

**UPPER THAMES RIVER CONSERVATION AUTHORITY BOARD OF DIRECTORS' MEETING**

**AGENDA**

**TUESDAY, June 22, 2021 at 9:30 A.M**  
**Virtual Meeting Due to COVID-19 Pandemic**

**1. Approval of Agenda**

Mover: B.Petrie

Seconder: J.Reffle

THAT the Board of Directors approve the Agenda as posted.

**2. Declaration of Conflicts of Interest**

**3. Minutes of the Previous Meetings: Tuesday May 25, 2021**

Mover: J.Salter

Seconder: M.Schadenberg

THAT that the UTRCA Board of Directors approve the Board of Directors' minutes dated May 25, 2021, including any closed session minutes, as posted on the Members' web-site.

**4. Business Arising from the Minutes**

**5. Delegations**

**6. Business for Approval**

**6.1 20 Year Flood Control Capital Plan – C.Tasker FC # 1859**

Mover: A.Westman

Seconder: M.Blosh

THAT the Board of Directors approve the recommendation as presented in the report.

**6.2 Appointment of B.Dafoe as Officer Pursuant to Section 28 of the Conservation Authorities Act – J.Allain ENVP #10442**

Mover: A.Hopkins

Seconder: T.Jackson

THAT the Board of Directors approve the recommendation as presented in the report.

**6.3 Investment Policy Review – C.Saracino FIN #1180**

Mover: S.Levin

Seconder: M.Lupton

THAT the Board of Directors approve the recommendation as presented in the report.

**7. Business for Information**

- 7.1 Administration and Enforcement - Section 28 Status Report – Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (*O.Reg157/06*) – J.Allain ENVP #10447

Mover: N.Manning

Seconder: H.McDermid

THAT the Board of Directors receives the report as presented.

- 7.2 Environmental Registry of Ontario Submission - Regulatory Proposal Consultation Guide: Regulations Defining Core Mandate and Improving Governance, Oversight and Accountability of Conservation Authorities – T.Annett Admin #4077

Mover: P.Mitchell

Seconder: A.Murray

THAT the Board of Directors receives the report as presented.

- 7.3 2020 Environmental Targets Progress Report – C.Harrington Admin #4047

Mover: B.Petrie

Seconder: J.Reffle

THAT the Board of Directors receives the report as presented.

**8. June 2021 For Your Information Report**

**9. Other Business (Including Chair and General Manager’s Concluding Remarks)**

**10. Closed Session – In Accordance with Section C.13 of the UTRCA Administrative By-Law**

Mover: J.Salter

Seconder: M.Schadenberg

THAT the Board of Directors adjourn to Closed Session – In Camera, in accordance with Section C.13 of the UTRCA Administrative By-Law to discuss litigation affecting the UTRCA.

- 10.1 Participation in Potential Litigation T.Annett/C.Saracino FIN #1183

Mover: A.Westman

Seconder: M.Blosh

THAT the Board of Directors approve the recommendation as presented in the report.

- 10.2 Litigation Affecting the UTRCA – J.Howley CA #9558

Mover: A.Dale

Seconder: A.Hopkins

THAT the Board of Directors receives the report as presented.

10.3 Matter Before the Local Planning Appeal Tribunal A.Shivas L&F #6901  
Mover: T.Jackson  
Seconder: S.Levin  
THAT the Board of Directors receives the report as presented.

Moved by: M.Lupton  
Seconded by: N.Manning  
THAT the Board of Directors Rise and Report progress.

**11. Adjournment**

Mover: H.McDermid



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Tracy Annett, General Manager

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

MINUTES  
BOARD OF DIRECTORS' MEETING  
Virtual Meeting Due to COVID-19 Pandemic  
TUESDAY, JUNE 22, 2021

The UTRCA Board Chair called the meeting to order at 9:30am.

Members Present:	M.Blosh	P.Mitchell
	A.Dale – Chair	A.Murray
	A.Hopkins	B.Petrie
	T.Jackson	J.Reffle
	S.Levin	J.Salter
	M.Lupton	M.Schadenberg
	N.Manning	A.Westman
	H.McDermid	

Regrets: None

Solicitor: G.Inglis

Staff:	J.Allain	J.Howley
	T.Annett	B.Mackie
	D.Charles	C.Saracino
	B.Dafoe	J.Schnaithmann
	J.Dony	A.Shivas
	B.Glasman	C.Tasker
	C.Harrington	M.Viglianti – Recorder
	T.Hollingsworth	

1. Approval of Agenda

The Chair confirmed the mover and seconder were willing to let their names stand.

Mover: B.Petrie

Secunder: J.Reffle

THAT the 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. Minutes of the Previous Meeting  
May 25, 2021

The Chair confirmed the mover and seconder were willing to let their names stand.

Mover: J.Salter

Secunder: M.Schadenberg

THAT the UTRCA Board of Directors approve the Board of Directors' minutes dated May 25, 2021, including any closed session minutes, as posted on the Members' web-site.

Carried.

4. Business Arising from the Minutes

There was no business arising from the minutes.

5. Delegations

There were no delegations.

6. Business for Approval

6.1 20 Year Flood Control Capital Plan  
(Report attached)

The Chair confirmed the mover and seconder were willing to let their names stand.

The Board requested and received verbal updates regarding the status of Springbank Dam and the status of the Harrington Dam Environmental Assessment.

Mover: A.Westman

Secunder: M.Blosh

THAT the Board of Directors approve the recommendation as presented in the report.

Carried.

6.2 Appointment of B.Dafoe as Officer Pursuant to Section 28 of the Conservation  
(Report attached)

The Chair confirmed the mover and seconder were willing to let their names stand.

Board members requested a map to show the geographical area covered by each section 28 regulations officer.

Mover: A.Hopkins

Secunder: T.Jackson

THAT the Board of Directors approve the recommendation as presented in the report.  
Carried.

6.3 Investment Policy Review  
(Report attached)

The Chair confirmed the mover and seconder were willing to let their names stand.

Mover: S.Levin

Secunder: M.Lupton

THAT the Board of Directors approve the recommendation as presented in the report, including part b) the question of the right funding ratio be referred to the Finance and Audit Committee for a report back within a year.

Carried.

7. Business for Information

7.1 Administration and Enforcement - Section 28 Status Report – Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (O.Reg157/06)  
(Report attached)

The Chair confirmed the mover and seconder were willing to let their names stand.

Mover: N.Manning

Secunder: H.McDermid

THAT the Board of Directors receives the report as presented.  
Carried.

7.2 Environmental Registry of Ontario Submission - Regulatory Proposal Consultation Guide: Regulations Defining Core Mandate and Improving Governance, Oversight and Accountability of Conservation Authorities  
(Report attached)

The Chair confirmed the mover and seconder were willing to let their names stand.

The Board discussed the proposed Advisory Board and members voiced questions and concerns regarding its mandatory nature, the function of the advisory Board and the cost.

Questions were raised regarding the requirements for the inventory consultations with member Municipalities, and whether the municipal consultation and subsequent agreement negotiations would happen at the upper or lower tier level for Oxford County. A Board member suggested Board members representing Oxford County encourage their Councils to seek clarity from the Province regarding whether negotiations were to happen at the upper or lower tier.

A.Murray left the meeting at 10:34am.

Questions were raised around the potential softening of the definition of natural hazards and staff clarified that updated Section 28 regulations from the Ministry of Natural Resources and Forestry had not yet been released, but the expectation was that it would contain clarified definitions for natural hazards.

Mover: P.Mitchell

Secunder: T.Jackson

THAT the Board of Directors receives the report as presented.  
Carried.

7.3 2020 Environmental Targets Progress Report  
(Report attached)

The Chair confirmed the mover and seconder were willing to let their names stand.

A question was raised regarding the potential inclusion of the previously deferred Targets levy increase in the 2022 budget, noting the 2022 budget would be the final year to include the deferred levy increase. Staff confirmed municipal consultations for the 2022 budget had begun, and a 2021 budget update would be presented at the August meeting.

A Board member noted an error in the report on page five, holes one to seven of Cedar Creek Golf Course are not owned by the City of Woodstock.

There was discussion regarding the circulation of the Targets update to the Municipal partners. Staff confirmed various options were being considered, including tying the updates into budget presentations, and creating individual fact sheets for each Municipality to accompany the 2022 budget package.

Staff confirmed the management team was working to identify the mandatory and non-mandatory programs within each of the Targets.

Mover: B.Petrie

Seconder: J.Reffle

THAT the Board of Directors receives the report as presented.

Carried.

#### 8. June 2021 For Your Information Report

The June FYI was presented for the member's information.

#### 9. Other Business (Including Chair and General Manager's Concluding Remarks)

A Board member conveyed concerns received by watershed residents regarding the perceived lack of management of Giant Hogweed in the UTRCA watershed. Staff confirmed a meeting of the UTRCA invasive species team had been scheduled to discuss further hogweed management on UTRCA lands and UTRCA managed lands. Suggestions for funding the work included engaging the Province to ask for additional resources to assist, and establishing a memorandum of understanding with Municipalities to manage Hogweed on municipal lands.

Staff confirmed the letter recently received from the Ministry of Environment, Conservation and Parks regarding the ongoing discussion with St. Marys would be included on the August agenda.

T.Annett shared a number of Provincial updates, including the announcement of Hon. David Piccini as the new Minister of the Environment, Conservation & Parks.

The Board was informed that C.Harrington, Manager of Watershed Planning, Research and Monitoring, had accepted a full time teaching job at Fanshawe College and would be leaving the UTRCA.

A.Hopkins left the meeting at 11:17am.



10. Closed Session – In Camera

The Chair confirmed the mover and seconder were willing to let their names stand.

Mover: J.Salter

Secunder: M.Schadenberg

THAT the Board of Directors adjourn to Closed Session – In Camera, in accordance with Section C.13 of the UTRCA Administrative By-Law to discuss litigation affecting the UTRCA.

Carried.

Rise and Report Progress

The Board of Directors rose and reported progress on the closed session items as follows:

10.1 Participation in Potential Litigation

Mover: A.Westman

Secunder: M.Blosh

THAT the Board of Directors approve the recommendation as presented in the report.

Carried.

10.2 Litigation Affecting the UTRCA

Mover: B.Petrie

Secunder: T.Jackson

THAT the Board of Directors receives the report as presented.

Carried.

10.3 Matter Before the Local Planning Appeal Tribunal

Mover: T.Jackson

Secunder: S.Levin

THAT the Board of Directors receives the report as presented.

Carried.

11. Adjournment

The Chair confirmed the mover was willing to let their name stand. There being no further business, the meeting was adjourned at 12:16 pm on a motion by H.McDermid.

A handwritten signature in blue ink, appearing to read "Tracy Annett", with a long horizontal flourish extending to the right.

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Tracy Annett  
General Manager  
Att.

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**To:** UTRCA Board of Directors  
**From:** Chris Tasker  
**Date:** June 14, 2021 **Agenda #:** 6.1  
**Subject:** 20 Year Flood Control Capital Repair Plan **Filename:** FC #1859

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**Recommendation:**

1. The Board approves the 20 Year Flood Control Capital Repair Plan dated June 2021.
2. The Board receives the 2020/21 Final WECE Expenditure Report as included in the 2020/21 WECE Year End Report package dated March 12, 2021.
3. The Board receives the 2021/22 Approved WECE Budget as per the Schedule "D" Budget of the Ontario Transfer Payment Agreement effective April 1, 2021.

**Background:**

Since 2008, the Board of Directors has been provided annually with a 20 Year Flood Control Capital Repair Plan for the Water and Erosion Control Structures managed by the UTRCA with the exception of 2017. The 20 Year Plan was developed by UTRCA staff and is updated on a regular basis to reflect current and planned projects.

**1) 20 Year Flood Control Capital Repair Plan - For Approval**

The attached summary indicates \$60,776,592.00 of forecasted expenditures over the next 20 years. In recent years, a number of engineering studies and inspections have been conducted to help determine the estimated project costs included in the plan. The estimates are updated as best as possible on an ongoing basis for budgeting purposes and to assist with the preparation of the various funding applications including the Water and Erosion Control Infrastructure (WECE) Program.

**2) 2020/21 Final WECE Expenditure Report dated March 12, 2021 - For Information**

The attached report indicates the total eligible expenditure amount of \$3,915,099.00 for the 2020/21 Projects, which were 50% funded by WECE in the amount of \$1,957,549.50.

**3) 2021/22 Approved WECE Budget effective April 1, 2021 - For Information**

The attached Schedule "D" Budget as included in the Ontario Transfer Payment Agreement received June 10, 2021 from the MNRF outlines the approved WECE funding in the amount of \$131,500 for the 2021/22 Projects with a total value of \$263,000.

Please don't hesitate to contact any of the undersigned if you have questions regarding any of the projects.

**Recommended by:**

Chris Tasker, Manager, Water and Information Management

**Prepared by:**

David Charles, Supervisor, Water Control Structures  
John Dony, Water Control Structures

**Attachment 1****Prepared for the UTRCA Board of Directors  
20 Year Flood Control Capital Repair Plan - Summary**

(updated June 2021)

**Capital Repairs**

<b>Structure</b>	<b>Sum 5 Yrs</b>	<b>Sum 10 Yrs</b>	<b>Sum 20 Yrs</b>
Totals	<b>\$21,707,797</b>	<b>\$39,197,592</b>	<b>\$60,776,592</b>
Fanshawe Dam	<b>\$1,680,000</b>	<b>\$2,490,000</b>	<b>\$5,925,000</b>
London Dykes	<b>\$12,262,297</b>	<b>\$24,321,092</b>	<b>\$35,821,092</b>
London Erosion Control	<b>\$1,150,000</b>	<b>\$2,210,000</b>	<b>\$3,540,000</b>
Springbank Dam	<b>\$1,260,000</b>	<b>\$1,510,000</b>	<b>\$2,310,000</b>
Pittock Dam	<b>\$1,667,500</b>	<b>\$2,287,500</b>	<b>\$3,947,500</b>
Wildwood Dam	<b>\$1,162,500</b>	<b>\$1,940,500</b>	<b>\$3,075,500</b>
St Marys Floodwall & Channel	<b>\$195,000</b>	<b>\$350,000</b>	<b>\$555,000</b>
Stratford Channel	<b>\$72,000</b>	<b>\$139,500</b>	<b>\$322,500</b>
Ingersoll Channel	<b>\$54,000</b>	<b>\$259,000</b>	<b>\$374,000</b>
Mitchell Dam & Channel	<b>\$402,500</b>	<b>\$760,000</b>	<b>\$1,332,000</b>
Orr Dam	<b>\$691,000</b>	<b>\$1,158,000</b>	<b>\$1,581,000</b>
Dorchester Mill Pond Dam	<b>\$50,000</b>	<b>\$62,000</b>	<b>\$99,000</b>
Dorchester C A Dam	<b>\$210,000</b>	<b>\$336,000</b>	<b>\$400,000</b>
Centreville Dam	<b>\$188,000</b>	<b>\$329,000</b>	<b>\$370,000</b>
Shakespeare Dam	<b>\$124,000</b>	<b>\$164,000</b>	<b>\$186,000</b>
Fullarton Dam	<b>\$81,000</b>	<b>\$173,000</b>	<b>\$178,000</b>
Embros Dam	<b>\$125,500</b>	<b>\$220,500</b>	<b>\$232,500</b>
Harrington Dam	<b>\$297,500</b>	<b>\$452,500</b>	<b>\$492,500</b>
Wildwood Ducks Unlimited Dam	<b>\$35,000</b>	<b>\$35,000</b>	<b>\$35,000</b>

