UPPER THAMES RIVER
CONSERVATION AUTHORITY

August 10, 2017

NOTICE OF
BOARD OF DIRECTORS' MEETING

DATE: **TUESDAY, August 22, 2017**

TIME: **9:30 A.M. – 11:30 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 June 27, 2017

5. Business Arising from the Minutes

6. Business for Approval 9:35am

   (a) WECS Consultant Selection
   (C.Tasker/D.Charles)(Doc #118057)
   (Report attached)(15 minutes)

   (b) Tender Award & Budget Increase
   Fanshawe Dam Substructure Rehabilitation
   Phase 4 (2017) & Phase 5 (2018)(C.Tasker/D.Charles)
   (Doc: FC #1095)(Report attached)(10 minutes)

   (c) i) Revised Budget
   (C.Saracino)(Doc: FIN #663)
   (Report attached)(10 minutes)

   ii) Financial Update for July 2017
   (C.Saracino)(Doc: FIN #672)
   (Report attached)(5 minutes)

7. Closed Session – In Camera 10:15am

(a) Glengowan Update (I.Wilcox)
(Doc #118013)(10 minutes)

(b) Pen Equity Update (T.Annett/M.Snowsell)
(verbal)(5 minutes)

8. Business for Information 10:30am

(a) Administration and Enforcement - Section 28
(T. Annett) (Doc: ENVP #4901)
(Report attached)(5 minutes)

(b) Minimum Wage Increase Impacts
(C.Saracino)(Doc: FIN #668)
(Report attached)(10 minutes)

(c) Pioneer Village Report
(S.Dunlop)(Report attached) (5 minutes)

(d) Conservation Awards Report
(T.Hollingsworth)(Doc #118094)
(Report attached)(10 minutes)

(e) Orr Dam Wingwall Stability Study
(C.Tasker/F.Sutherland)(Doc #117893)
(Report attached)(5 minutes)

(f) International Student Placement
(I.Shah)(Doc #118067)
(Report attached)(5 minutes)

(g) Harrington Fisheries Report
(M.Fletcher)(Doc #118078)
(Report attached)(10 minutes)

(h) Harrington & Embro EA Update
(C.Tasker)(Verbal)(5 minutes)

9. August FYI 11:25am

10. Other Business (Including Chair and General Manager's Comments)

- 2018 UTRCA Municipal Budget Workshop

11. Adjournment 11:30am

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.Skrypnyk	F.Sutherland
S.Dunlop	M.Fletcher	S.Viglianti	I.Shah	

MINUTES
BOARD OF DIRECTORS' MEETING
TUESDAY, AUGUST 22, 2017

Members Present:	M.Blackie	N.Manning
	M.Blosh	H.McDermid
	R.Chowen	A.Murray
	A.Hopkins	B. Petrie
	T.Jackson	J.Salter
	S.Levin	G.Way
Regrets:	S.McCall-Hanlon	M.Ryan
	T.Birtch	
Solicitor:	G.Inglis	
Staff:	F. Brandon-Sutherland	C.Saracino
	M. Fletcher	A.Shivas
	D.Charles	M.Snowsell
	C.Harrington	C.Tasker
	T.Hollingsworth	I.Wilcox
	S.Dunlop	K.Winfield

1. Approval of Agenda

T.Jackson moved – H.McDermid seconded:-

"RESOLVED that the UTRCA Board of Directors approve the agenda as posted."

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
June 27, 2017

N.Manning moved – G.Way seconded:-

"RESOLVED that the UTRCA Board of Directors approve the Board of Directors' minutes dated June 27, 2017 as posted on the Members' web-site."

CARRIED.

5. Business Arising from the Minutes

There was no business arising from the minutes.

6. Business for Approval

(a) WECS Consultant Selection
(Reports attached)

C.Tasker introduced David Charles, the new Water Control Structures Supervisor, and Fraser Brandon-Sutherland, Project Engineer In-Training, to the Board.

The Board can expect a draft of the new WECS Consultant Selection Policy at the November Board meeting. There will be other draft policies around procurement coming in the future.

B.Petrie brought forward the notion that bids be scored by best value, and if best value is achieved, staff approval would be a possibility. I.Wilcox agreed that this could be brought forward in the second set of policy changes.

Staff clarified that the engineering studies produced by the Consultants are all intellectual property of the UTRCA.

There were concerns raised about maintaining competition and fairness with the proposed changes. Staff clarified that there will be checks and balances that will be worked into the process that would not guarantee the existing contractors be chosen for future project phases. The Board asked that when this policy is brought back before them, past examples and how they relate to the new policy be provided so possible 'what if' scenarios' can be fully explored and discussed.

S.Levin moved – T.Jackson seconded:

"RESOLVED that recommendation two be amended to read 'Staff draft policy that builds on the considerations discussed in this report which, when approved by the board, will provide direction and guidance on the procurement of professional services. The

expected receipt date of the draft policy will be November 2017' "

CARRIED.

T.Jackson moved – N.Manning seconded:

"RESOLVED that the Board of Directors accept
the recommendations as amended."

CARRIED.

(b) Tender Award & Budget Increase Fanshawe Dam Substructure Rehabilitation Phase 4
(Report attached)

C.Tasker introduced the report and pointed out that in the last part of the report, the $779, 762.00 value amount is plus taxes and includes contingencies.

C.Tasker clarified that staff decide on a case by case basis whether to include a contingency.
D.Charles clarified that increasing the budget does not change the tender amounts.

S.Levin moved – B.Petrie seconded:

"RESOLVED that the recommendation be amended
to read "the Board approves to increase the project budget
by $95,305.00 and direct staff to pursue WECI funding
for the increased project budget."

CARRIED.

S.Levin moved – B.Petrie seconded:

"RESOLVED that the Board of Directors accept
the recommendations as amended."

CARRIED.

(c) i) Revised Budget
(Report attached)

C.Saracino explained the reasoning behind approving a revised budget.

S.Levin moved – T.Jackson seconded:

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

CARRIED.

ii) Financial Update for July 2017
(Report attached)

C.Saracino introduced her report and explained to the Board the reasons behind each of the surpluses. C.Saracino also explained the new built-in expense for depreciation on capital and the column for approval for a revised budget.

S.Levin moved – T.Jackson seconded: -

"RESOLVED that the Board of Directors receive the report as presented."

CARRIED.

7. Closed Session – In Camera

There being property and legal matters to discuss,

T.Jackson moved – H.McDermid 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.

S.Levin moved – R.Chowen seconded: -

"RESOLVED that the Board of Directors receive the report as presented in Closed Session."

CARRIED.

(b) Legal matters relating to Pen Equity were discussed.

8. Business for Information

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

The suggestion of adding beginning and end dates to the Section 28 report was brought forward again. Staff reported that they are currently working on a database that will be able to better

keep track of dates. When the database is complete, staff will be able to better incorporate dates into future Section 28 reports.

T.Jackson brought forward concerns about closing in drains and asked that staff created a presentation to better educate the Board on this matter. T.Annett responded that staff are currently working on a more comprehensive closures policy and when it has been drafted they will create an educational presentation around the topic and bring the policy forward for Board input.

H.McDermid moved – G.Way seconded:-

"RESOLVED that the Board of Directors receive the report as presented."

CARRIED.

(b) Minimum Wage Increase Impacts
(Report attached)

C.Saracino explained that at this point, the UTRCA is proceeding with the assumption that the legislation will pass. She also discussed the potential impacts and changes to the On Call procedure. The Board asked that staff do more analysis to gain a better understanding of what parts of our business this will impact.

Concerns were raised about the silence on this issue from Conservation Ontario and other Conservation Authorities. T.Jackson asked that the UTRCA make a formal statement to the Ministry of Labour stating the impacts the increases will have on the organization.

T.Jackson moved – seconded R.Chowen:-

"RESOLVED that the Board directs staff to send a letter making the Ministry of Labour aware of the concerns the UTRCA has about the impacts the legislation in question will have on the operations, services and costs of this organization. The letter is to be circulate to other CAs and Conservation Ontario for support.

CARRIED.

A.Hopkins left the meeting 11:34am

(c) Pioneer Village Report
(Report attached)

S.Levin moved – H.McDermid seconded:-

"RESOLVED that the Board of Directors receive

the report as presented."

CARRIED.

(d) Conservation Awards Report
(Report attached)

T.Hollingsworth spoke to the report. Concerns were raised regarding category names and the number of categories. T.Hollingsworth explained that not every category would be filled every year, there would be a degree of flexibility to the program.

S.Levin moved – T.Jackson seconded:-

"RESOLVED that the Board of Directors
approve the recommendation as presented in the report."

CARRIED.

(e) Orr Dam Wingwall Stability Study
(Report attached)

S.Levin moved – T.Jackson seconded:-

"RESOLVED that the Board of Directors receive
the report as presented."

CARRIED.

(f) International Student Placement
(Report attached)

S.Levin moved – B.Petrie seconded:-

"RESOLVED that the Board of Directors receive
the report as presented."

CARRIED.

(g) Harrington Fisheries Report
(Report attached)

T.Jackson expressed concerns regarding the Harrington Fisheries Report to the Board and presented his opinion based on personal experience, species specific scientific studies and discussions with a variety of fisheries experts regarding the potential negative impacts to the Brook Trout population at Harrington. He also expressed his concerns with MNRF's position against their own science and disagrees with the statement that there will be no impact on the Brook Trout.

M.Fletcher asked for copies of the studies T.Jackson referenced. She explained that it is difficult to compare this project to the studies mentioned as they focus on lake populations and may not be applicable to the stream based populations we are addressing at Harrington. While there is no certain outcome, based on the long term UTRCA data recorded at this site, M.Fletcher feels the information available to her does not indicate the stream will get overrun by predator species.

There was a question whether there was value at this stage to ask for another opinion from an expert from Western University. It was decided that at this time getting another opinion on this matter is not feasible with timelines and may not provide any more clarity on this issue.
It was suggested that the concerns expressed by all parties be presented to the engineers when designing the project.

J.Salter moved – R.Chowen seconded:-

"RESOLVED that the Board of Directors receive the report as presented."

CARRIED.

(h) Harrington & Embro EA Update

C.Tasker gave an update on the status of the Harrington & Embro EA. UTRCA staff are hoping to have feedback from Zorra Town Council in time for the September UTRCA Board meeting.

The September Board meeting will be held at Wildwood Conservation Area with a site visit to the Harrington Mill before the meeting. The Board was also updated on the very successful Canada 150 celebration, hosted by the Harrington and Area Community Association, and the group's current fund-raising efforts.

9. August FYI
(Attached)

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

10. Other Business

I.Wilcox reminded the Board of the 2018 UTRCA Municipal Budget Workshop being held on September 7th. This workshop is not mandatory for Board members, but asked that any members who wish to attend contact Michelle Viglianti. If possible, I.Wilcox will circulate his presentation to Board members before the Workshop.

