

# Board of Directors Meeting #4/23 Thursday, May 25, 2023 1:00 p.m.

# Kawartha Conservation, Boardroom

# 277 Kenrei Road, Lindsay, ON K9V 4R1

## **AGENDA**

12. Adjournment

We would like to acknowledge that many Indigenous Nations have longstanding relationships, both historic and modern, with the territories upon which we are located.

Today, this area is home to many indigenous peoples from across Turtle Island. We acknowledge that our watershed forms a part of the treaty and traditional territory of the south-eastern Anishinaabeg.

It is on these ancestral and treaty lands that we live and work. To honour this legacy, we commit to being stewards of the natural environment and undertake to have a relationship of respect with our Treaty partners.

1.	Adoption of Agenda						
2.	Declaration of Pecuniary Interest						
3.	Approva	al of Minutes					
	•	BOD Meeting #3/23	Page 2-9				
4.	Busines	s Arising from the Minutes					
5.	Deputat	ion – None					
6.	Presenta	Presentations and Applicable Action Items					
	6.1	Audited Financial Statement 2022 6.1.1 Audited Financial Statement 2022	Page 11				
	6.2	Section 28 Hearing Procedures					
7.	Staff Re 7.1 7.2 7.3 7.4	ports Permits Issued by Designated Staff (April) Lake Dalrymple Management Plan Update CAO Report Correspondence	Page 12-16 Page 17-23 Page 24-36 Page 37-45				
8.	8.1 8.2 8.3	tems 2023 Municipal Levy Weighted Vote Municipal Apportionment Agreement Lake Management Implementation Action Plan 2024-2028	Page 46-94 Page 95-106 Page 107-164				
9.	New Bu	siness					
10.	Reports	and Updates from Board Members					
11.	Closed S	Session – None					

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# Agenda Item #3

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To: The Chair and Members of

Kawartha Conservation Board of Directors

From: Mark Majchrowski, CAO

Re: Approval of Minutes

#### **KEY ISSUE:**

To approve the minutes of Meeting #3/23 held on Thursday, April 20, 2023.

## **RECOMMENDED RESOLUTION:**

RESOLVED, THAT, the Board of Directors Minutes of Meeting #3/23 be adopted as circulated.

## **BACKGROUND**

Minutes are attached for your review and approval.



# Board of Directors Minutes of Meeting #3/23

Meeting #3/23 was held on Thursday, April 20, 2023, in person at the Kawartha Conservation Administration Centre. The Chair called the meeting to order at 1:30 p.m.

Present: Robert Rock, Chair

Pat Warren, Vice-Chair Tracy Richardson, Director Eric Smeaton, Director Harold Wright, Director Peter Franzen, Director Gerry Byrne, Director Cria Pettingill, Director

Regrets: Lloyd Rang, Director

Jeff Forbes, Director, Mississaugas of Scugog Island First Nations (virtual)

Staff: Mark Majchrowski, CAO

Kristie Virgoe, Director, Stewardship and Conservation Lands

Jonathan Lucas, Acting Director, Corporate Services

Nancy Aspden, Acting Manager, Integrated Watershed Management

Melanie Dolamore, Corporate Services Assistant

John Chambers, Marketing and Communications Specialist

Guests: None

## FIRST NATIONS ACKNOWLEDGEMENT

The Chair began meeting #3/23 with a First Nations Acknowledgement:

We would like to acknowledge that many Indigenous Nations have longstanding relationships, both historic and modern, with the territories upon which we are located.

Today, this area is home to many indigenous peoples from across Turtle Island. We acknowledge that our watershed forms a part of the treaty and traditional territory of the south-eastern Anishinaabeg.

It is on these ancestral and treaty lands that we live and work. To honour this legacy, we commit to being stewards of the natural environment and undertake to have a relationship of respect with our Treaty partners.

#1 - ADOPTION OF AGENDA		
RESOLUTION #36/23	MOVED BY: SECONDED BY:	TRACY RICHARDSON HAROLD WRIGHT
RESOLVED THAT, the Agenda for Meeting #3/23 be adopted	as amended.	
	CARRIED	
Agenda Item #6 Presentations and Applicable Action Items Section 28 Hearing Procedures was postponed to Meeting		ciated agenda Item #6.1
#2 – Declaration of Pecuniary Interest		
None.		
#3 – Approval of Minutes		
RESOLUTION #37/23	MOVED BY: SECONDED BY:	PETER FRANZEN CRIA PETTINGILL
RESOLVED, THAT, the Board of Directors Minutes of Meeting	#2/23 be ado	oted as circulated.
	CARRIED	
#4 – Business Arising from the Minutes		
None.		
#5 – Deputation		
None.		
#6 – Presentations and Applicable Action Items		

None. Item postponed to the next meeting of the Board of Directors.

# #7 – Staff Reports

## 7.1 – Permits Issued by Designated Staff (March)

**RESOLUTION #38/23**MOVED BY: CRIA PETTINGILL
SECONDED BY: HAROLD WRIGHT

**RESOLVED, THAT**, the following Section 28 Permits issued by staff be received.

Permits	Permits 2022-157 (REVISED), 2023-020 (REVISED),
	2023-028, 2023-032, 2023-044, 2023-058, 2023-
	060 to 2023-065, 2023-067 to 2023-080, 2023-085
	to 2023-090, 2023-092, 2023-093, 2023-097, 2023-
	098

AND THAT, the Permitting performance report be received.

**CARRIED** 

Clarification was provided on permits included within the table of permits issued, and delays in timelines. Staff also shared details on service improvements implemented for the permitting process.

## 7.2 - Permit Application - North Bayou Road

RESOLUTION #39/23 MOVED BY: HAROLD WRIGHT

SECONDED BY: ERIC SMEATON

**RESOLVED, THAT**, the permit application submitted pursuant to Ontario Regulation 182/06: Regulation of Development, Interference with wetlands to allow the construction of a residential dwelling with attached garage at North Bayou Road (ARN# 165102603031595) City of Kawartha Lakes, be approved and permitted.

**CARRIED** 

Discussion was had amongst the Board and Mr. Majchrowski provided clarification on several items to assist the Board decision making, including regulatory and policy context, existing conditions and proposed development on the property, historical permits issued in the area, and the decision framework that led to staff's recommendation.

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## 7.3 – Strategic Actions Update 1st Quarter

RESOLUTION #40/23 MOVED BY: PAT WARREN SECONDED BY: GERRY BYRNE

**RESOLVED, THAT**, the staff report on Strategic Actions update for the first quarter be received.

**CARRIED** 

Staff addressed questions from the Board on water temperature monitoring initiatives relative to climate change efforts, and tree planting efforts as related to agricultural lands.

## 7.4 – 2016 Climate Change Strategy – Implementation Summary

RESOLUTION #41/23 MOVED BY: PAT WARREN

SECONDED BY: TRACY RICHARDSON

**RESOLVED, THAT**, the Kawartha Climate Change Strategy 2016 Implementation Report be received.

**CARRIED** 

Staff addressed questions from the Board on the proposed next steps towards developing a revised climate change strategy, public process, implementation success measures and lessons learned. Board interests and guidance for consideration in the new climate change strategy were identified, including the impacts of severe weather events and increased drought potential on communities and restorative efforts (e.g., on tree nursery, planting, and survival), invasive species impacts and setting of measurable goals.

## 7.5 – Bill 23: More Homes Built Faster Act, 2022

RESOLUTION #42/23 MOVED BY: GERRY BYRNE

SECONDED BY: HAROLD WRIGHT

RESOLVED, THAT, the staff report on Bill 23, More Homes Built Faster Act be received, AND,

**THAT**, comments submitted by staff to the Standing Committee for Bill 23 and to the Environmental Registry of Ontario (ERO #019-6160 – Proposed Updates to the Ontario Wetland Evaluation System and ERO #019-6141 – Legislative and regulatory proposals affecting conservation authorities to support the Housing Supply Action Plan 3.0) during the active consultation period be received.

**CARRIED** 

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## 7.6 – Regulatory Proposal: Provincial Policy Statement

RESOLUTION #43/23 MOVED BY: PETER FRANZEN

SECONDED BY: ERIC SMEATON

**RESOLVED, THAT,** the staff report on the proposed changes to existing provincial planning policy related to ERO #109-6813 (Review of proposed policies adapted from A Place to Grow and Provincial Policy Statement to form a new provincial planning policy instrument) be received.

**CARRIED** 

7.7 – CAO Report

RESOLUTION #44/23 MOVED BY: HAROLD WRIGHT

SECONDED BY: PAT WARREN

**RESOLVED, THAT**, the CAO Monthly Report for meeting #3/23 be received.

**CARRIED** 

7.8 – Correspondence

**RESOLUTION #45/23**MOVED BY: TRACY RICHARDSON

SECONDED BY: ERIC SMEATON

**RESOLVED, THAT**, the attached correspondence be received.

**CARRIED** 

## #8 - Action Items

## 8.1 - Risk Management Official / Risk Management Inspector Appointment

RESOLUTION #46/23 MOVED BY: CRIA PETTINGILL

SECONDED BY: GERRY BYRNE

**RESOLVED, THAT,** Stephanie Vegotsky be appointed as a Risk Management Official/Risk Management Inspector for the purpose of enforcing the *Clean Water Act, RSO, 2006, Part IV* and the regulations pursuant to Part IV, AND

**THAT,** a certificate of appointment be issued bearing the Chief Administrative Officer's signature.

**CARRIED** 

#### 8.2 - Board of Directors Remuneration

RESOLUTION #47/23 MOVED BY: CRIA PETTINGILL
SECONDED BY: PAT WARREN

RESOLVED, THAT, the staff report on Board of Directors remuneration be received, AND,

**THAT**, the Per Diem remuneration for the Board of Directors be established in the amount of \$75 effective January  $1^{st}$ , 2023, AND,

**THAT,** Per Diem remuneration be included in the 2023 budget.

**CARRIED** 

## 8.3 – 2023 Approval of Draft Budget

RESOLUTION #48/23 MOVED BY: ERIC SMEATON
SECONDED BY: TRACY RICHARDSON

**RESOLVED, THAT,** the Draft 2023 budget be updated to reflect Board recommendations prior to circulation, AND,

**THAT,** the Draft 2023 budget be endorsed, and the *Information for Municipal Partners* be developed and circulated to member municipalities.

CARRIED

Director Franzen departed the meeting at 3:11 p.m.

## #9 - New Business

Director Richardson shared with the Board the roll out of the City of Kawartha Lakes second draft of the Rural Zoning By-Law amendment and the interest and concern expressed from residents in the area of shoreline naturalization and native planting. Director Richardson to circulate the report for the Board's interest.

## #10 – Reports and Updates from Board Members

None.

## #11 - Closed Session

Director Richardson departed the meeting at 3:17 p.m.

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RESOLUTION #49/23 MOVED BY: PAT WARREN SECONDED BY: ERIC SMEATON

**RESOLVED, THAT,** the Board enter a closed session at 3:17 p.m.

CARRIED

**RESOLUTION #50/23** MOVED BY: ERIC SMEATON

SECONDED BY: HAROLD WRIGHT

**RESOLVED, THAT**, the Board exit a closed session at 3:46 p.m.

**CARRIED** 

**RESOLUTION #51/23** MOVED BY: GERRY BYRNE

SECONDED BY: ERIC SMEATON

**RESOLVED, THAT**, the staff report be received.

**CARRIED** 

# #12 - Adjournment

There being no further business, the meeting adjourned at 3:48 p.m.

**RESOLUTION #52/23**MOVED BY: PAT WARREN

SECONDED BY: CRIA PETTINGILL

**RESOLVED THAT,** the Board of Directors Meeting #3/23 be adjourned.

**CARRIED** 

Robert Rock Mark Majchrowski
Chair CAO



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To: The Chair and Members of

Kawartha Conservation Board of Directors

From: Mark Majchrowski, CAO

Re: Presentations

#### **KEY ISSUE:**

Presentation of the audited financial statement, and procedural By-Law #2 (hearing procedures).

#### **RECOMMENDED RESOLUTION:**

- 1) RESOLVED, THAT, the presentation on the 2022 audited financial statement be received.
- 2) RESOLVED, THAT, the presentation on Section 28 Hearing Procedures be received.

Please see below for a short description on the topics of interest.

## **Audited Financial Statement**

Our auditors, Mr. Adam Delle Cese, CPA and Mr. Nick Corsi, CPA, representing the firm BDO Canada Ltd. will present the 2022 audited financial statements and address any questions the board members may have.

Discussion on staff report (Item #6.1.1) associated with this presentation will follow.

#### **Section 28 Hearing Procedures**

Presentation on the process and procedures of the Kawartha Conservation Hearing Procedures will be provided by Matthew Mantle, Director, Planning and Development Services.

The Hearing Board, consisting of the Conservation Authority Board members, may conduct a public hearing under Section 28 of the *Conservation Authorities Act* (permitting approvals) when:

- An application is to be refused;
- Approved with contentious conditions;
- As required to support provincial matters of interest; or,
- At the request of a holder of a permission ("permit holder") when it is Kawartha Conservation's intention to cancel a permission.

The Hearing Board acts as a decision-making tribunal, evaluating information presented at a hearing to decide whether the application will be approved, with or without conditions, or refused. The meeting is conducted in a manner that is fair, without bias and consistent with legal requirements without being unduly legalistic. Procedures for Section 28 Hearing Procedures are found in <a href="https://example.com/by-Law #2">By-Law #2</a>.

A staff report <u>is not</u> associated with this presentation.

For more information, please contact Mark Majchrowski at extension 215.



# Agenda Item #6.1.1

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To: The Chair and Members of

Kawartha Conservation Board of Directors

From: Mark Majchrowski, Chief Administrative Officer

Jonathan Lucas, Acting Director, Corporate Services

Re: 2022 Audited Financial Statements

#### **KEY ISSUE:**

To seek Board approval of the 2022 Audited Financial Statements.

#### **RECOMMENDED RESOLUTION:**

RESOLVED, THAT, the 2022 draft financial statements as audited by the firm BDO Canada Ltd, be approved AND,

THAT, the reserves be adjusted in the amount of:

<\$X> addition to Unrestricted Net Assets,

<\$X> addition to Capital Asset Acquisitions,

<\$X> addition to Conservation Initiatives,

<\$X> reduction in Windy Ridge Conservation Area, and

<\$X> addition in the net investment in Tangible Capital Assets,

representing a total increase in net assets of <\$X> in 2022.

Note: Whereas, X, is to be defined upon the release of the Audited Financial Statements.

#### **BACKGROUND**

The Board of Directors annually approves the audited financial statements and the appropriation to/from reserves. The audited financial statement will be provided as a separate document following the release of the agenda.

Our auditors will present the 2022 financial statements and address any questions of board members preceding this agenda item.

Staff recommendations for the allocation to reserves will be provided at the Board meeting for discussion.

## **Acknowledgements/ Contributions from:**

Alex Krynicki, Accountant and Business Analyst

For more information, please contact Jonathan Lucas at extension 233.



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To: The Chair and Members of

Kawartha Conservation Board of Directors

From: Mark Majchrowski, Chief Administrative Officer

Matthew Mantle, Director, Planning and Development Services

Re: Permits Issued by Designated Staff (April)

#### **KEY ISSUE:**

A summary listing of Permits approved by designated staff for information purposes.

#### **RECOMMENDED RESOLUTION:**

RESOLVED, THAT, the following Section 28 Permits issued by staff be received:

	2022-418 (REVISED), 2023-041, 2023-054, 2023-082, 2023-
Permits	095, 2023-096, 2023-100, 2023-101, 2023-104 to 2023-118,
	2023-121 to 2023-124

AND, THAT, the Permitting performance report be received.

The following information identifies the permitting performance associated with the processing of permits since the previous staff report to the Board aggregated on a monthly basis. Most of our permits fall within the minor permits category and are associated with a 14-day timeframe for determination of a complete application, and a decision on issuance of a permit are tied to a 21-day timeframe. Major (complex) applications and streamlined applications also have timeframes associated with approvals as shown below.

Generalized Permit Processing Timeframe Guide for Client Service Standards							
Type of Permit   Complete App.   Permit							
Review Issuance							
Streamlined	10	14					
Minor	14	21					
Major	21	28					

As displayed in Table 1, for the month of April, our team met approximately 48% of the metric for application review timelines and met 67% of issuing permits within the Client Service Standard timeframes. With respect to the previous reporting period, we achieved 56% of applications reviewed within standard timeframes and 81% of permits issued within standard timeframes.

For more information, please contact Matthew Mantle at extension 213.



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 Table 1: Number of applications meeting Client Service Standards for Permit Review and Issuance

Month	Application	on Review	Permit Issuance		
WOITH	No.	%	No.	%	
April	13/27	48%	18/27	67%	

Table 2, below, illustrates permits that did not meet the revised Client Service Standard for determination of a complete application and permit issuance during this reporting period.

A chart indicating monthly permitting activity and a related graph indicating performance relative to guidelines are provided in the attachments following this report.

**Table 2: Permits Exceeding Client Service Standards for Permit Review and Issuance** 

Permit Number	Guideline Not Met	CALC Review Guideline	# Days Taken	Days Over	Reason
April			'		
2023-041	Application Review	14	24	10	Delays due to resourcing challenges and workload
2023-041	Permit Issuance	21	62	41	Delays due to resourcing challenges and workload
2023-054	Application Review	14	112	98	Delays due to resourcing challenges and workload
2023-034	Permit Issuance	21	28	7	Delays due to resourcing challenges and workload
2023-096	Application Review	14	114	100	Delays due to resourcing challenges and workload
2023-030	Permit Issuance	21	26	5	Delays due to resourcing challenges and workload
2023-100	Permit Issuance	21	49	28	Delays due to resourcing challenges and workload
2023-101	Permit Issuance	21	49	28	Delays due to resourcing challenges and workload
2023-104	Application Review	10	88	78	Delays due to resourcing challenges and workload
2025-104	Permit Issuance	14	24	10	Delays due to resourcing challenges and workload
2023-105	Application Review	14	88	74	Delays due to resourcing challenges and workload
2023-106	Application Review	10	64	54	Delays due to resourcing challenges and workload
2023-107	Application Review	14	76	62	Delays due to resourcing challenges and workload
2023-108	Application Review	14	99	85	Delays due to resourcing challenges and workload

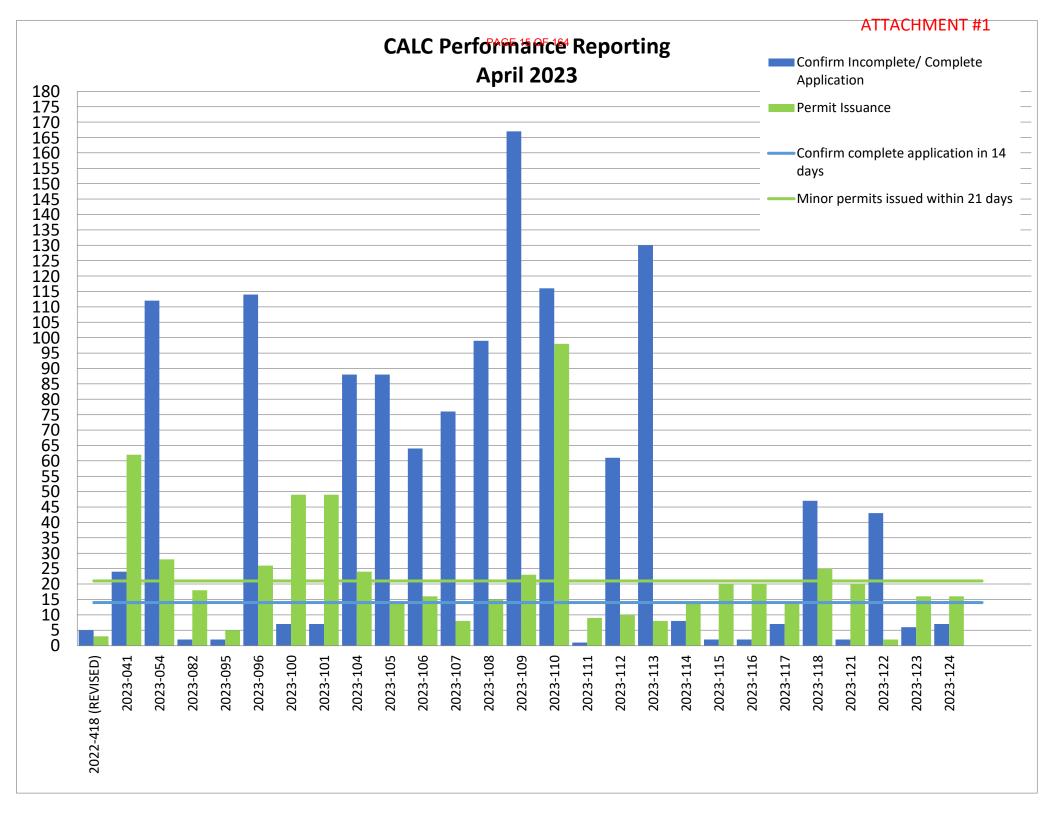
For more information, please contact Matthew Mantle at extension 213.



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Permit Number	Guideline Not Met	CALC Review Guideline	# Days Taken	Days Over	Reason
2022 100	Application Review	14	167	153	Delays due to resourcing challenges and workload
2023-109	Permit Issuance	21	23	2	Delays due to resourcing challenges and workload
2023-110	Application Review	14	116	102	Delays due to resourcing challenges and workload
2023-110	Permit Issuance	21	98	77	Delays due to resourcing challenges and workload
2023-112	Application Review	14	61	47	Delays due to resourcing challenges and workload
2023-113	Application Review	10	130	120	Delays due to resourcing challenges and workload
2023-118	Application Review	14	47	33	Delays due to resourcing challenges and workload
2023-110	Permit Issuance	21	25	4	Delays due to resourcing challenges and workload
2023-122	Application Review	10	43	33	Delays due to resourcing challenges and workload

Please see attached reports for additional details.



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PERMITS ISSUED - APR	RIL 2023				
Permit #	Permit Type	Address	Geographic Township	Date Issued	Description
2022-418 (REVISED)	Standard	Birch Point Road	City of Kawartha Lakes	April 21, 2023	Excavation/fill replacement of ~450 cubic metres of fill for the construction of a 187 square metre dwelling with attached garage, septic system and driveway on a historically filled area of wetland (Revision)
2023-041	Standard	3 Potash Street	City of Kawartha Lakes	April 13, 2023	Reconstruction of existing sunroom to change use and construction of roof over existing deck
2023-054	Standard	74 Romany Ranch Road	City of Kawartha Lakes	April 14, 2023	Demolition of existing boathouse and reconstruction of 18.4 m on-shore boathouse
2023-082	Other	503 Angeline St North & Various other streets - M6 Line	City of Kawartha Lakes	April 3, 2023	Utilities - HydroOne
2023-095	Other	19350 Island Road	Scugog	April 3, 2023	Routine maintenance and/or repair of public or private infrastructure
2023-096	Shoreline	7 Maple Court	City of Kawartha Lakes	April 3, 2023	Excavation and installation of upland armour stone with sloped stone in front along the shoreline
2023-100	Other	Various Streets-Highway 7A surrounding Nestleton	Scugog	April 3, 2023	Hydro One Vegetation maintenance- Standard Best Practices permit
2023-101	Other	Various Streets-Highway 7A surrounding Nestleton	Scugog	April 3, 2023	Hydro One vegetation maintenance-Standard Compliance Permit
2023-104	Streamlined	57 Hazel Street	City of Kawartha Lakes	April 28, 2023	Reconstruction of retaining wall near shoreline, replacement of existing deck and addition of less than 20 cubic m of fill
2023-105	Streamlined	50 Stephenson Point Road	Scugog	April 18, 2023	Fill placement and grading up to 20 cubic metres
2023-106	Standard	249 Stephenson Point Rd	Scugog	April 21, 2023	Construction of a ~223 sq m two-storey addition with an additional dwelling unit on the 2nd floor
2023-107	Streamlined	33 Graham Drive	City of Kawartha Lakes	April 12, 2023	Streamlined - New 38.6 m2 non-habitable accessory garage.
2023-108	Shoreline	230 O'Reilly Lane	City of Kawartha Lakes	April 28, 2023	Placement of additional rip rap along existing sloped stone along shoreline
2023-109	Standard	405 Cedar Glen Road	City of Kawartha Lakes	April 21, 2023	Construction of a new dwelling, detached garage, septic and additional detached accessory structure
2023-110	Standard	Intersection at Elm Tree Rd & Fish Hawk Rd	City of Kawartha Lakes	April 28, 2023	Reconstruction of Fish Hawk Bridge- Municipal infrastructure project
2023-111	Standard	1997 Little Britain Road	City of Kawartha Lakes	April 28, 2023	Construction of a ~94.8 square metre detached accessory structure
2023-112	Standard	414 Balsam Lake Drive	City of Kawartha Lakes	April 21, 2023	Dwelling reconstruction and installation of new septic
2023-113	Standard	1 Water Street	City of Kawartha Lakes	April 26, 2023	Demolition/ replacement of pedestrian bridge and associated piers/ abutements
2023-114	Streamlined	17 Crestview Ave	Scugog	April 25, 2023	Covered Porch to be built over existing front entrance.
2023-115	Other	1770 Brock Conc Rd 1	Brock	April 25, 2023	directional drill and install underground ducts, pedestals and vaults for high speed internet
2023-116	Other	1211 King Street	Scugog	April 25, 2023	Preposed directional drilling and installation of underground ducts, pedestals and vaults for high speed internet.
2023-117	Other	39 Davidge Drive	Scugog	April 25, 2023	Proposed NPS ½ HPPE Gas Service being installed at 39 Davidge Dr. approx. 265m south of Chandler Dr, Port Perry, Durham Region.
2023-118	Standard	57 Potts Shore Road	City of Kawartha Lakes	April 28, 2023	Excavation and construction of a 107sq m boathouse with a roof top deck, including concrete foundation that will tie into the currently present shoreline rip-rap.
2023-121	Other	605 Regional Rd 21 (Goodwood Rd)	Scugog	April 26, 2023	Proposed directional drilling and the installation of underground ducts, pedestals, and vaults for high-speed internet project Genesis (605 to 766 Regional Rd)
2023-122	Standard	94 Jasper Dr	City of Kawartha Lakes	April 28, 2023	Construction of a ~37.2 sq m enclosed sunroom
2023-123	Streamlined	Road work near 4440 Devitts Rd	Scugog	April 27, 2023	Municipal infrastructure (Scugog) Replacement of two existing (Devitts Road) CSP Culverts
2023-124	Other	56 Davidge Drive	Scugog	April 27, 2023	Proposed NPS ½ HPPE Gas Service being installed at 56 Davidge Dr. approx. 80m south of Davidge Dr, Port Perry, Durham Region

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# Agenda Item #7.2

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To: The Chair and Members of

Kawartha Conservation Board of Directors

From: Mark Majchrowski, CAO

Nancy Aspden, Acting Manager, Integrated Watershed Management

Re: Lake Dalrymple Update

#### **KEY ISSUE:**

To Provide the Board of Directors with a progress update on the development of the Lake Dalrymple Management Plan.

#### RECOMMENDED RESOLUTION:

RESOLVED, THAT, the update on the development of the Lake Dalrymple Management Plan be received.

#### **BACKGROUND**

Lake Dalrymple provides significant economic and environmental contributions to local communities, and once completed, this lake plan will help to keep this lake (the 5th largest in the municipality), healthy and resilient.

The Lake Dalrymple Management Plan is a 4-year (2021-2024) Special Benefitting Project between Kawartha Conservation and the City of Kawartha Lakes. The scope of the study area is shown in Figure 1.

The primary purpose of this project is to quantify the health of the lake watershed and to work collaboratively with lake stakeholders towards obtaining a better understanding of the pressures on the lake and to determine priority management activities.

Comprehensive monitoring of water quality, water quantity, and land use parameters are being conducted on a yearly basis. This allows us to develop baseline documentation – or 'state of the lake' – as the foundation for developing management recommendations. Additional project information can be found on our <u>Lake Dalrymple Management Plan</u> Website.



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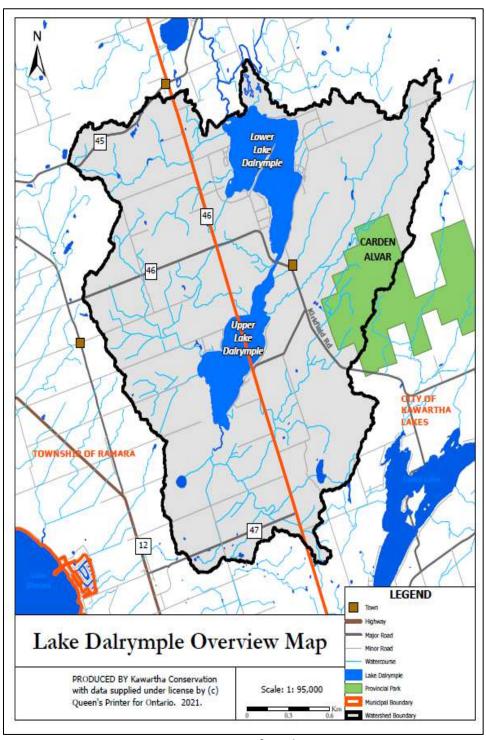


Figure 1. Scope of study area.

