire or pole;

(l) to use lands that are owned or controlled by the authority for purposes, not inconsistent with its objects, as it considers proper;

(m) to use lands owned or controlled by the authority for park or other recreational purposes, and to erect, or permit to be erected, buildings, booths and facilities for such purposes and to make charges for admission thereto and the use thereof;

(m.1) to charge fees for services approved by the Minister;

Note: On a day to be named by proclamation of the Lieutenant Governor, clause 21 (1) (m.1) of the Act is repealed. (See: 2017, c. 23, Sched. 4, s. 19 (3))

(n) to collaborate and enter into agreements with ministries and agencies of government, municipal councils and local boards and other organizations and individuals;

(o) to plant and produce trees on Crown lands with the consent of the Minister, and on other lands with the consent of the owner, for any purpose;

(p) to cause research to be done;

(q) generally to do all such acts as are necessary for the due carrying out of any project or as may be desirable to further the objects of the authority.
A. Definitions

“Authority” means the Grand River Conservation Authority.

“Act” means the Conservation Authorities Act, R.S.O. 1990, chapter C.27.

“Chair” means the Chairperson as referenced in the Act as elected by the Members of the Authority.

“Chief Administrative Officer” means the General Manager or Chief Administrative Officer of the Authority, and which may, by resolution of the Authority, include the responsibilities of the Secretary-Treasurer if so designated by resolution of the Authority.

“Fiscal Year” means the period from January 1 through December 31.

“General Membership” means all of the Members, collectively.

“Levy” means the amount of costs apportioned to participating municipalities in accordance with the Act and Regulations under the Act.

“Majority” means half of the votes plus one.

“Members” shall mean the members appointed to the Authority by the participating municipalities in the Authority’s area of jurisdiction.

“Minister” means the Minister responsible for the administration of the Act.

“Non-matching Levy” means that portion of an Authority’s levy that meets the definition of non-matching levy as found in Ontario Regulation 139/96.

“Officer” means an officer of the Authority empowered to sign contracts, agreements and other documents on behalf of the Authority in accordance with section 19.1 of the Act, which shall include the Chair, Vice-Chair(s) the Chief Administrative Officer and the Secretary-Treasurer (or the CAO/Secretary-Treasurer, if applicable).

“Participating Municipality” means a municipality that is designated by or under the Act as a participating municipality in a conservation authority.

“Pecuniary Interest” includes the financial or material interests of a Member and the financial or material interests of a member of the Member’s immediate family.

“Secretary-Treasurer” means Secretary-Treasurer of the Authority with the roles specified in the Act.

“Staff” means employees of the Authority as provided for under Section 18(1) of the Act.

“Vice-Chair” means the Vice-Chairperson as elected by the Members of the Authority. If a first and second Vice-Chair are elected, they shall be called First Vice-Chair and Second Vice-Chair.
“Weighted Majority” means the votes of 51 per cent of those represented after the votes are weighted by the percentage that applies under Ontario Regulation 139/96 for Municipal Levies.

B. Governance

1. Members

a) Appointments
Participating Municipalities within the jurisdiction of the Grand River Conservation Authority may appoint Members in accordance with Section 14 of the Act.

Appointed Members must reside in a Participating Municipality within the Authority’s area of jurisdiction and may include citizens as well as elected members of municipal councils.

Collectively, the appointed Members comprise the Authority, and for the purposes of this by-law are also referred to as the General Membership.

b) Term of Member Appointments
In accordance with Section 14 of the Act, a Member shall be appointed for a term of up to four years at the discretion of the appointing municipal council; such term beginning at the first meeting of the Authority following his or her appointment and ending immediately before the first meeting of the Authority following the appointment of his or her replacement. The Secretary-Treasurer shall notify the appropriate municipality in advance of the expiration date of any Member’s term, unless notified by the municipality of the Member’s reappointment or the appointment of his or her replacement. A Member is eligible for reappointment. A Member can be replaced by a Participating Municipality at the municipality’s discretion prior to the end of their term.

c) Powers of the General Membership
Subject to the Act and other applicable legislation, the General Membership is empowered without restriction to exercise all of the powers prescribed to the Authority under the Act. In addition to the powers of an authority under s.21 of the Act for the purposes of accomplishing its objects the powers of the General Membership include but are not limited to:

i. Approving by resolution, the creation of Committees and/or Advisory Boards, the members thereof and the terms of reference for these Committees and/or Advisory Boards;
ii. Appointing a Chief Administrative Officer and/or Secretary-Treasurer;
iii. Terminating the services of the Chief Administrative Officer and/or Secretary-Treasurer;
iv. Approving establishing and implementing regulations, policies and programs;
v. Awarding contracts or agreements where the approval of the Authority is required under the Authority’s purchasing policy.
vi. Appointing an Executive Committee and delegate to the Committee any of its powers except:
   i. The termination of the services of the Chief Administrative Officer and/or Secretary-Treasurer,
   ii. The power to raise money, and
iii. The power to enter into contracts or agreements other than those contracts or agreements as are necessarily incidental to the works approved by the Authority.

vii. Approving by resolution, any new capital project of the Authority;

viii. Approving by resolution, the method of financing any new capital projects;

ix. Approving details on budget allocations on any new or existing capital projects;

x. Approving of the total budget for the ensuing year, and approving the levies to be paid by the Participating Municipalities;

xi. Receiving and approving the Financial Statements and Report of the Auditor for the preceding year;

xii. Authorizing the borrowing of funds on the promissory note of the Authority in accordance with subsection 3(5) of the Act;

xiii. Approving by resolution, any proposed expropriation of land or disposition of land, subject to the requirements under the Act;

xiv. Approving permits or refusing permission as may be required under any regulations made under Section 28 of the Act except where approving permits has been delegated to the Chief Administrative Officer;

xv. Holding hearings required for the purpose of reviewing permit applications, and advising every applicant of their right to appeal the decision to the Minister through the Mining and Lands Tribunal;

d) Member Accountability

Participating Municipalities appoint Members to the Authority as their representatives. Members have the responsibilities of Directors of the corporation that is the Authority. While the administration is responsible for the day-to-day operations, the General Membership is responsible for matters of governance, ensuring compliance with applicable legislation, and ensuring appropriate policies are in place and for financial soundness of the Authority.

All Members have the responsibility to be guided by and adhere to the Code of Conduct (Appendix 1) and Conflict of Interest Policy (Appendix 2), as adopted by the Authority.

Members are responsible for:

i. Attending all meetings of the Authority;

ii. Understanding the purpose, function and responsibilities of the authority;

iii. Being familiar with the Authority’s statutory and other legal obligations;

iv. With the administration, setting strategic direction for the Authority.

e) Applicable Legislation

In addition to the Act, the Members are subject to other legislation including, but not limited to:

- Municipal Conflict of Interest Act
- Municipal Freedom of Information and Protection of Privacy Act

If any part of the by-law conflicts with any provision of the Municipal Conflict of Interest Act or the Municipal Freedom of Information and Protection of Privacy Act or a provision of a regulation made under one of those acts, the provision of that act or regulation prevails.
f) Relationship Between Members and Staff

The General Membership relies on the Chief Administrative Officer to manage the operations of the organization, including all employees of the Authority. The Chief Administrative Officer is accountable to the Authority, working cooperatively to achieve the goals established by the Authority.

The General Membership will ensure that a process exists for regular performance evaluations of the Chief Administrative Officer.

2. Officers

The Officers of the Authority, and their respective responsibilities, shall be:

Chair
- Is a Member of the Authority;
- Presides and preserves order and decorum and decides on questions of order at all meetings of the General Membership (and Executive Committee if applicable);
- Calls special meetings if necessary;
- Attends all meetings of the Authority;
- Acts as a public spokesperson on behalf of the General Membership;
- Serves as signing officer for the Authority;
- Ensures relevant information and policies are brought to the Authority’s attention;
- Keeps the General Membership apprised of significant issues in a timely fashion;
- Is a member of the Conservation Ontario Council and the Grand River Conservation Foundation;
- Performs other duties when directed to do so by resolution of the Authority.

Vice-Chair(s)
- Is/are a Member(s) of the Authority;
- Attends all meetings of the Authority (and Executive Committee if applicable);
- Carries out assignments as requested by the Chair;
- Understands the responsibilities of the Chair and acts as Chair immediately upon the death, incapacity to act, absence or resignation of the Chair until such time as a new Chair is appointed or until the Chair resumes his/her duties;
- Serves as a signing officer for the Authority.

Chief Administrative Officer (CAO)

Responsibilities of the CAO as assigned by the Authority include, but are not limited to the following:
- Is an employee of the Authority;
- Attends all meetings of the General Membership (and Executive Committee if applicable) or designates an acting CAO if not available;
- Works in close collaboration with the Chair and Vice-Chair(s) and keeps them apprised of relevant information and significant issues in a timely fashion;
- Develops a strategic plan for approval by the General Membership and implements short and long-range goals and objectives;
- Is responsible for the management of the operations of the Authority, including all staff and programs of the Authority;
• Ensures resolutions of the Authority are implemented in a timely fashion;
• Develops and maintains effective relationships and ensures good communications with Participating Municipalities, federal and provincial government ministries/agencies, Indigenous communities, other conservation authorities, Conservation Ontario, stakeholders, community groups and associations;
• Approves applications under the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulations made under Section 28 of the Conservation Authorities Act, RSO 1990 when such applications meet the Authority’s policies, are recommended by staff for approval with or without conditions and have a maximum period of validity that does not exceed 24 months;
• Is a member of Conservation Ontario Council;
• Serves as a signing officer for the Authority.

Secretary-Treasurer
• Is an employee of the Authority;
• Fulfills the requirements of the Secretary-Treasurer as defined in the Act;
• Attends all meetings of the General Membership (and Executive Committee, if applicable);
• Is the custodian of the Corporate Seal;
• Ensures notices are given and minutes are provided as required by this By-Law;
• Ensures accurate records of meetings and accounts of the Authority are kept;
• Carries out or causes to be carried out required financial transactions on behalf of the Authority;
• Is an alternate member of Conservation Ontario Council;
• Serves as a signing officer for the Authority.

3. Absence of Chair and Vice-Chair(s)
In the event of the absence of the Chair and Vice-Chair(s) from any meeting, the members shall appoint an Acting Chair who, for the purposes of that meeting has all the powers and shall perform all the duties of the Chair.

4. Maximum Term for Chair and Vice-Chair(s)
The individuals elected shall hold office until their successors are elected and will be eligible for re-election to the same office for up to a maximum of five one-year terms.

5. Election of Chair and Vice-Chairs
The election of the Chair and one or more Vice-Chairs shall be held annually at the first General Meeting in accordance with the Authority’s Procedure for Election of Officers (Appendix 3).

All Members shall be polled by electronic or regular mail in advance of the General Meeting at which the election is to be held to determine willingness to stand for election to the position of Chair or Vice-Chair.

In the event of a vacancy occurring in the office of Chair or Vice-Chair, the Authority shall appoint one of its Members to fill the vacancy at the next special meeting or General Meeting of the Authority, as chosen by election on accordance with the Authority’s Procedure for Election of Officers (Appendix 3).
6. **Appointment of Auditor**
The General Membership shall appoint an auditor for the coming year at the Annual Meeting in accordance with Section 38 of the Act.

7. **Appointment of Financial Institution**
The General Membership shall appoint a financial institution to act as the Authority’s banker by Resolution as required.

8. **Financial Statements and Report of the Auditor**
The General Membership shall receive and approve the Audited Financial Statements and Report of the Auditor annually for the previous year at the Annual General Meeting.

The Authority shall forward copies of the Audited Financial Statements and Report of the Auditor to Participating Municipalities and the Minister in accordance with Section 38 of the Act and will make the Audited Financial Statements available to the public on the Authority's website.

9. **Borrowing Resolution**
If required, the Authority shall establish a borrowing resolution at the Annual General Meeting each year, and such resolution shall be in force until it is superseded by another borrowing resolution.

10. **Corporate Policies**
The Authority shall approve and amend from time to time corporate policies, including Human Resource Policies, for employees containing conditions of employment and benefits.

11. **Levy Notice**
The levy due to the Authority from participating municipalities shall be communicated to those municipalities in accordance with the Act and any applicable Regulations.

12. **Signing Officers**
All deeds, transfers, assignments, contracts, and obligations entered into by the Authority and all cheques, promissory notes, and securities for money, shall be signed by the Chair or the Vice-Chair and the Chief Administrative Officer or the Secretary-Treasurer, with the following exceptions:

   i. Agreements, contracts, property leases or other documents required to be signed by the Authority shall be signed by the Chief Administrative Officer or the Secretary-Treasurer when properly authorized by resolution of the Authority;
   
   ii. Property leases, licenses, access agreements or other documents related to ongoing approved programs shall be signed by the Chief Administrative Officer or the Secretary-Treasurer;
   
   iii. Commitments to purchase goods and services may be signed by authorized buyers in accordance with the approved Purchasing Policy of the Authority;
   
   iv. Electronic Fund Transfers (EFTs) may be initiated by staff in accordance with proper authorization in the Purchasing Policy of the Authority or resolution of the Authority;
   
   v. Electronic signatures are considered acceptable except where expressly prohibited under the Electronic Commerce Act, 2000;
vi. Permits issued under Regulations made under the Conservation Authorities Act may be signed by the Chief Administrative Officer or Secretary-Treasurer if so authorized by resolution of the Authority to sign and execute such documents on behalf of the Authority.

vii. Notwithstanding the above, other documents required to be signed by the Authority may be signed by the Chief Administrative Officer, Secretary-Treasurer, or designate when properly authorized by policies, procedures, or resolution of the Authority.

Signing authority that was authorized by any previous By-law is superseded by this by-law.

13. Advisory Boards and Other Committees

In accordance with Section 18(2) of the Act, the Authority shall establish such advisory boards as required by regulation and may establish such other advisory boards or committees as it considers appropriate to study and report on specific matters.

The General Membership shall approve the terms of reference for all such advisory boards and committees, which shall include the purpose, the frequency of meetings and the number of members required. The names of Members to serve on all Committees shall be determined by the General Membership. The Chair is an ex-officio member of every committee.

Resolutions and policies governing the operation of the Authority shall be observed in all advisory board and committee meetings.

Each advisory board or committee shall report to the General Membership, presenting any recommendations made by the advisory board or committee.

The dates of all advisory board and committee meetings shall be made available to all Members of the Authority.

When an advisory board or committee has completed its work and submitted its final report, if applicable, it dissolves automatically, unless otherwise directed by the General Membership.

**Audit Committee**

The Audit Committee shall be appointed annually, at the Annual General Meeting, and shall meet at least twice per year, with the first meeting to take place after the Auditors have prepared the Auditors’ Report, at such time and place as the Chair of the Committee shall decide.

The Audit Committee will be composed of the Chair of the Authority, the Vice-Chair and five other members appointed by and from the General Membership. At its first meeting, the Audit Committee shall elect a Chair from its Members, excluding the Chair and Vice-Chair of the Board. The terms of reference for the Audit Committee shall be reviewed annually by the General Membership and attached to the Minutes of the meeting at which they are approved or confirmed.

14. Remuneration of Members

The Authority shall establish a per-diem rate from time to time to be paid to Members for attendance at General Meetings and Advisory Board or Committee meetings, and at such other business functions as may be from time to time requested by the Chair, through the Secretary-Treasurer. In addition, an honorarium will be approved by the Authority for the Chair and Vice-chair(s) as compensation for their additional responsibilities. A single per-diem will be paid for attendance at more than one meeting if they occur consecutively on the same day. The following activities shall be eligible for per diem allowance under this clause:
Attendance at meetings of municipal councils to present the Authority’s Annual budget and general levy requirement, if the member does not sit on that council and when such council presentations are scheduled through the Chair’s office or at the request of the General Membership:

- Attendance at meetings of working groups or committees when appointed by the General Membership to such group or committee as an “official representative” of the Authority;
- Attendance at workshops, conferences or tours hosted by the Authority or Conservation Ontario, if participation is open to all Members and registration is made through the Chair’s office;
- Any other business approved as eligible for a per diem allowance by the General Membership.

In the event of a scheduled meeting being adjourned for lack of a quorum, those attending a meeting so adjourned shall be entitled to receive the standard per diem rate and expense.

The Authority shall reimburse Members’ reasonable travel expenses incurred for the purpose of attending approved meetings and/or functions on behalf of the Authority, including actual cost of meals, lodging, public transportation and conference fees, as applicable.

A per-kilometre rate to be paid for use of a personal vehicle shall be approved by Resolution of the General Membership from time-to-time and shall be consistent with Canada Revenue Agency guidelines. Requests for such reimbursements shall be submitted on a Per Diem & Expense Claim Sheet monthly with the distance travelled entered for each meeting and allowable expenses shown. Each Member must sign a certification printed on the sheet that the information is correct.