The Species at Risk Family and Friends Day was a big success this year. It was a fun and positive event.

11. Adjournment

There being no further business the meeting was adjourned at 12:14 p.m. on a motion by N.Manning.

Ian Wilcox
General Manager
Att.

M.Blackie, Authority Chair

UPPER THAMES RIVER
CONSERVATION AUTHORITY

MEMO

To: **UTRCA Board of Directors**

From: **Chris Tasker, Manager, Water & Information Management**

Date: **August 10, 2017** **Agenda #:** **6a**

Subject: **Water Control Structure Consultant Selection** **Filename:** **#118057**

Recommendations
It is recommended that:

1. ***The Board authorize staff to enter into agreements for professional services, for the specified 2017-18 WECI funded projects, and to the consultants specified in this report, pending the successful completion of the process identified.***

2. ***Staff draft policy that builds on the considerations discussed in this report which, when approved by the board, will provide direction and guidance on the procurement of professional services.***

Purpose
This report is intended to document the consultant selection process proposed for WECI approved projects which are a logical continuation of work being undertaken by those consultants. The report also draws attention to challenges with current purchasing policies which are under review as part of a more comprehensive modernization of our accounting systems and processes. The report suggests considerations in developing policies allowing the extension of consulting services to work on related projects or subsequent phases of a project.

Background
Current purchasing policies require 3 quotations for services over $2,500 and public tender for services which cost in excess of $50,000. Our practice is to request proposals for consulting services related to significant projects even if they are less than the $50,000 threshold for public tender. Proposals provide a better description of the work proposed than a simple quotation generally includes and they provide, together with the RFP/ToR, a basis for an agreement for professional services with the consultant.

Proposals are requested based on a terms or reference (ToR) and a request for proposals (RFP). While public tender is appropriate for well-defined purchases, consulting services rely considerably on the experience of the engineers to scope and define the work as part of their proposals. Even when based on a well-defined ToR, all proposals will not be equal and to establish value a proposal must be evaluated in its entirety, considering many factors in addition to cost. It is important however that we ensure that we receive good value in the cost of the engineering work rather than simply the lowest cost. For construction projects, a good design by experienced engineers helps in ensuring good value for the overall project. The additional time and cost spent on design often results in project efficiencies, decreased construction costs, and better overall value.

The typical process followed when the UTRCA procures professional services has evolved with time and includes the following steps:

- Develop a detailed Terms of Reference (ToR) which outlines the project needs and defines scope,
- Assemble all relevant background and reference information,
- Contact multiple consultants to gauge interest and capabilities,
- Request expressions of interest, to confirm consultant interest and expertise. Expressions of interest may be requested for large projects and based on the expressions of interest, proposals would be requested from only those with the appropriate expertise.
- Request proposals from the interested consultants based on the detailed ToR and a RFP
- Have the consultants develop and submit proposals. Proposals are requested in 2 parts. Part A includes the technical details (project team, understanding & methods, etc.) and Part B includes the cost (rates, as well as time assigned to each task and the staff the tasks are assigned to),
- Review and score the submitted Part A proposals. If Part A scores sufficiently high, Part B is opened and scored. Part A and Part B scores are summed to determine the total proposal score,
    - If the highest scoring proposal **is** the lowest price, staff are able to award the work and begin the project (provided it is able to be completed within approved budget)
    - If the highest scoring proposal **is not** the lowest price,
        - Draft and Submit a recommendation to the Board to award the work to the consultant with the highest scoring proposal (representing best value)
        - Project cannot proceed until Board approves award to other than lowest price

For projects where a consultant has already been engaged on related work or earlier phases, staff often seeks board approval to extend the scope of ongoing work to include the new phase or project. A recent example of this was the consulting services related to Phase 4 and 5 of the Fanshawe Painting and Concrete Repair. In cases like this the engaged consultant:

- has a clear understanding of the work completed to date,
- has been involved in the scoping of the additional work or subsequent phases,
- understands the needs of the project,
- has demonstrated their ability to carry out the work,
- has already developed some of the items needed to complete the additional work, and
- may have a considerable advantage in any competitive tender process as a result.

Utilizing engaged consultants for related work or phases, often represents the best value for the work. When requesting such exceptions to our current purchasing policies we are careful to ensure that we are receiving good value through the work. This is done by ensuring rates for services are consistent with costs of the current work which was proposed as part of a previous competitive RFP process. We also work with the consultant to refine the scope of services to those which are necessary for the project and reflect the available project budget. This has been demonstrated in past requests for board approvals to utilize consultants already engaged on related work or phases.

Discussion

Each of the two recommendations are discussed separately in the following sections.

Recommendation 1 – Approval of the Proposed Consultant Selection in Attached Table

> ***The Board authorize staff to enter into agreements for professional services, for the specified 2017-18 WECI funded projects, and to the consultants specified in this report, pending the successful completion of the process identified.***

We are requesting authorization to utilize consultants already engaged on current projects for the projects identified in the attached table. In addition to the above discussion on ensuring we receive good value for the cost, another important consideration is that these consultants have significant direct experience with these projects. Due to a recent retirement it is even more important that the project continuity in the engineering on this projects is retained to the greatest extent possible.

The UTRCA is therefore requesting the Boards approval to enter into agreements with the consulting companies identified in the attached table following successful completion of the following process:

- Develop a simplified RFP through discussion with the consultant,
- Request a proposal from the consultant based on the RFP
- Review submitted proposal to ensure that it
    - addresses project objectives,
    - includes reasonable wages & fees in keeping with costs provided for previous work,
    - demonstrates the consultant's ability to complete the project within the project schedule
    - remains within the project budget (considering consulting and construction costs, where appropriate)
- Negotiate with consultant any revisions to their proposal necessary to meet the above
- If not able to reach a satisfactory agreement, staff would request proposals from other consultants
- Staff will report to the board on the results of the selection process for these projects

The UTRCA has had positive experiences on past projects with all of the consultants being considered through this process. All three of the consulting companies have successfully won previous work through a competitive process. It is our expectation that proposals received from these consultants on these projects will provide good value and will contribute to successful projects. The projects and consultants under consideration are summarized in the attached table.

If not able to utilize experienced consultants already engaged on related work or phases through the above proposed process it is unlikely that we will be able to initiate all of the approved projects within the project schedule dictated by WECI eligibility. Funding not able to be utilized for the approved projects would be returned to WECI and funding to complete the work would have to be applied for in a subsequent year.

It is recommended that the Board authorize staff to enter into professional services agreements with the proposed consultants and specified 2017-18 WECI funded projects in the attached table, pending the successful completion of the process identified.

Project - *Proposed Consultant*	**Type of Project** **Project Definition**	**Experience from Related Projects**
Wildwood Dam Valve Casing Corrosion Protection *–AECOM Canada Ltd.*	Repair Develop tender docs, specifications, tendering, and contract admin for the surface prep, recoating, and corrosion protection of three corroded Bypass Valves in Wildwood Dam Tunnel.	• Fanshawe Dam (FND) Superstructure Painting and Electrical Work – Phases 1, 2 and 3 • Currently working on FND Painting and Concrete Repairs Phase 4&5 o Developed tender docs, specifications, tendering, and contract admin for these projects • 2011 Condition Survey Report Wildwood Dam
Broughdale Dyke – EA **Riverview Dyke – EA** *–AECOM Canada Ltd.*	Study Environmental Assessment to determine preferred alternative and public consultation following Feasibility Study of Management Options for London Earth Dykes. Possible alternatives being considered in these EAs include stabilization, upgrade, and extension of existing dyke to account for revised flood levels and Climate Change.	• 2011-2013 London Earth Dykes Stability Review • 2014-2017 Feasibility Study of Management Alternatives for the London Earth Dykes o Possible alternatives being considered in these EAs were developed as part of this feasibility study and include stabilization, upgrade, and extension of existing dyke to account for revised flood levels and Climate Change.
Pittock Dam Embankment Restoration Phase 1 *–B. M. Ross & Associates Ltd.*	Repair Complete repair of deferred embankment restoration related to PIT Control Building Replacement Work Will restore erosion downslope and along crest of dam, replace lost rock protection, repair wear from public access and drainage erosion. Includes surveys, design tender and contract administration for construction.	• 2014-2017 Pittock Dam Control Building Replacement Design Engineering o Developed contract and tender documents o Developed drawings needed surveys
West London Dyke (WLD) -Design Phase 4 *–Stantec Consulting Ltd.*	Study Next phase segment of 12 phases originally planned to renew the West London Dyke. Design of Phase 4 with construction planned for 2018.	• 2006 WLD Preliminary Design Report • 2007-2009 WLD Phase 1 & Phase 2 Reconstruction • 2010-2016 WLD Master Repair Plan • 2010-2014 WLD Interim Repairs • 2014-2017 WLD N.Branch Thames River – Tech. Invst, Post EA Concept Design (Phase 3-9), Post EA Phase 3 Final Design • 2016-2017 WLD Phase 3 Reconstruction
WLD Erosion Control - Environmental Assessment (EA) *–Stantec Consulting Ltd.*	Study Following preliminary investigations of toe erosion problems at the West London Dyke in 15/16 within Concept Plan undertake a Class EA to develop preferred alternative to address identified erosion problems.	• (in addition to those above) • 2016 WLD River Morphology and Scour Remediation Report completed as part of 2014-2017 WLD N.Branch Thames River – Tech. Invst, Post EA Concept Design (Phase 3-9), Post EA Phase 3 Final Design

Recommendation 2 – Considerations for Future Revised Policy

> ***Staff draft policy that builds on the considerations discussed in this report which, when approved by the board, will provide direction and guidance on the procurement of professional services.***

As staff have requested and obtained board approval for this type of consultant selection on many projects in the past, we have included some points for future consideration in the development of purchasing policy. Purchasing policies are already being developed as part of the modernization of our accounting systems and processes. Policy governing the procurement of professional services would be reviewed and approved by the Board of Directors either as part of those broader purchasing policies or as an interim measure until more comprehensive policies are in place. Either way, further staff and board consideration would be sought before these considerations would be relied upon for purchasing decisions (other than those recommended in this report). Once finalized and board approved, the policies would provide staff with the direction needed in order ensure the efficient and effective procurement of professional services ensuring good value for expenditures.

As discussed above, significant value can be achieved by enabling award of professional services directly to consultants already engaged in related work. This has been proven in many past projects. This approach has been utilized with multiple phase projects as well as projects that build off or are very similar to previous projects completed by the consultant. With these types of projects, consultants who were awarded the previous related work through a competitive process and preformed the work well, have a significant edge over the competition due to:

- Proven capability to complete the related project
- Reduced start-up times (relevant historical reports, models, measurements gathered in previous project, experienced project team available) which is often reflected in reduced proposed cost
- Previous experience with the project and advanced knowledge and understanding of project intricacies are often reflected in proposal cost providing a more accurate picture of what final consulting costs will be with fewer claims for additional funding.
- Previous experience working with the UTRCA,
    - Familiarity with Health and Safety Policies
    - Familiarity with the operation of the structures
    - Established communication channels and awareness of strengths of team members and resources available,
    - Previous opportunities for consultant demonstration of integrity through accommodating project challenges within upset limits established in the proposal (limiting the need for change orders and changes to budget).