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# **Project Objectives**

The project involves 3 years of comprehensive water quality monitoring, allowing the capture of highs and lows, and average values. This is followed by 1 year of reporting on key findings and working closely with the local community to refine management alternatives and priorities.

The following are the key objectives:

- 1. Implement and maintain for the duration of the study, comprehensive water quality and water quantity sampling networks to provide a scientific basis to identify current and potential threats/stressors, hotspots, evaluate trends and key management issues, and identify options for priority actions.
- 2. Provide a current and baseline scientific basis to support and inform municipal land use planning and policy tools within the City of Kawartha Lakes.
- 3. Design and implement management activities to maintain or achieve Provincial Water Quality Objectives for the lake and its tributaries, as well as to reduce beach closures and create greater confidence in overall lake health.
- 4. Protect and improve water quality for all uses.
- 5. Foster community participation in the project and enhance their understanding of the Kawartha Lakes, their natural and historic heritage, and human impacts.
- 6. Develop and coordinate the necessary partnerships for effective collaboration on all aspects of the planning process and plan implementation.
- 7. Promote a greater dialogue and understanding of issues, conflicting needs, visions, and resource uses.
- 8. Identify specific items for ongoing monitoring and advanced university research, for example: quantifying impacts to the nearshore zone, identifying specific sources of pollution, considering impacts of climate change, and invasive species.

## **Community Engagement**

A Working Group, comprised of 10-15 local people, has been established that meets on a quarterly basis to provide input into the planning process. It includes representation from local lake associations, shoreline residents, councilors, and municipal staff. To date a total of 6 working group meetings have been held.

In 2022, we hosted two public information sessions (May 26, 28) at the Carden Recreation Centre, in conjunction with the Ministry of Natural Resources and Forestry. A representative from the Ministry of Natural Resources and Forests presented on the state of Lake Dalrymple fishery. Over 80 people attended, and several key issues and management opportunities were relayed to Kawartha Conservation staff.



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In 2022, we also undertook an engagement survey to identify the key community issues, lake values, and changes witnessed on Lake Dalrymple. We received 48 responses, and results are summarized in Figure 2.



Figure 2. Engagement Survey Results

## **Monitoring**

Our core water quality monitoring network consists of 3 lake-based stations, and 6 tributary-based stations. These are monitored on a bi-weekly and monthly basis for important contaminants of concern (e.g., phosphorus, sediments, and salt). Water quality is important to study because it is the key determinant of lake health. Poor water quality can lead to reductions in fish populations, reduced recreational opportunities, and concerns around lower property values.

Another priority for us is to study land use and water flows in each sub watershed. This includes identifying the location and percentages of development, natural areas, agriculture, and aggregate as well as the amount of surface water entering the lake. This data helps us identify where on the landscape we would expect poor vs. good water quality areas, and to quantify what sources influence the quality of water in the lake.



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We are also examining important aquatic features in the lake, its tributaries and around the shoreline, including fish habitats, invasive species, status of the fishery (in conjunction with Ministry of Natural Resources and Forestry), and aquatic plants. These are all specific features of interest as identified through community engagement.

Data being collected is reported and posted online to our interactive Lake Dalrymple <u>Water Monitoring Dashboard</u>. Figure 3 below shows an example of how the information is being displayed.

All monitoring data collected over the 4-year period will also be summarized in a technical 'State of the Lake' report and published at end year 2024.

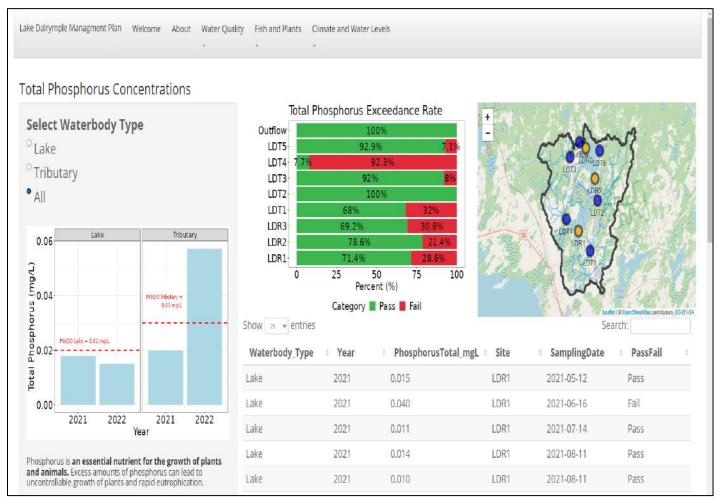


Figure 3. Monitoring Dashboard example.



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## **Early Findings**

The following provides a summary of preliminary findings, based on 2 years of monitoring (2021-2022) for water quality, aquatic species and habitats, and water quantity.

Parameter	Key finding
Water quality	<ul> <li>Most of the lake samples (71 to 79%) meet provincial guidelines for phosphorus.</li> <li>A distinct layer forms in the water column (at depths of around 5-7m), under which dissolved oxygen declines.</li> <li>Most streams meet provincial guidelines for phosphorus, ranging between 92-100% of samples meeting the guideline.</li> <li>Two streams have relatively high phosphorus concentrations where only 8% of samples for one stream and 69% of samples on the other stream meet provincial guidelines,</li> </ul>
Aquatic species and habitats	<ul> <li>There is a sensitive coldwater stream, draining into the northeast section of the lake.</li> <li>There are several invasive species in the lake, including zebra mussels, quagga mussels, banded mystery snail, Eurasian watermilfoil, and starry stonewort.</li> <li>The lake experiences relatively high angling pressures, especially in the winter, relative to similar sized lakes in the area.</li> </ul>
Water quantity	<ul> <li>The lake is prone to water level rise and fall as a direct result of local precipitation, snowmelt, and evaporation. The lake is not regulated, but beavers are active at the lake outlet.</li> <li>The highest recorded water levels on the lake were in spring 2019 (228.27 metres above sea level), which is about 1.5m higher than summer water levels last year.</li> </ul>

#### **NEXT STEPS**

2023 is year 3 of the 4-year project. Key activities will focus on continuing our core water quality and quantity monitoring activities, including monthly sampling of water quality in the lake, bi-weekly sampling of water quality in major tributaries, lake water level and water temperature monitoring. We are also undertaking a shoreline survey to characterize the status of development along the 'shore-water' interface.

Throughout the year we will be meeting with the Working Group to seek advice on how to address the key issues identified through public information sessions, engagement

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survey, and monitoring findings.

Next year (final year) we plan on releasing the draft Lake Management Plan, draft Lake Watershed Characterization Report, and hosting another round of public information sessions to present and receive feedback on our draft management recommendations.

The project is expected to be finalized by December 2024.

Acknowledgements/	<b>Contributions</b>	from
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To: The Chair and Members of

Kawartha Conservation Board of Directors

From: Mark Majchrowski, CAO

Re: CAO Report

#### **KEY ISSUE:**

To provide the Board of Directors with the monthly CAO Report.

#### **RECOMMENDED RESOLUTION:**

RESOLVED, THAT, the CAO Monthly Report for meeting #4/23 be received.

## **CORPORATE SERVICES**

Staff continue to work to achieve compliance with legislative changes that the organization is tasked with, which included a meeting of conservation authority General Managers and CAOs to discuss approaches to achieve apportionment agreements and align budget processes to match the categories of programs and services identified in the legislation, which will take effect for the 2024 budget.

Many activities over the past few weeks have been directed towards welcoming and orienting our seasonal complement of workers, working with the auditors in their year-end audit review and carrying out spring seasonal fieldwork and project management activities.

# **Communications**

#### **MEDIA RELEASES**

Communications has issued <u>9 media releases</u>, including 1 Watershed Condition Statement since the previous Board meeting.

## BLUE GREEN ALGAE CAMPAIGN 2023

In conjunction with the Haliburton, Kawartha, Pine Ridge District Health Unit, Kawartha Conservation launched a <u>new harmful algae bloom (HABs)</u> public education campaign.

The campaign kicks off on Tuesday, May 9 across Kawartha Conservation's social media platforms, including <u>Facebook</u>, <u>Twitter</u>, <u>Instagram</u>, and <u>LinkedIn</u>, and will run for several weeks throughout the summer when HABs are most common.

For more information, please contact Mark Majchrowski at extension 215.



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Within just the first two weeks, the campaign has generated significant participation and interaction across all our social media platforms.

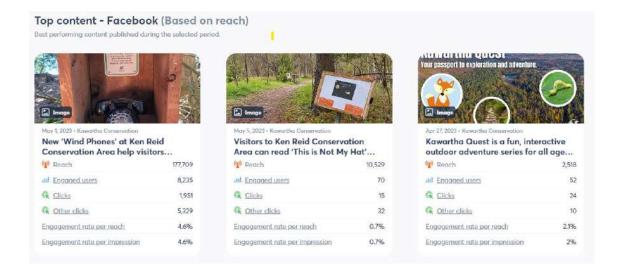


#### SOCIAL MEDIA

Between April 20 and May 14, Kawartha Conservation's social media content had more than 300,000 impressions across our social media channels. We published 229 items, which resulted in more than 7,600 engagements (likes, comments, shares).

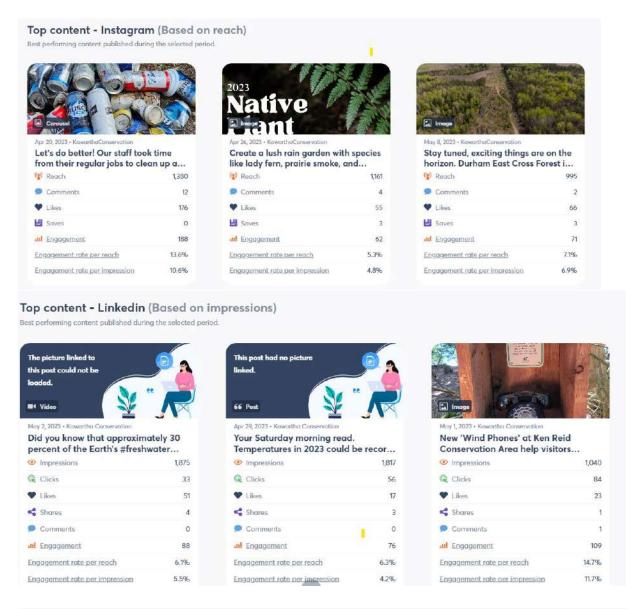
Our social media channels realized a growth of 1.2% during this time bringing our total followers to 17,986.

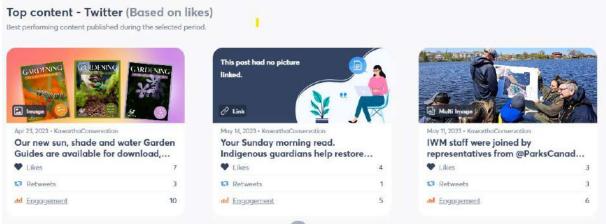
As reach of traditional media continues to decline, it is increasingly important to grow our audience segments and generate greater engagement to reach watershed residents, seasonal residents, visitors, and potential visitors alike.





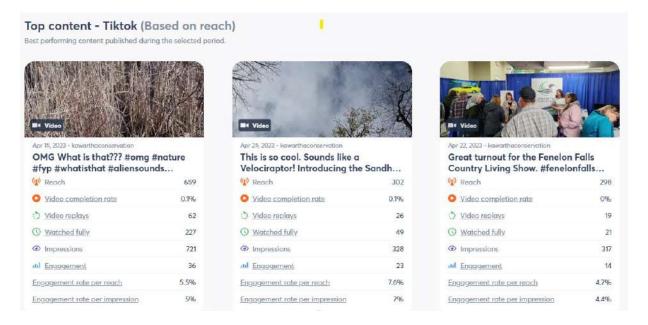
BOD Meeting #4/23 May 25, 2023 Page 3 of 13







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## CLIMATE CHANGE STRATEGY

The 10-Year Climate Change Strategy process was launched with an Internal staff survey. The results of that survey were used to develop a public-facing survey to solicit feedback, thoughts, and the development of a prioritization matrix for the upcoming draft 10-Year Climate Change Strategy.

As part of the strategy, member municipality Strategic Plans, Climate Change and Healthy Environment Plans, as well as appropriate legislation and internal Board-approved plans and strategies will help inform the development of the 10-Year Climate Change Strategy.

#### *PARTNERSHIPS*

Kawartha Conservation is working on the development of a new partnership with Two Blokes Cider. Similar to previous years partnering with Fenelon Falls Brewing Co., the new partnership will feature a co-branding opportunity to expand the reach and recognition of the Kawartha Conservation brand.

## Finance

The finance team has been busy with the core functions of accounts receivable, payable and payroll in addition to activities pertaining to the audit of the financial statements. Staff have been very busy fielding audit queries and preparing the audited financial statements with our new firm, BDO Canada Ltd.

The 2023 Draft Budget, Information for Member Municipalities was circulated to the Mayors and members of Council of all participating municipalities on April 24<sup>th</sup>, 2023. A presentation

For more information, please contact Mark Majchrowski at extension 215.



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was provided to the Municipality of Trent Lakes on May 16<sup>th</sup>, which was well received, and supported by the municipality.

Our Asset Management Software Implementation and Plan are progressing as per the scheduled workplan. The software implementation has been completed and staff have completed training sessions throughout April. The software is very robust with cloud-access, flexible reporting, administration, and excellent data management. The final two of four workshops were conducted in April for the Asset Management Plan which facilitate information sharing and gathering for the consultants to determine operational processes and procedures to consider within our final plan. The finance team is now completing data gap analysis and providing historical financial information to facilitate the development of the Asset Management Plan.

# Human Resources/Health & Safety

On May 1<sup>st</sup>, we welcomed 5 new seasonal staff to the organization. The students spent the first full week participating in orientation and job specific training. These students will be helping both the Integrated Watershed Management, and Stewardship and Conservation Lands Departments until August 25<sup>th</sup>. Applications for seasonal staff wage subsidies were submitted to Eco Canada and we may receive up to \$25,000 in funding to help offset seasonal wages.

Three applications were submitted to the Ojemawahj Tribal Council (OTC) seeking funding for three summer career placement positions. This program offers wage subsidies to train Indigenous youth. We're excited to have our first placement, a Conservation Areas Assistant begin on May 15<sup>th</sup>, 2023.

We have also hired a Conservation Areas Technician contract to support the ongoing management and improvements to our five conservation areas over the next 8 months. We welcome back a staff member who worked with us as a Conservation Areas Assistant and Community Engagement and Support position who coordinated our Fall Festival and Christmas at Ken Reid events.

# <u>Information Technology</u>

We have been very busy in the Information Technology areas of our business with security, infrastructure, and user support. Year to date, we have completed 164 IT requests for users (Jan 1-May 15, 2023).

We continue to successfully migrate users to Windows 11 in preparation of Windows 10

For more information, please contact Mark Majchrowski at extension 215.



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reaching end of life support (October 2024). This will ensure our computers will meet upgrade requirements prior to that time to ensure our systems and software function appropriately.

Our transition to offsite data backup has been completed allowing for the backing up of data through our cloud provider and connection and eliminating our aging equipment at an offsite location. This new strategy for backups has allowed for us to implement stronger measures such as increasing backup points to provide additional restore points on a daily, weekly, monthly and annual basis (7 years). This initiative has been cost-effective yet allowing for improved backup records and less capital outlay for equipment over time as our data needs change.

# PLANNING, DEVELOPMENT AND ENGINEERING

# Planning and Permitting Activities

We continue to experience a steady number of planning and permitting files as well as reports of activity in the watershed to be followed up from a compliance perspective. Staff are working hard to ensure we progress priority files and meet deadlines.

## Source Protection Activities

Source Protection activities remain active as updated policies are examined for effectiveness and work is carried out to translate changes in the technical rules to on-ground implications. Work also continues on the Risk Management Official front to establish risk management plans with remaining landowners and responding to inquiries and notice requirements related to building and planning applications. Additionally, our Risk Management Official/Source Protection Technician continues to provide guidance to our municipal partner's new staff.

# Flood Plain Mapping Activities

Our Flood Plain Mapping Technician has been busy working on finalizing the Fenelon Falls South Flood plain mapping project, which is currently with our peer reviewer to verify technical work completed on the draft report. We are also collecting additional field data to provide key information required for the Haliburton Floodplain Study.

Our Flood Plain Mapping Technician is in the process of acquiring consultants and preparing for field work to begin in May 2023 for the Trent Lakes Flood Hazard Identification Mapping Program. This project includes the two study areas of Nogies Creek and Miskwaa Ziibi River.



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# STEWARDSHIP AND CONSERVATION LANDS

# Stewardship Activities

As part of our ongoing programs that serve our urban, shoreline and rural property owners, we have produced a series of Healthy Garden Guides. These guides will help landowners design a variety of natural spaces including pollinator and rain gardens using native plants. To support the implementation of these guides, our native plant sale offered 5 different kits of native plants to area residents. At the time of writing this report, we have sold 2,583 native plants.



## Water Fund

Every year we provide landowners small microgrants to support wise land stewardship practices with a focus on improving water quality. Our team supports these landowners with site visits, project review, suggested species lists etc. Grants are available to landowners in the City of Kawartha Lakes and Durham Region as part of our special project funding agreements with those municipalities. Our 2023 call for applications has closed and grant selection meetings are scheduled for May 15<sup>th</sup> and 17<sup>th</sup>.

Once again, this program is oversubscribed with over \$153,800 requested and only \$75,500 in grants available. A total of 32 applications have been submitted for the Kawartha Water Fund and 12 have been received for the Scugog Water Fund. Projects include shoreline naturalization projects, erosion control projects, Well and Septic upgrades, Stormwater management, alternative watering systems for agricultural properties among others. These projects will leverage an estimated \$314,000 in landowner investments.

#### Urban

We have completed our 2 year Bring Back the Fish program in the City of Kawartha Lakes. This program was funded by the Environmental Damages Fund and supported the restoration of 10 urban streambanks on private lands. In total, 456 meters of streambank were restored including the planting of 750 trees and shrubs and 900 wildflowers. 2 root wad in-water fish habitat structures were also installed as part of the project. This project also produced a series of short videos that can be found on our YouTube channel <a href="Improving fish">Improving fish</a> habitat with shoreline restoration in Lindsay, Ontario - YouTube



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## **Forestry**



Our tree planting season is winding down with 22 sites planted. Over the course of the month, we have planted 39,090 trees across the watershed through the 50 Million Tree program. Funding from Forests Ontario totalled over \$93,800 leveraging another \$30,000 in landowner contributions. We have increased our tree planting efforts from last year by 27,615 trees.

Our Seedling Sale pick up was in

early May. This program provides a minimum of 25 seedlings to landowners interested in doing smaller scale plantings that don't qualify for the 50 Million Tree program. This year we sold 19,100 seedlings in total, an increase of over 3,000 from 2022. This program generated \$31,800 in revenue.

Our Stewardship Strategy has an annual goal of planting 21,000 trees and shrubs a year for ten years. This year we reached 58,190 trees and shrubs through these two programs alone, surpassing our target by over 37,000.

# Community Outreach / Education

## Forest Therapy

In recognition of Mental Health Month, we have provided 2 separate Forest Therapy walks for May. The first walk was offered on May 16<sup>th</sup> in partnership with the Boys and Girls Club. This walk will be offered to youth from the club as a way of promoting practices that support mental wellness. The second walk is on May 26<sup>th</sup> and is open to the public. We are thankful for the sponsorship of Ward's Lawyers. Their support of our Forest Therapy program allows us to make the walks accessible for our community.

## Education

Our curriculum-based education program is quite popular this year as schools return to classrooms after the pandemic. Our program has seen 4 classrooms during May come out to experience programs such as our scavenger hunt, changing seasons, rocks and minerals, forest senses, and a 2-day session incorporating building turtle nest boxes and incorporating the Talking Forest App as a teaching tool on turtle nesting behaviours. Over 90 students have visited Ken Reid so far, and some of them more than once as part of this program. Our

For more information, please contact Mark Majchrowski at extension 215.



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education program is run on a cost recovery basis.

## Story Book Trail

Written by Jon Klassen, 'This is Not My Hat' is a tale about an untruthful fish that ends up in the possession of a stolen hat, as well as the consequences that follow. Weaving through dense seaweed forests, the thieving fish makes great effort to stay undetected, but eventually finds the owner of the hat hot on his trail.

# **Conservation Lands**

May is the start of or busy season with the ongoing maintenance and management of our conservation areas. Our team has been busy onboarding new seasonal staff and opening up properties that were shut down for the winter. Park checks and trail monitoring have been the focus this month, with a few special projects added in.

## Pigeon River Headwaters Conservation Area

Our Butternut compensation program generated another planting of 20 Butternuts plus companion plants. This program is a revenue generating program paid for by the developer. The Butternut is an endangered species because of the impacts of the Butternut Canker. As a result, when trees are negatively impacted by development there must be a compensation planting that takes place. Pigeon River Headwaters has seen other Butternut planting projects in the past and provides ideal locations for these projects. As part of our program, we will be monitoring the health of these trees for the next 5 years and providing reports to the Ministry of Natural Resources on their survival.



## Ken Reid Conservation Area



The focus in May has been to prepare the new Nature's Edge disc golf course for play. This 9-basket course was installed in the winter, so with the thaw, comes a bit of clean up and aesthetic work. We have been in talks with a women's league and the Lindsay Disc Golf club, both of which want to run regular league events here starting in June. This course is a beautiful way to encourage new users to Ken Reid. Each set of Tee pads provides information on local wildlife, creating a wilderness experience and a challenging course. Some disc golfers have been out on the course through the winter and spring and have provided some



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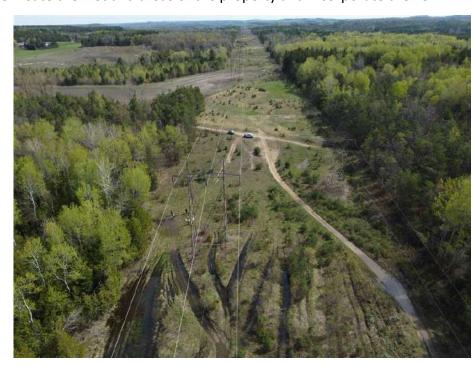
great feedback. A formal grand opening for the course is in the planning phase for June.

In May we also installed two wind phones at Ken Reid. Created in Japan, the wind phone concept started to help a man work through the grief of losing his cousin. As word spread, the wind phone grew in popularity as a symbol of hope and connection to those we have lost. The concept is simple. A disconnected phone in the forest, where people can lift the receiver and talk to their loved ones. Our wind phones can be found on the point loop trail and the dragonfly trail.

## Durham Eco Corridor Project

The Durham Eco-Corridor project is a three-year restoration of 11ha of hydro corridor that runs through Durham East Cross Forest. This area is home to wetlands, and open areas as well as being the site to some historic off roading activities. The goal of the project is to restore the wetlands and establish some tall grass prairie habitat on site. This will reduce the maintenance activities required by hydro and provide a unique opportunity to work with Mississauga's of Scugog Island First Nation (MSIFN) and Sir Sandford Fleming College on the species selection and design of the project. On May 8th we invited members of MSIFN to join us as we worked to delineate the wetland areas of the property and incorporate the 15m

setbacks from the towers that Hydro requires. With that work being done, we will be meeting with Hydro One representatives on May 29<sup>th</sup> to go over the project and review any additional considerations they may have. Once Hydro has approved the concept, we will be organizing community open





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houses to share the plans with the community and gather any feedback they may have.

## INTEGRATED WATERSHED MANAGEMENT

The official field season kicked off for the Integrated Watershed Management Department. Bi-weekly and monthly sampling will be conducted for several operating programs and special projects specific to water quality, water quantity, groundwater, and aquatics.



The month of May initiates our biomonitoring program specific to benthic macro invertebrates (water bugs). In 2023, this program will visit approximately 25 rural and urban sites to collect aquatic life to monitor the health of water quality in streams and lakes. In addition to our routine monitoring, we have partnered with STREAM (Sequencing the Rivers for Environmental Assessment and Monitoring). Staff spent a few days in early May being trained on how to properly collect

benthic samples for DNA testing to determine the species present in each stream. Three of the IWM staff members attended the training alongside colleagues from STREAM Hajibabaei Lab,

University of Guelph, Fleming College, Living Lakes Canada, and Kawartha Land Trust.

We have successfully obtained 27 volunteers for the Climate Change Action Program. The volunteers for this program will collect precipitation data across our watershed. This past month, Nathan Rajevski, our Assistant Water Resources



Technician has been busy delivering rain gauges and training each of the volunteers. The volunteers will begin collecting precipitation on May 24 and continue through until Labour Day weekend.

Rob Stavinga, Kawartha Conservation's bird expert, attended the second meeting of the Bird Friendly City Committee, led by Jamie Morris of Kawartha Lakes Environmental Advisory Committee. The committee is in the process of developing a logo, a social media presence and preparing presentations to council in the fall of 2023.

## Flood Forecasting and Warning

For the second year in a row the spring freshet was rather uneventful, all the snow in the For more information, please contact Mark Majchrowski at extension 215.



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Kawartha Conservation jurisdiction melted by the beginning of April decreasing the risk of flooding across our watershed. However, we did see some rain events throughout April that saturated the soils increasing the watercourses to bank full levels and causing the risk of flooding to low lying areas. We issued two flood watches for our watershed and one watershed Conditions statement in April as a result.

A prolonged period of rain at the end of April caused water levels to rise north of the Kawartha Conservation jurisdiction, primarily in the Gull River. This required a large amount of water to be moved through the Trent Severn Waterway, elevating lake levels and increasing the flows in all river systems. Fortunately input volumes did not exceed exit volumes into the Otonabee River and no flooding occurred around the Kawartha Lakes.

The end of April and early May has seen drier weather and sunny conditions, which have returned local watercourses to normal levels. No issues with flooding are foreseen in the near future.

#### Innovation Hub

We hosted our last spring course through the innovation hub the week of April 24-28 for the Ontario Building Code Part 8 Sewage Systems Exam Prep. This course was yet again fully attended. Innovation hub will take a break during the summer months and resume back up again in September. We currently have registration open for the following courses: Project Management for the Practitioner, Legal Process for Building Officials and Designers – Exam Prep, and Ontario Building Code Part 8 Sewage Systems Exam Prep.

Lake Plan Implementation – Aquatic Plant Control

Kawartha Conservation hosted an Aquatic Thruster 'testing session' with University of

Ottawa, engineering professor and his students on May 2<sup>nd</sup>. The thrusters were testing the 'zone of influence' or 'flow field' in the lake from aquatic thrusters, which create turbulent water to manage algae and aquatic plants. The information gathered from this training session will help inform results from our Aquatic Thruster study being initiated in June 2023 on Canal Lake and Lake Scugog. Project partners for this project include Kawartha Conservation, Parks Canada, Ontario Tech University, University of Ottawa, Carleton University, Toronto Metropolitan University, Rideau Valley Conservation Authority, among others.





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Lake Scugog Enhancement Project (LSEP)

After 6 years, we have completed the Municipal Class Environmental Assessment for the Lake Scugog Enhancement project. Staff submitted the fourth iteration for the Federal environmental assessment to Parks Canada, Transport Canada, and Fisheries and Oceans Canada for review. In addition, for review, staff submitted the fourth iteration of the Fisheries Offsetting plan to Fisheries and Oceans Canada.

On Wednesday May 10<sup>th</sup>, Kawartha Conservation hosted a tour for the Lake Scugog Enhancement Project for the permitting agencies. The tour visited the main project design feature site locations for the proposed constructed wetland, dredging areas, berm, and fish shoal locations by boat, as well as two perched culvert locations that will be replaced and the newly installed Casmir oil grit separator. The following agencies participated in the tour, Township of Scugog, Parks Canada, Transport Canada, Fisheries and Oceans Canada, Environment Canada, Mississauga Scugog Island First Nations, Scugog Lake Stewards, and Conservation Ontario.



## Acknowledgements in the preparation of this report:

Nancy Aspden, Acting Manager, Integrated Watershed Management; Jonathan Lucas, Acting Director, Corporate Services; Kristie Virgoe, Director, Stewardship and Conservation Lands; Matthew Mantle, Director, Planning and Development Services



### Agenda Item #7.4

BOD Meeting #4/23 May 25, 2023 Page 1 of 2

To: The Chair and Members of

Kawartha Conservation Board of Directors

From: Mark Majchrowski, CAO

Re: Correspondence

#### **KEY ISSUE:**

To provide the Board with correspondence received.

#### **RECOMMENDED RESOLUTION:**

RESOLVED, THAT, the attached correspondence be received.

#### **BACKGROUND**

The following correspondence which may be of some interest has been received since the last meeting of the Board of Directors.

#### Nicole Pincombe, Regional Municipality of Durham – April 19, 2023

RE: 2023 Operating and Special Projects Budgets

Conservation Authority funding for operations, special projects, land management, as well as 2023 requests for special one-time funding were approved by Regional Council on March 29, 2023. Details on Kawartha Conservations approved funding is provided in detail on the attached correspondence.

