

June 27, 2017

NOTICE OF
BOARD OF DIRECTORS' MEETING
AMENDED JUNE 27, 2017

DATE: TUESDAY, June 27, 2017

TIME: 9:30 A.M. – 11:55 A.M.

LOCATION: WATERSHED CONSERVATION CENTRE
BOARDROOM

AGENDA:		TIME
1.	Approval of Agenda	9:30am
2.	Declaration of Conflicts of Interest	
3.	Confirmation of Payment as Required Through Statutory Obligations	
4.	Minutes of the Previous Meeting: Tuesday May 23, 2017	
5.	Business Arising from the Minutes	9:35am
	(a) FYI Distribution (T.Hollingsworth) (Verbal)(5 minutes)	
6.	Business for Approval	9:40am
	(a) Harrington and Embro Dam EA Presentation (C.Tasker/Consultant)(Doc: FC #1061) (Reports attached)(60 minutes)	
	ii) Harrington Community Association Delegation Presentation	
	(b) Benefits Renewal Amounts Annual Review (I.Wilcox/S.Viglianti)(Doc: HR #18736) (Report attached) (5 minutes)	
	(c) Budget Concepts Memo (I.Wilcox)(Doc: #117660) (Report attached)(10 minutes)	

- (d) Conceptual Monitoring & Reporting Program for UTRCA Environmental Targets
(C.Harrington)(Doc: Admin #2048)
(Report attached)(10 minutes)
- 7. Closed Session – In Camera 11:15am
 - (a) Glengowan Update (I.Wilcox)
(Verbal)(5 minutes)
- 8. Business for Information 11:20am
 - (a) Administration and Enforcement - Section 28
(M.Snowsell/K.Winfield) (Doc: ENVP #4754)
(Report attached)(5 minutes)
 - (b) Gilmor Decision
(T.Annett)(Doc: ENVP #4751)
(Report attached)(10 minutes)
 - (c) 2017 Biennial Tour
(I.Wilcox)(Doc: Admin #2035)
(Report attached)(5 minutes)
 - (d) Proposed Changes to the CA Act (I.Wilcox)
(Doc: #117712)(Report attached)(10 minutes)
- 9. June FYI 11:50am
- 10. Other Business (Including Chair and General Manager's Comments)
- 11. Adjournment 11:55am



Ian Wilcox, General Manager

c.c. Chair and Members of the Board of Directors

I.Wilcox	T.Hollingsworth	J.Howley	C.Ramsey	S. Musclow
C.Saracino	A.Shivas	C.Tasker	B.Mackie	P. Switzer
G.Inglis	B.Glasman	M.Snowsell	K.Winfield	B. Verscheure
T.Annett	M.Viglianti	C.Harrington	J.Skrypnik	

MINUTES
BOARD OF DIRECTORS' MEETING
TUESDAY, JUNE 27, 2017

Members Present:	T.Birtch	S.McCall-Hanlon
	M.Blackie	H.McDermid
	M.Blosh	A.Murray
	R.Chowen	B. Petrie
	A.Hopkins	M.Ryan
	T.Jackson	J.Salter
	S.Levin	G.Way
	N.Manning	

Regrets:

Solicitor: G.Inglis

Staff:	M. Fletcher	C.Saracino
	B. Glasman	A.Shivas
	C.Harrington	M.Snowsell
	T.Hollingsworth	C.Tasker
	J.Howley	I.Wilcox
	B.Mackie	K.Winfield

1. Approval of Agenda

M. Blackie asked the members to consider an addition to the agenda to allow for a second presentation from the Harrington community.

R. Chowen moved – N. Manning seconded:-

“RESOLVED that the UTRCA Board of Directors
approve the agenda as revised.”

CARRIED.

2. Declaration of Conflicts of Interest

The Chair inquired whether the members had any conflicts of interest to declare relating to the agenda. There were none.

3. Confirmation of Payment as Required Through Statutory Obligations

The Chair inquired whether the Authority has met its statutory obligations in the payment of the Accounts Payable. The members were advised the Authority has met its statutory obligations.

4. Minutes of the Previous Meeting
May 23, 2017

T. Jackson moved – S. McCall-Hanlon seconded:-

“RESOLVED that the UTRCA Board of Directors approve the Board of Directors’ minutes dated May 23, 2017 as posted on the Members’ web-site.”

CARRIED.

5. Business Arising from the Minutes

(a) FYI Distribution

T. Hollingsworth reported that in addition to the hard copies that are distributed by staff and members, the FYI Newsletter is distributed to 3,412 people via the UTRCA Twitter Channels, to 3,937 people through the Facebook Channels and to 1,249 subscribers to the UTRCA Mailchimp eNewsletter.

6. Business for Approval

(a) Harrington and Embro Dam EA Presentation
(Reports attached)

C. Tasker introduced representatives from Ecosystem Recovery Inc., the consultants obtained to manage the Class Environmental Assessment under the Conservation Ontario Class EA on behalf of the UTRCA and the Township of Zorra. The consultants reviewed the attached presentation.

A number of issues and questions arose from the Board of Directors.

A question was raised regarding the role of Harrington Dam as a barrier to fish passage. T. Jackson mentioned that a retired Ontario Ministry of Natural Resources and Forestry (OMNRF) biologist had provided an opinion that the Dam was serving to block invasive species from moving up and into the Creek. C. Tasker explained that in response to similar questions from a previous delegation, the Authority had followed up with OMNRF and with the UTRCA fisheries biologist. Both sources agreed that the benefits of removing the Dam to the fishery outweighed the potential risk to the upstream brook trout.

M. Ryan spoke to the results of the recent Township of Zorra Council meeting discussion regarding Harrington Dam. Zorra Council deferred a decision in an effort to gather additional information. Township staff were asked to provide an economic impact review of each of the alternatives considered in the Environmental Assessment process for both Harrington and Embro Dams. M. Ryan understood that staff would bring a report back to Council in July and this information would be available for the UTRCA's August meeting. M. Ryan asked the UTRCA Board to consider postponing a decision to allow time for a review of the information and opinions from the Township of Zorra Municipal Council.

S. Levin asked about the impacts of postponing a decision on the safety of the dams and the liability of the Authority. C. Tasker reported that without a course of action or a direction that suggests repair, the Authority should embark on a dam safety review for Harrington and Embro Dams. The outcome of the Environmental Assessment process would determine the scheduling of the dam safety review.

S. Levin asked if there are funding opportunities through the Water and Erosion Control Infrastructure (WECI) program. C. Tasker noted that the Dam had been funded in the past but it would all depend on the priority ranking of Harrington in relation to other projects with important flood control functions that are waiting funding. He explained that WECI will not fund new dam construction but it will provide a bonus in ranking for dam removal. He was doubtful that the program would support repairs to the existing structure.

S. Levin suggested that the perhaps the Authority should consider dealing with Harrington Dam and Embo Dam separately. T. Jackson agreed that this may be a useful approach.

T. Jackson raised questions around the sediment levels and the possible impact of increased siltation on Wildwood Conservation Area's bird sanctuary should Harrington Dam be removed. He noted that following the breach of the Ducks Unlimited Dam, there have been impacts on Harmony. He questioned the validity of the Environmental Assessment based on the potential downstream impacts. The consultants explained that because of the Dam, the downstream has become sediment starved. He noted that natural channels are self maintaining and that Harrington Pond is capturing sediment and increasing the water temperature.

(a) ii) Harrington Community Association Delegation

Mr. Gavin Houston, speaking on behalf of the Harrington & Area Community Association, thanked the Authority for the additional opportunity to address the members. He noted that much diligent work has gone into the Environment Assessment Process.

Mr. Houston outlined information related to the economic and social impacts of the Dam and Pond, potential impacts on the fishery and the potential impacts of an offline pond. He noted that the people of Harrington had been developing infrastructure in the Conservation Area for some time and that they continue to raise funds to make improvements in the Harrington Mill living museum. He estimated that the improvements have had a significant impact on the local economy – adding up to \$4.5 million over the past 10 years. He questioned

the cost of improving the Dam in relation to this lost economic impact. He noted that it is impossible to weigh the importance of Harrington Dam to the community residents and that the Authority had only been looking at the science.

Mr. Houston stated that the removal of the Dam would negatively affect the fishery. Small Mouth Bass will impact the Brook Trout populations if the Dam is removed. He referred to recent MNRF studies that stated that introductions of Smallmouth Bass reduce the diversity of bait species. He noted the discrepancy in opinions from OMNR. Mr. Houston also referred to the potential for an increase in diseases affecting the fish population.

Mr. Houston questioned whether the off line pond would be able to deliver on all of the aspects outlined in the Environmental Assessment recommendation. He stated that millions of gallons of water per day will be needed to supply the mill and to support the fish and that this amount of water will not be available from the off line pond. He felt that without the pond, there would be insufficient recharge capacity for shallow wells in the area. With an off line pond, the Mill would only be operational within very limited timeframes. He felt that the depth of the head required to get the turbine going would be insufficient and require another structure, similar to another Dam to produce the head required.

Mr. Houston noted that should the Authority not support the local community, other options would be investigated. There is potential to have the entire Harrington site declared an historical site because of the Dam and vistas. Historical structures and views are worth protecting. The group was asking the Township of Zorra to deem the site an Historical Conservation District. Another option for the community is to purchase the entire Mill, Dam and Conservation Area from the UTRCA as has been done in other jurisdictions. Mr. Houston felt that the Committee has occupant status of the Mill and in such, has the same rights as the UTRCA. The Committee could expropriate the land. Mr. Houston noted that they would like us to work together but that they are making the Authority aware of all of the Committee's choices.

M. Blackie thanked Mr. Houston for the presentation. The UTRCA Board of Directors had further discussion.

T. Birch asked staff to comment on the Dorchester Mill Dam EA in relation to the Harrington Dam. C. Tasker reported that the Dorchester EA considered all of the same criteria. At that time, other agencies and groups did not call for the removal of the dam. Public opinion has changed as new information about the impacts of Dam has become available.

S. Levin asked if the options offered within the Harrington EA impact on our targets. I. Wilcox noted that the Authority currently has a list of 200 barriers in the watershed that should be removed as they have no flood control functions. The Authority's position is that a free flowing river is preferred. Generally the Authority supports the removal of dams, as they create significant risk and incur costs for maintenance. Nevertheless, the EA process is designed to be objective and consider social, economic and environmental impacts.

S. Levin noted that even if the dam is replaced we will not be certain that there would be sufficient head to operate the mill. All of these components are determined by the specific design. Detailed design allows us to design many things into each choice. B. Petrie inquired if it

is possible for the Authority to choose to support one of the alternatives and then over time, decide on the specific design of that alternative. C. Tasker answered that yes this is possible but that the EA process is currently still open for comment and change.

S. Levin noted that the EA is required to review and rank 4 factors. He felt that the community is asking the Authority to give 100% weighting to the social factor and the Authority is unable to do this.

T. Birtch questioned why the Community's creative ways to save money were not included in the comparison. C. Tasker explained that all costs were included but not potential savings. The report could not apply potential savings to one option. The report would need to consider all potential savings to all alternatives to illustrate a fair comparison. T. Birtch noted that there should be some way of incorporating this information so that it can be considered in the decision-making.

The UTRCA members agreed input from the Township of Zorra is critical and will assist to clarify roles and funding.

S. Levin moved – T. Jackson seconded: -

“RESOLVED that the Board of Directors defer the report until the August, 2017 meeting.”

CARRIED.

T. Jackson suggested that perhaps, as the Board will have time that the UTRCA Board membership should visit and review the site. A. Hopkins and other members agreed. Staff were directed to organize a visit to Harrington Dam and Conservation Area, perhaps with the August Board meeting at Wildwood Conservation Area.

Hard copies of an additional submission from Mr. Houston were distributed to the members of the Board.

(b) Benefits Renewal Amounts Annual Review
(Report attached)

S. Levin moved – H. McDermid seconded:

“RESOLVED that the Board of Directors accept the recommendations as presented in the report.”

CARRIED.

(c) Budget Concepts Memo
(Report attached)

N. Manning moved – B. Petrie seconded:

“RESOLVED that the Board of Directors accept the recommendations as presented in the report.”

CARRIED.

B. Petrie stated his appreciation for the early consultation on the budget. T. Birtch questioned whether the 2.0% levy increase amount is enough considering increased growth.

I. Wicox noted that the City of London expects a target number for their budgeting process and the Authority staff specified the April to April CPI and were clear it was being used as a guideline. A. Hopkins reported that 2.0% seems high and should be 1 to 1.5% to stay in line with what the City of London is asking for from other agencies.

A. Hopkins moved – B. Petrie seconded:-

“RESOLVED that the recommendation be amended from a 2.0% increase to 1.5%.

DEFEATED.

I. Wilcox reminded the members that the Authority will have increases to the minimum wage to deal with in addition to many other operational issues.

The Board members suggested that the information on page 2 of the report be amended to reflect that minimum wage is included, along with the usual merit increases. B. Petrie asked that there be a report that clearly outlines the wage increase and the impact of the increased minimum wage.

(d) Conceptual Monitoring & Reporting Program for UTRCA Environmental Targets
(Report attached)

S. Levin moved – B. Petrie seconded: -

“RESOLVED that the Board of Directors accept the recommendations as presented in the report.”

CARRIED.

7. Closed Session – In Camera

There being property and legal matters to discuss,

N. Manning moved – G. Way seconded:-

“RESOLVED that the Board of Directors adjourn to Closed Session – In Camera.”

CARRIED.

Progress Reported

- (a) Property and legal matters relating to the Glengowan lands were discussed.

8. Business for Information

- (a) Administration and Enforcement – Section 28
(Report attached)

H. McDermid moved – G. Way seconded:-

“RESOLVED that the Board of Directors receive the report as presented.”

CARRIED.

- (b) Gilmor Decision
(Report attached)

S. Levin moved – N. Manning seconded:-

“RESOLVED that the Board of Directors receive the report as presented.”

CARRIED.

S. Levin inquired if there has been an appeal to the Supreme Court. G. Inglis explained that to be considered by the Supreme Court the issue must be of national significance. The Gilmor decision would be considered an Ontario issue and it is doubtful that the Supreme Court would hear it.

S. Levin inquired whether this decision assists in our planning role. T. Annett reported that the decision reinforces the role of the Authority in their decision making through planning and permitting.

- (c) 2017 Biennial Tour
(Report attached)

The Board received the 2017 Biennial Tour report.

- (d) Proposed Changes to the CA Act
(Report attached)

B. Petrie moved – B. Way seconded:-

“RESOLVED that the Board of Directors receive the report as presented.”

CARRIED.

I. Wilcox will forward the Conservation Ontario Team report regarding the proposed changes to the Conservation Authorities Act to the members of the Board.

9. June FYI
(Attached)

The attached report was presented to the members for their information.

10. Other Business

11. Adjournment

There being no further business the meeting was adjourned at 12:10 p.m. on a motion by N. Manning.



Ian Wilcox
General Manager
Att.

M. Blackie, Authority Chair

To: UTRCA Board of Directors
From: Chris Tasker
Date: June 13, 2017 **Agenda #:** 6 (a)
Subject: Final Draft Embro and Harrington Dam EAs **Filename:** Flood Control Doc# 1061

Recommendations

It is recommended that the Board of Directors:

1. **Receive the Embro Dam Class Environmental Assessment report and approve it for posting with the notice of completion**
2. **Receive the Harrington Dam Class Environmental Assessment report and approve it for posting with the notice of completion**
3. **Staff work with the community groups and the Township of Zorra to develop a Master Plan for Harrington CA**

Background:

Class Environmental Assessments were initiated for Harrington and Embro Dams in 2015 under the Conservation Ontario (CO) Class Environmental Assessment (EA) process. The process included public consultation which included 3 Public Information Centres (public meetings) for each of the 2 projects. Both projects identified alternatives and processes for assessing the alternatives. Both projects identified preferred alternatives selected through the process and ranking system determined through the earlier parts of the projects. The final drafts have now been posted on the project web site.

The board received a delegation from the Harrington community expressing their interests in retaining the dam and reservoir. Similar delegations have been made to Zorra and Oxford councils. Similar feedback has been provided through public consultation on the Harrington EA and has been considered in arriving at the preferred alternative. One of the concerns raised during both board and council delegations was that the dam provided a benefit as a barrier to certain species. Both MNRF and staff fisheries biologists are of the opinion that the benefits to the overall ecology of the system, and the brook trout, outweigh the potential risks of the removal of the barrier. If a barrier for a specific purpose is desirable, the design of the preferred alternative can include this in such a way that it minimizes the negative impacts of a barrier while optimizing the barrier for the intended purpose. This has been addressed in the EA reports and also through correspondence with MNRF (attached).

The consultant will be presenting the reports to Zorra Township Council on June 20. It is hoped that council may provide some feedback on the reports and the preferred alternatives.

The same presentation will be made at the UTRCA's June Board meeting. The consultant will review the process followed, environmental considerations, alternatives considered, preferred alternatives and next steps. The presentation will be broken into 3 parts, the first focusing on the common processes followed in the 2 projects. The second part will be focused on the Embro Dam EA. The final part will be focused on the Harrington Dam EA.

Posting of EA related reports, presentations, and public comments are available on the UTRCA web site at: <http://thamesriver.on.ca/water-management/recreational-dams/classea-harrington-embro-dams/> which has been updated with the draft reports, appendices and executive summaries.

Attached as part of this report are:

1. Executive summary of the Embro Dam Environmental Assessment
2. Executive summary of the Harrington Dam Environmental Assessment
3. Correspondence from Pud Hunter providing an opinion on the benefit of Harrington Dam as a barrier
4. Correspondence from MNRF providing an opinion on the benefits of removing the barrier
5. The Oxford County resolution referred to in the last board meeting

Next Steps:

Once approved by the board the final reports will be posted with the notice of completion. This posting will begin the last 30 day consultation period of the class EA process. Any concerns which have not been considered through this process may be considered by the Minister of Environment and Climate Change which may result in approval, with or without conditions, or requiring a full Environmental Assessment. Once we have a completed Environmental Assessment we will be able to work towards securing funding for moving forward with the preferred alternatives.

As the Harrington Dam EA was underway many ideas, concepts and plans for the Mill and Conservation Area were brought forward. These included things such as the continuing mill restoration, need for water to power the mill turbine, education programming related to the mill, pond dredging and a potential fish hatchery. Some of the plans are better defined than others but prior to this EA much of this was not well documented or communicated. It became apparent that all would benefit from pulling these things together as part of a Master Plan for the Conservation Area. As the property owner the UTRCA is in a position to coordinate master planning for the area. The Harrington EA report includes a suggestion that a master plan would help all of these initiatives as well as defining some of the design considerations for the preferred alternative.

Prepared and Recommended by



Chris Tasker, Manager,
Water and Information Management

EXECUTIVE SUMMARY

Introduction

The Upper Thames River Conservation Authority (UTRCA) is responsible for the maintenance and operations of Embro Dam, situated in Zorra Township (**Figure 1-1**). Results of a 2007 (Acres) Dam Safety Assessment revealed concerns pertaining to insufficient spillway capacity, insufficient freeboard, embankment stability, and the conveyance of flood flows through the emergency spillway. A subsequent 2008 (Naylor/LVM) embankment stability analysis study concluded that the Embro Dam did not meet dam safety guidelines stability criteria and was not considered stable under existing conditions. The dam was classified as having a 'Low Hazard', based on MNR (2011) Dam Hazards due primarily to the rural area in which the dam is situated and the few low density of residential dwellings in the area.