Good value can be achieved without requiring that every phase of every project be required to go through an open competitive process. While it is preferable to include the future work within the original RFP this is often not possible as the future work can only be appropriately defined once the earlier work is completed. Good value in the additional work can be ensured where the consultant has:

1. been engaged on directly related work or previous phases of the project
2. has successfully completed or demonstrated appropriate progress on subsequent work
3. has demonstrated specific abilities related to the project through performance
4. was previously selected through a competitive process
5. is proposing to utilize many of the same team members (where appropriate) on the new work
6. is proposing to charge the team members to the new project/phase at the rates included in previous proposals (with appropriate adjustments reflecting cost of living increases)
7. has submitted an acceptable proposal in response to a RFP (developed through discussion with them) which

- demonstrates the criteria above and addresses the project objectives,
- demonstrates the ability to complete the work within the project schedule and budget (considering consulting and construction, where appropriate)
- demonstrates good value for approved project budget

It is proposed that staff build on these considerations in developing policies providing direction and guidance on the procurement of professional services. These policies will be returned to the board for consideration, and eventual approval, either as part of interim policies related to the procurement of professional services or as part of a more comprehensive purchasing policy.

If there are any questions please contact staff.

Recommended By:

Chris Tasker, Manager
Water & Information Management

Prepared By:

Fraser Sutherland, Project E.I.T.
Water Control Structures

UPPER THAMES RIVER
CONSERVATION AUTHORITY

MEMO

To:	**UTRCA Board of Directors**		
From:	**David Charles, Supervisor, Water Control Structures**		
Date:	**August 10, 2017**	**Agenda #:**	**6 b)**
Subject:	**Tender Award and Budget Increase Fanshawe Dam Substructure Rehabilitation Phase 4 (2017) & Phase 5 (2018)**	**Filename:**	**Flood Control # 1095**

Recommendation:
It is recommended that:

the Board approve the increased project budget and direct staff to pursue WECI funding for the increased project budget

Report Purpose:
Purchasing policy requires staff to inform the Board of tenders if the lowest tender is accepted. As the tended amount for Phase 4 is greater than the approved budget, this report also requests an increase in the project budget and direction to pursue WECI funding.

Background:
The overall scope for the Fanshawe Dam Rehabilitation Project was originally planned to cover 4 separate phases as developed in the 20 year Capital Repair Plan considering seasonal constraints, economies, and dependent projects. The first phase which consisted of repainting steel concurrently with electrical work across the superstructure was completed in 2013. The second and third phases which comprised mainly of superstructure painting were completed in 2014 and 2015 respectively. The latest and final installment of the project has been further divided into Phase 4 and Phase 5. Phase 4 and 5 includes concrete repairs and painting along with some structural steel and pier nose cladding repairs. Phase 4 and 5 have been included in a single tender with Phase 4 in the fall of 2017 and the work for Phase 5 in the fall of 2018 (subject to available funding).

Report on the Tender Process:
Six contractors were contacted by AECOM, our consultant, based on prior work experience and knowledge of these types of repairs. Three contractors responded with tenders as follows:

McLean Taylor - St. Marys, ON	$1,374,479 + HST
Eiffage Inc. - Burlington, ON	$1,789,700 + HST
Facca Inc. - Ruscom Station, ON	$2,570,100 + HST

AECOM recommended that we accept the lowest tender. The $1,374,479 + HST total tender amount comprises costs of $719,762 + HST for Phase 4 in 2017 and $654,717 + HST for Phase 5 in 2018. In addition, AECOM has recommended that the UTRCA include a budget item for material testing costs of $15,000 to be split equally between the two phases that was not included in the tender amounts.

	Phase 4 2017	Phase 5 2018
Engineering	$92,559	$50,724
Construction	$719,762	$654,717
Contingency	$60,000	$60,000
Material Testing	$7,500	$7,500
Total Contracts and Consulting	$879,821	$772,941
Non-refundable HST	$15,485	$13,604
Estimated UTRCA Costs	$20,000	$20,000
Total	**$915,305**	**$806,545**
Approved Funding	$820,000	
Variance from Approved Funding	$-95,305	

The UTRCA has received approval of 2017 WECI funding for Phase 4 in the amount of $410,000, which along with the levy from the City of London results in a total Phase 4 project budget of $820,000. This results in a project budget shortfall of $95,305 for Phase 4.

There is a significant contingency included for each year. If much of the contingency remains unused in 2017 it would reduce the potential shortfall. Also, we can utilize any funding not used in other 2017/18 WECI approved projects to cover this shortfall, as a couple of other projects have the potential to be under budget. We can also apply for any available 2017/18 WECI funding from projects which other CA's have cancelled or which have come in under the approved project funding. As this project is high ranking it would be considered ahead of many other projects which also received funding. Further, we will be submitting a WECI application in 2018 for Phase 5. As such, a third, but less preferred alternative, is to defer some of the Phase 4 work until 2018 so that it is eligible for 2018/19 funding. This third alternative is less preferred as work is confined to 3 of the 6 bays and deferring some of the work in one of the bays is likely to result in higher overall costs as the contractor would have to remobilize in order to setup and remove scaffolding and formwork in a bay twice. As Fanshawe Dam is one of the highest ranked structures our potential for getting funding in 2018/19 remains favourable.

Project Award Status:
It is recommended that the UTRCA award the contract to McLean Taylor for the full amount of $779,762 for Phase 4 and increase the contract value to include the Phase 5 tender amount contingent upon approval of 2018 WECI project funding. McLean Taylor has been advised that the UTRCA intends to award the contract to them, subject to board approval, as their tender was the lowest. As a result they are preparing to start work as soon as possible following notification of the board approval.

Please contact staff if there are any questions.

Recommended by:

Chris Tasker, Manager
Water & Information Management

Prepared by:

David Charles, Supervisor
Water Control Structures

UPPER THAMES RIVER
CONSERVATION AUTHORITY

MEMO

To:	**UTRCA Board of Directors**		
From:	**Ian Wilcox**		
Date:	**9 August 2017**	**Agenda #:**	**6 (c) i)**
Subject:	**Revised 2017 Budget for Approval**	**Filename:**	**P:\Users\vigliantim\Documents\GroupWise\663-1.doc**

Recommendation:

The Board of Directors approves the revised 2017 Budget as submitted.

Highlights of Changes:

The Budget Difference column indicates where changes have occurred since the initial budget was prepared and approved. There have been some dollar changes to our original budget and two structural changes as well.

(in thousands)

Revenues are estimated to increase $2,033 (11%) due to a great degree by:
$1,060 for matching municipal funding for flood control projects
$304 from MOECC and Environment Canada
$139 in private land management revenues,
$92 for Clean Water projects unbudgeted earlier,
$119 from OMAFRA for Conservation programs
$102 in combined revenues for a First Nations Engagement program,
$10 from the City of London for ESA contract expansion
$87 in mis-categorized education fees

Operational spending will increase $1,163 (9%) across all units. This is reflected largely by:
A reduction of 1 FTE earlier budgeted
$191 for program supplies to deliver on new funding agreements
$242 in contracted services
$827 in amortization expense

(actual amounts)

Structurally, we have now:

1. Fully incorporated the estimated $827,965 amortization expense on tangible capital assets for 2017 into our operational budget. It is fully attributed both directly to units which make use of capital assets and indirectly through allocations from service cost centres. It therefore becomes part of the $1,163 in total additional expense mentioned just above. The addition of amortization in our budget will allow significantly better forecasting of year-end results and should eliminate the variance which auditors must reconcile between our budgeted and actual results.

2. We have more clearly split out ***capital spending***.

Flood control capital expenses will increase by $770,903 due to the availability of matching project dollars and more detailed project planning.

Other capital needs will drop by $16,151 ($14,585 already approved for a microscope, $15,000 further for furnishings and $10,000 for wireless connectivity to Wildwood recently identified plus an error correction of $55,736). The complete list of capital expenditures for 2017 follows.

The operating surplus is estimated to grow by $754,752 some of which will need to be carried forward into 2018 for programs.

Recommended by:

for:

Ian Wilcox

Prepared by:

Christine Saracino

2017 Capital Projects
Revised Budget

Flood Control Projects	**4,416,147**
Office Furnishings for new staff	65,000
Desktop Hardware	25,000
Network Hardware	85,000
Vehicles	70,000
ATV, boat, gator, woodchipper	154,000
Erosion issue correction PCA	75,000
Culvert replacement WCA	60,000
Pumphouse removal FCA	15,000
Hydro upgrade plan	105,000
Internet access for WCA	10,000
Microscope	14,585
Storage Shed addition	122,650
Water Supply capital loan repayment	55,732
Total Other Expenditures	**856,967**

UPPER THAMES RIVER
CONSERVATION AUTHORITY

MEMO

To:	**UTRCA Board of Directors**		
From:	**Christine Saracino, Supervisor Finance and Accounting** **Ian Wilcox, General Manager**		
Date:	**9 August 2017**	**Agenda #:**	6 (c) ii)
Subject:	**Financial Update for July 2017**	**Filename:**	::ODMA\GRPWISE\UT_MAIN.UTRCA_PO.HR:5336.1

For Information:

Attached is a financial report which serves as both a financial update and revised budget.

You will note in the first column that year-to-date we have created a $4.8 million surplus in our operations though this is due primarily to over 80% of levy already being recorded for the year. Our provincial and federal contract revenues are slow to appear as many of those await quarterly or even year-end reports before being accrued. Many projects are not yet complete this year, so recording those anticipated revenues is not yet warranted. Of note are revenues from Conservation Areas which, at the end of July, are at 90% of budget.

On the expense side, and comparing YTD actuals to the second column of approved budget, we have spent 61% of our budget at 58% of the way through the year. This is not extraordinary nor does any single unit or activity stand out as the cause. As we are now just beyond half way through the year, this seemingly 'overspending' serves to highlight the desirability to revise the budget in order to project what's actually occurring and to update the planned financial status of the organization now that new projects are coming on line. Nine months have expired from the time the original budget was prepared and earlier estimates should be revised and missing items added. The management team is also preparing to implement split-year budgeting which will more closely address the differences in fiscal year between UTRCA and many of our funders. Some of these wrinkles will be ironed out in the coming months.

In capital activities, we have not yet spent as planned. We do not yet have a means to accrue committed contract amounts and we often await delayed billings from suppliers and other contractors. A lag appears as costs are often end-of- year loaded due to the necessity to reconcile balances at that time of the year.