**WECI 2020-2021 – Final Status Report – March – UTRCA**

<b>Project ID</b>	<b>Project Name and Description</b>	<b>Total Project Cost</b>	<b>Provincial Share (50%)</b>	<b>Written Description of Progress</b> (please specify on-schedule, behind schedule, partially deferred or cancelled)	<b>Total Project Expenditure</b>
R.20.009	West London Dyke Phase 7 Reconstruction	\$3,400,000.00	\$1,700,000.00	The WECI funded Phase 7 project was completed in December 2020. The remaining work associated with Phase 7 including lighting, railings, pathway and site restoration will be completed in 2021 for a total Phase 7 project value of \$6,200,000.	\$3,400,000.00
R.20.010	Wildwood Dam MCC Replacement	\$225,000.00	\$112,500.00	Phase 1 completed. Phase 2 continuation including replacement of gate power and gate heater wiring was included in 2021/22 WECI Application.	\$233,205.97
R.20.012	Wildwood Dam Generator Modifications	\$16,355.00	\$8,177.50	Modifications completed in October 2020.	\$16,355.00
R.20.013	Pittock Dam Generator Modifications	\$21,885.00	\$10,942.50	Modifications completed in October 2020.	\$21,885.00
S.20.003	Fanshawe Dam Safety Review	\$126,120.00	\$63,060.00	Phase 1 completed. Phase 2 continuation included in 2021/22 WECI Application.	\$121,395.61
S.20.004a	London Erosion Control Study	\$6,250.00	\$3,125.00	Inspections completed.	\$7,336.44
S.20.005	Pittock Dam Safety Review	\$119,489.00	\$59,744.50	Phase 1 completed. Phase 2 continuation included in 2021/22 WECI Application.	\$114,920.98
<b>Totals</b>		<b>\$3,915,099.00</b>	<b>\$1,957,549.50</b>		<b>\$3,915,099.00</b>

*Note: All funds must be spent by March 12, 2021. Please notify MNRF if project delays or project savings occur that would prevent projects/activities from being on time or on budget.*

I hereby certify that all expenditures are made in accordance with the Transfer Payment Agreement between the Province and the Authority, and that complete records have been kept for these program areas.

\_\_\_\_\_  
Originally signed by  
General Manager/Chief Administrative Officer

\_\_\_\_\_  
Date

**SCHEDULE "D"****Studies, Safety Projects and Repair Projects**

<b>Project ID</b>	<b>Project Name and Description</b>	<b>Total Project Cost</b>	<b>Local Share (50%)</b>	<b>Provincial Share (50%)</b>
R.21.002	Wildwood Dam Electrical Wiring Replacement	\$65,000.00	\$32,500.00	\$32,500.00
R.21.015	Pittock Dam Embankment Repairs	\$30,000.00	\$15,000.00	\$15,000.00
R.21.016	Mitchell Dam Hand Railings Phase 2	\$30,000.00	\$15,000.00	\$15,000.00
S.21.006	Embrow Dam Cultural Heritage Evaluation Report	\$13,500.00	\$6,750.00	\$6,750.00
S.21.007	Harrington Dam Cultural Heritage Evaluation & Impact Assessment	\$14,500.00	\$7,250.00	\$7,250.00
S.21.008	Fanshawe Dam Safety Review Continuation	\$40,000.00	\$20,000.00	\$20,000.00
S.21.009	Pittock Dam Safety Review Continuation	\$50,000.00	\$25,000.00	\$25,000.00
S.21.010	Fanshawe Dam Subsurface Inspection	\$20,000.00	\$10,000.00	\$10,000.00
<b>Totals</b>		<b>\$263,000.00</b>	<b>\$131,500.00</b>	<b>\$131,500.00</b>

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**To:** UTRCA Board of Directors

**From:** Jenna Allain, Manager  
Environmental Planning & Regulations

**Date:** June 13, 2021 **Agenda #:** 6.2

**Subject:** Appointment of Ben Dafoe as Officer  
Pursuant to Section 28 of the  
*Conservation Authorities Act* **Filename:** ::ODMA\GRPWISE\UT\_MAIN.UTRCA  
\_PO.ENVP:10442.1

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**Recommendation:**

That the Board of Directors designate Ben Dafoe as a Provincial Offences Act officer pursuant to Section 28 of the *Conservation Authorities Act* for the purpose of administering and enforcing the Ontario Regulation 157/06, Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation.

**Background**

With the approval of the 2021 UTRCA budget, funding was confirmed for the hiring of an additional Land Use Regulations Officer to assist with the administration and enforcement of Ontario Regulation 157/06. Ben Dafoe has been hired to fill the Land Use Regulations Officer position, and started in this role on June 7<sup>th</sup>.

On April 23, 2018, the Board of Directors appointed Ben as a Provincial Offences Act Officer responsible for regulatory enforcement duties associated with Section 29 of the *Conservation Authorities Act (Trespass to Property Act)*. Prior to his previous appointment he had successfully completed the requirements to obtain his POA designation consistent with the *Protocol for Conservation Authority Designation of a Provincial Offences Officer* endorsed by Conservation Ontario, February 2010.

In Ben's new role, he will now be responsible to administer and enforce *Ontario Regulation 157/06, Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation* pursuant to Section 28 of the Conservation Authorities Act. This designation will clarify that he is also able to administer Section 28 of the Conservation Authorities Act. Refer to the following excerpt from the Conservation Authorities Act:

**Regulations by authority re area under its jurisdiction**

28.(1) Subject to the approval of the Minister, an authority may make regulations applicable in the area under its jurisdiction,

(d) providing for the appointment of officers to enforce any regulation made under this section or section 29;

(e) providing for the appointment of persons to act as officers with all of the powers and duties of officers to enforce any regulation made under this section. 1998, c. 18, Sched. I, s. 12.

Prepared and Recommended by:



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Jenna Allain, Manager  
Environmental Planning & Regulations

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**To:** Board of Directors  
**From:** Christine Saracino  
**Date:** 15 June 2021  
**Subject:** Investment Policy Review

**Agenda #:** 6.3  
**Filename:** C:\Users\vigliantim\Documents\GroupWise\1180-C.doc

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**For Recommendation:**

**That the UTRCA Board of Directors reconfirms the attached Investment Policy, in place since 2018, for another 3 years.**

**Background Information**

It became clear through 2016 and the start of 2017 that the Authority was in a position to make better use of its cash. Interest rates were low and we did not have a programmed way to maximize returns beyond GICs. Interest earned each year was used to cushion small deficits in Service Cost Centre costs if they occurred.

At the inception of the Finance and Audit Committee, one of the earliest tasks was to review cash management practices. The review gave rise to several things:

- 1) Better understanding of the source of cash and needs for cash at any time,
- 2) The desire to create a pool of capital managed in such a way as to become a perpetual source of value to the organization,
- 3) Recognition of the unfunded status of both restricted and unrestricted UTRCA reserves.

At the same time, staff was beginning to undertake depreciation-inclusive budgeting so that the impact of capital spending on budgets, and more to the point in this discussion, on cash, could be better managed.

**Creating the Investment Policy**

The policy, approved in 2017, then revised and approved by the Board in April 2018, was structured in such a way as to create three pools based on time horizons of when cash might be required.

Current – covering 1 to 2 months operating needs	1 to 2 Million
Mid-term – equating to approximately 4 months operating needs	2 to 5 Million
Long-term – representing reserves, capital or future spending needs	4 to 6 Million

It was agreed that the current and mid-term investment needs could continue to be managed in-house with comparatively secure short-term investments such as GICs, term deposits, and good quality bonds which were structured, or laddered, to support the timing of needs. Shorter-term investing would tend to provide lower returns and less risk than longer-term investments.



The Finance and Audit Committee recommend and the Board agreed that long-term portion of the investment program requires active, skilled investment management and governance by the Finance and Audit Committee. A tender was issued and the Authority contracted Phillips Hager & North, a subsidiary of RBC to manage it. PH&N required us to supply them with an Investment Policy Statement (IPS) which is the contract governing their responsibilities, our approved choice of investment holdings, our desired returns and a fee structure, among other terms. We held discussions with them about the type of funds to hold, the degree of responsible, ethical investing desired, and other pertinent points of interest. This part of the overall strategy was approved by the Board in early 2018. The IPS is attached.

### **Performance and Cost of the Policy Implemented**

We generally no longer carry current balances as large as we did, though from time to time we have large single expenditures (i.e. CEWS repayment of \$632K) requiring a significant balance. As a result more resources were put to work generating returns. This has been critical as interest rates have continued to fall.

In 2017, we only held a range of GICs with TD Bank and TD Securities. They generally matured in less than 18 months. Today, in addition to our funds with PH&N, we hold GICs and corporate bonds with TD Bank, TD Securities and Edward Jones Investments; the latter being added as a way to insure some of our investments which are not fully insured through CDIC with TD Bank and TD Securities. These holdings range in maturity between 1 and 5 years.

PH&N periodically buys and sells investments on our behalf within the long-term portion of the policy. We are regularly updated with monthly reports, quarterly reviews and an annual meeting with our investment advisor, Leila Fiouzi. Market insight reports and periodic investment webinars provide additional economic and investment information to us as well. The return since inception of the PH&N holdings currently outperforms the benchmark of 8.2% set for the portfolio.

The Investment Policy Statement for PH&N requires an annual review which was completed by the Finance and Audit Committee in May 2021. It is a balanced style portfolio with 60% in equities and 40% in fixed income funds. It could be considered neither aggressive nor conservative. The Committee determined that the allocation of investments remains sound, the choice of environmentally responsible funds is still valid and that we should continue with PH&N. On a simplified basis, we provided \$5.5M to fund the account and today we have a \$6.6M portfolio after having paid \$89K of fees for its management. The annual returns have exceeded those anticipated in the Investment Policy.

Unlike the short and medium term investments, these returns are not without risk. The downside is the volatility of a market-based portfolio. Consider that the \$1M unrecorded gain is 15% of the value of the portfolio. Should markets fall more than 15% at any time, the \$1M evaporates. Nevertheless, the purpose of the portfolio was to create a perpetual pool of value to serve long-term needs of the organization and to represent both restricted and unrestricted reserves. The long-term perspective needs to be kept in mind.

### **What about the \$1Million change in value?**

When GICs mature, we record the interest earned. When bonds mature, we recognize those earnings at that time, as well as accruing for those interest-bearing investments at each year end. Those earnings are experienced (recognized) and recorded regularly.

For the long-term portfolio however, we have not yet adopted the accounting standard which would allow us to recognize the earnings and changes in the market value of those holdings. At this point in time, that standard is required from fiscal years beginning in 2022. Therefore we currently record only the changes in cost of the PH&N portfolio in our accounts and provide a note as to the market value in our audited statements each year end. Equally, we have not yet withdrawn from that pool and have not actually experienced gains to record. The cost of the PH&N portfolio today – almost \$5.7M - is a combination of our initial \$4M investment, the addition of \$1.5M and dividends which are reinvested, and the fees charged depleting it.

We are preparing to adopt the new standard to recognize gains and losses of the portfolio. We will also be preparing to accommodate this in our budgeting and reporting practices because we could have potentially large swings in asset balances and reported earnings due to fluctuations in investment markets. Less critical is the question of recording gains, but of how to record losses should they occur and how to smooth out potential fluctuations due to losses. Significant losses can derail the best budget.

**Using Investment Earnings**

The short-term and medium-term pools have been placed in secure investment vehicles with known interest rates at the time they are purchased. They represent cash we don’t need on a day to day basis and the earnings on those are predictable in the short-term. In fact, very few short-term holdings have been cashed early for short-term needs and they continue to roll, or be reinvested as each matures. We had no need in 2020 for additional cash due to COVID and the cost cutting measures in place, and we continue to maintain healthy balances in our current account. One could argue that we should divert more cash to long-term, higher return investment vehicles.

However, in 2018 we began to transition short-term funds into the long-term portfolio. Today we have approximately \$1M less in short and medium term funds. In 2019 interest rates began to fall so the known interest revenue now no longer supports day to day operations to the same extent it did in the past. This puts pressure on programs and activity budgets because there is less interest earned to soften the ‘overhead’ costs allocated to programs. In 2021 we are failing to support rising costs of current operations sufficiently with interest earned and this would imply that more short and medium-term GICS should be held. The trade-off would be lower yields now in lieu of potentially higher longer-term yields.

	2017	2018	2019	2020
Current Account Interest Earned	\$ 33,869	\$ 35,388	\$ 48,310	\$ 25,679
GIC Interest Earned	\$122,982	\$153,895	\$203,816	\$113,279
Total	\$156,851	\$189,283	\$252,126	\$138,958

**What is the solution?**

With contrary pressures, it is helpful to return to the original discussion of cash management and investment pools (see the board document from 2018 attached).

At the time the investment policy was devised, we were aware that this situation might occur; increasing costs corresponding to decreasing interest revenue. The policy was written in such a way as to *permit* the long-term portfolio to be used in three possible ways: to supplement operating costs with investment revenue each year, to support capital spending, and to become a perpetual pool of capital, such as an endowment could provide. However, the overriding thought was that it would be a

permanent pool of value and that it should be allowed to grow sufficiently to fully fund our reserves. In due course it could provide a steady stream of income safely maintained at some minimum amount if we continue to fund it periodically.

Secondly, over time, we are also holding larger and larger balances of deferred revenue (see the table below) which is money we’ve received but not been in a position to spend, or need, yet. This is made up in part by capital maintenance levy provided by member municipalities which is to be used for capital spending. It also comprises advances from funders, and it is the revenue we require in future to cover current capital spending – future depreciation. Reserves, both restricted and unrestricted, are the rainy-day value which would be prudent to actually have in cash or easily convertible to cash; deferred balances are actual obligations which must also be fully funded. Not all deferred balances are long-term, but most are. Therefore we need to consider deferred amounts as a kind of ‘up-front reserve’ of defined future need rather than reserves we hold “just in case”.

	<b>31 Dec 2017</b>	<b>31 Dec 2020</b>
Deferred balances	\$ 3,663,293	\$ 6,509,305
Reserves	\$ 7,181,187	\$ 7,160,362
<b>Total requirement long-term</b>	<b>\$10,844,480</b>	<b>\$13,669,667</b>
Long-term Portfolio today	\$ -----	\$ 5,675,245
Funding Ratio	0%	42%

We have not yet used the long-term portfolio for any purpose except to cover its management fees. If interest rates continue to be stagnant and we are stretched to secure adequate operating funding, it may become necessary to turn at least part of the long-term portfolio into an income stream. The desire to tap into the long-term portfolio for short-term needs, while arguable, at this point would seem to be counterproductive as we have not yet reached the position of having fully funded our long-term needs. Every year that passes makes us more financially resilient.

In addition, we have not addressed what transpires when the portfolio reaches a desired funding ratio or what that ratio should be. It is a question which the Finance and Audit Committee will review if we continue to fund the portfolio. Much deliberation will be required to determine the right funding ratio, or range, at any given time just as it is required to determine what level of reserves is adequate.