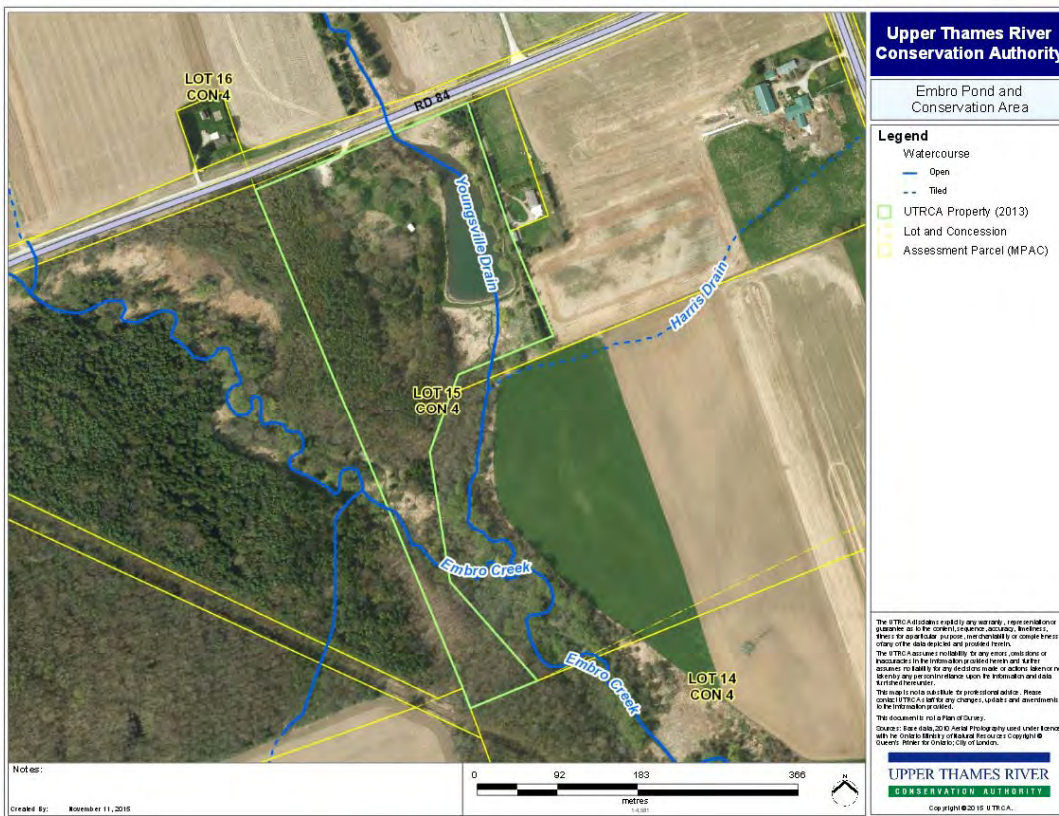


Figure 1-1. Embro Conservation Area (outlined in green, Source: UTRCA)

The UTRCA, in partnership with Zorra Township, initiated a Class Environmental Assessment due to the significant concerns related to the structural integrity and hydraulic capacity of the Embro Dam. The objective of this EA study was to identify, evaluate, and ultimately to recommend an alternative (including Do-Nothing) that will allow the Upper Thames River Conservation Authority (UTRCA) to move forward with resolution to the problem statement regarding the future of Embro Dam.

Background

The Embro Dam is situated 2 km north of the Village of Embro, in Embro Conservation Area (ECA). The dam is situated on Spring Creek which is also commonly referred to as Youngsville Drain situated in the Town of Embro, includes a dam and pond; both are under UTRCA ownership.

The Embro Conservation Area, in which the dam and pond are situated, supports a system of hiking and cross-country skiing trails. The Embro Pond Association entered into a lease agreement with UTRCA in 1999 for maintenance of Embro CA. excepting the dam. Various initiatives have been undertaken that have included planting of native trees and wildflowers. A hardwood forest regeneration project was also implemented in the conservation area.

Existing Conditions

Review of background materials and site conditions was completed to define and confirm the problem statement. Characterization of existing conditions was completed through review of background information; completion of field investigations, data collection, data analyses and monitoring. This included a general assessment of the study area and investigations of Youngsville Creek downstream and upstream of the dam, and within pond.

Youngsville Drain is a tributary of the North Branch Creek within the Mud Creek watershed. The drainage area to the dam and pond is approximately 7.0 km²; this is made up of mostly agricultural lands.

The wooded area of Embro Conservation Area (CA) is part of a larger significant natural heritage feature that includes the Oxford County Forest. Results of a three season botanical inventory revealed that 31% of the species within the 5.4 ha of Embro CA are non-native; no plant species at-risk, or rare or uncommon or sensitive species were found on the land or in the reservoir/pond. The reservoir has a dense growth of rooted aquatic waterweeds and pondweeds, but all three native species are common. There are very few rooted emergent wetland plants along the edges of the pond owing to the steep sides and constant water levels. The overall quality of the vegetation within Embro CA was rated as average or moderate.

During the three season bird survey, 40 species (common and mostly forest birds) were recorded. Only one species-at-risk bird (Barn Swallow) was observed although no evidence of nesting was found. The reservoir provides limited significance for a few resident waterfowl for raising broods (e.g., Wood Ducks, Canada Geese). These are common species. Migrating waterfowl make little use of the Embro Reservoir during spring migration, likely due to the isolation of this pond from other ponds or lakes in the area

Downstream of Embro Dam, Youngsville Drain Creek appeared to have been previously straightened and was considered to be stable. Through the aquatic assessment, twenty-one (21) different species were recorded downstream of the dam; the diverse community included cold water species and both permanent and seasonally present warm water species. The presence of Brook Trout below the dam indicates the presence of numerous seeps and the cooling effect of aquatic vegetation. Benthic analyses revealed pollution tolerant taxa in this section of the creek that were indicative of 'fairly poor' water quality. Measurements of water temperature revealed warmer water downstream than upstream of the pond; the pond appears to provide a warming effect.

Bathymetric surveys of Embro Pond showed that approximately 27-35% of the available pond volume has filled with sediment. Analysis of the accumulated sediment indicated that the sediment was not defined as hazardous waste according to Schedule 4 Leachate quality criteria (Ontario, 2015) but did exceed MOE (2011) Table 2 standards for Cyanide and Boron when considering sediment for agricultural, residential, or Industrial/commercial/community property reuse. The footprint of Embro Pond was determined to have no archaeological potential.

Youngsville Drain, upstream of the backwater effects due to the pond was considered to be geomorphologically 'in transition' and was considered to be aggradational. Results from the aquatic assessment suggested that this portion of Youngsville Drain provides good quality cold water habitat.

Only eight (8) species were recorded, including Brook Trout; the low species diversity likely reflects the barrier to fish migration due to the dam. Benthic analyses revealed that pollution sensitive taxa were observed in this portion of the creek that were indicative of 'fairly poor' water quality. Water temperature was cooler upstream than downstream of the dam.

Alternative Selection and Evaluation

Through review of study findings, seven potential alternative solutions were identified to address the dam and embankment instability concerns that were identified in the Acres (2007) and Naylor (2008) studies. These included:

- 1) Do Nothing
- 2) Repair Dam
- 3) Remove Dam and Establish Natural Channel
- 4) Remove Dam and Construct One or More Offline Ponds/Wetlands with a Natural Channel
- 5) Partially Remove Dam, Lower Crest and Naturalize the Remaining Perimeter

Evaluation of the potential alternatives was completed for each of the technical, environmental, socio-cultural and economic categories as defined in MOE (2014). The specific criteria that were evaluated were selected based on study area characteristics and factors considered especially relevant by the study team and/or the community. Ranking of each criterion was undertaken to determine the preferred alternative considering an equal category weighting.

The preferred alternative, resulting from both the equal and the weighted evaluation processes, was Alternative 3 (**Figure 7-1**). In this alternative, the dam would be removed and a naturalized channel would be established. The alternative recognizes the benefit of removing the dam to improve fish migration opportunities into cold water habitat.

Subsequent to Public Information Centre 3, a member of the public proposed an additional alternative. This alternative was reviewed and considered by the study team. That alternative shows thoughtful consideration for the reduction of liability and cost associated with any works in the area. The alternative included elements that are similar to Alternatives 2, and 5 and was thus not advanced to an additional alternative for inclusion in the evaluation process. Instead, draining the pond and lowering the dam crest to accommodate a fish ladder could be considered as a variation on Alternative 5 that incorporates elements of Alternative 3 (i.e., naturalized channel in area of exposed pond bottom).

Prior to development of detailed design, additional study is required to further characterize Youngsville Drain hydrology, examine potential effects of pond removal on nearby groundwater wells, and undertake further archaeological assessment. Where possible, the detailed design should address and incorporate elements considered important by the community that include: walking trails and viewing areas for birds, habitat creation for brook trout.



Figure 7-1. Preferred Alternative

Public Consultation

Public Consultation was undertaken throughout the study process which included not only the immediate community, but also First Nations, and organizations that may be interested in the project and/or agencies that must be consulted during the Class EA process. Public meetings were held to communicate study findings and study process to the community and to obtain public feedback to consider and incorporate into the study. In addition to three (3) public information centres (PIC), UTRCA also participated in additional communication with a community member who was actively engaged in the study process. All public notices, PIC presentation materials and draft reports were posted on the UTRCA website to provide public access.

Public comment and feedback received during the PICs and subsequent questionnaires were reviewed and used to inform the alternative evaluation process and refinement of the preferred alternative. While the preferred alternative is generally accepted by the community; a variation of Alternative 5 was felt, by a community member, to provide a more cost effective approach that would also reduce UTRCA liability for failure. This variation provides limited environmental benefits and could, in fact, contribute to adverse environmental conditions.

Conclusion

An Environmental Assessment study was initiated by UTRCA with the intent of identifying the preferred alternative for addressing the failure of Embro dam to meet dam safety guidelines with respect to its spillway and embankment. Review of existing conditions through background review and field studies demonstrated environmental impacts of the pond on water quality, fish species diversity, and channel function. No constraints were identified that would limit works associated with any of the potential alternatives. Through the evaluation process, Alternative 3 (remove dam and naturalize channel) was determined to be preferred. Preparation of design drawings for the preferred alternative should consider design elements that would support existing community use of the Embro Conservation Area and provide habitat creation and/or enhancement opportunities. Consideration should be given to initiating a Dam Safety Review if implementation of the preferred alternative is delayed. MNR (2011) recommends that Dam Safety Reviews be completed on a maximum 10 year cycle; the last reviews were completed in 2017 and 2018.

EXECUTIVE SUMMARY

Introduction

The Upper Thames River Conservation Authority (UTRCA) is responsible for the maintenance and operations of Harrington Dam, situated in Zorra Township (**Figure 1-1**). Zorra Township contributes 100% of the operating and maintenance costs of the dam and the costs may be offset where the UTRCA is able to obtain funding for capital projects. Results of a 2007 (Acres) Dam Safety Assessment revealed concerns of insufficient spillway capacity, spillway instability and embankment stability. A subsequent 2008 (Naylor) embankment stability analyses concluded that the Harrington Dam did not meet dam safety guidelines stability criteria. The dam was classified as having a Low Hazard, based on MNR (2011) Dam Hazards due primarily to the rural area in which the dam is situated and the low density of residential dwellings in the area.

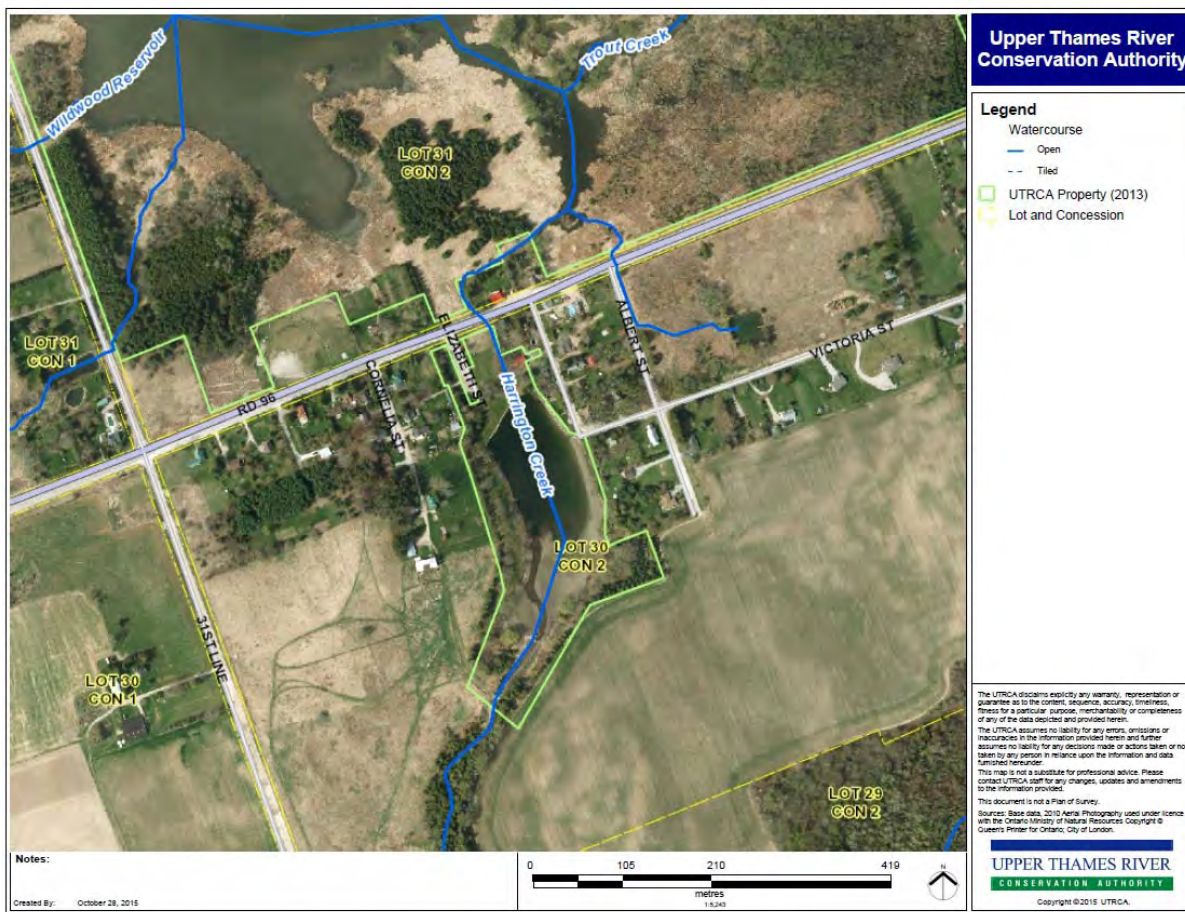


Figure 1-1. Location of the Harrington Dam and Pond within Harrington CA (Source: UTRCA)

The UTRCA, in partnership with Zorra Township, initiated a Class Environmental Assessment (EA) under the Conservation Ontario Class EA process due to the significant concerns related to the structural integrity and hydraulic capacity of the Harrington Dam and embankment. The objective of this EA study was to identify, evaluate, and ultimately to recommend an alternative (including Do-Nothing) that will allow the Upper Thames River Conservation Authority (UTRCA) to move forward with a plan to address the Harrington dam and embankment safety concerns.

Background

The Harrington Conservation Area (HCA), situated within the Village of Harrington, includes a dam, pond and the Harrington Mill. All are under UTRCA ownership. Harrington Conservation Area is a “Day-Use Only” area, with current uses including hiking, birding, fishing, and picnicking.

The Harrington Community Preservation and Historical Club Inc. entered into a lease agreement with UTRCA in 1999 for the long-term restoration of the grist mill and the management and maintenance of Harrington CA. Restoration of the Mill, to date, has been supported through community fundraising, volunteer hours, and a Trillium Grant. The restoration efforts are intended to result in a functioning museum and a working educational site. There is potential to support demonstration operations of the mill by water flow from Harrington Pond.

Existing Conditions

Review of background materials and site conditions was completed to define and confirm the problem statement. Characterization of existing conditions was completed through review of background information; completion of field investigations, data collection, data analyses and monitoring. This included a general assessment of the study area and investigations of Harrington Creek downstream and upstream of the dam, and within the pond.

Harrington Creek flows into Trout Creek and Wildwood Lake. The drainage area of Harrington Pond is ~ 12 km² and is made up of mostly agricultural lands. The study area is within 100 m of a Provincially Significant Wetland; wildlife species likely travel between the Wildwood Conservation Area and Harrington Conservation Area. Results of a three season botanical inventory revealed that 40% of the species observed within the 5 ha HCA are non-native; no species at-risk, rare, or uncommon species were found. The overall quality of the vegetation within Harrington CA was rated as moderately poor to average. The pond did not support any native rooted aquatic plants; only a narrow fringe of wetland emergent plants occurred along the shores.

In the community area surrounding the pond, shallow groundwater wells are used by several residential properties. Historically, these wells have been affected by water levels in the dam, including the 1949 dam failure event.

The three season bird survey recorded 42 species of birds within the HCA; all were considered common breeding or permanent residents of the area. Only one species-at-risk bird (Barn Swallow) was observed although no evidence of breeding was found. A snapping turtle, bluebird and milksnake have been observed by community members. Neither the pond nor other parts of HCA provide critical habitat for any sensitive bird or other species. Waterfowl appeared to use the pond on an occasional basis. The pond has been stocked annually with rainbow trout; UTRCA has recently (2016) been notified by the Ministry of Natural Resources that a permit for stocking the pond will no longer be provided; this will affect the annual fishing derby that has traditionally be held in Harrington Conservation Area. Downstream of Harrington Dam, Harrington Creek appeared to have been previously straightened and was considered to be stable. Results of the aquatic assessment indicated that the creek provides both seasonal and permanent habitat for warm water species; the abundance of young of the year fish suggested that this portion of the creek is valuable spawning and nursery habitat for warm water fish. Thirty (30) different species were recorded downstream of the dam. Cold water fish species are unable to successfully reproduce downstream of the dam. Benthic analyses revealed very pollution tolerant taxa in this section of the creek that were indicative of ‘fairly poor’ water quality. Measurements of water temperature revealed warmer water downstream than upstream of the pond; the pond appears to provide a warming effect.

Bathymetric surveys of Harrington Pond showed that approximately 48% of the available pond volume has filled with sediment. Analysis of the accumulated sediment indicated that the sediment was not defined as hazardous waste according to Schedule 4 Leachate quality criteria (Ontario, 2015). The footprint of Harrington Pond was determined to have no archaeological potential.

Harrington Creek, upstream of the backwater effects that are due to the pond was considered to be geomorphologically 'in transition'. The creek morphology was influenced by large woody debris with respect to profile controls and channel width; large woody debris is beneficial for aquatic species as it provides in-stream habitat. Results from the aquatic assessment indicated that the creek offers habitat for cold water fish species but that only seven (7) species in all were recorded. Benthic analyses in the same section of creek revealed that pollution sensitive taxa were present that were indicative of 'fair' water quality. The water temperature was cooler upstream than downstream of the dam indicating warming of the water through the pond.