In some cases, actual spending is not as large as originally planned. An example is the boat purchased at Wildwood Conservation Area; a much less expensive boat was purchased than originally planned because the precise kind of equipment required was not known at the time of the original budget preparation.

Submitted by:

Michelle Viglianti
for:
Ian Wilcox

Prepared by:

C Saracino
Christine Saracino

Upper Thames River Conservation Authority

Summary Statement of Operations
For The Period Ending July 31, 2017

	2017 YTD Actual	2017 Total Budget	$ Variance	2017 Revised Budget	Budget Difference
Revenues:					
Levy Funding					
Municipal General Levy	3,271,214	3,271,214	-	3,271,214	-
Dam and Flood Control Levy	1,324,926	1,324,926	-	1,324,926	-
Capital Maintenance and Operating Reserve Levy	200,723	200,723	-	200,723	-
Flood Control Capital Levy	246,768	1,301,310	1,054,542	1,301,310	-
	5,043,631	6,098,173	1,054,542	6,098,173	-
Government Transfer Payments	-	354,129	354,129	351,424	(2,705)
Contracts					
Municipal within Watershed	546,981	1,109,048	562,067	2,255,503	1,146,455
Municipal without Watershed	42,460	50,000	7,540	91,600	41,600
Provincial	563,743	2,294,238	1,730,495	2,637,908	343,670
Federal	263,255	1,377,917	1,114,662	1,177,432	(200,485)
All other	1,249,962	1,633,044	383,082	1,587,324	(45,720)
	2,666,401	6,464,247	3,797,846	7,749,767	1,285,520
User Fees					
Conservation Areas	2,901,997	3,231,949	329,952	3,241,149	9,200
Planning and Permit Fees	104,160	172,000	67,840	172,000	-
Education Fees	79,518	-	(79,518)	86,920	86,920
	3,085,675	3,403,949	318,274	3,500,069	96,120
All Other Revenues	1,992,321	1,055,957	(936,364)	1,642,549	586,592
Funding from reserves	-	580,582	580,582	648,489	67,907
Total Revenues	12,788,027	17,957,037	5,169,010	19,990,471	2,033,434
Mission Cost Centres					
Community Partnerships	661,760	967,552	305,792	1,120,441	152,889
Water and Information Management	1,233,901	2,035,399	801,498	2,401,750	366,351
Environmental Planning and Regulations	886,112	1,758,364	872,252	1,627,341	(131,023)
Conservation Services	998,975	1,479,830	480,855	1,785,760	305,930
Watershed Planning, Research and Monitoring	609,495	1,067,611	458,116	1,154,805	87,194
Conservation Areas	2,227,944	4,096,642	1,868,698	4,212,156	115,514
Lands and Facilities Management	895,824	1,632,001	736,177	1,674,005	42,004
Service Cost Centres	267,927	(265,282)	(533,209)	(40,435)	224,847
Total Operating Expenditures	7,781,938	12,772,117	4,990,179	13,935,823	1,163,706
Desired transfer to reserves	**205,723**	607,018	401,295	764,353	157,335
Surplus (deficit) in Current Year Operations	4,800,366	4,577,902	(222,464)	5,290,295	712,393
Capital Expenditures:					
Flood Control Capital Projects	1,172,241	3,645,244	2,473,003	4,416,147	770,903
All other Capital Expenditures	357,902	873,118	515,216	856,967	(16,151)
Expenditures Benefitting Future Years	**1,530,143**	**4,518,362**	**2,988,219**	**5,273,114**	**754,752**
Amortization	481,391	-	(481,391)	827,965	827,965
Net Cash Surplus (Deficit)	**3,751,614**	**59,540**	**(3,692,074)**	**845,146**	**785,606**

UPPER THAMES RIVER
CONSERVATION AUTHORITY

MEMO

To: **Chair and Members of the UTRCA Board of Directors**

From: **Tracy Annett, Manager – Environmental Planning and Regulations**

Date: **August 10, 2017** **Agenda #:** **8 (a)**

Subject: **Administration and Enforcement – Sect. 28 Status Report – Development, Interference of Wetlands and Alteration to Shorelines and Watercourses Regulation** **Filename:** **Document ENVP 4901**

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 June 15, 2017 to August 9, 2017.

Application #38/16 (Extension/Renewal)
Town of Ingersoll
Ingersoll Cheese Museum, Centennial Park – Town of Ingersoll
-requested extension/renewal for permit originally issued February 25, 2016.
-proposed timber frame community pavilion associated with the Ingersoll Cheese Museum and Centennial Park.
-plans prepared by Building Alternatives Inc.
-staff approved and permit extension issued July 18, 2017.

Application #32/17
Municipality of West Perth
Line 42 at the North Thames River – Municipality of West Perth
-proposed bridge rehabilitation crossing the Northwest Municipal Drain (North Thames River)
-plans prepared by B.M. Ross and Associates Limited.
-staff approved and permit issued July 4, 2017.

Application #55/17
Town of St. Marys
Wellington Street – Town of St. Marys
-proposed replacement of the Wellington Street Bridge crossing Trout Creek.
-plans prepared by Mclean Taylor Construction Limited and B.M. Ross and Associates Limited.
-staff approved and permit issued June 30, 2017.

Application #61/17
Union Gas Limited
2397 Oxford Street West – City of London
-proposed installation of a 2 inch pipeline beneath a Thames River tributary using horizontal directional drilling method
-plans prepared by Union Gas, with contingency plan if drilling method proves ineffective or in the event of a hydro-fracture ("frac-out")
-staff approved and permit issued June 23, 2017

Application #78/17
1066611 Ontario Ltd.
3804 Southwinds Drive – City of London
-proposed construction of storm outlet as part of servicing for Deer Creek Subdivision
-plans prepared by IBI Group
-staff approved and permit issued June 27, 2017

Application #83/17
Ellice Holdings Inc.
4842 Line 34 – Township of Perth East
-proposed construction of new commercial building, associated stormwater management pond and drainage swale.
-plans prepared by MTE Consultants Inc.
-staff approved and permit issued July 18, 2017.

Application #84/17
Union Gas
Lot 4, Concession 10 – Township of Blandford-Blenheim
-proposed pipeline (integrity shallow cover) remediation project adjacent the Union Gas Bright 'C' Compressor Station and adjacent wetland areas.
-plans prepared by Union Gas Limited.
-staff approved and permit issued June 21, 2017.

Application #87/17
Keith Wilson
Part Lot 16, Concession 11 – Municipality of Middlesex Centre
-proposed pole barn drive shed construction.
-plans prepared by JJJ Engineering Limited.
-staff approved and permit issued June 21, 2017.

Application #88/17
Union Gas Limited
Sebringville, Rostock, Wartburg, Milverton – Townships of Perth East & Perth South
-proposed NPS 2 and NPS 4 inch gas pipeline installations undercrossing 18 watercourses to accommodate 48.6 km of new natural gas pipeline associated with the Milverton Natural Gas Pipeline Community Expansion Project.
-plans prepared by Union Gas Limited including hydro-fracture contingency plans as installation will be via high pressure directional drilling.
-staff approved and permit issued July 18, 2017.

Application #90(A)/17
County of Perth
Perth Line 55 at Road 170 – Municipality of West Perth
-proposed culvert replacement crossing the Northwest Municipal Drain (North Thames River).
-plans prepared by GM BluePlan Engineering Limited.
-staff approved and permit issued July 4, 2017.

Application #90(B)/17
County of Perth
Perth Line 55 at Road 168 – Municipality of West Perth
-proposed culvert replacement crossing the Nicholson Municipal Drain.
-plans prepared by GM BluePlan Engineering Limited.
-staff approved and permit issued July 4, 2017.

Application #91/17
Rik Louwagie
4820 Line 46 – Township of Perth East
-proposed construction of single family residence and accessory building (shed), installation of associated septic system.
-plans prepared by landowner and MTE.
-staff approved and permit issued July 27, 2017.

Application #93/17
Jay Stegehuis
59 Elmurst Street – Municipality of Middlesex Centre
-proposed pool shed, roofed patio, in-ground pool and associated pool decking.
-plans prepared by landowner and Trueline Services Inc. in accordance with location details and mitigation measures agreed to on-site between the landowner and UTRCA staff.
-staff approved and permit issued June 23, 2017.

Application #94/17
Rick Earhart – London Fence and Deck
1520 Wilton Grove Rd. – City of London
-proposed new backyard deck construction for landowner Ross Mitchel
-staff approved and permit issued June 21, 2017.

Application #95/17
Vernon Pickell
1520 Wilton Grove Rd. – City of London
-proposed sunroom addition
-staff approved and permit issued June 22, 2017.

Application #96/17
City of London
Bradley Avenue at Pincombe Drain – City of London
-proposed road crossing of Pincombe Drain (a Dingman Creek tributary)
-part of Bradley Avenue extension project
-plans prepared by AGM Engineering, with supporting calculations from Stantec Consulting
-staff approved and permit issued June 22, 2017

Application #97/17
Brian Deitz
3953 West Graham Place – City of London
-proposed backyard deck re-construction
-staff approved and permit issued June 21, 2017

Application #98/17
Bell Canada
Perth Road 119 at Line 15 – Township of Perth
-proposed fibre optic cable installation undercrossing the Ralph Murray Municipal Drain.
-plans prepared by Bell Canada and Aecon Group Inc. including hydro-fracture contingency plans as installation will be via high pressure directional drilling.
-staff approved and permit issued July 18, 2017.

Application #100/17
City of London
Wonderland Road South – City of London
-proposed two-lane upgrade of Wonderland Road South between Highways 401 and 402
-supporting studies and drawings prepared by MMM Group Limited
-staff approved and permit issued June 27, 2017

Application #101/17
Wayne Hopson
983084 Wildwood Road - Zorra
- proposed tile repair and tree cutting exemption
- staff approved and permit issued June 29, 2017

Application #102/17
Lunor Group (Shawn McGuire)
East Woodstock Lands, D.P. 32T-08003, City of Woodstock
-proposed Phase 5 – Stormwater Management Facility (South End)
-plans prepared by Matt Ninomiya, Stantec Consulting Ltd.
-staff approved and permit issued June 29, 2017.

Application #103/17
Chris and Lainie Hanlon
465107 Curries Road, Woodstock – Norwich Township
-proposed construction of 40'x36' shed/garage
-staff approved and permit issued June 30, 2017.

Application #104/17
City of London
Dingman Creek ESA – Homewood Lane – City of London
-proposed tributary crossing as part of Dingman Creek ESA trail work
-plans prepared for City of London by UTRCA/ESA staff
-staff approved and permit issued July 5, 2017

Application 105/17
Township of Perth East – South Easthope
Stock Drain
- engineer's report review for 2 laneway culverts and a clean out of a Class C drain
- UTRCA permit, signed notification form, and SCR for bottom cleanouts issued June 29, 2017

Application #108/17
Bimini United Church Camp
Part Lot 7, Concession 9 – Township of Perth South
-proposed removal of three small existing buildings and construction of one permanent (combined) storage building and seasonal residence cabin.
-plans prepared by gb architect inc. in accordance with site specific location details and mitigation measures discussed on site.
-staff approved and permit issued July 17, 2017.