#### Nicholas Fischer, Conservation Ontario – May 9, 2023

RE: Conservation Ontario's comments on "Moving to a project list approach under the Environmental Assessment Act" (March 2023 Update) (ERO#019-4219)

Conservation Ontario's comments to the Ministry of the Environment, Conservation, and Parks on ERO#019-4219 have been provided on the attached correspondence for your interest.

#### **Leslie Rich, Conservation Ontario** – May 18, 2023

RE: Conservation Ontario's Comments on "Site Plan for Residential Developments of 10 or Fewer Units – Two Proposed new Minister's Regulations under the Planning Act and the City of Toronto Act, 2006" (ERO #019-6822)

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## Agenda Item #7.4

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Conservation Ontario's comments to the Ministry of Municipal Affairs and Housing on ERO#019-6822 have been provided on the attached correspondence for your interest.



The Regional Municipality of Durham

Finance Department

605 Rossland Rd. E. Level 4 PO Box 623 Whitby, ON L1N 6A3 Canada

905-668-7711 1-800-372-1102 Fax: 905-666-6256

durham.ca

N. Taylor, BBA, CPA, CA Commissioner of Finance April 19, 2023

Mark Majchrowski, Chief Administrative Officer Kawartha Conservation 277 Kenrei Road Lindsay, ON K9V 4R1

Re: 2023 Operating and Special Projects Budgets

Please be advised that on March 29, 2023 Regional Council approved Report #2023-F-9 for the 2023 Regional Business Plans and Budgets for Property Tax Purposes, including approval of the Conservation Authorities funding for Operations, Special Projects, Land Management as well as the 2023 requests for special one-time funding.

Kawartha Conservation's approved Regional funding for 2023 is as follows:

Program:	\$
Operating Programs	707,684
Special Benefiting Programs	144,130
Land Management Expenditures	15,000
2023 Total Approved Regional Funding	866,814

Quarterly instalments of \$216,703.50 for the Operating, Special Benefiting Programs, and Land Management Expenditures will commence in April 2023 followed by June 1, September 1, and December 1, 2023 for a 2023 total levy of \$866,814.00.

In addition, Regional Council approved the following special one-time funding in 2023 subject to accountability of program costs incurred and project completion:

- \$27,300 for Watershed Planning Project (Final Phase);
- \$9,014 for Environmental Monitoring Strategy Implementation (Phase 1 of 10); and
- \$5,408 for the Digitization of Corporate Records (Phase 4 of 5).

To receive payment for the above special funding requests, please submit a separate invoice for each project for the costs incurred with all supporting documents, as well as proof of project completion.

If not already submitted, please forward a copy of your 2022 Audited Financial Statements and the 2022 Accountability Statement when available.



#### PAGE 40 OF 164

If you have any further questions related to the above approved funding, please contact me by email at Nicole.Pincombe@durham.ca.

Nicole Pincombe, MPA, CPA, CMA

Director, Business Planning and Budgets

cc: Morgan Flanagan, Manager, Business Planning and Budgets, Region of

Durham

Alexander Harras, Regional Clerk, Region of Durham



May 9, 2023

Ministry of Environment, Conservation and Parks (MECP) Submitted via email: <u>EAmodernization.mecp@ontario.ca</u>

Re: Conservation Ontario's comments on "Moving to a project list approach under the *Environmental Assessment Act*" (March 2023 Update) (ERO#019-4219)

Thank you for the opportunity to provide comments on "Moving to a project list approach under the *Environmental Assessment Act*" (ERO#019-4219). Conservation Ontario is the network of Ontario's 36 Conservation Authorities (CAs). These comments are not intended to limit the consideration of comments shared individually by CAs. As proponents of both individual (comprehensive) and Class Environmental Assessments (Class EAs), and as prescribed public bodies under the *Environmental Assessment Act (EAA)* which review and provide comments on EAs in accordance with Ontario Regulation 686/21, CAs appreciate the opportunity to review these proposed changes as the Ministry transitions to a new EA framework.

It is understood that, following the November 2021 consultation on the above-noted Environmental Registry proposal, the Ministry of the Environment, Conservation and Parks (MECP) is now consulting on an updated version of the proposal. The March 2023 proposal outlines amendments to the proposed project list approach, including shifting the requirement for transportation and electricity transmission projects from completing a comprehensive EA to streamlined processes, as well as proposed amendments to the transition provisions for waterfront projects. No changes are proposed at this time for the previous proposals related to waste projects, waterpower facilities or large oil electricity generation facilities. The changes, if approved as proposed, would still result in the development of a comprehensive EA project list regulation (the "Project List Regulation") which identifies projects that will be subject to the new Part II.3 of the Act, as well as exemptions which may apply to certain undertakings.

Conservation Ontario 's comments are provided on the proposed amendments to the transition provisions in the proposed "Designations and Exemptions" regulation specific to waterfront projects. It is our understanding that transportation and electricity transmission projects would proceed through existing Class EA or regulatory processes which contain established notification and

consultation procedures. As prescribed public bodies, CAs will continue to review and provide comments on EAs with regard to the risk of natural hazards and drinking water source protection. Where projects require a Section 28 regulatory permission under the *Conservation Authorities Act*, CAs will continue to review applications and issue such permissions, as applicable. Where a Section 28 permission is not a required approval for the overall project, it is important that proponents have regard to comments on the risk of natural hazards submitted by CAs on the EA.

The November 2021 posting included a proposed regulation titled "Part II.3 Projects – Designations and Exemptions" to be made under the EAA which identifies the projects required to complete a comprehensive EA, as well as exemptions for certain projects which would have occurred prior to the transition to the new EA framework. At the time, the proposed regulation included a transition provision to exempt waterfront projects which had commenced under the Class EA for Remedial Flood and Erosion Control Projects prior to the transition date from the requirement to undertake a comprehensive EA. It is understood that the MECP is now considering extending this exempting provision to waterfront projects which have commenced under any Class EA, as well as to projects where a Planning Act application includes proposed waterfront works and was submitted before March 10, 2023.

Conservation Ontario is supportive of the proposed amendment which would extend the transitional exemption to waterfront projects commenced under any Class EA. While many of the proposed "works" as defined in the regulation may be undertaken by CAs through the *Class EA for Remedial Flood and Erosion Control Projects*, it is acknowledged that the scope of "waterfront projects" as outlined in the proposed regulation may apply to works undertaken through other Class EA documents. For instance, the Class EA for MNR Resource Stewardship and Facility Development Projects provides a process for activities such as shoreline stabilization as well as water-related excavations, dredging and placement of fill which may meet the proposed regulatory criteria for "waterfront projects".

Conservation Ontario is further supportive of the proposed amendment to extend the transitional exemption to waterfront projects which are a part of a *Planning Act* application submitted before March 10, 2023. Through discussions with MECP staff on April 18, 2023, it is understood that the intent of this proposed amendment is to provide a transition for *Planning Act* applications which are currently underway in Ontario, such that applications involving waterfront works would not be captured under a new EA framework and require a comprehensive EA (where one would not have been required at the time of submission). The transition provision would be limited to *Planning Act* applications which have been submitted prior to March 10, 2023, with all other waterfront projects which meet the regulatory criteria being subject to a comprehensive EA moving forward.

Lastly, it should be clarified that despite meeting the criteria for an exemption from the comprehensive EA process, other approvals may be required as part of the proposed project, including CA Section 28 regulatory permissions. Proponents are responsible for ensuring all necessary approvals have been obtained prior to commencing work on the proposed undertaking.

#### PAGE 43 OF 164

Thank you for the opportunity to review and provide comments on "Proposed Project List for comprehensive environmental assessments under the *Environmental Assessment Act* (EAA)" (ERO#019-4219). Please contact me directly should this letter require any clarification.

Sincerely,

Nicholas Fischer

Policy and Planning Coordinator

c.c: All CA CAOs / GMs



May 18, 2023

Ministry of Municipal Affairs and Housing Submitted via email: <u>PlanningConsultation@ontario.ca</u>

Re: Conservation Ontario's Comments on "Site Plan for Residential Developments of 10 or Fewer Units - Two Proposed new Minister's Regulations under the Planning Act and the City of Toronto Act, 2006" (ERO #019-6822)

Thank you for the opportunity to comment on "Site Plan for Residential Developments of 10 or Fewer Units – Two Proposed new Minister's Regulations under the Planning Act and the City of Toronto Act, 2006". Conservation Ontario is the network for Ontario's 36 Conservation Authorities (CAs). These comments are not intended to limit the comments submitted by individual CAs.

As part of "Helping Homebuyers, Protecting Tenants: Ontario's Housing Supply Action Plan April 2023" the Province introduced Bill 97, the *Helping Homebuyers, Protecting Tenants Act, 2023*. Schedule 6 of the Bill proposes amendments to the *Planning Act* to increase housing supply to reach the goal of building 1.5 million homes by 2031.

One proposed legislative amendment to the *Planning Act* provides the Minister of Municipal Affairs and Housing (MMAH) new regulation-making authority to permit Municipalities to use site plan control for residential developments of 10 or fewer units on a single lot in specific circumstances. As outlined in the proposal, these specific circumstances would include where any part of a parcel of land is located within 120 metres of a shoreline or within 300 metres of a railway line.

In our previous comments on proposed *Planning Act* and *City of Toronto Act* changes proposed through Bill 23 (ERO#019-6163) we note that using site plan controls provides Municipalities greater ability to receive expert input from CAs on detailed design items such as setbacks and the location of buildings concerning hazardous lands and hazardous sites, and protecting sources of drinking water.

Early engagement enables the Municipality, proponent, and CA to address potential issues and opportunities with the application. The proposed legislative amendments (and subsequent regulations) ensure planning authorities can consider site plan components relating to natural hazards, including flooding, erosion, and other natural features.

Draft regulatory text was not included as part of the proposal; it is unknown if future consultation opportunities will occur. In response, Conservation Ontario recommends including

a definition of "shoreline" in the regulation. For consistency, the definition of "shoreline" referenced in the regulation should include that of a lake, river or stream, as outlined in section 34(1)(3.2)(ii) of the *Planning Act* and as well as in the definition of "flooding hazard" in the Provincial Policy Statement (PPS, 2020).

The PPS provides development shall generally be directed to areas outside of hazardous lands adjacent to the shorelines of the Great Lakes – St. Lawrence River System and large inland lakes, as well as river, stream and small inland lake systems impacted by hazards including flooding and erosion. Including the broad definition of a shoreline as that of a lake, river or stream, consistent with the current PPS and the *Planning Act*, will allow CAs to continue to provide useful feedback to planning authorities regarding potentially hazardous lands (e.g., flooding and erosion hazards).

In addition to the proposed specific circumstances to permit use of site plan control for developments of 10 units or less, Conservation Ontario recommends the proposed regulation permit use of site plan control for developments where land is located within a designated vulnerable area in an approved source water protection plan under the *Clean Water Act*. Site plan control is identified in approved source water protection plans as an available tool to ensure development and site alteration activities do not have adverse impacts on drinking water supplies in designated vulnerable areas. Including this specific circumstance in regulation would be beneficial to developers and Municipalities to ensure consistency with source water protection plans prepared under the *Clean Water Act* and to ensure continued protection of Ontario's drinking water sources.

Thank you for the opportunity to provide comments on "Site Plan for Residential Developments of 10 or Fewer Units – Two Proposed new Minister's Regulations under the Planning Act and the City of Toronto Act, 2006". We are pleased to work together to keep development safe from natural hazards and to protect sources of drinking water. We remain committed to working with the Province, Municipalities, and other partners to support increasing the overall supply and diversity of housing types in Ontario while maintaining strong protections for public health, safety and the environment. Please contact Leslie Rich, Policy and Planning Specialist should this letter require any clarification.

Sincerely,

Leslie Rich

Jeplie Rich

Policy and Planning Specialist

c.c: All Conservation Authority CAOs / GMs



### Agenda Item #8.1

BOD Meeting #4/23 May 25, 2023 Page 1 of 2

To: The Chair and Members of

Kawartha Conservation Board of Directors

From: Mark Majchrowski, CAO

Jonathan Lucas, Acting Director, Corporate Services

Re: 2023 Municipal Levy Weighted Vote

#### **KEY ISSUE:**

To approve the 2023 Operating Levy and General Benefiting Projects Levy circulated to our member municipalities.

#### RECOMMENDED RESOLUTION:

RESOLVED, THAT, the General Operating municipal levy in support of the Operating Budget be set at \$1,715,325 with the Operating Levy being apportioned between watershed municipalities as follows:

Municipality of Trent Lakes	59.3214%	\$ 1	.,017,555
Region of Durham	35.0564%	\$	618,484
Municipality of Trent Lakes	4.2372%	\$	72,682
Township of Cavan Monaghan	0.3850%	\$	6,604

#### AND;

THAT, the 2023 General Benefiting Projects Budget be set at \$40,000 and the levy be approved at \$40,000 and apportioned between watershed municipalities as follows:

City of Kawartha Lakes	59.3214%	\$ 23,729
Region of Durham	35.0564%	\$ 14,423
Municipality of Trent Lakes	4.2372%	\$ 1,695
Township of Cavan Monaghan	0.3850%	\$ 154

#### AND;

THAT, the special benefiting projects proceed as the required funding is approved by the benefiting municipalities.

#### PAGE 47 OF 164



#### Agenda Item #8.1

BOD Meeting #4/23 May 25, 2023 Page 2 of 2

#### **BACKGROUND:**

We attach the budget document, "2023 Draft Budget, Information for Member Municipalities" as was distributed to the Mayor and members of Council of all participating municipalities on April 24<sup>th</sup>, 2023, and in accordance with:

**Resolution #48/23**MOVED BY: Eric Smeaton

SECONDED BY: Tracy Richardson

**RESOLVED, THAT**, the Draft 2023 budget be updated to reflect Board recommendations prior to circulation, AND,

**THAT**, the Draft 2023 budget be endorsed, and the *Information for Municipal Partners* be developed and circulated to member municipalities.

#### CARRIED

We have not received written comments from our municipalities objecting to the 2023 levy at this time.

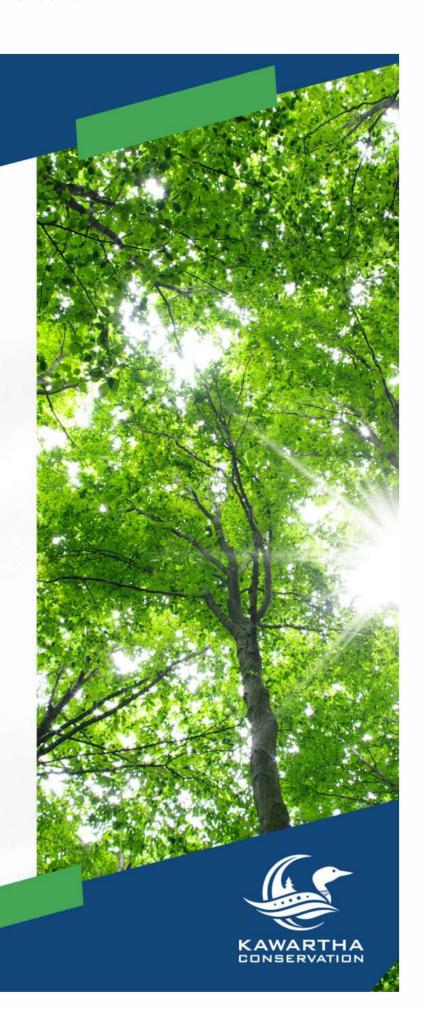
A weighted vote for operating levy is required under Ontario Regulation 139/96 made under the Conservation Authorities Act. The provincial regulation governing the weighted vote does not permit an individual municipality to have a weighted vote more than 50% of the weighting unless that municipality has more than 50% of the members on the Board of Directors. The weighted vote for operating levy and general benefiting levy is as follows:

CITY OF KAWARTHA LAKES		REGION OF DURHAM	
1st of 3 representatives	16.6667%	1st of 4 representatives	11.0797%
2nd of 3 representatives	16.6667%	2nd of 4 representatives	11.0797%
3rd of 3 representatives	16.6666%	3rd of 4 representatives	11.0797%
		4th of 4 representatives	11.0796%
MUNICIPALITY OF TRENT LAKES		TOWNSHIP OF CAVAN MONAGHAN	
1 representative	5.2081%	1 representative	0.4732%

The recorded vote is taken in alphabetical order by surname, with the Chair voting last. A weighted majority of 51% of those present carries the vote.

# 2023 Draft Budget

Information for Member Municipalities



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### Governance

The municipalities within the boundaries of the watershed govern Kawartha Conservation through a Board of Directors comprised of nine representatives. Directors are responsible for making decisions as a collective working for the benefit of the whole watershed. They act as liaisons between their municipalities and Kawartha Conservation.

### 2023 Board of Directors

**CHAIR** 

**Robert Rock** 

Township of Scugog

**VICE CHAIR** 

Pat Warren

City of Kawartha Lakes

**DIRECTORS** 

**Eric Smeaton** 

City of Kawartha Lakes

Tracy Richardson

City of Kawartha Lakes

Cira Pettingill

Township of Brock, Region of Durham

Lloyd Rang

Municipality of Clarington, Region of Durham

Harold Wright

Township of Scugog, Region of Durham

Gerry Byrne

Township of Cavan Monaghan

Peter Franzen

Municipality of Trent Lakes

**Jeff Forbes** 

Mississaugas of Scugog Island First Nation

We would like to acknowledge that many Indigenous Nations have longstanding relationships, both historic and modern, with the territories upon which we are located.

Today, this area is home to many indigenous peoples from across Turtle Island. We acknowledge that our watershed forms a part of the treaty and traditional territory of the south-eastern Anishinaabeq.

It is on these ancestral and treaty lands that we live and work. To honour this legacy, we commit to being stewards of the natural environment and undertake to have a relationship of respect with our Treaty partners.

# Member Municipalities

City of Kawartha Lakes Region of Durham

- Township of Scugog
- Municipality of Clarington
- Township of Brock

Municipality of Trent Lakes Township of Cavan Monaghan

# **KAWARTHA CONSERVATION**

# 2023 Draft Budget

Board of Directors March 23, 2023



### 2023 Draft Budget

The 2023 Operating and Special Projects Budget is developed and reviewed in detail by our Board of Directors, and it was approved for circulation to our municipal partners for comments.

The 2023 operating expenditure budget is organized into business units and each department is intended to reflect all associated costs. The operating levy is shared by the municipal partners based on an apportionment percentage supplied to us by the Ministry of the Environment, Conservation and Parks.

Durham East Cross Forest Conservation Area is an operating program funded solely by the Region of Durham Special Operating Levy. There is \$2,700 of deferred revenue that will be used in addition to the collected levy for 2023 operating.

The projects budget is organized by General Benefiting Projects and Special Benefiting Projects. The municipal levy for General Benefiting Projects is shared by the municipal partners based on the same apportionment percentage as the operating levy. Special Benefiting Projects are funded by the benefiting municipality/municipalities.

#### Municipal Levy – Summary

Mullicipal LCVy	Julilliary						
		Pr					
	Operating	Special Operating	General Projects	Special Projects	2023 Total Municipal Levy	2022 Approved Municipal Levy	Levy Increase (Decrease)
City of Kawartha Lakes	\$1,017,555	-	\$23,729	\$396,250	\$1,437,534	\$1,395,675	\$41,859
Region of Durham	618,484	104,200	14,423	171,400	908,506	882,385	26,121
Municipality of Trent Lakes	72,682	-	1,695	273,000	347,377	71,655	275,722
Township of Cavan Monaghan	6,604	-	154	-	6,758	6,360	398
Total	\$1,715,325	\$104,200	\$40,000	\$840,650	\$2,700,175	\$2,356,075	\$344,100

#### Municipal Operating Levy

The Operating Levy is shared by the municipal partners based on apportionment percentages supplied to us by the Ministry of the Environment, Conservation and Parks. The apportionment percentage is based on current value assessment (CVA) information generated by MPAC. Individual municipal increases vary due to changes in the CVA apportionment year over year.

MUNICIPAL OPERATING LEVY	2022 Apportionment	2023 Apportionment	Increase (decrease)	2022 General Operating Levy	2023 General Operating Levy	Increase in General Operating Levy	% Increase
City of Kawartha Lakes	59.5102%	59.3214%	(0.1888)%	\$983,896	\$1,017,555	\$33,659	3.42%
Region of Durham	35.8690	36.0564	0.1874	593,031	618,484	25,453	4.29%
Municipality of Trent Lakes	4.2442	4.2372	(0.0070)	70,170	72,682	2,512	3.58%
Township of Cavan Monaghan	0.3767	0.3850	0.0083	6,228	6,604	376	6.04%
Total	100.00%	100.00%	(0.00)%	\$1,653,325	\$1,715,325	\$62,000	3.75%

#### Municipal Projects Levy

Projects are developed to implement priorities within our Strategic Plan and in response to municipal concerns. The projects address strategic plan directions and issues identified by our board of directors, municipal leaders, senior municipal staff, and community stakeholders. We use municipal funds to leverage grant opportunities whenever possible.

#### General Benefiting Projects

General Benefiting projects have a watershed wide benefit and the levy is shared by the municipal partners on the same apportionment percentage as the operating levy. Projects include Drinking Water Source Protection (fully funded), 10-year Environmental Monitoring Strategy Implementation (Year 1 of 10) and digitization of corporate records.

Summary of General Benefiting Projects:	2022 Approved General Benefiting Levy	2023 Proposed General Benefiting Levy
City of Kawartha Lakes	\$20,829	\$23,729
Region of Durham	12,554	14,423
Municipality of Trent Lakes	1,485	1,695
Township of Cavan Monaghan	132	154
Total	\$35,000	\$40,000

#### **Special Benefiting Projects**

Special Benefiting projects are designed to meet the needs or concerns of a specific municipality, and thus directly benefit the individual municipality. The benefiting municipality funds the projects. Projects continue our work to develop and implement Lake Management Plans and initiate updates to our watershed plans in the Region of Durham and a new project will be completed for Trent Lakes Flood Plain Mapping.

Summary of Special Benefiting Projects:	2022 Approved Special Benefiting Levy	2023 Proposed Special Benefiting Levy
City of Kawartha Lakes	\$390,950	\$396,250
Region of Durham	170,600	171,400
Municipality of Trent Lakes	-	273,000
Township of Cavan Monaghan	-	-
Total	\$561,550	\$840,650

#### **Budget Process**

On February 23<sup>rd</sup>, 2023, the Board of Directors received a staff report on the preliminary budget for 2023 and passed a resolution that the budget is developed with the direction provided. The preliminary budget was approved by the Board of Directors for circulation on April 20, 2023. The Board of Directors vote on the budget and associated municipal levy is scheduled for May 25<sup>th</sup>, 2023.

#### **Budget Vote**

Eligible Directors of the Board will vote on the budget and levy using a weighted vote based on the Current Value Assessment levy apportionment formula. Non-voting members or agricultural members appointed by the Province are ineligible to vote as identified in the Conservation Authorities Act.

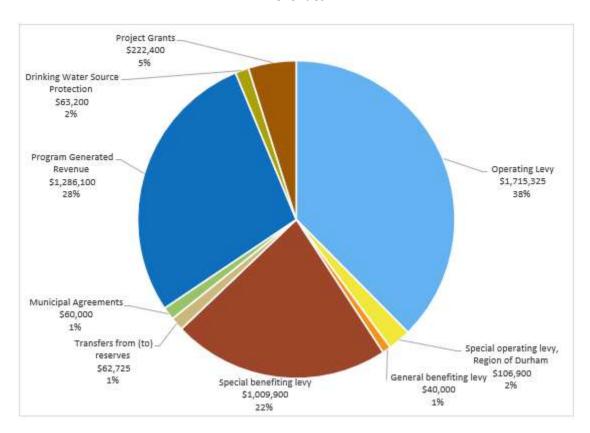
The provincial regulation governing the weighted vote does not permit an individual municipality to have a weighted vote in excess of 50% of the weighting unless that municipality has more than 50% of the members on the Board of Directors. A weighted majority of 51% carries the vote.

The weighted vote is distributed amongst Directors as follows:

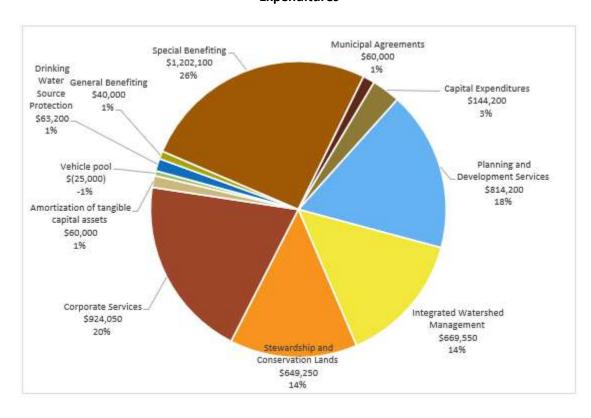
City of Kawartha Lakes						
1st of 3 representatives	16.6667%					
2nd of 3 representatives	16.6667%					
3rd of 3 representatives	16.6666%					
Region of Durham						
1st of 4 representatives	11.0734%					
2nd of 4 representatives	11.0734%					
3rd of 4 representatives	11.0734%					
4th of 4 representatives	11.0734%					
Municipality of Trent Lakes						
1 representative	5.2411%					
Township of Cavan Monaghan	•					
1 representative	0.4653%					

### Sources of Revenue and Expenditures

#### **Revenues**



#### **Expenditures**



## Statement of Revenue and Expenditures

# KAWARTHA CONSERVATION 2023 Preliminary Budget

### STATEMENT OF REVENUE AND EXPENDITURES



		Budget 2022	Budget 2023	Variance to 2022 Budget
REVENUE				
Municipal levy				
Operating	\$	1,653,325 \$	1,715,325	
Special operating, Region of Durham		123,000	106,900	(16,100)
General benefiting projects Special benefiting projects		35,000 699,100	40,000 1,009,900	5,000 310,800
Transfers from (to) reserves		-	62,725	62,725
Hullsteis Holli (to) reserves		2,510,425	2,934,850	424,425
Municipal Agreements				
CKL, Risk Management Official, Clean Water Act		60,000	60,000	-
		60,000	60,000	-
Program Generated Revenue				
Planning and Development Services		545,800	486,000	(59,800)
Intergrated Watershed Management		50,900	70,400	19,500
Stewardship and Conservation Lands		333,800	224,950	(108,850)
Corporate Services		63,000	86,800	23,800
Special Projects management		330,500	417,950	87,450
		1,324,000	1,286,100	(37,900)
Benefiting Projects				
Drinking Water Source Protection		57,000	63,200	6,200
Grants, Durham special projects		61,700	80,550	18,850
Grants, CKL special projects		105,300	141,850	36,550
		224,000	285,600	61,600
Total Revenue	\$	4,118,425 \$	4,566,550	\$ 448,125
EXPENDITURES				
Operations				
Planning and Development Services	\$	771,200 \$	814,200	43,000
Integrated Watershed Management	Ψ.	686,400	669,550	(16,850)
Stewardship and Conservation Lands		732,400	649,250	(83,150)
Corporate Services		910,325	924,050	13,725
Amortization of tangible capital assets		60,000	60,000	-
Vehicle pool		(25,000)	(25,000)	-
·		3,135,325	3,092,050	(43,275)
Benefiting Projects	_			
General Benefiting, Drinking Water Source Protection		57,000	63,200	6,200
General Benefiting		35,000	40,000	5,000
Special Benefiting		866,100	1,202,100	336,000
		958,100	1,305,300	347,200
Municipal Agreements				
CKL, Risk Management Official		60,000	60,000	-
		60,000	60,000	-
Operating Expenditures	\$	4,153,425 \$	4,457,350	\$ 303,925
	•			
Capital Expenditures		-	144,200	144,200
Total Expenditures	\$	4,153,425 \$	4,601,550	\$ 448,125
Annual Surplus (Deficit)	\$	(35,000) \$	(35,000)	\$ (0)

### **Operating Departments**

#### Planning and Development Services

#### Planning

Planning helps to protect properties against the loss of life, property damage and social disruption, and encourages the responsible management of natural hazard related features, while ensuring compliance with provincial legislation at the local level.

Conservation Authorities have been delegated the responsibility of commenting on behalf of the Province of Ontario on planning matters related to natural hazards (Section 3.1 of the Provincial Policy Statement, 2020). In addition, Conservation Authorities provide plan review advice with respect to the health of watersheds including the management of water and natural heritage resources.

#### **Permitting**

Permitting through the Conservation Authority ensures public safety and protection of property from damage caused by natural hazards, protects watershed health by preventing pollution and damage to sensitive environmental areas such as wetlands, shorelines, and watercourses, and promotes long term sustainability of the watershed. Kawartha Conservation administers the Section 28 Regulation of the *Conservation Authorities Act*. Ontario Regulation 182/06, the regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses regulates development in relation to river and stream valleys, steep slopes, watercourses, floodplains, and wetlands, plus the respective allowances that are associated with each feature.

#### Enforcement

Conservation staff are responsible for regular monitoring of development activities impacting on natural regulated features, following up on public and municipal complaints regarding any potential violations and obtaining regulatory compliance through compliance agreements or judicial methods as pertains to Section 28 of the Conservation Authorities Act and associated specific Ontario Regulation 182/06.