### **Summary**

It is the writer’s belief that the investment policy approved by the board in 2018 is delivering what it intended to do. We have a significantly stronger balance sheet than we had in 2017 partly due to it.

Recommended by:

Christine Saracino, CPA, MBA  
Supervisor, Finance & Accounting

# **UTRCA INVESTMENT POLICY**

## **COMPANY PROFILE**

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Corporate Name: Upper Thames River Conservation Authority

Type of Business: Watershed Management

Date of Incorporation: 1947

Jurisdiction of Incorporation (Province): Ontario

Annual Revenue: \$19,000,000

Fiscal Year End: December 31st

Other Professional Advisors: Christine Saracino, Supervisor of Finance, CPA

Investment Knowledge of Signing Officers: Moderate

## **PURPOSE OF POLICY**

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The purpose of the Investment Policy is to establish and define the investment parameters UTRCA Board of Directors wishes to promote. Specifically, the Investment Policy will:

- Identify the investment objectives and constraints of the organization within certain timelines
- Suggest an appropriate asset mix that is consistent with these investment objectives and constraints.
- Establish an appropriate reporting and review process.

## **INVESTMENT OBJECTIVE**

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It is an objective of the UTRCA to ensure that funds are available when required and securely invested to provide future benefit to the organization. The board recognizes that there are day-to-day cash requirements which must meet operational needs (i.e. meeting payroll and tax obligations, meeting the needs of vendors) as well as costs which may be fulfilled on a longer time horizon including the maintenance of funds recognized as reserves to the organization. These needs will be met with appropriate cash management procedures developed internally and approved by the General Manager.

Any secondary investment objective will vary dependent on the purpose of the funds in question and will dictate the strategy and specific type of investments purchased. However, in all cases, preservation or protection of capital will be the primary objective.

## Portfolio Structure

<b>Portfolio Portion</b>	<b>Minimum and Maximum Holdings in Expected Investments</b>	<b>Objective</b>	<b>Discretion</b>	<b>Governance</b>	<b>Minimum Expected Returns after fees</b>
<b>Current Portion</b> Overnight to up to 1 year	.5 to 2 million in CAD and USD current accounts	Liquidity	Internal: Supervisor of Finance based on cash flow forecast	Cash Management procedures	0%
<b>Mid-term Portion</b> Over a year and up to 7 years	2 to 3 million in GICs, Treasury Bills or High Interest Savings Accounts	Income generation Liquidity	Internal: Supervisor of Finance in conjunction with GM and approved budget	Cash Management procedures and Quarterly Reports to the Board	2%
<b>Long-term Portion</b> representing reserves and future needs from approximately 5 years onwards	3 million and more (6 million is the reserve balance) in a selection of eligible investments outlined below	Growth Liquidity through capital appreciation	External: Selected committee of the Board with an investment firm	Annual review with investment advisor as to performance against benchmarks	5%

## Withdrawals

Discretionary withdrawals from each of the three portions of the total portfolio will be conducted as necessary under governance procedures noted above and to meet the cash needs of the organization.

Withdrawals from the long-term portion of the portfolio are expected to be infrequent as it is the desire of the Board to maintain a long-term investment portfolio in perpetuity to support the continuing financial strength of the organization. Such withdrawals are expected to be planned in advance and can be directed towards specific needs, both operating (ie. strategic directives) and capital.

## Eligible Investments, Allocation and Exposures

UTRCA holdings may include the following asset categories.

Asset	Range of Total Portfolio	Target of Total Portfolio
Publicly traded domestic or foreign equity securities, common and preferred stocks rights, warrants, convertible debentures, American and Global Depository Receipts	20%-60%	40%
Investment grade bonds, high yield or global bonds, debentures (convertible or not), notes or other debt instruments of governments, government agencies or corporations including mortgage or asset-backed securities	15%-45%	40%
Cash or money market securities issued by governments or corporations, Treasury bills, commercial paper, bankers acceptances and certificates issued by banks, trusts and insurance companies	0%-30%	20%

## RISK TOLERANCE

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There is always some degree of uncertainty (investment risk) concerning the rate of return or growth of assets that may be generated over any future period. Investment risk may be defined as the frequency and magnitude of negative returns over a given period.

The directors' tolerance for risk and volatility is considered to be moderate which implies in any one year period, the organization can tolerate a drop in value of the portfolio of up to 10% before the directors feel distinctly uncomfortable with the investment strategy. This range is a representation of the directors' tolerance for risk and volatility; however, please note that in times of higher volatility in the financial markets the portfolio may experience fluctuations in value that are higher than this range.

Each portion of the total portfolio will be managed to minimize fluctuations in a manner that is consistent with stated objectives over the time horizon. While one portion may incur little risk, another portion may tolerate higher levels of risk.

## CONSTRAINTS

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### Socially Responsible Investing

The directors have indicated that they would like the portfolio's investments to follow a socially responsible investment strategy. A socially responsible investment strategy means investment decisions are not based primarily on financial performance, but also on ethical, social and in particular, environmental considerations.

The directors acknowledge that a socially responsible investment strategy may exclude investment in certain types of businesses or geographic markets, which may impact overall

diversification and performance of the portfolio. In addition to incorporating Environmental, Social and Corporate Governance parameters( ESG) across the overall Portfolio, UTRCA has a preference for divesting of fossil fuels within its global equity holdings by excluding issuers that are directly involved in extracting, processing or transporting coal, oil or natural gas (fossil fuels), or issuers included in “The Carbon Underground 200”. Furthermore, UTRCA expects third party managers to exclude, on a best efforts basis, issuers who knowingly engage in child labour practices.

## **REPORTING AND REVIEW PROCESS**

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The Board has accepted the Finance and Audit committee’s recommendation of RBC PH&N Investment Counsel to advise on the investments of the long-term portion of the portfolio. It therefore will be relying on the Finance and Audit Committee to make recommendations for the general management of investments held by the organization.

For the current portion of the portfolio, any amounts varying from the maximum holding will be reported to the General Manager in conjunction with a review of the Cash Management policy.

For the mid-term portion of the portfolio, investment status will be noted on quarterly financial reports to the board and any material changes in holdings also reported then.

For the long-term portion of the portfolio, the advisor is required to meet with the Finance and Audit Committee annually to review the portfolio structure and reconfirm the organization’s objectives. The committee will provide an annual report to the Board for its review of the performance of the portfolio, a summary of the transactions during the period and a recommendation on the continuation of the advisor in its role.

## **POLICY REVIEW**

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The Board recognizes that as the organization grows and circumstances change, this policy may require review. To that end, it intends to revisit the information in this policy no less than every third year to revise and amend the objectives and details outlined here.

## **ACKNOWLEDGEMENT AND AGREEMENT**

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All investment activities will be conducted in accordance with requirements of federal and provincial regulatory bodies, the CFA Institute Code of Ethics and Standards of Professional Conduct. The members of the Board here confirm their agreement with this policy.

## **Investment Policy Statement**

# **Upper Thames River Conservation Authority**

Adopted: September 2020

Date of Last Revision: September 2020



## TABLE OF CONTENTS

1	GENERAL.....	2
2	RESPONSIBILITIES .....	3
3	PORTFOLIO OBJECTIVES .....	4
4	AUTHORIZED INVESTMENTS .....	5
5	RISK GUIDELINES.....	6
6	PERFORMANCE EXPECTATIONS FOR FUND .....	8
7	REPORTING & MONITORING.....	9
8	CONFLICT OF INTEREST .....	10
9	STANDARD OF CARE.....	11
10	PROXY VOTING RIGHTS.....	11
11	ACKNOWLEDGEMENT.....	12

# 1 GENERAL

## 1.1 Purpose

This Investment Policy Statement (“IPS”) applies to the assets held by the Upper Thames River Conservation Authority (“UTRCA”) with RBC PH&N Investment Counsel Inc. The purpose of this Investment Policy Statement (“the Statement”) is to outline the procedures and policies to effectively manage and monitor these investment assets. The assets will be managed in accordance with all applicable legal requirements.

Any investment manager (“the Manager”) or any other agent or advisor providing services in connection with the portfolio shall accept and adhere to this Statement.

## 1.2 Background

The Upper Thames River Conservation Authority (UTRCA) was the sixth Authority formed in Ontario, being created by Order in Council on September 18, 1947. The UTRCA covers the upper watershed of the Thames River, an area of 3,482 square kilometres. The watershed is mainly rural except for the larger urban centres of London, Stratford and Woodstock and has a total population of approximately 485,000. Agriculture is the main component of the landscape with approximately 3,600 farms, including over 2,000 livestock operations. The fiscal year end of the UTRCA is December 31.

The UTRCA’s mission, or ends, is to:

- protect life and property from flood and erosion
- protect and improve water quality
- preserve and manage natural areas
- provide outdoor recreation opportunities

Our programs and services today include:

- flood/water control
- environmental planning & regulations
- watershed planning, monitoring & research
- soil conservation & forestry management
- management of conservation areas
- lands & facilities management
- environmentally significant areas protection
- community partnerships
- drinking water source protection

## **2 RESPONSIBILITIES**

### **2.1 Board of Directors**

The Board of Directors of the UTRCA has ultimate responsibility and decision-making authority for the Portfolio. The Board has the responsibility to govern the assets of the organization and has chosen a Finance and Audit Committee to develop the Statement and to work directly with the Portfolio Manager.

The Board will:

- Will appoint the Finance and Audit Committee annually;
- receive the Committee’s recommendations with respect to the Statement of Investment Policies for long-term funds and approve or amend the Statement as appropriate;
- review all other recommendations and reports of the Committee with respect to the Portfolio and take appropriate action.

### **2.2 Finance and Audit Committee**

The Finance and Audit Committee (“Committee”) consists of a minimum of 3 members and a maximum of 5 members. Members of the Committee are appointed annually.

The Committee may delegate some of its responsibilities with respect to the investment of the Portfolio to agents or advisors. In particular, the services of a custodian (the “Custodian”) and of one or more investment managers (the “Manager”) are retained.

The Committee will have an active role to:

- maintain an understanding of legal and regulatory requirements and constraints applicable to the Portfolio;
- on an annual basis, review the Investment Policy Statement and make appropriate recommendations to the Board;
- provide regular reports to the Board;
- formulate recommendations to the Board regarding the selection, engagement or dismissal of professional investment managers and advisors;
- formulate recommendations to the Board regarding Managers’ mandates
- oversee the Portfolio and the activities of the Managers, including the Managers’ compliance with their mandates, the investment performance of assets managed by each Manager and the performance of the Portfolio as a whole;
- ensure that the Managers are apprised of any amendments to their mandates; and inform the Managers of any significant cashflows.

## **2.3 Investment Managers**

The Manager is responsible for:

- Selecting securities within the asset classes assigned to them, subject to applicable legislation and the constraints set out in this Statement;
- Providing the Committee with quarterly reports of portfolio holdings and a review of investment performance and future strategy;
- Attending meetings of the Committee at least once per year to review performance and to discuss proposed investment strategies;
- Informing the Committee promptly of any investments which fall outside the investment constraints contained in this Statement and what actions will be taken to remedy this situation; and
- Advising the Committee of any elements of this Statement that could prevent attainment of the Fund's objectives.

# **3 PORTFOLIO OBJECTIVES**

## **3.1 Investment Objectives**

The overall investment objectives, in their order of priority, of the portfolio are to:

- preserve capital, in real terms
- maximize total return, within acceptable risk levels and a focus on income
- maintain liquidity necessary to meet cash requirements

## **3.2 Cash Requirements and Liquidity**

UTRCA does not have a short-term need for cash and is willing to liquidate long-term assets as necessary.

## **3.3 Time Horizon**

The Portfolio is intended to be permanent with an investment horizon of over 10 years.

## 4 AUTHORIZED INVESTMENTS

Outlined below are the general investment criteria as understood by the Committee.

### 4.1 List of Permitted Investments

- (a) Short-term instruments:
  - Cash;
  - Demand or term deposits;
  - Short-term notes;
  - Treasury bills;
  - Bankers acceptances;
  - Commercial paper; and
  - Investment certificates issues by banks, insurance companies and trust companies.
  
- (b) Fixed income instruments:
  - Bonds;
  - Debentures (convertible and non-convertible); and
  - Mortgages and other asset-backed securities.
  
- (c) Canadian equities:
  - Common and preferred stocks;
  - Rights and warrants.
  
- (d) Foreign equities:
  - Common and preferred stocks; Rights and warrants; and
  - American Depository Receipts and Global Depository Receipts.
  
- (e) Pooled funds, closed-end investments companies and other structured vehicles in any or all of the above permitted investment categories are allowed.

#### **4.2 Derivatives**

The manager may use derivatives, such as swaps, options, futures and forward contracts, for hedging purposes, to protect against losses from changes in interest rates and market indices; and for non-hedging purposes, as a substitute for direct investment. The manager must hold enough assets or cash to cover its commitments under the derivatives. The Portfolio cannot use derivatives for speculative trading or to create a portfolio with excess leverage.

#### **4.3 Pooled Funds**

With the approval of the Committee, the Manager may hold any part of the portfolio in one or more pooled or co-mingled funds managed by the Manager, provided that such pooled funds are expected to be operated within constraints reasonably similar to those described in this mandate. It is recognized by the Committee that complete adherence to this Statement may not be entirely possible; however, the Manager is expected to advise the Committee in the event that the pooled fund exhibits, or may exhibit, any significant departure from this Statement.

## **5 RISK GUIDELINES**

*All allocations are based on market values. All ratings are at time of purchase.*

#### **5.1 Cash and Cash Equivalents**

At least R1, using the rating of the Dominion Bond rating Service (“DBRS”) or equivalent.

## 5.2 Fixed Income

- a) Maximum holdings of the fixed income portfolio by credit rating are:

Credit Quality	Maximum in Bond Portfolio <sup>1</sup>	Minimum in Bond Portfolio <sup>1</sup>	Maximum Position in a Single Issuer
Government of Canada <sup>2</sup>	100%	n/a	100%
Provincial Governments <sup>2</sup>	60%	0%	40%
Municipals	25%	0%	10%
Corporates	75%	0%	10%
AAA <sup>3</sup>	80%	30%	10%
AA <sup>3</sup>	60%	0%	5%
A <sup>3</sup>	30%	0%	5%
BBB	20%	0%	5%

1 Percentage of portfolio at market value.

2 Includes government-guaranteed issues.

3 Does not apply to Government of Canada or Provincial issues

- b) Maximum holdings of the overall portfolio for the following fixed income instruments:
- 5% for asset-backed securities;
  - 10% for bonds rated BB and below (high yield bonds)
  - 20% for mortgages or mortgage funds;
  - 10% for bonds denominated for payment in non-Canadian currency; and
  - 10% for real return bonds.
- c) All debt ratings refer to the ratings of Dominion Bond Rating Service (DBRS), Standard & Poors' or Moody's and are at time of purchase.
- d) No borrowing is permitted except as a temporary measure to allow orderly redemption of units.
- e) No more than 15% of the net assets of the Fund at market value at month end may be invested in any one security except government or government guaranteed debt instruments or pooled/mutual funds issued under a prospectus.

