

NOV 18 2016

**HELP SAVE HARRINGTON POND!**

**EVERYONE NEEDS TO WRITE IMMEDIATELY!!!**

**SEND YOUR COMMENTS BEFORE NOVEMBER 20 TO**

**RICK GOLDT AT UPPER THAMES RIVER CONSERVATION AUTHORITY**

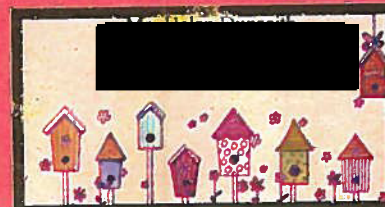
**AT [goldtr@thamesriver.on.ca](mailto:goldtr@thamesriver.on.ca)**

**Or mail to**

**Rick Goldt, Supervisor, Water Control Structures**

**Upper Thames River Conservation Authority**

**1424 Clarke Road, London ON N5V 5B9**



## IMPORTANT POINTS TO COVER:

The Upper Thames River Conservation Authority has stated that Harrington Dam should be removed to allow the free movement of native fish, such as speckled trout, up and down stream, BUT the removal of this dam will also permit the free movement of non-native species of fish from the artificially created Wildwood Lake which will decimate the native fish species.

Considerable funds and volunteer hours have been spent restoring the Harrington Grist Mill. The only step remaining is to construct a sluice way to provide the necessary water power to run the Mill, providing an invaluable historic site and educational resource. If the pond is removed this will be impossible.

For many, Harrington Pond is the only reason Harrington is on the map. Fishing, including the annual trout derby, canoeing, picnicking, hiking and bird-watching will be extremely and adversely affected by the removal of the pond. Without the pond, Harrington loses a major part of its history and identity,

The extensive population of birds, water birds, water mammals and reptiles, some of which are on "threatened" lists, will be extremely and adversely affected.

*Goal of the issue - the Harrington Dam is needed & necessary*  
Please add your own thoughts and arguments, and if you want guidance, send an email to

[saveharringtonpond@gmail.com](mailto:saveharringtonpond@gmail.com). Remember that you must write your email or letter to Rick Goldt so that it

**From:** Tom Kittmer <[REDACTED]>  
**To:** Rick Goldt <goldtr@thamesriver.on.ca>  
**Date:** 11/21/2016 11:08 AM  
**Subject:** HARRINGTON POND

MY NAME IS TOM KITTMER AND I HAVE LIVED IN HARRINGTON FOR 63 YRS. I BELIEVE THAT THE HARRINGTON DAM SHOULD BE REBUILT OR REPAIRED.

THE POND HAS BROUGHT PEOPLE TO THIS AREA WHO SIMPLY COME TO ENJOY THE FISHING, ITS' WILDLIFE AND ITS' BEAUTY.

FOR YEARS THE TAVISTOCK ROD & GUN CLUB HAVE SPONSORED THE FISHING DERBY FOR THE KIDS. THEY PROVIDED A DAY OF FAMILY FUN .

THEY COVER THE COST OF EVERYTHING FROM STOCKING THE POND, TO FOOD AND PRIZES.

WITHOUT THE POND THERE WILL BE NO FISHING DERBY!

THE POND SUPPORTS ALL KINDS OF WILDLIFE BESIDES THE FISH. THERE ARE BALD EAGLES NOW COMING TO THIS AREA. WE HAVE SEEN MALLARD DUCKS, GEESE, OSPREY, HERONS, TURTLES, MUSKRAT, MINK, BEAVERS AND DEER, TO NAME JUST A FEW. THERE ARE A PAIR OF SWANS WHO STAY THE WHOLE YEAR ON HARRINGTON POND.

THE GRIST MILL RESTORATION IS DEPENDANT ON THE HARRINGTON POND BEING THERE! A LOT OF TIME AND MONEY HAS BEEN SPENT ON THE RESTORATION. IT IS A PIECE OF OUR LOCAL HERITAGE. LET'S NOT THROW ALL THAT OUT THE WINDOW!

THERE HAS ALWAYS BEEN A WET AREA BELOW THE DAM, WHERE THE WELL IS, WHERE WATER LAYS. IT HAS BEEN THAT WAY FOR AS FAR BACK AS ANYONE CAN REMEMBER. THE HARRINGTON AREA IS BLESSED WITH LOTS OF ARTESIAN WELLS AND CLEAN FRESH WATER FROM THE UNDERGROUND RIVER SYSTEM.