The Chair may submit monthly expense claims, which will be reviewed and signed by the Chief Administrative Officer, the Secretary-Treasurer and the Vice-Chair. The purpose of this review is to ensure that the Chair’s expense claims conform to any policies that have been established by the Authority, are within the approved budget and are supported with appropriate documentation.

15. Retention of Records
The Authority shall keep full and accurate records including, but not limited to:

i. Minutes of all meetings of the Authority, including registries of statements of interests in accordance with the Municipal Conflict of Interest Act;
ii. Assets, liabilities, receipts and disbursements of the Authority and Financial Statements and Reports of the Auditors;
iii. Human Resources Files for all employees and Members as applicable;
iv. Workplace Health and Safety documents including workplace inspections, workplace accidents, investigations, etc.;
v. Electronic Communications including emails
vi. Contracts and Agreements entered into by the Authority;
vii. Strategic Plans and other documents providing organizational direction
viii. Projects of the Authority;
ix. Technical Studies and data gathered in support of Programs of the Authority;
x. Legal Proceedings involving the Authority;
xi. Incidents of personal injury or property damage involving the Authority and members of the public.

Such records shall be retained and protected in accordance with all applicable laws and the Retention of Records Policy of the Authority as approved by the General Membership from time-to-time.

16. Records Available to Public
Records of the Authority shall be made available to the public in a manner that is consistent with existing legal obligations, restrictions and requirements, including Municipal Freedom of Information and Protection of Personal Privacy Act (MFIPPA) and other applicable legislation.

The Chair of the Authority shall act as head of the Authority for the purposes of MFIPPA and responsibility for administration related to MFIPPA shall be delegated to the CAO.

17. By-law Review
In accordance with the Act, these by-laws shall be reviewed by the Authority to ensure the by-laws are in compliance with the Act and any other relevant law. The General Membership shall review the by-laws on a biennial basis to ensure best management practices in governance are being followed.

18. By-law Available to Public
In accordance with the Act, the Authority shall make its by-laws available to the public on the Authority’s website. By-laws shall also be available for review by any member of the public at the Authority’s administration centre or provided in alternative formats, in accordance with the Accessibility for Ontarians with Disabilities Act, if requested by interested parties.

19. Enforcement of By-laws and Policies
The Members shall respect and adhere to all applicable by-laws and policies (for example, the Code of Conduct and Conflict of Interest). The Authority may take reasonable measures to enforce its by-laws and policies, including the enforcement mechanisms under the Municipal Conflict of Interest Act.

20. Indemnification of Members, Officers and Employees
The Authority undertakes and agrees to indemnify and save harmless its Members, Officers and Employees and their heirs and legal representatives, respectively, from and against all costs, charges and expenses, including all amounts paid to settle an action or satisfy any judgement, reasonably incurred by any such Member, Officer or Employee in respect of any civil, criminal or administrative action or proceeding to which any such Member, Officer or Employee is made a party by reason of being a Member, Officer or Employee of the Authority (except in respect of an action by or on behalf of the Authority to procure a judgment in its favour) if;

- such Member, Officer or Employee acted honestly, in good faith with a view to the best interests of the Authority and within the scope of such Member's, Officer's or Employee's duties and responsibilities, and,
• in the case of a criminal or administrative action or proceeding that is enforced by a monetary penalty that such Member, Officer or Employee had reasonable grounds for believing that the conduct was lawful.

C. Meeting Procedures
The Meeting Procedures below governing the procedure of the Authority shall be observed in Executive Committee and Advisory Board meetings, as far as they are applicable, and the words Executive Committee or Advisory Board may be substituted for the word Authority as applicable

1. Rules of Procedure
In all matters of procedure not specifically dealt with under the Act and this By-law, the current edition of Bourinot’s Rules of Order shall be binding.

The Authority may choose to conduct its business as a committee of the whole. The Committee of the Whole will consist of all Members of the Authority and will be chaired by the Vice-Chair. All standing “Rules of Debate” will be observed in Committee of the Whole. The Committee of the Whole may make recommendations for consideration by the General Membership.

2. Declared State of Emergency – Electronic Meetings
During any period where an emergency has been declared to exist, in all or part of an area over which the Authority has jurisdiction, under Section 4 or 7.1 of the Emergency Management and Civil Protection Act, that may prevent the General Membership from meeting in person,

a) a Member may participate in meetings electronically and shall have the ability to:
   i. register a vote;
   ii. be counted towards determining quorum; and
   iii. participate in meetings closed to the public.

b) any date or timeline requirement established under any Section in this By-law shall be postponed until such time as the General Membership can reasonably address the issue.

c) the Authority shall make electronic meetings of the Authority open to the public.

d) any hearing or appeal dealt with in this By-law may be conducted electronically with provisions for applicants and their agents to participate if the Authority decides to hold any such hearing or appeal.

Delegations
Registered delegations will be invited to defer their attendance to a future meeting or may choose to provide a written submission to the Membership instead.

If a delegation requests to address the Membership at an electronic meeting they may do so, provided they have registered as a delegation through the Office of the CAO at least eight calendar days in advance of the meeting. Presentation materials may be shared with the Authority members provided the delegation provides them at least eight calendar days in advance of the meeting. All matters pertaining to number of speakers, length of presentation and content presented by delegations shall be in accordance with the delegations section of this by-law.
3. Notice of Meeting

The General Membership shall meet at least once a month at the Authority’s Head Office unless otherwise specified, and at such time as the Chair decides. The General Membership shall approve a schedule for regular meetings in advance. The Secretary-Treasurer shall send Notice of regular meetings to all Members at least five calendar days in advance of a meeting. Notice of all regular or special meetings of the General Membership, or its Executive Committee or Advisory Board, as far as they are applicable, shall be made available to the public as soon as possible after its delivery to General Membership.

Notice of any meeting shall indicate the time and place of that meeting and the agenda for the meeting. Notices of meetings shall include a notation that members are to contact the office if unable to attend.

All material and correspondence to be dealt with by the Authority at a meeting will be submitted to the Secretary-Treasurer 7 days in advance of the meeting where it is to be dealt with if it is to be included in the published agenda, or 2 days in advance if it is to be introduced at the meeting. All communications on any subject may be referred to staff or a committee without any motion or debate unless otherwise ordered by the Authority.

The chair may, at his/her pleasure, call a special meeting of the Authority as necessary on three calendar days notice in writing or email. That notice shall state the business of the special meeting and only that business shall be considered at that special meeting. Any member, with 50% support of the other members, may also request the Chair to call a meeting of the Authority and the Chair will not refuse.

The Chair or the Secretary-Treasurer may, by notice in writing or email delivered to the members so as to be received by them at least 24 hours before the hour appointed for the meeting, postpone or cancel any meeting of an Advisory Board or other committee until the next scheduled date for the specific Advisory Board or committee affected.

The Chair or the Secretary-Treasurer may, if it appears that a storm or like occurrence will prevent the members from attending a meeting, postpone that meeting by advising as many members as can be reached. Postponement shall not be for any longer than the next regularly scheduled meeting date.

4. Special Meetings

The chair may, at his/her pleasure, call a special meeting of the Authority as necessary on three calendar days notice in writing or email. That notice shall state the business of the special meeting and only that business shall be considered at that special meeting. Any member, with 50% support of the other members, may also request the Chair to call a meeting of the Authority and the Chair will not refuse.

A special meeting may be held to amend the by-law.

Members of the Authority can participate electronically in any special meeting that occurs during an emergency. A member of the Authority that is participating electronically in a special meeting
will be counted in determining whether a quorum of members is present at any time during the meeting.

The agenda for special meetings of the Authority shall be prepared as directed by the Chair.

5. Meetings Open to Public
All meetings of the General Membership shall be open to the public.

A meeting or part of a meeting may be closed to the public if the subject matter being considered is identified in the closed meeting section of the Agenda and/or the subject matter meets the criteria for a closed meeting as defined in this by-law.

6. Agenda for Meetings
Authority staff, under the supervision of the Secretary-Treasurer, shall prepare an agenda for all regular meetings of the Authority that shall include, insofar as they are applicable to the meeting but not necessarily limited to, the following headings:

1. Call to order by Chair
2. Certification by Secretary-Treasurer that there is a quorum of Members present
3. Review of Agenda
4. Declarations of pecuniary interest
5. Adoption of minutes of previous meeting
6. Hearing of delegations
7. Presentations
8. Correspondence
9. 1st & 2nd readings of By-laws
10. Presentation of Reports
11. Committee of the Whole
12. Election of officers
13. Presentation of annual budget
14. General business
15. Adoption of Projects (if applicable)
16. 3rd reading of by-laws
17. Other business
18. Closed Meeting
19. Adjournment

The agenda for special meetings of the Authority shall be prepared as directed by the Chair.

Agendas for meetings shall be forwarded to all Members at least five calendar days in advance of the meeting. Such agendas shall be made available to the public on the Authority’s website at the same time, unless the meeting is closed to the public in accordance with this by-law. Such agendas shall also be available in alternative formats, in accordance with the Accessibility for Ontarians with Disabilities Act, if requested by interested parties.

7. Quorum
At any meeting of the General Membership, a quorum consists of one-half of the Members appointed by the Participating Municipalities, except where there are fewer than six such
Members, in which case three such Members constitute a quorum. At any advisory board or committee meeting, a quorum consists of one-half of the Members of the advisory board or committee.

If there is no quorum within one half hour after the time appointed for the meeting, the Chair for the meeting shall declare the meeting adjourned due to a lack of a quorum, or shall recess until quorum arrives, and the recording secretary shall record the names of the Members present and absent.

If during an Authority or Advisory Board or Committee meeting a quorum is lost, then the Chair shall declare that the meeting shall stand recessed or adjourned, until the date of the next regular meeting or other meeting called in accordance with the provisions of this by-law.

Where the number of Members who are disabled from participating in a meeting due to the declaration of a conflict of interest is such that at that meeting the remaining Members are not of sufficient number to constitute a quorum, the remaining number of Members shall be deemed to constitute a quorum, provided such number is not less than two.

8. Order of Business
   The business of the Authority shall be taken up in the order in which it stands on the agenda unless otherwise decided by a majority of those Members present.

   No Member shall present any matter to the Authority for its consideration unless the matter appears on the agenda for the meeting of the Authority or leave is granted to present the matter by the affirmative vote of a majority of the Members present.

9. Debate
   The Authority shall observe the following procedures for discussion/debate on any matter coming before it:
   a) A Member shall be recognized by the Chair prior to speaking;
   b) Where two or more Members rise to speak, the Chair shall designate the Member who has the floor, who shall be the Member who in the opinion of the Chair was first recognized;
   c) All questions and points of discussion shall be directed through the Chair;
   d) Where a motion is presented, it shall be moved and seconded before debate;
   e) Any Member may require the question or motion under debate to be read at any time during the debate, except while a Member is speaking;
   f) No Member shall speak more than once to the same question without leave from the Chair, except in explanation of a material part of the speech;
   g) A Member is allowed a time limit of ten minutes to speak on any given point, and extensions of five minute intervals may be granted at the discretion of the Chair;
   h) Any Member may ask a question of the previous speaker through the Chair;
   i) The Member who has presented a motion, other than a motion to amend or dispose of a motion, may speak again to the motion immediately before the Chair puts the motion to a vote;
When a motion is under debate, no motion shall be received other than a motion to amend, to defer action, to refer the question, to take a vote, to adjourn, or to extend the hour of closing the proceedings.

When a motion is under consideration, only one amendment is permitted at a time.

10. Matters of Precedence
The following matters shall have precedence over the usual order of business:

a) a point of order;
b) matter of privilege;
c) a matter of clarification;
d) a motion to suspend a rule of procedure or to request compliance with the rules of procedure;
e) a motion that the question be put to a vote;
f) a motion to adjourn.

When a member raises a point of order, he/she shall ask leave of the Chair to raise a point of order and after leave is granted shall state the point of order to the Chair and thereafter no Member shall address the Chair on the point of order except for the purpose of appealing the Chair's decision.

Where there is no appeal, the decision of the Chair shall be final, and where there is an appeal, the Authority shall decide the question without debate and the decision of the majority of the Members present shall be final.

11. Members’ Attendance
The Authority shall provide a listing of Members’ attendance at scheduled meetings of the Authority to the Participating Municipalities semi-annually.

Upon a Member's vacancy due to death, incapacity or resignation occurring in any office of the Authority, the Authority shall request the municipality that was represented by that Member appoint a Member replacement.

If a Member is unable to attend any meeting and wishes to bring any additional information or opinion pertaining to an agenda item to the General Membership, the Member shall address in writing or email to the Chair or Secretary-Treasurer such correspondence prior to the start of the meeting. The correspondence shall be circulated in advance, if possible, or distributed at the meeting by the Secretary-Treasurer without comment or explanations.

When a member’s appointment is due to expire, the appropriate municipality shall be notified at least 30 days before the date of such expiration.

12. Delegations
Any person or organization who wishes to address the Authority may make a request in writing or email to the Secretary-Treasurer. The request should include a brief statement of the issue or matter involved and indicate the name of the proposed speaker(s). If such request is received 10 days in advance of a scheduled meeting, the delegation shall be listed on the published agenda.
Any person or organization requesting an opportunity to address the Authority, but not having made a written request to do so in the timelines specified above, may register as a delegation through the Office of the CAO up to two business days immediately preceding a meeting of the General Membership or shall be listed on the published agenda for the following meeting. Unregistered delegations present at the meeting may request to speak and will be limited to a maximum of three (3) minutes to address the Board, if approved by a majority of members present at the meeting.

Except by leave of the Chair or appeal by the leave of the meeting, delegations shall be limited to one (1) speaker for not more than 10 minutes. A delegation of more than three (3) speakers will be limited to a total maximum of twenty (20) minutes. When a large number of Delegations wish to speak on the same topic, the time limits may be reduced at the discretion of the Chair.

Speakers will be requested not to repeat what has been said by previous speakers at the meeting. A returning delegation will only be allowed to speak again if new, relevant information has become available since their previous presentation. The Chair may choose to end a returning delegation’s presentation if, in the opinion of the Chair, the new information being presented is not relevant to a decision facing the General Membership.

Members of the public who constitute an audience during an Authority meeting may not:

- Address the Authority without permission;
- Interrupt any speech or action of the Members, or any other person addressing the Authority;
- Display or have in their possession any picket signs, placards, or other forms of written messages deemed inappropriate by the Chair.

13. Section 28 Hearings and Permit Issuance

Hearings

When a hearing is required under Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulations, under Section 28 (12) of the Conservation Authorities Act, the General Membership shall form a tribunal for the purpose of such a hearing. When hearings are to be held for Applications for Permit under Section 28 of the Conservation Authorities Act, RSO 1990, individual notice of hearing shall be sent by registered mail or email to the applicant, with a copy by ordinary mail or email to the applicable municipal clerk.

When a permit is approved, the original shall be retained on file by the Authority, and a copy shall be sent by regular mail to the applicant, the applicable municipal clerk, and to the appropriate municipal department with plans attached when required.

When a permit is refused, a letter of refusal shall be sent to the applicant by registered mail or email with a copy of the reasons for refusal which have been signed under seal by the mover and seconder of the refusal resolution. Copies shall be sent by regular mail or email to those who received the hearing notice.

Section 28 Permit Issuance
When a permit is approved, the original shall be retained on file by the Authority, and a copy shall be sent by regular mail or email to the applicant, the applicable municipal clerk, and to the appropriate municipal department with plans attached when required.

14. Annual Meeting
The Authority shall designate one meeting of the General Membership each year as the annual meeting to be held prior to March 1 and shall include the following items on the agenda, in addition to the normal course of business:
   i. Appointment of the auditor for the upcoming year
   ii. Receipt of the most recent report of the Audit Committee
   iii. Receipt and Approval of the Auditor’s Report and Audited Financial Statements for the prior year
   iv. Approval of the Budget and General Levy for the current year
   v. Approval of Provision for Borrowing for the current year
   vi. Confirmation of By-laws passed, repealed, amended or re-enacted during the past year.

15. Meetings with Closed “In Camera” Sessions
Every meeting of the General Membership, Executive Committee and Advisory Boards, if applicable, shall be open to the public as per Section 15(3) of the Act, subject to the exceptions set out below.

Meetings may be closed to the public if the subject matter being considered relates to:
   a) The security of the property of the Authority;
   b) Personal matters about an identifiable individual, including employees of the Authority;
   c) A proposed or pending acquisition or disposition of land by the Authority;
   d) Labour relations or employee negotiations;
   e) Litigation or potential litigation, including matters before administrative tribunals (e.g. Local Planning Appeal Tribunal), affecting the Authority;
   f) Advice that is subject to solicitor-client privilege;
   g) A matter in respect of which the General Membership, Executive Committee, Advisory Board or committee or other body may hold a closed meeting under another Act;
   h) Information explicitly supplied in confidence to the Authority by Canada, a province or territory or a Crown agency of any of them;
   i) A trade secret or scientific, technical, commercial, financial or labour relations information, supplied in confidence to the Authority, which, if disclosed, could reasonably be expected to prejudice significantly the competitive position or interfere significantly with the contractual or other negotiations of a person, group of persons, or organization;
   j) A trade secret or scientific, technical, commercial or financial information that belongs to the Authority and has monetary value or potential monetary value; or
   k) A position, plan, procedure, criteria or instruction to be applied to any negotiations carried on or to be carried on by or on behalf of the Authority.