### Equities

- (a) No one equity holding shall represent more than 15% of the market value of the assets of a single pooled fund.
- (b) No borrowing is permitted except as a temporary measure to allow orderly redemption of units.
- (c) Illiquid assets are restricted to 10% of the net assets of the Portfolio.

## 6 RESPONSIBLE INVESTING GUIDELINES

The Committee should endeavour to delegate investment management responsibilities to third party managers with a demonstrated commitment to incorporating ESG (Environmental, Social, and Governance) factors in their investment decision making process when doing so may have a material impact on the investment risk and/or return. At a minimum, contracted managers are expected to be signatories to the United Nations Principals for Responsible Investment (UN PRI) and offer investment solutions that are aligned with the UN PRI's six principals of Responsible Investment. Investment managers are also expected to undertake active engagement with investee companies to advocate for more sustainable business practices, have clearly articulated proxy voting guidelines that clearly address ESG considerations, and vote proxies firm-wide (as opposed to per fund or client).

UTRCA Board of Directors has expressed a preference for socially responsible investment strategies as they relate to environmental and child labour considerations. In addition to incorporating ESG across the overall portfolio, if practicable, the investment manager will to the best of their ability, limit the portfolio's exposure to companies directly engaged in the extraction, processing and transportation of fossil fuels or issuers included in "The Carbon Underground 200". Furthermore, UTRCA expects third party managers to exclude, on a best efforts basis, issuers who knowingly engage in child labour practices.

## 7 PERFORMANCE EXPECTATIONS FOR FUND

In order to meet disbursement requirements, investments need to earn a minimum level of income, measured over a four year rolling market cycle. Return objectives include realized and unrealized capital gains or losses plus income from all sources. Returns will be measured quarterly, and calculated as time-weighted rates of return. The composition of the benchmark is developed from the asset mix outlined in this Statement.

The minimum recommended level is defined as the sum of the following items:

Fees & Expenses	0.75%
<u>Capital growth/preservation amount</u>	<u>5.25%</u>
Minimum Rate of Return	6.0%

*Note: The disbursement requirement and capital preservation amounts will be reviewed, and updated as required.*

In addition, active investment managers are evaluated relative to the benchmarks their mandates are managed to. The Committee expects that active managers will outperform their benchmarks over a four year rolling market cycle and after all investment management fees. The performance of all active managers is reviewed annually.



## 6.1 Asset Mix, Ranges and Benchmarks

Asset Class	Strategic Target	Range	Benchmark (Total Return)
<b>Cash &amp; short-term</b>	<b>0%</b>	<b>0% – 5%</b>	FTC 30-Day T-Bill Index
<b>Fixed Income</b>	<b>40%</b>	<b>30% – 50%</b>	
Investment Grade bonds	20%		FTC Universe Bond Index
Conventional Mortgages	10%		FTC Short Term Overall Bond Index
High Yield Bonds	5%		FTC Universe Bond Index
Global Bonds	5%		FTC Universe Bond Index
<b>Equities</b>	<b>60%</b>	<b>50% – 70%</b>	
Canadian	25%		S&P/TSX Composite Index
Global (US approx. half)	30%		MSCI World Net Index (\$C)
Emerging Markets	5%		MSCI Emerging Markets Net Index (\$C)

*Note: FTC stands for FTSE TMX Canada*

## 8 REPORTING & MONITORING

### 8.1 Investment Reports

Each quarter, the Manager will provide a written investment report containing the following information for the Finance and Audit Committee:

- Portfolio holdings at the end of the quarter;
- Portfolio transactions during the quarter;
- Rates of return for the portfolio with comparisons with relevant indexes or benchmarks; and
- Compliance Report.

Each year end, Dec 31<sup>st</sup>, the Manager will prepare a brief summary report on the performance of the portfolio for the Board of Directors.

## **8.2 Monitoring**

At the discretion of the Committee as required, the Manager will meet with the Committee regarding:

- the rate of return achieved by the Manager;
- the Manager's outlook for the markets and corresponding strategies any changes the personnel of the Manager; and
- other issues as requested.

## **8.3 Annual Review**

It is the intention of the UTRCA to ensure that this Statement is continually appropriate to the UTRCA's needs and responsive to changing economic and investment conditions. Therefore, the Committee shall review the Investment Policy Statement annually.

# **9 CONFLICT OF INTEREST**

All fiduciaries shall disclose the particulars of any actual or potential conflicts of interest with respect to the Foundation. This shall be done promptly in writing to the Chair of the Board of Directors of the UTRCA. The Chair will, in turn, table the matter at the next Board meeting. It is expected that no fiduciary shall incur any personal gain either directly or indirectly because of their fiduciary position. This excludes normal fees and expenses incurred in fulfilling their responsibilities if documented and approved by the Board.

## 10 STANDARD OF CARE

The Manager is expected to comply, at all times and in all respects, with the code of Ethics and Standards of Professional Conduct as promulgated by the CFA Institute.

The Manager will manage the assets with the care, diligence and skill that an investment Manager of ordinary prudence would use in dealing with all clients. The Manager will also use all relevant knowledge and skill that it possesses or ought to possess as a prudent Investment Manager.

The Manager will manage the assets in accordance with this Statement and will verify compliance with this Statement when making any recommendations with respect to changes in investment strategy or investment of assets.

The Manager will, at least once annually, provide a letter to the Committee confirming the Manager's familiarity with this Statement. The Manager will, from time to time, recommend changes to the IPS to ensure that the IPS remains relevant and reflective of the Foundation's investment objectives over time.

## 11 PROXY VOTING RIGHTS

- a) Proxy voting rights on portfolio securities are delegated to the Manager.
- b) The Manager maintains a record of how voting rights of securities in the portfolio were exercised. The Manager will exercise acquired voting rights in the best interests of the unit holders of the pooled fund.

## 12 ACKNOWLEDGEMENT

This Statement has been approved by the undersigned on behalf of the Committee:

e-Signed by Sanford Levin  
on 2020-11-10 14:40:02 EST

Signature

**Sanford Levin**

Name

**Chair**

Title

**2020-11-10**

Date Approved

This Statement has been accepted by the undersigned on behalf of RBC PH&N Investment Counsel:

e-Signed by Leila Fiouzi  
on 2020-11-10 13:59:59 EST

Signature

**Leila Fiouzi**

Name

**VP & Investment Counsellor**

Title

**2020-11-10**

Date Approved

# INTERNAL USE ONLY

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**RBC PH&N Investment Counsel accounts managed under this IPS:**

<b>Account Name</b>	<b>Account Type</b>	<b>Account Numbers</b>
UPPER THAMES RIVER CONSERVATION AUTHORITY	Investment	46320320 1-9

**\*This list must match the accounts listed under the Personal Profile section**

**Electronic Approval from MD/RMG (tick box)**

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**To:** UTRCA Board of Directors  
**From:** Jenna Allain, Manager – Environmental Planning and Regulations  
**Date:** June 14, 2021 **Agenda #:** 7.1  
**Subject:** Administration and Enforcement - Section 28 **Filename:** ::ODMA\GRPWISE\UT\_M  
Status Report – *Development, Interference with* AIN.UTRCA\_PO.ENVP:104  
*Wetlands and Alterations to Shorelines and* 47.1  
*Watercourses Regulation (O.Reg157/06)*

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**Section 28 Report:**

The attached tables are provided to the Board as a summary of staff activity related to the Conservation Authority's *Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation* (Ontario Regulation 157/06 made pursuant to Section 28 of the Conservation Authorities Act). The summary covers reports for May 1, 2021 to May 31, 2021.

**Recommended by:**

Jenna Allain, Manager  
Environmental Planning and Regulations

**Prepared by:**

Cari Ramsey  
Environmental Regulations Technician

Jessica Schnaithmann  
Land Use Regulations Officer

Brent Verscheure  
Land Use Regulations Officer

Karen Winfield  
Land Use Regulations Officer

## SECTION 28 STATUS REPORT SUMMARY OF APPLICATIONS FOR 2021

DEVELOPMENT, INTERFERENCE WITH WETLANDS AND ALTERATIONS TO SHORELINE AND WATERCOURSES REGULATION  
ONTARIO REGULATION 157/06

Report Date: May 2021

[Client Service Standards for Conservation Authority Plan and Permit Review \(CO, Dec 2019\)](#)

Permit #	Municipality	Location/Address	Category	Application Type	Project Description	Application Received	Notification of Complete Application	Permit Required By	Permit Issued On	Comply with Timelines	Staff
7-21	West Perth	St. Andrew Street between James Street and Adelaide Street Crossing Whirl Creek	Routine	Municipal Project	Proposed Repairs to the Bridge at St. Andrew Street	10-Dec-2020	13-Apr-2021	27-Apr-2021	7-May-2021	NO	Schnaithmann
54-21	London	105 Wychwood Court	Minor	Development	Proposed Replacement of On-Ground Pool, Deck and Retaining Wall	21-Dec-2020	12-Apr-2021	3-May-2021	7-May-2021	NO	Schnaithmann
56-21	Perth South	1774 Perth Road 123	Minor	Development	Proposed Construction of Screened Deck Addition to Existing House	21-Apr-2021	21-Apr-2021	12-May-2021	7-May-2021	YES	Schnaithmann
59-21	Zorra	Various Watercourses from Perth-Oxford Road to the North, Road 78 to the South, Zorra-East Zorra-Tavistock Line to the East and Lakeside at 23rd Line to the West.	Routine	Utility Corridor	Proposed Quadro Communications SWIFT Project - HDPE Conduit Installation for Telecommunications Fibre Optics Undercrossing Various Watercourses.	17-Mar-2021	21-Mar-2021	4-Apr-2021	10-May-2021	NO	Winfield

Permit #	Municipality	Location/Address	Category	Application Type	Project Description	Application Received	Notification of Complete Application	Permit Required By	Permit Issued On	Comply with Timelines	Staff
66-21	Stratford	200 Devon Street	Routine	Development	Proposed Transmission Station Yard Expansion	30-Apr-2021	5-May-2021	19-May-2021	10-May-2021	YES	Schnaithmann
62-21	Zorra	15th Line from Thamesford to Road 88.	Routine	Utility Corridor	Proposed Quadro Communications Thamesford Feed Project (NORTH - Part I) - HDPE Conduit Installation for Telecommunications Fibre Optic Installation.	27-Apr-2021	27-Apr-2021	11-May-2021	11-May-2021	YES	Winfield
63-21	London	2079 Huron Street	Routine	Development	Proposed pregrade of City owned Industrial Lands adjacent to wetland	6-May-2021	10-May-2021	24-May-2021	11-May-2021	YES	Verscheure
37-21	EZ Tavistock	Highway #59 at Thames River	Routine	Municipal Project	Proposed Rehabilitation of Bridge 597068 Crossing the South Thames River.	24-Mar-2021	24-Mar-2021	7-Apr-2021	13-May-2021	NO	Winfield
10-21	Huron East	70419 Road 164	Routine	Development	Proposed Construction of Deck, Replacement of Septic System and Minor Regrading	4-Jan-2021	10-May-2021	24-May-2021	13-May-2021	YES	Schnaithmann
61-21	London	205 Baxter Street	Routine	Development	Proposed Above-Ground Pool Installation and Deck Construction	26-Apr-2021	5-May-2021	19-May-2021	13-May-2021	YES	Schnaithmann
71-21	London	25 Kirk Drive	Routine	Development	Proposed In-Ground Pool Installation	13-May-2021	13-May-2021	27-May-2021	19-May-2021	YES	Schnaithmann
72-21	Thames Centre	Part Lot 27, Concession 2	Major	Development	Proposed Construction of New Single Family Residence and Installation of New Driveway & Septic System	1-Mar-2021	17-May-2021	14-Jun-2021	25-May-2021	YES	Winfield
76-21	Middlesex Centre	235 Union Avenue	Minor	Development	Proposed deck	17-May-2021	17-May-2021	7-Jun-2021	25-May-2021	YES	Ramsey



Permit #	Municipality	Location/Address	Category	Application Type	Project Description	Application Received	Notification of Complete Application	Permit Required By	Permit Issued On	Comply with Timelines	Staff
73-21	West Perth	Line 46 to the North, Line 42 to the South, Perth Road 180 to the West, Road 160 to the East	Minor	Utility Corridor	Proposed Conduit Installation for Telecommunications Fibre Optic Undercrossing a Variety of Watercourses	7-Apr-2021	17-May-2021	7-Jun-2021	26-May-2021	YES	Schnaithmann
75-21	Woodstock	1231 Nellis Street	Major	Development	Proposed Oxford County Four-Storey Residential Affordable Housing Initiative	24-Mar-2021	25-May-2021	22-Jun-2021	27-May-2021	YES	Winfield

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**To:** UTRCA Board of Directors

**From:** Tracy Annett

**Date:** June 14, 2021 **Agenda #:** 7.2

**Subject:** ERO Submission - REGULATORY PROPOSAL  
CONSULTATION GUIDE: Regulations Defining  
Core Mandate and Improving Governance,  
Oversight and Accountability of Conservation  
Authorities **Filename:** ::ODMA\GRPWISE\UT\_  
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## SUMMARY

The Province has released the [MINISTRY OF THE ENVIRONMENT, CONSERVATION AND PARKS REGULATORY PROPOSAL CONSULTATION GUIDE: Regulations Defining Core Mandate and Improving Governance, Oversight and Accountability of Conservation Authorities](#) to consult with stakeholders and the public in its first phase of finalizing proposed regulations for the Conservation Authorities Act. Staff will collaborate with Conservation Ontario and adjacent Conservation Authorities to submit comments to the Environmental Registry.

## DISCUSSION

As previously reported to the Board, the Ministry of Environment Conservation and Parks (MECP) posted a consultation guide to the Environmental Registry on Thursday May 13, 2021. The MECP is consulting on the proposed regulations that would be made under the *Conservation Authorities Act* (CAA). This document is a consultation guide being used to gather feedback on the Ministry's regulatory postings on the Ontario's Environmental Registry. Together, Conservation Authorities (CAs) have submitted initial comments to Conservation Ontario for a compiled response to the ERO posting, which is to close on June 27<sup>th</sup>, 2021.

The regulations the government proposes to introduce as part of the first phase would set out the following:

1. **Mandatory programs and services:** MECP is proposing that conservation authorities would be required to provide, including certain core watershed-based resource management strategies.
2. **Non-Mandatory Program and Services:** MECP is proposing that conservation authorities and their participating municipalities will be required to have agreements with municipalities to fund non-mandatory programs and services with Municipal levy.
3. **Transition Plan:** Details of the transition plan conservation authorities must prepare.
4. **Community Advisory Boards:** MECP is proposing that each conservation Authority be required to establish a community advisory board
5. **Section 29 Regulation:** MECP is proposing to create one consolidated Minister's regulations to Section 29 pertaining to the operation and management of lands owned by conservation authorities.

Consultation on these Phase 1 regulatory proposals is open until June 27th, 2021. According to the MECP website (last updated May 13th, 2021) the Phase 2 regulatory proposal will be released for consultation later this year, and will focus on municipal levies related to mandatory and non-mandatory programs and services, and the standards for the delivery of non-mandatory programs and services.

## **ANALYSIS:**

Based on staff review of the consultation with other neighbouring Conservation Authorities, the report below contains comments on this first phase of regulatory amendments.