LET'S NOT END UP WITH AN AREA THAT LOOKS LIKE THE "DUCKS UNLIMITED" AREA, FOR WHICH THERE SEEMS TO BE NO MONEY TO FIX!

SAVE HARRINGTON POND!

TOM KITTMER

[REDACTED]

[REDACTED]

**From:** Cam Schiedel [REDACTED]  
**To:** "goldtr@thamesriver.on.ca" <goldtr@thamesriver.on.ca>  
**Date:** 11/23/2016 9:24 AM  
**Subject:** The Harrington Pond

Hello Rick, I am contacting you today regarding the Harrington Pond as I understand that its future is undecided. I also understand that there is considerable information to consider both for keeping it, and for removing it. I will start by saying that the pond is one of the reasons that I gravitated to the area from London. When you are in Harrington, you look around and you feel like you could be in any Northern community in Ontario. It is in my opinion one of the most scenic communities in south western Ontario. The pond simply puts it over the top by adding a free recreational space for local residence to enjoy. And the word free cannot be underestimated. Nearby Wildwood has an associated user cost which is prohibitive for many people. This cost also steers people away from recreational activities and the outdoors. The Harrington pond has introduced countless kids to fishing and wildlife over the years, which is certainly a better option than video games in the basement. It also teaches them a lifelong respect for nature and the environment. Places like this are few and far between. Many are private, fenced off, or come with a user cost. We have a great opportunity to do the right thing and maintain the pond for future generations. You have the support of the community. Please help us save our pond. Your consideration in this matter is much appreciated.

[REDACTED]

**From:** sherri hamilton [REDACTED]  
**To:** "goldtr@thamesriver.on.ca" <goldtr@thamesriver.on.ca>  
**Date:** 11/21/2016 9:58 AM  
**Subject:** HARRINGTON POND

I WRITE TO YOU AS A RESIDENT OF HARRINGTON WHO HAS A BEAUTIFUL VIEW OF HARRINGTON POND EVERYDAY. I SEE PEOPLE ENJOYING THE POND AND PARK AREA EVERYDAY.

IT IS VITAL THAT WE SAVE THE POND FOR THE IMPORTANCE IT SERVES FOR THE WILDLIFE, THE COMMUNITY AND THE GRIST MILL. THE POND PLAYS A INTREGAL PART IN THE GRIST MILL RESTORATION, AND WITHOUT IT, ALL THE TIME, LABOUR AND MONEY SPENT, WOULD BE NOW WASTED. IF THE GRIST MILL RESTORATION PROJECT WAS ABANDONED, WE WOULD BE LOSING A PIECE OF OUR LOCAL HERITAGE.

NO ONE WANTS A MOSQUITO LADEN SWAMP AND STREAM TO REPLACE THE POND!

THE DAM NEEDS TO EITHER BE REPAIRED OR REPLACED.

JONI MITCHELL SAYS IT BEST WHEN SHE SINGS;

" don't it always seem to go  
that you don't know what you've got till it's gone  
they paved paradise and put up a parking lot"

SINCERELY,

SHERRI HAMILTON

[REDACTED]

[REDACTED]



**From:** Gavin [REDACTED]  
**To:** GOLDTR@thamesriver.on.ca  
**Date:** 11/23/2016 7:05 AM  
**Subject:** option 8.docx  
**Attachments:** option 8.docx; Part.002

Hello Rick, please find another alternative for the Harrington dam/pond that I hope will be considered.

Rick Goldt  
UTRCA

Re: Harrington Dam

Dear Mr. Goldt,

In going over the documents provided for the Harrington Dam including past engineering reports and the most recent version of the EA, I believe there is another option available to bringing the dam up to modern standards that has not been accessed while at the same time allowing for improvements to the pond habitat and water quality.

First I would like to point out that the more time I spend looking at the dam issue and spending time on-site looking at the dam, dyke and pond, the smaller the issue becomes. This is a small dam in every essence of the word. It's height is minimal as is its length and the volume of water it is holding back. When thinking back to my time on the Red River flood plain, it is becoming more shocking to me the time and money that has been spent on this small project. Thoughts of spending hundreds of thousands more on engineering alone is appalling to me when what is proposed is not a new science. Enough is known about the site conditions- the rest a foregone conclusion from a construction perspective. In reality, this is simple stuff, a small project of which every aspect of it has been done before. That said, I would like to present Option 8.