The Harrington Conservation Area, in which the dam, mill, and pond are situated, is a beloved focal point of the community that dates back to 1846. The area has supported family and community picnics, fishing derbies, skating, swimming, bird watching, trail use, and canoeing. The Harrington and Area Community Association and its members are keenly interested in preserving the viewscape of the pond, enhancing the pond environment, providing educational opportunities, supporting the operation of the Harrington Mill, and enhancing tourism potential to the area.

Alternative Identification and Evaluation

Through review of study findings, seven potential alternative solutions were identified to address the failure of the dam and its embankment to meet dam safety guidelines stability criteria as identified and discussed in the Acres (2007) and Naylor (2008) studies. These alternative options identified for addressing the deficiencies of the dam and embankment included the following:

- 1) Do Nothing
- 2) Remove Dam and Install Rocky Ramp
- 3) Remove Dam and Construct Natural Channel
- 4) Remove Dam and Construct One or More Offline Ponds/Wetlands with a Natural Channel
- 5) Replace Dam with a New Structure Downstream of the Existing Dam
- 6) Lower the Dam Crest with Natural Channel
- 7) Reconstruct the Existing Dam in its Current Location and Configuration with New Materials

Evaluation of the potential alternatives was completed for each of the technical, environmental, socio-cultural, and economic categories as defined in MOE (2014). The specific criteria that were evaluated were selected based on study area characteristics and factors considered especially relevant by the study team and/or the community. Ranking of each criterion was undertaken to determine the preferred alternative considering an equal category weighting. Given the high community interest and local cultural value of the dam and pond, the ranking was also evaluated using an altered category weighting (i.e., 40% socio-economic, 20% for all other categories).

The preferred alternative, resulting from both the equal and the weighted evaluation processes, was Alternative 4 (**Figure 7-1**). In this alternative, the dam would be removed and one or more off-line ponds would be created. The channel would be naturalized and flow around the off-line pond. The alternative recognizes the socio-cultural value of the community regarding viewscape of the pond and recreational uses of the area along with environmental benefits that would be achieved with placing a pond off-line (i.e., improved water quality, species diversity, habitat continuity, etc.). The alternative allows for replication and enhancement of the terrestrial environment. Subsequent to the third PIC, an additional alternative was proposed by the community, and considered by the study team. That alternative was a variation of Alternative 7 (i.e., partial rather than full replacement; creation of a spillway at the upstream



Figure 7-1. Preferred Alternative

end of the pond) and considered a temporary solution rather than long-term. In conjunction with their description of the alternative, the community identified measures for environmental enhancement and recreational potential; many of these would not be exclusive to the variation of Alternative 7. The variation of Alternative 7 was evaluated, informally, to examine how the final scoring would compare to the preferred alternative. While the score, in both the equal and weighted evaluation tables would be higher than Alternative 7, the rank did not increase to be within the top 3 alternatives. Alternative 4 therefore remained the preferred alternative.

Prior to development of detailed design, additional study is required to further characterize Harrington Creek hydrology, examine potential effects on shallow groundwater wells, potential for upwelling into an off line pond, undertake further archaeological assessment, and further examine the hydrological requirements to operate the turbine within the Grist Mill. The offline pond should consider water taking needs required to operate the turbine, within natural constraints. Where possible, the detailed design should address and incorporate elements considered important by the community that include: large pond viewscape, trails and viewing areas for birds, habitat creation (snake, turtles, birds), wheelchair accessible fishing area, unobstructed access to the pond (i.e., avoid overgrown overhanging vegetation), and mosquitos management.

Public Consultation

Public Consultation was undertaken throughout the study process which included not only the immediate community, but also First Nations, and organizations that may be interested in the project and/or agencies that must be consulted during the Class EA process. Extensive Public Consultation was undertaken to communicate study findings and study process to the Harrington Community and to obtain public feedback to consider and incorporate into the study. All public notices, PIC presentation materials and draft reports were posted on the UTRCA website to provide public access.

In addition to three (3) public information centres (PIC), UTRCA organized a field tour of dam removal and restoration projects that have been completed in the jurisdiction of the Grand River Conservation Authority. Upon the request the Harrington Community & Historical Preservation Club (also called the Harrington and Area Community Association) provided a tour to the study team and Zorra Township representatives. After the third PIC, UTRCA met with the Harrington and Area Community Association to further clarify study process and findings and encourage community participation; a three week extension of the comment submission time period was given. Public comment and feedback received during the PIC and questionnaires were reviewed and used to inform the alternative evaluation process and refinement of the preferred alternative. While the preferred alternative is generally accepted by some community members and non-governmental agencies (12%); the majority of the communications (88%) received during the study process oppose dam and pond removal and prefer repair or reconstruction of a dam similar to the existing dam and embankment. The key concerns pertain to the perceived loss of cultural heritage through the loss of a large pond viewscape and loss of opportunity to use pond water to power the restored Mill. The community has expressed concern regarding mosquitos in an off-line pond, loss of wildlife habitat, and the introduction of non-native species to Harrington Creek upstream of the dam (e.g., carp).

Conclusion

A Class Environmental Assessment study was initiated by UTRCA with the intent of identifying the preferred alternative for addressing the failure of Harrington dam to meet dam safety guidelines with respect to its spillway and embankment. Review of existing conditions through background review and field studies demonstrated environmental impacts of the pond on water quality, fish species diversity, and channel function. No constraints were identified that would limit works associated with any of the potential alternatives. Through the evaluation process, Alternative 4 (remove dam, create off-line pond, naturalize channel) was determined to be preferred. Through the public consultation process, community members have made it clear that they, generally, prefer repair or replacement of the dam and embankment in contrast to the preferred alternative. The Harrington Community indicated that if the dam and pond could be retained that the community would intend to improve the

overall pond environment. Some plans were being made as the EA report documents were in completion, to initiate an improvement strategy. Preparation of design drawings for the preferred alternative should consider design elements that would support demonstration operation of Harrington Mill, maximize the viewscape, and enhance habitat. The design should also consider exclusion measures for invasive species (e.g., carp).

Administrative Assistant - Fwd: Harrington EA

From: Gavin [REDACTED]
To: Chris Tasker <taskerc@thamesriver.on.ca>, Bill Mackie <mackieb@thamesriv...>
Date: 6/2/2017 5:43 AM
Subject: Fwd: Harrington EA
CC: Philip Kerr [REDACTED]

Dear Chris,

For quite some time I have been hoping to get Pud Hunter to provide his thoughts on the Harrington Dam and the free travel of fish, should the barrier of the dam be removed. He has vast experience working in this area and I felt his position, favourable to our end goal or not, would be invaluable.

Please find Mr Hunter's reply to my urging.

I am sure you and the Board of Directors at UTRCA will find it helpful as you near the end of the EA process.

Sincerely,

Gavin Houston

Sent from my iPad

Begin forwarded message:

From: "P. Hunter" [REDACTED]
Date: June 1, 2017 at 10:20:29 PM EDT
To: Gavin Houston [REDACTED], Felix Barbetti [REDACTED],
 Tony Jackson [REDACTED] SOX Cher Sprague [REDACTED],
 Robert Huber [REDACTED]
Cc: SOX Roger Boyd [REDACTED] Randy Bailey [REDACTED]
 Brian Moore [REDACTED]
Subject: Re: Harrington EA

Hi Everyone.

Introductions

* Gavin Houston, Oxford County Resident to save Harrington Pond

Advise of my previously commenting through the following clubs of which I am a Member

-

* Stewardship Oxford [County] (SOx) : Roger Boyd, Chair & Cher Sprague, Director

* Thames Rivers Anglers Association (TRAA) : Rob Huber, President & Randy Bailey, Director

* OFAH Zone J Directors (OFAH) : Brian Moore, Chair; Felix Barbetti, Fish Cmte Chair & Tony Jackson,

Gavin, Tony, Cher,

Gavin per your May 24th email, thank you for the kind words. Tony appreciated your reminder of the email. Cher, thank you for your email. Been working (consulting) & away.

Folks,

Acknowledge my individual discussions with Cher, Rob, Felix & Tony. Per your encouragements, I've provided a brief summary of my opinion. And in doing so, it is " with respect " I gave you a summary all of my opinions.

Key Words

EA = MCEA: a Municipal Class Environmental Assessment.

EA Proponents = the UTRCA att Rick Goldt (now retired) & UTRCA Consultants.

PIC = Public Information Centre for public review & comments.

Gavin,

1. acknowledge the separate projects being discussed -

- i. UTRCA's Harrington EA Proceedings.
- ii. MNRF's Fishery Review of Harrington Ck completed in 2016.
- iii. MNRF's denial of a 2017 Rainbow Trout Stocking Permit into Harrington Reservoir.

2. the EA Proceeding requires the fishery information. The fishery information should include the Fishery Review & the Fish Stocking Permit.

3. with regard to -

i. the EA Proceedings, the process is a legal procedure administered through MOECC's Ontario Environmental Act. The EA is currently post its PIC 3. Up to & including PIC 3, the Proponent's & Public comments were provided based on the information collected & provided by EA Proponents. Post PIC 3, new anecdotal information became publicly known. Such was the Reservoir's dyke was originally cored with sheet metal piling and covered with earth. If such is confirmed, the status of the dyke's stability is stronger, safer than hypothesized & reported at the beginning of the EA.

ii. the Fishery Review, was not privy to the same. MNRF may not alter their decisions. Anecdotally, concur the impacts to the fishery may be as you described below. Advise the impacts may change with a whole ecosystem review: from Wildwood Dam to upper Harrington Ck. A benefit of this review may be the potential impact of invasive species from downstream to upstream.

iii. the Stocking Permit, was not privy to same. MNRF may not alter their decision. Anecdotally understand the denial of the Permit was without MNRF's historical facts around management of the Harrington Ck, the associated societal benefits & land use influences within Harrington Ck watershed.

4. the non-disclosure of some topics – such as the dyke's history & stability, the cost-benefits of re-establishing brook trout populations in the Creek bed of the Reservoir, the review of impacts-mitigation-benefits of permitting/ prohibiting the rainbow trout stocking for opening day project, the potential for invasive – falsifies the starting premise the dyke was not safe and the background information presented to the decision making process. Such diminishes the validity of the decision making. As such, suggest the EA review be re-initiated prior to PIC 1 public review.

5. acknowledge my original comments to UTRCA mail survey pre-PIC 3 was without the background info of PIC 3 and supported dam decommissioning. Although initial priorities of SOx, TRAA & OFAH is the decommissioning of dams to restore ecosystems (ergo replace fish-bowl mgnt with ecosystem mgnt [Felix]), each case is treated on its own merits. There was concurrence there are **special case considerations for maintaining Harrington CA Reservoir and the historic rainbow trout opening day stocking project.**

6. comments in 4 & 5 were communicated through conversation by myself to the Proponents at the end of PIC 3 & a follow-up conversation. Was advised the next opportunity to legally input into this process was via PIC 4 which at this date is not scheduled. I suggest **considering the legal status of moving the EA onto PIC 4 or re-initiating to PIC 1 or finding a middle ground.**

Invasive species -

Introductions of invasive species & diseases above dams is a reality; there are books about this topic. Multitude factors to consider: slope of the watercourse bed, water flows (velocities & volumes); artificial locating of aquatics (people, children, birds), ecosystem quality (environment), species impacts (fauna/ flora), disease, etc.

General principles -

Biologically if the habitat is maximized for the species type dwelling in it, then the species type should out-compete the invasive species. Ex. cold water, brook trout, ecosystems are best suited for brook trout fish who should outcompete the invasive species.

Reality is this is not always biologically achievable; or, it is cost prohibitive to achieve.

Often brook trout, brown trout & pike share brook trout habitats.

If pike, bass, suckers, carp are present 24-7-365 downstream their behaviour to expand into new habitats will have them disperse, expand their ranges into new habitats sometime, somehow.

Biologically warm water species (bass, carp) will not sustain yearly in cold water ecosystems; although they may periodically visit them. Same may be expected of the minnow & invertebrate species.

In the circumstance of Harrington Pond, Wildwood dam theoretically separates the Harrington Pond & upper Harrington from the downstream North Thames R.

A concluding remark: my Compliments to the UTRCA & Staff for their hard work & presentations at the Embro & Harrington PIC 3's. Well done (& I enjoyed the cookies). Best to All & my Good Friends at the UTRCA,

Pud

-----Original Message-----

From: Cher Sprague
Sent: Thursday, June 01, 2017 11:48 AM
To: [REDACTED]
Subject: Upper Thames/Harrington pond.

Hi Pud

Gavin Houston has asked me if I could contact you about the request he sent you recently. UTRCA would like your opinion about opening the dam to invasive species from Wildwood lake.

Let me know if you need the original email or more info.

Thanks.

See you on Tuesday.

Cher

-----Original Message-----

From: Gavin
Sent: Wednesday, May 24, 2017 6:07 AM
To: Pud Hunter
Subject: Harrington EA

Good morning Pud,

We have made headway in regards to saving the pond and getting the mill operational. Engineering for a new sluice is underway and we hope to have the mill operational for our 150 celebration on August 12th.

As for the pond and dam, we have been pressing the issue that the dam provides a necessary barrier between the natural headwaters and the man made Reservoir known as Wildwood Lake. Where, in an effort to protect the brook trout, the department of MNRF has stopped the stocking of the pond with rainbow trout, a species that has little to no impact on the native brook trout, by allowing the free travel of fish by removing the dam, they would be giving numerous undesirable fish access to the brook trout habitat (bass, rock bass, perch, catfish, pike etc), species that would have huge, negative impact on the native fish.

Pud, we need your help. The Board of UTRCA holds you in high esteem and wants to know your thoughts on this matter. This came out in a board meeting yesterday. Could I please ask that you provide me a letter to present to UTRCA regarding the connectivity between Wildwood and the headwaters of Trout (Harrington) creek. Your honest and knowledge based comments will carry much weight not only with UTRCA but MNRF and our local group as well.

I hope this finds you well.

Had two sandhill cranes hanging around the backyard recently!

Very cool!

Regards,

Gavin

Sent from my iPhone=



Virus-free. www.avg.com

May 31, 2017

Chris Tasker, P.Eng.
Manager, Water & Information Management
Upper Thames River Conservation Authority
1424 Clarke Road
London, Ontario
N5V 5B9

Dear Mr. Chris Tasker

SUBJECT: Harrington Dam EA

Thank you for your letter of May 24, 2017 requesting input from the Ministry of Natural Resources and Forestry (MNR) regarding the effects that the various EA options would have on Brook Trout populations and an opportunity to address a temporary water supply for the mill associated with the Harrington Dam, in Zorra Township.

Specifically, you have requested information regarding MNR's staff opinion/feedback as to whether the removal of the Harrington dam would benefit the Brook trout populations. You have also requested what opportunities if any exist for modifications to the dam without finalizing a plan to address the dam safety concerns and for an opportunity to look for temporary measures which could supply water to the mill without disturbing the dam

Brook Trout Populations

Staff have confirmed, through an electrofishing survey carried out in July 2016, that brook trout reside immediately upstream of the pond created by Harrington Dam. Additionally, water and air temperatures taken during the electrofishing events suggest that cold water habitat exists upstream of the pond (14°C water temp with air temp at 26°C) while immediately downstream currently offers cool water habitat (22°C water temp with air temp at 28°C). Anecdotal evidence from the local fish and game club indicate that warm water bass species and carp are caught in the pond during the summer and we also know that fish species preferring warm and cool water stream habitats are found immediately downstream of the dam. However, immediately upstream of the dam only two cold water species (brook trout and mottled sculpin) were captured in the cold water habitat.

Summer months (July & August) represent a critical time period for stream fish species. Cold water fish species such as brook trout prefer water temperatures of 16 °C but can tolerate temperatures up to 21-22°C.

The Harrington Dam is currently adding warm water to the downstream section of the stream. In our opinion, removal of the dam should restore cooler water and would likely shift the downstream segment of this stream from cool to cold water summer habitat preferred by brook trout. Riparian re-vegetation through the section formerly flooded by the pond, either naturally or through plantings, will also help cool stream temperatures and increase the amount of available cold water habitat. The warm and cool water fish species currently utilizing the pond and downstream section of the stream during

the summer months will then shift further downstream to stream segments with thermal habitat associated with their preferred warmer temperature ranges.

LRIA Requirements Associated with Work on Dams

It is MNRF's mandate under the *Lakes and Rivers Improvement Act* (LRIA) to protect persons and properties by ensuring that dams are suitably located, constructed, operated, maintained and are of an appropriate nature.

Section 16 of the LRIA states that no person shall alter, improve or repair any part of a dam in the circumstances prescribed by the regulations, unless the plans and specifications for whatever is to be done have been approved.

Under Section 2(1) (b) of Ontario Regulation 454/96, Ministry approval is required to make alterations, improvements or repairs to a dam that holds back water in a river, lake, pond or stream to raise the water level, create a reservoir to control flooding or divert the flow of water, if the alterations, improvements or repairs may affect the dam's safety, structural integrity, the waters or natural resources.

Where alterations, improvements or repairs to a dam may affect the safe operation of components that are physically attached or logically connected to the proposed works, additional information may be required specific to those components to support the Ministry's Section 16 review.

In considering options (temporary measures) to supply water to the Mill, a permit under LRIA would not be required provided these measures do not affect the safe operation of components of the dam and are not physically attached or logically connected to the proposed works.

The MNRF Technical Bulletin, "Alterations, Improvements and Repairs to Existing Dams" provides direction on the administration for existing dams, including the control structure and other structures and equipment on the dam site as well as providing examples of common alteration, improvement and repair work which do not require LRIA Section 16 approval.

Depending on direction provided by the EA, approvals may be required under the LRIA for work undertaken with regard to the Harrington Dam.

If you have additional questions or require further information contact me at 519-773-4749

Sincerely,



Ron Drabick
IRM Technical Specialist
Aylmer District
Ministry of Natural Resources and Forestry
519-773-4749
ron.drabick@ontario.ca



FROM THE OFFICE OF THE CLERK

Brenda J. Tabor

P. O. Box 1614, 21 Reeve Street, Woodstock, ON N4S 7Y3

519.539.9800, ext. 3002 | 1.800.755.0394

Website: www.oxfordcounty.ca

Letter Sent Via Email

April 25, 2017

Mr. Ian Wilcox, General Manager/Secretary-Treasurer

Upper Thames River Conservation Authority

1424 Clarke Rd.

London, Ontario

N5V 5B9

Ms. Karen Martin, Clerk

Township of Zorra

P.O. Box 306

Ingersoll, Ontario

N5C 3K5

Dear Mr. Wilcox and Ms. Martin:

Oxford County Council, at its meeting held on April 12, 2017, requested that you be contacted regarding a good news story happening in Harrington.

Council was pleased to receive a delegation from Gavin Houston, representing the Harrington and Area Community Association, at its April 12th meeting and subsequently passed the following resolution:

“That the information provided in the presentation given by Gavin Houston, regarding a plan for the future of the Harrington Conservation area by the people of Harrington and the Harrington Mill Pond water quality and habitat improvement plan, be received and further that Oxford County Council is excited about the possibilities and requests that a letter indicating this be sent to the UTRCA and Zorra Council.”

I have attached two presentation documents from the delegation to Council, titled “[Harrington Conservation Area – The living museum – A plan for the future of the Harrington Conservation area by the people of Harrington](#)” and “[Harrington Mill Pond water quality and habitat improvement plan](#)” for the consideration of your Board and Council.