### **1. Mandatory Programs and Services**

These categories of programs and services offered by the UTRCA are related to:

- A. Risk of natural hazards.
- B. Conservation and management of lands owned or controlled by a conservation authority, including any interests in land registered on title.
- C. Conservation authority duties, functions and responsibilities as a source protection authority under the Clean Water Act, 2006.

In addition, we were pleased to see the addition of under the category of F - Other programs or services prescribed by the regulation within a year of the end of the transition period which are proposed to be:

- a. Core Watershed-based Resource Management Strategy
- b. Provincial Water Quality and Quantity Monitoring

#### **A. Hazards**

Generally, the scope of programs and services included by MECP in the proposals for natural hazards are comprehensive. We were pleased to see the recognition of land use planning input, stream morphology, floodplain mapping, flood risk mapping and the inclusion of all the tools that CAs need to carry out our flood management program, including communications support which is particularly important during an event. We also note the inclusion of a low water program which, with climate change, is becoming an important function. The province has not included a specific reference to wetland mapping, which should be added.

The province has also specifically included low flow augmentation dams within the scope of mandatory programs and services which is essential in the Upper Thames River Watershed.

**General Comment:** *Concerns for future funding by the province for hazard management programs have been raised with recent 50% cuts to the MNRF funding for their natural hazards program. It is estimated that the MNRF transfer payment covers less than 10% of the actual cost to deliver the hazard management program in the UTRCA watershed. Infrastructure funding support through the Water and Erosion Control Infrastructure (WECI) Program is essential for continued maintenance and repairs to our water management infrastructure. The current transfer payments to UTRCA was cut by 50% in 2019 and while completely inadequate for its purpose should be returned at a minimum to former levels and ideally increased to reflect the importance of the hazard management function to the province.*

#### **B. Conservation Lands**

The second area of mandatory program and services relates to the management of Conservation Authority land. There are new mandatory requirements proposed for strategies or management

plans for all properties and land acquisition policy approved by the board. These are typical undertakings for UTRCA. The regulation is seeking plans for all properties. We own a lot of parcels of land and would suggest that categories or groupings of land should be considered to ensure timely completion of the plans.

We were pleased to see the inclusion of natural heritage monitoring and management as part of the mandatory programs for CA lands to maintain or rehabilitate them but remain disappointed that the importance of this work is not equally valued throughout the watershed.

Specifically excluded from this mandatory area are any recreational uses of the lands like walking trails, that are provided free of charge to the public. UTRCA has many properties that offer trails for which there will be no levy to monitor, maintain or manage risk. This means that the trails could be closed to public use or that gates and/or fees of some manner will need to be collected to enable the management of the recreational use, should a municipality not wish to enter into an agreement for special levy funds to support non-mandatory programs.

According to the consultation guide, it would appear that this type of passive recreation is not to be considered mandatory and therefore would require municipal agreement. However, it is very difficult to separate passive recreation from property security, considered mandatory service. By providing safe public access to the property, we have found that issues related to unauthorized access points/use is managed and more effective than fencing and enforcement of unauthorized use. In addition, these areas are often located within one municipality but used by residents from outside the municipality or beyond. Sharing of costs for these shared resources to specific municipalities will be difficult to determine. How are these costs treated if one municipality does not wish to contribute?

In addition, we feel the provision of private land stewardship programs such as tree-planting and soil erosion control for mitigation of natural hazards should be included as a new mandatory activity. The issues that prompted the establishment of many Conservation Authorities were related to deforestation and its impact on water supply, drought, soil erosion and flooding. Early emphasis in some Conservation Authorities was on forest acquisition, reforestation and aiding landowners to reforest marginal land – basically water/hazard management through forest management.

Research has demonstrated the importance of nature based solutions such as protecting and restoring headwater areas, flood plains, river valleys, riparian areas, and wetlands in order to reduce the risk of flooding, erosion and drought. Nature based approaches are much cheaper to implement than grey infrastructure approaches. The Insurance Bureau of Canada (IBC) released a report in 2018 entitled [“Combatting Canada’s Rising Flood Costs: Natural Infrastructure is an Underutilized Option”](#) which speaks to the potential for nature based approaches to reduce the risk of flooding. The IBC recognizes that these approaches need to be undertaken on a watershed basis to be effective. It is requested that the long understood value of forests, wetlands and riparian buffers in the watershed-based prevention and mitigation of flood and erosion hazards be acknowledged and that provision of private land stewardship programs such as tree-planting and soil erosion control be included in the mandatory programs and services related to the Risk of Natural Hazards. While there may be, from time to time, other sources of funding available for the disbursement cost of these programs, funding for planning, outreach and delivery of these projects is not. Continuity, relationship building and a watershed approach

to these programs are important in the mitigation of flood and erosion hazards. They also build resiliency into our watershed systems as we deal with the impacts of a changing climate.

**General Comments:** *That the province includes the infrastructure to support public access opportunities (such as walking trails) that are provided free of charge to the public as an eligible mandatory activity on conservation authority lands. Public access to CA owned lands is a cost-effective means of reducing encroachment and other illegal activities and promotes equitable access to green infrastructure. Also related to green infrastructure, the provision of private land stewardship programs such as tree-planting and soil erosion control for mitigation of natural hazards be included as a new mandatory activity*

### **C. Source Water Protection**

The inclusion of Source Water Protection is new for municipalities as the Province has funded this program at 100% since its inception. CAs are required to exercise and perform the powers and duties of a Drinking Water Source Protection Authority and implement programs and services related to responsibilities identified under the Clean Water Act.

The mandatory programs and services identified in the discussion paper are generally consistent with Source Protection Authority tasks as identified in the Clean Water Act.

Conservation Authorities, as Source Protection Authorities, play a role in approvals for municipalities (e.g., issuing notices to drinking water system owners for a S. 34 amendment, monitoring and reporting on source protection plan implementation/ compliance). Identifying Source Water Protection as a mandatory program under the CA Act creates a framework for an expected future shift in program funding from MECP grants to municipal levy. If funding for the source water program eventually shifts to municipalities, they would effectively be funding an approvals/enforcement agency, which could lead to conflict of interest.

It will be important to understand MECP's intent with respect to continued financial support for this program this fall as we are informing the municipalities of the potential budget implications of the changes. By inclusion under mandatory programs it signals a requirement to be included in the levy, although provincial funding may continue to be provided. MECP staff have been unclear in their responses about the potential for continued funding but given the importance of this program to Ontario we encourage the province to maintain funding, at a minimum for the core administrative program and staff for the Source Protection Regions that are shared across multiple CAs. Further, this funding needs to be indexed for inflation so that there is no erosion of the ability to implement the requirements of the Clean Water Act.

**General Comment:** *That the MECP continue to fully fund Source Protection Authority responsibilities under the Clean Water Act through provincial transfer payments. This funding needs to be indexed for inflations as to not impact the implementation of the requirements under the Clean Water Act.*

### **F. a) Core Watershed-based Resource Management Strategy**

The addition of the watershed-based resources management strategy is positive as it provides a longer-term perspective as well as an organizing framework for categorizing the mandatory and non-mandatory programs and services for consultation with municipalities.

**General Comment:** *The UTRCA strongly supports inclusion of core watershed-based resource management strategies as a mandatory program and service because it provides a framework for Conservation Authorities and their member municipalities to identify and prioritize the programs and services most needed in each watershed to protect people and property from natural hazards and conserve natural resources. As well it will enable and encourage the integration of all other mandatory programs and identify non-mandatory programs.*

#### **F. b) Provincial Water Quality and Quantity Monitoring**

For years UTRCA staff have been carrying out monitoring of surface and ground water on behalf of the province with the province providing support largely in the form of lab analysis.

It is unfortunate that the province did not specifically allow for the additional surface water quality monitoring that is needed for our own programs to provide better coverage in support of a variety of municipal and CA needs.

**General Comment:** *Please clarify that MECP will continue to be a funding partner for the proposed mandatory Provincial Water Quality and Quantity Monitoring program.*

## **2. Regulations for Municipal Agreements**

Regulatory authority for agreements for municipal funding of non-mandatory programs and services and the regulatory authority for a transition period/plan to develop the agreements is proposed to be combined into one Minister's regulation - Regulation for Municipal Agreements and Transition Period.

The proposed agreements regulation could require that the agreements do the following:

- Include a provision that the participating municipality agrees to pay its apportioned levy for the non-mandatory program or service.
- Set out the termination date of the agreement. Certain time periods may also be specified for the purposes of reviewing and renewing any such agreements that are reached.
- Include provisions governing early termination and governing notice and resolution of breaches of the agreement.
- Include transparency provisions (e.g., that agreements are available to the public online).

The ministry is proposing that agreement arrangements between conservation authorities and municipalities could be flexible according to program or service circumstances (i.e. an agreement for a program or service could be with one or more participating municipalities or could be separate agreements per participating municipality including all the conservation authority-determined programs or services that a municipality may agree to fund, etc.). The flexibility is intended to support efficiency, expedite the agreement(s) and be cost effective in any potential legal or accounting fees.

**General Comment:** *It is important that flexibility be retained to ensure that each municipality can approach the agreements to best suit their needs. With the agreements being due on or before December 2022 in an election year will be challenging to achieve within council deadlines for*

*business to be completed before the election. Further, the budgets attached to the non-mandatory programs will not be approved until the new council takes office in 2023.*

### 3. Transition Plans

Un-proclaimed provisions in the CA Act would, once proclaimed, also establish a requirement each conservation authority to develop and implement a transition plan that includes:

- A workplan and timeline outlining the steps the conservation authority plans to take to develop and enter into agreements with its participating municipalities.
- The preparation of an inventory of all of the authority's programs and services, with clear indication for each program and service which of the three categories it fits into (mandatory programs and services where municipal levy could be used without any agreement; non-mandatory programs and services at the request of a municipality with municipal funding through a MOU; non-mandatory programs and services an authority determines are advisable), and how they are funded (e.g., provincial, federal, municipal funding, municipal levy, and self-generated revenue).
- The consultation process with participating municipalities on the inventory.
- A list of any new mandatory programs and services the authority will need to provide to meet the requirements of the mandatory program and services regulation.
- A list of non-mandatory programs and services for which the authority will seek municipal agreement to fund via municipal levies, including estimated amounts requested/required from the participating municipalities to do so.
- A list of non-mandatory programs and services that do not require municipal agreements (if the programs and services are funded by revenue that is not from a municipal levy).
- Steps taken and/or to be taken to enter into these agreements.

CA's with Conservation Ontario are already looking at ways to be consistent in our classification of programs and services using standardized approaches.

The government proposes to require that the mandatory conservation authority transition plans be completed by the end of 2021 and that quarterly progress reports be provided to the Ministry. This is tight but we can proceed assuming limited change to the scope of the regulations. Should significant change happen it may become difficult to meet that timeline.

The province is then proposing that all required conservation authority/municipal agreements would need to be in place, and the transition to the new funding model for CAs and municipalities would be reflected in our budget for **January 1, 2023**.

**General Comment:** *The timeline proposed is a very tight timeline given the regulations, and subsequent phases of regulations including for the levy and fees have yet to be released, timing of 2023 budget preparations, municipal elections and resulting limitations on approvals for MOUs and agreements.*

### 4. Section 29 Minister's Regulation

Under the Conservation Authorities Act, conservation authorities are required to provide programs and services related to the conservation and management of lands owned or controlled by the authority. This includes a regulation made under Section 29 of the Conservation Authorities Act regarding public use of authority's property. Current regulation is outlined in [Regulation 136: Conservation Areas – Upper Thames River](#). It is proposed that the Section 29 regulation be

redesigned to better align with by-laws made under the Municipal Act related to the use of municipal property including parks, and the Provincial Parks and Conservation Reserves Act, 2006 and its associated regulations, including O. Reg. 347/07: Provincial Parks: General Provisions.

**General Comment:** *That the province defer the approval of a new Section 29 regulation until such time as a fulsome review and update of the regulation can be undertaken. It is important that CAs have the right tools to take us into the future where our conservation areas are heavily used by tourists and locals alike. Near urban CAs like UTRCA face challenges with park users that require additional tools.*

## 5. Community Advisory Board

The Province is proposing to proclaim an un-proclaimed provision of the CA Act related to advisory boards to require CAs to establish community advisory boards, that can include members of the public, to provide advice to the authority.

In recognition of the variation in the circumstances of individual conservation authorities, the Province is considering an approach to structure the CA community advisory boards with minimal prescribed requirements to enable local flexibility of some aspects of the community advisory board to reflect a conservation authority's circumstances and to accommodate a conservation authority's preferences for their use of the community advisory board.

Specific details related to the composition, activities, functions, duties, and procedures of the community advisory board will be outlined in a Terms of Reference (TOR) document to be approved by the Board of Directors.

The province intends to require the TOR also outline specific functions and activities of the community advisory board scoped to the authority's needs, and at a minimum enable community advisory board members to:

- Provide advice and recommendations to the authority on the authority's strategic priorities and associated policies, programs and services
- Discuss opportunities to co-ordinate with other environmental initiatives in the authority's jurisdiction (e.g. municipal)
- Identify opportunities for community engagement
- Suggest potential community outreach opportunities

The province intends to prescribe certain aspects in regulation related to the composition of the community advisory board but leaving considerable flexibility for the CA.

**General Comment:** *The UTRCA is not opposed to such a board, but caution that there will be additional administrative burden on the levy to support the Community Advisory Board (CAB) assuming per diems are paid, staff support and reports required for meetings, time and place for meetings to be held, minutes and agenda's prepared as supported by the current administrative functions. The proposed timing of the creation and implementation of the CAB should coincide with the implementation of new municipal agreements in January 2023 and reflect the input of new councils taking office in November 2022 and appointing their representatives to the Conservation Authority (CA) General Membership.*

## CONCLUSION



The Province has released the first phase of regulatory proposals for public comment by June 27th, 2021. The regulations have been informed by a working group of CA's and stakeholders appointed to advise the Ministry of Environment Conservation and Parks. The proposed regulations for consultation in phase one are focused on: definition of mandatory programs and services, the proposed agreements required with participating municipalities for municipal levy to fund non-mandatory programs and services, the transition period to establish those agreements, the requirement to establish 'community' advisory boards, and, a consolidated Minister's section 29 regulation relating to conservation authority (CA) operation and management of conservation lands. While there are still some areas for improvement in the proposed regulations, the content covers the important functions of the CA and align reasonably well with expectations for what would be considered mandatory and non-mandatory programs and services. Overall, we remain concerned with the timelines to implement the requirements of these changes (completion and maintenance of municipal agreements, strategies, plans and community advisory boards) and the additional administrative and financial resources required.

**PREPARED BY:**

Tracy Annett, MCIP, RPP,  
General Manager / Secretary Treasurer

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**To: UTRCA Board of Directors**

**From: Unit Managers, General Manager**

**Date: June 2021**

**Agenda #: 7.3**

**Subject: 2020 Environmental Targets  
Progress Report**

**Filename: Admin #4047**

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2020 marked the third year of implementation of the UTRCA Environmental Targets Strategic plan approved in June 2016. This report summarizes work in 2020 and highlights progress related to each of the four targets.