**OPTION 8 – Leaving the existing concrete structure in place, replacing the earthen dyke while leaving portions of the old one in place and, incorporating a spillway to accommodate increased flows and bring the flow capacity to within current guidelines.**

**Existing concrete structure:**

Prior engineering reports conclude the structure is not in bad shape showing signs of only minor stress. The main issue with the structure is its inability to handle high enough flow levels based on new government guidelines. This can be rectified by installing a spillway directly across from the dam at the opposite end of the dyke.

**The spillway:**

I propose building a spillway at the North West corner of the pond. The channel for the water that passes over the spillway will be where the existing access road is. The water will flow down stream from the pond towards the parking lot and then turn East just before the existing

gate and concrete posts. Three trees would be removed at this point allowing the flow to travel East-Northeast across the existing level grass area, and dump into the creek below the dam at a point just North of the mill on the opposite bank. A track excavator would be used to make the channel for the water to follow. The trench would be lined with geotextile and rock to prevent erosion and slow the rate of flow (standard practice).

Initially, the portion of the spillway between the parking lot and the pond would be temporary. It would be made gradually deeper until the pond was nearly drained and the flow from the upper creek passed directly into the spillway. By doing this, the risk of dam/dyke failure would be eliminated and the dyke could be worked on as well as the pond itself. Hydrostatic pressure would be greatly reduced and dewatering, if still required, could likely be greatly reduced.

### **Dyke replacement:**

If the water in the pond was substantially lowered using the spillway, the downward side of the existing dyke could be excavated – carved away, to allow for a quality clay core to be keyed in slightly below the current location (as per guidelines by Naylor Engineering, 2008). Some of the excavated material could be used to fill in between the clay core and the existing dyke to reduce costs. In this way an impermeable clay barrier would be installed and protected by the granular material of the the existing dyke with the pond side being relatively undisturbed. The end result would be a stronger, wider dyke. Riprap could be added on the pond side and, if required, a small retaining wall could be installed to reduce the downside footprint and save the trees that exist there.

At this time, money permitting, it would be possible to install a small spillway that draws from the bottom to improve water temperature- not only that leaves the pond but within the pond itself by improving circulation. Also, a sluice to the mill could be incorporated (money already in place)..

Upon completion of the dyke and pond improvements (excavation of pockets to increase depth and create islands to encourage weed growth, installing rock and gravel to improve habitat and stream flow, placing wood and wood piles to create habitat etc.) the temporary spillway could be plugged with clay and brought to the required height. Using erosion control fabric and riprap, a permanent spillway would be created to accommodate periods of high flow and reduce stress on the existing concrete dam.

Upon the water level returning to normal, dredging could also occur using a mobile floating dredge and geotextile tubes placed in the parking area or on the grass to contain the sediment for later disposal.



## **Conclusion**

This is obviously a simplified version of the plan but it seems like a fairly simple project and would cost a fraction of the other options proposed. Again, this type of work has all been done before. It isn't reinventing the wheel. What is gained is the continuation of the historical and social aspects of the pond and mill, improved water quality, habitat and fishing opportunities, reduced risk and liability and reduced costs.

The only downside is that I am two days late for the November 20<sup>th</sup> deadline.

## Comments and concerns about the Harrington Pond EA

Though Harrington pond is technically man made due to the installation of the dam, in reality, it is a natural environment. Having been in existence in one form or another for encroaching on 200 years, the only thing NOT natural about it is the presence of the carp that got into it from the Wildwood reservoir. Though the pond itself is in need of some maintenance, mainly due to neglect over the past 20-30 years, it is still an extension of the headwaters of the spring fed system, a cold water environment with a fairly healthy native fish population and benthic environment.

If the plan goes ahead to remove the dam and create an off-line pond and an artificial stream bed, the habitat for the fish will be completely disturbed and the new stream un-natural with the benthic environment extirpated- completely eliminated due to the excavation work and removal of apparently contaminated silt. The best method for rehabilitating a stream or river is to use the existing material within the stream bed and to disturb the benthic environment as little as possible. Rock is usually added but anything excavated from one spot is used somewhere nearby. Nothing is removed entirely, merely shuffled around. What is proposed for Harrington is an entirely new stream bed with new material. Without a healthy benthic population it will be years or decades before it becomes remotely close to what currently exists with the distinct possibility that it will never be used by the fish as intended. We do not fully understand the nuances of a fishes behaviour. One missing component could ultimately affect how the fish utilize the new stream. One thing for sure is that there is a huge risk in undertaking this type of project and that years will go by before anything will be gained. Add to this the fact that the natural cold water environment of the Harrington Creek headwaters will be opened up to the unnatural warm-water environment of Wildwood Lake, further risks are being unnecessarily taken. The introduction of undesirable species of fish, invertebrates and disease can quickly affect the natural environment that the preferred plan is supposed to benefit. I am aware that measures can be taken to reduce or attempt to prevent the travel of unwanted fish upstream, but this is not foolproof. The risks still remain. And I would be remiss if I did not mention the fact that an assessment of the benthic community in the pond seems to be absent, as does fish sampling from below the dam during periods of high flow when the headwaters would be at most risk should the barrier of the dam be removed.