Yours very truly,

Brenda J. Tabor,
Clerk

Copy to: Peter Crockett, CAO

Gavin Houston, Harrington and Area Community Association

HARRINGTON CONSERVATION AREA

The living museum



**A plan for the future of the Harrington
Conservation area by the people of Harrington**

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HARRINGTON CA – THE LIVING MUSEUM

FORWARD BY GAVIN HOUSTON

Time is but the stream I go a-fishing in. I drink at it; but while I drink I see the sandy bottom and how shallow it is. It's thin current slides away, but eternity remains" HENRY DAVID THOREAU
– ON WALDEN'S POND.

There is a debate going on that involves the future of the Harrington mill and mill pond- should the dam be repaired or replaced **or** removed completely and returned to a stream and natural barrier-less fishery as existed prior to mans original involvement circa 1840? On one side is the people- local residents, concerned citizens, historians. On the other side is the Provincial Government (concerned about liability) and lobbyist groups that believe **all** waterways should be barrier free regardless of circumstance. In the middle is the Upper Thames River Conservation Authority, not only the owner of the mill and pond but also the mediator who, upon performing it's due diligence, will instruct the Province as to what the future of the dam should be. But, without pointing fingers, it is easy to determine that the main reason this debate is even happening in the first place is due to poor governance. Both the mill and the pond have succumbed to neglect for decades with the mill itself finally being rescued by the people, brought back to the cusp of being operational as it once was. Entirely due to the efforts of the people, the mill now appears to have a future which, in the minds of the people, will be a working museum, a small piece of mans ingenuity saved for the purpose of the education of future generations. But what of the mill pond? First, without the pond, the mill will not be operational and therefore a mere shell of what it could be. There is a vast difference between a restored building and a mill that actually works, the water from the pond turning the turbine that powers the machinery and grinds the wheat or rolls the oats. Second, it is also through the efforts of the people that the pond area itself has been improved and maintained- as part of an agreement between a local community group and Upper Thames River Conservation Authority (UTRCA).

Walking trails, picnic tables, memorial benches and trees, and regular ground maintenance is the result of the efforts of the people. Other than the installation of the current dam in 1952, which now appears to have been built with sub-grade material (not enough clay), and its mandatory repair after being breached in 2002, little to no physical work has been performed other than by the people- except for one small project.

Approximately 12 years ago, under the guidance of UTRCA, large rocks were installed where the stream enters the pond, the purpose- to alter the flow of the stream and collect sediment in a controlled manner for later removal. The sediment was never removed. Actually, this sediment that *always* accumulates when a barrier in a waterway slows the flow, one of the main issues that is negatively affecting the water quality and functionality of the Harrington Mill pond from the perspective of fish, wildlife and recreation, one of the main points being used to strengthen the argument that the dam should be removed, *has not been removed since UTRCA took possession of the property nearly 70 years ago.* Prior to that, based on scant records and personal communication, the accumulated sediment was removed at least twice thereby deepening the pond and improving water quality, fish habitat and recreational use. This removal of the sediment presumably was performed by the people. In fact, the majority of money spent on the mill and pond has come from the people either through fundraising, grant applications or personal contribution, yet, for a considerable number of years, taxpayers money has been set aside for the upkeep of the pond. It was either presented to UTRCA directly by the Township or withheld by the Township for future use. It seems some of the money, in part, was used for environmental and engineering assessments on the Harrington Dam as part of a Provincial Government initiative to assess all dams in the Province, but is that what the money was originally set aside for? Is that maintenance? One would have to ask the question that if the money had been used to upkeep the pond and remove the sediment whether the outcome of environmental assessment would have been different. And what of the remaining funds?

There is another example nearby of a barrier across a waterway that shows the effects of restricted flow, accumulated sediment and reduced water quality, that being the Wildwood dam and reservoir that the Harrington Creek flows into. Formerly a cold water environment called Trout Creek, predictably because of the population of native brook trout that inhabited it, but now, due to the installation of the dam and the creation of the reservoir, the habitat has changed to a warm water environment. The trout have been replaced with bass, sunfishes, perch, pike and huge populations of coarse fish. A recent report I read from UTRCA listed all these warm water species as "native". Native to Southern Ontario perhaps, but not to Trout or Harrington Creek!

One of the arguments by the "save the pond" group is that: by removing the dam and returning the creek back to a more natural free-flowing waterway it will be jeopardizing the existing native fish and natural cold water environment by connecting the cold water to the un-natural warm water environment. They are correct. A quick look at the Eastern branch of Trout Creek that is connected directly to the Wildwood Reservoir shows the significant and negative effects of just such a combination. From silt-laden warm water to teeming schools of carp and suckers, parts of Trout Creek are a mere shadow of its former self.

But, the people have a plan. They are looking at the Harrington Mill and its associated pond from a different perspective than other vested parties. They look at it as a remnant of days gone by, an asset that has purpose from a historical and education perspective. They believe that their little conservation area has similar potential as the Jack Minor Bird Sanctuary and Black Creek Pioneer Village rolled into one. Under their governance, as with the restoration of the mill, this plan has merit. I used a quote from Henry David Thoreau at the beginning not just because of its poignancy but because of several parallels to the situation in Harrington. Mr. Thoreau was one of America's most significant writers who wrote about life on Walden's pond in Massachusetts, not unlike Harrington's connection to Ralph Connor, one of Canada's most prolific writers. Due to poor governance, in the 1980's, two large developments were approved for the woods around Walden's pond. People in the area were not happy with the prospect and banded together to stop the developments and save the pond and woods. Don Henley, founding member of the music group the Eagles, a conservationist and fan of the works of Thoreau, joined in the fray and together they were eventually successful. They not only saved the pond and woods but turned it into a tourist attraction with emphasis on the natural history as well as the literary history created by Thoreau. It is now a pride of the state.

The following presentation by the people is about what they see as the future of their Conservation area by emphasizing the past. It is a multifaceted plan that involves the natural history and historical significance of the site while considering the repair and maintenance after years of neglect. It is a plan of good governance that will preserve and maintain a historically significant gem that can be used as an educational tool and a recreational hub for generations to come.

Purpose

The people of Harrington have prepared this plan to present to all parties with a vested interest in the future of the Harrington Conservation Area to ensure that the position of the people is clearly understood. Where some would prefer that the dam and pond be removed, the people would clearly look at this as a loss to not only the local community, but all residents, and as a failure to the original intent of the creation of the conservation area in the first place. This plan demonstrates what the potential of the site can be and how the people would see it through to its fruition.

THE DAM

The people, though they feel they have little influence on the future of the dam, believe that it is worth saving. It seems, based on numerous reports and assessments, that the greatest concern for the dam is catastrophic failure in the event of severe weather, that the dam was not designed for heavier flows of water. The people strongly believe that by creating a new overflow spillway at the north west corner of the pond, the purpose of which to receive and control excessive flows of water and direct it towards Harrington creek below the dam, future stress on the dam would be alleviated. These types of spillways, using rock and fabric, have been created numerous times before and the cost is minimal. Under the guidance of UTRCA, the community would be in a position to install the spillway as designed.

With the installation of the spillway, the risk of imminent failure is removed and the need to replace the existing concrete structure eliminated. If it is decided that the earthen portion still requires work, the new spillway could be used to divert water and simplify the construction and, therefore, reduce costs. Also, if clay is required for strengthening the earthen portion of the dyke, a call to local landowners with suitable clay, and who would like a free dugout or pond, could be sourced, again, greatly reducing costs.

The amount of money suggested by the EA report for the reconstruction of the Harrington dam is huge. It should be noted that when the EA for Dorchester dam was completed, the exact same environmental concerns existed in dorchester as they do in Harrington – reduced water quality, sediment buildup, increased temperature- yet the dam was replace and the water quality concerns still exist. The main reason it seems the dam was replaced was simply because grants for the project were readily available. This time they are not. But the people believe there are other options available to improve the water quality and condition of the pond, assuming the dam remains with the new overflow.

The Pond

Whether the pond is saved, altered or removed, the sediment within the pond **must** be removed. A proposal for the removal of the sediment in the pond has been prepared by the local residents. They propose to use a low impact suction dredge to remove the sediment from the pond, create an island, and open up the channel to improve flow and reduce further sediment build-up. This would have zero impact on the shoreline. In places where natural springs enter the pond, the area could be deepened to allow for better seepage from the springs and create a greater cooling effect. With the sediment removed, water quality would be improved, mainly the temperature, and suitable habitat for the native brook trout would be created. This would also impact vegetative growth and habitat for other wildlife in a positive way.

Fish and Fishing

Once the sediment is removed from the pond, the intent is to recreate the excellent trout fishing that once occurred on the pond. This would only involve the native brook trout. Stocking of rainbow trout, for decades a yearly event, would stop. There are numerous historical references to the quality of fishing in the pond including the photograph and split-cane fly rod on display in the restored mill. Prior to silting, a healthy brook trout population existed within the pond. With the pond returned to its original state with deep, cool zones and improved flow, the native fish will return. By introducing woodpiles, rock and gravel, the fishery can be further enhanced with the possibility of transplanting some fish from nearby over-populated branches of the same stream system into the pond. First, the carp

that got into the pond from Wildwood reservoir would have to be removed. A plan is in place to do just that.

Brook trout fishing is an underutilized resource. Due to the nature of the fish and its preferred habitat, it is not a species that is accessible to everyone. After making improvements to the pond and improving the fishery, further projects will be undertaken to encourage and promote fishing for this amazing little fish. Better access to the waters edge and fishing platforms, including a handicap fishing platform, will provide safe fishing opportunities. Fly fishing can be promoted and encouraged. Signage describing the brook trout and promoting the fishery will also be posted.

All these fishing initiatives will be undertaken by the local community with permission and guidance from UTRCA. By performing this work, the Harrington pond will not only become a destination for the avid angler, but a place to introduce school children, Cubs, Scouts, Guides, 4H and other youth organizations to the natural world of the brook trout. This would not just include fishing, but a natural history lesson on the life history of the brook trout and the water and insects it depends on. Brook trout and its food are like a canary in a coal mine, a sign of a clean and healthy environment.

The Land

Through the efforts of a local community group, a walking trail with some emphasis on birdwatching has been developed. Once the pond is improved, the trails will be improved and expanded, the intent being to create a more educational experience. By introducing wildlife specific trees, shrubs and plants to attract certain kinds of wildlife, as well as feeding stations for birds, hummingbird stations, butterflies etc, a greater interaction with wildlife will be presented to visitors. Appropriate signage would also be included for educational purposes.

Designated resting areas and picnic zones will also be incorporated and maintained. Along the trails will also be small plaques denoting quotes from the works of Harrington's famous writer, Ralph Connor.

Improved maintenance will also be included to ensure the clean and sustainable use of the area.

An arrangement has already been made for the installation of an osprey platform prior to the spring of 2017 nesting season. For several years Ospreys have been using the pond intermittently and it is hoped that by providing the platform, they will become more permanent residents. The platform will have the capability of having a camera installed for watching the nest from any computer.

All of the above initiatives will be undertaken by the local residents.

The Mill

After years of sweat equity and money spent, all generated by local people, the Mill is almost completely restored and ready to become operational again with water from the pond. The final pieces required to become fully operational are the restructuring of the original turbine and the millrace from the pond. Options for the turbine are currently being reviewed and engineering for the millrace has begun. Most of the money for this is already in place. As has been the intention from the beginning, the mill is being restored to be a working museum. There are very few of these mills still in existence and even fewer that are functional. Harrington will have one of the last functioning grist mills in existence and an excellent educational tool for young and old. Every effort will be made to keep the mill as original as possible and to have it operate under water power as before. Even a functioning

replica of the punt in the “fishing” picture hanging on the wall in the mill will be built to not only complete the historical link between the mill and the pond but to be available should access to the water ever be required.

Education

Education is a reoccurring theme throughout the plan for the Harrington Conservation Area. The intent is not to make a pretty spot for locals but to create an attraction to draw people to the area. Contact has been made with three school divisions and several clubs all of which expressed interest in including Harrington Conservation Area as a yearly education day-trip destination once the plan is implemented.

The educational tour: Starting with the pond and trails with discussions on habitat, natural and sustainable resources, fish and fishing, birds and birding, water and benthic sampling (using fine nets to sample the water and bottom substrate to learn what lives there) and terminating with a tour of the functioning mill showing mans ingenuity and how things used to be. The hall would also be used as a classroom where children could see pictures of the area before and after as well as further education on nature and the environment, including microscopes where they could see what wonders live in the water they collected from the pond. A lesson on Ralph Connor would also be included, along with a display of the complete collection of his books (available in the library), and combined with a discussion on other famous local people and related books such as the two volume collection on the history of the township. The hall would also be a fallback in case of poor weather.

Initially all the work and tours would be performed by the local residents including the natural history outdoor tours, the mill tour, and

classroom teaching in the hall. Eventually, as attendance and cash-flow allow, post secondary students or young local residents would be given the opportunity to participate, with the potential for full-time seasonal employment.

This is not only an educational opportunity for thousands of children and adults alike, it is an opportunity to highlight another worthwhile destination in Zorra/Oxford as well as providing employment potential to local youth.

Heritage Classification

In the near future, as part of the Ontario Heritage Act, we would like the Municipality to have the Mill designated as an official Heritage Building. We also foresee the entire conservation area being designated as a Heritage Conservation District under the same Act. These declarations should be made soon to ensure the necessary protection to the site and to give access to other benefits from tax related benefits, Provincial media coverage, and special signage just to name a few. We will be officially contacting the municipality in the near future regarding the specifics of our request and are bringing it to everyone's attention now as there is likely some preliminary work required from the Township.

Conclusion

This is what the people see as the potential and future of the Harrington Conservation Area along with increased use of the Harrington Hall. The infrastructure is already in place with only minor

modifications required to make all this happen. Unfortunately, right now, because of the dam, the area is looked upon as a liability by some. Hopefully this plan from the people will demonstrate what an asset it really can be. The people have the means and desire to make this happen. They did it with the mill, and with so little help from others that, until recently, UTRCA did not realize just how far things had come along and that the mill was at the point of being made operational. History has shown what the people can do. Let's make this the new future..

Harrington Conservation Area, the Living Museum

Low impact Dredging

Harrington Mill Pond water quality and habitat improvement plan

Gavin Houston



photo by Philip Kerr

Harrington Mill Pond

The Harrington Mill pond is a historic treasure, much loved by the local community and area residents. For generations it has been the heart of the community. Unfortunately, the future of the dam that creates the pond and therefore the pond itself is in question. Due to structural and design issues, the dam must be repaired, replaced or removed entirely. Also, mainly do to neglect and poor management, the environmental conditions within the pond have deteriorated considerably, silting being the main issue. Over time, the accumulated sediment has turned the pond into a

shallow basin unsuitable for desirable vegetation, fish and wildlife. Formerly the pond was deeper, colder and home to a healthy population of native Brook Trout. But, the point is, whether the dam is repaired and the pond saved or the dam is removed and the pond reduced to a green space with an artificial creek flowing through it, the sediment that has accumulated within the pond must be dealt with. As the sediment is difficult to handle because of its soupy consistency, standard methods of removal are costly, messy and destructive to the shoreline and surrounding area. We are proposing to use a newer method of sediment removal to clean up the pond and improve water quality. After the work is completed, the water leaving the pond will be cooler and the water within the pond will be better suited as habitat for the native Brook trout. Other improvements will be undertaken to not only improve fish habitat but also the habitat for other wildlife as well. Also, the proposed work will improve the recreational use for visitors to the area. Historically the pond was regularly utilized by a greater number of people and for more varied purposes. We would like to see that happen once again. This is a proactive approach to water maintenance that will not only benefit the environment of Harrington Pond and the area downstream, but possibly other locations that have experienced reduced water quality due to neglect and poor land management practices.

Low impact dredging

The problem with removing silt is that the material is very soupy when wet and difficult to manage. This method of dredging simplifies the management process. Low impact dredging is similar to standard suction dredging but is more precise, allows for more control, and has almost no impact on the surrounding environment. A floating platform containing specialized pumping equipment sucks water and sediment from the bottom in a very precise and controlled manner and can do two things:

1. Pump the mixture of water and sediment to a staging (dewatering) area. This staging area will consist of a containment zone made of tarps and square straw bales that house a large



dewatering bag, like a huge bag of landscape fabric (30'x100'). The bag is pumped full of water and sediment- the water filters out through the bag while the sediment remains inside. The bag is pumped full of water and sediment several times allowing the water to percolate out each time. Once the bag is full, it is left to dry. Once the sediment

has dried to a point it is easily handled, the bag is cut open and the sediment, now basically soil, is hauled away. The filtered water that leaves the bag is contained by the tarps and hay bales and is redirected back into the creek below the dam. Once the bag or bags have

been removed, the tarps and bales are cleared away and, once the grass grows, there is little negative evidence of the work that was done.

2. An area within the pond is curtained off using the same fabric as the big bags. The sediment and water is then pumped into the curtained off area. The water escapes through the curtain and the sediment is left behind. By continuing to pump water and sediment into this curtained off area, eventually an island is created which can be planted and seeded for wildlife purposes. This has little impact on the surrounding area, including the benthic environment, and is therefore much better for the fish and animals that utilize the pond.

We propose to use both methods above to remove and control the sediment from the Harrington Mill pond. The staging area would be on the flat grass area below the dam near the old community well. The proposed island would be located out from the observation deck and towards where the creek enters the pond. There is a natural spring area in this location and by widening and deepening this area, the water would be cooler and better suited for the native trout. Dredging would also be performed along the original stream bed from where the creek enters the pond to the base of the dam itself. This would speed up flow and help reduce future sediment deposits. By adding rock in specific locations, and in a u-shaped configuration, improved habitat and sediment control can be achieved (some rock was installed in the Harrington pond for this purpose in recent years but the pond was already heavily silted by this time and there was zero follow-up maintenance thereby compounding the silt issue). By dredging and deepening pockets in the pond, water quality can be improved as well as fish habitat, fishing opportunities and other recreational pastimes accommodated. By using this method and re-using some of the original pond material, the benthic community within the pond will be less impacted than using standard methods and the shorelines will be left untouched.

Other improvements in the Mill Pond

After dredging is completed, other improvements would be undertaken. By adding boulders, logs and log-piles, further fish habitat could be created as well as aid in a healthier benthic environment. Also, in areas of known seepage or flow, gravel could be introduced to encourage spawning of the native Brook trout. A portion of the islands surface could be covered in a layer of sand/gravel to encourage turtle nesting.

We are also proposing a campaign to remove the invasive carp from the pond and to release them back into the Wildwood reservoir from where they originated.

Upon completion of the above works, it may be beneficial to transfer Brook Trout from a nearby tributary to stock the pond. An educational campaign about this under-utilized species would be

undertaken by the community to promote fishing of this native species (using on-site signage and local media). Minor bank improvements could be made to facilitate safe fishing for this unique fish. This could also include the installation of a handicap fishing platform.

One other aspect of the plan would be to work with local farmers, who's land is part of the Harrington Creek drainage system, to encourage better land use practices in an effort to keep the soil and nutrients on the fields and out of the waterway.

Cost and Cost Sharing

We are looking at this as a community based initiative specifically for the Harrington Mill Pond, but as this type of dredging has many purposes that would benefit local municipalities, townships and conservation authorities- from sediment removal in other ponds such as Dorchester, rivers and lakes (including marinas and boat slips) as well as removing invasive weed species- including the roots and the sediment that supports them to greatly reduce re-growth, and improving drainage in locations that are difficult to access using standard methods, it may be possible to share costs of the above over a number of projects. The current range of cost is between \$40,000 and \$60,000 to complete the work as described above on the Harrington pond.. If other projects can be performed around the same time, certain costs could be spread out reducing the total cost of each project.