#### UTRCA Environmental Targets:

1. Improve each subwatershed's water quality score by one letter grade, as measured by the UTRCA Watershed Report Cards, by the year 2037.
2. Establish and restore 1,500 hectares of natural vegetation cover, windbreaks and buffers by 2037.
3. Reduce flood and erosion risk by updating flood models and hazard mapping for all UTRCA subwatersheds by 2020, and then integrate climate change scenarios into the updated models and develop climate change adaptation strategies by 2030.
4. Instill conservation values by supporting outreach to one million people annually by 2037, through visits to CA owned and managed lands as well as hands-on environmental experiences.

#### Targets Funding 2020:

Transfer payments from senior levels of government continue to be a challenge. Longstanding inadequate provincial transfer payments that were slashed by 50% in 2019 are specific to flood control and natural hazard management programs. The core nature of this program and need to continue prompted identification of this funding cut as a download to municipalities and its continued inclusion as levy in the 2020 UTRCA budget.

The UTRCA Board of Directors approved the 2020 Municipal Levy contribution of \$76,636 towards targets as part of the Authority's budget passed at the 73<sup>rd</sup> annual General Meeting on February 22, 2020. Increase in levy contribution for environmental targets was originally

proposed to be phased in over four years. 2020 was planned to be the last year of phased in levy funding but was reduced by 75% for the final year from \$306,544 to \$76,635. Reduced levy funding reflects the Board of Director's challenge to find balance among environmental priorities and funding. COVID19 related restrictions and uncertainty in 2020 also resulted in delays to work that planned for that year and the deferral of revenue and related work into 2021.

Contract funding continued to support work related to targets and while lower in 2020 in comparison to 2019 still provided a significant source of funding for this work, examples are identified throughout this report.

### **Progress by Targets 2020**

Progress included increased efforts towards all targets. However in 2020 there were limitations in work that could be completed due to restrictions associated with the COVID19 pandemic.

### **Water Quality Target: Improve each subwatershed's water quality score by one letter grade, as measured by the UTRCA Watershed Report Cards, by the Year 2037**

*Target Action: Double Existing Rural Stewardship Program:*

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#### **Medway Creek Watershed Phosphorus Reduction Initiative:**

This 4-year project continued in 2020 with \$150,000 provided by ECCC. This project proposed for the establishment of 75% of the upper Medway Creek watershed to be planted to cover crops each year and sample the resulting water quality. In 2020, staff together with watershed farmers achieved over 80% cover crop amount. The project also aims to work across the entire Medway Creek watershed with BMP establishment at selected sites to showcase opportunities to other landowners. Working with the University of Waterloo and Western University through specific research projects (slag filter, saturated buffer) is also part of the ongoing project. Overall this is a \$1.5 million project.

#### **Medway Creek Watershed Demonstration Project for Phosphorus Reduction through the Canadian Agricultural Partners/OMAFRA:**

Building on the success of the Medway Creek Priority Subwatershed Project this project helps support cover crop establishment and the development of technical knowledge and its transfer to others. This \$700,000 3-year project was wrapped up in 2020 with \$167,000 in funding provided.

### **Subwatershed Monitoring:**

Water quality sampling in three subwatersheds (Medway Creek, Kintore Creek and North Kettle Creek) continued in 2020. Funding for this work was provided by ECCC (\$27,000 annually), the UTRCA is able to collect water samples and maintain base-line information of water quality in typical agricultural subwatersheds in our region.

### **Clean Water Program:**

The CWP has been ongoing since 2000 with commitment from our municipalities across the watershed. In 2020, 89 projects were carried out offering \$111,000 in cost-sharing. The overall projects value was \$423,000. This included 29 tree and shrub planting projects, 7 wetland restoration projects, 12 cover crop projects and 24 soil erosion control projects.

### **On-Farm Applied Research and Monitoring Priority Subwatershed Project (ONFARM):**

Under the auspices of the Ontario Soil & Crop Improvement Association, this project is the continuation of the Medway Creek Priority Subwatershed Project of past years. The aim is to establish and measure the impacts of agricultural best management practices on water quality. The project is being carried out in the Upper Medway Creek and North Kettle Creek subwatersheds and began late in 2019. The 2020 funding is about \$150,000 with an overall 4-year project value of \$667,000.

### **On-Farm Phosphorus Sorbative Filter Using a Removable Cartridge:**

In partnership with the Thames River Phosphorus Reduction Collaborative UTRCA staff have designed and are now testing the use of a slag filter in reducing phosphorus in agricultural tile drains. This (now \$58,000) project extends over 2 years with installations at a Southwest Oxford/Oxford County and a Lucan-Biddulph/Middlesex County farm.

### **Thames River watershed demonstration farm and cover crop initiative for phosphorus reduction:**

ECCC is providing the UTRCA with a little over \$145,000 over two years to implement a demonstration farm on UTRCA lands that will encompass a number of different BMP aimed at reducing phosphorus inputs from farmland into the Thames River and Lake Erie. In addition, funds were allocated to carry out cover crop projects with farmers across the watershed.

### **Rainbow Mussel and Silver Shiner Rehabilitation in and Around Medway Creek:**

This short-term project with about \$30,000 in funding through Fisheries and Oceans Canada DFO included developing an App for photo labelling Ontario freshwater fisheries, carrying out demonstration cover crop projects on Medway Creek watershed farms and a provide a

workshop to create awareness and promote BMPs to protect and enhance rainbow mussel and silver shiner habitat also in the Medway Creek and surrounding area watersheds.

### **Sediment/Nutrient Reductions and Barrier Removal to Benefit Silver Shiner and Other Aquatic Species at Risk:**

This Fisheries and Oceans funded projects will extend into 2023 and will provide funds for a number of enhancement projects including improving knowledge of SAR (primarily Silver Shiner), implementing BMPs throughout identified silver shiner habitat areas to improve and protect habitat, reclaim and protect damaged natural areas and remove stream barriers limiting silver shiner habitat. Approximately \$185,000 in funding is being provided.

### **Living Labs:**

This agreement provides \$60,000 over 3 years from the Ontario Soil and Crop Improvement association. The project is provincial in nature with several conservation authorities and Agriculture and Agri-Food Canada (AAFC) leading the Canada-wide effort. The overall goal of the project is to increase the sustainability and resilience of the agricultural sector by providing knowledge and support in their decision making regarding cover crops and minimum tillage.

### **Soil Health and Water Quality: Increasing the Health of the Thames River watershed and Lake Erie Basin:**

This two year project with OMAFRA (COA-based funding) has many features including the promotion of cover crops, installing a saturated buffer, working with producers to handle silage leachate, demonstration farm activities ( blind inlet, pollinator work and woody fence-row maintenance) and municipal drain Stormwater management. A little over \$200,000 is being provided.

### *Target Action: Expand Urban Stewardship Program:*

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### **Low Impact Development (LID) - Fusion Landscape Professional (FLP) Training:**

Seeing a need in the residential market for landscapers with LID experience, staff investigated programs that would meet this need in the landscape industry. Discussions with Credit Valley Conservation identified the Fusion Landscape Professional (FLP) program as a way to work with watershed municipalities to increase the uptake of residential LID features and reduce residential stormwater runoff. The long-term goal of the program is for healthy and water efficient landscapes that utilize stormwater to become a standard practice in the landscape industry and to promote FLP certified companies as leaders in the industry. Fusion landscaping combines the art and science of horticulture with the science of hydrology to design, build/install, and maintain aesthetically pleasing, water efficient landscapes. LID technologies,

such as rain gardens, bioswales, infiltration trenches, and permeable pavers, are installed to capture and use rain water on site, instead of it being directed away from the property. The UTRCA, with the City of London, negotiated with Landscape Ontario to bring the training to the UTRCA watershed in 2021 and applied to the Ontario Ministry of Environment, Conservation and Parks for funding support.

#### **LID Feasibility Study:**

Staff investigated the feasibility of developing an internal LID Maintenance Team to maintain LID features on municipal and other public properties on a cost recovery basis.

#### **Hodge's Pond:**

Rock deflectors were constructed in Cedar Creek at Hodge's Pond property. These in-stream rock structures will improve flows and water quality in Cedar Creek. Members of the Oxford Trails Council joined UTRCA staff to plant 800 native trees and shrubs along Cedar Creek, near the in-stream work. A trail plan was finalized for the Hodge's Pond property, outlining a 5 km trail route, including locations for the parking lot, trailhead sign, creek crossings, and amenities. The new parking lot was constructed, allowing the first phase of the trail to be open to the public.

#### **Cedar Creek Wetland at the 401:**

The funding application to EcoAction was submitted and approved in the first half of 2020, and wetland construction on the property began in late 2020.

#### **Burgess Park, Woodstock:**

Naturalization continued on City of Woodstock & UTRCA owned land within Burgess Park. A 1 ha native wildflower meadow was seeded in one of the retired agricultural fields, following the recommendations of the Burgess/Standard Tube Park Master Plan. This planting nearly concludes the 5 year planting plan, which has re-naturalized roughly 20 hectares of retired farmland within the city park.

#### **Cedar Creek Golf Course:**

This recently closed golf course, which runs along Cedar Creek in Woodstock, has been slated to become a naturalized public park and trail corridor. In 2020, UTRCA partnership staff began planning the naturalization and stream rehabilitation components of this property transformation. Work on the property is planned to begin in the second half of 2021.

**The Friends of Medway Creek:**

The Friends of Medway Creek hosted an open house (one of the last in-person events hosted) to provide the community with information on ongoing and planned projects designed to improve water quality and forest conditions in the watershed and to provide participants with an opportunity to provide input. In addition, the Friends of Medway Creek spent many hours developing and creating a kiosk sign to educate the public on the natural heritage features and history of the Medway Valley Heritage Forest Environmentally Significant Area (ESA). The project was funded by the City of London, with design and installation contributions from the UTRCA. The Friends completed the Medway Strategic Plan that then informed an EcoAction Proposal for funding. Approximately 1,500 trees were planted in the watershed in 2020.

**The Friends of Stoney Creek:**

The Friends of Stoney Creek secured funding for the construction of a Barn Swallow nesting structure in the Stoney Creek subwatershed, through the City of London's Neighbourhood Decision Making Program. Matt McCutcheon, UTRCA Carpenter, built and installed the structure next to the Stoney Creek near Stackhouse Avenue. In addition, the Friends of Stoney were successful in applying for funding from Unsmoke Canada for trash grabbers and COVID supplies to help with community clean ups.

**Dorchester Mill Pond Committee:**

The committee developed interpretive signage for an eco-trail through Dreamland and organized the construction of two Purple Martin boxes for the area.

*Target Action: Expand Comprehensive Monitoring:***Water Quality Monitoring and Data Management:**

Expanded water quality monitoring implemented in 2018 continued in 2020 to fill data gaps and ensure a similar regime for all 28 subwatershed. This expanded monitoring has now become part of the core monitoring program to improve consistency in data used for the UTRCA Watershed Report Cards and tracking progress with 15 additional sites and monitoring expanded to include winter sampling. Work is underway for the development of the next version of the UTRCA Watershed Report Cards that will utilize this expanded monitoring data.

*Target Action: Reduce and prevent future increases in sediment and erosion delivery to the Thames River:*

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### **Sediment and Erosion Control:**

To accomplish this target action, efforts focused on working with drainage superintendents to reduce sedimentation related to drainage activities through education and outreach. Staff undertook the training course required to become designated as a Drainage Superintendent. In addition, staff prepared and delivered three presentations during the Drainage Superintendent Course. The topics included:

- Conservation Authorities and their role in Municipal Drainage
- Conservation Authorities Act and Drainage Act – Drainage Act and Section 28 Regulations Team (DART) Protocol
- Alternative Drain Maintenance Techniques – Enhancing Drainage Functions Through an Ecologically Friendly Approach

Through these presentations the UTRCA was able to advocate for improved BMP's to incorporate buffers into Drainage reports to reduce the impacts of pollutants to our watercourses. These efforts also demonstrate our enhanced collaborations with drainage superintendents for consultation and enforcement.

**Natural Cover Target: Establish and restore 1,500 hectares of natural vegetation cover windbreaks and buffers by 2037**

*Target Action: Increase Technical Outreach and Restoration:*

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### **Tree Planting:**

2020 offered a unique year for UTRCA tree planting as most seedling stock from nurseries was cancelled. The large stock program continued as usual and a limited number of seedlings were acquired and planted. A number of different cost-share opportunities were applied for, but only some received for 2020. The seedling projects were deferred until 2021. These included Trees Ontario, 50 Million Trees through Forests Ontario, Highway of Heroes through the Ontario Horticultural Trades Foundation, our local Clean Water Program and the McTavish Foundation.

A number of different cost-share opportunities were applied for and received for 2020 tree planting. This supported private land tree planting program and 26 Communities for Nature projects. Due to COVID related impacts approximately 30,000 trees/shrubs were planted in 2020. The seedling program for the most part was postponed in 2020.

In addition to private landowners payments, funding sources included:



- Ontario Power Generation (\$10,000)
- Tree Power - London Hydro, London (\$10,000)
- Clean Water Program (\$18,000)
- McTavish Foundation (\$4,500)
- Other government and private industry funding included: Home Hardware, TD Canada Trust, EcoAction through Environment Canada, Nature London, developers, City of Stratford, City of Woodstock, the Town of St. Marys and the City of London.

### **Upper Thames Natural Heritage Enhancement Strategy:**

Work to develop a Natural Heritage Enhancement Strategy now called the Vegetation and Aquatic Ecosystems Strategy (VAES) continued in 2020 to identify the best places to grow the natural heritage system through such things as connections, corridor and buffers. The project team of UTRCA staff has definitions of vegetation and aquatic features, summarized these features by subwatersheds and by municipality. Work has begun to establish priority locations to target using GIS modeling and tools for achieving the targets have been developed. The next step is to finalize priority locations and to develop and implementation plan for each subwatershed and municipality – anticipated to be completed in 2021.

### **Land Acquisition and Disposition:**

Land acquisition opportunities are considered as on a case-by-case basis as they present themselves. In 2020 information was prepared for an available property located in Dorchester Swamp for a possible re-submission of and application to the Canada Nature Fund, Challenge Fund as part of a collaborative application planned by Conservation Ontario. Currently the proposal is on hold as Conservation Ontario is still in talks with the funders. The identified property in Dorchester swamp, adjacent to current UTRCA land holdings, is located within the Provincially Significant wetland and would add to the 282 hectares of land already owned, managed and protected by the UTRCA. Efforts will continue to seek funding to acquire this property in the future.

### **Other highlights for 2020:**

The Butternut Archive Project continued through 2020 with new seedlings being planted and monitored for growth and resilience. The Memorial Forestry Programs continued across the watershed in London, Oxford County, St. Marys/Perth County and Woodstock.

*Target Action: Advocate for Natural Heritage Restoration and Protection:*

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**Tracking Natural Heritage Change:**

Work to update standardized natural heritage spatial data in GIS is an ongoing effort that is based on air photography that is provided in 5 year cycles. In 2020 work was completed to update and summarize this data based on the most recent 2015 air photography. This data supports numerous UTRCA and partner projects and specifically will be used in the next iteration of the UTRCA Watershed Report Cards that are being developed in 2021. In addition, the natural heritage change data will be used in 2021 to highlight and present in detail natural heritage change to the UTRCA Board of Directors and through tailored presentations to member municipalities.