# KAWARTHA CONSERVATION 2023 Operating Budget



#### PLANNING AND DEVELOPMENT SERVICES

	Audited Actual Budget 2021 2022		Budget 2023		Variance to 2022 Budget		
Sources of Revenue							
Municipal operating levy	\$	214,671	\$ 225,400	\$	328,200	\$	102,800
Special projects management		43,987	-		-		-
Planning and permitting fees		407,966	367,000		420,000		53,000
Large scale fill permits		18,187	100,000		10,000		(90,000)
Muncipal agreement project management, RMO		6,042	6,000		6,000		-
MOU, Haliburton County		42,544	72,800		50,000		(22,800)
	\$	733,396	\$ 771,200	\$	814,200	\$	43,000
PLANNING/PERMITTING Expenditures							
Direct labour	\$	522,608	\$ 599,500	\$	683,000	\$	83,500
Overhead		41,611	50,900		62,700		11,800
Legal		-	5,000		5,000		-
Consulting		-	7,000		30,000		23,000
Fill permit compliance costs		2,104	60,000		5,000		(55,000)
IMS Records management		10,000	10,000		10,000		-
Flood plain mapping services		7,074	20,500		1,000		(19,500)
Supplies & equipment		11,821	11,300		11,500		200
Professional development		1,535	1,500		2,500		1,000
Travel		1,813	5,500		3,500		(2,000)
	\$	598,566	\$ 771,200	\$	814,200	\$	43,000

#### Municipal Agreement, City of Kawartha Lakes Risk Management Official

#### Clean Water Act, Part IV, Enforcement

#### Purpose

Source Water Protection Plan policies are designed in the best interests of a community and are required to be implemented for the long-term protection of safe and healthy drinking water sources. Risk Management Plans and developing the land surrounding water supply systems in a suitable way is required. This is a proactive method of ensuring contamination risks are reduced and expensive clean-up costs can be averted.

#### Benefits

A Source Protection Plan helps municipalities save money by creating and implementing a multi-barrier approach to strengthen the protection of municipal drinking water sources. By implementing source protection plan policies requiring a risk management official (RMO), as per the Clean Water Act, threat assessments of groundwater and surface water quality and quantity on a site specific and watershed scale are determined and monitored. These plans and activities directly support the City of Kawartha Lakes specifically in implementation of plan policies requiring a Risk Management Plan and providing information for planning/building applications for development where the activity or land use could impact upon municipal drinking water supplies.

#### Deliverables

This project to date has involved the establishment of a risk management office and the development of plans with landowners designed to eliminate risks to municipal water supply systems, as delegated by the City of Kawartha Lakes through agreement. Policies and procedures have been developed to guide implementation activities. Activities in 2023 will continue to focus on the negotiation and establishment of risk management plans, issuing notices to proceed with an activity under the *Planning Act* and *Building Code Act* and reporting.

Risk Management Plans address various risks to drinking water sources and agricultural uses and residential fuel oil are most common. Risk management plans need to be negotiated with landowners and tenants, which will address threats to community drinking water supply systems. Risk management plans ensure that activities that pose a potential threat to municipal drinking water supply systems are adequately managed, such as by improvements to infrastructure, changes in process and handling of chemicals, and ensuring spill containment measures are in place. Activities of the Risk Management Official are guided by a Project Oversight Committee comprised of public works, planning and building staff, and staff at Kawartha Conservation.

# KAWARTHA CONSERVATION 2023 Municipal Agreement Budget



City of Kawartha Lakes Risk Management Official CLEAN WATER ACT, PART IV, ENFORCEMENT	udited Actual 2021	E	Budget 2022	ı	Budget 2023	Variance to 2022 Budget		
Sources of Revenue City of Kawartha Lakes, service agreement	\$ 41,771	\$	60,000	\$	60,000	\$		
Expenditures								
Direct labour	\$ 35,437	\$	43,500	\$	45,000	\$	1,500	
In-house expertise	2,610		6,000		6,000		-	
Supplies	100		2,000		2,000		-	
Technology and data management	128		2,000		2,000		-	
Travel	64		500		500		-	
Administration fee	 3,432		6,000		4,500		(1,500)	
	\$ 41,771	\$	60,000	\$	60,000	\$		

#### Note:

This budget is funded through a municipal agreement and is not considered a part of the municipal general operating levy

#### Integrated Watershed Management

#### **Environmental Information Services**

Environmental Information Services supports our stakeholders and partners by providing environmental spatial information to assist with decision making across our watershed. As part of this service, we develop maps for both our internal programs and projects and as a service to our external partners.

#### **Environmental Monitoring Services**

We maintain a core watershed monitoring network, including water quality and quantity for both surface and ground water. This enables us to identify issues requiring attention early on, while gauging the effectiveness of current planning practices. Collaboration and the pooling of resources assist with the coordination of program delivery and is key to planning and permitting functions, while combining expertise and experience to ensure consistency and cost efficiency. We partner with provincial ministries, such as the Ministry of the Environment, Conservation & Parks, Ministry of Northern Development, Mines, Natural Resources and Forestry, local volunteer groups, Fleming College, Ontario Technical University, Trent University, local high schools, and agencies such as the Greenbelt Golden Horseshoe Conservation Authority Collaborative — a grouping of 12 Conservation authorities.

#### Flood & Water Level Monitoring

Our flood contingency and flood response plans, daily monitoring of water levels and precipitation, assessment of potential flood threats, communication with municipalities and the community, and participation in municipal flood response activities helps support and protect the people and property across the watershed.

Flood forecasting and warning is a fundamental responsibility delegated to conservation authorities by the province since 1984. We fulfill this duty by monitoring the water level, precipitation, and watershed conditions.

Close collaboration and partnership with federal (Ontario Waterways – Trent Severn Waterway, Environment and Climate Change Canada), and provincial (MNRF, Ontario Hydro) agencies and partner conservation authorities allow for accurate forecast and reliable information which is put in context of the local watershed and provided to the community when flooding concerns are warranted.

# KAWARTHA CONSERVATION 2023 Operating Budget



#### INTEGRATED WATERSHED MANAGEMENT

	 Actual 2021	Budget 2022	Budget 2023	ariance to 22 Budget
Sources of Revenue				
Municipal operating levy	\$ 498,569	\$ 635,500	\$ 599,150	(36,350)
Special Projects Management	102,158	-	-	-
MNRF transfer payment	24,640	24,600	24,600	-
Technical Services fees	5,046	1,000	1,000	-
Innovation Hub	10,773	10,000	34,500	24,500
Employment grants	6,778	10,000	10,000	-
Climate Change grant	14,538	5,000	-	(5,000)
Other grants	300	300	300	
	\$ 662,800	\$ 686,400	\$ 669,550	\$ (16,850)
Expenditures INTEGRATED WATERSHED MANAGEMENT Direct labour Seasonal labour Overhead Supplies & equipment Technology and data management Professional development Innovation Hub Travel Oak Ridges Moraine Alliance Surface water monitoring	\$ 508,308 16,397 49,226 9,043 16,776 811 3,847 2,015 1,250 5,630	\$ 532,700 23,200 61,100 15,500 14,300 4,400 4,000 3,000 2,500 6,000	\$ 516,000 12,200 62,700 11,000 14,200 5,900 24,000 3,200 2,500 5,000	\$ (16,700) (11,000) 1,600 (4,500) (100) 1,500 20,000 200 - (1,000)
Groundwater monitoring	2,105	8,000	8,250	(1,000)
Citizen Science Program	 8,850	11,700	4,600	(7,100)
	\$ 624,258	\$ 686,400	\$ 669,550	\$ (16,850)

#### Stewardship and Conservation Lands

#### Conservation Areas

Kawartha Conservation owns and manages over 1,300 hectares of natural areas including Ken Reid Conservation Area, Durham East Cross Forest, Pigeon River Headwaters, Windy Ridge / Tuckerman property, Fleetwood Creek Natural Area, and Dewey's Island.

Visitors to our Conservation Areas include the public, schools, special interest groups, and tourists. With an estimated 30,000 visits per year, our Conservation areas provide opportunities to relax, discover the natural world and enjoy the many health benefits of being in nature. This program strives to provide a safe and meaningful way for our community to access quality greenspaces.

In 2022, our conservation areas appeared in over 760,000 direct searches in Google. Those searches resulted in over 31,000 requests for directions or visits to our website, demonstrating the ongoing popularity and demand for access to green spaces and natural areas. Our properties offer safe opportunities to get active and get outside.

Our conservation lands also provide sites to compensate for species or habitat disruption because of development activity to restore these vulnerable habitats in our conservation properties, and by providing expert advice and support for private land restoration projects. This program is initiated by provincial requirements and generates revenue for other programming, improves habitat across Conservation and private lands, and builds relationships between the development industry and the Conservation Authority.

#### Community Engagement and Education

Our Community Engagement programs include our geared to curriculum education program, community events, and a variety of community hikes throughout the year. These popular programs were cancelled for the last few years due to the pandemic. With easing restrictions, 2022 saw a return to in person programming and community events. We are preparing to build on the success of 2022 and to continue to deliver these programs on a cost recovery basis in 2023. These activities provide key opportunities to connect with our community and to provide unique ways for people and families to connect with nature in a way that is meaningful for them.

The education program is designed to provide a variety of engagement and educational opportunities to all members in our community, and include youth, families, and seniors in the delivery models. We strive to provide excellence in our curriculum and community programs. The goals of conservation education align with our strategic vision and contribute to communities that love, respect, and appreciate our natural environment.

# KAWARTHA CONSERVATION 2023 Operating Budget





		Audited Actual 2021	Budget 2022		Budget 2023	riance to 22 Budget
SOURCES OF REVENUE						
Municipal operating levy	\$	200,991	\$ 275,600	\$	317,400	41,800
Municipal funds, Region of Durham		81,243	123,000		106,900	(16,100)
Special Projects Management		41,184	<u>-</u>		<del>-</del>	<del>-</del>
		323,418	398,600		424,300	25,700
Restoration Management						(44.000)
Habitat Compensation projects, cost recovery		105,044	81,000		40,000	(41,000)
Project management fees Habitat Compensation		5,205	45,000	_	34,500	(10,500)
	-	110,249	126,000		74,500	(51,500)
Conservation Areas		42.405	24.000		40.000	(2.000)
Conservation Area Employment grants		13,405	21,000		18,000	(3,000)
Conservation Areas User fees		20,443	2,500		2,500	-
Conservation Areas Parking fees		36,164	32,000		32,000	-
Conservation Area Agricultural rent		12,962	12,000		12,000	450
Reserve funds, Windy Ridge		- 42.554	3,300		3,750	450
Fleetwood Creek cost recovery		12,551	8,700		8,700	-
Property management fees Fleetwood Creek		8,369	7,500		7,500	- (40.400)
Property management fees East Cross Forest		47,812	65,800		46,700	(19,100)
Donation (Ken Reid Conservation Area)		1,762	10,000		5,000	(5,000)
Community Events, Sponsors and Grants		452.460	- 462,000		10,000	10,000
		153,468	162,800		146,150	(16,650)
Education		13,244	45,000		4,300	(40,700)
	\$	600,378	\$ 732,400	\$	649,250	\$ (83,150)
Expenditures						
Direct labour	\$	267,768	\$ 300,300	\$	311,000	10,700
Seasonal labour		27,324	57,000		36,000	(21,000)
Overhead		33,289	40,700		62,700	22,000
Professional development		1,553	2,000		1,500	(500)
Supplies, brochures and publications		14,303	7,200		7,200	-
Travel		476	4,100		600	(3,500)
Community Events		-	10,000		10,000	-
Education program		550	39,500		1,300	(38,200)
Ken Reid Conservation Area		61,947	60,500		49,050	(11,450)
Pigeon River Headwaters Conservation Area		5,726	11,000		10,450	(550)
Windy Ridge Conservation Area		2,701	3,300		3,750	450
Fleetwood Creek Natural Area		12,551	8,700		8,700	-
Dewey's Island		-	100		100	-
Nogies Creek		367	-		-	-
Durham East Cross Forest Conservation Area		81,243	123,000		106,900	(16,100)
Restoration projects		12,799	65,000		40,000	(25,000)
	\$	522,594	\$ 732,400	\$	649,250	\$ (83,150)

# KAWARTHA CONSERVATION 2023 Operating Budget



#### **SCHEDULE OF CONSERVATION AREAS**

		udited Actual	Budget	Budget	Variance to	
		2021	2022	2023	2022 Budget	
Ken Reid Conservation Area					<u> </u>	_
Road and parking lot maintenance	\$	23,984	\$ 20,000	\$ 23,600	\$ 3,600	
Vehicle usage		1,510	1,800	1,000	(800)	
Equipment usage		5,090	6,200	5,400	(800)	
Supplies and small tools		10,168	11,700	10,150	(1,550)	
Infrastructure repair and maintenance		17,320	17,000	4,000	(13,000)	
Utilities		3,742	3,200	4,700	1,500	
Property taxes		133	600	200	(400)	
		61,947	60,500	49,050	(11,450)	_
Pigeon River Headwaters Conservation Area						
Road and parking lot maintenance		-	500	500	-	
Vehicle usage		1,001	800	1,000	200	
Equipment usage		600	1,200	1,200	-	
Supplies and small tools		687	300	2,350	2,050	
nfrastructure repair and maintenance		2,536	6,800	4,000	(2,800)	
Property taxes		902	1,400	1,400	-	
		5,726	11,000	10,450	(550)	
Windy Ridge Conservation Area						
Road and parking lot maintenance		1,175	900	850	(50)	
Vehicle usage		596	800	450	(350)	
Equipment usage		122	350	200	(150)	
Supplies and small tools		310	250	1,250	1,000	
Infrastructure repair and maintenance		-	500	500	-	
Property taxes		498	500	500	-	
		2,701	3,300	3,750	450	
Fleetwood Creek Natural Area						
Vehicle usage		559	600	600	-	
Equipment usage		158	350	350	-	
Supplies and small tools		3,465	250	250	-	
Property management		8,369	7,500	7,500	-	
		12,551	 8,700	8,700	-	
Dewey's Island						
Travel and equipment		-	100	100	-	

# KAWARTHA CONSERVATION 2023 Operating Budget SPECIAL OPERATING PROGRAM



Region of Durham								
	4	Audited						
DURHAM EAST CROSS FOREST CONSERVATION AREA	A Actual		al Budg			Budget	Va	riance to
		2021		2022	2023		20	22 Budget
Sources of Revenue								
Region of Durham special and operating levy Grants and other sources of revenue	\$	81,243 -	\$	106,200	\$	104,200	\$	(2,000) -
Deferred municipal levy		-		16,800		2,700		(14,100)
	\$	81,243	\$	123,000	\$	106,900	\$	(16,100)
Expenditures								
Direct labour	\$	8,892	\$	20,000	\$	16,000	\$	(4,000)
In-house expertise		40,430		54,600		37,000		(17,600)
Infrastructure and supplies		16,239		23,500		29,000		5,500
Travel		2,093		5,100		4,200		(900)
Equipment usage		891		1,600		2,000		400
Professional development		-		-		1,000		1,000
Professional services and security		493		2,000		2,000		-
Property taxes		4,824		5,000		6,000		1,000
Program administration		7,382		11,200		9,700		(1,500)
	\$	81,243	\$	123,000	\$	106,900	\$	(16,100)

Durham East Cross Forest is considered to be an operating program funded solely by the Region of Durham Levy.

#### **Corporate Services**

Corporate Services supports each of the departments and the organization as a whole by providing administrative support, coordination, policy development and implementation, program direction and development, strategic and business planning and Board support including agendas and minutes.

#### Finance, Budget, Audit

This area of business provides financial leadership and support to the organization through financial direction, reporting and management. All accounting processes, financial statements, and audits are conducted and prepared through strict adherence to the Canadian public sector accounting standards. Ongoing scrutiny and analysis contribute to effective and efficient processing, and adherence to applicable legislation. We produce internal financial statements and reports regularly for our leadership team and the Board of Directors.

#### Human Resources, Health & Safety

Human Resources provide comprehensive services and advice to all departments in the areas of legislative compliance, recruitment, orientation, on-boarding, talent management, metrics reporting, performance management, employment grants and policies and procedures. Within the Health and Safety function, education and training continue to be a focus to create a culture of safety in our organization. We continue to invest resources to produce an effective and progressive Health and Safety program and ensure compliance with the Occupational Health and Safety Act. In 2023, a Compensation Review will be completed to ensure that our practices are aligned with organizational strategy, to ensure competitiveness to retain and attract top talent and ensure legislative compliance through Pay Equity.

#### Infrastructure, Asset Management, Information & IT Management

Assets include land, buildings, information technology infrastructure, vehicles, and equipment. The Corporate Services team provides support in managing, maintaining, replacing, and monitoring risk and liability issues. This business area also includes the management of corporate records involving soft and hard copies along with the proper retention criteria as well as the implementation of the Information Management System (IMS). This system enables timely responses to client requests, helps us to meet MFIPPA obligations, and improves search capabilities. Hardware and software for the computer network, including system support and security, are a function of this division. Through partnership with the Federation of Canadian Municipalities Asset Management Plan Grant, providing 80% of eligible expenditure support up to \$32,800, we are in the process of completing an Asset Management Plan and Software Implementation. This project will optimize the use and maintenance of our infrastructure and equipment, leading to cost savings and improved service delivery to the public. This will also help us to prioritize and plan for future investments, identify potential risks, and ensure long-term financial sustainability of the organization and our municipal partners.

#### **Corporate Communications**

Corporate communications ensure organization transparency and accountability to our Board of Directors, Municipal partners, staff, and the watershed community, while representing our organization in a strong, positive manner that is consistent with our vision, mission, and focus. This business area also supports all of our programs, projects and services through the development and implementation of communication plans. Some of the regular services and products provided include: strategic communication guidance, plan development and implementation, media relations, image and brand management, website development and maintenance, and photography management.

# KAWARTHA CONSERVATION 2023 Operating Budget

### CORPORATE SERVICES



	Audited Actual 2021			Budget 2022	Draft Budget 2023	Variance to 2022 Budget		
Sources of Revenue								
Municipal operating levy	\$	698,769	\$	847,325	\$ 842,650	\$	(4,675)	
Special Projects Management		143,179		-	-		-	
Investment income		12,673		20,000	62,600		42,600	
Donations		4,048		-	500		500	
Grants, wage subsidies and other		10,662		43,000	18,300		(24,700)	
	\$	869,331	\$	910,325	\$ 924,050	\$	13,725	
Expenditures Direct labour Overhead Technology, supplies & equipment Professional services Asset Management Plan Directors travel and expenses Strategic Plan Reports, brochures, publications	\$	663,179 41,611 15,987 37,222 - 230 1,029 1,992	\$	816,800 50,700 22,000 12,000 - 1,800 - 525	\$ 782,000 62,700 19,500 20,000 25,300 7,050		(34,800) 12,000 (2,500) 8,000 25,300 5,250	
Professional development		3,942		5,500	5,500		-	
Travel		144		1,000	1,000			
	\$	765,336	\$	910,325	\$ 924,050	\$	13,725	

# KAWARTHA CONSERVATION 2023 Operating Budget

#### **Schedule of OVERHEAD**



	Audited							
		Actual		Budget		Budget		Variance to
		2021		2022		2023		2022 Budget
Administration building utilities	\$	10,900	\$	12,000	\$	13,000	\$	1,000
Administration building maintenance	•	18,643	•	23,000	·	29,000	·	6,000
Office equipment supplies, maintenance		1,591		2,500		3,000		500
Telephone & internet		11,977		15,000		14,200		(800
Audit & legal		10,532		21,500		32,500		11,000
Banking & administration fees		4,638		3,000		4,700		1,700
Insurance		40,770		40,000		55,400		15,400
Website hosting, licenses, ecommerce		7,308		9,000		11,000		2,000
Conservation Ontario membership		24,761		26,000		26,000		
Information Technology & Corporate Software		19,412		38,400		46,500		8,100
Human Resources & Safety		15,911		13,000		15,500		2,500
	\$	166,443	\$	203,400	\$	250,800	\$	47,400
Distributed to departments:								
Planning and Development Services		25%	\$	50,850	\$	62,700	¢	11,850
Integrated Watershed Management		25%	•	50,850	7	62,700	7	11,850
Conservation Areas		25%		50,850		62,700		11,850
Corporate Support Services		25%		50,850		62,700		11,850
		100%	\$	203,400	\$	250,800	\$	47,400

### General Benefiting Projects

#### **Drinking Water Source Protection**

#### Purpose

To help implement a multi-barrier approach to strengthen the protection of municipal drinking water sources, through the support of actions required to implement source protection planning. A Source Protection Plan is based on threat assessments of groundwater and surface water quality and quantity. Activities support the Source Protection Committee, Source Protection Authority, and stakeholders in the implementation of the Source Protection Plans.

#### Benefits

A multi-stakeholder Source Protection Committee (SPC) which includes representatives from municipal and local stakeholders (agriculture, industry, commerce, environmental, rural and urban property owners) is responsible for the development of an effective and proactive approach to protect municipal drinking water sources. This is completed through policy development detailed in a local Source Protection Plan. The plan uses a preventative planning approach to actively manage development and activities around municipal water supply source areas. Our work has been fully funded by the Ministry of Environment, Conservation and Parks.

#### Background and detail

In response to Justice O'Connor's recommendations in the Report of the Walkerton Inquiry, Ontario's Clean Water Act was released in 2006. The Act requires Source Protection Plans be developed on a local watershed basis by a local committee comprised of a variety of stakeholders known as a Source Protection Committee (SPC).

The best available science, technical data and local knowledge has been used by the SPC to make decisions in the interest of the long-term protection of safe and healthy drinking water sources. Our local SPC has since developed the terms of reference guiding the overall work, the assessment report (September 2014) identifying the science behind source protection planning, and the source protection plan (effective Jan 1, 2015) outlining the policies to protect water supply. The current challenge is the implementation of the plans, which includes an annual reporting component. The implementation of policies in the source protection plan forms the current phase in the planning cycle. Activities include the update of planning policies (Official Plans, Zoning bylaws), emergency management plans, and the development of risk management plans, which will reduce the likelihood of an activity on the landscape impacting the municipal water supplies. Updates to the assessment report and source protection plan are also slated for 2023.

#### Deliverables

- Assist municipalities in the implementation of the Source Protection Plan
- Respond to inquiries regarding the plan and deliver communications and education services
- Conduct annual reporting requirements specified in the plan
- Provide management of source water related information and data
- Update assessment report science and plan policy updates as per the Minister-ordered fiveyear work plan

#### Digitization of Corporate Records

In conjunction with our Information Management System the digitization of these hard copy files will help contribute to faster processing of planning applications and can provide both parties with instant copies of important documents. As technology improves, more and more companies are moving to paperless offices to preserve these documents. Benefits of shifting to digitized documents will allow for easy storage, retrieval, updating and improved access and transport of information.

The digitization of corporate records is projected to be an ongoing project to transfer our paper files to a digital format for the next five years.

#### Environmental Monitoring Strategy Implementation

In 2022, a 10-year environmental monitoring strategy was endorsed. To achieve the recommendations and actions outlined in the strategy, a financial commitment is required. Over the next 10 years a plan has been laid out to facilitate enhancements each year that focus on upgrading infrastructure to access real time data, enhancing our monitoring network to fill data gaps, and improving environmental information by investing in more recent aerial imagery. In 2023, our priorities include:

- Upgrading of 3 existing Provincial Groundwater Monitoring wells to Real Time
- Installment 1 of Ortho-imagery Acquisition.

# KAWARTHA CONSERVATION 2023 General Benefiting Project Budget



DRINKING WATER SOURCE PROTECTION PLAN	Audited Actual 2021			Budget 2022	Budget 2023
Sources of Revenue					
Regional Transfer funds	\$	50,393	\$	57,000	\$ 63,200
Expenditures					
Direct labour	\$	35,437	\$	39,300	\$ 45,000
In-house expertise		10,300		7,500	7,500
Travel		4,582		500	500
Supplies & equipment		-		4,400	4,400
Project administration		74		5,300	5,800
	\$	50,393	\$	57,000	\$ 63,200

# KAWARTHA CONSERVATION 2023 General Benefiting Project Budget GENERAL BENEFITING PROJECTS



		A	udited actual 2021	Levy 2022	Levy 2023	
Digitization of corporate records		\$	4,502	\$ 15,000	\$	15,000
Environmental Monitoring Strate	gy Implementation		-	-		25,000
Website - design/application trac	cking		7,075	20,000		
		\$	7,075	\$ 35,000	\$	40,000
Apportionment share:						
City Kawartha Lakes	59.3214			\$ 20,900	\$	23,729
Region of Durham	36.0564			12,478		14,423
Municipality of Trent Lakes	4.2372			1,492		1,695
Cavan Monaghan	0.3850			130		154
	100.0000			\$ 35,000	\$	40,000

## **Proposed Special Benefiting Projects**

## Region of Durham – Watershed Plan Implementation 2023

## Project Purpose

This program implements recommendations for high priority objectives identified within the Lake Scugog Environmental Management Plan (endorsed in 2010), Oak Ridges Moraine Watershed Plans (endorsed in 2012), Port Perry Stormwater Management Plan (endorsed in 2014), and the Kawartha Conservation Stewardship Strategy (endorsed by the Board of Directors in 2020). In addition, the Kawartha Conservation Climate Change Strategy (endorsed by the Board of Directors in 2016) recommends a wide range of adaptation and mitigation activities that also support watershed plan implementation.

The maintenance of a healthy aquatic environment, recreational opportunities, and attractive waterfront area, with enhanced stormwater management, are important to the economic and social well-being of Lake Scugog and the Port Perry area. Implementation activities are geared to the improvement of water quality and the sustainability of natural heritage features. They are categorized into major groupings of activities as identified below:

- Stewardship and Natural Heritage
- Scugog Water and Terrain Environmental Restoration (WATER) Fund
- Water Quality Monitoring
- Lake Scugog Enhancement Project

## Stewardship and Natural Heritage

## Urban Deliverables include:

The Port Perry urban landscape is largely hardened surfaces that promote faster moving storm runoff and reduces the ability for the land to absorb water. The Urban Stewardship program is designed to help protect our urban communities by providing low impact development solutions at the lot level. Working with private landowners and the landscaping community, Kawartha Conservation will deliver a program designed to support private landowners looking to retrofit their properties including scalable templates for urban rain gardens and support for a variety of options to suit landowners with varying capacity for implementation.

#### Deliverables for 2023 include:

- Urban Tree Planting on Municipal Property
- On-Site landowner Consultations for Low Impact Development or Runoff management projects
- Implementation of permeable pavement pathway near the boat launch (delayed from 2022)

## Rural Agriculture Deliverables Include:

Farmland makes up 50% of the Kawartha watershed and is particularly important in sustaining our rural communities, with agriculture and healthy lakes being the two pillars of our vibrant local economy. This program works directly with the farming community to provide a range of technical services and incentives to assist farmers in practicing beneficial farmland management to improve groundwater and surface water quality.

#### Deliverables for 2023 include:

- Collaboration and consultation with commodity groups across the region
- On-site landowner consultations and support to connect them with other cost sharing program opportunities
- On-site landowner consultations to support Scugog WATER Fund applications and project opportunities

#### Shoreline Deliverables Include:

The majority of shoreline around Lake Scugog is privately owned. With this sensitive area having a considerable influence on surface water quality, the daily actions of these landowners are important to ensuring the ability for our community and tourists to enjoy the lake. The Shoreline Stewardship Program works with private landowners to provide an array of technical supports to encourage better land management decisions and actions.

## Deliverables for 2023 include:

- On-Site landowner Consultations on shoreline related restoration projects
- Implementation of a restoration plan for Rotary Trail Park

## Scugog WATER Fund

Since 2007, Kawartha Conservation has worked in partnership with the Township of Scugog, local landowners and businesses to deliver the Scugog Water and Terrain Environmental Restoration (WATER) Fund. To date we have assisted with over 290 water quality improvement projects on private properties and leveraged over \$1 Million in landowner contributions.

## Deliverables for 2023 include:

- Provide seed funding grants to private landowners to support water quality improvement projects that align with our stewardship outreach programs and the various management plan recommendations
- Continue to expand our reach to embrace rural non-agricultural landowners with pilot project seed funding that improve water quality and incorporate climate change adaptation recommendations
- Continue to provide support for community and private urban projects that improve water quality and incorporate climate change adaptation recommendations at the lot level
- Report on Implementation successes to community stakeholders, municipal partners, and other agencies
- Minimum 50% match from landowners

## Water Quality Monitoring

## Upstream Investigative Water Quality Examination

The intention of the upstream investigative program is to reduce the data gaps by performing more comprehensive water quality and quantity data collection (more sites on one stream) in a specific area in order to identify causality of water quality degradation and plan for remediation or restoration efforts through our stewardship department.

This program includes comprehensive water chemistry and flow data being collected simultaneously to achieve accurate nutrient loading calculations. The information gathered will serve to identify specific stewardship priorities and areas for actions / improvements. Data collection is performed monthly during the ice-free period of May – November. A report will identify findings and provide recommendations for

stewardship prioritization. Ongoing data analysis will identify changes across time.