Conclusion

We hope that all parties with a vested interest in our local heritage site and a healthy local environment will consider our proposal to improve the water quality and habitat of the Harrington Mill Pond. All of the work described above could be performed within two weeks with less cost, mess and risk to the dam and the land surrounding the pond. In two weeks we could turn back the pages of time and repair what decades of neglect has caused while making improvements to reduce the risk of this happening again. And in the greater scheme of thing, this small project, linked with numerous other small projects that all cool the water and improve water quality, will combine to make a bigger difference through the entire watershed from Harrington to Lake St.Clair and Lake Erie as well.

Thank you

Gavin Houston Chair of the Harrington Pond Committee

To: UTRCA Board of Directors
From: Sharon Viglianti, HR/Payroll Administrator
Date: May 25, 2017
Subject: Group Insurance Renewal

Agenda #: 6 (b)
Filename: Human Resources
#18736

BACKGROUND

This report will briefly summarize the scope of our group insurance plan and explain our recent rate history.

In late 2013, the UTRCA sent its employee group insurance package out for tender and as a result, in March, 2014, we moved to Equitable Life Insurance as our new group insurance carrier. Prior to 2014 we had been insured by Empire Life and RBC Insurance since the year 2000. This move to Equitable Life netted an overall 18% decrease in the cost of premiums.

UTRCA GROUP INSURANCE COVERAGE

The benefits covered under the group insurance package include: (premium ratios shown in brackets)

1. Basic Life Insurance (50% employer paid)
2. Dependent Life Insurance (50% employer paid)
3. Accidental Death & Dismemberment (50% employer paid)
4. Long Term Disability (100% employee paid, making any LTD benefit non-taxable)
5. Employee Assistance Program (100% employer paid)
6. World Care Second Opinion Program (100% employer paid)
7. Health Care (100% employer paid)
8. Dental Care (100% employer paid)

Notes: Health care includes many components such as vision care, travel assistance, paramedicals, semi-private hospital, prescription drugs, ambulance, etc.

The UTRCA self-insures for short term disability.

AON Hewitt acts as a broker for the UTRCA to negotiate with insurance companies on its behalf. They also help us to understand the group insurance business and all its complexities.

Premiums for health and dental care are 100% based on our own claims experience over the past 2 years, with the exception of health claims in excess of \$10,000 and all travel claims which are both removed from claims experience before premiums are determined.

CHANGES TO GROUP INSURANCE PREMIUMS

In June, 2016 we experienced an aggregate 10.9% increase in premiums. Many reasons contribute to this increase including our aging demographics, our increasing use of health care coverage and increasing costs of drugs (in particular, biologics). An increase was also anticipated as the insurer attempted to move our rates closer to market average following their artificially low initial bid price.

In June, 2017 we will have an aggregate -0.2% decrease in premiums. Employees will see a 7.8% increase in their premiums while the employer will see a -2.0% decrease. The employee increase is due primarily to the Long term disability rate increase. Of special note, this LTD rate is still 1% below what we were paying to our former carrier in 2013.

Overall, we have been pleased with the performance of both Equitable Life and AON Consulting and therefore we have accepted the renewal for the next year.

Attached to this report, you will find 3 slides of particular interest taken from the renewal package we reviewed with AON Consulting. These slides will be explained more fully during the Board of Directors meeting.

Prepared by:



Sharon Viglianti
HR/Payroll Administrator

Recommended by:



Ian Wilcox
General Manager/Secretary-Treasurer

sv

Rate History

Upper Thames River Conversation Authority

Rate History (Adjusted for Changes in Volumes/Headcounts)

Benefit	Rate Basis	Current Volume/Lives	1-Jun-17 Monthly		1-Jun-16 Monthly		1-Jun-15 Monthly		1-Mar-14 Monthly		1-Nov-12 Monthly		1-Nov-11 Monthly		1-Nov-10 Monthly		1-Nov-09 Monthly		1-Nov-08 Monthly	
			Rate ⁽¹⁾	Premium	Rate ⁽¹⁾	Premium	Rate ⁽¹⁾	Premium	Rate ⁽¹⁾	Premium	Rate	Premium	Rate	Premium	Rate	Premium	Rate	Premium	Rate	Premium
LIFE	/S1000	11,538,000	\$0.273	\$3,150	\$0.255	\$2,942	\$0.220	\$2,538	\$0.220	\$2,538	\$0.251	\$2,896	\$0.233	\$2,688	\$0.216	\$2,492	\$0.200	\$2,308	\$0.174	\$2,008
AD&D	/S1000	11,538,000	\$0.037	\$427	\$0.037	\$427	\$0.037	\$427	\$0.037	\$427	\$0.035	\$404	\$0.035	\$404	\$0.035	\$404	\$0.030	\$346	\$0.030	\$346
DEPENDENT LIFE	per Family	74	\$2,900	\$215	\$2,900	\$215	\$2,900	\$215	\$2,900	\$215	\$2,800	\$207	\$2,480	\$184	\$2,400	\$178	\$2,270	\$168	\$2,150	\$159
LONG TERM DISABILITY	/S100 benefit	273,985	\$1,980	\$5,425	\$1,827	\$5,006	\$1,590	\$4,356	\$1,590	\$4,356	\$2,000	\$5,480	\$1,900	\$5,206	\$1,850	\$5,069	\$1,740	\$4,767	\$1,640	\$4,493
HEALTH	S	14	\$82.76		\$84.88		\$72.86		\$58.29		\$71.68		\$69.59		\$69.73		\$69.73		\$63.39	
	F	69	\$205.81	\$15,360	\$211.09	\$15,754	\$181.19	\$13,522	\$144.95	\$10,818	\$178.24	\$13,302	\$173.05	\$12,915	\$173.40	\$12,941	\$173.40	\$12,941	\$157.64	\$11,765
DENTAL	S	14	\$33.47		\$34.86		\$35.57		\$26.95		\$34.66		\$36.48		\$33.47		\$34.50		\$30.26	
	F	68	\$93.46	\$6,824	\$97.35	\$7,108	\$99.34	\$7,253	\$75.26	\$5,495	\$98.13	\$7,158	\$103.29	\$7,534	\$94.76	\$6,912	\$97.69	\$7,126	\$85.69	\$6,251
EAP/Worldcare	per Member	86	\$4.90	\$421	\$4.90	\$421	\$4.90	\$421	\$4.90	\$421										
MONTHLY TOTAL ALL BENEFITS⁽²⁾				\$31,822		\$31,873		\$28,732		\$24,270		\$29,447		\$28,931		\$27,996		\$27,656		\$25,022
<i>Percentage Change from Prior Year</i>				0%		11%		18%		-18%		2%		3%		1%		11%		11%
<i>Percentage Change from Pre-Implementation</i>				8%		8%		-2%		-18%										

⁽¹⁾ Health & Dental rates effective March 1, 2014 were guaranteed until June 1, 2015; the remaining rates are guaranteed until June 1, 2016

⁽²⁾ For comparison purposes, monthly cost is based on insured volumes/headcount at March 1, 2017 and will not represent historical paid levels

Projection of Costs

PERIOD	EQUITABLE LIFE PROJECTION OF COSTS ⁽¹⁾ ORIGINAL	EQUITABLE LIFE PROJECTION OF COSTS ⁽²⁾ UPDATED FOR VOLUMES/HEADCOUNTS	ACTUAL COSTS ⁽³⁾
Period #1	\$311,910	\$311,910	\$314,456
Period #2	\$293,926	\$293,926	\$290,352
Period #3	\$314,125	\$359,273	\$342,772
Period #4	\$351,806	\$439,529	\$382,006
Period #5	\$378,452	\$477,108	
TOTAL	\$1,650,219	\$1,881,746	\$1,329,586

Notes:

(1)

Source: Market Survey - Results & Recommendations Report
 Period #1 costs adjusted to reflect that initial period is 15 months vs. original projected 16 months
 (\$332,704 x 15 / 16)

Costs exclude ORST

(2)

Projection of costs for Periods 3, 4 & 5 updated to reflect current headcounts/volumes (original
 projection x current volume-headcounts / quote volume-headcounts)

(3)

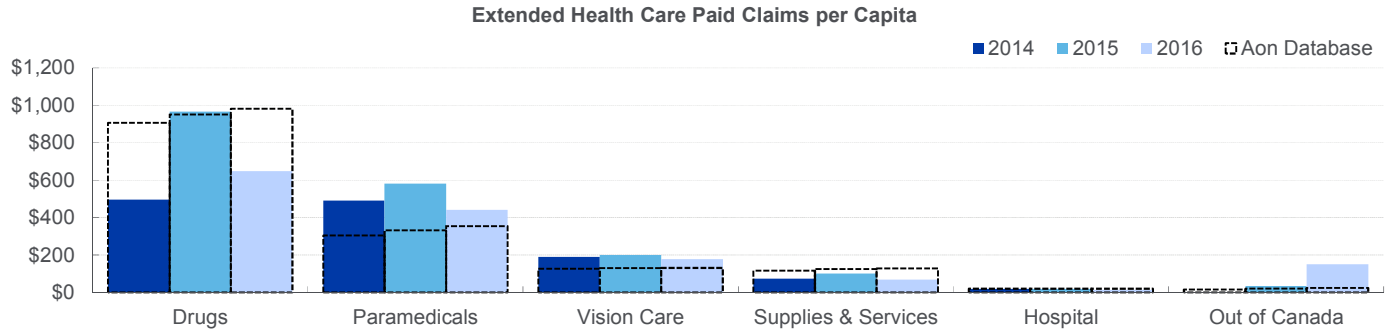
Period #1 costs reflect billed premium for the period March 1, 2014 to April 30, 2015 plus an
 estimate for May 2015

May 2015 billed premium was estimated based on April 30, 2015 billed premium

Costs exclude ORST

Period 4 costs = current month premium x 3 + renewal monthly premium x 9

... Renewal of Premium Rates



- Per capita drug claims are lower than the Aon databank, where as per capita paramedical claims are higher than the Aon databank
- This may be a reflection of UTRCA's wellness focus

- Paramedicals and Vision Care amounts paid per capita may also be a reflection of UTRCA's higher than Aon databank average maximums (\$600 per practitioner and \$300 vision care)

To: UTRCA Board of Directors
From: Ian Wilcox, General Manager
Date: June 2, 2017
Subject: Draft Levy Increase in Support of the 2018 UTRCA Budget

Agenda #: 6 (c)
Filename: ::ODM\AGR\WISE\UT_MAIN\UTRCA_PO.File_Centre_Library:117660.1

Recommendations:

1. That the Board of Directors approve a 2018 draft levy increase of 2.0% to account for cost of living and merit increases, and
2. That the Board of Directors approve a further 4.4% draft levy increase for implementation of the 2018 projected phase-in of costs in support of the Environmental Targets Strategic Plan. In total, the 2018 levy increase is proposed as a 6.4% levy increase, totaling \$392,679.
3. That the Board of Directors support scheduling of a September ½ day municipal budget workshop for politicians and senior staff in an effort to more directly engage this key partner earlier in the budget's development.

Discussion

Each June, the UTRCA Board of Directors is asked to approve a draft municipal levy rate for the upcoming budget year. This allows staff time to develop the full draft budget through the summer in anticipation of the Board's review in the early fall, followed by circulation to member municipalities for comment. This early draft approval is also necessary to support submission of the UTRCA's 2018 budget to the City of London which has a due date of July 15th.

Issues to consider for a 2018 draft levy rate and budget include:

1. The Board of Directors has an approved policy directing that the Consumer Price Index (CPI) be used as a guide for annual levy increases. Ontario's CPI for the period April 2016- April 2017 is 1.9%. It is therefore proposed that the 2018 salary grid be increased by 1.9%. An additional 0.1% levy increase is proposed for merit increases bringing the total levy increase for wages and benefits to 2.0%.
2. The UTRCA's Environmental Targets Strategic Plan was approved in June 2016. Phase I of levy funding was also approved for the 2017 budget year. Year II of the four year funding phase-in is now being requested in the amount of \$270,716 for 2018 as projected in the Strategic Plan. This equates to a 4.4% levy increase. Board members are referred to the approved Environmental Targets Strategic Plan for budget details (<http://thamesriver.on.ca/wp-content/uploads//Targets/EnvironmentalTargets-June2016.pdf>.)
3. The overall levy increase request for 2018 is 6.4% (wages, benefits and merit increase of 2.0% plus Environmental Targets Strategic Plan implementation at 4.4%).

4. As discussed last year, this proposed levy increase conflicts with direction received from the City of London. The City approved a four year budget in 2016 and set specific targets for boards and commissions. Funding for Conservation Authorities was to be limited to 1.5% annually. The UTRCA complied with this request in 2016. In 2016/17 meetings were held with most councilors to request a higher levy increase justified primarily by the Environmental Targets Strategic Plan. This was ultimately approved by council in 2017. City staff and council are anticipating a similar request from the UTRCA for 2018.
5. UTRCA staff are not aware of any other municipal budget targets at this time.
6. While not confirmed, provincial transfer payments for flood control are expected to remain at the same level for 2018 (there has been no increase since 1997).
7. Budget Workshop: Municipal feedback from the 2017 budget process (St. Marys and Perth South in particular) suggested consultation with municipalities earlier in the budget's development would be more effective. As a result, staff are recommending a ½ day budget workshop be hosted in early-mid- September to review the UTRCA's 2018 budget plans and levy in particular. An on-line input form is also anticipated. The voluntary workshop would be targeted to municipal politicians and senior staff and would ensure earlier municipal input for the Board's consideration in developing and approving a draft budget.

2018 Draft Budget: Proposed New Municipal Funding

Expenditure	Detail	Amount	Percent Increase
Wages, Benefits and Merit Increases	CPI April 2016-2017= 1.9% Merit Increase= 0.1%	\$121,963	2.0%
Environmental Targets Strategic Plan Implementation			
Hazard Management Implementation		\$121,716	4.4%
Water Quality Program Implementation		\$149,000	
Total		\$392,679	6.4%

Prepared and Recommended by:



Ian Wilcox

To: UTRCA Board of Directors

From: Chris Harrington, Manager Watershed Planning, Research and Monitoring

Date: June 15, 2017. **Agenda #:** 6 (d)

Subject: Conceptual Monitoring and Reporting Program - **Filename:** Admin
UTRCA Environmental Targets. **#2048**

Recommendation:

That the Board of Directors approves the conceptual monitoring and reporting program for Environmental Targets.

Discussion

The Environmental Targets Strategic Plan was approved by the UTRCA Board of Directors in June 2016. The need to monitor and report on progress related to these targets was also identified at this time and this report outlines the conceptual monitoring and reporting proposed to keep the Board and partners informed on progress related to the targets. These monitoring and reporting components will be integrated into work plans for each target to ensure they are clearly documented and planned. Each target will have specific measures defined to track progress on implementation and outcomes from the work that has been undertaken.

It is important to note that while new monitoring and reporting efforts will be developed for the Environmental Targets there is already monitoring undertaken by UTRCA staff to support this. The UTRCA Watershed Report Cards (<http://thamesriver.on.ca/watershed-health/watershed-report-cards/>) provide a good inventory of current monitoring undertaken to support tracking progress on UTRCA targets.

Monitoring Concepts:

A few key concepts are considered when determining a monitoring and reporting program for the UTRCA Environmental Targets.

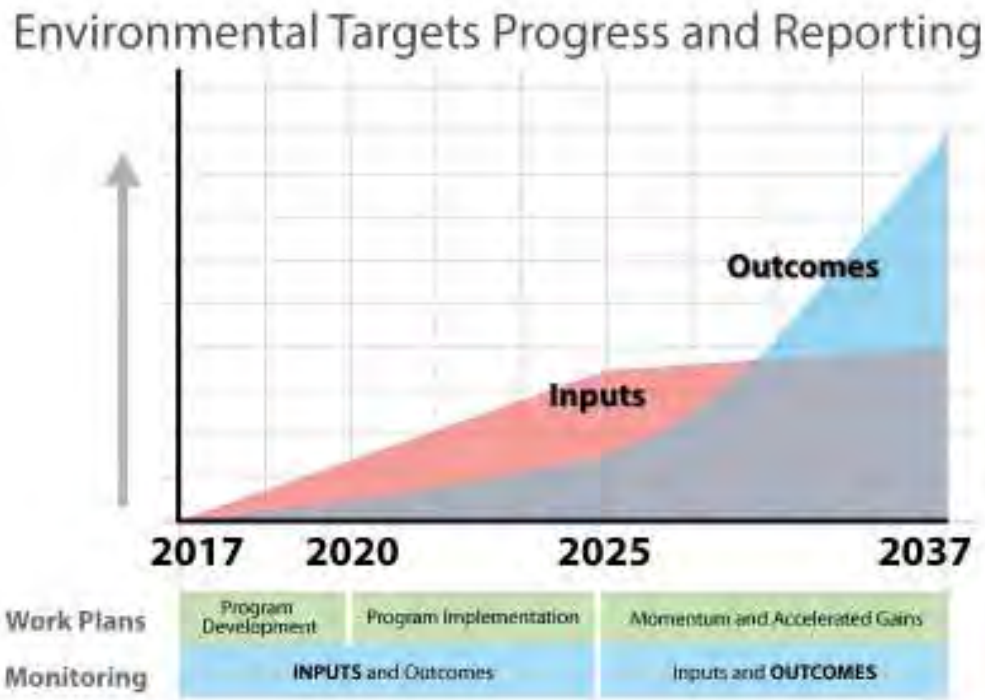
Outcomes: Ultimately the effort associated with the each target is to achieve desired outcomes (such as 1500 hectares of natural cover, water quality grade increase, 1 million visitors, etc.). Monitoring and reporting on these outcomes are the real measure of how well the targets are being met. Some outcomes will not be measurable in the early years of the expanded efforts related to the targets. For example, expanded planting programs to increase natural vegetation cover will not be mature identified early on in traditional monitoring techniques (air photo interpretation). It is anticipated that some outcome measures will be

limited in the early years of implementing the targets as the environment responds to inputs and result in measurable change.

Inputs: Outcomes are directly related to inputs over time that will form the expanded programs outlined by the targets. The need to report more frequently will mean monitoring and reporting on various inputs will be necessary. Included will need to be anticipated measures of how these inputs work towards the outcomes. For example, number of trees and area planted volume of stewardship projects or amount of resources dedicated.