Application #109/17
Stewart McCutcheon
Part Lot 26, Concession 3 – Municipality of Thames Centre
-proposed watercourse enclosure of a headwater stream.
-plans prepared by K McCutcheon Farm Drainage.
-staff approved and permit issued July 14, 2017.

Application #111/17
City of London
Second Street Stormwater Management Facility (S-039-Pond)
-proposed cleanout of sedimentation of SWMF
-staff approved and permit issued July 17, 2017.

Application #112/17
Municipality of Middlesex Centre
Patrick Drain – Hughes Branch
- proposed bottom cleanout of 232 metres of a Class F drain
- UTRCA permit, signed notification form, and SCR for bottom cleanouts issued July 19, 2017

Application #115/17
Drewlo Holdings
Summerside Subdivision Phase 13A – Bradley Avenue – City of London
-latest phase of development of Summerside Subdivision in southeast London, adjacent to a Provincially Significant Wetland
-Development Engineering (London) Limited coordinated preparation of supporting documents and drawings
-staff approved and permit issued July 21, 2017

Application #116/17
Arthur Tkaczyk
15 Oxford St. West, City of London
-proposed small addition to front of existing home & 2 dormers
-staff approved and permit issued July 25, 2017.

Application #117/17
City of London
2A Grosvenor St. – Gibbons Park, City of London
-proposed concrete pad/music park installation
-staff approved and permit issued July 26, 2017.

Application #118/17
Mark Przewieda
1454 Corley Drive – City of London
-reconstruction of an in-ground pool, following major reconstruction of residential dwelling on subject property
-staff approved and permit issued July 31, 2017

Application #119/17
Ivy Homes Ltd.
427 Randol Drive – City of London
-proposed house renovation and deck construction
-plans prepared by DC Buck Engineering
-staff approved and permit issued August 4, 2017

Application #120/17
London Renovations
211 Bernard Avenue – City of London
-house renovation project within regulated area, primarily interior work with limited exterior upgrades
-staff approved and permit issued August 1, 2017

Application #121/17
Union Gas Limited
Dundas Street – Township of East Zorra-Tavistock
-proposed NPS 4 inch gas pipeline installation along Dundas Street, west side of the South Thames River.
-plans prepared by Union Gas Limited.
-staff approved and permit issued August 3, 2017.

Application #122/17
City of Stratford
Lake Victoria North Shore – City of Stratford
-proposed public washroom facility adjacent the Avon River/Lake Victoria.
-plans prepared by GB Architect Inc. and MTE Consultants Inc.
-staff approved and permit issued August 1, 2017.

Status Report – Unauthorized Development, Fill Placement, Site Grading
545 Fanshawe Park Road West
City of London
A development application for the subject property has been reviewed by UTRCA staff over an extended period of time, with development limits confirmed through the submission of a satisfactory geotechnical report by exp. Plans to extend a pathway along the northern limits of the development and connecting with the neighbouring property to the east led to additional geotechnical analysis by exp plus the submission of a scoped Environmental Impact Study (EIS). While the documentation in support of this added proposal was being compiled, preliminary excavation began on the site without Section 28 approval in place. Primary staff concerns related to lack of effective sediment and erosion control measures. A Notice of Violation was issued July 5, 2017 to the developer and steps are being taken to finalize supporting documentation. Sediment and erosion control measures have been upgraded and staff anticipate being able to finalize our Section 28 approval very soon. Members will be kept apprised of progress in this matter.

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

UPPER THAMES RIVER
CONSERVATION AUTHORITY

MEMO

To: **UTRCA Board of Directors**

From: **Ian Wilcox, General Manager**
Christine Saracino, Supervisor, Finance and Accounting

Date: **26 July 2017**

Agenda #: **8 (b)**

Subject: **Effect of Minimum Wage Change**

Filename: **::ODMA\GRPWISE\UT_MAIN.UTRCA_PO.Finances:668.1**

The recent announcement of the Ontario Bill 148 regarding changes to minimum wage as well as changes to vacation, call-in pay and scheduling has been referred to the Standing Committee on Finance and Economic Affairs for consideration and public input has been sought. A second reading of the bill is not yet scheduled. The introduction of this bill has necessitated an evaluation of the potential impact on the UTRCA budget. The table below summarizes the overall effect.

A 2018 increase of minimum wage from $11.60/hr. to $14.00/hr. will require amendments to the salary grid, specifically to the lowest three grades of the 10 grade grid. As the lowest pay grade is increased by this legislation, it requires pay grades immediately higher to be increased as well to avoid overlap. This change increases those grades by 22%. On a positive note, the change aligns all grade levels in the grid much more effectively than previously.

A further 2019 increase to $15.00/hr. will necessitate a 7% change to those lowest three grades of the grid.

With no other changes applied to our 2017 wage budget, the total wage and payroll burden will increase by 4.29% for 2018. An additional 2% grid change to the remaining grades makes a total anticipated wage and payroll burden increase of 6.06% for our 2018 budget.

An additional 7% increase to the lowest grades for 2019 is required if Bill 148 becomes law. With a projected 2% change to the remaining grades, 2019 wages will increase overall by 2.59% from 2018.

One further change in the legislation which will impact UTRCA involves on-call pay. Our current policies require 24/7 coverage in each of our 3 Conservation Areas along with coverage in various other units. The new legislation will require 3 hours on-call pay for each of these days of on call for an estimated total cost of $504,576. It is anticipated that our current on-call policy will require revision to mitigate this total estimated cost.

Budget	$ Total wages and burden	Change over previous year
2017 Revised	9,075,308	
2018 with minimum wage change	9,465,078	4.29%
2018 with min.wage + 2 % grid change	9,625,210	6.06%
2019 with minimum wage change	9,703.095	.81%
2019 with min.wage + 2% grid change	9,874,544	2.59%

Submitted by:

Ian Wilcox

Prepared by:

Christine Saracino

UPPER THAMES RIVER
CONSERVATION AUTHORITY

MEMO

To:	**UTRCA Board of Directors**		
From:	**Shanna Dunlop, Executive Director, Fanshawe Pioneer Village**		
Date:	**August 9, 2017**	**Agenda #:**	8 (c)
Subject:	**Fanshawe Pioneer Village Report**	**Filename:**	

Fanshawe Pioneer Village is having a busy 2017 season and all attendance projections are on target. A successful Spring Education program engaged over 9,600 participants in hands-on history and eight public events have been delivered to date, including our summer theatre program and special Canada 150 event, "Confederation Weekend", supported by an Ontario 150 Community Celebration Program grant. Thanks to a special contribution from the City of London, our "Dominion Day" event on July 1st was made a free community event and drew 1,770 visitors to mark Canada's 150th birthday. Fanshawe Pioneer Village also coordinated a shared booth for local museums at the downtown London "Sesquifest" event for outreach and promotional purposes that ran June 30th through July 3rd. We have had over 200 participants in our new *"Ransom"* adventure room and the program is starting to gain exposure and interest. Late Summer and Fall will focus on the implementation and delivery of six additional public events, including our signature "Agricultural Fair", "Fanshawe 1812" and "Midnight Village" ghost walk.

A new commemorative sculpture of a circa 1860s pioneer statue and traveling trunk was installed at the entrance to the heritage Village in July. This generous gift from the Beverly N. Baines Fund was commissioned and produced by local artist Frank Moore. Interpretive signage and an indigenous meadow will be installed in Spring 2018 with an additional contribution from the donor, and together with the statue, provide an authentic natural historical landscape and welcoming point for site visitors.

On Saturday August 5th, Fanshawe Pioneer Village opened two new storefront displays in a replica annex recently restored to our Denfield General Store. The event was attended by 114 guests, including municipal and federal politicians as well as community donors and their families. This capital project, funded by the Canada 150 Infrastructure Program, included installing a fully accessible boardwalk linking the annex, General Store and Print shop. The new Tinsmith shop exhibit and historic Rotary office have completed the Town of Fanshawe Streetscape and will provide a unique platform for the interpretation of early trades and businesses in turn of the century London. Restoration work is currently being completed on the stable area of the London Brewery building and a leatherworking shop display will be installed in this location in Spring 2018. Upcoming capital projects include two roof replacements (funded by a special capital contribution from the City of London) and the rehabilitation of a former man-made pond area in the Village affected with phragmites into a Carolinian Woodland (with support from funders with the London Community Foundation).

The London & Middlesex Heritage Museum has recently had five Board members complete their terms. Vic Cote, Bob McNaughton, Anne Baxter, Tim Castle and Dr. Tom Peace have filled in these spaces. As of the June 19th, 2017 Annual General Meeting, Craig Lukassen is now Chair of the London & Middlesex Heritage Museum Board, Sabrina Lombardi assumes the role of Past Chair, Mary Anne Dowding takes on the position of 1st Vice Chair, Joy Jackson is 2nd Vice Chair and Vic Cote Treasurer.

Prepared by:

Shanna Dunlop

Shanna Dunlop, Executive Director
Fanshawe Pioneer Village

UPPER THAMES RIVER
CONSERVATION AUTHORITY

MEMO

To: **UTRCA Board of Directors**

From: **Teresa Hollingsworth, Manager, Community and Corporate Services**

Date: **August 8, 2017** **Agenda #:** **8(d)**

Subject: **UTRCA Recognition Awards** **Filename:** **P:\Users\vigliantim\Documents\GroupWise\118094-1.doc**

Background

The UTRCA Board of Directors directed staff to investigate the potential for an Upper Thames River Conservation Authority Recognition Awards Program. The purpose of the program is to allow the Authority to publically thank and recognize individuals and groups that are furthering the mission of the Authority.

Staff reviewed many existing local awards programs to summarize the types of recognition commonly found and to gauge potential overlap should the Authority initiate a program. Examples of some of these programs are illustrated below.

Organization	Awarded to:	Awarded for:	Award Type
Carolinian Canada Awards	Landowner and/or volunteer, youth, business in any one year	Conservation/ stewardship Lifetime achievement	Sculpture and banquet
Nature London	Individual or group	Contributions to the organization or to conservation	Banquet
Urban League of London	individual/organization	Community citizenship & leadership Outstanding built form	Green Umbrella Award Green Brick Award
Pillar Nonprofit Network	Nonprofits, charities individuals, businesses, a government	Community Innovation, Leadership, Impact and Collaboration	$2000 gift to charity Engraved award Permanent name plaque
Oxford Stewardship Award	Landowner	Protection of natural environment on their land	Gift certificate Recognition Wall

A review was completed of recognition programs offered across the province that would have relevance to a UTRCA program. Overall, the organizations surveyed recognized various individuals and groups, for actions related to their mission, with varying types of awards and events.