- Produce a final report for the Layton River on the past 3 years of monitoring
- Continuation of monitoring on 2 streams, East Cross Creek and Blackstock Creek (Year 2 of 3)
- 11 sites being sampled in total
- 6 rounds of sampling (3 high flow and 3 low flow events)
- Water quality and discharge rates (flow volumes)
- Data maintenance, analysis and report writing

## Watershed Quality Monitoring - Lake Scugog and Major Oak Ridges Moraine Tributaries

The Lake Scugog Environmental Management Plan (LSEMP) identified recommendations for ongoing monitoring and the identification of 'hot spots' and data gaps.

Research and monitoring activities conducted for watershed planning purposes provided detailed baseline information on water quality and quantity for Lake Scugog and watershed tributaries. This annual project maintains a basic level of monitoring, providing a basis for evaluating implementation activities for future stewardship priorities, and providing recommendations for land use planning.

- 14 sites across Lake Scugog and its watershed (6 lakes and 8 tributary sites)
- 6 rounds of sampling on the lake
- 7 rounds of sampling on tributaries

In addition to the research and monitoring activities in 2023, we will collaborate with the Scugog Lake Stewards to implement the Lake Scugog Festival. This event aims to provide environmental education and awareness to Lake Scugog during the month of August.

## Lake Scugog Enhancement Project

The purpose of this project is to provide technical and project management support to the Healthy Lake Scugog Steering Committee with a project to revitalize Port Perry Bay. Proposed strategies involve a combination of activities such as dredging, creating a berm and constructed wetland to improve urban storm water treatment, and aquatic plant harvesting. These activities will involve environmental assessment processes, public input, and permitting.

A contract was awarded to GHD Consulting to investigate options, develop a project plan, and conduct the public consultation process. A draft conceptual design was unveiled in 2016 for public review and input, along with a subsequent open house in late 2017. Work is being undertaken by GHD in response to recommended project refinements and amendments as part of the ongoing permitting processes with external regulatory organizations in conjunction with our support for managing the project as provided below.

- Provide ongoing science and technical support in addition to project management services, in collaboration with the Township of Scugog.
- Oversee GHD to provide detailed final conceptual preferred design
- Work through agency comments on submitted permits and applications including:
  - Municipal Class Environmental Assessment file
  - Basic Impact Assessment for Parks Canada
  - DFO fish offsetting plan and 'In Water Works' permit from Parks Canada for DFO offsets
- Installation of 2 Oil Grit Separators within the Town of Port Perry
- Review of project deliverables and reports

# KAWARTHA CONSERVATION 2023 Preliminary Special Project Budget SPECIAL BENEFITING PROJECTS



Region of Durham  WATERSHED IMPLEMENTATION PROJECTS	Audited Actual 2021		Budget 2022	Budget 2023	
WATERSHED INVIPLEIVIENTATION PROJECTS		2021		2022	2023
Sources of Revenue-Stewardship programs					
Special project funding, Region of Durham	\$	59,252	\$	64,400	\$ 65,800
	\$ <b>\$</b>	59,252	\$	64,400	\$ 65,800
Expenditures-Stewardship programs					
Direct labour	\$	24,738	\$	31,500	\$ 32,900
In-house expertise		6,305		4,000	4,600
Supplies & professional fees		1,661		2,000	1,600
Landowner grants		20,895		20,000	20,000
Travel and equipment		265		800	700
Project administration		5,387		6,100	6,000
,	\$	59,252	\$	64,400	\$ 65,800
Sources of Revenue-Science and Technical					
Special project funding, Region of Durham	\$	70,000	\$	77,600	\$ 78,300
Deferred project funds		4,020		12,800	42,700
Scugog Lake Stewards		15,430		7,200	1,600
Grants, employment		-		2,000	2,000
	\$	89,449	\$	99,600	\$ 124,600
Expenditures-Science and Technical	<u> </u>				
Direct labour		9,110		11,500	18,400
In-house expertise		23,310		24,700	21,200
Lake Scugog Enhancement Project		32,209		27,200	37,800
Supplies & professional fees		3,162		4,000	3,800
Travel and equipment		3,800		6,300	6,800
Lab costs		9,722		16,800	25,200
Project administration		8,137		9,100	11,400
	\$	89,449	\$	99,600	\$ 124,600
DDG IFCT EVERNINITHER TOTAL	<b>.</b>	440.704		464.000	400.400
PROJECT EXPENDITURE TOTAL	\$	148,701	\$	164,000	\$ 190,400
Total Municipal Special Project Levy	\$	129,252	\$	142,000	\$ 144,100

## Region of Durham – Watershed Planning 2023

## Project Purpose

This project will help the municipality conform to provincial planning guidance related to watershed resources management (e.g., Provincial Policy Statement, Growth Plan, Greenbelt Plan, Oak Ridges Moraine Conservation Plan, etc.) and will also contribute to more efficient processing of Planning Act applications.

Several recommendations to fill data gaps in features mapping within Durham Region were made in recent published reports such as Durham Watershed Planning Project, Provincial Conformity of Watershed Plans and Water Resources System (Kawartha Conservation, 2020). Updating this information will assist with more efficient processing of Planning Act applications and land use planning activities for the Region.

This 1-year project will address the following recommendations:

- Update the delineation of key hydrologic features and areas on a routine basis, particularly in areas with rapidly changing land use or areas that are scheduled for future development
- Fill gaps in current information with respect to fish habitat, particularly with respect to the location of coldwater fish habitat
- Fill gaps in current information with respect to sand barrens, savannahs, and tallgrass prairies
- Centralize information in a digital manner (e.g., using geographic information systems), and make available to all local planning authorities through an easy-to-use mapping tool

## Deliverables for 2023 include:

- Confirm the location of 19.1 km of perennial and intermittent streams within the Port Perry urban boundary, through field verification of drainage pathways
- Confirm the location of coldwater fish habitat through field sampling areas that are 'likely supporting coldwater habitats' but are not currently mapped
- Identify the location of sand barrens, savannahs, and tallgrass prairies through aerial imagery interpretation
- Routine updating of mapping tools to include most up-to-date information related to water resources, natural heritage, and watershed planning data

# KAWARTHA CONSERVATION 2023 Preliminary Special Project Budget SPECIAL BENEFITING PROJECTS



Region of Durham WATERSHED PLANNING	Audited Actual 2021	Budget 2022	Budget 2023
Sources of Revenue			
Special project funding, Region of Durham	\$ 26,237	\$ 28,600	\$ 27,300
Expenditures			
Direct labour	\$ -	\$ 3,000	\$ 5,300
In-house expertise	22,295	21,000	16,200
Supplies & professional fees	1,309	1,800	500
Travel and equipment	248	200	2,800
Project administration	2,385	2,600	2,500
	\$ 26,237	\$ 28,600	\$ 27,300

## City of Kawartha Lakes - Lake Dalrymple Management Plan

## Project Purpose

The primary purpose of this project is to work collaboratively with lake stakeholders towards obtaining a better understanding of the pressures on the lake and to determine priority management activities.

2023 is year three of a four-year project and builds on several accomplishments in year one, which included the establishment of a 10+ member Community Working Group, comprehensive water quality and quantity monitoring program, project website and numerous social media interactions.

The planning process involves science-based lake and watershed studies, in conjunction with strategic partnerships across all areas of interest to facilitate plan development and implementation. Comprehensive monitoring of water quality, water quantity, and land use parameters will be undertaken over multiple years. This allows us to develop baseline documentation – or 'state of the lake' – as the foundation for developing management recommendations.

#### Deliverables for 2023 include:

- Continuation of Lake Working Group to help focus priority management recommendations
- Continuation of water quality and quantity monitoring to help capture "average" and "atypical" conditions
- Continuation of communications initiatives to increase profile of project, capture local issues and opportunities, and to disseminate lake health and management recommendations information
- Routine updating of Lake Dalrymple webpage and data dashboard. This includes posting up-to-date
  information on: Working Group meeting minutes and presentations, Open House presentations,
  available technical reports, and key findings of our monitoring efforts.

## KAWARTHA CONSERVATION 2023 Special Project Budget



City of Kawartha Lakes			
LAKE MANAGEMENT PLANS,	В	Budget 2023	Budget 2024
Lake Dalyrmple		2023	2024
Sources of Revenue			
Special project funding, City of Kawartha Lakes	\$	69,300	\$ 62,700
Expenditures Direct labour In-house expertise Supplies Lab fees Travel and equipment	\$	11,600 33,600 2,100 8,800 6,900	\$ 51,000 2,000 2,500 1,500
Project administration		6,300	5,700
	\$	69,300	\$ 62,700

## City of Kawartha Lakes - Lake Management Plan Implementation 2023

## **Project Purpose**

Implementation of the Lake Management Plans is important to our local economy, the attractiveness of the area for tourism and to the continued growth of our communities that have developed around our lakes and rivers. Building on the momentum established through early implementation, Kawartha Conservation and the Implementation Task Force developed a 5-year Implementation Action Plan to improve the appeal of our lakes as an engine for economic growth. In June of 2018, the Implementation Action Plan was approved by the City of Kawartha Lakes Council.

The preferred options provided here address the greatest common concerns expressed by residents throughout the City and proposes science-based solutions to address these concerns. The programs are broken into five areas as outlined in the Action Plan. They are as follows:

- Incentive Grant Program
- General Program
- Shoreline Program
- Urban Program
- Rural Program

## Incentive Grant Program

## Community Grant Program

Grassroots organizations play a critical role in the implementation of the Lake Management Plans. The Community Grant program provides support to local groups so that they are empowered to act towards the implementation of the Lake Management Plan recommendations specific to their community. Since 2019, this program has leveraged more than \$122,000 in committed community investment through volunteer and fundraising efforts.

#### Deliverables for 2023 include:

- \$15,500 in grants available for a 50/50 match
- Community planting projects
- Aquatic plant management projects
- Community engagement projects
- Implementation of other LMP recommendations
- Leverage additional investment of \$15,000 in external support
- Return on investment of 100%

## Landowner Incentive Fund

Provides seed funding for private land stewardship to landowners looking to undertake key projects that improve water quality through the implementation of high priority recommendations from the Lake Management Plans. Since 2019, this program has leveraged more than \$490,000 in committed landowner investment in beneficial management practices.

## Deliverables for 2023 include:

- \$45,000 in grants available for:
  - Agricultural Best Management Practices
  - Septic upgrades
  - Rainwater harvesting
  - Shore and stream side plantings
  - Low impact development solutions

- Well decommissioning/upgrades
- Leverage additional investment of \$150,000 in external support
- Return on investment of 333%

## General Program

## Implementation Oversight & Coordination

A key component of the Implementation Action Plan is collaboration among community groups and institutions already active on the lake. This program will ensure that collaboration continues between multiple partners at various levels to make sure that projects and programs within partner agencies include actions recommended with the Lake Management Plans. It will also support grass roots organizations that are looking for support in identifying and implementing high priority actions. A key component of this program in 2023 will be the development of the next 5-year strategy that will come to City Council for endorsement in 2023. This updated plan will outline the next five years of implementation priorities and goals.

## Deliverables for 2023 include:

- Coordinate 3 Advisory group meetings
- Collaborate with Lake Associations, and other community groups
- Produce an annual report on implementation success
- Report on Implementation successes to community stakeholders, municipal partners, and other agencies
- Promote the Implementation Action Plan and Community Grant Program to partner groups, agencies, and individuals throughout the City of Kawartha Lakes
- Draft an update to the Implementation Action Plan for 2024 2029 based on previous accomplishments, emerging trends, and priority actions
- Preparations for the International Plowing Match in 2024
- Return on Investment of 16%

## Sediment and Erosion Control Planning

Better erosion and sediment control management is a priority recommendation in all Lake, Watershed, and Storm Water Management Plans to address this significant threat to the health of local lakes and connecting waters. The purpose of this project is to increase local expertise and application of erosion and sediment control standards when reviewing, undertaking, and inspecting development and site alteration projects. Training and expert resource materials will be learned, provided to, and shared among staff at municipalities, Kawartha Conservation, and local contractors. Release of materials from construction/development sites to local watercourses can have significant long-term impacts, including filling in shallow areas, smothering fish habitat, water pollution, and poor aesthetics, among others.

#### Deliverables for 2023 include:

- Enhanced staff skills including certification by CISEC (Certificated Inspector of Sediment and Erosion Control).
- Attendance at TRIECA (industry conference among subject experts).
- Coordinated site visits to local construction sites.
- Host 2 training webinars in partnership with STEP (Sustainable Technology Evaluation Program) on Erosion Sediment Control fundamentals and application for construction projects.
- Organize an annual workshop in partnership with local experts and contractors

## Rural Program

## Agricultural Stewardship

Farmland makes up nearly 50% of the Kawartha watershed and is particularly important in sustaining our rural communities, with agriculture and healthy lakes being the two pillars of our vibrant local economy. This program works directly with the farming community to provide a range of technical services and incentives to assist farmers in practicing beneficial farmland management to improve groundwater and surface water quality.

#### Deliverables for 2023 include:

- Collaboration and partnerships with agricultural commodity groups
- On-farm consultations to develop and support project implementation
- Collaboration with the East Central Farm Stewardship Collaborative
- Collaboration with the Peterborough chapter of ALUS
- Implementation of 4 natural buffer demonstration sites on local farms
- Coordination of a demonstration tour for local producers in the fall
- Leverage an additional \$82,400 in funding support
- Total Return on Investment of 400%

#### Investigative Upstream Monitoring

The Investigative Upstream Monitoring program will reduce existing data gaps by providing qualitative and quantitative data. This data will be invaluable to allowing Kawartha Conservation to identify problem areas and establish remediation and restoration options moving forward. The City of Kawartha Lakes Lake Management implementation plan is a result of recommendations made from the lake management planning process for Sturgeon, Balsam, and Cameron and Pigeon lakes. These recommendations include the identification of 'hot spots' or problem areas (i.e. high nutrient concentrations, reduced forest cover, impaired riparian zones).

## Deliverables for 2023 include:

- Continuation of monitoring on Janetville Creek, Stoney Creek and Sucker Creek (Year 2 of 3) in collaboration with Trent University
- Kawartha will undergo routine monitoring, while Trent University will sample during extreme events
- Sampling 12 sites in total for water quality and flow 8 times a year
- Parameters include nutrients (phosphorus & nitrogen, total suspended solids, chloride)

As an extension to the upstream monitoring program, in 2023 we will also focus on rural streams that discharge into the Scugog River. The Scugog river is important watercourse as it is a transition between Lake Scugog and Sturgeon Lake, not to mention, it is relied upon for drinking water for the most populated area in City of Kawartha Lakes region.

## Deliverable for 2023 Include:

- We will sample the outlet of Distillery, Sinister, Jennings and Albert Creeks for water quality, flow and benthic communities
- Twice a month sampling from April-November
- Parameters include nutrients (phosphorus & nitrogen, total suspended solids, chloride)
- Explore innovative approaches to sample by using conductivity loggers, an autosampler and siphon samplers, to help capture high loading events (rain events) without staff

## Shoreline Program

## Aquatic Plant Control

Waterfront residents need practical approaches for controlling nuisance aquatic plants along their shoreline. Aquatic plant management is a priority recommendation in the majority of completed lake management plans. The proliferation of aquatic plants can have significant effects on the enjoyment, perception of water quality, and sustainability of the lakes. Aquatic thrusters are an emerging aquatic plant control method being used by landowners even though it is not currently a recognized activity by regulating agencies who require permits to be issued for their use.

This proposal is a 4-year project to study the degree to which aquatic thrusters impact the growth of nuisance aquatic plants, and evaluate the effect on physical, chemical, and biological parameters of nearshore waters. 2023 is year 4 of the project. The viability of using thrusters is being tested to understand the return more clearly on investment of using thrusters. We are working in a research collaborative with Parks Canada, Carleton University, Ontario Tech University, University of Ottawa, and Rideau Valley Conservation Authority to scientifically test the impacts and effectiveness of thrusters on controlling plant populations along the nearshore environment of lakes. The results will inform Parks Canada and other regulatory agencies on the potential use of these aquatic thrusters for controlling aquatic plants.

#### Deliverables for 2023 include:

- Regular check-in meetings with Research Collaborative on project implementation status.
- Lead the 'Technical Equipment' component of the project, which includes securing, testing, installing, and maintaining 6 aquatic thrusters and associated equipment on six shorelines total on two lakes (Scugog and Canal).
- Assist Research Collaborative with securing 6 private shoreline properties (3 on Scugog, 3 on Canal) on which to install aquatic thrusters.
- Finalize technical report on Kawartha Conservation's Aquatic Thruster pilot project.

## Shoreline Stewardship

The Shoreline Stewardship Program works with private landowners to provide an array of technical supports to encourage better land management decisions and actions. Most shoreline properties in the City of Kawartha Lakes are privately owned. With this sensitive area having such a large influence on surface water quality, the daily actions of these landowners impact the ability for our community and tourists to enjoy our lakes.

## Deliverables for 2023 Include:

- On-site Shoreline consultations with landowners
- Watershed Welcome program in partnership with Real Estate Professionals and KLEAC
- Native Plant sale to empower landowners to act
- Septic management information for private landowners

## **Urban Program**

The Urban Stewardship program helps to protect our urban communities by providing low impact development recommendations at the individual property level. Much of our urban landscape is hardened surface that promotes faster moving storm runoff and reduces the ability for the land to absorb water. We work with private landowners and the landscaping community to develop a program

for retrofitting existing properties including a variety of options to suit landowners with varying capacity for implementation.

## Deliverables for 2023 include:

- On-site landowner consultations
- Development of rain garden templates and manuals available on our website
- Implementation of lot level stormwater feature as part of new development model homes
- Consult and partner with local landscaping professionals to develop feature landscape plans
- Leverage investment of \$5,300
- Return on investment of 46%

## KAWARTHA CONSERVATION 2023 Special Project Budget



City of Kawartha Lakes  LAKE MANAGEMENT PLANS,	Audited Actual	Budget	Budget
IMPLEMENTATION	2021	2022	2023
Sources of Revenue-Stewardship programs		455.000	
Special project funding, CKL	\$ 93,589 \$	,	163,200
Deferred revenue Grants, Federal	-	105,000	77,800
Grants, Provincial	21,417	53,400	68 000
	95,128	8,400	68,900
Fees for service	 -	2,000	7,000
	 210,134	326,600	316,900
Expenditures-Stewardship programs			
Direct labour	55,919	123,000	117,500
In-house expertise	40,520	66,300	44,000
Supplies and events	9,269	18,200	18,500
Landowner grants	33,572	66,000	55,500
Contractor and consulting services	50,604	20,000	48,500
Travel and equipment	1,147	3,400	4,100
Project administration	 19,103	29,700	28,800
	 210,134	326,600	316,900
Sources of Revenue-Science and Technical			
Special project funding, CKL	61,700	121,200	128,950
Deferred project funding	48,485	2.000	24,250
Employment grants	-	2,000	2,000
Grants, fees, sponsors	 38,463	5,000	5,000
	 148,648	128,200	160,200
Expenditures-Science and Technical			
Direct labour	11,963	8,400	14,100
Stipends	17,000	10,000	10,000
In-house expertise	65,315	61,800	67,300
Supplies	18,377	13,500	11,400
Laboratory fees	15,539	17,000	24,000
Travel and equipment	6,940	5,800	18,800
Project administration	 13,513	11,700	14,600
	148,648	128,200	160,200
PROJECT TOTAL	\$ 358 <i>,</i> 782 \$	454,800	\$ 477,100
Total Municipal Special Project Levy	\$ 155,289 \$	279,000	\$ 292,150

## Municipality of Trent Lakes – Flood Plain Mapping Studies

## Purpose

The objective of these studies is to update flood plain mapping along two stretches of rivers in the Municipality of Trent Lakes, using new hydrologic and hydraulic models based on the latest ground survey, future land-use conditions, topographic maps, aerial photography, and provincial guidelines. The updated flood plain mapping will allow communities, municipalities, and Kawartha Conservation staff to make informed decisions about future land use and identify flood hazard reduction opportunities within the region.

## Background and detail

One of the core responsibilities of Conservation Authorities is to advise on improvements or help mitigate flood risks within the watershed; which can be partially achieved through up-to-date and refined data. To do this, flood plain mapping study models (a digital representation of the study area) are created using information collected for the study such as LIDAR, survey data, soil type and land use types. These studies help synthesize representations of what the landscape is like and how excess water volume will be displaced during large storm events within the watershed. Ultimately the model produces a flood line that can be used to create flood hazard mapping. This model will also help inform consultants and other engineers produce updated mapping for safe future development within or adjacent to flood plains.

In an effort to achieve this core responsibility, Kawartha Conservation is partnered with Municipality of Trent Lakes to provide studies along the Miskwaa Ziibi River and Nogies Creek, which is being funded through the Federal Flood Hazard Identification and Mapping Program (FHIMP) and managed by the Ministry of Natural Resources and Forestry (MNRF).

The Miskwaa Ziibi River is approximately 32 km long and flows south into Little Bald Lake. It has a watershed area of approximately 200 square kilometers. Most properties of concern are located at the south end of the Miskwaa Ziibi river. There are approximately 200 residential properties that are assumed to be within the flood plain. This mapping will help identify which properties are at risk along the east and west side of the Miskwaa Ziibi River.

Nogies Creek is approximately 6.5 km long and flows south into Pigeon Lake. It has a watershed area of approximately 200 square kilometers. Most properties of concern are located at the southern half of Nogies Creek. This Creek has approximately 200 residential properties that are assumed to be within the flood plain. This mapping will help identify which properties are at risk along the east and west side of Nogies Creek.

## Deliverables

- Attend quarterly coordination meetings;
- Provide management of flood plain related information and data;
- Prepare progress reports for March 1, 2023 (completed) and September 1, 2023;
- Provide Flood Plain Mapping Technical Report by March 1, 2024, outlining the findings for each study; and,
- Assist in the implementation of planning decisions.

## KAWARTHA CONSERVATION 2023 Special Project Budget



## **Municipality of Trent Lakes**

FLOOD PLAIN MAPPING SERVICES	Budget Foreca		Budget Forecast 2024
Sources of Revenue			
Special project funding, Trent Lakes	\$ 273,000		-
Deferred revenue, transfers from (to)	 (22,700)		31,200
	\$ 250,300	\$	31,200
Expenditures			
Directlabour	\$ 8,500	\$	-
In-house expertise	58,600		24,800
Supplies and materials	3,000		-
Contractor and consulting services	152,400		-
Travel and equipment	5,000		-
Project administration	 22,800		6,400
PROJECT TOTAL	\$ 250,300	\$	31,200

## **Proposed Joint Special Benefiting Projects**

## City of Kawartha Lakes and Region of Durham - Tree Planting Program

Tree planting within the watershed is a key deliverable of the 2020 Stewardship Strategy which outlines the need for increased forest cover across the watershed. Municipal guidance indicates a desired 30% tree canopy to help address the impacts of climate change. To achieve this coverage will require multiple organizations working together to support private landowners in rural and urban areas. Kawartha Conservation has focused programs to support private landowners including participating in the 50 Million Tree program, the Forest Recovery Program, and through over the counter tree seedling sales. Urban tree planting is encouraged through our TD Tree days work and in partnership with our municipal partners to identify public space that would benefit from increased canopy coverage. These programs provide incentives that support for tree planting projects on private and public properties. Tree planting through these programs also supports the implementation of the Implementation Action Plan as well as Protect and enhance our tree canopy; both highlighted in the City of Kawartha Lakes 2020-2023 Strategic Plan. This new program is heavily invested in by Forest Ontario, Highway of Heroes, and the private landowner.

## Program benefits and value include:

- On-site Landowner consultations
- Survival assessments of previous planting sites
- Development of planting plans to support canopy growth
- Planting of private land
- Over the counter tree seedling sales
- Urban tree planting projects
- Leveraged external funding of \$118,140
- Return on Investment of 170

# KAWARTHA CONSERVATION 2023 Preliminary Special Project Budget JOINT SPECIAL BENEFITING PROJECTS



## Region of Durham City of Kawartha Lakes

City of Kawartha Lakes			
	Audited Actual	Budget	Budget
WATERSHED IMPLEMENTATION PROJECTS	2021	2022	2023
Revenue			
Deferred Revenue, Region of Durham	\$21,105	\$ 19,750	\$ 17,000
Special project funding, City of Kawartha Lakes	19,745	37,750	34,800
Region of Durham, climate change funding	9,000	18,000	18,000
Product sales	19,838	20,000	27,000
Grants, Provincial	11,526	18,500	55,500
Grants, other	10,000	17,800	4,000
Fees for service	7,399	12,700	31,400
	\$ 98,614	\$ 144,500	\$ 187,700
Expenditures			
Direct Labour	\$43,309	\$ 72,100	\$ 76,000
In-house expertise	10,740	4,000	9,100
Supplies	8,965	39,400	57,000
Project Contractor	7,624	14,000	26,000
Travel and equipment	27,201	1,800	2,500
Project administration	775	13,200	17,100
	\$ 98,614	\$ 144,500	\$ 187,700

## Capital Expenditures

## Asset Management Software Implementation

As part of our initiative to implement an Asset Management Plan, a supporting software is being invested in to manage our assets in accordance with Public Sector Accounting Standards. The investment in this software is treated as a Tangible Capital Asset. The software will allow us to maintain and modify our Asset Management Plan, conduct Capital Forecasts, amortization, net book value reports and other analysis.

## Strategic Link(s):

• Innovate and Enhance - Continue to drive positive change as an industry leader in business and environmental best practices.

## Off-leash Dog Park Fencing

As part of our efforts to ensure the community has a positive experience at our Conservation Areas, the fencing around the perimeter of our Off Leash Dog Park will be implemented in 2023. Ongoing challenges with dogs escaping the enclosure puts visitors and animals at risk. Improving the fence will address user concerns and ensure a safe experience for park users and reduce unexpected challenges associated with dogs escaping the enclosure.

## Strategic Link(s):

 Engage and Inspire – Maintain and enhance our Conservation Areas to provide healthy outdoor experiences.

## Pigeon River Headwaters Conservation Area Vehicle Bridge

In 2022, we launched the re-opening of the Pigeon River Headwaters Conservation Area after the installation of a pedestrian bridge. The maintenance of the trails at this Conservation Area requires an ability to get equipment over the Pigeon River as well. The existing vehicle bridge was installed in the late 1980s and has had some upgrades over time to prolong the life of the bridge. At present, this bridge is not structurally sound enough to take many pieces of equipment over the bridge safely. To ensure the safety of our property, an upgrade to this bridge is required so that we can get mowers, and other vehicles safely across.

## Strategic Link(s):

• Engage and Inspire – Maintain and enhance our Conservation Areas to provide healthy outdoor experiences.

## Equipment Purchase, City of Kawartha Lakes Special Project

The Investigative Upstream project will extend its monitoring in 2023 to include the rural streams discharging into the Scugog River. We will focus our monitoring on both water quality and quantity. To ensure we capture all high flow events, we will be installing an auto sampler, which captures water quality samples triggered at selected time intervals along a rainfall event or at water levels observed in streams. This innovative technology will help to reduce travel time and staff visits to sites and increase the number of samples that can be collected. The purchase of a data logger will allow us to monitor water levels and volume continuously at a given location along the stream. Conductivity data loggers will record chloride concentrations which will help to identify impacts on how salt usage is impacting our watercourses and help implement best management practices.

## Strategic Link(s):

- Protect and Restore Implement, update, and adapt Lake Management Plans to address emerging issues.
- Protect and Restore Provide data-driven recommendations to advise on water resource issues.
- Protect and Restore Track key environmental trends impacting the watershed and report on results at least every 3 years.

## **Building Infrastructure Initiatives**

We are proposing a number of infrastructure improvements be included in the 2023 budget. These improvements include:

- Security improvements and expansion for owned buildings to update our security system with remote management capabilities to increase visibility and security along with expanding coverage to vulnerable areas.
- Replacement of our front door to provide a barrier free path of entry for visitors. Additionally, the
  current front door is outfitted with an aging residential inward swinging door without a panic escape.
  With replacement to a commercial door, we will increase accessibility for visitors, reduce liability and
  save on energy with a door with higher R-Value.
- Purchase of two stand/sit desks that will be available to staff as shared desks. The desks will provide
  employees with the option to stand or sit while they work, promoting better posture and reducing
  sedentary posture whilst improving employee morale.
- Replacement of aging furniture and fixtures within the building that are failing or nearing increased failure rates.

## Strategic Link(s):

- Innovate and Enhance Continue to drive positive change as an industry leader in business and environmental best practices.
- Protect and Restore Ensure the safety of people, property, and public infrastructure.

## Vehicle Replacement

Our current vehicle fleet is aging and requires replacement. Two vehicles have been pulled from circulation for auction (2005 Pontiac Vibe with 300,000km and 2006 Toyota Matrix with 300,000km) as the investment to continue operating is exponentially increasing. We anticipate that a third vehicle (2006 GMC Sierra), may be disposed this year. We are planning to replace one vehicle this year with a hybrid or electric option, if available and within budget.

Additionally, we are piloting a short-term leasing program for the field season to determine if our fleet can be supplemented with short term leases to reduce the owned fleet requirements and large capital outlays required.