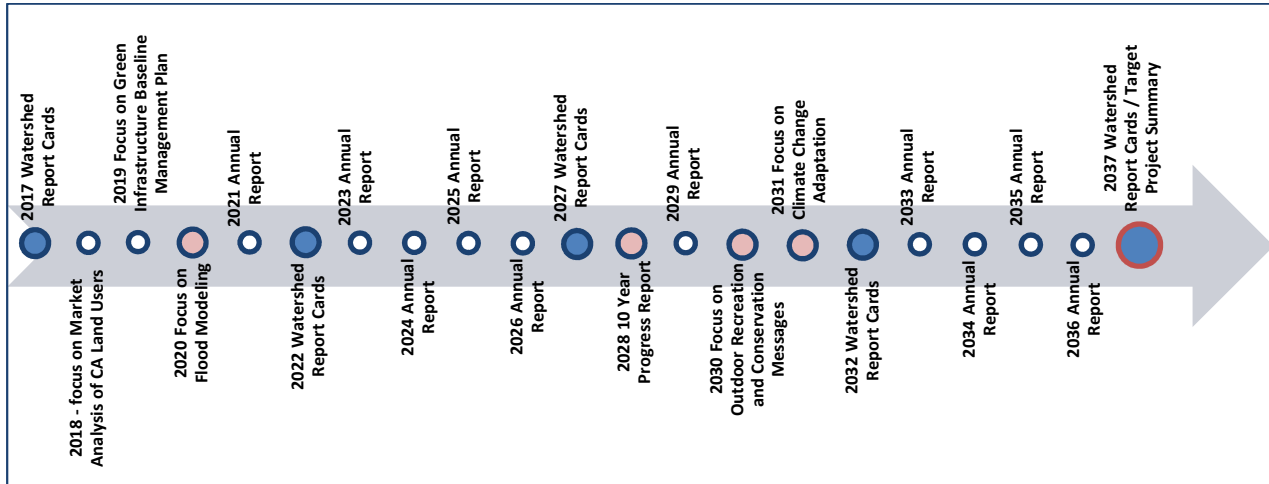
Data Custodianship: Identification of data custodians in the work plans for each target will also be required. This ensures the required monitoring is defined and appropriate staff is assigned. Data custodianship ensures that accountability is in place to ensure monitoring and reporting is adequately incorporated in the program. Appropriate data management tools to collect and store this information will be developed as needed by Information Management staff. For example, required tools that would facilitate spatial data collection using the UTRCA web mapping application, tools for electronic data collection in the field, a centralized database(s) to house monitoring information associated with each target, etc.

Inputs will be a key monitoring and reporting tool for some targets until as late as 2025. It is anticipated that outcomes will begin to be realized post 2025 with the majority of gains coming in the last 10 years of the 20 year plan. Efforts in the early years (4-7) will be on program development and focused on securing funding and phasing in work on each target. For some of the targets, during these early years it is not reasonable to expect significant change in outcome measures so the focus will be more related to input measures. Program implementation and uptake is expected to gradually increase during this time with impactful momentum anticipated by 2025 and growing thereafter up to the 2037 target date.



Timelines –Annual and Milestone Reporting:

Annual reports will be developed that summarize the monitoring data and progress each year at the annual general meeting for all targets. Key audiences for annual reporting will be the UTRCA Board of Directors, member municipalities and project partners. The focus of these reports will shift to include more detail on target milestones or existing traditional reporting schedules when appropriate. For example, traditional Watershed Report Cards will serve to best identify progress related to Water Quality and Natural Cover target outcomes. Milestones can also reflect phases of projects such as the first phase of the flood and erosion target to complete updated flood models by 2020 and larger progress report in 2027 reflecting the half way point on the targets timeline.



Monitoring by Target:

Monitoring associated with each target is identified in the table below. Included are monitoring that look at both inputs and outcomes as described above. The elements identified here for each target will be further detailed in the work plans for each target.

Improve each subwatershed’s water quality score by one grade, as measured by UTRCA Watershed Report Cards, by the year 2037.		
Monitoring Outcomes	Monitoring Inputs	
Watershed Report Card Grades on 5 year cycles including a summary of progress towards meeting this target for each of the 28 UTRCA subwatersheds.	<p>Activities:</p> <p>Rural Stewardship Program</p> <ul style="list-style-type: none"> Monitoring to provide summary of stewardship project uptake anticipated impacts to water quality. <p>Urban Stewardship Program</p> <ul style="list-style-type: none"> Scope and design a monitoring program to measure the impact of projects on stormwater quality and quantity combined with methods to tally and promote impacts of completed projects. <p>Stream Corridor Enhancement</p> <ul style="list-style-type: none"> Quantify enhancement work and anticipated water quality improvements. 	<p>Funding / Resources:</p> <p>Report on secured funding to support stewardship and enhancement efforts. Including phase in of levy support, leveraged contract funding and direct landowner contribution associated with target related project work.</p>

Establish and restore 1,500 hectares of natural vegetation cover, windbreaks and buffers by 2037.

Monitoring Outcomes	Monitoring Inputs	
<p>Measure of natural vegetation cover as identified through air photo interpretation on 5 year air photography cycles to track and quantify overall gains or losses.</p>	<p>Activities: Increase Outreach and Double Planting and Restoration Programs</p> <ul style="list-style-type: none"> • Spatially track on-the-ground projects and summarize annually. • Track and summarize outreach efforts including landowner visits, workshops, tours, articles, videos and social media. <p>Advocate for Natural Heritage Protection and Restoration</p> <ul style="list-style-type: none"> • Track advocacy related works in a database, such as completion of NH studies, bylaws created that we advocate for, planting compensations we are successful in getting, new BMP development, etc. 	<p>Funding / Resources: Report on secured funding to undertake planting and restoration efforts coupled with related staffing resources. Including breakdown of levy funding, leveraged contract funding and landowner contribution associated with target related project work.</p>

Reduce flood and erosion risk by updating flood models and hazard mapping for all UTRCA subwatersheds by 2020, then integrating climate change scenarios into the updated models and developing climate change adaptation strategies by 2030.

Monitoring Outcomes	Monitoring Inputs	
<p>Measure of progress toward updated models and hazard mapping</p> <ul style="list-style-type: none"> • Geographic extent (such as reach length, sub watershed, etc.) • Stages/tasks/activities completed within the geographic extent (such as base mapping, hydrology, hydraulics, mapping, consultation acceptance, etc.) • Utilize the same metric for monitoring progress on using the models for assessing the climate change impacts and adaptation strategies. 	<p>Activities: Report on</p> <ul style="list-style-type: none"> • staffing resources utilized in accomplishing the targets • technical advancement facilitating or challenging progress • Policy and documentation development 	<p>Funding / Resources: Report on funding utilized to undertake the work. Reporting would include breakdown of source of funding (levy funding, contract, other government funding).</p>

Reach 1 million people annually with conservation messages through access to UTRCA lands and demonstration of green infrastructure by the year 2030.

Monitoring Outcomes	Monitoring Inputs	
<p>Annual summary of attendance and periodic survey to determine influence on understanding and behavior change.</p>	<p>Activities:</p> <p>Market Analysis</p> <ul style="list-style-type: none"> • Baseline understanding of clients (demographics, interests), outdoor recreational trends and existing conservation message and green infrastructure opportunities on CA owned or managed lands. • Inventory all attributes of CA owned and managed lands for interpretive and green infrastructure potential. • Prioritize programming / facility needs based on research results, community input and CA messaging. <p>Develop and implement property specific marketing and education Plans</p> <ul style="list-style-type: none"> • Track completion of marketing and education plans by individual CA owned or managed lands. <p>Develop and implement a green infrastructure plan with the goal of using CA lands as demonstration sites for interpretation and to model behaviour.</p> <ul style="list-style-type: none"> • Inventory of defined green infrastructure opportunities by property. • Quantify Green Infrastructure project implementation, budget, return on investment and transferability to other UTRCA owned or managed lands. <p>Develop and implement instruments to measure attendance and uptake of conservation messages.</p>	<p>Funding / Resources:</p> <p>Track and report on secured funding to support staffing to undertake market analysis, coordinate the development of the green infrastructure plan and contract expertise to develop measurement tools. Including breakdown of levy funding and leveraged contract funding associated with the target work plan.</p>

Next Steps:

This report presents the conceptual monitoring program associated with the UTRCA Environmental Targets. Details associated with monitoring efforts associated with each target will be incorporated into each target work plan. Developing the appropriate tools (e.g., databases, GIS, in-field data collection, etc.) will be undertaken to facilitate comprehensive monitoring and information management. Reporting products that will encompass the outlined monitoring will be developed annually and presented to the UTRCA Board of Directors, project partners and the public, where appropriate. The content and format of this reporting will be subject to refinement over time to reflect current trends, milestones and issues.

Prepared and Recommended by:

A handwritten signature in black ink, appearing to read "Chris Harrington". The signature is written in a cursive style with a large, prominent initial "C".

Chris Harrington
Manager Watershed Planning, Research and Monitoring

To: Chair and Members of the UTRCA Board of Directors
From: Tracy Annett, Manager – Environmental Planning and Regulations
Date: June 15, 2017 **Agenda #:** 8 (a)
Subject: Administration and Enforcement – Sect. 28 Status Report – **Filename:** Document
Development, Interference of Wetlands and Alteration to **ENVP 4754**
Shorelines and Watercourses Regulation

This report is provided to the Board as a summary of staff activity related to the Conservation Authority's *Development, Interference of Wetlands and Alterations to Shorelines and Watercourses Regulation* (Ont. Reg. 157/06 made pursuant to Section 28 of the Conservation Authorities Act). The summary covers the period from May 11, 2017 to June 14, 2017.

Application #170/16

Municipality of Middlesex Centre

Landsdowne Pk #2 Drain

- spot cleanouts requested due to the classification the cleanout request
- proposed cleanout of 643 metres of a Class D drain
- UTRCA permit, signed notification form, and SCR for bottom and spot cleanouts issued May 23, 2017

Application #171/16

Municipality of Middlesex Centre

Komoka Drainage Works No. 3

- proposed bottom clean out 760 metres of a class F drain
- UTRCA permit, signed notification form, and SCR for bottom and spot cleanouts issued May 23, 2017

Application #33/17

Municipality of Middlesex Centre

Line 4 at 19 Creek – Municipality of Middlesex Centre

- proposed bridge rehabilitation crossing Medway Creek
- plans prepared by B.M. Ross and Associates Limited.
- staff approved and permit issued June 6, 2017.

Application #34/17

Township of Perth South

Line 4 at 19 Creek – Township of Perth South

- proposed bridge rehabilitation crossing 19 Creek (Berry Municipal Drain).
- plans prepared by B.M. Ross and Associates Limited.
- staff approved and permit issued May 29, 2017.

Application #49/17

Dancor Construction Limited

1205 Green Valley Road – City of London

- proposed construction of transport truck “cross dock facility”
- plans prepared by Development Engineering (London) Limited and Insite Landscape Architects Inc.
- staff approved and permit issued June 12, 2017

Application #56/17

Municipality of Thames Centre

Dorchester Mill Pond – Municipality of Thames Centre

- proposed trail remediation and stabilization adjacent the Dorchester Mill Pond via the installation of five sections of “bio-engineering” cribwalls.
- plans prepared by Brad Glasman of the UTRCA
- staff approved and permit issued June 1, 2017.

Application #60/17

Township of Zorra

Perth-Oxford Road at Trout Creek –Township of Zorra

- proposed bridge rehabilitation crossing Trout Creek.
- plans prepared by Strik, Baldinelli, Moniz Limited.
- staff approved and permit issued June 6, 2017.

Application #62/17

Mornington Communications

Line 47 and Road 119 – Township of Perth East (North Easthope)

- proposed fibre optic cable/conduit installation undercrossing the Northern Drainage Works and the South Branch of the Northern Drainage Works.
- plans prepared by Mornington Communications including hydro-fracture contingency plans as installation will be via high pressure directional drilling.
- staff approved and permit issued May 17, 2017.

Application #63/17

Edwin Kelly

10821 Old River Road – Municipality of Middlesex Centre

- proposed house repairs, septic system installation, trenching and backfilling for hydro/cable lines.
- plans prepared by BOS Engineering.
- staff approved and permit issued May 24, 2017.

Application #64/17

2495939 Ontario Inc.

24 Lansdowne Park Crescent – Municipality of Middlesex Centre

- proposed residential driveway for access to a proposed single family residence, associated septic system, stable and manure storage.
- plans prepared by R Dobbin Engineering Inc.
- staff approved and permit issued June 5, 2017.

Application #68/17

Bayhill Homes Ltd.

1934 Waterloo Drive – City of London

- proposed house and deck construction within regulated area
- plans included lot grading plan by AGM Engineering
- staff approved and permit issued May 11, 2017

Application #69/17

City of London

Kilally Road at Webster Street – City of London

- road upgrades required along section of Kilally Road in anticipation of new residential development in vicinity
- engineering plans prepared by Development Engineering (London) Limited
- staff approved and permit issued May 12, 2017

Application #70/17

Dan DeLoyer

4972 Line 36, Lot 29, Concession 2 – Perth East - Ellice

- proposed enclosure of approximately 900 metres of a class C drain
- staff approved and permit issued May 24, 2017.

Application #71/17

William van Straaten

Lot 12, Concession 1 – Township of Perth East

- proposed earthen berm, livestock barn and associated (sub-floor) manure storage.
- plans prepared by landowner and N A Geomatics in accordance with location and mitigation measures agreed to on site between landowner(s) and UTRCA staff.
- staff approved and permit issued June 12, 2017.

Application #72/17

Neil Elhayek

1697 Trafalgar St. – City of London

- approval required for placement of fill in area for playground installation
- staff approved and permit issued May 18, 2017

Application #74/17

Municipality of Thames Centre

Risdon Drain

- proposed cleanout of 1250 metres of a Class F drain
- spot cleanout requested due to length of work
- UTRCA permit, signed notification form, and SCR for bottom and spot cleanout issued May 30, 2017

Application #77/17

Rembrandt Homes

Commissioners Road East – City of London

- development of Meadowlark Ridge Subdivision adjacent to Meadowlily Environmentally Significant Area (ESA)
- plans prepared by LDS Consultants Inc.
- staff approved and permit issued May 26, 2017

Application #79/17

Municipality of Middlesex Centre

Ross-Moir Drain

- new tile drain and new road crossing on Ten Mile Road under engineer's report
- UTRCA permit issued May 27, 2017

Application #80/17

Township of Zorra

Ross Branch of the Quinn Drain

- 2850 metres of a new closed tile partially through a non-evaluated wetland, plus one road crossing under engineer's report
- UTRCA permit issued May 30, 2017

Application #81/17

Trevalli Homes Ltd.

Lot 1 (#259), Wedgewood Drive – City of Woodstock

- proposed single family residence and attached garage adjacent Sally Creek.
- site plans prepared by Van Harten Surveying Inc. in accordance with approved subdivision plan.
- staff approved and permit issued June 1, 2017.

Application #85/17

City of London

Westminster Ponds/Pond Mills ESA – City of London

- proposed trail upgrades in this heavily used ESA
- plans in accordance with City of London TAG (Trails Advisory Group) recommendations
- staff approved and permit issued June 9, 2017

Application #86/17

Toyota Motor Manufacturing Canada Inc.

1717 Dundas Street, 715134 Oxford Road 4 – City of Woodstock

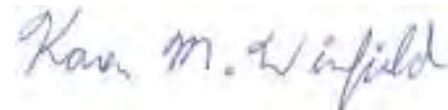
- proposed creation of approximately 1.6 km of a trail loop consisting of a combination of limestone screenings, existing (natural) surfaces and approximately 90 metres of boardwalk.
- plans prepared by Brad Hertner of the UTRCA
- staff approved and permit issued May 30, 2017

Reviewed by:



Tracy Annett, MCIP, RPP, Manager
Environmental Planning and Regulations

Prepared by:



Karen Winfield
Land Use Regulations Officer



Mark Snowsell
Land Use Regulations Officer



Brent Verscheure
Land Use Regulations Officer



Cari Ramsey
Env. Regulations Technician

To: UTRCA Board of Directors
From: Tracy Annett, Manager Environmental Planning & Regulations
Date: June 12, 2017 **Agenda #:** 8 (b)
Subject: Court of Appeal Decision - Gilmor **Filename:** ::ODMA\GRPWISE\UT_MAIN.UT
RCA_PO.ENVP:4751.1

On May 23, 2017, the Court of Appeal for Ontario released its decision on the Gilmor v. Nottawasaga Valley Conservation Authority (NVCA). The ruling set aside the Divisional court decision in its entirety and the court reinstated the Commissioner's decision. This is very good news for Conservation Authorities and reinforces our role and past practices.

Conservation Ontario:

The attached Memo was provided to General Managers, *Re: Gilmor v. Nottawasaga Valley Conservation Authority*, dated May 23, 2017.

Background

The Gilmor et al vs. NVCA case is based on the following:

- The Gilmors, without receiving a Conservation Authorities Act Permit, began to construct a single family home in the flood plain
- The Gilmors were denied a permit by the Authority's Board of Directors (Hearing Committee) on the basis that the 'proposed' new house was located in the floodway subject to approximately 1m of flooding depth. In addition, there was no safe access or egress as the driveway would be inundated by 0.5 to 0.8m of water.
- NVCA was supported by the Township of Amaranth, who did not issue a building permit for the construction.
- The Gilmors appealed to the Mining and Lands Commissioner but lost the appeal. The Commissioner concluded that due to safety and property damage concerns the development was not appropriate and did not meet the tests under the *Conservation Authorities Act* and Regulation 172/06 (NVCA's Regulation). The decision can be found at: <http://www.web2.mnr.gov.on.ca/mnr/omlc/Alex-Gilmor-v-NVCA-Amaranth-July30-2014.html>
- The Gilmors appealed to the Divisional Court and were successful. The decision of the Deputy Mining and Lands Commissioner was reversed. The decision can be found at: <http://www.ontariocourts.ca/search-canlii/scj/dv-en.htm>

Since October 2015 the following occurred:

- The NVCA moved forward with the request for an appeal (Request for Leave to Appeal the Divisional Court Decision to the Ontario Court of Appeal) based on what the NVCA believed were five errors made by Divisional Court:
 1. That the Court applied the wrong standard of review –it applied the test of correctness and not one of reasonableness;

2. That the Court narrowly interpreted the Authority's power "control of flooding" and failed to apply the broad interpretation of the Conservation Authorities Act and of Regulation 172/06;
 3. That the Court wrongly confined the Authority's jurisdiction and failed to appreciate that safety considerations fell under the phrase 'control of flooding' and that a Conservation Authority does indeed have the power to deny a permit on the basis of safety to a land owner who seeks to develop in the flood plain;
 4. That the Court erred in concluding that the MLC Commissioner misinterpreted sections 2 and 3 of Ontario Regulation 172/06; and
 5. That the Court misapprehended the testimony and wrongly substituted its view rather than allowing the Commissioner, a specialized tribunal with expertise in the subject matter, to make the decision.
- The Canadian Institute for Property Rights Advocacy and David Guergis also sought intervenor status but were denied,
 - Ministry of Natural Resources and Forestry was granted intervenor status,
 - Conservation Ontario was granted intervenor status,
 - Hearing was held on December 20, 2016, and
 - The Ontario Court of Appeal issued their Decision on May 23, 2017. The appeal was allowed and the Commissioner's decision was reinstated. The decision is available online at <http://www.ontariocourts.ca/decisions/2017/2017ONCA0414.pdf>.

Conservation Ontario is currently preparing a detailed Factsheet for distribution. In addition, a report outlining further recommendations related to the decision will be considered by Conservation Ontario Council this month. As information is provided from Conservation Ontario it will be distributed to the Board for information.

Prepared by:



Tracy Annett, MCIP, RPP
Manager, Environmental Planning and Regulations

Attachment:

Conservation Ontario Memo provided to General Managers, *Re: Gilmor v. Nottawasaga Valley Conservation Authority*, dated May 23, 2017



May 23, 2017

Re: Gimor v. Nottawasaga Valley Conservation Authority

To: CA General Managers

The Court of Appeal for Ontario released its decision today on the Gilmore case. In its unanimous decision, the appeal was allowed and the court reinstated the Commissioner's decision. It was a very strong ruling which set aside the Divisional court decision in its entirety.