The Authority shall close a meeting if the subject matter relates to the consideration of a request under MFIPPA.

Before holding a meeting or part of a meeting that is to be closed to the public, the Members shall state by resolution during the open session of the meeting that there will be a meeting
closed to the public and the general nature of the matter to be considered at the closed meeting. Once matters have been dealt with in a closed meeting, the General Membership shall reconvene in an open session.

The General Membership shall not vote during a meeting that is closed to the public, unless:

a) the meeting meets the criteria outlined in this by-law to be closed to the public; and
b) the vote is for a procedural matter or for giving directions or instructions to Officers, employees or agents of Authority.

Any materials presented to the General Membership during a closed meeting shall be returned to the Secretary-Treasurer prior to departing from the meeting and shall be treated in accordance with the Authority’s procedures for handling confidential material.

A meeting of the Authority, advisory board or other committee may also be closed to the public if:

a) the meeting is held for the purpose of educating or training the Members; and
b) at the meeting, no Member discusses or otherwise deals with any matter in a way that materially advances the business or decision-making of the authority, advisory board or other committee.

16. Voting
In accordance with Section 16 of the Act:

a) each Member is entitled to one vote, including the Chair, and
b) a majority vote of the Members present at any meeting is required upon all matters coming before the meeting.

If any Member who is qualified to vote abstains from voting, except during a recorded vote, they shall be deemed to have voted neither in favour nor opposed to the question, which will not alter the number of votes required for a majority.

On a tie vote, the motion is lost.

Interrelated motions shall be voted on in the order specified in Bourinot’s Rules of Order.

Unless a Member requests a recorded vote, a vote shall be by a show of hands or such other means as the Chair may call. No question shall be voted upon more than once at any meeting, unless a recorded vote is requested.

If a member present at a meeting at the time of the vote requests immediately before or after the taking of the vote that the vote be recorded, each member present, except a member who is disqualified from voting by any Act, shall announce his or her vote openly answering “yes” or “no” to the question, and the Secretary-Treasurer shall record each vote. Any Members who did not stand in a recorded vote will be recorded as voting in favour.

At the meeting of the Authority at which the Non-Matching Levy is to be approved, the Secretary-Treasurer shall conduct the vote to approve of Non-Matching Levy by a Weighted Majority of the Members present and eligible to vote, in accordance with Ontario Regulation 139/96.
Where a question under consideration contains more than one item, upon the request of any Member, a vote upon each item shall be taken separately.

While the Chair is putting a question to the vote, no Member shall leave his/her seat or make any noise or disturbance until the result of the vote is declared.

No question shall be voted upon more than once at any meeting, unless a recorded vote is requested.

Except as provided in Section B, Paragraph 5 of this By-law (Election of Chair and Vice-Chair), no vote shall be taken by ballot or by any other method of secret voting, and every vote so taken is of no effect.

17. **Notice of Motion**

Written notice of motion to be made at an Authority advisory board or committee meeting may be given to the Secretary-Treasurer by any Member of the Authority not less than seven business days prior to the date and time of the meeting and shall be forthwith placed on the agenda of the next meeting. The Secretary-Treasurer shall include such notice of motion in full in the agenda for the meeting concerned.

Recommendations included in reports of advisory boards or committees that have been included in an agenda for a meeting of the General Membership, shall constitute notice of motion for that meeting.

Recommendations included in staff reports that have been included in an agenda for a meeting of the General Membership, shall constitute notice of motion for that meeting.

Notwithstanding the foregoing, any motion or other business may be introduced for consideration of the Authority provided that it is made clear that to delay such motion or other business for the consideration of an appropriate advisory board or committee would not be in the best interest of the Authority and that the introduction of the motion or other business shall be upon an affirmative vote of a majority of the members of the Authority present.

18. **Motion to Reconsider**

If a motion is made to reconsider a previous motion, a two-thirds majority vote shall be required in order for reconsideration to take place. If a motion to reconsider is passed, the original motion shall then be placed on the agenda at a future meeting to be debated and voted upon, and the result of that vote, based on a simple majority, shall supersede.

19. **Duties of the Meeting Chair**

It shall be the duty of the Chair, with respect to any meetings over which he/she presides, to:

a)    Take the chair and call the members to order when a quorum is first present after the hour fixed for a meeting of the Authority;

b)    Preserve order and decide all questions of order, subject to appeal; and without argument or comment, state the rule applicable to any point of order if called upon to do so;
c) Ensure that the public in attendance does not in any way interfere or disrupt the proceedings of the Members;
d) Receive and submit to a vote all motions presented by the Members, which do not contravene the rules of order or regulations of the Authority;
e) Announce the results of the vote on any motions so presented;
f) Adjourn the meeting when business is concluded.

The Chair who opens the meeting shall remain Chair of the meeting until its adjournment. If, however, the Chair for any reason wishes to vacate the chair, either temporarily or for the balance of the meeting, he/she may appoint a Member of the Authority to take the chair in his/her place.

The Chair will vacate the chair while the Members are sitting as a Committee of the Whole, and, while nominations are being held for the office of Chair, Vice-Chair or any and all other elected officers of the Authority. The Authority shall appoint a person other than a Member of the Authority to conduct such elections; who shall appoint such clerks and returning officers as is necessary to assist in holding the elections.

20. **Conduct of Members**
Members shall maintain a high standard for conduct and at all times comply with applicable laws and the Authority’s Code of Conduct (Appendix 1).

No Member at any meeting of the Authority shall:
a) Speak in a manner that is discriminatory in nature based on an individual’s race, ancestry, place of origin, citizenship, creed, gender, sexual orientation, age, colour, marital status, family status or disability;
b) Leave their seat or make any noise or disturbance while a vote is being taken or until the result is declared;
c) Interrupt a Member while speaking, except to raise a point of order or a question of privilege;
d) Speak disrespectfully or use offensive words against the Authority, the Members, staff, or any member of the public;
e) Speak beyond the question(s) under debate;
f) Resist the rules of order or disobey the decision of the Chair on the questions or order or practices or upon the interpretation of the By-laws.

21. **Minutes of Meetings**
The Secretary-Treasurer shall undertake to have a recording secretary in attendance at meetings of the Authority, the Executive Committee and each advisory board or committee. The recording secretary shall make a record in the form of minutes of the meeting proceedings and in particular shall record all motions considered at the meeting.

If a recording secretary is not present in a closed session, the Secretary-Treasurer, or designate, shall take notes of any direction provided, for endorsement by the Chair and Vice-Chair.

Minutes of all meetings shall include the time and place of the meeting, a list of those present and shall state all motions presented together with the mover and seconder and voting results.
The Secretary-Treasurer or designate shall include draft minutes of the previous meeting available to each member of the Authority at the same time as agendas for the next meeting are distributed.

After the minutes have been approved by resolution, original copies shall be signed by the Secretary-Treasurer and the Chair and copies of all non-confidential minutes shall be posted on the Authority’s website. Such minutes shall also be available for review by any member of the public at the Authority’s administration centre or provided in alternative formats, in accordance with the Accessibility for Ontarians with Disabilities Act, if requested by interested parties.
D. Approval of By-law and Revocation of Previous By-law(s)

By-law number 1-2019 is hereby repealed;

By-law number 42-2020 shall come into force on the 28th day of February, 2020

READ A FIRST AND SECOND TIME

Date

READ A THIRD TIME AND FINALLY PASSED

Date

Signed:

Chair

Secretary-Treasurer
E. Appendices to the Administrative By-law

Appendix 1 - Code of Conduct

1. Background
The Grand River Conservation Authority demands a high level of integrity and ethical conduct from its General Membership. The Authority’s reputation has relied upon the good judgement of individual Members. A written Code of Conduct helps to ensure that all Members share a common basis for acceptable conduct. Formalized standards help to provide a reference guide and a supplement to legislative parameters within which Members must operate. Further, they enhance public confidence that Members operate from a base of integrity, justice and courtesy.

The Code of Conduct is a general standard. It augments the laws which govern the behaviour of Members, and it is not intended to replace personal ethics.

This Code of Conduct will also assist Members in dealing with confronting situations not adequately addressed or that may be ambiguous in Authority resolutions, regulations, or policies and procedures.

2. General
All Members, whether municipal councillors or appointed representatives of a municipality, are expected to conduct themselves in a manner that reflects positively on the Authority.

All Members shall serve in a conscientious and diligent manner. No Member shall use the influence of office for any purpose other than for the exercise of his/her official duties.

It is expected that Members adhere to a code of conduct that:

i. upholds the mandate, vision and mission of the Authority;
ii. considers the Authority’s jurisdiction in its entirety, including their appointing municipality;
iii. respects confidentiality;
iv. approaches all Authority issues with an open mind, with consideration for the organization as a whole;
v. exercises the powers of a Member when acting in a meeting of the Authority;
vi. respects the democratic process and respects decisions of the General Membership, Advisory Boards and other committees;
vii. declares any direct or indirect pecuniary interest or conflict of interest when one exists or may exist; and
viii. conducts oneself in a manner which reflects respect and professional courtesy and does not use offensive language in or against the Authority or against any Member or any Authority staff.

3. Gifts and Benefits
Members shall not accept fees, gifts, hospitality or personal benefits that are connected directly or indirectly with the performance of duties, except compensation authorized by law.

4. Confidentiality
The members shall be governed at all times by the provisions of the Municipal Freedom and Information and Protection of Privacy Act.
All information, documentation or deliberations received, reviewed, or taken in a closed meeting are confidential.

Members shall not disclose or release by any means to any member of the public, either in verbal or written form, any confidential information acquired by virtue of their office, except when required by law to do so.

Members shall not permit any persons, other than those who are entitled thereto, to have access to information which is confidential.

In the instance where a member vacates their position on the General Membership they will continue to be bound by MFIPPA requirements.

Particular care should be exercised in protecting information such as the following:

i. Human Resources matters;
ii. Information about suppliers provided for evaluation that might be useful to other suppliers;
iii. Matters relating to the legal affairs of the Authority;
iv. Information provided in confidence from an Aboriginal community, or a record that if released could reasonably be expected to prejudice the conduct of relations between an Aboriginal community and the Authority;
v. Sources of complaints where the identity of the complainant is given in confidence;
vii. Items under negotiation;
vii. Schedules of prices in tenders or requests for proposals;
viii. Appraised or estimated values with respect to the Authority’s proposed property acquisitions or dispositions;
ix. Information deemed to be “personal information” under MFIPPA.

The list above is provided for example and is not exhaustive.

5. **Use of Authority Property**

No Member shall use for personal purposes any Authority property, equipment, supplies, or services of consequence other than for purposes connected with the discharge of Authority duties or associated community activities of which the Authority has been advised.

6. **Work of a Political Nature**

No Member shall use Authority facilities, services or property for his/her election or re-election campaign to any position or office within the Authority or otherwise.

7. **Conduct at Authority Meetings**

During meetings of the Authority, Members shall conduct themselves with decorum. Respect for delegations and for fellow Members requires that all Members show courtesy and not distract from the business of the Authority during presentations and when others have the floor.
8. **Influence on Staff**
Members shall be respectful of the fact that staff work for the Authority as a whole and are charged with making recommendations that reflect their professional expertise and corporate perspective, without undue influence.

9. **Business Relations**
No Member shall borrow money from any person who regularly does business with the Authority unless such person is an institution or company whose shares are publicly traded and who is regularly in the business of lending money.

No Member shall act as a paid agent before the Authority or an advisory board or committee of the Authority, except in compliance with the terms of the *Municipal Conflict of Interest Act*.

10. **Encouragement of Respect for the Authority and its Regulations**
Members shall represent the Authority in a respectful way and encourage public respect for the Authority and its Regulations.

11. **Harassment**
It is the policy of the Authority that all persons be treated fairly in the workplace in an environment free of discrimination and of personal and sexual harassment. Harassment of another Member, staff or any member of the public is misconduct. Members shall follow the Authority’s Harassment Policy as amended from time-to-time.

Examples of harassment that will not be tolerated include: verbal or physical abuse, threats, derogatory remarks, jokes, innuendo or taunts related to an individual’s race, religious beliefs, colour, gender, physical or mental disabilities, age, ancestry, place of origin, marital status, source of income, family status or sexual orientation. The Authority will also not tolerate the display of pornographic, racist or offensive signs or images; practical jokes that result in awkwardness or embarrassment; unwelcome invitations or requests, whether indirect or explicit and any other prohibited grounds under the provisions of the *Ontario Human Rights Code*.

12. **Breach of Code of Conduct**
Should a Member breach the Code of Conduct, they shall advise the Chair and Vice-Chair, with a copy to the Secretary Treasurer, as soon as possible after the breach.

Should a Member allege that another Member has breached the Code of Conduct, the said breach shall be communicated to the Chair, with a copy to the Secretary-Treasurer, in writing. In the absence of the Chair, or if a Member alleges that the Chair has breached the Code of Conduct, the said breach shall be communicated the Vice-Chair, with a copy to the Secretary-Treasurer, in writing.

Should a member of the public or a municipality allege that a Member has breached the Code of Conduct, the party making the allegation will be directed to follow the notification procedure outlined above.
Any breach, or alleged breach, of the Code of Conduct shall be investigated in accordance with the Enforcement of By-laws and Policies procedure outlined or referred to in the Authority’s Administrative By-law.
Appendix 2 - Conflict of Interest

1. **Municipal Conflict of Interest Act**
The Authority Members commit themselves and the Authority to ethical, businesslike, and lawful conduct when acting as the General Membership. The Authority is bound by the *Municipal Conflict of Interest Act*. This appendix to the by-law is intended to assist Members in understanding their obligations. Members are required to review the *Municipal Conflict of Interest Act* on a regular basis.

2. **Disclosure of Pecuniary Interest**
Where a Member, either on his or her own behalf or while acting for, by, with or through another, has any pecuniary interest, direct or indirect, in any matter and is present at a meeting of the Authority, Advisory Board or committee at which the matter is the subject of consideration, the Member:
   a) shall, prior to any consideration of the matter at the meeting, disclose the pecuniary interest and the general nature thereof;
   b) shall not take part in the discussion of, or vote on any question in respect of the matter;
   c) shall not attempt in any way whether before, during or after the meeting to influence the voting on any such question, and,
   d) shall file a written statement of the interest and its general nature to the Secretary-Treasurer at the meeting or as soon as possible afterwards.

3. **Chair’s Conflict of Interest or Pecuniary Interest**
Where the Chair of a meeting discloses a conflict of interest with respect to a matter under consideration at a meeting, another Member shall be appointed to chair that portion of the meeting by Resolution.

4. **Closed Meetings**
Where a meeting is not open to the public, a Member who has declared a conflict of interest shall leave the meeting for the part of the meeting during which the matter is under consideration.

5. **Member Absent**
Where the interest of a Member has not been disclosed by reason of their absence from the particular meeting, the Member shall disclose their interest and otherwise comply at the first meeting of the Authority, Advisory Board or Committee, as the case may be, attended by them after the particular meeting.

6. **Disclosure Recorded in Minutes**
The recording secretary shall record in reasonable detail the particulars of any disclosure of conflict of interest or pecuniary interest made by Members and whether the Member withdrew from the discussion of the matter. Such record shall appear in the minutes/notes of that particular meeting of the General Membership, Advisory board or committee, as the case may be.

7. **Pecuniary Interest Registry**
A registry will be kept by the Secretary-Treasurer of each written statement of pecuniary interest filed along with a copy of each declaration recorded in the minutes. The registry shall be made available for public inspection upon request submitted to the Secretary-Treasurer.
8. Breach of Conflict of Interest Policy

Should a Member breach the Conflict of Interest Policy, they shall advise the Chair and Vice-Chair, with a copy to the Secretary Treasurer, as soon as possible after the breach.

Should a Member allege that another Member has breached the Conflict of Interest Policy, the said breach shall be communicated to the Chair, with a copy to the Secretary Treasurer, in writing. In the absence of the Chair, or if a Member alleges that the Chair has breached the Conflict of Interest Policy, the said breach shall be communicated to the Vice-Chair, with a copy to the Secretary-Treasurer, in writing.

Should a member of the public or a municipality allege that a Member has breached the Conflict of Interest Policy, the party making the allegation will be directed to follow the notification procedure outlined above.