Awarded to:	Awarded for:	Award Type
Landowner Citizen Youth Business Education (School, teacher, student) Municipality Public Servant	Conservation/Stewardship Agriculture Habitat Waste Reduction Leadership Longevity/Dedication Innovation	Plaque or Certificate Sign (property/business/school) Public Recognition (banquet, website/newsletter article, video) Gift (item or cash) Donation to a cause on behalf of winner Public Installation (wall of fame, winners walk)

Successful Programs in Ontario

After reviewing current programs, staff chose two successful awards programs in Ontario to serve as models for a UTRCA program: Conservation Halton's program and Pillar Nonprofit Network's program.

The Halton Conservation Awards program is currently in their 35th year. Halton Conservation was very forthcoming with lessons learned and provided the UTRCA with an outline of their current program, as summarized below.

Categories	Description
Citizen Award	Presented to a citizen who has made a significant effort to improve the natural environment in the Halton Watershed
Citizen Award (Youth)	Presented to a youth who has made a significant effort to improve the natural environment in the Halton Watershed
Community Award	Presented to a community organization, institution, municipality, or business that has undertaken a significant conservation action that exemplifies wise conservation
Education Award	Presented to an individual, group, or school that has promoted a better understanding and appreciation of conservation
Stewardship Award	Presented to a landowner who demonstrates stewardship excellence in protecting the natural environment on their property or public land

The Conservation Halton program includes additional important components:

- Nominations for the Halton Conservation Awards come from staff recommendations and from public nominations made by filling out an online form.
- Winners are chosen by a 3 member committee of Board Members.
- All of the awards are given out each year. They started the program with 1 award; the categories grew to 9, and then were pared back to 5.
- The awards reception is held in the spring at the Milton Centre for the Arts. It is an evening reception with a catered meal and cash bar.
- Winners are recognized at the reception with a sculpture & gift bag and their individual stories are posted on the Conservation Authority's website.

The Pillar Community Innovation Awards, although not focused on environmental improvements, illustrate the importance of including community members in our efforts to effect change. Pillar's awards highlight how the nonprofit sector's Innovation, Leadership, Impact and Collaboration improve the quality of life in the City of London. The Awards celebrate nonprofits and charities and the individuals, businesses and government sector organizations that work with them to make our community brighter.

Categories	Description
Community Innovation	Nominees for this award have recognized new and better ways to address a need in the community. Nominees have found innovative, creative and efficient solutions to make a difference in the lives of others.
Community Leadership	Nominees for this award stand out because of their exceptional professional and/or volunteer achievements in the community, which are above and beyond their role in a paid position. These nominees embody the spirit of the community and, through their actions and accomplishments, are an inspiration to others.
Community Impact	Nominees for this award have recognized new and better ways to address a need in the community. Their efforts have had a positive and meaningful impact on the broader community, resulting in clear and measurable change. The nominee's impact extends to provide other opportunities that impact the lives of individuals, meet additional needs and build a sense of community.
Community Collaboration	Nominees for this award provide outstanding examples of collaboration with their communities. These nominees recognize the benefits that come from accessing the expertise of individuals, local businesses, government, nonprofits or charities - be it human, financial, or physical resources. Through the synergy that comes with community collaboration, the nominees have facilitated increased sustainability, efficiency, and innovation in the service they provide to their community.

The Pillar Nonprofit awards program includes additional important components:

- Nominations are made through a public call for nominations – filling in and submitting a nomination package. Self-nominations and posthumous nominations are not accepted.
- A selection committee, with non-profit, public, and private sector representation chooses the winners.
- All nominees, along with the community, are invited to attend the annual awards dinner. Winners are announced at the event.
- Award recipients receive $2000 gift to direct to a charity of the winners choice, an engraved award, and a name plaque installed permanently in the Central Library.

Recommendation:

It is recommended that the UTRCA further investigate the implementation of a recognition program with the following awards categories and implementation components.

Categories	Description
Outstanding Resident Award	Presented to a watershed resident who embodies the spirit of conservation and, through their actions and accomplishments, creates a more livable and resilient watershed.
Youth Leadership Award	Presented to a K-12 youth that has undertaken an outstanding environmental project, promoted awareness of environmental issues, or encouraged positive community involvement.
Community Award	Presented to a community organization, institution, municipality, business, or collaboration that has undertaken a significant conservation action that improves the local environment and encourages community action.
Inspiration Award	Presented to a teacher, group, or school that, through their actions, projects, or programs, encourage watershed residents to take an interest in the natural environment, create connections with nature, and contribute to its preservation.
Stewardship Award	Presented to a watershed resident with passion and understanding of the conservation needs in their area and a desire to take action. The recipient demonstrates exceptional stewardship in protecting or improving the natural environment on their property or public land.
Board of Directors Award	Presented under exceptional circumstances to an individual or group that has made a significant contribution to the protection or improvement of the natural environment in the Upper Thames. River watershed.

The UTRCA recognition program implementation would include:

- An opportunity for nominations from the community, in addition to staff and Board member recommendations
- The ability to award multiple recipients or no one in a category, in a given year.
- A special award to appropriately acknowledge an extraordinary contribution or achievement.
- A location to permanently display award recipient names.
- The intention to be open to changing category definitions/ descriptions.

Recommended by:

Teresa Hollingsworth
Manager, Community & Corporate Services

Prepared by:

Brad Hertner
Community Partnerships Specialist

UPPER THAMES RIVER
CONSERVATION AUTHORITY

MEMO

To: UTRCA Board of Directors

From: Chris Tasker, Manager, Water & Information Management

Date: July 18, 2017 **Agenda #:** 8(e)

Subject: For Information– R.T. Orr Dam Wingwall Stability Study – Consultant Award **Filename:** #117893

Summary

The contract for the R.T. Orr Dam Wingwall Stability Study was awarded to AECOM for $30,745 + HST and an engineering agreement was executed between the AECOM and the UTRCA. The study is currently on-going and is expected to be completed October 2017.

Purpose

Update the board on the progress of an on-going Water Control Infrastructure project that was identified and approved in the 20 year Capital Project plan and received approval for WECI funding.

Background

The R. T. Orr Dam is located in the city of Stratford on the Avon River, which is a tributary to the North Thames River. It was constructed in 1963/64. The dam comprises right* and left embankments, separated by a 3-bay concrete spillway. The spillway has two gated bays (one adjacent to each bank) with a center duck-billed overflow weir. Retaining walls extend upstream on both sides of the spillway and retain the embankment fill. The retaining walls extend downstream as well. A Dam Safety Review was completed in 2007, which determined that the wingwalls did not have an adequate factor of safety for all expected conditions and actions should be taken to stabilize the walls should any further movement of the wingwalls occur. Further movement has since occurred.

The purpose of this study is to:

i) Determine the stability of each of the 4 wingwalls in existing condition under the three different load cases (drained, flood, winter drawdown).

ii) For each wingwall develop options for remedial and/or preventative action and complete preliminary design and costs of preferred option(s).

iii) Develop appropriate timelines for remedial or preventative actions to be initiated and completed based on existing stability as well as predicted future stability. Actions dependent on future stability should be based on a measurable change from the current condition (e.g. displacement or tilt). Remedial and preventative actions should be ranked in terms of priority from most urgent to least urgent.

* The orientations of all structures are given in terms of left and right as looking downstream.

Proposal Process
Ten consultants were invited to submit proposals. Technical Proposals (Part "A") and Cost Proposals (Part "B") were received from Amec Foster Wheeler (AFM) and AECOM. Proposal review was undertaken by reviewing Part A (technical proposals) of each consultant. Part B (cost proposal) is only reviewed if the technical proposals are satisfactory.

Part A review
- Technical proposal quality
- Experience and qualifications
- Understanding and methods
- Capacity
- Other considerations and innovations

Part B review
- Structure of cost proposal
- Assigned time
- Allocation of staff
- Level of detail
- Related costs

Part A review indicated that AFW and AECOM had satisfactory technical proposals, however there was an indication from AFW that Part B of their proposal would not provide all of the costs required to complete the project. When Part B of the proposals were opened this was confirmed as AFW did not provide costs to complete study objectives ii) and iii); essentially not committing to complete all of the required work and not providing costs to complete all of the required work. Multiple attempts to obtain additional costing information from AFW were unsuccessful and as a result the proposal from AFW was dismissed for not satisfying the proposal and project requirements.

AECOM identified that additional boreholes will likely be necessary and included those costs as a provisional item. Costs identified in the accepted Part B proposal were:

AECOM (London)	Mandatory Study	$21,365 + HST
	Provisional Item	$6,380 + HST
	Contingency	$3,000 + HST
	Total Cost	$30,745 + HST

The average hourly rate provided by AECOM was ~$15/hr less than the hourly rate provided by AFW. It can be reasoned with a high degree of confidence that if the costs associated with the omitted mandatory work and the provisional items identified by AFW were included in their pricing; the costs for AFW to complete the project would be considerably higher than that proposed by AECOM.

Project Budget:
The project was approved by the board as a 2017 WECI project and is WECI approved for 50% WECI funding of the $40,000 project budget. The proposal from AECOM at $30,745 + HST is within the project budget and represents best value for the proposed work and cost. In addition to the consultant costs, UTRCA staff costs, estimated at $7,700, are also eligible for WECI funding within the approved WECI project budget.

If there are any questions please contact staff.

Recommended By:

Chris Tasker, Manager
Water & Information Management

Prepared By:

Fraser Sutherland, Technologist
Water Control Structures

UPPER THAMES RIVER
CONSERVATION AUTHORITY

MEMO

To: **Chair and Members of the UTRCA Board of Directors**

From: **Imtiaz Shah – Environmental Engineer**

Date: **August 9, 2017** **Agenda:** **8 (f)**

Subject: **Providing International Training to a Graduate Student from Japan** **Filename:** **Document# 118067**

A graduate student from the Saitama University in Saitama, Japan contacted Imtiaz Shah, Environmental Engineer at the Upper Thames River Conservation Authority (UTRCA) through email dated June 22, 2017 requesting a three week volunteer internship. The UTRCA views this as an opportunity for our organization to provide training and internship to an international student. Staff accepted the student by asking her to provide support for funding. The student requested a supporting letter from the UTRCA to apply for funds and the UTRCA provided this supporting letter on June 27, 2017.

The student used the supporting letter and applied for funds. The student was then awarded a grant and the UTRCA was informed on July 24, 2017. The grant covers the student's travel costs, stay and living expenses in Canada.

The UTRCA will not be responsible for any liability or obligations, except providing this volunteer training opportunity. The UTRCA will not be responsible for any help in Visa/Immigration procedures, any remuneration, pay or other benefits. The student was told that she would be required to have her own fully covered health insurance during her stay in Canada, and will be responsible for her own food, lodging and transportation.