**Partnering with Municipalities to Advocate for Prevention of Loss:**

The UTRCA participated as stakeholders and provided extensive technical input to the City of London Environmental Management Guidelines (EMG's). The Environmental Management Guidelines were developed to provide technical guidance in implementing the Natural Heritage System policies of *The London Plan*. The Natural Heritage policies of *The London Plan* provide direction for the identification and protection of natural heritage features and areas and the ecological functions, processes, and linkages that they provide over the long term. These guidelines are aligned with federal and provincial policies, provincial and municipal planning processes, relevant data sources, current scientific knowledge and best management practices. As an integral part of the environmental planning process, these guidelines also include the provisions for the UTRCA as a stakeholder in the engagement and consultation process. The updated EMG's included a significant contribution of staff time engaging Ecology and Land Use Planners to review and comment on the Draft Document, participation in the various consultant input sessions and ongoing communications with City departments as the Draft moves to a final document.

**Flood and Erosion Risk Target: Reduce flood and erosion risk by updating flood models and hazard mapping for all UTRCA subwatershed by 2020, then integrating climate change scenarios into the updated models and developing climate change adaptation strategies by 2030.**

*Target Action: Update and Modernize Hydraulic and Hydrologic Models and Hazard Mapping*

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Flood Hazard Models are used to understand the areas impacted by flooding. These models can be used to update regulatory hazard mapping, as well as for flood forecasting, warning and preparedness planning. Work is divided into major tasks which are planned and undertaken in

each of six reaches on the main branches of the Thames River, eleven urban study areas and 24 rural study areas.

The Environmental Targets proposed to have flood modelling completed in 2020. While this work is well underway in many of the study areas, data collection and model development still remain in rural study areas. Once model development is completed mapping may be undertaken. Model development is expected to be much quicker in these rural areas with most of the work focused on modelling the bridges. It is currently expected that most of the modelling and mapping will continue beyond 2022. In the meantime, we are expecting to focus on peer review and consultation in areas where preliminary mapping is ready.

A significant challenge in working through the study areas is that priorities are continually changing due to increased development pressures and permit applications. It would be far more efficient to work through study areas to their completion. However, our regulation is a text-based regulation, which includes an expectation to rely on best available data. As such, work is often diverted to priority local analysis to allow for permit and planning review and comments, interrupting the flow of work on the broader updates underway. This has been a significant constraint on progress.

Staff retention has also been a challenge and remains an ongoing concern. There is a considerable learning curve to being able to work efficiently on the modelling of the various study areas. This has affected progress on flood modelling, erosion hazard mapping and review of preliminary products.

As work has progressed on the modelling and preliminary mapping, updates to Regulatory mapping have not yet been a focus. Once peer review has been undertaken in more of the study areas, mapping will become a focus and is expected to progress in concert with continued efforts on flood modelling in the study areas that are not as far along.

Although work on climate change was to follow the initial work on modelling, some of this work has been initiated to the extent necessary for preliminary regulatory mapping.

Following is a brief synopsis of the cumulative progress in each task, summarized across the study areas, to the end of 2020.

### **Work Planning:**

Work planning is undertaken at various levels including at a project, task or study area level. Each task in each study area is iterative as work done in one area may inform work undertaken in other areas. For this reason, work planning is ongoing throughout the project in most study areas. Work planning is substantially complete or in progress in almost all of the main branches of the Thames River and the urban study areas and initiated or in progress in 30% of the rural study areas.

## Data Collection:

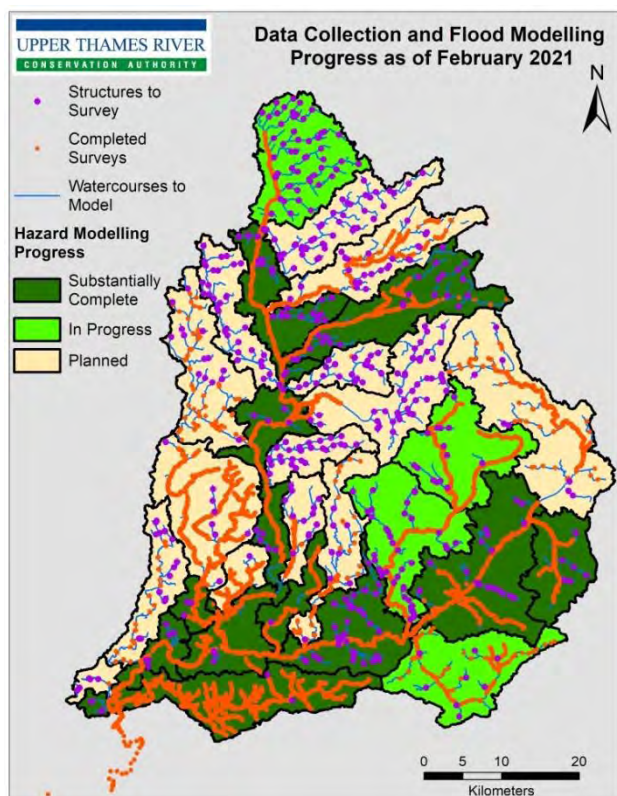
Survey detail and channel bathymetry collection using Geographic Position System (GPS) survey equipment is used to verify and augment Digital Elevation Model (DEM). This data collection continues in the rural study areas in 2020. This work is especially important under canopy and around structures where DEM may be inadequate and includes the documentation and processing of the survey information so that it can be used by staff completing the hydraulic models. This work is complete in all main branches of the Thames and complete or substantially complete in most of the urban study areas with some work remaining in London tributaries and is substantially complete in 4 of the rural study areas and in progress for 9 of the 24 rural study areas and may not be necessary for initial model development in many of the other rural study areas.

Collection of bridge and culvert geometry using GPS survey equipment is also underway. This includes collecting detail on hydraulic control structures (bridges and culverts) to allow these to be accurately represented in hydraulic models and includes required documentation so that it can be used by staff completing the hydraulic models. This data collection is complete in all main branches of the Thames and complete or substantially complete in most of the urban study areas with some work remaining in London and complete or substantially complete for 7, in progress in 6 of the 24 rural study areas.

Digital Elevation Models (DEM) provide a detailed topography of the study area which is used in both hydrologic and hydraulic models. DEMs allows representation of the topography of the area within the model without having to collect a vast array of surveyed elevation data and different sources of DEM are available for different areas and at different times. Part of utilizing different versions of DEM is an assessment of the accuracy and suitability of the DEM for its intended use. Depending on the DEM available when the modelling is undertaken, it may be necessary to revisit the modelling and mapping when more appropriate DEM is available. This work is complete in all study areas and as work proceeds to new study areas new DEM will be considered as it becomes available. Recent revisions to Dingman hydraulic model following peer review allowed the use of the newer Lidar based DEM in 2019.

## Flood Hazards:

Hydraulic model updates using HEC-RAS includes coding the physical representation of the watercourse within a hydraulic model and represents the creation of 1 dimensional, steady state models. This includes creation of



cross sections across the channel and floodplain, and addition of flows from hydrology models or historical data to the hydraulic models. Where historical information is available, model results are compared to the historical information to verify the model after physical control structures (bridges and culverts) have been appropriately represented in the models. This work is complete or substantially complete in 14 of the 17 Thames and urban study areas including St Marys, Stratford, Mud Cr London, Ingersoll Tributaries, Woodstock, Dingman, and the main branches of the Thames with the exception of the south branch north of Woodstock and is substantially complete or in progress in 7 of the 24 Rural study areas including Avon, Cedar, Middle Thames, Mud Cr, Pottersburg, St Marys Tributaries, Reynolds Cr. and South Thames tributaries.

More advanced 2D modelling or unsteady state modelling may need to be undertaken in areas where more detail on depths and velocities or the volumes of water spilling into and across flood plain areas is warranted. Two-Dimensional modelling is in progress or substantially complete on Thames River in London, St Marys and Dingman Creek. This 2D modelling has become very important in Dingman Creek to help define and assess risk in large spill areas. This advanced modelling is not expected in most of the rural study areas and 8 of the urban study areas where it has not already been initiated.

Hydrologic analysis of the study area is undertaken to provide appropriate flows for the hydraulic models. Where sufficient historical record of flows is available a statistical analysis of the flows may be undertaken to determine the regulatory (or other event) flows to be used in the hydraulic models. These flows may be transposed to similar areas using regional analysis methodologies. This analysis will require future updates as part of climate change considerations. Where sufficient historical data is not available or does not represent the uniqueness of a watershed, hydrologic models may be utilized to determine flows for hydraulic modelling. Hydrologic modelling will generally be used in urbanizing areas where sufficient historical data is not available or conditions are changing such that the historical data would not adequately represent the watershed. Where appropriate monitoring data is available, model calibration and verification are undertaken to reduce uncertainty in model results. Hydrology work has been focused on watersheds where gauge data is available to calibrate and/or verify hydrologic models being developed. Considerable effort went into model development in Dingman Cr and the modelling benefitted considerably by peer review which identified similar modelling completed in the Toronto area. This work is in progress for all but 3 of the study areas and is complete or substantially complete in 5 of the urban watersheds including Stratford Avon and Tributaries, Mud Cr London, Woodstock Cedar Cr, and Dingman Cr. Hydrologic analysis has begun shifting to the rural study areas.

Flood plain mapping is substantially complete in six study areas on the main branch of the Thames and urban areas and in progress in three study areas on the main branches of the Thames and urban areas. Flood plain mapping cannot be finalized until peer review and consultation has been completed for major updates such as this.

## **Erosion Hazards and Other Regulated Areas:**

To support erosion hazard mapping top and toe of slope have been identified in all study areas and are currently being reviewed. Stable slope and meander belt definition is in progress across most of the watershed. Final erosion mapping has also been initiated but cannot be completed until the other components have been completed and reviewed internally. Erosion mapping will be combined with floodplain mapping discussed above and current wetland information as part of updating regulatory mapping.

Peer review of hydraulic and hydrologic models is substantially completed for Mud creek and Dingman creek as part of City of London Environmental Assessments. The phase 2 of the Dingman Creek environmental assessment is anticipated to provide information that will be important in the completion of updated hazard mapping in Dingman Creek. Peer review and public engagement are important steps leading to the adoption of the updated information before it can be incorporated into Official Plans and Zoning By-Laws for consistency with natural hazard and climate change adaption policies contained in the Provincial Policy Statement.

Sample products have been produced of flood risk mapping, structural mitigation mapping and flood mitigation reporting on the Thames River. Work on production of the mapping products in these areas has been delayed to focus efforts on flood plain mapping products some of these products are being planned in other study areas.

**Recreation and Education Target: *Instill conservation values by supporting outreach to one million people annually by 2037, through visits to UTRCA owned and managed lands as well as hands-on environmental experiences.***

*Target Action: Characterize visitors and increase marketing and implement new marketing strategy to reach new audiences.*

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Although the global pandemic presented numerous challenges in all aspects of our day to day lives, the conservation areas proved to be a place solace for many. The need for local green spaces to assist with the mitigation of the mental and physical health challenges associated with COVID-19 was very much evident in UTRCA Conservation Areas.

Reduced staffing did impact our ability to complete some of the planned studies and programming that we had hoped to achieve with respect to targets including accuracy in tracking visitation. The late start to the season, reduced campsite availability and occupancy by 50% and the limited programs and services appear to have had minimal impact on visitation based on passes and permits sold throughout.

The plan for purchasing trackers for those areas that are not gatehouse controlled such as PCA south shore, PCA dam walkway as well as ESA's did not take place.

If one were to identify a positive of the pandemic was the boost it gave to the outdoor recreation industry. With provincial restrictions to stay home in place and delayed opening dates, local visitors had the opportunity to explore UTRCA conservation areas free of charge which presented the best marketing opportunity. Visitors came to explore trail systems and green spaces that might not necessarily would have come otherwise. Once they were able to see the value of the experience, they purchased passes when we were able to open to continue to enjoy our lands.

*Target Action: Expand and improve environmental experiences.*

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The ability to expand and improve environmental experiences was difficult to achieve in 2020. Planned projects with much emphasis on hiking trail improvements had to be put on hold for the season. This was the case for all capital investment projects. The assimilation and summarizing of past management plans, surveys, PALMS study and other relevant documents and information also had to be put on hold.

The operating environment for working with and for watershed residents and students in 2020 continually changed over the course of the year and really pushed staff to find imaginative ways to deliver programming and contract obligations. In the end, the number of contacts was more than could be expected and many of the activities and videos will be used long into the future.

#### **#utrcaNatureChallenge:**

When it became apparent that social/physical distancing was going to be in place for a while, a social media campaign was developed as a way to engage people to stay connected with the natural world. 48 days of different and unique nature challenges was presented. The family-friendly activities were designed to keep followers in touch with nature and to be accessible outdoors and indoors. Participants were encouraged to share responses using #utrcaNatureChallenge for a chance to win a UTRCA gift card or hat.

#### **Watershed Wednesdays:**

This social media campaign was designed to connect watershed residents to information, projects and actions being taken in many of the 28 subwatersheds. Videos were created weekly to highlight different subwatersheds and their features and to provide residents with ideas for enjoying their local environments. This project led to the development of a series of curriculum-based learning packages that included the Watershed Wednesdays videos, lesson plans and outdoor activities for grade 8 students based on the Water Systems curriculum.

**Community Science:**

Staff worked on researching various community science platforms and implementation strategies. A framework for two Community Science projects was created. The first project used the iNaturalist platform to collect biodiversity information through photo recognition software, creating a baseline of data for the watershed. The second project used the CoCoRaHS (Community Collaborative Rain, Hail and Snow Network) platform to measure and record daily precipitation with a pilot group of 12 landowners from across the watershed. The precipitation information will enhance the UTRCA's monitoring network, fill data gaps, aid in model calibration and improve our understanding of climate change trends over time. In late 2020, two staff teams were created to work through the logistics of each project.

**Community Interpretive Programs:**

Staff offered in person Fall/Winter Interpretive Programs for community groups, such as Homeschool groups, Guides/Scouts and 4H.

**Inclusive and Accessible Programming:**

Staff developed and lead in person and virtual hike experiences for groups heavily impacted by the pandemic, specifically people with disabilities and new Canadians. Staff led an in person hike for CNIB Deadblind community members and monthly virtual hikes the Community Living London community (adults with developmental disabilities).

**Virtual Field Trips:**

Curriculum-based virtual field trips were created for grade 5 remote learners and for grade 9 and 10 classes. New lesson plans and virtual resources were developed (Google Sites, Google Slideshows) for synchronous learning sessions via Google Meet. The River Safety program for gr. 2 students (which is normally delivered in schools) was adapted to be completely virtual.

**Community Education Videos:**

New videos were created that were then used for a variety of educational and promotional purposes, including for the virtual field trips. These included: Fanshawe Dam Tour, Stream Study, Augmented Reality Sand Table Demonstration and the Watershed Model Demonstration.

**GREEN Leaders Program:**

The Program offered to 15 grade 7/8 classes in the Thames Valley District School Board was modified to both compress the delivery time and for virtual implementation. Post-visit lesson plans were developed for teachers to deliver between virtual visits.