Any breach, or alleged breach, of the Conflict of Interest Policy shall be investigated in accordance with the Enforcement of By-laws and Policies procedure outlined or referred to in the Authority’s Administrative By-law.
Appendix 3 - Procedure for Election of Officers

1. **Voting**
Voting shall be by secret ballot and no Members may vote by proxy.

2. **Acting Chair**
The General Membership shall appoint a person, who is not a voting Member, as Acting Chair or Returning Officer, for the purpose of Election of Officers.

3. **Scrutineer(s)**
The appointment of one or more scrutineers is required for the purpose of counting ballots, should an election be required. All ballots shall be destroyed by the scrutineers afterwards. The Acting Chair shall call a motion for the appointment of one or more persons, who are not Members or employees of the Authority, to act as scrutineers. A Member, who will not stand for election, may be appointed as an additional scrutineer if requested.

4. **Election Procedures**
The Acting Chair shall advise the Members that the election will be conducted in accordance with the Act as follows:

   a) The elections shall be conducted in the following order:
      i. Election of the Chair, who shall be a Member of the Authority
      ii. Election of one or more Vice-chairs, who shall be Members of the Authority.
   b) The Acting Chair shall ask for nominations to each position;
   c) Only current Members of the Authority who are present may vote;
   d) Nominations shall be called three (3) times and will only require a mover;
   e) The closing of nominations shall require both a mover and a seconder;
   f) Each Member nominated shall be asked to accept the nomination. The Member must be present to accept the nomination unless the Member has advised the Secretary-Treasurer in writing or by email in advance of the election of their willingness to accept the nomination.

   If one Nominee:
   g) If only one nominee the individual shall be declared into the position by acclamation.

   If More than One Nominee:
   h) In the event of an election, each nominee shall be permitted not more than three (3) minutes to speak for the office, in the order of the alphabetical listing by surnames.

   i) Upon the acceptance by nominees to stand for election to the position of office, ballots shall be distributed to the Members by the scrutineers for the purpose of election and the Acting Chair shall ask the Members to write the name of one individual only on the ballot.
   j) The scrutineers shall collect the ballots, leave the meeting to count the ballots, return and advise the Acting Chair who was elected with more than 50% of the vote.

A majority vote shall be required for election. If there are more than two nominees, and upon the first vote no nominee receives the majority required for election, the name of the person with the least number of votes shall be removed from further consideration for the office and new ballots
shall be distributed. In the case of a vote where no nominee receives the majority required for
election and where two or more nominees are tied with the least number of votes, a special vote
shall be taken to decide which one of such tied nominees’ names shall be dropped from the list of
names to be voted on in the next vote.

Should there be a tie vote between two remaining candidates, new ballots shall be distributed
and a second vote held. Should there still be a tie after the second ballot a third vote shall be
held. Should there be a tie after the third vote, the election of the office shall be decided by lot
drawn by the Acting Chair or designate.
Grand River Conservation Authority

Report number: GM-04-20-22
Date: April 24, 2020
To: Members of the Grand River Conservation Authority
Subject: Cash and Investment Status – March 2020

Recommendation:
THAT Report Number GM-04-20-22 Cash and Investment Status – March 2020 be received as information.

Summary:
The cash position included Notes Receivable of the Grand River Conservation Authority as at March 31, 2020 was $26,392,491 with outstanding cheques written in the amount of $316,731.

Report:
See attached.

Financial implications:
Interest rates, etc. are shown on the report.

Other department considerations:
Not applicable.

Prepared by: Carol Anne Johnston
Senior Accountant

Approved by: Karen Armstrong
Deputy CAO/Secretary Treasurer

Sonja Radoja
Manager of Corporate Services
Grand River Conservation Authority  
Cash and Investments Status Report  
March 31, 2020

<table>
<thead>
<tr>
<th>BANK ACCOUNTS</th>
<th>Location</th>
<th>Type</th>
<th>Amount</th>
<th>Interest Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIBC</td>
<td>Current Account</td>
<td></td>
<td>5,043,503</td>
<td>1.34%</td>
</tr>
<tr>
<td>RBC</td>
<td>Current Account</td>
<td></td>
<td>270,092</td>
<td>nil</td>
</tr>
<tr>
<td>Wood Gundy</td>
<td>Current Account</td>
<td></td>
<td>0</td>
<td>0.20%</td>
</tr>
<tr>
<td>CIBC - SPP Holding</td>
<td>Current Account</td>
<td></td>
<td>111,577</td>
<td>1.34%</td>
</tr>
<tr>
<td><strong>TOTAL CASH - CURRENT ACCOUNT</strong></td>
<td></td>
<td></td>
<td><strong>5,425,172</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INVESTMENTS</th>
<th>Date Invested</th>
<th>Location</th>
<th>Type</th>
<th>Amount</th>
<th>Face Value</th>
<th>Interest Rate</th>
<th>Yield Rate</th>
<th>Date of Maturity</th>
<th>2020 Total Interest Earned/Accrued</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIBC Renaissance</td>
<td>September 3, 2015</td>
<td>High Interest Savings Account</td>
<td>671,105</td>
<td>0.60%</td>
<td>0.60%</td>
<td>not applicable</td>
<td></td>
<td></td>
<td>4,319</td>
</tr>
<tr>
<td>One Investment Savings</td>
<td>March 1, 2016</td>
<td>High Interest Savings Account</td>
<td>4,273,214</td>
<td>1.705%</td>
<td>1.705%</td>
<td>not applicable</td>
<td></td>
<td></td>
<td>78,189</td>
</tr>
<tr>
<td>Bank of Montreal</td>
<td>August 24, 2017</td>
<td>Bond</td>
<td>1,550,000</td>
<td>1.01%</td>
<td>1.70%</td>
<td></td>
<td></td>
<td>October 28, 2021</td>
<td>30,781</td>
</tr>
<tr>
<td>Bank of Nova Scotia</td>
<td>May 17, 2019</td>
<td>Bond</td>
<td>800,000</td>
<td>1.90%</td>
<td>1.15%</td>
<td></td>
<td></td>
<td>December 2, 2021</td>
<td>17,027</td>
</tr>
<tr>
<td>Cdn Western Bank</td>
<td>June 17, 2019</td>
<td>Bond</td>
<td>1,542,000</td>
<td>2.788%</td>
<td>2.09%</td>
<td></td>
<td></td>
<td>September 13, 2021</td>
<td>32,307</td>
</tr>
<tr>
<td>Cdn Western Bank</td>
<td>October 23, 2019</td>
<td>Bond</td>
<td>2,010,000</td>
<td>2.800%</td>
<td>2.78%</td>
<td></td>
<td></td>
<td>September 6, 2024</td>
<td>55,625</td>
</tr>
<tr>
<td>Laurentian Bank</td>
<td>December 23, 2019</td>
<td>Bond</td>
<td>3,821,000</td>
<td>3.450%</td>
<td>2.57%</td>
<td></td>
<td></td>
<td>June 27, 2023</td>
<td>99,259</td>
</tr>
<tr>
<td>Cdn Western Bank</td>
<td>January 16, 2020</td>
<td>Bond</td>
<td>3,000,000</td>
<td>2.597%</td>
<td>2.45%</td>
<td></td>
<td></td>
<td>September 6, 2024</td>
<td>70,166</td>
</tr>
<tr>
<td><strong>TOTAL INVESTMENTS</strong></td>
<td></td>
<td></td>
<td><strong>20,967,319</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>$465,041</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TOTAL CASH AND INVESTMENTS</th>
<th><strong>$26,392,491</strong></th>
</tr>
</thead>
</table>

* Reserve Balance at December 31st, 2019  
20,891,930

<table>
<thead>
<tr>
<th>Investment By Institution</th>
<th>% of Total Portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.I.B.C.</td>
<td>19%</td>
</tr>
<tr>
<td>Bank of Nova Scotia</td>
<td>4%</td>
</tr>
<tr>
<td>Bank of Montreal</td>
<td>7%</td>
</tr>
<tr>
<td>Royal Bank</td>
<td>0%</td>
</tr>
<tr>
<td>Laurentian</td>
<td>18%</td>
</tr>
<tr>
<td>Cdn Western Bank</td>
<td>31%</td>
</tr>
<tr>
<td>One Investment Program</td>
<td>20%</td>
</tr>
</tbody>
</table>

100%

* Reserve balances are reviewed annually by the Board in November.
Grand River Conservation Authority

Report number: GM-04-20-21

Date: April 24, 2020

To: Members of the Grand River Conservation Authority

Subject: Financial Summary for the Period Ending March 31, 2020

Recommendation:
THAT the Financial Summary for the period ending March 31, 2020 be approved.

Summary:
The Financial Summary includes the 2020 actual year-to-date income and expenditures. The budget approved at the February 28, 2020 General Meeting is included in the Budget column. The Current Forecast column indicates an estimate of income and expenditures for the whole year. At this time a surplus of NIL at year-end is anticipated.

No forecast adjustments have been made to date to reflect the impact of the COVID-19 pandemic given the state of flux that we are currently experiencing and the resulting uncertainty as relates to potential financial impacts.

Report:
The Financial Summary is attached.

Financial implications:
The activity summarized will result in a NIL surplus at December 31, 2020.

Other department considerations:
The management committee and appropriate supervisory staff receive monthly financial reports and advise the finance department of applicable forecast adjustments.

Prepared by: Sonja Radoja
Manager Corporate Services

Approved by: Karen Armstrong
Secretary-Treasurer/Deputy CAO
Grand River Conservation Authority

Report number: GM-04-20-24
Date: April 24, 2020
To: Members of the Grand River Conservation Authority
Subject: Award of Cottage Lot Curbside Garbage and Recycling Materials Collection, Processing, and Disposal Contract: 2020-2022

Recommendation:
THAT Report Number GM-04-20-24 – Award of Cottage Lot Curbside Garbage and Recycling Materials Collection, Processing, and Disposal Contract be received as information.

Summary:
The Grand River Conservation Authority is responsible for curbside garbage and recycling materials collection, processing, and disposal services through the lease agreement with the cottage lot tenants of Belwood Lake and Conestogo Lake.

In accordance with the Grand River Conservation Authority’s Human Resources Policy, the GRCA awarded the curbside garbage and recycling materials collection, processing, and disposal services for 2020, 2021, and 2022 with optional extensions for 2023 and 2024 to Waste Management of Canada Corporation as they were the lowest bidder from the publicly advertised Request for Proposals process. The estimated cost for 2020 is $66,368.20 with the final costs depending on actual tonnage.

Report:
Grand River Conservation Authority (GRCA) entered into a lease agreement with the 735 cottage lot tenants at Belwood Lake and Conestogo Lake on January 1, 2009. Under Section 10 (e) of the Cottage Lot Program Lease, GRCA covenants to “maintain a weekly household garbage collection service to the Demised Site from the 1st day of May to the Thanksgiving weekend in each year”. Further, section 10 (f) of the Cottage Lot Program Lease states that GRCA will “provide annually… a large household item collection and disposal service”. The current five year contract for curbside pickup of waste, recyclables and large item pickup at the cottage lots expired at the end of the 2019 season.

GRCA released a Request for Proposals (RFP) for the provision of weekly curbside garbage and recycling materials collection, processing, and disposal services, including an annual large item pickup. The RFP outlined the scope of the work required and also detailed contractor obligations for items including regulatory compliance, workplace safety, and contingencies. The RFP specified a three year collection agreement with two optional one year extensions. Prices were submitted on a per-tonne basis for waste, recyclables, and large item collection. Prices received are based on estimated tonnage for 2020, with pricing in subsequent years adjusted by the consumer price index. A technical proposal was also requested from each bidder to determine if the bidder possesses the necessary qualifications, background, and equipment to perform the required services.
Tender Award Details

The GRCA RFP for curbside garbage and recycling materials collection, processing, and disposal services for cottage lots was publicly advertised on Biddingo. Two completed proposals were submitted.

The RFP opening was held at 2:00 p.m. on Monday, March 9, 2020 at the GRCA Administration Centre. The tender opening committee consisted of Karen Armstrong, Deputy CAO, Secretary-Treasurer; Beth Brown, Manager of Property; and Matt Amy, Property Superintendent.

The following table shows the RFP results as received:

<table>
<thead>
<tr>
<th>Contractor</th>
<th>Waste &amp; Recycling Curbside Pick-up</th>
<th>Large Item Pick-up</th>
<th>Total Cost of Contract for 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste Management Canada Corp.</td>
<td>$53,243.20</td>
<td>$13,125.00</td>
<td>$66,368.20</td>
</tr>
<tr>
<td>Provincial Waste Systems Inc.</td>
<td>$79,625.35</td>
<td>$10,763.90</td>
<td>$90,389.25</td>
</tr>
</tbody>
</table>

Waste Management Canada Corporation submitted the lowest bid for the required services noted in the RFP. A review of its technical proposal confirms that the firm has an extensive background in curbside waste collection activities and meets all the requirements outlined in the RFP.

The Award of Cottage Lot Curbside Garbage Collection and Recycling Materials was to be considered at the March 27, 2020 General Membership meeting. As a result of the COVID-19 Global Pandemic, the March 27, 2020 General Membership meeting was cancelled.

Section 10.8 of the Grand River Conservation Authority Human Resources Policy allows for a committee comprised of the Chief Administrative Officer, Secretary Treasurer/Deputy CAO, Chair and the Vice-Chair of the Board of Directors to approve purchases in the event of a break in board meetings beyond one month provided the purchase is within the approved budget forecast.

As such, a committee comprised of the required members was formed and approved the staff recommendation to award the contract.

Financial implications:
Cottage lot curbside garbage and recycling materials collection, processing, and disposal services will be funded from the cottage lot operating budgets.

Other department considerations:
None.

Prepared by: Matt Amy
Property Superintendent

Approved by: Samantha Lawson
Chief Administrative Officer

Beth Brown
Manager of Property
Recommendation:
THAT Report Number GM-04-20-27 – Replacement Tractor Purchase be received as information.

Summary:
In accordance with the Grand River Conservation Authority’s Human Resources Policy, the GRCA purchased one 2020 Kubota B2320 DTN Tractor from Ed Stewart’s Equipment in the amount of $14,650.00 (excluding HST) and one 2020 John Deere 6110M Tractor with attachments from Premier Equipment Elmira in the amount of $249,185.43 (excluding HST) as these were the highest scoring bids from the publicly advertised Request For Quotation (RFQ) process.

Report:
The 2020 Motor Pool budget included the purchase of two tractors to replace two units that were 13 and 15 years old respectively.

Specifications for the two new tractors were developed based upon GRCA’s specialized performance requirements including maintaining steep dike embankments, mowing cottage lot roads, mowing narrow rail trails, and various agricultural uses at the Burford Nursery. Two unique tractor specifications were issued as part of the request for quotations (RFQ):

- #1 – 13.4 kW PTO (18HP) 4 WD Open Station Tractor – One (1) Required
- #2 – 70.1 kW PTO (94 HP) 4WD Tractor with Cab, Loader and Attachments – One (1) Required

The 2020 RFQ for Replacement Tractors was publicly advertised on January 27, 2020 on the Biddingo electronic procurement website. Five bids for tractor #1 and seven bids for tractor #2 were received by the closing date of Thursday February 13, 2020. As described in the RFQ, to ensure the best value for the GRCA bid packages were evaluated based on the following criteria:

- 10% Location of Parts and Service Facility
- 10% Past Experience with the Manufacturer
- 40% Conformance to the Specification
- 40% Price Quotation

The RFQ also allowed for equipment demonstrations to form part of the evaluation criteria considered. Demonstrations were requested and confirmed physical characteristics of each tractor such as driver sight lines which is critical to the safe operation of this equipment in publicly occupied spaces.
Bids were reviewed by Brandon Heyer, Manager of Central Services, Mark Slade, Supervisor of Central Services and Jim Himsl, Fleet Coordinator. Bids and evaluation rankings have been summarized below:

### #1 - 13.4 kW (18HP) 4WD Open Station Tractor

<table>
<thead>
<tr>
<th>Dealer</th>
<th>Make/Model</th>
<th>Bid Amount (HST excluded)</th>
<th>Evaluation Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ed Stewart’s Equipment</td>
<td>Kubota B2320 DTN</td>
<td>$14,650.00</td>
<td>1</td>
</tr>
<tr>
<td>Ayr Turf &amp; Trac</td>
<td>Kubota B2320 DTN</td>
<td>$14,800.00</td>
<td>2</td>
</tr>
<tr>
<td>Brant Tractor</td>
<td>Kubota B2320 DTN</td>
<td>$15,964.06</td>
<td>3</td>
</tr>
<tr>
<td>Connect Equipment Ltd</td>
<td>Massey Ferguson MF GC1526</td>
<td>$20,577.01</td>
<td>4</td>
</tr>
<tr>
<td>ESM Farm Equipment Ltd</td>
<td>2020 New Holland Workmaster 25</td>
<td>$22,100.00</td>
<td>5</td>
</tr>
<tr>
<td>Premier Equipment</td>
<td>No Bid for this tractor</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### #2 - 70.1 kW PTO (94 HP) 4W.D. Tractor with Cab, Loader and Attachments

<table>
<thead>
<tr>
<th>Dealer</th>
<th>Make/Model</th>
<th>Bid Amount (HST excluded)</th>
<th>Evaluation Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premier Equipment</td>
<td>2020 John Deere 6110M</td>
<td>$249,185.43</td>
<td>1</td>
</tr>
<tr>
<td>Stratford Farm Equipment Ltd</td>
<td>2020 Case IH Maxxum 115 Active 8</td>
<td>$232,500.00</td>
<td>2</td>
</tr>
<tr>
<td>Connect Equipment Corp.</td>
<td>2020 Massey Ferguson 5712S</td>
<td>$213,250.00</td>
<td>3</td>
</tr>
<tr>
<td>Premier Equipment</td>
<td>2019 John Deere 6110M (Lease Return)</td>
<td>$250,953.12</td>
<td>4</td>
</tr>
<tr>
<td>ESM Farm Equipment Ltd</td>
<td>2020 New Holland T6 -145 Electro Command</td>
<td>$218,200.00</td>
<td>5</td>
</tr>
<tr>
<td>Brant Tractor</td>
<td>2020 Case IH Maxxum 125</td>
<td>$228,203.00</td>
<td>6</td>
</tr>
<tr>
<td>Ed Stewart's Equipment</td>
<td>2019 Case IH Maxxum 115 Active 4 (Lease Return)</td>
<td>$233,497.25</td>
<td>7</td>
</tr>
<tr>
<td>Ayr Turf &amp; Trac</td>
<td>No bid for this tractor</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**NOTE:** For ease of ongoing maintenance and to aid the specific uses of grass and snow attachments in occupied areas, a $10,747.00+HST proportional joystick in lieu of standard cable controls has been purchased directly from Colvoy Equipment and will be factory installed into the 70.1 kw PTO tractor at the time of assembly.
The Replacement Tractor Purchase Board Report was slated for the March 27, 2020 General Membership meeting. As a result of the COVID-19 Global Pandemic, the March 27, 2020 General Membership meeting was cancelled.