In its reasons for the decision, the court noted that the *Conservation Authorities Act* (and associated regulations) may be regarded as one of the Commissioner's several "home acts"; that the Commissioner's interpretation of O. Reg. 172/06 (the NVCA's individual regulation) is reasonable and that it accords with the plain meaning of the relevant sections.

The decision further delved into a discussion about the CA role in public safety. It states that "the suggestion that CAs (and the Commissioner) are usurping municipalities' decision-making authority concerning public safety must be rejected".

Finally, with regard to the relationship between S. 2 and S. 3 of the Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses the court ruling indicated that the "Divisional Court's interpretation – that s. 3 is a condition precedent to the operation of the prohibition in s. 2 – is counterintuitive given the structure of the regulation. Moreover, it appears to overlook O. Reg. 97/04, which specifically requires the NVCA regulation to prohibit development". Further, discretion under S. 3 of the regulation may be exercised on the basis of safety concerns and CO's submission that the Commissioner's decision was consistent with the approach overwhelmingly applied by that Tribunal in similar cases, as well as the approach shared by conservation authorities across the province supports this. In summary, "it was open to the Commissioner to take safety considerations into account in determining whether to exercise the discretion under S. 3 to permit development on the floodplain. The prohibition on development in s. 2 of the regulation – common to the regulations of conservation authorities across the province – reflects a strategy of directing development away from floodplains".

To: UTRCA Board of Directors

From: Ian Wilcox

Date: June 12, 2017

Subject: 2017 Biennial Tour

Agenda #: 8 (c)

Filename: P:\Users\viglianti\Documents\GroupWise\2035-1.doc

Recommendation:

That Board Members interested in attending the four day Biennial Tour (Oct. 1-4) notify Michelle Viglianti by July 14th so that early registrations can be submitted.

Background

Every two years a Conservation Authority hosts a Biennial Tour of its watershed with invitations directed at other Conservation Authority Staff and Board Members. The 2017 Biennial Tour is being jointly hosted by Credit Valley Conservation and Conservation Halton and it will run from the evening of Sunday, October 1st until the morning of Wednesday, October 4th. An overview of the Tour is attached.

Interested Board Members are invited to join a small group of UTRCA Staff and attend the Biennial Tour. The full cost of the Tour is \$750 per person for registration, accommodation and meals, which will be covered through the Authority budget. Unfortunately, there seems to be no opportunity for partial attendance.

Recommended by:



Ian Wilcox

Prepared by:



Michelle Viglianti



CREDIT VALLEY
CONSERVATION

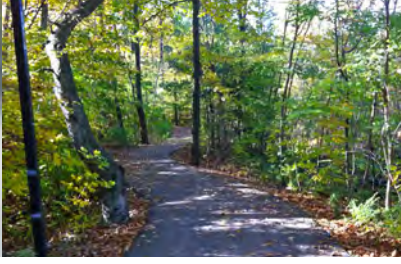


Conservation
Halton



2017 CONSERVATION AUTHORITIES
Biennial Tour

growing TODAY
PROTECTING *tomorrow*



Rattray Marsh Conservation Area

Jack Darling Park

Cooksville Creek Trail

HL Blachford

Sunday, October 1

TIME	LOCATION	ACTIVITY
6:00pm-10:00pm	Holiday Inn Oakville Centre	Dinner/Presentation Keynote Speaker The Honourable David Crombie, former Mayor of Toronto and Officer of the Order of Canada Welcoming Remarks from Don MacIver, Mayor of Amaranth and CVC Vice Chair

Monday, October 2

TIME	LOCATION	ACTIVITY
8:15am-8:30am	Holiday Inn	Depart Hotel
8:30am-9:00am	HL Blachford	STOP 1: Greening Corporate Grounds H.L. Blachford joined CVC's Greening Corporate Grounds program in 2013. H.L. Blachford is a founding member of the Chemistry Industry Association of Canada (CIAC) and has been committed to Responsible Care® since its inception in 1985. They have committed to substantial ecological landscaping and forest management projects on their site that will provide habitat for migratory birds and improve the overall biodiversity on industrial lands near the shoreline. They are into the third year of their forest management plan.
9:15am-10:45am	Rattray Marsh Conservation Area	STOP 2: Conservation Area Restoration and Management Opening remarks by Jean Williams, Chair of the Rattray Marsh Protection Association. Rattray Marsh Conservation Area located on the Mississauga waterfront is the last remaining baymouth bar coastal wetland on the western end of Lake Ontario. It is a centre for biodiversity and CVC's most heavily visited Conservation Area. CVC staff will present on a series of topics including marsh restoration in 2014 and 2015; ongoing management of emerald ash borer; CVC lands monitoring program including an innovative trail assessment process; Rattray Marsh as a Centre for Biodiversity; and overall monitoring initiatives related to Rattray Marsh.
11:00am-11:30pm	Jack Darling Park	STOP 3: Prairie Restoration and Prairie Wildflower Garden After discovering prairie plants growing naturally in the park in 1996, the City of Mississauga has worked to restore tallgrass prairie to the site, engaging volunteers to plant thousands of prairie plants over several years. The area is managed using prescribed burns to prevent the growth of woody and invasive plants. In 2013, CVC and the City partnered to create a prairie wildflower garden to demonstrate how selected prairie plants can be grown in more formal home landscapes.
		Enroute: Video "Lake Ontario Shoreline, Under Stress" narrated by Robert Bateman
12:00pm-12:30pm	Unitarian Congregation	STOP 4: Greening Corporate Grounds The Unitarian Congregation in Mississauga (UCM) has been an active participant in the CVC's Greening Corporate Grounds program since 2010 and has transformed a former farm field into a series of demonstration gardens. The gardens show members and visitors how ecological landscaping can be incorporated on small and large scale sites. UCM volunteers host planting and maintenance events several times a year. They also hire summer students interested in environmental studies to maintain and report on the projects.
12:30pm-1:45pm	Unitarian Congregation	Lunch
1:45pm-2:00pm		Enroute: Hurontario LRT Hurontario LRT will be a leading edge transportation link that spans Mississauga, connecting two major transit hubs within the region. CVC, Mississauga and Metrolinx are working closely to optimize the project with updates to stormwater infrastructure and multi-modal transportation. Together, this project will exemplify the "complete streets" approach to design.



Boyne Framgard Pond



Iroquois Lake Shoreline



Paisley Boulevard

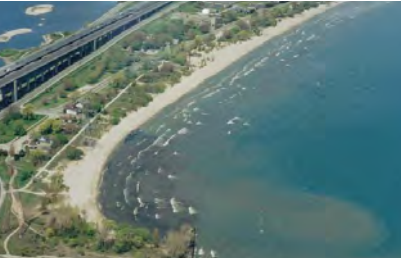


Lakeside Park

TIME	LOCATION	ACTIVITY
2:00pm-2:30pm	Paisley Boulevard	<p>STOP 5: Real-time Monitoring Network</p> <p>CVC's real-time water quality monitoring network will be showcased with a demonstration of how this network is helping CVC and its stakeholders to understand climate change and urban related water quality challenges. Region of Peel staff will also discuss the importance of this initiative in the context of the Region's work related to climate change mitigation and adaptation.</p>
3:00pm-4:15pm	Sheridan Science and Technology Park	<p>STOP 6A and 6B: Sheridan Creek Subwatershed Study</p> <p>IMAX Corporation</p> <p>In 2012 IMAX retrofitted its parking lot with a variety of innovative low impact development (LID) stormwater management technologies. These technologies collect, absorb and filter pollutants from stormwater runoff before it is discharged into Sheridan Creek, Rattray Marsh and eventually Lake Ontario. The IMAX parking lot retrofit was completed in partnership with CVC as part of the Province of Ontario's Showcasing Water Innovation (SWI) program.</p> <p>VALE</p> <p>The Vale naturalization project was started in 2009 in consultation with CVC. Its focus is the health of the Sheridan Creek Watershed and what actions can be taken to improve it. The property is now home to a 3.5 ha naturalization project designed and maintained by Blue Oak Native Landscapes.</p>
4:30pm-5:00pm	Lakeside Park	<p>STOP 7: Park Master Plan and Low Impact Development</p> <p>Lakeside Park is located on the Lake Ontario shoreline and is co-owned by CVC and the City of Mississauga. CVC staff will highlight LID techniques implemented at the park. CRH Canada will summarize on-site research related to permeable paving. In addition, a City of Mississauga representative will discuss the development and implementation of the Lakeside Park Master Plan.</p>
5:15pm-6:15pm	Harding Waterfront Estate	<p>STOP 8: Wine and Cheese</p> <p>An opportunity to view various projects and programs, while enjoying cocktails before dinner. This event is held at the Harding Estates that bisects CVC and Conservation Halton's jurisdictions and affords scenic views of Lake Ontario.</p>
6:30pm-8:00pm		<p>Dinner/Presentation</p> <p>Guest Speakers John Pontarollo, Sr. Vice President, Great Lakes and Western Canada Region, CRH Canada Inc. and representative from the Conservation Youth Corps.</p>

Tuesday, October 3

TIME	LOCATION	ACTIVITY
8:00am	Holiday Inn	Depart Hotel
8:15am-8:45am	Boyne Framgard Storm Water	<p>STOP 1: Tour of Stormwater Management Pond</p> <p>The pond is located at the northwest corner of Britannia and Hwy 25. It treats drainage from the Mattamy Framgard subdivision as well as the majority of the Country Homes West subdivision. Total drainage area is approximately 35 ha. It's designed to provide Level 1 Enhanced quality control, meet targets (flow and volume) for erosion control and quantity control (25 yr, 100 yr and Regional storm). It discharges to a tributary of 16 Mile Creek. Flows are dissipated into the newly realigned channel via a structure known as an offline stone-cored wetland.</p>



Burlington Beach



Dufferin Quarry



Kelso Dam



Crawford Lake Conservation Area

Tuesday, October 3 continued...

TIME	LOCATION	ACTIVITY
9:00am–11:30am	Dufferin Milton	<p>STOP 2: Tour of Quarry</p> <p>Rehabilitation within Dufferin Aggregates' Milton Quarry has been developing an attractive new landscape over the past 10 years. The landscape includes cliff faces, shorelines, wetlands, and islands, and represents the first two phases of progressive rehabilitation of the quarry. Since 1992, the company has been developing and implementing a monitoring program to evaluate the results. The program documents natural regeneration of vegetation, survival and growth of transplanted trees and shrubs, a bird census, and baseline aquatic and soil conditions. The site provides wildlife habitat and offers opportunities for demonstration, research, monitoring, education and land sharing.</p>
11:40am–12:10pm	Kelso Conservation Area	<p>STOP 3: Tour of Kelso Dam</p> <p>Originally built in 1962, the Kelso Dam is currently undergoing repairs to provide energy dissipation at the outlet and mitigate a siltation plume caused by a boil (upwelling) that was noticed by staff in June of 2015.</p>
12:30pm–1:30pm	Lowville Golf Course	<p>Lunch/Presentation</p> <p>Glenorchy Conservation Area in Oakville has been the site of significant ecological restoration efforts since its establishment in 2008. Learn more about this important 401 ha natural area, which is managed by Conservation Halton and owned by the Province.</p>
1:40pm–2:30pm	Crawford Lake Conservation Area	<p>STOP 4: Tour of Longhouses and Iroquoian Village or Lake Tour</p> <p>Crawford Lake is home to an Iroquoian Village that sees over 100,000 visitors annually including 30,000 school children. The newest addition is the state of the art Deer Clan Longhouse that was recently completed in 2014. Participants will be given the opportunity to tour the village or visit the rare Meromictic Lake.</p>
3:00pm–4:00pm	Burlington Beachway Park	<p>STOP 5: Tour of Beach</p> <p>Burlington Beach is a premier park which draws visitors from throughout the region. The park is comprised of two unique city parks.</p>
4:00pm–4:30pm		Free time to walk the waterfront
4:30pm	Spencers at the Waterfront	<p>Dinner/Presentation</p> <p>Hear from members of the C2E team as they share the history of this area and plans for the future protection of these valuable natural areas.</p>
7:00pm	Holiday Inn	Bus Pick Up for those wishing to return to the hotel.

Wednesday, October 4

TIME	LOCATION	ACTIVITY
8:00am	Holiday Inn	Breakfast/Closing Remarks

To: UTRCA Board of Directors
From: Ian Wilcox, General Manager
Date: June 8, 2017
Subject: Bill 139- Proposed Changes to the Conservation Authorities Act

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Bill 139, the Building Better Communities and Conserving Watersheds Act, was introduced to the Legislature for first reading on May 30th, 2017. This Bill includes the long anticipated proposed changes to the Conservation Authorities Act.

On the surface most changes appear positive and will strengthen the Conservation Authority's role in Ontario through clearer language regarding purpose and funding, and improved accountability, while tidying up several nuisance housekeeping matters. However, many details remain to be clarified. The Bill is posted at http://www.ontla.on.ca/bills/bills-files/41_Parliament/Session2/b139_e.pdf

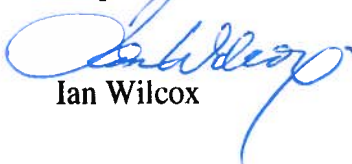
A companion document 'Conserving our Future: A Modernized Conservation Authorities Act' was released by the Ministry of Natural Resources and Forestry on June 14, 2017 and outlines the suite of legislative, regulatory, policy and program changes proposed to be made as a result of the review. This document is an easier read but still comprehensive summary of proposed changes and can be found at <http://apps.mnr.gov.on.ca/public/files/er/mnrf-17-044-conserving-our-future-en.pdf>

Conservation Ontario (CO) is taking the lead in completing a full review of both the Bill and the "Conserving Our Future" document. A small staff committee has been working with the Minister's Office to understand the proposed changes and to explore the implications for individual Conservation Authorities. Conservation Ontario is working towards a full report for the June 26th Conservation Ontario Council meeting. Rather than duplicate CO's efforts or commission our own legal evaluation of the Bill, staff plan to wait for a summary from Conservation Ontario and will share this with UTRCA Board Members as soon as it's available.

Public comments regarding the Act's proposed changes are being requested through the provincial Environmental Registry with a deadline of July 31, 2017. It is expected Conservation Ontario will take the lead in gathering comments from individual Conservation Authorities, forming key messages, and submitting them on our behalf. The UTRCA intends to reinforce CO's messaging through its own submission.

A CO fact sheet is attached that describes the Conservation Authorities Act review process and Bill's introduction.

Prepared by:


Ian Wilcox



Conservation Authorities Act Review – Proposed Amendments Bill 139 – Building Better Communities and Conserving Watersheds Act (2017)

What is the name of the Bill?

Bill 139, the *Building Better Communities and Conserving Watersheds Act, 2017* was introduced into the legislature and passed First Reading on May 30, 2017. The Bill proposes amendments to the *Conservation Authorities Act* and can be viewed at http://www.ontla.on.ca/bills/bills-files/41_Parliament/Session2/b139_e.pdf

Bill 139 is an ‘omnibus bill’ which groups various Acts to be amended including the *Conservation Authorities Act*. In addition to other Acts, the Bill also encompasses changes to the *Planning Act* and proposes replacing the Ontario Municipal Board with a new Local Planning Review Tribunal.

Conservation Authorities and Conservation Ontario are focused on **Schedule 4** of Bill 139 which refers to the *Conservation Authorities Act*.

Bill 139 is on the Orders and Notices Paper for the next session of Parliament scheduled to commence Monday, September 11, 2017. It joins approximately 72 other Bills that will start at the Second Reading stage.

The Province’s media release about the Bill can be read here: <https://news.ontario.ca/mma/en/2017/05/building-better-communities-and-conserving-watersheds.html>

When will the Bill be enacted?

The Bill has to pass through two more readings in the legislature before it could be enacted which could take place during the next sitting of the Legislature which starts September 11, 2017. During this time, it will be debated by Members of the Legislature and could be referred to a Standing Committee for a ‘clause by clause’ review.

What is the policy document still to be posted?

In the coming weeks the Province will be posting *Conserving our Future: A Modernized Conservation Authorities Act* that supports the Bill by describing the changes being proposed and other policy and program changes resulting from the review. Members will be circulated the document as soon as it is available on the Environmental Bill of Rights registry.

What are the objectives of the proposed changes?

The Province states that the proposed changes will modernize the *Conservation Authorities Act* framework by:

- Strengthening oversight and accountability.
- Increasing clarity and consistency in programs and services.
- Increasing clarity and consistency in regulatory requirements.
- Improving collaboration and engagement.
- Modernizing funding mechanisms.

What are the proposed amendments to the *Conservation Authorities Act*?

Bill 139: *Building Better Communities and Conserving Watersheds Act*, 2017,

In its “explanatory note” for the amendments, the Province posted the following information on the Legislative Assembly of Ontario website

http://www.ontla.on.ca/web/bills/bills_detail.do?locale=en&Intranet=&BillID=4936 :

Schedule 4:

The Schedule makes numerous amendments to the *Conservation Authorities Act*. In addition to many housekeeping amendments, the Schedule makes more significant amendments as follows:

1. A new purpose section (section 0.1) is added to the Act.

From the proposed amended CA Act: “The purpose of this 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.”

2. Enlargement of the area of jurisdiction of an authority, the amalgamation of authorities and dissolution of an authority

Various amendments are made in relation to the enlargement of the area of jurisdiction of an authority, the amalgamation of two or more authorities and the dissolution of an authority (sections 10, 11 and 13.1), including amendments relating to the notice that is required before some of these events can occur. Also, the amendments to section 11 add a requirement for the Minister’s approval of any amalgamation of two or more authorities.

3. Membership and governance of authorities

Some amendments are made in relation to the membership and governance of authorities (sections 14 to 19.1). The rules relating to the appointment and term of office of members of an authority are clarified. The maximum term of office of a member is increased from three to four years.

A requirement that meetings of the authority be open to the public is added, subject to exceptions that may be provided in an authority’s by-laws.

Authorities are required to establish advisory boards in accordance with the regulations.

A new section 19.1 is enacted setting out the power of an authority to make by-laws in relation to its governance, including its meetings, employees, officers and its executive committee. Many of these powers were previously regulation-making powers that the authorities held under section 30 of the Act. The Minister may direct an authority to make or amend a by-law within a specified time. If the authority fails to do so, the Minister has the power to make a regulation that has the same effect as the by-law was intended to have.

4. Objects, powers and duties of authorities

Amendments are made to the objects, powers and duties of authorities (sections 20 to 27.1) in particular their powers in relation to programs and services and in relation to projects that they undertake. New section 21.1 sets out the three types of programs and services that an authority is required or permitted to provide: the mandatory programs and services that are required by regulation, the municipal programs and services that it provides on behalf of municipalities and other programs and services that it determines to provide to further its objects.

New section 21.2 sets out the rules for when an authority may charge fees for the programs and services it provides and the rules for determining the amount of the fees charged. Authorities are required to maintain a fee schedule that sets out the programs and services in respect of which it charges a fee and the amount of the fees. The fee schedule is set out in a written fee policy that is available to the public. Persons who are charged a fee by an authority may apply to the authority to reconsider the charging of the fee or the amount of the fee.

Sections 24 to 27 of the Act are repealed and replaced with new sections allowing authorities to recover their capital costs with respect to projects that they undertake and their operating expenses from their participating municipalities. Currently the apportionment of those costs and expenses is based on a determination of the benefit each participating municipality receives from a project or from the authority. The amendments provide that the apportionment will be determined in accordance with the regulations.