### **EcoSchools Certification Support:**

Learning packages were created to support schools on their journey to higher EcoSchools certification including: The Great Gulp, Supporting Species at Risk, Low Mow Zone, Tree Planting and Community Science.

### **Stream of Dreams Stormwater Education Program:**

More than 3000 students participated in the program from the fall of 2019 and into the winter of 2020. Due to the pandemic, students and volunteers could not participate in the installation of the murals but UTRCA staff wanted them to be up for student's return to school in the fall. "Stream of Dreams" fish murals were installed at six schools.

### **Wildwood Nature School:**

After several years of consideration and planning, the Wildwood Nature School was launched in 2020. A new area called the Spruce Grove was created within Wildwood Conservation Area for this exciting program. Sessions were offered for children ranging in ages from 2 to 13 years. The program was very popular with 65 participants attending. Due to the demand, another morning session was added and many were asked to be placed on a waiting for future Nature School sessions.

### **Water is Life Program:**

UTRCA partnered with the Huron Perth Catholic District School Board (HPCDSB) to develop a Water Is Life program to be delivered to the 67 Primary, Junior and Intermediate classes within Perth County in 2021. This collaboration created opportunities for the integration of Outdoor and Indigenous Education and the continuation of relationship building among groups. Inspired by the book "The Water Walker" by Joanne Robertson, the UTRCA created digital resources for students from K to 8. This resource includes a reading of the book itself by the author, who is aware of and supportive of the use of her book for this initiative. Also included are division specific presentations, videos, an opportunity for mindfulness to encourage students to reflect on the importance of water and actions they can take to take care of the watershed, and a catalog of resources that exhibit the many actions being taken in the watershed and some further afield. A final call to action is based on the purpose and history of Water Walks, including participation in the movement "The Junior Water Walkers LEARN-ADOPT-PROTECT-WALK" initiative. Classes will also learn about their school's connection to the local waterway on a virtual story map walk that encourages them to adopt and protect that body of water.

### **Prepared by:**

Tracy Annett, General Manager; Teresa Hollingsworth, Manager, Community and Corporate Services; Jennifer Howley, Manager, Conservation Areas; Brad Glasman, Manager, Conservation Services; Alex Shivas, Manager, Lands and Facilities; Jenna Allain, Manager, Environmental Planning and Regulations; Chris Tasker, Manager, Water and Information Management, and Chris Harrington, Manager, Watershed Planning, Research and Monitoring

*fyi*

June 2021



*Indigo Bunting*

[www.thamesriver.on.ca](http://www.thamesriver.on.ca)

Twitter [@UTRCMarketing](https://twitter.com/UTRCMarketing)

Facebook [@UpperThamesRiverConservationAuthority](https://www.facebook.com/UpperThamesRiverConservationAuthority)

### **Mornington Central PS - Schoolyard Outdoor School and Trees**

Despite the global pandemic, there was a time over the winter when Wildwood Education staff were fortunate enough to be asked to provide schoolyard professional development programming at Mornington Central Public School. This temporary return to teaching, outside, with students and staff, was a welcome reprieve.



The participating classes suggested topics of interest prior to the visit and Wildwood Education staff incorporated teaching methods and activities using the schoolyard as an extended classroom. We also enjoyed turning



whatever nature offered at any given moment into learning opportunities!

Lisa Meszeros, a teacher and long time supporter of Wildwood Education programming, secured a TD Friends of the Environment Foundation grant for the school to provide all classes with some form of outdoor learning opportunity. For Wildwood Education staff, that meant teaching all classes from Kindergarten to Grade 6 and arranging for five large stock trees for the schoolyard, adding to the 25 or so planted last spring!

**Contact: [Maranda MacKean](mailto:maranda@wildwoodeducation.ca), Community Education Specialist**



Staff from Cedar Hollow Public School laying out plants for the pollinator garden.

### **Cedar Hollow PS Pollinator Garden**

In partnership with the Thames Valley District School Board (TVDSB), the UTRCA is delivering a pollinator garden project to five schools this spring. Virtual programs about pollinator gardens developed by UTRCA education staff are shared with classes on-line (see story below). While the original plan was for students to do the actual planting, staff at the schools have pulled together to make the gardens happen.

Various projects include establishing pollinator plants in planter boxes (previously built by students), in outdoor learning areas, and in a canoe (see the [David Suzuki Canoe project](#)).

**Contact:** [Karen Pugh](#), Resource Specialist

### **Pollinator Power!**

During the month of June, Fanshawe Community Education staff taught virtual Pollinator Garden field trips for 36 classes from five TVDSB schools: Cedar Hollow, East Carling, Innerkip, West Nissouri, and W.S. Fox. These synchronous sessions complemented the new pollinator gardens being planted this spring at each of these schools, expertly coordinated by the UTRCA's Karen Pugh. The pollinator gardens also support schools seeking to become certified as an EcoSchool with EcoSchools Canada. Each school demonstrated creativity and adaptability in planting these gardens safely during COVID-19 restrictions.

Our engaging virtual field trips helped students get excited about their school's new pollinator garden and encouraged students to get involved

by helping with future watering, weeding, and recording pollinators that visit the garden. Another goal of the virtual sessions was to inform students, ranging from Kindergarten to Grade 8, about how native plants support native pollinators such as bees, hummingbirds, and butterflies.

Community Education staff developed three different presentations to suit all elementary grade levels and added a variety of fun and interactive experiences, such as reading the story "Give Bees a Chance," singing an insect song, and creating various games for younger participants. Older grades participated in Google Jamboards, a Kahoot quiz, and were challenged to answer a variety of true and false questions about pollinators. Students could ask questions at the end of each virtual presentation, and they had some great queries including "Is there a king bee as well as a queen bee?", "What is the biggest bee in the world?", and "Have bees ever been to space?"

It is both our hope and the hope of the TVDSB, which generously funded these gardens and virtual field trips, that these schoolyard pollinator gardens will create a place to support and protect pollinators while also providing students with another rich teaching and learning environment as an outdoor classroom.

**Contact:** [Fiona Navickas](#), Community Education Specialist, or [Kim Gilbert](#), Community Education Technician

### **St. Marys Sparling Bush Pollinator Garden**

Thanks to funding from TD Friends of the Environment Foundation, hundreds of pollinator plants are now growing next to Sparling Bush in St. Marys. Staff from the Town of St. Marys and the UTRCA worked together on the morning of June 4. St. Marys staff prepared the site, which included stripping the sod, bringing in topsoil, tilling, and providing mulch.

Originally, the plan was for local students to participate and get hands on planting experience. The plants were grown at Heeman's Greenhouses and include species such as purple and white coneflower, bergamot, black eyed Susan, butterfly milkweed, coreopsis, and sedum.



The activity generated a lot of interest from passers-by, including Mr. Sparling, the original landowner and farmer who just happened to be visiting the area from out of town. The planting site was once land that Mr. Sparling drove his cattle through, past the bush.

**Contact:** [Karen Pugh](#), Resource Specialist

### Tailgate Lunch!

A number of industry partners are helping to make the UTRCA's new Thorndale Demonstration Farm come to fruition. Contractors are busy installing tile, inlets, and structures for the controlled drainage system. Tony Kime, of Bluewater Pipe, provided a BBQ lunch to keep the workers fed – a gesture that was appreciated by all!



Staff are planning a field day in the fall to showcase the new features installed on the farm.

**Contact:** [Craig Merkley](#), Conservation Services Specialist

### GREEN Leaders Program & Virtual Student Summit

In January, Community Partnerships and Education staff Brad Hertner and Julie Read launched a virtual version of the GREEN Leaders Program. This June, more than 400 students in grade 7 and 8, along with the grade 10 HELP class (Head, Heart, Hands Environmental Leaders' Project), completed this program and had the opportunity to become youth environmental leaders and implement sustainable solutions to local environmental issues. Our staff were able to offer this program to students in the TVDSB, thanks to generous funding provided by the school board and Start.ca internet company.

The students met virtually with Brad and Julie biweekly and completed a six-step process that took them from identifying local environmental issues through to taking civic action in their community. Students democratically selected one local environmental issue as a class. This year's issues included deforestation, litter, algal blooms, destruction of animal habitats, invasive species, misuse of storm drains, and water pollution.

Students could engage directly with local stakeholders as they researched their issues. Action Projects included creating education and awareness campaigns and engaging community members through websites, slideshows, posters, painted rocks, sidewalk chalk murals, public service announcements, virtual challenges, and by teaching younger students. Students also participated in media engagement, such as writing newspaper articles and creating social media posts, hashtags, and TikTok videos. Students led on-the-ground actions including litter clean ups, fundraisers, cleaning up a Westminster Ponds buffer zone, implementing waste reduction challenges, and adding PPE boxes in their community where people can safely recycle single-use masks. Lastly, some classes asked for change directly from policy-based stakeholders.

On June 10, the participating classes came together virtually for a Student Summit coordinated by Julie and Brad. The Summit was an opportunity for students to share their Action

Projects and celebrate their successes. During the Summit, students used the interactive platform Flipgrid to watch videos created by the other classes and record their own video feedback, enhancing their engagement and enabling them to connect directly to other GREEN Leaders. The classes also connected virtually with a local stakeholder via Microsoft Teams to get professional feedback on their Action Projects.

We hosted five stakeholder synchronous sessions throughout the day, with Andrea Boyer (London Public Library's Environmentalist in Residence), Leah Derikx (Operations Manager, London Environmental Network), Reta Horin (Parks & Forestry Supervisor, City of Woodstock), Darby Alderson (Administration and Engagement Coordinator, Thames Talbot Land Trust), and Pat Donnelly (Manager, Watershed & Climate Change, City of London).

We also offered video presentations for the students featuring TVDSB Learning Coordinator for Environmental Education Erin Mutch, Start.ca staff, and Earth Force president Vince Meldrum. To inspire and support students in continuing with environmental leadership, we featured a special interview with Youth Environmental Leader Ana Humphrey and provided resources prepared by the H<sup>3</sup>ELP class outlining how they could engage in environmental leadership when they enter secondary school and beyond.

In the effort to make the Summit as engaging and interactive as possible, we prepared a Google Map with the locations of all participating schools and stakeholders, organized a collaborative art project so students could reflect on their GREEN Leaders experience, asked students to do a sit spot outside to connect to nature, and created a fun Kahoot Quiz.

The Summit was a very successful day of shared learning, connecting and celebrating, which is especially meaningful during these times of remote learning. We would like to express our gratitude to the funders, stakeholders, educators and, especially, the students for making this year's GREEN Leaders Program such a success!

**Contact: [Julie Read](#), Community Education Supervisor (Fanshawe)**



### **Supporting Threatened Species**

In 2011, the Dale family worked with UTRCA staff to plant an 8 acre prairie on their Norwich Township farm. Within a couple of years, Bobolink, a threatened species in Ontario and Canada, began nesting in the new prairie.

Bobolinks spend much of their time out of sight on the ground feeding on insects and seeds. They seem to appear out of nowhere and may be spotted flying high above the fields or low over the tops of vegetation, singing a bubbling musical song. The Dale family delays cutting their hay until after July 15 to ensure that the Bobolink nesting season is complete.

Barn Swallows, another threatened species, also nest on the Dale family farm. As Chair of the UTRCA Board of Directors, Alan Dale is an inspiration to staff with his leadership in conservation. We thank the Dale family for their efforts!

[See photos from the Dale family farm.](#)

### **Reclaiming Shoreline & Creating Lake Access**

Conservation Services and Fanshawe CA staff teamed up to reclaim a section of Fanshawe Reservoir shoreline that was being lost to bank erosion. The erosion was also threatening a roadway used to access campsites, so something had to be done.

Two sections of wooden cribbing were placed along the eroded bank and filled with stone



to secure the bank and protect the roadway. A wooden staircase incorporated into the project will allow campers and other visitors to safely access the shore for better viewing of the lake and to launch their watercraft. The work was completed as part of our ongoing efforts to improve and protect the shoreline for future enjoyment.

**Contact:** [Craig Merkley](#), Conservation Services Specialist



### **The one that didn't get away!**

Five years ago, the UTRCA's Conservation Services team worked with Fanshawe and Pittock Conservation Areas staff and biology staff to install a series of underwater structures in the two CA reservoirs. Wooden cribs filled with stone were sunk into the lakes at strategic locations to mimic old remnant docks or piers. The structures were designed to provide critical habitat needed for small bait fish which, in turn, would hopefully attract larger predatory fish.

As evidenced by the photo, the underwater habitat is a success! Recreational anglers now catch and release fish that have never been recorded in the area. All of this adds to the experiences offered at our parks.

**Contact:** [Craig Merkley](#), Conservation Services Specialist



## Adding the Finishing Touches

Several trays of wildflower plugs, Big Bluestem plugs, and Serviceberry trees were planted along the north shore of Stratford's Lake Victoria last month. The planting completed the 60 metre long shoreline stabilization project that started in the winter.

The plugs and trees will provide the biodiversity component of the project. The roots add stability to the work in addition to keeping the weeds down. Lake users are already using the new boat launch that was installed as part of the project.

**Contact:** [Craig Merkley](#), Conservation Services Specialist



## Species of the Month: Dame's Rocket

Walking along riverside trails from mid-May to early June, you may notice stands of tall purple flowers. These pretty flowers are often mistaken for phlox but are actually Dame's Rocket (*Hesperis matronalis*), a non-native species.



Dame's Rocket is a member of the Mustard Family (Cruciferae or Brassicaceae) and, like all mustards, has four petals (phlox has five). The four petals form a cross or crucifix; hence, the family name Cruciferae. Edible members of the family include arugula (called "rocket" in Europe) and broccoli. The leaves and seeds (sprouted and dried) of Dame's Rocket are edible. Domestic goats love the leaves but deer don't eat it, unfortunately.

The flowers are almost an inch across, and range in colour from deep purple to white. The flowers are very fragrant, especially in the evening, and are insect pollinated. Dame's Rocket is a biennial, which means it blooms in the second year of growth.

Dame's Rocket is an old-fashioned ornamental that was introduced into North America from Europe in the 1600s and, like many other introduced species, escaped from cultivation. Dame's Rocket produces a lot of seed and is an aggressive grower, allowing it to out-compete native plants. It is now common across most of North America in areas of damp soil. In some US states, cultivating this plant is against the law.

Hand pulling can be effective method to get rid of this invasive species, as the roots come out easily from moist soils. Put flowers and seeds in

garbage bags destined for the landfill. Repeat yearly until the seed bank is exhausted and replant the area with native wildflowers.

**Contact:** [Cathy Quinlan](#), Terrestrial Biologist

## On the Agenda

The next UTRCA Board of Directors meeting will be held virtually on June 22, 2021.

- 20 Year Flood Control Capital Plan
- Appointment of B. Dafoe as Officer Pursuant to Section 28 of the CA Act
- Investment Policy Review
- Administration and Enforcement - Section 28 Status Report – Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (O.Reg157/06)
- Conservation Ontario Submission/ Consultation Guide Comments
- Environmental Targets Progress Report

Please visit the “Board Agendas & Minutes” page at [www.thamesriver.on.ca](http://www.thamesriver.on.ca) for draft agendas, audio/video recordings, and minutes.

**Contact:** [Michelle Viglianti](#), Administrative Assistant