Section 10.8 of the Grand River Conservation Authority Human Resources Policy allows for a committee comprised of the Chief Administrative Officer, Secretary Treasurer/Deputy CAO, Chair and the Vice-Chair of the Board of Directors to approve purchases in the event of a break in board meetings beyond one month provided the purchase is within the approved budget forecast.

As such, a committee comprised of the required members was formed and approved the staff recommendation to award the purchase of the tractors to the highest scoring bids and acknowledged the significant staff effort made to ensure the best value for the GRCA.

Financial implications:

The total combined amount of $274,582.43 excluding HST is included in the 2020 Motor Pool budget and will be funded from the Motor Pool Reserve. The units being replaced will be disposed of through public auction and any proceeds from that sale will be allocated to the Motor Pool Reserve.

Other department considerations:

The Engineering Division, Property department, and Conservation Area Operations department rely on functions of the 70.1 kW PTO (94 HP) 4W.D. tractor. This tractor is a crucial piece of equipment to maintain dikes, cottage lot roads and trails.

Prepared by: Brandon Heyer
Manager of Central Services

Approved by: Karen Armstrong
Deputy CAO/Secretary-Treasurer
Recommendation:


Summary:

The Grand River Conservation Authority (GRCA) obtains general insurance as part of a group consisting of 34 Conservation Authorities and Conservation Ontario. The policies run from April 1 to March 31 each year. The policy terms, renewals, loss reviews, and other administrative matters are overseen by the Conservation Ontario General Insurance and Benefits Committee (Insurance Committee), which consists of 10 senior staff from Conservation Authorities (including GRCA) and the General Manager of Conservation Ontario. This Committee reports to Conservation Ontario Council and, in addition to carrying out a number of ongoing risk management activities, the committee reviews and approves renewal terms annually.

The Insurance Committee met with Marsh on March 5, 2020 to review the proposed coverage and premiums for 2020-2021 and the committee approved the April 1, 2020 renewal as recommended by Marsh. A summary of GRCA’s 2020-2021 premiums is included below which reflect a sizable increase over the 2019-2020 premiums.

Report:

The Insurance Committee was formed in 1986 on the basis that obtaining coverage through a group rather than individually provides better value, allows sharing of administration costs and risk management experience/expertise, as well as helping to offset the impact of significant claims that may arise at one Authority. GRCA was one of the founding members of the group.

Marsh is the current insurance broker, and since being appointed in 2014, they have negotiated favourable renewals every year prior to the current renewal. Marsh provides ongoing service to all Conservation Authorities and staff at the GRCA have found significant value from their practical expertise on risk management matters and assistance with claims management.

Current market conditions are creating tough negotiations for insurance renewals. In the broader insurance market, property losses, largely caused by natural disasters, have driven up global commercial insurance prices. In anticipation of these unfavourable renewal conditions, beginning in late 2018, Marsh conducted a full procurement process on most of the major insurance coverage lines to seek the best terms and pricing from insurers, including the incumbent insurers. At that time, the incumbent insurers provided the most favourable terms and pricing.
Throughout 2019 and so far in 2020, the insurance market has continued to harden. Many insurers have experienced combined loss ratios in excess of 100% which means that actual incurred losses and expenses exceed the premiums paid. It is also important to note the risk profile for Conservation Authorities does reflect high susceptibility to weather-related, vandalism and fire damage claims.

Based on overall market conditions and the actual experience of the group in the 2019-2020 claim period, as well as several years before that, the group will experience an overall increase of 18.3% for the 2020-2021 policy period.

The largest premium increases are in property, commercial general liability, automobile and directors and officers (D&O) insurance. The increases in property and commercial general liability (CGL) are driven by the same factors impacting the overall insurance market. Conservation Authority property claims have increased in both numbers and incurred costs. It is also important to note that the reported insured values for the GRCA has also increased to reflect factors such as inflation and the value of newly built or acquired assets; the reported insured values are a factor in determining premium.

Auto insurance claims have also increased due to an increase in larger bodily injury claims, and the increased technological complexity of cars have made repairs more costly. CGL claims have an impact over a longer period of time due to the time it takes to proceed through litigation, so costs continue to be incurred and reserves are established for future costs; thus, CGL premiums are likely to continue to increase. The current premium increases in CGL are driven by expenses for claims management and legal fees as opposed to settlement payouts. D&O premiums are increasing primarily because of an increase in claims related to employment practices, although none of these claims have been received by the GRCA to date.

A list of the current insurance policies, with carriers noted, and a brief description of the coverage provided is attached as Appendix A.

Risk Management Program – 3D Team

Another service that Marsh provides to the Conservation Ontario group is a risk management program. This program provides significant value to the Conservation Authorities. The 3D team conducts risk assessments to determine the largest drivers of losses to help Conservation Authorities make informed operational decisions and prioritize risk management spending and they develop guidance documents on a variety of risk management topics relevant to Conservation Authorities.

The 3D team performs on-site assessments to identify site-specific risks and challenges in order to make recommendations for improvements to mitigate and reduce risks. They visited a few GRCA properties in 2019 and prepared a summary report of suggestions which are being addressed where applicable.

Financial implications:

Total General Insurance premiums for the entire Conservation Authority group are approximately $4.05 million (before tax). All policies were renewed with the incumbent insurers with varying changes in rates.

Since the policies are purchased at the group level, a number of formulas are used to allocate the premiums to the 34 Conservation Authorities. The formulas are designed to measure the relative risk exposures at the individual Conservation Authorities. Due to changes in the statistics used (number of visitors, swimming areas, campsites, trails, Nature Centre classes, etc.), the portion allocated to an individual Conservation Authority can vary year-over-year. A major review of the allocation model for liability premiums resulted in savings for GRCA in past years.
In total, GRCA’s insurance premiums will increase by $67,918 or 22.78% in the 2020-2021 term. Details of the changes in the existing policies are as follows:

<table>
<thead>
<tr>
<th>POLICY</th>
<th>2019-2020</th>
<th>2020-2021</th>
<th>Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial General Liability (CGL)</td>
<td>$100,184</td>
<td>$107,391</td>
<td>$7,207</td>
<td>7.19%</td>
</tr>
<tr>
<td>Umbrella Liability</td>
<td>$22,100</td>
<td>$23,452</td>
<td>$1,352</td>
<td>6.12%</td>
</tr>
<tr>
<td>Property</td>
<td>$93,718</td>
<td>$144,884</td>
<td>$51,166</td>
<td>54.60%</td>
</tr>
<tr>
<td>Errors and Omissions</td>
<td>$38,489</td>
<td>$39,779</td>
<td>$1,290</td>
<td>3.35%</td>
</tr>
<tr>
<td>Directors and Officers Liability</td>
<td>$2,388</td>
<td>$3,482</td>
<td>$1,094</td>
<td>45.81%</td>
</tr>
<tr>
<td>Automobile</td>
<td>$34,854</td>
<td>$39,599</td>
<td>$4,745</td>
<td>13.61%</td>
</tr>
<tr>
<td>Equipment Breakdown</td>
<td>$4,186</td>
<td>$4,579</td>
<td>$393</td>
<td>9.39%</td>
</tr>
<tr>
<td>Crime</td>
<td>$750</td>
<td>$825</td>
<td>$75</td>
<td>10.00%</td>
</tr>
<tr>
<td>Cyber</td>
<td>$1,500</td>
<td>$2,096</td>
<td>$596</td>
<td>39.73%</td>
</tr>
<tr>
<td><strong>Total Premium with Group</strong></td>
<td><strong>$298,169</strong></td>
<td><strong>$366,087</strong></td>
<td><strong>$67,918</strong></td>
<td><strong>22.78%</strong></td>
</tr>
</tbody>
</table>

In addition to the insurance premiums referenced above, there is a brokerage fee of $30,112 and tax on most lines of insurance (excluding automobile).

The 2020 budget for insurance expense is $388,000. The forecast insurance expense (calendar year) will be increased by $20,000 to $408,000 as a result of the premium increases which came into effect on April 1, 2020 (partial year impact in 2020).

**Other department considerations:**

All departments provide input to the renewal documents to ensure adequate coverage for all of GRCA’s property and activities.

**Prepared by:**
Karen Armstrong  
Deputy CAO, Secretary-Treasurer

**Approved by:**
Samantha Lawson  
Chief Administrative Officer
APPENDIX A – Current Policy Information

*Commercial General Liability (QBE)*
The Commercial General Liability (CGL) policy is the first source of coverage for bodily injury and third party property damage. The primary limit is $1 million per occurrence (with no general aggregate) and there is umbrella insurance for settlements that exceed that amount. This policy also covers third party property damage resulting from Sudden and Accidental Pollution. There is a $5,000 deductible.

*Umbrella Liability (QBE)*
The umbrella policy provides a limit of $14 million in excess of the primary liability, errors and omissions and automobile coverage. This is a dedicated limit per Authority and there is a $10,000 self-insured retention.

*Property (QBE)*
This policy is for all risks including flood and earthquake, subject to policy exclusions. It also covers first party pollution cleanup of $100,000 (annual aggregate) and debris removal (sub-limit of $100,000 with $25,000 deductible). GRCA's insured property values are approx. $68 million. There is a $10,000 deductible for most occurrences.

*Errors and Omissions (QBE)*
This coverage is for damages resulting from negligence in provision of certain professional services, including engineering and the issuance of permits or preparation of maps, plans and surveys. The primary limit under this policy is $1 million per occurrence, with an annual aggregate of $10 million for the group. There is a deductible of $25,000 (excluding expenses).

*Directors and Officers Liability (Chubb)*
This covers Directors and Officers for any claims that may result from wrongful acts while directing the affairs of the GRCA, the Source Protection Authority and the Foundation. At the present time, the Source Protection Committee is also covered. There is a limit of $3 million per occurrence, with an annual aggregate limit of $5 million per Authority in the group. Defence costs are covered in excess of the limit of liability. There is no deductible.

*Automobile (QBE)*
This insurance is for all licensed vehicles in the motor pool with a premium of approximately $350-$550 per vehicle (depending on type of vehicle), based on a $1,000 deductible. The limit of liability under this policy is $1 million and the umbrella coverage also applies. GRCA’s actual premium is adjusted during the year based on actual number of vehicles in the fleet.

*Equipment Breakdown (QBE)*
This policy covers property damage and losses resulting from sudden breakdown of equipment such as boilers, air conditioning equipment, motors, etc. There is a limit of $25 million per accident, with a range of deductibles depending on the type of damage.

*Crime (QBE)*
This policy covers such acts as theft, employee dishonesty, counterfeit currency etc. with a range of limits between $10,000 and $150,000, depending on the type of crime. The deductible is $500. Social Engineering coverage was recently added to cover fraud that occurs when an employee is duped into parting with the assets of the business. The deductible for this enhancement is $5000.

*Cyber (Axis Reinsurance Company)*
This policy covers data breach expenses, crisis management expenses, privacy liability, network security liability, internet media liability, network extortion and regulatory proceedings. There is a limit of $500,000 per claim with a $25,000 self-insured retention.
Grand River Conservation Authority

**Report number:** GM-04-20-31

**Date:** April 17, 2020

**To:** Members of the Grand River Conservation Authority

**Subject:** Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation

**Recommendation:**
THAT Report Number GM-04-20-31 – Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation, be received as information.

**Summary:**
To provide the General Membership of the Grand River Conservation Authority with a quarterly summary of permits approved and issued by staff which conform to current Grand River Conservation Authority policies for the Administration of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation Ontario Regulation 150/06.

**Report:**
Permit Report January, February and March 2020

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Brantford</td>
<td>4</td>
</tr>
<tr>
<td>City of Cambridge</td>
<td>6</td>
</tr>
<tr>
<td>City of Guelph</td>
<td>7</td>
</tr>
<tr>
<td>City of Hamilton</td>
<td>14</td>
</tr>
<tr>
<td>City of Kitchener</td>
<td>9</td>
</tr>
<tr>
<td>City of Waterloo</td>
<td>4</td>
</tr>
<tr>
<td>County of Brant</td>
<td>16</td>
</tr>
<tr>
<td>Haldimand County</td>
<td>9</td>
</tr>
<tr>
<td>Norfolk County</td>
<td>2</td>
</tr>
<tr>
<td>Town of Erin</td>
<td>2</td>
</tr>
<tr>
<td>Town of Grand Valley</td>
<td>2</td>
</tr>
<tr>
<td>Township of Amaranth</td>
<td>2</td>
</tr>
<tr>
<td>Township of Blandford-Blenheim</td>
<td>5</td>
</tr>
<tr>
<td>Township of Centre Wellington</td>
<td>11</td>
</tr>
<tr>
<td>Township of East Garafraxa</td>
<td>3</td>
</tr>
</tbody>
</table>
Township of Guelph/Eramosa 5
Township of Mapleton 8
Township of Melancthon 2
Township of North Dumfries 11
Township of Perth East 2
Township of Puslinch 6
Township of Southgate 1
Township of Wellesley 5
Township of Wellington North 2
Township of Wilmot 3
Township of Woolwich 15

Total Permits in Q1: 156

Financial implications:
Not Applicable.

Other department considerations:
Not Applicable.

Prepared by: Fred Natolochny Supervisor of Resource Planning

Approved by: Nancy Davy Director of Resource Management
Grand River Conservation Authority

Report number: GM-04-20-25
Date: April 24, 2020
To: Members of the Grand River Conservation Authority
Subject: Proposals to amend O.Reg.244/97 and the Aggregate Resources of Ontario Provincial Standards under the Aggregate Resources Act (EBR 019-1303)

Recommendation:
THAT Report GM-04-20-25 – Proposals to amend O.Reg.244/97 and the Aggregate Resources of Ontario Provincial Standards under the Aggregate Resources Act (EBR 019-1303) – be received as information;
AND THAT this report be forwarded to the Ministry of Natural Resources and Forestry through Environmental Registry Number 019-1303.

Summary:
Not applicable.

Report:
On September 20, 2019, the Ministry of Natural Resources and Forestry (MNRF) released a proposal on the Environmental Registry (ERO 019-0556) recommending changes to the provincial aggregate resources framework. GRCA provided comments to the MNRF noting concerns with the process for existing operators that want to extract aggregates within the water table, the lack of cumulative effects assessments, a provincial data management strategy and proposed notification and consultation requirements. Changes to the Aggregate Resources Act were made effective December 10, 2019.

On February 12, 2020, the MNRF posted a proposal on the Environmental Registry (ERO 019-1303) recommending amendments to Ontario Regulation 244/97 and the Aggregate Resources of Ontario Provincial Standards under the Aggregate Resources Act. The proposal recommends changes for applications to establish a new aggregate extraction sites, prescribed rules for minor excavations, and how new and existing sites are managed and operated, including amendments to expand an existing site below the water table.