#### Strategic Link:

- Innovate and Enhance Increase efficiency and effectiveness of service delivery.
- Climate Change Strategy.

## KAWARTHA CONSERVATION 2023 Preliminary Capital Expenditures



CAPITAL EXPENDITURES	Budget 2023
Sources of Revenue	
General Levy	\$ 45,875
Transfers from (to) reserve	62,725
Special Benefitting Levy, City of Kawartha Lakes, Deferred	30,200
Federal Grant, Asset Management Plan	 5,400
	144,200
Expenditures Asset Management Software Implementation Building Infrastructure Initiatives Howlers Corners Fencing Pigeon River Car Bridge Equipment Purchase, City of Kawartha Lakes Special Project Vehicle Replacement	\$ 7,500 32,000 24,500 5,000 30,200 45,000
veniere reprocentant	\$ 144,200



## Agenda Item #8.2

BOD Meeting #4/23 May 25, 2023 Page 1 of 3

To: The Chair and Members of

Kawartha Conservation Board of Directors

From: Mark Majchrowski, CAO

Re: Draft Municipal Apportioning Agreements

#### **KEY ISSUE:**

Development of apportionment agreements with participating municipalities by January 1, 2024.

#### **RECOMMENDED RESOLUTION:**

RESOLVED, THAT, the draft apportionment agreement be endorsed as the framework for discussions with participating municipalities.

#### **BACKGROUND**

The Ministry of the Environment, Conservation and Parks (MECP) released Phase 1 regulations to implement amendments to the *Conservation Authorities Act* on October 4<sup>th</sup>, 2021, which included a requirement to enter into agreements with participating municipalities on the costing of programs, by January 1, 2024. These agreements are specific to Category 3 programs as identified in the *Conservation Authorities Act*.

Category 3 programs and services are those activities performed to further the purposes of a conservation authority, generally stated in the Act as the organization and delivery of programs and services that further the conservation, restoration, development, and management of natural resources. These activities are agreed upon by the Board through the budget and decision-making process and don't fall into Category 1 (mandatory programs and services) or Category 2 programs. Category 2 programs are programs performed at the request of a municipality, through agreement or MOU to carry out the work.

The inventory of programs and services initiates the process for understanding the categories of services that a Conservation Authority provides and facilitates entering into agreements with participating municipalities on the costing of programs.

Ontario Regulation 687/21: Transition Plans and Agreements for Programs and Services under Section 21.1.2 of the Act requires each conservation authority to develop cost apportioning agreements with its municipalities for programs and services with specific requirements to be included in the agreements including:

- A termination date
- A review of the agreement at least 6 months before the termination date



## Agenda Item #8.2

BOD Meeting #4/23 May 25, 2023 Page 2 of 3

- If the agreement terminates more than 5 years after the agreement is entered into, that the parties review the agreement every 5 years (or earlier intervals)
- Early termination clauses
  - How a notice of early termination is to be provided by one party to the other parties
  - Timeline for such notice to be given at least 30 days before the early termination date (or greater)
- Dispute resolution mechanisms (outside the court system)
- Establishment of fees for the program or services as may be appropriate and applicable
  - o The program or service is identified for which a fee is to be charged
  - Set out procedures that must be followed before a fee is established, including any consultations with each participating municipality party to the agreement.

Further, a cost apportioning agreement must be approved by resolution of the municipal council of participating municipalities that is a party to the agreement.

## **Draft Agreement:**

A draft agreement is attached to this staff report for consideration of the Board to enable discussions with municipalities on the content of apportionment agreements. The agreement presented is based upon the model that the Lake Simcoe Region Conservation Authority is utilizing and has been developed with York Region staff. This model is similar to the agreement that the Toronto Region Conservation Authority is using and is the model that Durham Region is working towards.

The agreement provides a greater context for the legislative changes that the province has implemented, which will provide for greater clarity into the future and encompasses all agreements with the participating municipalities under one umbrella. Other key features of the agreement include the following:

- addresses all categories of programs and services outlined by the province
- clarifies the funding mechanism for the categories of programs and services
- integration to the existing budget process as the mechanism for identifying program and service costs and agreement of programs and services
- identifies that fees may be charged in accordance with the Minister's Fee Classes Policy, and in accordance with our Fee Policy, which establishes the procedure for setting fees, or alternatively with the participating municipality as might be applicable
- term to proceed on a 4-year renewing cycle, reviewed annually as part of the budget and apportionment process

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## Agenda Item #8.2

BOD Meeting #4/23 May 25, 2023 Page 3 of 3

• details outlined for the general administration of category 2 programs

It is the intention that this agreement will serve as a basis for discussion with our participating municipalities, which will provide a comprehensive and clear outlook on the programs and services carried out. The agreement will be tailored to each municipality with respect to Category 2 program and services. The intent is such that existing ongoing programs and services falling under Category 3 expenses, would be shared amongst our participating municipalities, which includes for example, community programming, education and outreach programs and watershed specific monitoring activities.

## THIS MEMORANDUM OF UNDERSTANDING ("MOU")

THIS AGREEMENT dated this day of , 2023.

## **BETWEEN:**

## THE <PARICIPATING MUNICIPALITY>

(Hereinafter, "Participating Municipality")

## AND:

## KAWARTHA REGION CONSERVATION AUTHORITY

(Hereinafter, "Kawartha Conservation")

WHEREAS Kawartha Conservation is a conservation authority established under the Conservation Authorities Act ("Act") providing programs and services that further the conservation, restoration, development and management of natural resources in its watershed;

**AND WHEREAS** the Participating Municipality is a municipality, located wholly or partly within the area under the jurisdiction of Kawartha Conservation, and is designated as a participating municipality under the Act;

**AND WHEREAS** in carrying out its mandate under the Act, Kawartha Conservation is required to provide mandatory programs and services (Category 1) set out under *Ontario Regulation 686/21*;

**AND WHEREAS** in carrying out its mandate under the Act, Kawartha Conservation provides non-mandatory programs and services (Category 2) at the request of or on behalf of its municipal partners within its jurisdiction;

**AND WHEREAS** in carrying out its mandate under the Act, Kawartha Conservation provides non-mandatory programs and services (Category 3) that Kawartha Conservation implements to manage and conserve the watershed;

**AND WHEREAS** under the Act, Category 1 programs and services are to be funded through the annual budget and apportionment process in accordance with the Act;

**AND WHEREAS** under the applicable regulations, Category 1 operating expenses and capital costs may be included in the apportionment and provided without an agreement;

**AND WHEREAS** under the Act, Category 2 programs and services provided at the request of or on behalf of its municipal partners municipalities are delivered under a memorandum of understanding ("MOU") or such other agreement;

**AND WHEREAS** under the applicable regulations, Category 2 operating expenses and capital costs may be included in the apportionment under an MOU or other agreement, and the operating expenses and capital costs shall be apportioned, in their entirety, to the participating municipality that requested the programs and services;

**AND WHEREAS** under the Act, Category 2 programs and services may be provided at the request of participating municipalities, outside of the budget and apportionment process, through individual procurement agreements;

**AND WHEREAS** the Act requires such MOUs or other agreements to be reviewed at regular intervals and to be made available to the public, subject to certain exemptions;

**AND WHEREAS** this MOU sets out the principles, terms and conditions governing the delivery of Category 2 programs and services funded by the Participating Municipality through the budget and apportionment, or otherwise requested outside of the budget and apportionment process;

**AND WHEREAS** under the Act, Category 3 programs and services implemented by Kawartha Conservation may be provided in accordance with the Act, within the budget and apportionment process, or otherwise requested outside of the budget and apportionment process (Schedule 3);

**AND WHEREAS** under the Act and the Minister's Fee Classes Policy, the Authority may establish fees to be charged for the program or service where appropriate;

**NOW, THEREFORE**, in consideration of the mutual covenants and agreements contained herein and for other good and valuable consideration the sufficiency of which is hereby acknowledged by the parties, the parties hereto agree as follows:

- 1. This MOU shall commence on the Effective Date and shall continue for four (4) years (the "Initial Term"). Thereafter this MOU shall continue for additional four (4) year periods (each a "Renewal Term") unless either party provides written notice of termination to the other party at least sixty (60) days prior to the expiry of the Initial Term or Renewal Term, as the case may be.
- 2. This MOU shall be reviewed by the parties on an annual basis as part of the budget and apportionment process.
- 3. When preparing its annual budget (Schedule 1), Kawartha Conservation shall follow the prescribed budgetary process in accordance with the requirements of the applicable regulations, including preparation of a draft budget, consultations with participating

municipalities, rules for voting to approve the apportionment, and preparation of the final budget.

- 4. Kawartha Conservation and the Municipality shall identify and agree upon Category 1, applicable Category 2, and Category 3 services in the annual budget.
- 5. Kawartha Conservation and the Participating Municipality shall negotiate in good faith in an attempt to settle any dispute between the parties in connection with the funding of Category 3 programs and services in a timely manner.

Should the Authority and the Municipality be unable to settle the dispute through negotiation, both parties acting reasonably and in good faith, then the determination of such dispute shall be resolved by arbitration, pursuant to the Arbitration Act (Ontario).

A party desiring arbitration shall give written notice of arbitration to the other party, containing a concise description of the matter referred to arbitration. Within ten (10) business days after a party delivers a Notice of Arbitration, the parties shall jointly appoint a single arbitrator (the "Arbitrator"). If the parties fail to appoint an Arbitrator within such time, the Arbitrator shall be designated by a judge of the Ontario Superior Court of Justice upon application by either party.

The decision of such Arbitrator shall be final and binding as between the parties and shall not be subject to appeal. The costs of the Arbitrator shall be split equally between the Authority and Municipality.

- 6. Where requested Category 2 services are included in the budget process and apportionment, Kawartha Conservation shall apportion the operating expenses and capital costs, in their entirety, to the participating municipality that requested the programs and services.
- 7. A list of existing service agreements as of the date of this MOU are referenced in Schedule 2 to this MOU. Amendments to Schedules may be made by staff periodically to ensure alignment with existing agreements and the annual budget process.
- 8. Where Category 2 services are requested and procured outside of the budget process, and not included in the apportionment, the following principles, terms and conditions shall govern the delivery of Category 2 programs and services requested by the Participating Municipality:
  - a. Subject to complying with procurement and purchasing policies, the Participating Municipality will give due consideration to Kawartha Conservation when procuring services related to Kawartha Conservation's mandate and areas of expertise.

- b. Kawartha Conservation's or the Participating Municipality's standard form of purchase order and procurement and other agreements will be used for the delivery of municipally requested programs and services.
- c. Kawartha Conservation will maintain such insurance policies as required by the Participating Municipality in respect of the delivery of programs and services provided outside of the budget process pursuant to this MOU.
- d. Kawartha Conservation will retain all financial and project records in connection with the programs and services for audit purposes by the Participating Municipality for no less than seven years.
- 9. Category 1 programs and services shall be provided be in accordance with any standards and requirements that may be prescribed under subsection 21.1(3) of the Act. Category 2 programs and services provided shall be in accordance with any standards and requirements, and any terms and conditions, that may be prescribed under subsection 21.1.1(4) of the Act.
- 10. Where Category 2 programs and services funded by the Participating Municipality involve user fees, such user fees shall only be imposed in accordance with Kawartha Conservation's fee policy and fee schedules adopted in accordance with the provisions of the Act, or otherwise in accordance with provisions set out in an agreement between Kawartha Conservation and the Participating Municipality.
- 11. The Participating Municipality and Kawartha Conservation will continue to work together to identify opportunities for further collaboration to the benefit of both parties and ensure efficiency, transparency and accountability in the use of public sector resources.
- 12. This MOU shall be made available to the public in accordance with the Act and any applicable regulations.
- 13. This MOU may be executed in counterparts and when each party has executed a counterpart, each of such counterparts shall be deemed to be an original and all of such counterparts, when taken together, shall constitute one and the same agreement.
- 14. Payment for all Category 1, Category 2 and Category 3 expenses agreed to as part of the budget process shall be received under the following timelines: 1/3 due within 30 days of invoice date, 1/3 due by June 30 and the remainder by September 30 of each calendar year.

**IN WITNESS WHEREOF**, the parties have entered into this MOU as of the Effective Date of January 1, 2024.

## KAWARTHA REGION CONSERVATION AUTHORITY

Per	<b>:</b>
1	Name: Mark Majchrowski
٦	Title: Chief Administrative Officer

## THE <PARTICIPATING MUNICIPALITY>

Per:\_\_\_\_\_ Name: <NAME>

Title: Chief Administrative Officer

## **SCHEDULE 1:**

**Kawartha Region Conservation Authority Annual Budget** 

<attach 2024 budget>
<subsequent year's budgets thereafter to this schedule>

## **SCHEDULE 2:**

## **Category 2 Service Agreements and Memorandums of Understanding**

## **SCHEDULE 3:**

## **Category 3 Funding Agreements**

## **SCHEDULE 4:**

## **Inventory of Programs and Services Provided by Category**

#### PAGE 107 OF 164



## Agenda Item #8.3

BOD Meeting #4/23 May 25, 2023 Page 1 of 1

To: The Chair and Members of

Kawartha Conservation Board of Directors

From: Mark Majchrowski, CAO

Kristie Virgoe, Director, Stewardship and Conservation Lands

Re: Lake Management Implementation Action Plan 2024 - 2028

#### **KEY ISSUE:**

The Lake Management Implementation Action Plan (2019-2023) ends this year. We are aiming to update the strategy for the next five years with the City of Kawartha Lakes to continue to guide our implementation activities.

#### **RECOMMENDED RESOLUTION:**

RESOLVED, THAT, the 2024 – 2028 Lake Management Implementation Action Plan be endorsed.

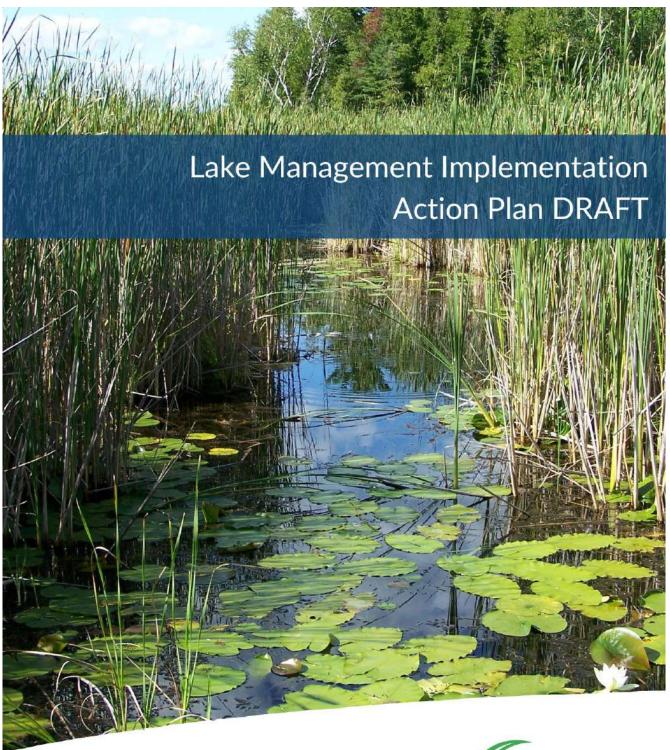
#### **BACKGROUND**

In 2017, City of Kawartha Lakes Council requested that a multi-year implementation plan for the Lake Management Plans be developed. Kawartha Conservation worked alongside a Task Force to develop the 5-year Lake Management Implementation Action Plan 2019-2023. To continue the momentum garnered over the last five years we have been developing an update to this strategy with planned implementation to begin in 2024. As before, this new 5-year strategy will guide the implementation of priority actions from the Lake Management Plans adjusted to meet current priorities.

In July 2022, an Advisory Committee was formed to provide recommendations and feedback on the update of the Action Plan. The Advisory Committee was comprised of representation from City Council, City staff, Lake Associations, Agricultural community members and the local business sector. Monthly meetings of the committee resulted in the creation of the new Lake Management Implementation Action Plan and support to bring the final draft forward before the Board.

Attached is the draft Lake Management Implementation Action Plan for 2024 – 2028. This plan, if endorsed by the Board, will be presented to the City of Kawartha Lakes Council for funding consideration.

**Acknowledgements/Contributions from:** Nancy Aspden, Carolyn Snider, Brett Tregunno, Danielle Marcoux-Hunter, Tanner Liang, and Colleen Cathcart





Discover - Protect - Restore

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# **Executive Summary**

The Kawartha Lakes are an important contributor to our economic growth. We need to continue protecting our healthy fisheries, clear water, and access to our lakes for recreational activities for now and for generations to come.

Our community is growing and so are the demands. Kawartha Conservation along with its many partners continue to work towards protecting and enhancing our lakes through our strategic goals of a healthy environment, a vibrant growing community, and supporting an exceptional quality of life. Kawartha Conservation will use this plan to prioritize Lake Management Plan recommendations to develop innovative programs, and improving existing programs that align with the goals laid out in the Healthy Environment Plan (2019) and Kawartha Lakes Strategic Plan (2022-2023) for the City of Kawartha Lakes.

Kawartha Conservation developed the Lake Management Implementation Action Plan and programs to address high priority recommendations in 2019. For the last four years, these programs have been successfully operating and generating positive impacts within our community. The health of our lakes has been improved by planting over 111,000 trees and shrubs, naturalizing 5,580ft of shoreline, and leveraging over \$322,000 in landowner contributions to private land implementation projects. We want to continue these improvements through our new plan. By updating our programs and building on our successes, we are improving water quality, building community awareness and involvement, and attracting additional investment into our municipality.

Kawartha Conservation has consulted with many stakeholders, including Lake Associations, shoreline communities, the agricultural community, City of Kawartha Lakes council and staff, as well as representatives from our real estate and business sector. This plan is the result of the collaboration within our community.

Program activities are ranked in priority, each program in its own context and on its own timeline. Costing is forecasted over five years, with the usual caveat that budgets are approved only annually. The five-year budget forecast for the recommended programs is attached to this Executive Summary as Table 1. The first-year budget request for 2024 Municipal Investment is \$526,446.

Program summaries as follows:

### 1. Incentive Grant Program

a. Kawartha Water Fund - provides private landowners and community groups with financial support through micro-grants to implement environmental projects that will have a direct impact on the health of our lakes.

# 2. Implementation Outreach Program

- a. Partner and Community Engagement continue collaboration with our partners through presentations, attendance at local events, online newsletter, website, and social media updates, etc. to ensure that the actions recommended in the Lake Management Plans are being met.
- b. Sedimentation and Erosion Control continue to develop partnerships with the City of Kawartha Lakes and industry professionals to pilot innovative monitoring technologies and ensure good erosion and sediment control measures.

# 3. Rural Program

a. Agricultural Stewardship - offer technical services and incentives to the farming community to increase the number of implementation Best Management Practices (BMP's), including

- exclusion fencing, barnyard eavestroughs, manure control and other projects that will achieve the Lake Management Plan recommendations.
- b. Forestry and Tree Planting Stewardship work with private landowners to increase forest cover across the watershed through a variety of tree planting options including urban tree planting, large scale block tree planting, and over the counter seedling sales.
- c. Investigative Upstream Monitoring includes the monitoring of streams which will provide information on where and what nutrients are entering our watercourses and using this data to inform stewardship initiatives.

### 4. Shoreline Program

- a. Waterfront Stewardship promote naturalized and stabilized streambanks and shorelines through the implementation of on-the-ground demonstration sites, technical services provided to landowners and a semi-annual native plant sale.
- b. Community Science Monitoring includes working with community volunteers to proactively sample the near shore environment as part of an early warning system to identify where pollution is entering the lakes.
- c. Bobcaygeon Dam Aquatic Habitat Assessment address concerns surrounding the aquatic ecosystem that is immediately downstream of the Bobcaygeon Dam to determine if the negative impacts on Walleye spawning success.

# 5. Urban Program

- a. Stormwater Monitoring Program monitoring urban runoff areas in Lindsay and areas that drain into the Scugog River to identify where nutrients and contaminants are entering the river and using this data to inform stewardship activities.
- b. Urban Restoration promote urban naturalization techniques to improve infiltration and reduce urban runoff though demonstration LID projects, collaborations with the building industry, and private land consultations.

Further information on each program can be found in Appendix A.

The Lake Management Implementation Action Plan 2024-2028 recommends approval for the following reasons:

- 1. Actions and programs that have a direct impact on the recommendations of the Lake Management
- 2. The program actions support healthy communities and align with the goals laid out in the Healthy Environment Plan (2019) and the City of Kawartha Lakes Strategic Plan (2022-2023)
- 3. Investment in the Plan will be used to focus on in-the-ground actions.
- 4. The programs support healthy lakes and a healthy environment in a changing climate.

Approval of the Municipal Investment for the year 2024 - 2028 as set out in Table 1 is requested.

Table 1 – Recommended Budget

Kawartha Conservation has considered each program area at three different funding levels. The recommendations below are a result of considering a balance of effectiveness, priorities, and budget constraints.

Program	2024	2025	2026	2027	2028
Incentive Grant Program					
Kawartha Water Fund	\$107,500	\$107,500	\$107,500	\$107,500	\$137,800
2. Implementation Outreach Program					
Partner and Community Engagement	\$98,045	\$80,040	\$80,040	\$80,040	\$80,040
Sedimentation & Erosion Control Planning	\$24,401	\$37,640	\$37,640	\$37,640	\$49,430
3. Rural Program					
Agricultural Stewardship	\$17,900	\$22,800	\$30,200	\$22,800	\$22,800
Forestry and Tree Planting Stewardship	\$48,000	\$51,300	\$51,300	\$51,300	\$51,300
Investigative Upstream Monitoring	\$42,400	-	-	-	-
4. Shoreline Program					
Waterfront Stewardship	\$22,000	\$13,800	\$22,000	\$13,800	\$22,000
Community Science Monitoring	\$25,300	\$25,300	\$26,850	\$25,300	\$29,150
Bobcaygeon Dam Aquatic Habitat Assessment	-	-	-	-	-
5. Urban Program					
Stormwater Monitoring	\$123,300	\$100,500	\$100,500	\$100,500	\$100,500
Urban Restoration	\$17,600	\$22,300	\$31,000	\$22,300	\$22,300
Total Project Cost	\$526,446	\$461,180	\$487,030	\$461,180	\$515,320
Deferred Revenue	\$139,662	\$66,660	\$84,620	\$50,722	\$56,286
Total Municipal Investment	\$386,784	\$394,520	\$402,410	\$410,458	\$459,034
Grant Funding Leveraged	\$203,000	\$283,500	\$388,500	\$283,500	\$368,500
In-Kind Support Leveraged	\$310,450	\$297,750	\$301,250	\$297,750	\$308,250
Total Program Value	\$1,039,896	\$1,042,430	\$1,176,780	\$1,042,430	\$1,192,070

The recommendations on program levels and timelines are based on the potential impacts the programs could have on the environment and the local economy. Consideration is also put on the impact of funding from the City of Kawartha Lakes and other supporting foundations. The recommendations for programs and funding levels are expected to garner 124% return on investment over the next five-year period.

# The Plan

The purpose of the plan is to provide the framework for investment in the initiatives that play an important role in the implementation of the actions recommended in the lake plans. The plan will outline the multi-year programs that will be delivered to satisfy the recommendations put forward by Kawartha Conservation while also supporting the strategic goals of the City of Kawartha Lakes. The goal of the Lake Management Implementation Action Plan 2024-2028 is to continue to build on the momentum created from the previous plan and to continue to foster the effective use of limited resources across partnering agencies to improve the economic, social, and environmental wellbeing of our lakes and our lake communities.

# **Implementation Success**

The first Lake Management Implementation Action Plan began in January of 2019, and will run until the end of 2023. The program area incorporated actions geared towards rural, urban and shoreline landowners. Each program area targeted different priorities and set out to accomplish incredible milestones (Appendix C).

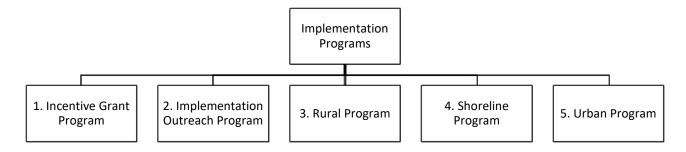
Even with unforeseen circumstances including the COVID-19 pandemic, each program area saw important implementation achievements. A key example of achievements includes the Incentive Grant program. In the first 4 years, at the time this action plan was written, this program granted a total of \$169,693 between community groups and private landowners and leveraged \$322,953. Projects completed through that program include exclusion fencing, rain garden plantings, tree plantings, shoreline naturalization, well decommissioning and more. The Landowner Incentive fund saw the completion of 26 agricultural, 25 rural, 23 waterfront and 5 urban projects on private land throughout the City of Kawartha Lakes. These "boots on-the-ground" projects are key to working towards the recommended actions from the Lake Management plans.

Kawartha Conservation program leaders continued to build strong relationships in our community through attendance at and hosting workshops, symposiums, and online program events. Building healthy relationships with community members, including developers, community groups and local contractors, helps to continuously raise awareness of the importance of implementation actions and the programs that were designed to protect and enhance our watershed. Furthermore, Kawartha Conservation staff successfully implemented projects that contributed to the restoration of 5,580ft of shoreline, plantings of over 111,205 trees and shrubs and plantings of over 6,150 native plant species within our watershed.

Kawartha Conservation and its partners intend to build on these successes and continue to improve the health of our watershed. Keeping the momentum going from the previous five years will be vital in ensuring that the actions recommended in the Lake Management Plans continue to be implemented and that promoting awareness of our programs remains a constant at all levels.

# Recommendations

Kawartha Conservation has recommended the following implementation program areas. Funding is provided by City of Kawartha Lakes, government agencies and in-kind contributions.



# **Implementation Program Areas**

Each of the following programs will impact the three unique communities within our watershed, this includes our rural, shoreline, and urban areas. Each of these communities have different needs and require different remedial actions which are outlined in the prioritization matrix (Appendix B). Programs were identified and designed so that they can meet the actions required for each community as well as meet the goals laid out in the Lake Management Plans, City of Kawartha Lakes Healthy Environment Plan, and the Stewardship Strategy.

### 1. Incentive Grant Program:

The Kawartha Water Fund program was created to support private landowners and community groups that are interested in undertaking projects on their properties that demonstrate actions from the Lake Management Plans. The program provides financial support in the way of small micro grants to private landowners and community groups who wish to implement environmental projects that will improve water quality. This is a cost sharing program that leverages cash and in-kind contributions from the landowners, community groups and other agencies. Kawartha Conservation administers and reports on the funding under the guidance of a grant selection committee. More information about this program can be found on page 3 of Appendix A.

### 2. Implementation Outreach Program:

Partner and Community Engagement will continue to build collaboration with our partners at various levels to ensure that the programs are meeting the actions recommended in the Lake Management Plans. To ensure that our community continues to be engaged and involved, the program proposes to extend outreach through presentations and attendance at local events and engage residents through an online newsletter publication that will showcase Kawartha Conservations programs and news from our partner agencies. For more information about this program see page 6 of Appendix A.

The **Sedimentation and Erosion Control Planning Program** will advance erosion and sediment control practices for projects in and around water for construction and construction related industries. The release of materials from construction and development sites to local watercourses can have significant

long-term impacts on water quality, community aesthetics, fish habitat and others. For more information regarding this program see page 8 of Appendix A.

# 3. Rural Program:

The **Agricultural Stewardship** program will offer a range of technical services and incentives to the farming community to increase the number of implementation Best Management Practices (BMP's) within the Kawartha Lakes. These projects include activities such as exclusion fencing, barnyard eavestroughs, manure control and other projects that will help improve water quality and the health of our community. For more information about how this program will improve water quality see page 12 of Appendix A.

The **Forestry and Tree Planting Stewardship** will help to build the tree cover of our watershed from the current level of 21% to the recommended level of 30%. This program will increase forest cover through private landowner tree plantings, community plantings, an urban tree program and an over-the-counter seedling sale. Increased forest cover will reduce erosion, increase natural habitat, support water balance, and help to sustain a community that is more resilient in the face of climate change. For more information on how this program will increase our watersheds tree cover see page 14 of Appendix A.

The **Investigative Upstream Monitoring Program** is designed to identify areas where nutrients and contaminants are entering streams and ultimately ending up in our lakes. By identifying the sources of these nutrients, priority areas for restoration can be identified and partnerships with landowners can be made. For more information on the final year of this project see page 16 of Appendix A.

# 4. **Shoreline Program:**

The Waterfront Stewardship program works with private landowners and the municipality to achieve naturalized and stabilized streambanks and shorelines through the implementation of on-the-ground demonstration sites. These projects will address issues such as erosion, nutrient runoff, and aquatic plant control. Restoring the delicate interface of where land meets our lakes and rivers is vital to improving water quality. For more information on how waterfront stewardship will help improve water quality see page 20 of Appendix A.

The **Community Science Monitoring Program** will work with community members to establish and maintain a community monitoring network that will focus on monitoring the nearshore zone of the lakes within the watershed. The information gathered will be presented to the community to raise awareness of water quality needs and will help identify potential sites for stewardship projects. For more information on this project see page 22 of Appendix A.