The student will work with UTRCA staff in various divisions to learn and practice various programs and projects that we offer throughout our watershed. The activities will include but not limited to the followings and may be changed to the student's program requirements:

- Stormwater management (SWM) and design, SMW runoff quality and quantity,
- Low Impact Development (LID),
- Geotechnical reports for stable slopes for development,
- Municipal Class EA,
- Flood protection through water control structures,
- Hydrological and hydraulics modelling for flood studies, Floodplain mapping and delineation,
- Protecting people and properties by regulating natural hazards and natural heritage,
- Municipal planning and development process,
- Lake Erie water quality related to phosphorus and algal bloom,
- Sustainable building features,
- Climate change and infrastructure resiliency,
- Collecting water quality and hydrologic data,
- Sediment and erosion control and afforestation; and
- Protecting groundwater resources.

Prepared by:

Imtiaz Shah
Environmental Engineer

c.c. Ian Wilcox
Tracy Annett

UPPER THAMES RIVER
CONSERVATION AUTHORITY

MEMO

To: **UTRCA Board of Directors**

From: **Michelle Fletcher, Aquatic Biologist**

Date: **August 22, 2017** **Agenda #:** **8 (g)**

Subject: **Harrington Dam EA Fisheries Information** **Filename:** **#118078**

Background:
At the June 27th Upper Thames River Conservation Authority (UTRCA) Board Meeting, and the July 25th Zorra Township Council Meeting, there were outstanding concerns raised in regards to the potential impacts on resident aquatic species if an alternative is chosen that includes the removal of the Harrington Dam. The intention of this report is to address those outstanding concerns and to provide information upon which UTRCA and Ministry of Natural Resources and Forestry (MNRF) aquatic biology staff have based their opinions on what course of action will provide the most overall benefit to the ecology of this watercourse.

Outstanding Concerns That Have Been Raised In Regards To Resident Aquatic Species If The Preferred Alternative of a Natural Channel Design With an Offline Pond Is Chosen:

1. It has been suggested that warmwater fish species, particularly Smallmouth Bass, will encroach upon Brook Trout habitat if the Harrington Dam is removed.
   One of the most limiting habitat requirements for many fish species is water temperature. A paper by Coker et al. (2001) provides a table with the preferred temperatures of Canadian freshwater fish species. This paper lists the preferred temperature for Brook Trout at 16°C, while the preferred temperature for Smallmouth Bass is listed at 30.3°C.

   UTRCA temperature monitoring upstream and downstream of Harrington Pond, during June and July of 2015, confirms that the pond has a warming effect on the watercourse, with downstream temperatures up to 5°C higher than upstream. Temperatures recorded by MNRF while electrofishing on July 21, 2016 showed an 8°C difference with upstream water temperature at 14°C and downstream temperature at 22°C.

   MNRF has indicated that they expect the removal of the Harrington Dam will eliminate the warming effect of the pond. This is expected to shift the downstream segment of this stream from cool to cold water summer habitat, which is preferred by Brook Trout. Once this happens it is expected that the Brook Trout will be able to expand their range further downstream than currently recorded. At the same time the warmwater species will also shift further downstream to warmer water conditions.

Current and former UTRCA aquatic biology staff support the MNRF opinion that the warmwater and coldwater fish species will mix in the sections of the watercourse where the temperature transitions from cool to cold, but that warmwater fish will be restricted from the summer coldwater portion of the stream (and vice versa) via a temperature barrier. This is already demonstrated by electrofishing records from MNRF and UTRCA. While there is no physical barrier preventing the warmwater species that are currently in the Harrington Pond from moving upstream into the coldwater portion of the Harrington Creek, no warmwater species were recorded during these surveys.

2. <u>It has been suggested that there will be a loss of revenue from the fishing at the Harrington Pond. The community has projected this loss to the local economy at $1.5 million dollars over the next 10 years.</u>
   It was not clearly stated whether this projection was based on the Rainbow Trout stocking of the Harrington Pond and popular fishing derby associated with the stocking. If that is the case these figures may no longer be accurate.

   Rainbow Trout stocking on Ontario watercourses is an activity that is regulated by the MNRF via stocking permits. MNRF policies do not allow for Rainbow or Brown Trout stocking permits to be issued for watercourses where there are successfully reproducing Brook Trout populations.

   MNRF staff conducted an electrofishing survey upstream and downstream of Harrington Pond on July 21, 2016. This survey confirmed that the Brook Trout population upstream of Harrington Pond is successfully reproducing. Having confirmed this MNRF staff indicated there will be no future Rainbow Trout stocking permits issued for Harrington Pond/Creek.

   April 2015 electrofishing work conducted by UTRCA staff only recorded Common Carp, Mottled Sculpin, Rock Bass, and White Sucker in the pond. While more extensive surveys may record additional species it is unknown whether the resident species of the pond will continue to provide the same fishing incentive without the Rainbow Trout stocking.

   With this in mind if the stream naturalization and offline pond alternative option is chosen the detailed design phase should consider optimizing fishing opportunities both in the naturalized stream channel as well as in the offline pond.

3. <u>It has been suggested that removal of the Harrington Dam could result in the spread of diseases such as Viral Hemorrhagic Septicemia (VHS).</u>
   VHS spreads in water and by contact with infected fish or their body fluids. Currently the VHS Management Zone on the main/north Thames ends downstream of the Fanshawe Dam. This means that if the Harrington Dam was removed Fanshawe and Wildwood Dams would prevent infected fish from the VHS Management Zone from coming in contact, on their own, with fish in Harrington Creek.

   For any area currently outside of the VHS Management Zones, such as Harrington Creek, the most important measure to ensuring that VHS does not spread to the area is the education of anglers. VHS can be spread to uninfected waterbodies by transporting fish (e.g. bait), water, boats, and

equipment from an infected waterbody. It is important that anglers are aware of this fact so that they do not bring things like infected baitfish or contaminated fishing tackle to Harrington Pond/Creek. The MNRF has information on preventing the spread of VHS on their website and the UTRCA will be including a link to this information on our website.

4. It has been suggested that there will be an impact on resident Snapping Turtles due to dewatering the pond and creating a natural channel.

One of the things that will be considered at the detailed design stage will be the steps that need to be taken in order to dewater the Harrington Pond. The dewatering plan will take into consideration how to dewater with the least amount of impact, as is possible, on all resident aquatic species. Some of the factors that will be considered will include:

- Time of year- taking into account spawning windows for fish, hibernation times for turtles, etc.
- Staging of dewatering- are there opportunities to conduct the dewatering in stages that allow for stabilization of the site and creation of new habitat elements over time (e.g. partial dewatering of the pond followed by creation of an offline pond in the newly dewatered portion prior to full dewatering of the pond would result in pond habitat being available throughout the work period)
- Length of time over which the dewatering(s) will occur- a slow and gradual dewatering process will allow for animals to move out of the area being dewatered
- Sediment and erosion control- appropriate sediment and erosion controls paired with a slow dewatering process will mitigate downstream impacts to aquatic species due to sediment release from the pond during the work period
- Contingency plans- a thorough assessment of what things could go wrong with the dewatering process and what measures can be taken to quickly address those issues (e.g. animals do not all move out of the area being dewatered and some become stranded- contingency would be to have a biologist on site during dewatering to move stranded animals if required, etc.)

It is important to note that no matter which alternative is eventually chosen (removal of the dam, replacement/reconstruction of the dam, etc.) some degree of dewatering of the pond will be required. Whether it is permanent or temporary dewatering, and the way it is done, will vary between the different alternatives. In all cases the degree, permanency, and methods for dewatering will be determined at detailed design stage.

UTRCA and MNRF Aquatic Biology Staff Position on the Preferred Alternative:

Having considered the concerns that have been raised throughout the EA process staff from both agencies continue to support the EA alternative to naturalize the stream and create an offline pond. It is the continued opinion of staff that this alternative will result in healthier overall stream conditions when compared to the existing conditions. This opinion from MNRF has previously been provided in writing with letters on May 31st and June 20th of this year.

Prepared by:

Michelle Fletcher

Michelle Fletcher
Aquatic Biologist

UPPER THAMES RIVER
CONSERVATION AUTHORITY

FYI
July/August 2017

Water Quality Monitoring Update

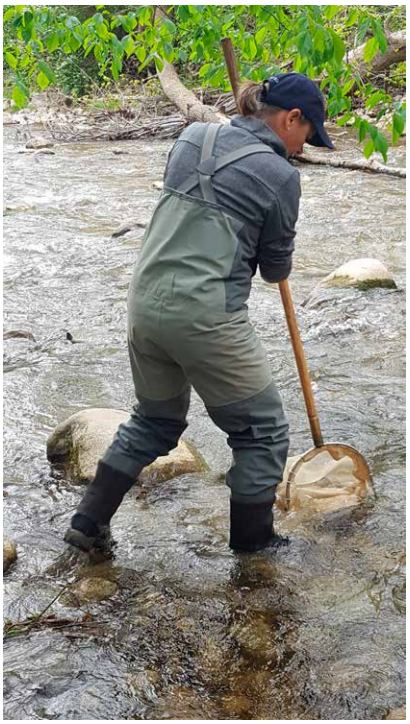
The UTRCA's water quality monitoring programs are well underway for 2017. Monitoring enables us to assess stream health and pollution levels, to better understand conditions and target new work in the 28 Upper Thames watersheds. We report on monitoring results every five years in the UTRCA Watershed Report Cards, including the upcoming 2017 edition. The following is an overview of this year's program.

Installing meters for continuous water quality measurements in Medway Creek in-stream restoration site.

Groundwater - The UTRCA continuously monitors groundwater water levels at 28 monitoring wells across the watershed, as part of the Provincial Groundwater Monitoring Network. We use the information for the Ontario Low Water Response Program. The UTRCA watershed is a demonstration site for testing new, real-time telemetry equipment for the province. We also have an additional 15 monitoring wells that are sampled for water quality, in partnership with the City of London.

Stream Water Quality - Every month, the UTRCA monitors 24 stream sites for water chemistry (such as nutrients, chloride and metals) as part of the Ontario Ministry of the Environment & Climate Change's (MOECC) Provincial Water Quality Monitoring Network, along with three additional long term subwatershed sites. Bacteria are monitored at these same locations through a partnership with local Health Units. This monitoring program has run for more than 45 years and gives a good measure of long term pollutant levels and changes due to land use and other activities.

Benthic Invertebrates - Benthic invertebrates are monitored as a good indicator of water and aquatic ecosystem quality. Our first round of benthic monitoring was conducted in May and included sites that contribute to the water quality scores in the Watershed Report Cards, as well as a set of reference (least impacted) sites. Later in the year, staff will monitor additional locations that include urban and rural development sites as well as remedial project sites.



Monitoring streams for benthic invertebrates.