The public comment period for the proposed changes initially was open until March 30, 2020. The commenting period has been extended until May 15, 2020. A description of the proposed amendments can be found on the Environmental Registry of Ontario (https://ero.ontario.ca/notice/019-1303)

The current proposal does not appear to provide any actual changes to the Aggregate Resources Act (ARA) Regulations. It provides a summary of proposed changes to the ‘Standards’ for ARA applications. As a result, it is challenging to assess the potential effect the proposal may have on water and natural resource systems within the watershed.
There are some changes in this proposal related to a new requirement for a document called a ‘Water Report’. This report appears to replace and incorporate the Hydrogeological Report that is currently a requirement in the Standards. The ERO document identifies a proposal to require a qualified professional to complete the Water Report. This recommendation is supported by the GRCA and it is noted that Ecological expertise will also be necessary to assess impacts and mitigation options for changes to water resources related to the natural environment. In addition, the proposal appears to require various technical studies for below water table applications including new or amended applications. Below is a brief summary of key comments:

- Pre-consultation with agencies such as conservation authorities and municipalities should be a mandatory requirement to ensure that ‘terms of reference’ for technical reports are completed or new aggregate or quarry sites or amendments to existing applications to go below the water table. This would ensure that applications include the required technical information prior to municipal and agency review and that they can be reviewed in a timely and efficient manner.

- MNRF should develop cumulative effects assessment and data collection and sharing regulations and criteria for new aggregate or quarry sites for below water table extraction. At this time, there is no mention of cumulative effects assessments in the ERO proposal.

In 2010, a document entitled “Cumulative Effects Assessment Best Practices Paper for Below-Water Sand and Gravel Extraction Operations in Priority Subwatersheds in the Grand River Watershed” was released. The document was completed in consultation with various provincial ministries and representatives of the Ontario Stone Sand and Gravel Association. It provides a framework for cumulative impacts to be assessed in a consistent manner and to guide decisions makers, such as municipal governments and the MNRF and Ministry of Environment, Conservation and Parks with responsibilities in this area. Eleven priority subwatersheds within the Grand River watershed were identified.

- The Best Practices Paper identified the need for a comprehensive data collection and data management process. This was to be developed and maintained by MNRF in consultation with the partners to facilitate collecting the appropriate data and sharing this information with aggregate resource applicants. This data process has yet to be established and it would provide an opportunity for a transparent and open-data sharing framework to permit all external stakeholders with access to information related to below water table aggregate and quarry applications and operations.

- A requirement for applications to be consistent with provincial or local Technical Guidelines needs to be included in the ARA Technical Standards. This would include studies that identify and evaluate impacts to water or natural environment resource systems.

- GRCA supports the identification of source protection vulnerable areas and activities and how source protection plans and policies are addressed. To better protect municipal drinking water supplies, GRCA recommends the Ministry consider the following:
A water budget should be required for all applications proposing below water extraction

Water Report requirements should include an assessment of potential impacts to sources of drinking water, in particular for proposed below water extraction (e.g., breaching of aquitard), and propose any necessary measures to prevent, where possible, mitigate, or remediate any negative impacts.

All aggregate extraction should be prohibited in Wellhead Protection Area (WHPA) A and B, not just extraction activities by private land owners and farm businesses

Chloride based dust suppressants should be prohibited where dust suppression is required at aggregate sites located within source water protection areas

In addition to this report Attachment 1 provides comments on the proposal and we request the Province consider the GRCA comments in their review of the ARA Standards.

**Financial implications:**
Not applicable.

**Other department considerations:**
Resource Management Division and Source Protection staff provided input to this report.

**Prepared by:**
Martin Keller
Source Protection Program Manager

**Approved by:**
Samantha Lawson
Chief Administrative Officer

Nancy Davy
Director of Resource Management
Section 1 – Proposed Changes for Applications to Establish a New Site  
Part 1.1: Study and Information Requirements

Missing from Proposal

Cumulative Effects Assessment for below water table applications

- Cumulative effects assessments should be conducted in areas of the province where there are concentrations of existing licences or new applications for licences to extract below the water table. The detailed water and hydrogeological assessments prepared by qualified professionals should be conducted for any existing licence that applies for an amendment of a license to extract below the water table and for new below water table applications. This would demonstrate that there will be no offsite or onsite impacts to the quantity and quality of local water resources that sustain natural environment features and address municipal interests in the protection of local municipal drinking water sources. These studies should also prescribe detailed pre and post extraction water and natural environment monitoring requirements for these areas. Depending on site characteristics, other studies should also be required for below water table extraction such as Environmental Impact Studies and other evaluations.

- Examples of cumulative effects assessment include:
  - the measurement of cumulative effects, e.g. multiple water taking impacts related to staging of extraction from license to license (not only within the limit of a single license);
  - a subwatershed scale study for areas of the province under pressure for below water table extraction, with consistent baseline monitoring prior to an application and initiation of extraction;
  - monitoring reports that are compatible from license to license in scope and criteria that will be consolidated by MNRF, or another agency, to ensure that short and long term impacts are measured, evaluated and mitigated and information is shared on an open data platform.

Data Management and Provincial Open Data Directive

- This proposal includes an option to use data from other applications (see notes below). The Standards should include a requirement for applicants to provide their data to the province in an electronic submission and they should also be granted access to data collected by other parties in the vicinity of an application.

- The province has establish an Open Data Directive and should implement a comprehensive data collection and data management process for current aggregate sites monitoring information and
information submitted with Aggregate Resources Act (ARA) applications. In 2010 the province, the Ontario Stone Sand and Gravel Association (OSSGA) and GRCA released a paper that includes data management “Cumulative Effects Assessment Best Practices Paper for Below-Water Sand and Gravel Extraction Operations in Priority Subwatersheds in the Grand River Watershed”. It was proposed that this database be developed by MNRF in consultation with various stakeholders to facilitate collecting the appropriate data and sharing this information with aggregate resource applicants. This data process has yet to be established and it would provide an opportunity for a transparent and open data sharing framework to permit external stakeholders with access to information related to below water table aggregate and quarry applications and operations. The standards should include a requirement for application information to be submitted electronically and agreement that it will be shared with other parties.

**Technical Guidelines**

- The standards provide a base list of information to be provided and a list of the type of analysis that should be provided to support an amendment or new application. Although it is proposed that a Qualified Person complete reports, there is a wide variation in the information that is collected and analysed. This leads to delays in the review and commenting process that could be avoided or minimized through clearer requirements. The standards should be amended to include a requirement for studies to be completed in accordance with provincial Technical Guidelines (as update). Examples include: Natural Heritage Reference Manual, Technical Guide - River & Stream Systems: Erosion Hazard Limit, Technical Guide - River & Stream Systems: Flooding Hazard Limit, etc.
- Where there is a gap or no Provincial technical guidelines (e.g. water budget, cumulative effects assessment, hydrogeological assessment) a Technical Guideline that has been approved by a municipality and/or Conservation Authority should be considered as technical guideline that is applicable to ARA applications. The standards should include a reference to this effect.

**Pre-consultation Requirement in the Consultation process**

- Pre-consultation with agencies such as conservation authorities and municipalities should be a mandatory requirement to ensure that satisfactory terms of reference are prepared for technical reports for new aggregate or quarry sites. This would ensure that applications are complete i.e. include the appropriate pre-extraction monitoring, plans, technical information etc. This activity is required in similar applications processes such as a subdivision application under the Planning Act and it enables an efficient and timely review of applications by municipalities and agencies.

<table>
<thead>
<tr>
<th>Proposal</th>
<th>GRCA Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1.1 Water Report</td>
<td><strong>Determination of Water Table:</strong></td>
</tr>
<tr>
<td></td>
<td>• Support that water table must be determined for all applications and determined based on maximum predicted elevation of the water</td>
</tr>
</tbody>
</table>
There can be significant variations in the natural environment from year to year and an evaluation based on one year of data can be misleading. Many technical reports to support planning applications and other proposals of a similar scale to most aggregate applications are based on two to five years of data collection. The proposal to only require one year minimum groundwater monitoring to establish level of water table (and other water and natural features) should require a minimum two (2) years of surface water and natural resources monitoring and continuous groundwater level monitoring for proposed above water extraction, and a minimum three (3) years of this monitoring for proposed below water extraction.

The current wording in the proposal to allow determination of the water table from existing monitoring data and from adjacent sites is problematic. How old can existing monitoring data be? How far away can adjacent monitoring sites be? Water table should be determined on the basis of current monitoring on site.

**Requirement of a Water Report:**
- It is unclear what is proposed: Will the Provincial Standards be revised to eliminate the requirement for a Hydrogeological 1 and 2 report and require a new Water Report? Will the natural environment report requirements be modified? The province should clearly define the level of detail and assessment of impacts, in particular with respect to protecting municipal drinking water sources, water budget, and cumulative impacts.
- Proposed Water Report should require avoidance of impacts where possible, or mitigation, not just feasibility of mitigation. The PPS requires that municipalities protect, improve and restore the quality and quantity of water. Since land use planning mechanisms for review of ARA applications have been modified, the ARA standards and technical guidelines will need to be in line with PPS requirements to ensure the appropriate criteria is in place to protect for an adequate quality and quantity of water in communities and assess and prevent any potential threat or impacts to source water and local municipal drinking water supplies.
- Assessment of impacts should be in line and defined with the same criteria as the current growth plan requirements for natural resource systems (that relate to water, e.g. fish habitat) and assessment of water resource systems, e.g. seepage areas, wetlands, significant groundwater recharge areas and highly vulnerable aquifers including some source water protection areas. These areas include ‘key hydrological features’ such as all wetlands including unevaluated wetlands. An analysis completed in 2016 in the Grand River watershed reviewed the wetlands mapped by the GRCA and MNRF, and there are approximately 12,255 hectares of wetlands in the Grand River watershed that have not been evaluated by MNRF. There may be a minor variation in this statistic due to work...
completed in Aylmer District. It is likely that some wetland areas in or near known aggregate resource areas would be evaluated as Provincially Significant Wetlands and the absence of evaluation at this time may result in the inadequate assessment of these features if the standards only refer to Provincially Significant Wetlands. An option for the province to consider is completing the evaluations in south-central Ontario where wetland loss has been most significant over the past several decades with a focus on areas with aggregate resources.

- Content requirement for Water Report should spell out and include criteria for when a water budget is required. E.g., applications proposing below water extraction should always require a water budget. Water budgets should include the full extent of the proposed excavation and use best available modelling techniques for a comprehensive and up to date assessment. A Technical Guideline for Water Budget analysis is required and this guideline should be included by reference in the Standards.
- GRCA supports the proposal that a qualified person to prepare a water report must be a P.Geo or P.Eng. However, the impact analysis of the application in relation to water and natural features will require a qualified person in ecology as well.
- GRCA supports the identification of source protection vulnerable areas and activities and how source protection plans and policies are addressed. In addition, Water Report requirements should include an assessment of potential impacts to sources of drinking water, in particular for proposed below water extraction (e.g., breaching of aquitard), and propose any necessary measures to prevent, where possible, mitigate, or remediate any negative impacts.
- The standards should include the identification of the presence of an aquitard to a municipal drinking water supply on or near the site and a detailed assessment on how the application will avoid any impacts to the aquitard.

### 1.1.3 Natural Environment Report
- GRCA is concerned that only ‘significant’ features need to be identified and assessed. For proposed sites in Southern Ontario, all natural heritage features (e.g., all wetlands including unevaluated wetlands) should be identified and assessed as part of the Natural Environment Report.
- It is unclear how the Natural Environment Report will align with the PPS and the four Provincial Plans. Requirements that are the same as other provincial plans that are related to Water or the Natural Environment Report should be included in the revised Provincial Standards.

### 1.1.6 Summary Statement
- It is unclear what planning and land use considerations will be included in the summary statement and how they will be addressed should they not align.
- If a new pit or quarry application creates a new Significant Drinking Water Threat under the Clean Water Act, this information and how it
will be addressed should be included in the Summary Statement.
- Site plans for existing sites should be updated to include the same
  information as required in the Summary Statement for new sites.
  This should include the identification of Significant Drinking Water
  Threats under the Clean Water Act and how they will be addressed.

### Part 1.2: Site Plan and Licence/Permit Conditions

| 1.2.1 Site Plan Standards – Improving Flexibility | • In addition to setbacks, listed items (e.g., scrap storage area) should still be required to not be located within natural features |
| 1.2.2 Site Plan Standards – Modernization | • If a new pit or quarry imports excess soil to facilitate rehabilitation on site and is located within a Wellhead Protection Area A or B, the standard will need to specify that excess soil importation must be ‘clean’ fill. This may require a reference to a specific Table or MECP criteria in the standards. |
| 1.2.4 Prescribed Licence and Permit Conditions (New Sites) | • Monitoring, threshold exceedance actions and notification requirements should be included as a mandatory condition for new licences and permits. |

### Part 1.3: Notification and Consultation Requirements

| 1.3.2 Notification and Consultation Process | • Pre-consultation should be a mandatory requirement for all new applications to ensure the applicant and agencies (province, municipalities, conservation authorities) can discuss the proposed extraction activities and ensure the application will be complete when submitted (see comments above). |
| 1.3.3 Objection Process on Private Land | • Only the Ministry of Natural Resources and Forestry may refer outstanding objections to the Local Planning and Appeal Tribunal (LPAT). Persons and agencies (e.g. conservation authorities and municipalities) should be given the right to appeal the Ministry’s decision to the LPAT if their concerns, e.g., protecting the natural environment or municipal drinking water sources, have not been adequately addressed through the application process. |
| 1.3.4 Circulating New Applications to Agencies | • Proposal includes circulation to conservation authorities for them to determine whether the application has the potential to impact the control of flooding, erosion or other natural hazards. Under agreements with municipalities, conservation authorities may also provide further comments to a municipality for their consideration. Conservation authorities may also be adjacent landowners or provide comments as a watershed management agency; e.g. cumulative effects within a basin or subwatershed. • Conservation authorities, in their capacity as a source protection authority, should also comment on any potential impact to sources of municipal drinking water, given that the protection of sources of drinking water has been included as a mandatory program under the Conservation Authorities Act. |
## Section 2 – Prescribed Rules for Minor Excavations

### Part 2.1: Excavation from Private Land or Land Owned by a Farm Business

- The Ministry is proposing that private land owners and farm operations be allowed to extract aggregates if they meet certain rules set out in regulation. Among other requirements, aggregate extraction would not be allowed in a Wellhead Protection Area (WHPA) A and B. To strengthen the protection of municipal drinking water sources, all aggregate extraction activities should be prohibited in a WHPA A and B.

## Section 3 – Proposed Changes to How New and Existing Sites are Managed and Operated

### Part 3.1: Operating Requirements for All Sites (New and Existing)

3.1.2 Dust

- The proposal would require all licence holders to mitigate dust to prevent it from leaving the site. Dust suppressants are often chloride based. The application of these chemicals would result in chloride leaching into the ground, recharging water supply aquifers, and increasing chloride levels in private and municipal supply wells. Where dust suppression is required at aggregate sites located within source water protection areas, chloride based dust suppressants should be prohibited.

### Part 3.3: Site Plan Amendments

3.3.1 Site Plan Amendment Process

- Site plan amendments should also be able to be initiated by the Province, in cases where new information becomes available. The Province should have the ability to require the licensee or permit holder to complete technical studies to address new information. For example, for existing licence or permit holder that never had any technical reports, i.e., dormant or inactive licenses (for a number of years) or very old licences/permits or where the technical reports are outdated, the Province should have the ability to require new technical assessments to address changing and new information.

- To prevent licences/permits from getting outdated, licenses/permits should have expiry dates. Renewal periods could be up to 10 years similar to PTTW, ensuring site plans reflect changing environmental and regulatory conditions.

3.3.3 Amendment to Expand on Existing Site Below the Water Table

- Supplemental report to widen existing below water extraction area should only be allowed for limited widening of area, e.g. widening into road allowance. Larger scale widening should be considered the same as a new application. Clarification on what is intended by the term ‘widening’ is needed, i.e. should not include adjacent private lands.

- There should be no exemption to preparing a Natural Environment Report as expanding extraction to below the water table may impact natural features and their function, e.g., fish habitat impact; items that are likely addressed in the Natural Environment Report.
- It is unclear what happens after the two (2) year period when the applicant submits documentation. Other than - the Ministry may refer outstanding objections to the Local Planning and Appeal Tribunal (LPAT), the proposal is silent on how and when the Ministry will make a decision on the site plan amendment, the role of Ministry staff and criteria for referring outstanding objections to the LPAT.
- The proposal is also unclear whether the reference to the LPAT removes the Environmental Tribunal approval role.