The **Bobcaygeon Dam Aquatic Habitat Assessment** program will address concerns raised by the local community surrounding the aquatic ecosystem that is immediately downstream of the Bobcaygeon Dam, as exemplified by the Save the Walleye Campaign. The area is recognized as an important fishery and this project will monitor the spawning habitat conditions to determine if the Bobcaygeon Dam is negatively impacting the Walleye spawning success. For more information on this program and its program partners see page 24 of Appendix A.

# 5. Urban Program:

The **Stormwater Monitoring** program will focus on monitoring the urban runoff areas in Lindsay that drain into the Scugog River. Urban runoff can negatively impact water quality in various ways, and this monitoring will help identify key areas requiring restoration and the types of restoration required to address the site-specific conditions. This program will help to inform developers on proper stormwater management techniques and provide information needed to develop Low Impact Development (LID) site plans and community stewardship plans. For more information see page 27 of Appendix A.

The **Urban Restoration** program works alongside the stormwater monitoring program to encourage the building of resilient communities through implementation of natural infrastructure-based demonstration sites within core urban areas. The program will concentrate on working with the municipality to identify key locations for public Low Impact Development (LID) sites to create alternatives to conventional stormwater management practices. Working with the development community to showcase lot level designs on new builds will help promote urban stewardship practices for new home buyers. This program will also empower private landowners to make changes on their properties through free downloadable landscape templates from Kawartha Conservation. For more information on this program see page 29 of Appendix A.

# Conclusion

Continuing to implement the priority recommendations from the Lake Management Plans is a vital part of the health of our communities and our watershed. The programs proposed in this 5-year Action Plan will continue to build on our knowledge of how to improve our water quality, build increased understanding and capacity amongst our unique communities, and attract additional investment to our municipality. Our lakes are an important part of our economy, our quality of life and our environment.

The Action Plan will continue to foster effective use of resources to improve economic, social, and environmental wellbeing of our watershed to continue to build and support the communities that we live, work, and play in. Kawartha Conservation recommends proceeding with the programs and investments that are laid out in this plan. Following through with the recommendations will result in a return on investment of 124%.

The following table provides recommendations on when programs should be introduced, and the funding level associated with the recommendations. These recommendations are a result of considering a balance of effectiveness, priorities, and budget constraints.

Table 1-1: Proposed 5-Year Implementation Program and Timelines.

Program	2024	2025	2026	2027	2028
Incentive Grant Program					
Kawartha Water Fund	\$107,500	\$107,500	\$107,500	\$107,500	\$137,800
Implementation Outreach Program					
Partner and Community Engagement	\$98,045	\$80,040	\$80,040	\$80,040	\$80,040
Sedimentation & Erosion Control Planning	\$24,401	\$37,640	\$37,640	\$37,640	\$49,430
Rural Program					
Agricultural Stewardship	\$17,900	\$22,800	\$30,200	\$22,800	\$22,800
Forestry and Tree Planting Stewardship	\$48,000	\$51,300	\$51,300	\$51,300	\$51,300
Investigative Upstream Monitoring	\$42,400	-	-	-	-
Shoreline Program					
Waterfront Stewardship	\$22,000	\$13,800	\$22,000	\$13,800	\$22,000
Community Science Monitoring	\$25,300	\$25,300	\$26,850	\$25,300	\$29,150
Bobcaygeon Dam Aquatic Habitat Assessment	-	-	-	-	-
Urban Program					
Stormwater Monitoring	\$123,300	\$100,500	\$100,500	\$100,500	\$100,500
Urban Restoration	\$17,600	\$22,300	\$31,000	\$22,300	\$22,300
Total Project Cost	\$526,446	\$461,180	\$487,030	\$461,180	\$515,320
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Grant Funding Leveraged	\$203,000	\$283,500	\$388,500	\$283,500	\$368,500
In-Kind Support Leveraged	\$310,450	\$297,750	\$301,250	\$297,750	\$308,250
Total Program Value	\$1,039,896	\$1,042,430	\$1,176,780	\$1,042,430	\$1,192,070

Level 1	Level 2	Level 3

Information on the various levels and associated deliverables can be found in Appendix A.

# Appendix A

# **Program Descriptions**



# 1. Incentive Grant Program

The Incentive Grant program contains the following detailed programs:

# Kawartha Water Fund

The Kawartha Water Fund now combines the Community Grant Program and the Landowner Incentive Fund into one program area. The chart below indicates the funding for both areas combined, this allows for more flexibility and efficiency within the program.

Level 1
Level 2
Level 3

		2024	2025	2026	2027	2028
Kawartha Water Fund						
Municipal Contribution*		\$107,500	\$107,500	\$107,500	\$107,500	\$137,800
Grant Funding Leveraged						
In Kind Support Leverage	d	\$215,000	\$215,000	\$215,000	\$215,000	\$375,000
Total Project Value		\$322,500	\$322,500	\$322,500	\$322,500	\$512,800

<sup>\*</sup> This value will be offset by differed revenue. See the full plan for the overall amount of differed revenue being allocated year over year.

# Kawartha Water Fund

**Program Lead**: Landowner and Community Support

Program Partners: City of Kawartha Lakes, Private Landowners, Cottage and Community Organizations,

Non-profit Organizations

**Recommended Funding Level:** Level 2 for 2024-2027

Level 3 for 2028

Since 2019, 70 landowners have been granted \$123,000 in funding, leveraging an additional \$491,659 in community investment. 367 meters of waterfront was restored, and 11,500 native trees, shrubs, and perennials were planted. 9 community groups have been granted \$47,000, leveraging an additional \$122,500 in community investment. 95 metres of waterfront was restored, and 400 native trees, shrubs, and perennials were planted.



A community raingarden planting completed with funding through the Kawartha Water Fund.

Much of the land base in the City of Kawartha Lakes is privately owned. Kawartha Conservation seeks to support and partner with private landowners to

implement environmental projects that improve water quality. Actions taken on private property can have a significant impact on the overall health and wellbeing of our community's shared water resources.

The Kawartha Water Fund program provides private landowners and community groups with support to implement environmental projects that will have a direct impact on the health of our lakes. This is a cost sharing program that leverages cash and in-kind contributions from the landowners, community groups and other agencies. The Water Fund is now a well-known program for landowners in Kawartha Lakes. Eligible landowner projects include agricultural Best Management Practices (BMPs), shoreline/streambank erosion control and naturalization, and Low Impact Development LID) projects to reduce stormwater impacts on private property. The Water Fund is also available for locally led non-profit community organizations. Community group projects include aquatic plant control measures, establishing community rain gardens, undertaking water-based research studies, implementing invasive species mitigation programs, and other projects that increase community awareness, involvement, and health. The Kawartha Water Fund is designed to inspire further investment from other agencies, while empowering change for land stewardship behaviours in our community.

Private landowner and community group contributions and commitments are required to obtain healthy watershed goals. Stewardship staff offer free phone and on-site consultations to aid in the preparation of appropriate project proposals. Additionally, where appropriate on a site-specific level, Integrated Watershed Management staff will monitor environmental KPIs before and after project implementation to determine the effectiveness of Kawartha Water Fund projects. This program is important as it builds relationships in our community, engages with community members in environmental action and creates a positive, trust-filled reputation in our watershed.

### Kawartha Water Fund

# Level 1

- ✓ Increase landowner awareness and engagement through Landowner and Community Grants webpage updates
- ✓ Present at 2 cottage owner association meetings and community events
- ✓ Award 20 landowners and 3 community groups with funding to implement environmental projects to improve water quality
- Monitor environmental quality characteristics at project sites if applicable

Municipal funding: \$80,800

Grant funding: \$0

In-Kind: \$160,000 **Total Value:** \$240,800

ROI: 198%

# Level 2

- ✓ Increase landowner awareness and engagement through Landowner and Community Grants webpage updates
- Present at 3 cottage owner association meetings and community events
- ✓ Award 25 landowners and 4 community groups with funding to implement environmental projects to improve water quality
- ✓ Monitor environmental quality characteristics at project sites if applicable

# Level 3

- ✓ Increase landowner awareness and engagement through Landowner and Community Grants webpage updates
- Present at 5 cottage owner association meetings and community events
- ✓ Award 33 landowners and 5 community groups with funding to implement environmental projects to improve water quality
- ✓ Monitor environmental quality characteristics at project sites if applicable

Municipal funding: \$107,500

Grant funding: \$0

In-Kind: \$215,000 Total Value: \$322,500

ROI: 200%

Municipal funding: \$137,800

Grant funding: \$0

In-Kind: \$375,000 **Total Value:** \$512,800 **ROI:** 272%

The Kawartha Water Fund program provides suggestions as to the types of projects that could receive funding while leaving room for the creativity of individual groups and private landowners. The guiding principle is that the projects should address the priority actions as recommended in the Lake Management Plans. Individual project level funding and the number of projects will vary depending on the level of funding available. While all projects will be considered, the caps per project will vary from one level of programming to the next.

The Advisory Committee recommends building this program over the five-year period to build community capacity and landowner interest. Starting at the Level 2 program will continue to build on an already solid momentum and ensure that the program demonstrates continued success. The consequences of not growing the capacity of the program includes a lack of community participation and a reduced ability to implement larger and more sophisticated projects.

Preferred program levels are highlighted in blue boxes. When multiple levels are highlighted it indicates varying levels of implementation over the 5-year period.

# 2. Implementation Outreach Program

The Implementation Outreach program contains the following detailed programs:

- 1. Partner and Community Engagement
- 2. Sedimentation and Erosion Control Planning

Level 1
Level 2
Level 3

	2024	2025	2026	2027	2028
Partner and Community Engagement					
Municipal Contribution	\$98,045	\$80,040	\$80,040	\$80,040	\$80,040
Grant Funding Leveraged					
In Kind Support Leveraged					
Total Project Value	\$98,045	\$80,040	\$80,040	\$80,040	\$80,040

		2024	2025	2026	2027	2028
Se	dimentation & Erosion Control Planning					
	Municipal Contribution	\$24,401	\$37,640	\$37,640	\$37,640	\$49,430
	Grant Funding Leveraged					
	In Kind Support Leveraged		\$6000	\$6000	\$6000	\$15,000
	Total Project Value	\$24,401	\$43,630	\$43,640	\$43,640	\$64,430

<sup>\*</sup> This value will be offset by differed revenue. See the full plan for the overall amount of differed revenue being allocated year over year.

Combined Implementation Outreach Budget	2024	2025	2026	2027	2028
Municipal Contribution *	\$122,446	\$117,680	\$117,680	\$117,680	\$129,470
Grant Funding Leveraged					
In Kind Support Leveraged		\$6000	\$6000	\$6000	\$15,000
Total Project Value	\$122,446	\$123,680	\$123,680	\$123,680	\$144,470

# Partner and Community Engagement

Program Lead: Kawartha Conservation

**Program Partners**: City of Kawartha Lakes, Trent Severn Waterway, First Nations Communities, Community Groups, Lake Associations, Academia, Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA), Environment and Climate Change Canada, Alternative Land Use Services (ALUS), City of Kawartha Lake Environmental Advisory Committee (CKLEAC)

**Recommended Funding Level:** Level 2 for 2025-2028 Level 3 for 2024

Ensuring there is unity of action among Kawartha Conservation leaders, external stakeholders, community groups, agencies, and municipal partners is important to guarantee that our goals are coordinated and being met. The Partner and Community Engagement program will maintain collaboration with our partners at various levels to ensure that programs and projects are meeting the actions that were recommended in the Lake Management plans. By working alongside the different program partners Kawartha Conservation will share and promote sound scientific decision making, local knowledge, and traditional values.



Community Advisory Panel members from local groups help to form the Lake Management Plans.

The lakes and rivers within the Kawartha watershed are an incredible resource and a major driver in increasing tourism and promoting economic growth. As the City of Kawartha Lakes population increases and audiences change, Kawartha Conservation recognizes that now more than ever there is a need to find new ways to reach those different audiences to inform on the several factors that can affect the health of our lakes and rivers. Kawartha Conservation will target outreach to the various groups that have the greatest impact and investment into the health of our lakes. Those groups include shoreline property owners, lake associations, agricultural and rural landowners, urban communities, tourists and other visitors, municipal staff and more. Increasing our outreach through presentations, improved reporting, public newsletters and more will ensure that we are reaching every level of those audiences and increasing awareness of the direct impacts they have on our watershed. All while promoting diverse ways that they can get involved to help maintain and improve the lakes that are incredibly vital to our community.

Moreover, this program will raise the profile of the several types of programs within the Action Plan to increase awareness and promote development of new partnerships that aid in maintaining a positive relationship with our community. To raise the profile of our programs, Kawartha Conservation will increase our communications and extend our reach to additional communities throughout the City of Kawartha Lakes. With improved communications, Kawartha Conservation can build heightened awareness and create more opportunities for collaboration with community groups, partner agencies, academia and more that share in our values and goals. This improved collaboration will also have a positive impact on the development of deeper more meaningful partnerships that can lead to opportunities like grant funding, program promotion, and an increased participation in recommended remedial activities.

# Partner and Community Engagement

# Level 1

- ✓ Attend local shows to provide updated information to local and seasonal residence (Fenelon Falls Country Living Show, East Central Farm Show)
- ✓ Attend and/or present at one Annual General Meeting for a Lake Association
- Provide an annual report on the implementation programs involving KRCA, partner groups and agencies
- Liaise with community groups and lake associations to build community leadership and positive relationships

Municipal funding: \$58,065

Grant funding: -In-Kind: -

Total Value: \$58,065

**ROI: 0%** 

The Advisory Committee recommends starting 2024 at a Level 3 for this project because it allows for increased coordination, planning and attendance at the International Plowing Match and Rural Expo. From 2025-2028 it is recommended to bring the program down to the Level 2 to continue building capacity and leadership within community organizations and proactively create opportunities to collaborate with other agencies that have jurisdiction over the lakes. This will build the overall capacity to implement the plan through multiple organizations and

# Level 2

- ✓ Attend local shows to provide updated information to local and seasonal residence (Fenelon Falls Country Living Show, East Central Farm Show, Spotlight on Agriculture)
- ✓ Attend and/or present at Annual General Meetings for six Lake Associations
- ✓ Provide an annual report for on the implementation programs involving KRCA, partner groups and agencies
- ✓ Liaise with community groups and lake associations to build community leadership and positive relationships
- Publish technical information and implementation program actions through various means (e.g. website, social media)
- Coordinate and facilitate a multipartner public State of Lakes
   Symposium every three years
- ✓ Create and publish a semi-annual digital newsletter on KRCA's website providing information on implementation activities from KRCA, partner agencies and groups
- ✓ Implement a basic digital dashboard on KRCA's website to report on implementation data and activities in real time

Municipal funding: \$80,040

Grant funding: In-Kind: -

Total Value: \$80,040

**ROI: 0%** 

# Level 3

- ✓ Attend local shows to provide updated information to local and seasonal residence (Fenelon Falls Country Living Show, East Central Farm Show, Spotlight on Agriculture)
- ✓ Attend and/or present at Annual General Meetings for six Lake Associations
- ✓ Provide an annual report for on the implementation programs involving KRCA, partner groups and agencies
- ✓ Liaise with community groups and lake associations to build community leadership and positive relationships
- ✓ Publish technical information and implementation program actions through various means (e.g. website, social media)
- ✓ Coordinate and facilitate a multipartner public State of Lakes Symposium every three years
- ✓ Create a semi-annual digital newsletter in conjunction with partner groups and agencies to report on implementation activities
- ✓ implement a complex digital dashboard on KRCA's website to report on implementation data and activities in real time
- ✓ Oversee the planning and preparation for attendance at the International Plowing Match and Rural Expo at the Lindsay Fairgrounds

Municipal funding: \$98,045

Grant funding: -

In-Kind:

Total Value: \$98,045

**ROI: 0%** 

Preferred program levels are highlighted in blue boxes. When multiple levels are highlighted, it indicates varying levels of implementation over the 5-year period.

# Sedimentation and Erosion Control Planning

**Program Lead:** Kawartha Conservation.

**Program Partners:** City of Kawartha Lakes; Construction Industry (local developers and contractors); Sustainable Technologies Evaluation Program.

Recommended Funding Level: Level 1 for 2024 Level 2 for 2025-2027 Level 3 for 2028

Better erosion and sediment control management at construction projects near water is a priority recommendation in all Lake Management Plans. Sediment-laden runoff is a significant threat to the health of local lakes and their connecting waters and can have both acute and long-term impacts including filling in shallow areas, smothering fish habitat, increasing phosphorus loads, and poor aesthetics.

Ongoing development is a priority in the City of Kawartha Lakes and vital to our economic growth. Responsible sediment and erosion control planning is a required part of the pre-, during, and post-construction process. Effective erosion and sediment control planning between municipalities, contractors, conservation authorities, and other construction partners reduces construction delays,



Sedimentation and erosion control site inspections help to understand what control measures are problematic, and how to work with developers to resolve them.

ensures work permit compliance, and protects the local environment.

The purpose of the 5-year program is to partner with the development industry to pilot innovative technologies and research to track erosion and sedimentation at construction sites Educating developers, contractors, construction works, and others in the development industry on best management practices related to selection, installation, and inspection of erosion and sediment control measures will help ensure the effectiveness of these technologies. The program will also work towards an updated consolidation of Erosion and Sedimentation control plan requirements and guidelines to streamline approval processes and increase efficiencies. Lastly, a key part of this program is to undertake site inspections on active construction projects to work with proponents on evaluating effectiveness and to adjust when needed to ensure the health and safety of our surface water.

Innovative technologies include the use of drones to identify high-risk areas, and turbidity meters (logging devices or real-time devices) installed in a receiving watercourse upstream and downstream of a construction site. Innovative research includes establishing a relationship between land-based and water-based sediment for total suspended solids (CSA standard) and turbidity (not CSA standard). This will allow site inspectors to detect non-compliant sediment-release events more efficiently.

# **Sedimentation and Erosion Control Planning**

# Level 1

- ✓ Establish a partnership with 1 developer to test sediment and erosion tracking technologies during the construction phase of a project.
- ✓ Establish a relationship between water clarity and sedimentation at 1 site during the construction phase of a project.
- ✓ Increased distribution of fact sheets, videos, and other education materials to proponents.
- ✓ Update erosion and sediment control guidelines at Kawartha Conservation.
- ✓ Undertake 10 construction site inspections annually to assess efficiency of control measures.
- ✓ Secure proponent-led solutions for improving control measures for 5 construction projects annually.
- Certification of 1 staff as a Certified Inspector of Sediment and Erosion Control, annually.

Municipal funding: \$24,401

In-Kind: -

Total Value: \$24,401

ROI: 0%

Grant funding:

# Level 2

- ✓ Establish a partnership with 2 developers to test sediment and erosion tracking technologies during the construction phase of a project.
- ✓ Establish a relationship between water clarity and sedimentation at 2 sites during the construction phase of a project.
- ✓ Increased distribution of fact sheets, videos, and other education materials to proponents.
- ✓ Update erosion and sediment control guidelines at Kawartha Conservation and consolidate guidelines with City of Kawartha Lakes.
- ✓ Undertake 20 construction site inspections annually to assess efficiency of control measures.
- ✓ Secure proponent-led solutions for improving control measures for 10 construction projects annually.
- Certification of 2 staff as a Certified Inspector of Sediment and Erosion Control, annually.

Municipal funding: \$37,640

Grant funding: \$6,000 In-Kind:

Total Value: \$55,740

**ROI: 48%** 

### Level 3

- ✓ Establish a partnership with 3 developers to test sediment and erosion tracking technologies during the construction phase of a project.
- ✓ Establish a relationship between water clarity and sedimentation at **3** sites during the construction phase of a project.
- ✓ Increased distribution of fact sheets, videos, and other education materials to proponents.
- ✓ Update erosion and sediment control guidelines at Kawartha Conservation and consolidate guidelines with City of Kawartha Lakes, and Parks Canada.
- ✓ Undertake 30 construction site inspections annually to assess efficiency of control measures.
- ✓ Secure proponent-led solutions for improving control measures for 15 construction projects annually.
- Certification of 3 staff as a Certified Inspector of Sediment and Erosion Control, annually.

Municipal funding: \$49,430 Grant funding: \$15,000

In-Kind:

Total Value: \$64,430

**ROI: 30%** 

The Advisory Committee recommends starting at a Level 1 programing, increasing to Level 2 for 2025-2027 and finishing 2028 at a level 3. Staring programming at the lowest level allows time to build a healthy relationship with a local developer to pilot new monitoring techniques. Increasing levels will help to establish more relationships and provide greater insight into the sedimentation and erosion control techniques that are being used on-the-ground. Increasing levels will also include multiple information transfer opportunities which will support improved techniques.

Preferred program levels are highlighted in blue boxes. When multiple levels are highlighted it indicates varying levels of implementation over the 5-year period.

# 3. Rural Program

The Community and Landowner Stewardship Services program contains the following detailed programs:

Agricultural Stewardship

Forestry and Tree Planting Stewardship

Investigative Upstream Monitoring

Level 1 Level 2 Level 3

		2024	2025	2026	2027	2028
Ag	ricultural Stewardship					
	Municipal Contribution	\$17,900	\$22,800	\$30,200	\$22,800	\$22,800
	Grant Funding Leveraged		\$55,000	\$105,000	\$55,000	\$55,000
	In Kind Support Leveraged		\$1,500	\$2,500	\$1,500	\$1,500
	Total Project Value	\$17,900	\$79,300	\$137,700	\$79,300	\$79,300

		2024	2025	2026	2027	2028
Fo	restry and Tree Planting Stewardship					
	Municipal Contribution	\$48,000	\$51,300	\$51,300	\$51,300	\$51,300
	Grant Funding Leveraged	\$81,400	\$101,900	\$101,900	\$101,900	\$101,900
	In Kind Support Leveraged	\$56,600	\$62,300	\$62,300	\$62,300	\$62,300
	Other	\$66,000	\$69,300	\$69,300	\$69,300	\$69,300
	Total Project Value	\$252,000	\$284,800	\$284,800	\$284,800	\$284,800

		2024	2025	2026	2027	2028
Inv	restigative Upstream Monitoring					
	Municipal Contribution	\$42,400	-	-	-	-
	Grant Funding Leveraged					
	In Kind Support Leveraged	\$25,900				
	Total Project Value	\$68,300	ı	-	-	-

Combined Rural Program Budget	2024	2025	2026	2027	2028
Municipal Contribution	\$108,300	\$74,100	\$81,500	\$74,100	\$74,100
Grant Funding Leveraged	\$81,400	\$156,900	\$206,900	\$156,900	\$156,900
In Kind Support Leveraged	\$82,500	\$63,800	\$64,800	\$63,800	\$63,800
Other	\$66,000	\$69,300	\$69,300	\$69,300	\$69,300
Total Project Value	\$338,200	\$364,100	\$422,500	\$364,100	\$364,100

<sup>\*</sup> This value will be offset by differed revenue. See the full plan for the overall amount of differed revenue being allocated year over year.

# Agricultural Stewardship

**Program Lead**: Landowner and Community Support

**Program Partners**: City of Kawartha Lakes, Ontario Ministry of Agriculture, Food and Rural Affairs, East Central Farm Stewardship Collaborative, ALUS Peterborough, East Central Farm Show, Ontario Soil and Crop Improvement Association, Victoria Soil and Crop Improvement Association, Ducks Unlimited Canada, Ontario Federation of Agriculture, Kawartha Lakes Haliburton Federation of Agriculture, other commodity groups.

**Recommended Funding Level:** Level 1 for 2024

Level 2 for 2025, 2027-2028 Level 3 for 2026

Since 2019, 9 agricultural demonstration projects have been implemented in Kawartha Lakes. \$208,000 in granting funding and \$8,000 in community funding was leveraged. 2,095 native trees and shrubs were planted, and 36 on-site consultations were conducted.

Farmland makes up nearly 50% of the Kawartha watershed, and is particularly important in sustaining our rural communities, with agriculture and healthy lakes being the two pillars of our vibrant local economy. Farms can have significant impact and benefits on watershed health. When such a substantial portion of the watershed is used for agriculture, a significant opportunity exists to implement innovative Best Management Practices (BMP) to make a significant difference. Farmer contributions and commitment are essential for obtaining our healthy watershed goals.

The Agricultural Stewardship program provides a range of technical services and incentives for our farming community to increase the implementation of agricultural Best Management Practices (BMPs) in our watershed. Projects include BMP activities that improve surface water quality and soil erosion control, which help to achieve Lake Management Plan targets. In 2020, Kawartha Conservation surveyed local farmers to decipher how our programs could best encourage and support the



Barnyard eavestrough project completed in partnership with agricultural landowner and Ontario Ministry of Agriculture, Food and Rural Affairs.

agricultural community to implement BMPs on their land. Respondents answered unanimously that the primary barrier to BMP implementation is financial support. Kawartha Conservation recognizes that reducing the financial burden from producers by partnering with external funding agencies will ensure we achieve the greatest participation in our Agricultural Stewardship Program, thereby achieving the greatest uptake in BMP implementation.

This program will also build on community outreach and engagement by facilitating the continued participation of Kawartha Conservation in initiatives like the East Central Farm Stewardship Collaborative (a group of 12 organizations that leverage local expertise and resources to support farm stewardship projects across the region) and the ALUS Peterborough Participant Action Committee (an initiative that provides technical and financial support to farmers undertaking stewardship projects on marginal agricultural land). Kawartha Conservation's involvement in these initiatives leads to opportunities to combine resources with our partners to increase the participation, success, and impact of agricultural stewardship projects. Outreach also includes attending local events including the East Central Farm Show, International Plowing Match, Kawartha Lakes Country Living Show, Spotlight on Agriculture, and AGMs for local commodity groups to share programs and opportunities for networking and collaboration across the watershed.

# Agricultural Stewardship

# Level 1

- ✓ Present at 3 agricultural commodity group meetings and events
- ✓ Participate in the East Central Farm Stewardship Collaborative
- ✓ Participate in the ALUS Peterborough PAC
- ✓ Increase landowner awareness and engagement through Farm Management webpage updates

**Municipal funding:** \$17,900 Grant funding: \$0

In-Kind: \$0

Total Value: \$17,900

ROI: 0%

# Level 2

- ✓ Present at **5** agricultural commodity group meetings and events
- ✓ Participate in the East Central Farm Stewardship Collaborative
- ✓ Participate in the ALUS Peterborough PAC
- ✓ Increase landowner awareness and engagement through Farm Management webpage updates and a mailout campaign to 250 farmers
- ✓ Provide on-farm consultations with 10+ landowners
- ✓ Implement 2-3 agricultural Best Management Practice (BMP) projects
- ✓ Creation 1 new educational resource
- Monitor nutrient loading and sedimentation in agricultural waterways

Municipal funding: \$22,800
Grant funding: \$55,000
In-Kind: \$1,500
Total Value: \$79,300

248%

Level 3

- ✓ Present at 7 agricultural commodity group meetings and events
- ✓ Participate in the East Central Farm Stewardship Collaborative
- ✓ Participate in the ALUS Peterborough PAC
- ✓ Increase landowner awareness and engagement through Farm Management webpage updates and a mailout campaign to 500 farmers
- ✓ Provide on-farm consultations with 20+ landowners
- ✓ Implement 5 agricultural
   Best Management Practice
   (BMP) projects
- ✓ Create 1 new educational resource
- ✓ Monitor nutrient loading and sedimentation in agricultural waterways
- ✓ Host 1 farm tour

Municipal funding: \$30,200
Grant funding: \$105,000
In-Kind: \$2,500
Total Value: \$137,700
ROI: 357%

The Advisory Committee recommends starting at a Level 1 program for the first year, increasing to the Level 2 program for 3-years and then increasing service to a Level 3 for the final year. This level of programming will support our agricultural sector to implement BMPs and protect our water while also highlighting innovative technologies. The City of Kawartha Lakes has a significant and well-respected agricultural community. By developing these relationships and working together towards a healthier lake system, we are better able to affect change on the landscape. Reducing the level of activity will make this relationship building more difficult and will impact the number of in-the-ground projects we can accomplish.

Preferred program levels are highlighted in blue boxes. When multiple levels are highlighted it indicates varying levels of implementation over the 5-year period.

ROI:

# Forestry and Tree Planting Stewardship

**Program Lead**: Kawartha Conservation

Program Partners: Forests Ontario, Durham Region, City of Kawartha Lakes, TD Friends of the Environment,

Ontario Woodlot Association

Timeline: Level 2 for 2024

Level 3 for 2025-2028

Since 2018, Kawartha Conservation has implemented 8 private land large scale plantings, 2 community plantings, and hosted 5 annual seedling sales. With the help of funding from external partners, we were able to offset large scale tree planting costs by 60-95% and implement community driven urban plantings on public land.

Rural landowners have a unique opportunity to impact their watershed's health simply because they often own and manage large areas (e.g., 10-100 acres), which are home to valuable ecosystem features that protect our water resources and overall health. Private rural properties often possess significant forested lands, wetlands, streams, and pollinator habitat. It is imperative that these features are maintained in proper functioning order. Rural land management can be complex and complicated, and as our climate changes the level of complexity increases. Extreme weather conditions, increasing populations of forest pests and invasive species all pose new challenges for rural land managers.