One item that I find puzzling is the apparent fear of the sediment should the Harrington Dam fail. Currently during high flow periods from the headwaters, silt laden water passes over the spillway of Harrington Dam and into Trout Creek/Wildwood lake. But first, I think a new distinction needs to be made between what is Trout Creek and what is Wildwood Lake. The EA report(s) currently describe Harrington Creek as travelling about 300 meters from below the dam and emptying into Trout Creek. This is a misnomer. Harrington creek flows into Wildwood reservoir at that point. Trout Creek is actually gone until it passes closer to the 33<sup>rd</sup> Line further to the East. Due to the creation of Wildwood Lake and the retention of water through much of the spring and summer, this portion of what was formerly Trout Creek is now a slow moving, silt laden warm water environment unsuitable for the trout that used to inhabit it but teeming

with warm water species such as carp and suckers, catfish and rock bass. The one benefit to this area is that it is the beginning of a large, shallow plateau of mud and weeds that extends to the bridge on the 31<sup>st</sup> Line. This large, wide area is actually a delta for the water flowing from Harrington Creek and Trout Creek. Sediment trapped in the water settles to the bottom as the water slows. This is an ideal situation as the natural filtration properties of the marsh would help to clean the water before it enters Wildwood Lake proper. In the fall, as the water recedes due to flood control measures, the drying mud and direct sunlight would help to break down some of the residue currently found in the silt. Should the Harrington dam fail, much of the sediment would settle in the flood plain immediately below the dam before passing through the bridge on Rd 96. Whatever sediment *did* make it through would not go far and would begin to settle quickly once it hit the slower moving water of the marsh at the beginning of Wildwood Lake 300 meters away. As stated in the Acres report from data collected in 2002, the Environmental impact would be minor with no long term effects.

As for repairing or replacing the dam and improvements to the pond itself in the form of dredging or deepening, I believe two options have not been fully assessed. First, regarding the concrete and earthen work required for the dam, cannot a temporary stream be created on the West side of the pond closer to the North end the purpose of which to not only handle the flow from the headwaters but to also reduce the depth of the pond? Using a track excavator, geotextile and rock, water from the pond could be re-routed by the South edge of the parking lot to a point midway between the current dam location and Rd 96. This would eliminate risk of dam failure and allow for not only safe work on the existing dam and dyke but also allow for work to improve the pond itself. A bottom draining spillway could also be installed to improve the quality and temperature of water exiting the pond once the temporary stream is removed and the pond becomes operational again. The cost of this would be nominal and allow for more efficient work on the dam and dyke.

Another option that has not been looked at is the use of low impact dredging. By using a small floating dredge, and if the silt is considered too hazardous to remain in the pond area, pumping the silt into large geotextile bags for later disposal, improvements to the pond for both the native fish and improved water quality could be undertaken without destroying the existing benthic environment. The cost of this is manageable, less than the cost of another study on the pond!

To conclude, it is my belief that not enough information has been gathered to truly determine that the best option, from an environmental perspective, is to remove the dam and allow for free travel of fish. If the habitat below the dam was the way Trout Creek used to be, yes, absolutely, but it is not. What is proposed is to turn back 200 years of time and introduce what is now a natural environment into a modern man-made mess in the form of the warm reservoir of Wildwood Lake - a decision made without understanding the true nature of the unhealthy habitat below the dam nor the status or the health of the invertebrate population above the dam. I believe that the costs of creating the proposed "natural" stream bed are underestimated especially when factoring in the quality of the habitat being created. And I believe the costs of replacing the dam have not been properly assessed or all options considered for its efficient replacement, along with upgrades to the pond itself. This can be

done in such a way as to protect the environment of the headwaters AND improve the quality and temperature of the water that exits the pond and enters Wildwood Lake, something that was NOT accomplished in Dorchester. It appears to me this is more a decision based on liability and costs, not an improvement to the environment.

Michelle Houseman  
Harrington  
Nov. 16, 2016