<table>
<thead>
<tr>
<th>General Comments</th>
</tr>
</thead>
</table>

**Proposed amendments to Ontario Regulation 244/97 and the Aggregate Resources of Ontario Provincial Standards under the Aggregate Resources Act (ERO#019-1303)**

- It is anticipated that the general concepts outlined in the consultation paper will be incorporated into draft Provincial Standards. As a next step the province is encouraged to provide the proposed draft Provincial Standards as they would appear in provincial documents for public consultation. This would provide an opportunity for a comprehensive review to determine if there are components of the standards that need clarification to achieve the desired result of a streamlined review process that also protects the natural environment. It is clear that Technical Guidelines are necessary components of the ARA process and should be updated or created in several areas.
- Several municipalities and conservation authorities have developed technical guidelines that could be accessed and modified as required to accelerate the development of MNRF technical guidelines for ARA applications.
Recommendation:
THAT Report Number GM-04-20-26 – Potential Trail & Area Closures Due to Ash Hazard Tree Risk be received as information.

Summary:
To minimize the hazard tree risks presented by the decline of ash trees due to the emerald ash borer, the GRCA is proceeding with the following actions:

Maintaining existing trail closures at:
- Wrigley Lake – maintain closure of the trail at south end of the property
- Byng Island – maintain no public entry to small island and adjacent forest in the eastern portion of the property

Implementing closures of the trails/areas at:
- Hosack Tract - close property and associated trail
- Apps Mill – close trails on western half of property while maintaining Cleaver Road parking lot and immediately adjacent Whiteman’s creek access

These measures will remain in place for a minimum of two to four years. Long term decisions regarding trails and public access on these properties will be reviewed periodically.

Report
The decline and loss of ash trees due to the emerald ash borer (EAB) has resulted in significant ecological and financial impacts since 2010 when EAB was first detected in the Grand River watershed. The greatest financial impact for the GRCA is from the required removals of hazard trees on GRCA land: dead or declining ash trees that present a risk to people or infrastructure. Between 2014 and the end of 2019 the GRCA has spent $1.9 million to address hazard trees in conservation areas, cottage lots, and along passive land recreational trails. An additional $800,000 is budgeted for ash hazard removals prior to March 2021.

A GRCA staff EAB Strategy working group has been meeting since 2014 to facilitate decisions and provide direction to GRCA’s overall response to EAB. This group has recognized since early on in the strategy that temporary or permanent closures of areas of our properties might be required to either focus available resources to where they are most needed or to defer the demand on GRCA resources. The EAB strategy presented to the Board in 2014 and 2016 also recognized the potential for temporary or permanent closure of some properties or portions of properties.
Staff are currently maintaining or implementing area or trail closures in four specific areas where the number of ash trees is high and public usage is low or moderate. This will provide the following benefits:

- Focus current tree removal resources on areas of higher use and risk
- Eliminate the associated demand on hazard tree removal resources, or defer it until a time when the demand is lower and less expensive options may be available
- Defer decisions regarding managing tree risk in these four areas until a time when the actual costs of tree removals in other higher priority GRCA areas are known

To realize the benefits above, it is anticipated that the closures would need to be maintained for a minimum of two to four years.

Table 1 – Management Actions and Forecast Tree Removal Costs Deferred\Eliminated

<table>
<thead>
<tr>
<th>Property \ Area</th>
<th>Management Action</th>
<th># of Ash Inventoried within Hazard Zone</th>
<th>Forecast Removal Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apps Mill – Trail on Western Half of Property</td>
<td>Sign\Close Trail(s) Maintain Parking Lot &amp; immediately adjacent creek access Limit staff access*</td>
<td>181</td>
<td>$54,000</td>
</tr>
<tr>
<td>(see map in appendix)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hosack Tract – Trail Loop in central portion of Property</td>
<td>Sign\Close Property Limit staff access*</td>
<td>139</td>
<td>$31,000</td>
</tr>
<tr>
<td>(see map in appendix)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wrigley Lake – Linear Trail on southern edge of Property</td>
<td>Maintain Existing Closure; Review Signage Limit staff access*</td>
<td>112</td>
<td>$34,000</td>
</tr>
<tr>
<td>(see map in appendix)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Byng – Western section of property</td>
<td>Maintain Existing No Public Entry Limit staff access*</td>
<td>85</td>
<td>$21,000</td>
</tr>
<tr>
<td>(see map in appendix)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>517</td>
<td>$140,000</td>
</tr>
</tbody>
</table>

*Staff access would be limited to these areas. For staff who need to enter areas, guidelines/direction as to limiting risk from hazard trees will be provided.

GRCA staff from the Nature Centre, Natural Heritage, and Conservation Area programs provided feedback on the potential impacts and considerations related to the actions above. See maps at the end of this report for locations of closures.
Other department considerations:

Property, Communications and Operations staff will determine appropriate signage at each property and arrange for signs to be installed.

A communications plan will be formulated to ensure that user groups and the public informed of these GRCA property management actions.

Prepared by:

Ron Wu-Winter
Watershed Forester

Crystal Allan
Supervisor, Natural Heritage

Approved by:

Nancy Davy
Director of Resource Management
Wrigley Lake

Byng Island
Recommendation:
THAT Report Number GM-04-40-30 – Environmental Assessments be received as information.

Summary:
To provide the General Membership of the Grand River Conservation Authority with information on Environmental Assessments being reviewed, a summary report is presented below. The report has been prepared as directed through Motion No. P44-99 (May 18/99) adopted through General Membership Res. No. 55-99 (May 28, 1999).

Report:

A. New Environmental Assessments Received

New: Environmental Assessments received by the Grand River Conservation Authority and currently under review.

1. First Notice – City of Guelph Water and Wastewater Servicing Master Plan

The City of Guelph has initiated an update to their Water and Wastewater Servicing Master Plan to ensure the water distribution and wastewater collection infrastructure supports the growing community.

There are multiple GRCA resource features in and around the City of Guelph, many of the proposed upgrades will be within existing infrastructure areas, with potential for additional new services in proposed growth areas.

GRCA staff has responded to the Notice of Commencement indicating an interest in the Class EA.

2. First Notice – Waterloo Transportation Master Plan, City of Waterloo

The City of Waterloo has initiated a Class Environmental Assessment for the city’s Transportation Master Plan. The study will update the previous Transportation Master Plan for the next 25 years. Specific objectives include developing transportation policy, provide more transportation options, and
examine ways to reduce reliance on private automobiles. The study is being carried out in accordance with the Municipal Class Environmental Assessment.

There are regulated features present across the city. GRCA staff have provided written notice that we have an interest in this study.

3. **First Notice – Highway 403 Rehabilitation of County Road 14 Underpass, Township Road Underpass, and Kenny Creek Bridges, County of Oxford. Detailed Design and Environmental Assessment**

The Ministry of Transportation (MTO) is undertaking a Detailed Design and Class Environmental Assessment (EA) Study for the rehabilitation of County Road 14 Underpass, Township Road Underpass, and Kenny Creek Bridges on Highway 403 in the Township of Norwich, Oxford County. This study will follow the approved planning process for a Group ‘C’ project under the Class Environmental Assessment for Provincial Transportation Facilities. The study will identify the extent of rehabilitation required as the project proceeds.

The Township Road Underpass is located within Upper Thames River Conservation Authority’s jurisdiction. County Road 14 Underpass does not contain any features of interest to the GRCA. The Kenny Creek Bridges include features of interest to the GRCA specifically Kenny Creek, floodplain, the Provincially Significant Kenny Creek Wetland Complex and the regulated allowance associated with these features.

We have advised MTO that we have an interest in this EA and will continue with involvement in the project.

4. **First Notice – City of Guelph Stormwater Management Master Plan**

The City of Guelph has initiated an update to their 2012 Stormwater Management Master Plan to ensure stormwater is managed to protect water supply and the environment.

There are multiple GRCA resource features in and around the City of Guelph. The proper management of stormwater is a primary interest to the GRCA. Staff have been in contact with the city during the development of the work plan for this initiative.

GRCA staff has responded to the Notice of Commencement indicating an interest in the Class EA.

B. **Classification of Reviewed Environmental Assessments**

**Minor:** Minimal potential resource impacts that can be mitigated using conventional construction methods.

**Major:** Significant impacts on identified resource features. Alternatives and proposed mitigation will be outlined in detail.
Minor Impacts –

1. **Final Notice – Princeton Wastewater Servicing, Blandford-Blenheim**

The County of Oxford has completed a Class Environmental Assessment (EA) Study which examined wastewater servicing alternatives for the Village of Princeton to meet the existing and future needs of the community.

The Village of Princeton contains a tributary of Horner Creek.

The preferred wastewater servicing solution was determined to be updating private on-site wastewater treatment systems (septic systems) by individual property owners on an as-needed basis.

2. **Final Notice – Township of Woolwich, Middlebrook Bridges, Township of Woolwich**

The Township of Woolwich has completed a study to identify a preferred solution for the two bridges along Middlebrook Place. The first is a truss bridge crossing the Grand River and its floodplain. The second is a concrete bridge crossing a small unnamed creek. This study was carried out in accordance with the Schedule B procedures of the Municipal Class Environmental Assessment.

Bridge rehabilitation, replacement and removal was assessed for each bridge. The concrete bridge would be rehabilitated to provide continued access to a single private property.

The Township proposes to permanently close and remove the truss bridge without any replacement. Known as the Chamber’s Bridge, it was constructed in 1930 and moved to this location in 1946. It is one of three remaining truss bridges in Woolwich Township, and is listed on the Grand River Watershed Heritage Bridge Inventory. The Township will explore the potential to relocate or salvage pieces of the bridge, or commemorate the bridge with a plaque.

The Township has been advised that a permit will be required from the GRCA under Ontario Regulation 150/06. GRCA staff will continue to be informed through detailed design to ensure that these works will have a minimal to no negative impact on GRCA regulated features.

Major Impacts – None for this report

**Financial implications:** Not Applicable

**Other department considerations:** Not Applicable

**Prepared by:** Fred Natolochny  
Supervisor of Resource Planning

**Approved by:** Nancy Davy  
Director of Resource Management
Grand River Conservation Authority

**Report number:** GM-04-20-29

**Date:** April 24, 2020

**To:** Members of the Grand River Conservation Authority

**Subject:** Brantford Ice Jam Study

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**Recommendation:**

THAT the Grand River Conservation Authority receive the Brantford Ice Jam Study, dated April 2019 and prepared by KGS Group Consulting Engineers as information;

AND THAT the Grand River Conservation Authority work with City of Brantford staff to carry out a feasibility study that provides an analysis of the technical and financial options to mitigate future Ice Jam Flooding.

**Summary:**

An Ice Jam Study was completed by KGS Consulting on behalf of the Grand River Conservation Authority. The report documents the Ice Jam Flood event of February 2018 the underlying cause and outlines potential mitigating measures.

**Report:**

The Grand River Watershed experienced a flooding event in February 2018 as a result of rainfall and warm temperatures. The flood event resulted in ice movement along the Grand River system and in particular the release of an ice jam in Galt which subsequently moved downstream to Brantford. This ice jam release lodged into an intact ice jam in the Gilkison Flats section of the Grand River at Eagle Place. The ice jam overtopped sections of the dyke protection resulting in flooding of properties and structures, damage to municipal infrastructure and evacuation of residents. The flooding event is summarized in a previous report to the board (GM-03-18-37 February 2018 Flood Event).

Following the ice jam, GRCA retained KGS Consultants Limited to carry out a study to document and analyze the event and provide recommendations for potential mitigation alternatives. The study was carried out under a joint working group including GRCA and City of Brantford staff. Regular meetings were conducted with the City to coordinate and provide updates on other repair works and general recovery operations resulting from the flood event.

Study phases included:

- **Phase 1:** Review available data and documentation from the February 2018 ice jam event that occurred in Brantford
- **Phase 2:** Develop a quantitative description of that ice jam
- **Phase 3:** Analyze the conditions and mechanisms that contribute to ice jam formation in Brantford with the assistance of river ice models
- **Phase 4:** Develop and evaluate alternative measures to prevent and/or mitigate future similar ice jam events in Brantford
Study work included field visits to the reach and extensive assembly and review river gauge data as well as photo and video documentation of the event from available sources including those taken by staff and also from public sources posted to the internet. Mapping of flood extents is seen in Figure 1.

Figure 1 – Ice Jam Conditions at Peak

Computer modelling of the river hydraulics and ice reach considered factors including topography and river bathymetry through the reach, flow and ice conditions. The analysis was able to simulate conditions observed during the ice jam was applied to investigate aspects of potential mitigation options.

Conclusions of the study confirm the tendency for ice jam development through this reach of the river due to the numerous tight bends of the river associated with the geometry and slope of the river and narrow river corridor through the core of the City.

Mitigative Measures – The study developed a long list of potential mitigative measures. The list included:

- Improvements to dyke floodwall protection,
- Floodplain relief in the overbank areas,
- Vegetation Management,
- Ice Control Structures upstream of Brantford,
- River Channel Modifications,
- Channel Relief and Ice storage,
- Ice Cutting, Weakening, and Breaking,
- Flow Regime Modification,
- Flood Forecasting and Response Improvements.

Each of these options have advantages and disadvantages along with including varying degrees of effectiveness, cost, reliability, feasibility of implementation, maintenance and
operations obligations, etc. The emphasis was placed on maintaining and reinforcing the existing dyke and floodwall defences and improving conveyance characteristics of the river and floodplain as the most suitable alternatives, however benefits were seen in all the alternatives and it is not likely that any one alternative will achieve all the objectives.

Next Steps – The ice jam study has provided valuable information and technical background for any future remedial works. The recommendation moving forward is to carry out a feasibility study that provides additional analysis of the technical, process and financial considerations with the potential mitigation measures. The study would again be carried out as a GRCA study and would work closely with City of Brantford staff to advise on how to proceed to implementation. This feasibility study would inform future decisions regarding process, specifically which options will require an environmental assessment.

**Financial implications:**

The ice jam mitigation feasibility study has been included in the 2020 GRCA budget at $150,000. A WECI application has been submitted to MNRF for a 50% grant. The province has approved the WECI application for this study.

**Other department considerations:**

Property: GRCA owns a property within the study reach at Birketts Lane and River Road which is a registered past landfill site. The study will need to consider approaches that are compatible with stabilizing the site as well as providing ice mitigation benefits.

**Prepared by:**

Gus Rungis, P. Eng.
Senior Engineer Infrastructure

**Approved by:**

Dwight Boyd, P. Eng.
Director of Engineering
Grand River Conservation Authority

Report number: GM-04-20-20

Date: April 24, 2020

To: Members of the Grand River Conservation Authority

Subject: Completion of the New Hamburg Flood Mitigation Study

Recommendation:

THAT Report Number GM-04-20-20 Completion of the New Hamburg Flood Mitigation Study be received as information.

Summary:

The New Hamburg Flood Mitigation Study resulted in an updated estimate of Annual Average Damages due to flooding of $0.9M for New Hamburg. This damage estimate was used to evaluate potential options to reduce flooding in the town. Seven mitigation options were evaluated, representing a range of flood reduction. Return-on-investment ranged from 5 years for improving the flood resilience of residential buildings and vegetation maintenance along the bank of the dike, to 24-51 years for dike improvements (raising and realigning the dike to contain the 10-, 25- or 100-year floods). Replacement and redesign of the Pedestrian and Highway 7/8 bridges to improve flood conveyance should be considered at end of lifecycle. Next steps include a GRCA review of dike ownership and access agreements, and further discussion of study findings with the Township of Wilmot and other levels of government, agencies, and potential partners. This study also updated the Regulatory floodplain mapping through the community of New Hamburg.

Report:

New Hamburg is one of seventeen communities known to be flood damage centres in the Grand River watershed. Much of downtown New Hamburg’s commercial and residential area is within the Nith River floodplain and is subject to regular flooding. Significant flood events occurred in 1948, 1954, 1975, 2008, and most recently in February 2018 and January 2020.

Flood mitigation options were studied by various agencies in the 1950s, 1970s, and 1980s. A dike system and river channelization works were built in the 1970s, providing protection to a level less than the 5-year flood event (i.e., a flood event with 20% chance of occurring in a given year).

In August 2019, report GM-08-19-81 authorized the hire of Matrix Solutions Incorporated to undertake the New Hamburg Flood Mitigation Study. The objectives of the study were to:

- Estimate flood damages for the community of New Hamburg, and
- Undertake a high-level evaluation of potential options to reduce flooding in New Hamburg.
A project team of Grand River Conservation Authority (GRCA) and Township of Wilmot representatives guided the study. The GRCA undertook a survey of floodplain residents and businesses in December 2019 to refine the flood damage estimate and help ensure it reflects actual damages experienced by the community.

Three Public Information Centres (PICs) were held in New Hamburg in June and November of 2019, and March 2020, to introduce the project, share preliminary flood damage estimates, and present results of the evaluation of options, respectively.