Fish Communities - Funding dependent, staff will be collecting information on a small number of agricultural drains this summer as part of a Fisheries and Oceans Canada drain classification protocol. This sampling will be targeted on watercourses where we do not have existing fisheries information. Information collected through this protocol allows for a more streamlined approvals process for drainage superintendents when they need to conduct maintenance work on these drains.

Pesticides - The UTRCA continues to monitor pesticides as part of an MOECC and Ontario Ministry of Agriculture, Food & Rural Affairs (OMAFRA) Agricultural Pesticide Study, which started in 2004. This year, three rural stream locations will be monitored from April to November: Otter Creek, Gregory Creek, and Reynolds Creek.

Phosphorus Research - The UTRCA is part of a new University of Waterloo study to examine phosphorus loadings and changing forms of phosphorus throughout the Thames River to Lake St. Clair. The research is looking to better understand the transport through the Thames of sediment and phosphorus that are contributing to an increase in harmful algae blooms in Lake Erie and Lake St. Clair. Additional river monitoring is starting this summer. *(See "Phosphorus Spike in Medway Creek" story.)*

Measuring oxygen and temperature at Pittock Reservoir.

Reservoir Monitoring - UTRCA reservoirs are monitored to assess dissolved oxygen and temperature conditions to help inform reservoir management decisions. Routine monitoring is conducted from June to September at Fanshawe, Wildwood, Pittock, Stratford, and Mitchell reservoirs.

Stream Rehabilitation Monitoring - In-channel restoration work along a section of Medway Creek has improved the natural stream functions, including riffles and pools. The UTRCA is working with the University of Waterloo and Western University to measure the stream's improved ability to remove excess phosphorus in this stretch. Continuous temperature and dissolved oxygen are also being tested to assess the benefits of this stream naturalization on aquatic life. *(See "Phosphorus Spike in Medway Creek" story.)*

Temperature - The UTRCA has 10 continuous temperature meters. This year, the meters will continue to be used throughout the watershed to assess stream temperature to identify cold, cool, and warm water streams for fish habitat, as well as measure the benefits of stream rehabilitation projects.

Contacts: Karla Young, Monitoring Technician, Karen Maaskant, Water Quality Specialist, & Michelle Fletcher, Aquatic Biologist

Phosphorus Spike in Medway Creek

UTRCA staff, in partnership with Dr. Merrin Macrae from the University of Waterloo and Dr. Adam Yates from Western University, assisted in conducting a "phosphorus spike" in a section of Medway Creek. Potassium phosphate was slowly added to the water over two hours to artificially increase the concentration of phosphorus. Water samples were taken at various points downstream to assess the timing of phosphorus transport and the location of phosphorus uptake.

This experiment was conducted in both a restored and non-restored section of Medway Creek. Comparing the two locations will help us understand the ability of the in-stream restoration project to reduce phosphorus concentrations.

Students from the University of Waterloo set up the experiment.

Collecting a water sample in the restored section of Medway Creek.

The experiment builds on efforts carried out in November to understand the transport and uptake of phosphorus within the restored section of Medway Creek.

Contact: Tatianna Lozier, Agricultural Soil & Water Technician

New Rain Gardens Installed

Two rain gardens have been installed at Chalmers Presbyterian Church in London's Glen Cairn neighbourhood. Five of the building's downspouts have been redirected into the rain gardens, instead of being connected directly into the city's storm sewer system. Rooftop runoff now flows into the rain gardens where it briefly ponds as it soaks into the ground. This process mimics the natural water cycle by promoting infiltration and reducing surface runoff.

The rain gardens have been planted with a variety of plants, mostly native species, whose roots help to promote infiltration, and whose blooms attract pollinators and add beauty to the landscape.

For this project, the UTRCA worked in partnership with Chalmers Presbyterian Church and the Glen Cairn Community

UTRCA staff joined members from Chalmers to plant and mulch the rain gardens.

Rain water soaks into the ground in one of the rain gardens.

Partners, with funding provided by the London Community Foundation and the MOECC.

Contacts: Alison Regehr, Conservation Services Technician, or Julie Welker, Community Partnership Specialist

Learning in the Great Outdoors

Another busy UTRCA community education spring season has come to an end. Though wind, rain, and thunderstorms resulted in some cancellations and re-bookings, thousands of students from kindergarten to grade 12 participated in outdoor environmental education programs.

Throughout the meadow, stream, pond, and forest ecosystems at Fanshawe and Wildwood Conservation Areas, students learned by collecting bugs, studying soil, constructing homes for animals, using a map and compass, playing Animal Survival (a crowd favourite!), and enjoying many other activities linked to the Ontario curriculum. Education staff also ventured off-site for tree and wildflower plantings with classes as part of the Community Forestry and Spreading like Wildflowers programs.

A young student checks her sweep net for interesting bugs at Wildwood CA.

Three new programs launched this spring at Fanshawe Education Centre. All three programs were popular, with more than 730 students participating.

In the Celebrate 150! program, students from kindergarten to grade 6 explore and document the Carolinian Zone's biodiversity by collecting species in the pond, field and forest as part of a "mini bio blitz." During the Amazing Race GPS program, intermediate and senior students learn how to use GPS units and apply their new skills to complete a nature-based "amazing race." The Map/Compass/GPS Certification program gives specialist high skills major students experience with orienteering skills.

Students enjoyed the new "Celebrate 150!" program at Fanshawe CA.

Collectively, community education staff from Fanshawe and Wildwood delivered environmental education and stewardship opportunities to more than 6800 students this spring.

Contact: Vanni Azzano, Community Education Supervisor (Wildwood Education Centre), & Karlee Flear, Community Education Supervisor (Fanshawe Education Centre)

The interactive sand table was a hit with students, who could see how landforms they created in the sand (photo below) affected water flowing across the landscape.

Great Lakes Mini Water Festival

The UTRCA, in partnership with the MOECC, took the Great Lakes Mini Water Festival to five schools in St. Marys, Stratford and area in June. The program gives students a better understanding of the importance of the Great Lakes by exploring current uses, issues and impacts, especially as they relate to the Thames River and Lake Erie watershed and the importance of protecting and conserving water.

The Mini Water Festival delivers the key messages with fun, interactive activities that support the curriculum. At the various activity stations, the students learned about:

- the water in the world and how much is available for human consumption,
- the water cycle and what happens to water throughout a watershed in a board game style activity,
- watersheds using an interactive sand table,
- fast facts about the Great Lakes, and
- where water comes from and goes in relation to their school.

Another activity had some students create a campaign to promote the Mini Water Festival's key messages using screen printing and button making.

UTRCA staff will be heading back out to Stratford and area schools this fall to complete at least five more Great Lakes Mini Water Festivals.

Contact: Maranda MacKean, Community Education Specialist

Dillon staff planting the pollinator garden.

Dillon Consulting Digs Pollinators

M.A. Baron Park, at the Forks of the Thames River in London, now has plants that will benefit bees and butterflies, thanks to the work of Dillon Consulting staff. Through the City of London's Adopt-a-Park program, Dillon has held planting events with the UTRCA in an effort to naturalize part of the park and attract pollinators. The plants were purchased at Heeman's Nurseries and the staff planted on their June 13 lunch hour. Thanks to the City of London Environmental and Parks Planning department for providing the site, and to the enthusiastic Dillon employees.

Contact: Karen Pugh, Resource Specialist

Planting wildflowers at Tecumseh Public School.

Spreading Like Wildflowers!

This spring, students planted butterfly gardens in three school yards in London, as part of the UTRCA's Spreading like Wildflowers program. The students from Tecumseh Public School, Stoneybrook Public School and Jack Chambers Public School planted over 900 wildflowers.

The species planted included:

- butterfly milkweed
- grey headed coneflower
- black eyed Susan
- little bluestem (grass)
- foxglove beardtongue

- wild bergamot
- New England aster
- Virgina mountain mint
- tall ironweed

Funders for these projects included TD Friends of the Environment, Thames Valley District School Board, Stoneybrook Public School and Jack Chambers Public School.

Contact: Linda Smith, Community Partnership Specialist

Water level in the wetland following 4 inches of rainfall.

Oxford County Wetland Update

Four inches of rain on July 13 demonstrated the functionally of the wetland constructed last month in Oxford County. As designed, the wetland held all the surface runoff and tile drainage water it received.

The vibrant Cardinal Flower is one of the aquatic species planted in the wetland.

The final touches have been added to the wetland, with 700 native aquatic plants planted around the perimeter and in shallow sections. The plants will help to naturalize the area and create aquatic habitat, recycle nutrients, filter sediment, and improve the pond's aesthetics.

Contact: Tatianna Lozier, Agricultural Soil & Water Technician

Constructed Wetland

A stormwater wetland has been created at the Stratford Perth Museum. The construction of a new building and parking lot next to the museum led to increased runoff flowing onto a trail system used for the museum's educational programming. After a rainfall, the trails were often unusable due to flooding. The museum and the UTRCA partnered to construct a wetland that would treat the runoff, keeping the trails dry and releasing clean water to a nearby municipal drain.

Volunteers in front of the newly planted wetland.

The wetland was constructed in July 2017, and has since been successfully tested in several large storms. The trail system remains dry while the wetland contains the water.

The wetland was planted with a variety of native shrubs and aquatic plants. Volunteers from TD, the Stratford Perth Museum, and the community came out to help plant.

Funding for the project was provided by TD Friends of the Environment, Ontario Power Generation, Stratford Perth Community Foundation, and Orr Insurance.

Contact: Alison Regehr, Conservation Services Technician

Adelaide in Bloom – the Whole Community Wins!

The Glen Cairn Community Partners, including the UTRCA, hosted a friendly competition to beautify the southern section of London's Adelaide Street. The goal of Adelaide Business in Bloom is to inspire the Glen Cairn community to make their neighbourhood and streetscape more visually appealing and environmentally friendly. The partners hope this pilot project expands to other neighbourhoods in London next year.

Lovers Furniture won first place in this year's competition.

Six businesses and organizations participated in the event with four judges (City of London representative, two London Horticultural Society representatives, and one from the local community) choosing a winner. In the end, the first place trophy went to Lovers Furniture, second place to Glen Cairn Community Resource Centre, and third place to the London Ukranian Club. Congratulations to everyone who participated. It takes leadership to make a difference!

Contact: Julie Welker, Community Partnership Specialist

On the Agenda

The next UTRCA Board of Directors meeting will be August 22, 2017. Approved board meeting minutes are posted on the publications page at www.thamesriver.on.ca.

- WECS Consultant Selection
- Revised Budget and Quarterly Financial Report
- Administration and Enforcement - Section 28
- Minimum Wage Increase Impacts
- Pioneer Village Report
- Conservation Awards Report
- Orr Dam Wingwall Stability Study
- Fanshawe Dam Phase 4 of 5 Painting & Concrete Repairs Contract Award
- International Student Placement
- Harrington Fisheries Report
- Harrington & Embro EA Update

Contact: Michelle Viglianti, Administrative Assistant