5. Regulating-making powers

The provisions regulating activities that may be carried out in the areas over which authorities have jurisdiction are substantively amended (sections 28 and 29). Section 28 of the Act is repealed. That section currently gives authorities certain regulation-making powers, including the power to regulate the straightening, changing and diverting of watercourses and development in their areas of jurisdiction and to prohibit or require the permission of the authority for such activities. The re-enacted section 28 prohibits such activities so that the previous regulation-making power is no longer required.

Furthermore, new section 28.1 gives the authorities the power to issue permits allowing persons to engage in the prohibited activities and section 28.3 allows authorities to cancel the permits in specified circumstances. New regulation-making powers are set out in section 28.5 in respect of activities that impact the conservation, restoration, development or management of natural resources.

6. Enforcement of the Act and offences

Sections 30 and 30.1 are repealed and sections 30 to 30.4 are enacted in relation to the enforcement of the Act and offences. Authorities are given the power to appoint officers who may enter lands to ensure compliance with the Act, the regulations and with permit conditions. The officers are also given the power to issue stop orders in specified circumstances.

Offences for contraventions of the Act, the regulations, permit conditions and stop orders are set out in section 30.4 and the maximum fines under the Act are increased from \$10,000 to \$50,000 in the case of an individual and to \$1,000,000 in the case of a corporation. An additional fine of

\$10,000 a day for individuals and \$200,000 a day for corporations may be imposed for each day the offence continues after the conviction.

Section 30.6 expands the existing powers of the court when ordering persons convicted of an offence to repair or rehabilitate any damage resulting from the commission of the offence.

Various regulation-making powers are enacted.

What has been the initial response from Conservation Ontario?

On May 31, 2017 Conservation Ontario issued a media release which said that CO and the Conservation Authorities would be reviewing the Bill in detail and will continue to work with the Province in moving forward.

The media release can be found on Conservation Ontario's website:

http://conservationontario.ca/images/Media_Releases/MediaRelease_CA_Act_COMay2017_FNL_rev.pdf

The Bill is being reviewed by a Conservation Ontario CA Act Working Group comprised of a number of CA General Managers and CO staff. A report to the broader membership is scheduled for the June 2017 Council meeting.

Background

In 2015, the Province initiated a review of the *Conservation Authorities Act (CA Act)* which governs Ontario's 36 Conservation Authorities. They developed an initial Conservation Authorities [Discussion Paper](#) (Fall 2015) to provide an overview of Conservation Authorities, their funding and governance.

In Spring 2016, MNRF posted a second discussion paper which identified priorities for moving forward with the *CA Act* review: [Conserving Our Future: Proposed Priorities for Renewal](#). This was followed up by multi-stakeholder engagement sessions.

Conservation Ontario and the Conservation Authorities have provided input to both documents. An amended *Conservation Authorities Act* was introduced to the legislature on May 30, 2017 for first reading.

For more information:

Kim Gavine, General Manager, Conservation Ontario
kgavine@conservationontario.ca (905) 895-0716 ext 231

Bonnie Fox, Manager, Policy and Planning, Conservation Ontario
bfox@conservationontario.ca (905) 895-0716 ext 223

Jane Lewington, Marketing & Communications Specialist, Conservation Ontario
jlewington@conservationontario.ca (905) 895-0716 ext 222



A newly planted two year old grafted butternut.

Butternut Seed Orchard

In June, UTRCA staff planted 39 grafted butternut trees and three butternut trees grown from seed at the Southern Ontario Butternut Seed Orchard, just south of Innerkip. The province's two other butternut seed orchards are in central and eastern Ontario.

Butternut is threatened by a fungal disease called butternut canker. As a result, the species has been protected under the Ontario Endangered Species Act since 2007.

The UTRCA began working with the Forest Gene Conservation Association in 2015 to archive endangered native butternut trees. The goal is to archive healthy native butternut that may be genetically tolerant to the canker.

Archiving butternut is a lengthy and expensive procedure. Only butternut that appear to be healthy and, hopefully, resistant to butternut canker are considered for archiving. The trees are DNA tested to ensure they are pure butternut, as this species hybridizes with Japanese walnut and, to a lesser extent, with English walnut. A licensed arborist is hired to climb the tree in March to collect scion wood (twig wood from previous year's growth). This wood is grafted onto black walnut root stock in April at the Ferguson Forest Centre in Kemptonville. The grafted butternut are tended for two years in the nursery then planted out in the seed orchard, which is fenced to prevent browsing by wildlife.

We expect the archived butternut to start producing seed in about five years. The three seedlings planted this year were the first produced from the Eastern Ontario Seed Orchard, which was established in 2009. In future years, it is hoped that more of these seedlings will be available for planting across Ontario.

Contact: John Enright, Forester

Innerkip Wellhead Planting

The UTRCA, which owns the land around Oxford County's Innerkip wellheads, has fully retired all lands within 100 metres of the wellheads. This approach allows the UTRCA to comply with the County's drinking water source protection planning objectives, with little need for future concerns or maintenance.

UTRCA forestry staff carried out the wellhead planting over a few years. Approximately 4 hectares have been naturalized to oak savannah, native prairie and mixed woodland. This spring, three rows of buffer were added to complete the project. A total of 213 trees have been planted, including 50 shagbark hickory, 35 bur oak, 50 red oak and 78 white pine.

Contact John Enright, Forester



The UTRCA machine tree planting crew planted a 30 foot buffer by the Innerkip wellheads to complete the land retirement project.

Protecting our Drinking Water

Seventeen years have passed since the Walkerton tainted water tragedy. In May 2000, after a few days of very heavy rainfall, the town water supply in Walkerton, Ontario became contaminated with *E. coli* bacteria. This highly dangerous bacteria entered the town's well in surface runoff. Seven people died as a result of the contamination and over 2,000 became ill, in a town with a population of approximately 4800 people.

The government of Ontario established the Walkerton Inquiry in June 2000 to investigate the contamination of Walkerton's water supply. The Honourable Dennis R. O'Connor was charged with

preparing a public report of findings and recommendations to ensure the future safety of Ontario's water supply system.

Source Protection Planning

The Clean Water Act (CWA), 2006 is part of the provincial government's commitment to implementing the recommendations of the Walkerton Inquiry, as well as protecting and enhancing human health and the environment. The CWA sets out a framework for municipal drinking water source protection planning on a watershed basis. The Act established Source Protection Areas based on the watershed boundaries of Ontario's 36 Conservation Authorities. The Upper Thames River, Lower Thames Valley and St. Clair Region Conservation Authorities entered into a partnership for The Thames-Sydenham Source Protection Region as the local Source Protection Authorities, providing technical and administrative support for source protection planning.

A key part of the CWA is its requirement for local Source Protection Committees, comprised of representatives from municipalities, agriculture, industry, business, community groups, First Nations and the public. These committees developed science-based Assessment Reports and Source Protection Plans. Each plan identifies potential threats to local drinking water, and uses policies to reduce or eliminate those threats. The plans are the culmination of a process that uses a science-based approach as its foundation to identify vulnerable areas and the risks posed to municipal drinking water systems.

The Source Protection Plan for the Thames-Sydenham and Region was approved by Glen Murray, Minister of the Environment and Climate Change, on September 17, 2015, and came into effect on December 31, 2015.

Implementing the Source Protection Plan

The job of implementing source protection plans is shared by municipalities, conservation authorities, and provincial ministries and agencies. As the owners of drinking water systems, municipalities play a significant role in implementing the policies governing their protection. However, some municipal implementation responsibilities may be delegated to another public body. In the Thames-Sydenham Source Protection Region, seven municipalities have chosen to delegate the authority to implement certain policies to the UTRCA.

The UTRCA, with support from the SCRCA, has developed a Risk Management Services program to fulfill these delegated responsibilities. Staff have completed a mandatory training course approved by the Ministry of the Environment and Climate Change, and been appointed as Risk Management Officials (RMOs) and Risk Management Inspectors (RMIs).

The RMOs and RMIs work to ensure that requirements under the CWA and the Thames-Sydenham and Region Source Protection Plan are met. They provide necessary notifications, negotiate risk management plans for certain activities of concern, develop and distribute information packages for property owners, and ensure information about activities in the vulnerable areas is accurate.

The current Risk Management Agreements extend until August 31, 2017. A revised agreement was proposed to current program partners to extend the services until December 31, 2020. To date,

the following municipalities have council approval for the UTRCA to carry out Risk Management Services until the end of 2020:

- Town of St. Marys
- Township of Perth East
- City of London
- Municipality of Chatham-Kent

The City of Stratford and the Township of West Perth have both indicated their intent to continue the agreement for services, pending council approval. The Township of Perth South has requested an extension for Council to consider their options.

Contact: Jenna Allain, Source Protection Coordinator



John Enright receives the Zavitz Award from the MNRF's Ken Elliott.

Award Winning Forester!

John Enright, the UTRCA's Forester, has been awarded the 2017 Zavitz Award by the Ontario Professional Foresters Association (OPFA). The award recognizes John's significant contribution to forest conservation. It is named for E.J. Edmund Zavitz, Ontario's first Provincial Forester. Zavitz was known as "the man who saved Ontario with trees and determination."

John could not be at the OPFA meeting to receive the award, so Ken Elliott, from the Ministry of Natural Resources & Forestry, came to the Watershed Conservation Centre along with a number of John's colleagues to present the award on behalf of the OPFA.

As Ken said during his presentation, John is the go-to guy for landowners and agency staff when it comes to forestry knowledge in this part of Ontario. The UTRCA has known this for some time, but now this is being recognized by his peers across the province. Congratulations, John!

Contact: Brad Glasman, Manager, Conservation Services

Floodplain Connection for Municipal Drain Stormwater Management

Many natural streams have been reconstructed and straightened to improve drainage. In several instances, the old stream channel remains but the new watercourse has been cut off from it. In early May, a drain in Thames Centre was



Construction of the trench to reconnect the stream channel to the floodplain.

reconnected to the old stream channel to encourage flow through the natural floodplain. A trench was excavated so that water can flow freely through the trench into the floodplain during high flow events.

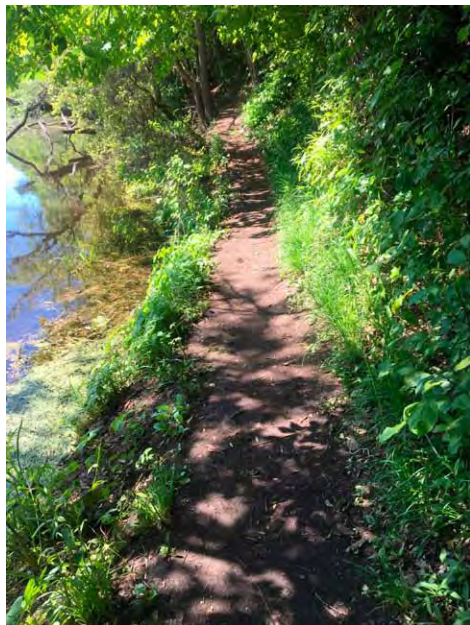
This will help reduce peak flow velocities and encourage the settlement of sediment and nutrients in the floodplain area.

This project is a rural stormwater management pilot demonstration project. Funding was provided by the Ontario Ministry of Agriculture, Food and Rural Affairs as part of the Canada-Ontario Agreement.

Contact: Tatianna Lozier, Agricultural Soil & Water Quality Technician

Dorchester Mill Pond Trail Improvements

Working under the auspices of the Dorchester Mill Pond Committee and the Municipality of Thames Centre, UTRCA staff spent four days rebuilding a 33 metre section of the Mill Pond Trail in Dorchester.



The trail before.

This section of trail, situated at the toe of a steep slope and adjacent to the water, was in very rough shape and difficult for many users. Working on the trail was challenging as access to the area was limited to the narrow walking trail.

The improvements consisted of digging out the trail to a more suitable width and then building timber cribs on site, moving them in place, and

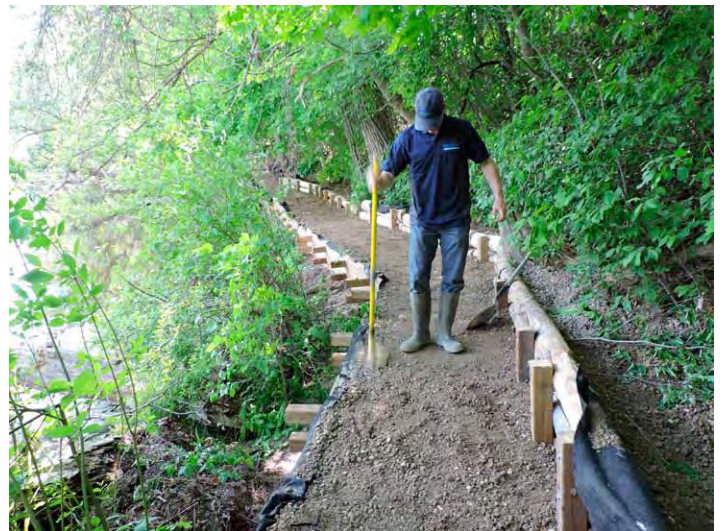


Building the timber cribs.

filling them with the excavated spoil and imported gravel. In the end, the new section blends well with the existing trail system. Hopefully, the area's many users will appreciate the improvements.

Although all of the project costs are not in yet, it is expected to be in the \$8,000 - \$10,000 range. Funding was provided by the Dorchester Mill Pond Committee and Municipality of Thames Centre, with some in-kind time from the UTRCA.

Contact: Brad Glasman, Manager, Conservation Services



Almost done - final compaction of the new trail.

“Soil Your Undies” Soil Health Challenge

Twenty-eight pairs of underwear have been buried around the Medway Priority Subwatershed and other locations in the Upper Thames watershed, in the name of soil conservation. The “Soil Your Undies” challenge demonstrates the level of biological activity in the soil. Participants have buried a pair of 100% cotton underwear in the topsoil, and will leave it buried for the next two to three months. After this time, the amount of underwear remaining indicates the level of decomposition; the less underwear that is



Underwear buried in the topsoil of a corn field. The elastic band is not buried so the underwear can be located again later in the season. left, the greater the biological activity in the soil. This experiment will compare fields with different soil types, crop rotations and management practices.

Contact: Tatianna Lozier, Ag. Soil & Water Quality Technician



Flowers blooming at one of the first rain gardens planted in 2015.

Final Rain Gardens Installed at Ingersoll Condo

Over the past two years, the UTRCA has partnered with Warren Sinclair Homes and Dillon Consulting to install nine rain gardens at the Enclave at Victoria Hills condo development in Ingersoll. Rain gardens are a form of low impact development (LID), a stormwater management method that is becoming more common throughout the Thames River watershed.

The first rain gardens were installed in spring 2015, and the final two rain gardens were planted by students from Harrisfield Public School in June 2017. All stormwater from this condo development is either infiltrated into the soil or filtered by the rain gardens, reducing the impact of the development on the nearby Thames River. Over 3500 plants have been planted in the nine rain gardens to filter the water as well as provide habitat for birds and butterflies.

Contact: Alison Regehr, Conservation Services Technician



Students give Monarchs a Lift

Grade four and five students from AJ Baker School planted hundreds of milkweed plants and wildflower seeds at three locations in Zorra Township on May 26. Their first stop was at the Zorra Memorial Forest on the 41st Line, next to Golspie Swamp. They also planted at the Zorra Township Office and at Grace Patterson Park in Thamesford.

The students grew their own plants from seed. The sites are part of the Monarch Waystation program. Milkweed is a host plant for the monarch caterpillar.

Thank you to the teachers and students at AJ Baker, UTRCA Board Member Marcus Ryan, and Karen Martin at Zorra Township for organizing what is hoped to be an annual event.

Contact: Karen Pugh, Resources Specialist

Wet Spring & Close Call for Flooding

The Upper Thames watershed received 113 mm of rain in April (measured at the London Airport), which is almost one and a half times the normal amount for the month. The ground conditions were still wet on May 4, when a slow-moving system began passing through the area. Some forecasts called for more than 100 mm over a two day period, while other forecasts called for 40-60 mm. Accordingly, UTRCA flood control, conservation areas, and communications staff ramped up the flood response system, in case the higher forecasts materialized.

Fortunately, the lower rain estimates proved to be accurate as 40-60 mm were measured, fairly evenly distributed across the watershed. There was some minor flooding in London parks (e.g., Gibbons and Harris Parks). Some lakeside trailers in the campgrounds at Fanshawe and Pittock Conservation Areas were moved to higher ground as a precaution, as flood control staff stored water in the reservoirs to reduce downstream flood impacts. Staff kept a close watch on overnight conditions as the reservoir levels peaked.

In the end, this event proved to be in line with what we would expect every spring. However, the drawn out nature of the event

and the range of precipitation forecasts provided a good exercise of the UTRCA flood contingency plan. It was also a reminder to municipal flood coordinators to be prepared for flooding at any time.

If the higher forecasts had been correct, the watershed would have experienced some of the highest water levels in several decades, potentially approaching the 1:50 year flood in some locations.

Contact: Mark Helsten, Senior Water Resources Engineer



Glen Cairn students paint their fish.

Revitalization alive and well in the Glen Cairn Neighbourhood!

As part of a broader project to revitalize the Glen Cairn neighbourhood, UTRCA staff have delivered the Stream of Dreams program to the last school in the neighbourhood, Glen Cairn Public School. Each and every student learned the value of taking care of their local streams and how they can each play a role in protecting fish habitat. Each student also painted a wooden fish that will become a mural on the school yard fence. This colourful “Stream of Dreams” will remind students and the local community that this school cares about their environment and so should everyone else.

The UTRCA and their Glen Cairn partners have also offered demonstration rain gardens on select residential properties as well as at Chalmers Church at the corner of Pond Mills Road and Commissioners Road. Watch for these beautifully designed gardens that are intended to deal with rooftop stormwater runoff.

Next on the agenda for the neighbourhood is “Adelaide in Bloom,” a friendly competition for local businesses to enhance the area’s visual appeal. The entrants will be judged on July 20.

Contact: Julie Welker, Community Partnership Specialist

Creating a Seasonal Wetland

Construction of a 0.5 ha seasonal wetland in Oxford County began in early June. The constructed wetland is located in a naturally wet area of the field, where crop growth is limited due to standing water after intense rainfall events. This area of the field will have an oval pond, 0.3 – 1.0 m deep. The wetland will enhance habitat, control agricultural runoff, and allow sediment and nutrients to settle out within the pond.



Aerial view of the wetland under construction.

A variety of large, native hardwoods and conifers have been planted around the perimeter of the wetland. Shrubs, grasses and aquatic plants will be planted following construction. The wetland will be an aesthetically pleasing, environmentally beneficial and wildlife enhancing alternative to an unproductive area of the field.

Contact: Tatianna Lozier, Ag. Soil & Water Quality Technician

On the Agenda

The next UTRCA Board of Directors meeting will be June 26, 2017. Approved board meeting minutes are posted on the publications page at www.thamesriver.on.ca.

- Harrington and Embro Dams EA Presentation
- Revised 2017 Budget
- Budget Concepts Memo
- Conceptual Monitoring & Reporting Program for UTRCA Environmental Targets
- Administration and Enforcement - Section 28
- Gilmor Decision
- 2017 Conservation Authorities’ Biennial Tour
- Proposed Changes to the Conservation Authorities Act

Contact: Michelle Viglianti, Administrative Assistant



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