Updating the Regulatory floodplain mapping was not part of the Matrix Solutions Inc. contract. Updating of the Regulatory mapping is being completed by GRCA staff with external peer review by Stantec consultants.

**Evaluation of Options**

Flood damages are expressed as cumulative potential damages occurring from various flood events averaged over an extended period and presented as a uniform annual amount (Average Annual Damages, AAD). This study estimated Average Annual Damages from flooding at $0.9 Million for New Hamburg (in 2016 dollars). Future refinements of the AAD could include development of depth-damage curves for residential structures with unfinished basements, surveys of commercial buildings with basements, and topographic surveys of the lowest openings of buildings. Actual flood damages for individual flood events were provided by residents and businesses from New Hamburg through comments at PICs and GRCA’s survey, and are documented in the study reports.

A long list of mitigation options were screened using technical, economic, environmental, stakeholder, and policy-related criteria. Options that were screened out of further analysis included dam removal or modification, construction of an upstream reservoir, and diversion of flow along Bleams Road.

The following short-listed options, representing a range of levels of flood protection, received further analysis:

1. Channel improvements – widen the channel for 2 kilometres between the Huron Street and Highway 7/8 bridges.
2. Dike and floodplain improvements to provide 100-year flood protection – realign and raise the dike (about 2.5 m).
3. Dike, floodplain and channel improvements to provide 25-year flood protection – realign and raise the dike (about 1.1 m) and widen the channel at the pedestrian bridge.
4. Dike improvements for 10-year flood protection – raise (about 0.5 m) and extend the dike from upstream of Huron Street bridge to downstream of the pedestrian bridge.
5. Replace the Highway 7/8 and pedestrian bridges to remove backwater impacts.
6. Improved flood resilience of buildings – implement lot-level measures including basement waterproofing, sealing basement entrances (doors and windows), and installing backflow prevention valves in residences within the 50-year flood inundation boundary (63 homes). These measures are reflective of those adopted by some New Hamburg residents as documented by GRCA’s survey.
7. Vegetation management – remove vegetation along 1,600 m of the Nith River bank along the dike.

Short-listed options were evaluated using a hydraulic model to estimate reductions in flood levels and corresponding decreases in damages to building structures and contents. Damage reductions were compared to estimated costs of the mitigation
options to calculate return-on-investment (ROI) (Table 1). Mitigation costs did not include land easements or acquisition, or ongoing operations and maintenance.

Table 1: Evaluation of potential flood mitigation options for New Hamburg

<table>
<thead>
<tr>
<th>Mitigation Options</th>
<th>Economic Analysis</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Channel improvements</td>
<td>Cost: $26M</td>
<td>- Higher benefits for smaller flood events (5- to 10-year), lower benefits for larger events</td>
</tr>
<tr>
<td></td>
<td>Benefit: $0.51M</td>
<td>- Can be combined with other mitigation options</td>
</tr>
<tr>
<td></td>
<td>ROI: 51 years</td>
<td></td>
</tr>
<tr>
<td>2. 100-year dike and floodplain improvements</td>
<td>Cost: $28M</td>
<td>- Nearly complete reduction in damages up to the 100-year flood</td>
</tr>
<tr>
<td></td>
<td>Benefit: $0.69M</td>
<td>- Some backwater impacts requiring further study and/or mitigation</td>
</tr>
<tr>
<td></td>
<td>ROI: 41 years</td>
<td></td>
</tr>
<tr>
<td>3. 25-year dike, channel, and floodplain improvements</td>
<td>Cost: $26M</td>
<td>- Nearly complete reduction in damages up to the 25-year flood, smaller reductions for larger events</td>
</tr>
<tr>
<td></td>
<td>Benefit: $0.60M</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ROI: 43 years</td>
<td></td>
</tr>
<tr>
<td>4. 10-year dike improvements</td>
<td>Cost: $7.7M</td>
<td>- Raises the water level between the Dam and Hwy 7/8 bridge for all flood events</td>
</tr>
<tr>
<td></td>
<td>Benefit: $0.32M</td>
<td>- Nearly complete reduction in damages up to the 10-year flood, slight increase in damages for larger events</td>
</tr>
<tr>
<td></td>
<td>ROI: 24 years</td>
<td></td>
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<tr>
<td>5. Highway 7/8 and Pedestrian bridge replacement</td>
<td>Cost: $18-21M</td>
<td>- Under current conditions, backwater impacts are mainly due to Hwy 7/8 bridge up to the 100-year flood, and mainly due to Pedestrian bridge at Regional flood</td>
</tr>
<tr>
<td></td>
<td>Benefit: $0.17M</td>
<td>- Costs assume a replacement bridge installed before end of lifecycle</td>
</tr>
<tr>
<td></td>
<td>ROI: 106-123 years</td>
<td>- Reduces damages by 10% to 30% for the 5-through 100-year events and by 5% for the Regional event</td>
</tr>
<tr>
<td>6. Improved flood resilience of buildings</td>
<td>Cost: $1.6M</td>
<td>- Costs assume $25,000 invested per residence</td>
</tr>
<tr>
<td></td>
<td>Benefit: $0.56M</td>
<td>- Assumes 80% reduction to basement damages for residences until the first floor is flooded</td>
</tr>
<tr>
<td></td>
<td>ROI: 5 years</td>
<td>- Reduces damages by 30% to 70% for the 5-through 100-year events and &lt;5% in the Regional event</td>
</tr>
<tr>
<td>7. Vegetation maintenance</td>
<td>Cost: $0.2M</td>
<td>- Reduces damages by 2-10% for the 5- through 100-year events, and by 2.5% for the Regional event</td>
</tr>
<tr>
<td></td>
<td>Benefit: $0.04M</td>
<td>- Annual maintenance of vegetation removal would be required to maintain improved flow conveyance (not included in costs)</td>
</tr>
<tr>
<td></td>
<td>ROI: 5 years</td>
<td></td>
</tr>
</tbody>
</table>
Mitigation options 2 and 3 have the potential to reduce flooding of roads to improve emergency access (until the dikes are overtopped). Flood mitigation options that widen the channel or floodplain and add conveyance capacity may improve debris/ice jamming (Options 1, 2, 3, and 5). Since options 5 and 6 could be designed to have added capacity or provide a higher level of protection, they may have greater climate change resiliency.

**Conclusions and Next Steps**

No options will eliminate all risk of flooding – there will always be risk in the floodplain of New Hamburg. Flood damages would still have been experienced in February 2018, 2008, and 1975 with implementation of dike improvements to the 10- or 25-year flood level (Options 3 and 4).

Lower cost options, such as improving the flood resiliency of buildings (Option 6) and dike bank vegetation removal (Option 7) could provide some immediate benefits. Option 6 would require voluntary landowner adoption and development of a funding model. Option 7 is a major maintenance project that would require landowner access agreements, as the existing dike extends across GRCA, Wilmot Township, and about 10 private properties.

Raising or changing the alignment of the dike (Options 2, 3, and 4) can be effective but costly, and needs to balance level of protection with potential upstream water level impacts. These options would be major capital projects requiring an environmental assessment. Bridge replacement and redesign to improve flood conveyance should be considered at the end of lifecycle of the Pedestrian and Highway 7/8 bridges.

Next steps include GRCA staff review of dike ownership and access agreements, and further discussion of study findings with Wilmot Township, and others levels of government, agencies, and potential partners. The approaches and lessons learned from the New Hamburg Flood Mitigation Study are transferable to other flood damage centres in the Grand River watershed.

**GRCA Regulated Areas**

Modifications to the floodplain mapping and associated regulated area is expected due to updated base mapping and the new hydraulic modelling that was completed. The March 11, 2020 Public Information Centre served as the initial public consultation process for revisions to GRCA mapping under Ontario Regulation 150/06 of the Conservation Authorities Act. A second Public Information Centre may be required following peer review of the hydraulic model and updated mapping. The updated floodplain mapping will be provided to the Township of Wilmot for incorporation into municipal planning documents such as the Official Plan and Comprehensive Zoning By-law.

**Financial implications:**

The New Hamburg Flood Mitigation Study was approved under the National Disaster Mitigation Program for a total budget of $180,000, to be cost shared 50% by Public Safety Canada ($90,000) and 50% by GRCA ($90,000). GRCA’s contribution will be drawn from the Land Sale Proceeds Reserve, as approved in board report GM-05-19-53.
Other department considerations:
Staff from the Engineering Division have led project management and technical review. Staff from Resource Management, Information Systems, and Communications also are involved in this study.

Prepared by:

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Approved by:

Dwight Boyd, P.Eng.  
Director of Engineering

Nancy Davy  
Director of Resource Planning
Grand River Conservation Authority

Report number: GM-04-20-23
Date: April 24, 2020
To: Members of the Grand River Conservation Authority
Subject: Current Watershed Conditions as of April 14, 2020

Recommendation:
THAT Report Number GM-04-20-23 – Current Watershed Conditions as of April 14, 2020 be received as information.

Summary:
March was a typical transition month from winter to spring. The month was warm and wet. These conditions melted the snowpack and increased runoff. The large reservoirs captured much of the runoff to begin the filling cycle, which will continue into May. Three flood messages were issued during the month and there was some minor flooding in the communities of Ayr and New Hamburg.

The first half of April has continued to be warmer than normal, but has been fairly dry with no significant rainfall events. Strong winds and high static lake levels resulted in three high lake level warning messages for Lake Erie shoreline flooding. The April 13th event resulted in some minor flooding along the lakeshore. Lake Erie continues to be higher than the long-term average increasing the risk of lake surge flooding into the next few months. The long-range forecast is for near normal temperatures and above normal precipitation over the remaining spring months.

Report:
Precipitation
Precipitation in March was above the long-term average throughout the watershed. The average rainfall across the watershed was approximately 80mm or about 20mm above the long-term average. Very little snow was recorded in March. The snowpack that formed through the later half of the winter was completely gone from the watershed by the end of the month.

April precipitation is below the long-term average for the first half of the month. Precipitation has been fairly even with about 24mm of rain across the watershed and a small trace of snow. There have been no large rainfall events to date in April.

Table 1 includes monthly and recent precipitation trends for select watershed climate stations. Monthly precipitation at the Shand Dam, Shades Mill and the Brantford climate stations from 2016 to 2020 is shown in Figure 1.
Table 1: Precipitation Averages at Watershed Climate Stations

<table>
<thead>
<tr>
<th>Station</th>
<th>Monthly Precipitation (mm)</th>
<th>Long Term Average (mm)</th>
<th>Percentage of Long Term Average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>14-Apr</td>
<td>Current Half</td>
<td>Last Full</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Month</td>
<td>Months</td>
</tr>
<tr>
<td>Shand</td>
<td>21.9</td>
<td>77.8</td>
<td>56%</td>
</tr>
<tr>
<td>Conestogo</td>
<td>20.6</td>
<td>79.5</td>
<td>52%</td>
</tr>
<tr>
<td>Guelph</td>
<td>22.8</td>
<td>75.5</td>
<td>60%</td>
</tr>
<tr>
<td>Luther</td>
<td>31.0</td>
<td>78.0</td>
<td>79%</td>
</tr>
<tr>
<td>Woolwich</td>
<td>19.9</td>
<td>65.3</td>
<td>61%</td>
</tr>
<tr>
<td>Laurel</td>
<td>22.6</td>
<td>78.9</td>
<td>57%</td>
</tr>
<tr>
<td>Shades</td>
<td>24.4</td>
<td>78.4</td>
<td>62%</td>
</tr>
<tr>
<td>Brantford</td>
<td>26.6</td>
<td>66.1</td>
<td>80%</td>
</tr>
</tbody>
</table>

Environment Canada precipitation gauge at Brantford Airport is offline, values in the table are from Brant Park.

Air Temperatures

The month of March was over 2 degrees warmer than the long-term average. The monthly average air temperature at the Shand Dam climate station was slightly above freezing, or about 2.6 degrees above the long-term average. Daytime high temperatures were above freezing for all but a few days, while overnight low temperatures were mostly below freezing.

The trend for warmer than normal temperatures continued into the first half of April. The average temperature at the Shand Dam climate station was 1.6 degrees above the long-term average. April temperatures have been variable with some days getting close to 20 degrees and other days barely above freezing.

Figure 2 presents recent mean monthly air temperature departures from the long-term average recorded at Shand Dam.

Lake Erie Water Levels

The average lake level was approximately 0.94m above the long-term average in February and 0.87m in March. It has increased in the first part of April, with an average level of 175.08m or 0.42m below the critical level at the Port Colborne gauge. Water levels are following the highest forecast from the Canadian Hydrographic Survey from April 1st. The high forecast is predicting that levels will continue to increase to new record levels by the late spring.

Three Lake Erie high lake level warning messages were issued in April to date. On April 9th, a warning message was issued based on an anticipated water level just above the Zone 1 threshold. Levels peaked below the flooding threshold. Two warning messages were issued for an event over the Easter weekend. Forecast strong south-westerly winds were anticipated to result in water levels well into Zone 2 flooding. Levels peaked during the afternoon of April 13th within the Zone 2 range and some minor flooding occurred.

There remains in effect an ongoing Lake Erie Shoreline Conditions Statement message in regards to a higher potential for shoreline flooding due to the high lake levels.

Figure 3 presents current and forecast Lake Erie level from the Canadian Hydrographic Service.
Reservoir Conditions

The large reservoirs are at their normally operating level for this time of the year and annual filling of many of the smaller reservoirs has begun.

A large rainfall and snowmelt event occurred early in March which resulted in higher flows throughout the river system. Water was captured during this event and used to fill the reservoirs to the normal early spring level. Minor runoff events since then have been used to continue to increase the amount of water in storage following the normal operating procedure. The reservoirs will continue to be filled gradually over the remainder of April and into May.

Reservoir levels are shown in Figures 4 and 5 for the four large reservoirs.

Flood Operations Centre Activities

In addition to the High Lake Level warning messages, there were three flood messages issued in March. On March 10th a combined Flood Watch and Warning message was issued for the watershed. Rainfall and snowmelt resulted in increased river flows throughout the watershed. The communities of New Hamburg and Ayr on the Nith River and Drayton on the Conestogo River were warned of flooding, while the rest of the watershed was in a flood watch. The message was updated on March 11th with a higher warning level for Ayr. Water levels reached flood thresholds in these communities with some minor flooding.

A Watershed Conditions Statement – Water Safety message was issued on March 27 urging caution around waterways due to higher river flows from forecast rainfall. No flooding was observed during this event.

Long Range Outlook

The three month forecast for April through June from Environment Canada is for near normal temperature and above normal precipitation. The Ministry of Natural Resources and Forestry is also predicting near normal temperatures and above normal precipitation over the next three months.

Flood Preparedness

Conditions are being monitored closely. Staff continue to hold weekly meetings as part of overall succession planning initiatives, dam operations and flood emergency preparedness.

A heighten state of preparedness has been implemented during the current pandemic crisis. Daily weather summaries are prepared that summarize and assess potential weather systems in the 5-day forecast. The intent of these summaries is to maintain a heighten awareness of systems that could results in shoreline or riverine flooding. The flood forecast model is updated daily and maintained a state of readiness if needed.

Access to major dams has been restricted regular dam operators. If there is a need for other staff or contractors to access a GRCA dam, a screening questionnaire is completed to assess potential COVID-19 concerns, hygienic and cleaning protocols are in place for those areas visited in a dam. These protocols are in place to maintain a safe clean work place at GRCA dams.

Staff rosters of experienced dam operators and flood management staff are maintained with a 3-week outlook. These rosters maintain an up to date awareness of what staff are
available and the capabilities of each staff member. The roster and knowledge of staff capabilities and availabilities allows for efficient redeployment of staff to fill critical roles.

Flood management staff are equipped and currently working remotely. A limited number of staff are working at the administration office and protocols are in place to maintain a safe secure clean work place at head office.

Financial implications:
Not applicable

Other department considerations:
Not applicable

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Approved by: Dwight Boyd, P.Eng.
Director of Engineering
Figure 1: Precipitation at Shand Dam, Shades Mill Dam and Brantford 2016 to April 14, 2020
Figure 2: Departures from Average Air Temperatures at Shand Dam

*only partial data available for April 2020

Figure 3: Forecasted Lake Erie Levels
Figure 4: Shand and Conestogo Reservoir Elevation Plots
Luther Dam Operating Curves

Luther Dam primarily provides a flow augmentation function to the upper Grand River and to Shand Dam. While it does provide some benefits from a flood control perspective, these benefits are limited due to the small drainage area regulated by Luther Dam.

The buffers between March 1st and September 30th define the operating range to meet downstream low flow targets. The lower buffer defines the lowest operating range for flow augmentation before reducing downstream flow augmentation targets. The earlier winter (January 1st to March 1st) and late fall (October 1st to December 31st) upper buffer curve is defined from ecologic considerations from the Luther Marsh Master Plan.