The Forestry and Tree Planting program works to provide large scale tree planting services at a reduced cost to the landowner. The goal of this is to increase forest cover to 30% as laid out in the Stewardship Strategy and all the Lake Management Plans. This program includes projects such as afforestation, reforestation, windrows, and riparian plantings. With



Community tree planting events encourage residence to be involved in environmental improvements.

additional forest cover, these projects will also help to target the goal sequestration of carbon as laid out in the City of Kawartha Lakes Healthy Environment Plan. Plantings will also assist in decreasing soil erosion, all while aiding in soil remediation. With these planting projects we create resilient planting plans to grow and thrive through the ever-changing climate of our future.

Other benefits of the tree planting program are that City of Kawartha Lakes private landowners receive additional resources during consultation on topics such as invasive species management, climate change, forest health, riparian habitat, and buffer zones, as well as the opportunity to implement windrows that not only benefit them but the community that use the surrounding rural roads.

The forestry and tree planting program also aims to increase urban forest cover through engaging the community in volunteer planting events, and an urban tree program. These programs allow us to engage with the community on a personal level to help enhance their land and community spaces. These tree plantings will help enhance our watershed and community greenspace by reducing the heat island effects, increasing shade and wildlife habitat as well as reduce runoff into local water systems.

# Forestry and Tree Planting Stewardship

# Level 1

- ✓ Increase forest cover up to 10ha each year in CKL through increasing the number of hectares of afforested land to help reach the Kawartha Conservation goal of 30% forest cover jurisdiction wide.
- ✓ Sell 8,000 trees during the annual seedling sale to citizen of the City of Kawartha Lakes help increase forest cover up on private lands
- ✓ Plant 11,000 trees through the forestry and tree planting program in the City of Kawartha Lakes to help sequester a goal of 71 tons of carbon each year to help the region reach their emission reduction rates for 2030
- ✓ Host 1 community tree planting event in an urban area and engage the community.

Municipal funding: \$45,000

Other: \$63,000

Grant funding: \$58,900 Fee of service: \$50,900 Total Value: \$217,800

ROI: 384%

# Level 2

- Increase forest cover up to 15ha each year in CKL through increasing the number of hectares of afforested land to help reach the Kawartha Conservation goal of 30% forest cover jurisdiction wide.
- ✓ Sell **15,000** trees during the annual seedling sale to citizen of the City of Kawartha Lakes help increase forest cover up on private lands.
- Plant **15,000** trees through the forestry and tree planting program in the City of Kawartha Lakes to help sequester 97 tons of carbon each year to help CKL reach their emission reduction rates for 2030
- Implement an urban trees project to increase forest cover in urban centres by planting 5 Urban Public or **Private Properties**
- Host 2 community tree planting event on public urban lands and engage the community.

Municipal funding: \$48,000

Other: \$66,000

Grant funding: \$81,400 Fee of Service: \$56,600 Total Value: \$252,000

ROI: 425%

### Level 3

- ✓ Increase forest cover up to 16ha each year in CKL through increasing the number of hectares of afforested land to help reach the Kawartha Conservation goal of 30% forest cover jurisdiction wide.
- ✓ Sell 15,000 trees during the annual seedling sale to citizen of the City of Kawartha Lakes help increase forest cover up on private lands.
- ✓ Plant **18,000** trees through the forestry and tree planting program in the City of Kawartha Lakes to help sequester 117 tons of carbon each year to help CKL reach their emission reduction rates for 2030
- ✓ Implement an urban trees project to increase forest cover in urban centres by planting 10 Urban Public or **Private Properties**
- ✓ Host 2 community tree planting event on public urban lands and engage the community.

Municipal funding: 51,300

Other: \$69,300

Grant funding: \$101,900 Total Value: \$284,800

**ROI: 455%** 

Fee of Service: \$62,300

The Advisory Committee recommends beginning implementation at Level 2 for the first year and increasing service to a Level 3 for 2025-2028. The recommended delivery levels will provide support to private landowners, leading to improved and maintained ecosystem function on large rural lots.

Preferred program levels are highlighted in blue boxes. When multiple levels are highlighted it indicates varying levels of implementation over the 5-year period.

# **Investigative Upstream Monitoring**

**Program Lead:** Kawartha Conservation

**Program Partners:** Trent University

Recommended Funding Level: Level 2 for 2024

Investigative Upstream monitoring focuses on surface water draining into tributaries entering our lakes that have been identified by the Lake Management plan process as having high concentration of nutrients and contaminants. Knowing the point source of these nutrients will help us to design and implement stewardship restoration projects to address the nutrient loading at these sites. The intention of the Investigative Upstream Monitoring Program is to reduce the data gaps by performing more comprehensive water quality & quantity data collection (more sites on one stream) over a three-year period, to identify areas of water quality degradation and plan for remediation or restoration efforts through our stewardship department.

Currently, three streams are monitored through a collaboration with Trent University, which has strengthened strategic, beneficial, and impactful opportunities for learning, a key strategic goal of Kawartha Conservation. By collaborating, our partners benefited from our technical expertise and vast knowledge of the landscape. In addition, partners with students can gain critical hands-on experience from Kawartha Conservation staff.

Unfortunately, the program initiated a year later than anticipated due to pandemic response (2021), on three tributaries **Sucker Creek, Stoney** 



Monitoring streams across the watershed will identify key areas where nutrients enter our waterways.

Creek, and Janetville Creek, and will continue in 2023 (as year 2 of three). To round up the third year of monitoring on these tributaries Kawartha Conservation will require an extension of one year into 2024 (year 3 of 3). At the end of 2024 we will have addressed all the high priority tributary of concerns identified through the Lake Management Plans.

# **Investigative Upstream Monitoring**

# Level 2

- ✓ One year monitoring period
- ✓ 3 streams (21 sites based on road crossings)
- ✓ Flow data collected simultaneously -Ontario Stream Assessment Protocol
- ✓ Water chemistry sampling 8 time a year
- ✓ Parameters include nutrients (phosphorus & nitrogen), total suspended solids, chlorideproxy for road salt.
- ✓ Produce summary report including recommendations for stewardship prioritization projects.

Municipal funding: \$0 Deferred Revenue: \$42,400

Grant funding: \$0 In-Kind: \$25,900 Total Value: \$68,300

**ROI: 61%** 

# 4. Shoreline Program

The Rural and Shoreline Monitoring program contains the following detailed programs: Waterfront Stewardship
Community Science Monitoring
Bobcaygeon Dam Aquatic Habitat Assessment

Level 2
Level 3

		2024	2025	2026	2027	2028
W	aterfront Stewardship					
	Municipal Contribution	\$22,000	\$13,800	\$22,000	\$13,800	\$22,000
	Grant Funding Leveraged	\$35,000		\$35,000		\$35,000
	In Kind Support Leveraged	\$1,500		\$1,500		\$1,500
	Total Project Value	\$58,500	\$13,800	\$58,500	\$13,800	\$58,500

		2024	2025	2026	2027	2028
Со	mmunity Science Monitoring					
	Municipal Contribution	\$25,300	\$25,300	\$26,850	\$25,300	\$29,150
	Grant Funding Leveraged	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
	In Kind Support Leveraged					
	Total Project Value	\$65,300	\$65,300	\$66,850	\$65,300	\$69,150

	2024	2025	2026	2027	2028
bcaygeon Dam Aquatic Habitat sessment					
Municipal Contribution	-	-	-	-	-
Grant Funding Leveraged	\$46,600	\$46,600	\$46,600	\$46,600	\$46,600
In Kind Support Leveraged	\$11,450	\$11,450	\$11,450	\$11,450	\$11,450
Total Project Value	\$58,050	\$58,050	\$58,050	\$58,050	\$58,050

Combined Shoreline Program Budget	2024	2025	2026	2027	2028
Municipal Contribution*	\$47,300	\$39,100	\$48,850	\$39,100	\$51,150
Grant Funding Leveraged	\$121,600	\$86,600	\$121,600	\$86,600	\$121,600
In Kind Support Leveraged	\$12,950	\$11,450	\$12,950	\$11,450	\$12,950
Total Project Value	\$181,850	\$137,150	\$183,400	\$137,150	\$185,700

<sup>\*</sup> This value will be offset by differed revenue. See the full plan for the overall amount of differed revenue being allocated year over year.

# Waterfront Stewardship

Program Lead: Landowner and Community Support

Program Partners: City of Kawartha Lakes, Real Estate Board, CKLEAC, Cottage and Communication

Associations.

**Recommended Funding Level:** Level 1 for 2025, 2027

Level 2 for 2024, 2026, 2028

Since 2019, the Native Plant Sale drew 104 landowners to plant 3,265 native plants in Kawartha Lakes.

Most waterfront properties in the City of Kawartha Lakes are privately owned. One of the primary reasons tourists and new residents come to the Kawartha Lakes is the abundant recreational opportunities our lakes and waterways provide. Recreation and other activities can have significant impacts on the health of our waterways, which could limit access and enjoyability for the entire community. With increased tourism and development in our region, it is imperative that Kawartha Conservation works with the municipality and external agencies on the public spaces on our lakes and waterways to protect and improve water quality and prevent erosion.

The Waterfront Stewardship program aims to achieve 75% naturalized and stabilized streambanks and shorelines on all shoreline projects as outlined in the



Naturalized shorelines and streambanks help to reduce erosion and runoff.

Stewardship Strategy. By implementing on-the-ground demonstration projects in high traffic, publicly accessible areas Kawartha Conservation can help to educate and inspire private landowners to adopt similar projects on their properties. The team will monitor water at all demonstration sites prior to and after the completion of project activities to determine project success. Over the past 5 years, a previous rendition of this program attracted interest and investment from the municipality, community, and external funding agencies who all aim to improve the quality of experience our waterways have to offer. We will continue to build relationships with project partners and funders to implement the most meaningful, innovative, and attractive projects possible.

This program supports private landowners to undertake land stewardship initiatives on their shorelines by offering technical advice for addressing shoreline issues and offering a semi-annual Native Plant Sale. The Native Plant Sale supplies residents with waterfront stabilizing native plants and shrubs at a reduced cost. Kawartha Conservation staff select species and provide supplementary resources with the goal of helping landowners to enhance their shorelines while simultaneously preventing erosion and nutrient runoff to improve water quality across our watershed.

Additionally, a Watershed Welcome package will be created annually and distributed to partnering realtors to reach the largest number of new landowners in our community. This package will contain pertinent information about waterfront stewardship, including project examples, funding opportunities, plant sale promotions, and permit guidelines to ensure landowner projects are implemented safely and effectively.

# Waterfront Stewardship

### Level 1

- ✓ Increase landowner awareness and engagement through Erosion and Shoreline Protection webpage updates
- ✓ Increase new landowner awareness and engagement through Watershed Welcome packages
- ✓ Provide 800 native plants to waterfront landowners through annual shoreline plant kit sale

Municipal funding: \$13,800

Grant funding:

\$0 \$0

In-Kind:
Total Value:

\$13,800

ROI:

0%

### Level 2

- ✓ Increase landowner awareness and engagement through Erosion and Shoreline Protection webpage updates
- ✓ Increase new landowner awareness and engagement through Watershed Welcome packages
- ✓ Provide 1,200 native plants to waterfront landowners through annual shoreline plant kit sale
- ✓ Implement 1-2 public waterfront naturalization projects
- ✓ Monitor sedimentation and nutrient loading at project waterfronts
- ✓ Present at 3 cottage owner association meetings

Municipal funding: \$22,000
Grant funding: \$35,000
In-Kind: \$1,500
Total Value: \$58,500
ROI: 166%

# Level 3

- ✓ Increase landowner awareness and engagement through Erosion and Shoreline Protection webpage updates
- Increase new landowner awareness and engagement through Watershed Welcome packages
- ✓ Provide 2,000 native plants to waterfront landowners through annual shoreline plant kit sale
- ✓ Implement **3-5** public waterfront naturalization projects
- Monitor sedimentation and nutrient loading at project waterfronts
- ✓ Present at 5 cottage owner association meetings
- ✓ Engage **100** community volunteers in public waterfront naturalization projects

 Municipal funding:
 \$26,500

 Grant funding:
 \$110,000

 In-Kind:
 \$2,500

 Total Value:
 \$139,000

 ROI:
 427%

Most of our shoreline is privately owned and managed. As the ribbon of land surrounding our lakes, this area is particularly sensitive to management techniques and often has a direct impact on lake water quality. The Advisory Committee recommends alternating between a Level 2 and Level 1 for this program because it combines the provision of information to private landowners with the collaboration between Real Estate Professionals and the City of Kawartha Lakes. Building these partnerships and collaborating with community partners will help to improve the state of our shorelines. Reducing the level of programming offered to the shoreline community will significantly impact on the quality of projects and our ability to maintain or improve water quality within our lakes.

Preferred program levels are highlighted in blue boxes. When multiple levels are highlighted it indicates varying levels of implementation over the 5-year period.

# **Community Science Monitoring**

Program Lead: Kawartha Conservation

**Program Partners:** City of Kawartha Lakes; Kawartha Lake Stewards Association; Scugog Lake Stewards Association; other community associations/groups, lakeshore residents

Recommended Funding Level: Level 3 for 2024-2028

The nearshore area is under the direct influence of activities performed on the shoreline (urban development, agriculture, specific shoreline alteration) in addition to acting as a transition zone that is highly influenced from waters offshore and land and tributary drainage. The data collected in near shore areas can act as an early warning indicator for the lakes and thus identify "problem areas" or "hot spots" of degraded water quality and threats to human and animal health in addition to a decrease in biodiversity and habitat.

Routine water quality monitoring was identified as a priority recommendation in every Lake Management Plan. In addition, members of the public, councillors, environmental groups, and other governmental agencies have all questioned the health of the surrounding waterbodies due to the greater movement of people from the Greater Toronto Area to the Kawarthas, the reliance of the lake for tourism and recreational dollars, and the growing awareness of environmental issues such as climate change, harmful algae blooms, contaminants, and invasive species. This awareness of the health of our waterbodies has major implications to the health and well-being of the citizens of Kawartha Lakes, whom many have spent their lives connecting to their favourite lake or stream.



Community Science engages community members to actively participate in the monitoring of their local lakes.

This citizen science program will continue the successful Nearshore Monitoring Program (2019-2021) and aim to continue to empower our community to act and provide valuable information on the concentrations of various nutrients in our waterbodies.

The objectives of the 5-year Community Science Monitoring Program are to monitor the nearshore environments health annually, provide up-to-date results to the public and key lake stakeholders, track changes over a 3- and 5-year period to inform Lake Plan actions, and provide stewardship with information on areas with degraded nearshore water quality. These findings will guide stewardship efforts through the Water Fund and Waterfront Stewardship programs. The monitoring and hands-on components will work together to seek funding.

# **Community Science Monitoring**

# Level 1

- ✓ Monthly (May to October) contaminant concentration monitoring at 40 sites across the high priority lakes (Sturgeon, Balsam, Cameron, Pigeon), yearly.
- ✓ Engage at least 40 volunteers in monitoring activities annually.
- ✓ Reporting of key findings to lake stakeholders through online dashboards.
- ✓ Annual reporting of key findings.
- ✓ Summary report of degraded areas of water quality for the planning of future stewardship project.
- ✓ Monthly social media posts with science summary.
- ✓ 3 and 5-year trending summary report.
- ✓ Annual volunteer appreciation event. \*\*

Municipal funding: \$\*17,680
Grant funding: \$20,000
In-Kind: \$0
Total Value: \$37,680

**ROI: 113%** 

\*Year 3: \$19,200 \*Year 5: \$21,150

# Level 2

- ✓ Monthly (May to October) contaminant concentration monitoring at 55 sites across the high priority lakes (Sturgeon, Balsam, Cameron, Pigeon), and medium priority lakes (Canal, Mitchell, Dalrymple), yearly.
- ✓ Engage at least **55 volunteers** in monitoring activities annually.
- ✓ Reporting of key findings to watershed residents through online dashboards.
- ✓ Annual reporting of key findings.
- ✓ Summary report of degraded areas of water quality for the planning of future stewardship project.
- ✓ Monthly social media posts with science summary.
- ✓ 3 and 5-year trending summary report.
- ✓ Annual volunteer appreciation event. \*\*

Municipal funding: \$\*20,000

Grant funding: \$30,000 In-Kind: \$0

Total Value: \$50,000

ROI: 150%

\*Year 3: \$21,500 \*Year 5: \$23,440

# Level 3

- ✓ Monthly (May to October) contaminant concentration monitoring at 70 sites across the high priority lakes (Sturgeon, Balsam, Cameron, Pigeon), medium priority lakes (Canal, Mitchell, Dalrymple), and low priority lakes (Head, Shadow, Four Mile), yearly.
- ✓ Engage at least 70 volunteers in monitoring activities annually.
- ✓ Reporting of key findings to watershed residents through online dashboards.
- ✓ Annual reporting of key findings.
- ✓ Summary report of degraded areas of water quality for the planning of future stewardship project.
- ✓ Monthly social media posts with science summary.
- ✓ 3 and 5-year trending summary report.
- ✓ Annual volunteer appreciation event. \*\*

Municipal funding: \$\*25,300
Grant funding: \$40,000
In-Kind: \$0
Total Value: \$65,300

**ROI: 178%** 

\*Year 3: \$26,850 \*Year 5: \$29,150

The Advisory Committee recommends the Level 3 program as it will provide for monitoring on all ten of major lakes within our watershed at the same time. This monitoring will provide the greatest amount of insight into the health of our nearshore lake environment.

Preferred program levels are highlighted in blue boxes. When multiple levels are highlighted it indicates varying levels of implementation over the 5-year period.

<sup>\*</sup> Funding will differ for year 3 & 5 to accommodate addition reporting.

# Bobcaygeon Dam Aquatic Habitat Assessment

**Program Lead:** Kawartha Conservation.

**Program Partners:** Save the Walleye Campaign; Jamie Schmale's Office; Parks Canada; Ontario Ministry of Natural Resources and Forestry; Fleming College Fish and Wildlife Program.

**Recommended Funding Level:** Level 3 for 2024-2028 (note: dependent on grants)

The aquatic system immediately downstream of the Bobcaygeon Dam (Big Bob Channel, Bobcaygeon River) has long been recognized as an important reproductive area for fishes, especially Walleye but also other aquatic organisms that exist in connected waters which includes Pigeon Lake, Buckhorn Lake, and Chemong Lake (collectively called the 'Tri-Lakes').

The local community has expressed significant concerns that the aquatic ecosystem in this section is not functioning as optimally as it could be, as exemplified by the <u>Save the Walleye</u> campaign. Of particular concern is the management of water flows through the Bobcaygeon Dam, specifically the perception that this leads to sub-optimal and/or degrading habitat conditions for spawning Walleye and other aquatic life. Specifically, there is a perception that the current flow regime causes the following negative impacts:

- Reduced surface area of habitat due to low water levels, with sections of prime spawning grounds being 'high and dry' during all or part of the spawning period.
- Increased flow velocities at the substrate that dislodge deposited and developing eggs.
- Reductions in dissolved oxygen and water temperature.

The purpose of the 5-year program is to:

- Monitor spring Walleye spawning habitat conditions downstream of Bobcaygeon Dam over a multi-year period to confirm if any water quality, quantity, or habitat limitations exist that negatively impact Walleye spawning success.
- Share information with partners and develop site-specific recommendations that strive to improve Walleye spawning habitat conditions in Big Bob Channel below the dam.



Bobcaygeon Dam – working with program partners to determine if the aquatic system downstream is being affected by water flows.

Local organizations including provincial and federal governments, academia, First Nations, angling and hunting clubs, and conservation authorities met in December 2020 on the topic and expressed a general interest in pursuing a science-based study of the local aquatic ecosystem.

Comparison of existing conditions against known Walleye spawning habitat preferences for each parameter of interest, for example optimal spawning depth, optimal dissolved oxygen concentrations, etc. Annual monitoring of key water quality, quantity, and aquatic habitat conditions in the spring, including water levels, water flows, dissolved oxygen, water temperature, substrate, and riparian land use.

# Bobcaygeon Dam Aquatic Habitat Assessment

# Level 1

- ✓ Aquatic habitat monitoring of fish spawning and nursery habitat along 2.2 ha (from dam to Main St.) of Bobcaygeon River annually during spring.
- ✓ Secure 2 students to undertake Walleye Watch spawning population monitoring during spring.
- ✓ Coordinate 1 multistakeholder meeting per year for project info sharing.
- ✓ Partner with 3 external organization on monitoring efforts.
- ✓ Technical report on fish spawning habitat conditions and constraints in the Bobcaygeon River.

# Level 2

- ✓ Aquatic habitat monitoring of fish spawning and nursery habitat along 7.1 ha (from dam to East St.) of Bobcaygeon River annually during spring.
- ✓ Secure **4** students to undertake Walleye Watch spawning population monitoring during spring.
- ✓ Coordinate 2 multistakeholder meetings per year for project info sharing.
- ✓ Partner with 3 external organizations on monitoring efforts.
- ✓ Technical report on fish spawning habitat conditions and constraints in the Bobcaygeon River.

# Level 3

- Aquatic habitat
  monitoring of fish
  spawning and nursery
  habitat along 11.5 ha
  (from dam to Pigeon Lake)
  of Bobcaygeon River
  annually during spring.
- ✓ Secure **6** students to undertake Walleye Watch spawning population monitoring during spring.
- ✓ Coordinate 3 multistakeholder meetings per year for project info sharing.
- ✓ Partner with 3 external organizations on monitoring efforts.
- ✓ Technical report on fish spawning habitat conditions and constraints in the Bobcaygeon River.

Municipal funding: \$0

Grant funding: \$36,140 In-Kind: \$5,150 **Total Value:** \$41,290

**ROI: 0%** 

Municipal funding: \$0

Grant funding: \$41,370
In-Kind: \$9,300
Total Value: \$50,670

**ROI: 0%** 

Municipal funding: \$0

Grant funding: \$46,600 In-Kind: \$11,450 **Total Value:** \$58,050

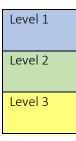
**ROI: 0%** 

The Advisory Committee recommends Level 3 programming. This service level will monitor the largest habitat area which will help to discern if dam water flows need to be adjusted to protect valuable habitat. This program level will also increase the outreach efforts to the local community which will impact awareness surrounding this important issue.

Preferred program levels are highlighted in blue boxes. When multiple levels are highlighted it indicates varying levels of implementation over the 5-year period.

# 5. Urban Program

The Urban Program contains the following detailed programs: Stormwater Monitoring Urban Restoration



		2024	2025	2026	2027	2028
Sto	ormwater Monitoring					
	Municipal Contribution	\$123,300	\$100,500	\$100,500	\$100,500	\$100,500
	Grant Funding Leveraged					
	In Kind Support Leveraged					
	Total Project Value	\$123,300	\$100,500	\$100,500	\$100,500	\$100,500

		2024	2025	2026	2027	2028
Ur	ban Restoration					
	Municipal Contribution	\$17,600	\$22,300	\$31,000	\$22,300	\$22,300
	Grant Funding Leveraged		\$40,000	\$110,000	\$40,000	\$40,000
	In Kind Support Leveraged		\$1,500	\$2,500	\$1,500	\$1,500
	Total Project Value	\$17,600	\$63,800	\$143,500	\$63,800	\$63,800

Combined Stormwater Monitoring and Restoration Budget	2024	2025	2026	2027	2028
Municipal Contribution*	\$140,900	\$122,800	\$131,500	\$122,800	\$122,800
Grant Funding Leveraged		\$40,000	\$110,000	\$40,000	\$40,000
In Kind Support Leveraged		\$1,500	\$2,500	\$1,500	\$1,500
Total Project Value	\$140,900	\$164,300	\$244,00	\$164,300	\$164,300

<sup>\*</sup> This value will be offset by differed revenue. See the full plan for the overall amount of differed revenue being allocated year over year.

# **Stormwater Monitoring Program**

**Program Lead**: Kawartha Conservation

**Program Partners**: City of Kawartha Lakes, Fleming College, and Developers

Recommended Funding Level: Level 2 for 2024-2028

The City of Kawartha Lakes has several urban centres that are poised for growth in the coming years. It is critical that we develop a program designed to support this growing community to protect our watershed. Urban centers, such as Lindsay, has been recorded to increase phosphorus concentrations up to 0.114 mg/L (note that the Provincial Water Quality Objective is 0.03 mg/L, nearly 4 times lower) in the Scugog River. Furthermore, urban centers are source points for other contaminant types such as chloride, hydrocarbons, and heavy metals.

During the next 5 years, our focus will be in the largest urban centre of CKL, Lindsay, and the urban runoff draining into the Scugog River. The Stormwater Monitoring program will gather baseline water quality and quantity information from both stormwater outlets and streams. Our collection efforts will take place at outlets during storm events occurring spring, summer and fall months as well as at 5 major streams that drain directly into the Scugog River (Distillery, Jennings, Sinister, Albert, and Sucker creeks).

Urban stormwater runoff has been identified throughout all Lake Management Plans to be a concern due to higher rates of imperviousness and the concentration of contaminant sources. Building upon the successes of the



Investigative Upstream Monitoring program for agricultural tributaries, we can transfer the same approach of monitoring multiple sites along a watercourse, to identify hotspots along the Scugog River.

In the older development areas, we will determine whether implementation measures need to be put in place to improve stormwater runoff, while in the newer development areas we will track storm water runoff to ensure that water quality and quantity is satisfactory and if not, ensure that the proper measures are put in place by developers to improve the stormwater runoff entering the Scugog River.

In addition, the information gathered will help direct the upcoming monitoring plans that will need to be developed by municipalities as part of the new provincial guidance being released in 2023, that are specific to the Consolidated Linear Infrastructure Permissions Approach (CLI-EAC). The preliminary data being collected will directly correlate with the two main objectives that these plans will have to include.

- i) Identifying existing or emerging water quality and quantity issues in the key receivers as well as track future changes to water quality and quantity including long term trends of receiver health due to urbanization and
- ii) Determining cumulative impacts on the receiver due to water quality and quantity changes over time due to urbanization.

### **Stormwater Monitoring**

### Level 1

- ✓ Calculating contaminant inputs from 63% of the Lindsay Urban Area, into the Scugog River, annually.
- ✓ Calculating contaminant inputs from 25% of storm sewer catchments in the Lindsay Urban Area, into the Scugog River, annually.
- ✓ Calculating contaminant inputs from 53% of watercourse catchments in the Lindsay Urban Area, into the Scugog River, annually.
- ✓ Determining source bacteria at 1 storm sewer outlet and 1 stream location.
- ✓ Continuous conductivity logger at 1 storm sewer outlet

Municipal funding: \$81,000

Grant funding: \$0
In-Kind: \$0
Total Value: \$81,000

**ROI: 0%** 

### Level 2

- ✓ Calculating contaminant inputs from 63% of the Lindsay Urban Area, into the Scugog River, annually.
- ✓ Calculating contaminant inputs from 25% of storm sewer catchments in the Lindsay Urban Area, into the Scugog River, annually.
- ✓ Calculating contaminant inputs from 53% of watercourse catchments in the Lindsay Urban Area, into the Scugog River, annually.
- Determining source of bacteria at 2 storm sewer outlets and 2 stream locations.
- ✓ Continuous conductivity loggers at 2 storm sewer outlets.

Municipal funding: \*\$100,500

Grant funding: \$0
In-Kind: \$0

Total Value: \$100,500

ROI: 0%

\*Year 1: \$123,300

### Level 3

- ✓ Calculating contaminant inputs from 63% of the Lindsay Urban Area, into the Scugog River, annually.
- ✓ Calculating contaminant inputs from 25% of storm sewer catchments in the Lindsay Urban Area, into the Scugog River, annually.
- ✓ Calculating contaminant inputs from 53% of watercourse catchments in the Lindsay Urban Area, into the Scugog River, annually.
- Determining source of bacteria at 3 storm sewer outlets and 3 stream locations.
- ✓ Continuous conductivity loggers at5 storm sewer outlets.

Municipal funding: \*\$136,250

Grant funding: \$0
In-Kind: \$0

Total Value: \$136,250

ROI: 0%

\*Year 1: \$165,150

\*Year 1 will have slightly higher budget than all other years, due to equipment purchases taking place.

The Advisory Committee recommends Level 2 programming so that base line information can be collected to be provide Stewardship with the information needed to pinpoint locations for restoration projects. Reducing the program level will not provide enough information to be able to help locate key areas for restoration projects.

Preferred program levels are highlighted in blue boxes. When multiple levels are highlighted it indicates varying levels of implementation over the 5-year period.

Text in bold represents unique activities between the levels.

#### **Urban Restoration**

Program Lead: Landowner and Community Support

Program Partners: City of Kawartha Lakes, CKLEAC, contractors, community organizations

Recommended Funding Level: Level 1 for 2024

Level 2 for 2025, 2027-2028

Level 3 for 2026

Since 2019, Kawartha Conservation has successfully implemented 14 urban demonstration projects, with \$75,000 in grant funding and \$38,200 in community investment leveraged. Through these projects, 456 metres of waterfront was restored, and 2,190 native trees, shrubs and perennials were planted.

The City of Kawartha Lakes has several urban centres that are poised for growth in the coming years. It is critical that we develop a program designed to support this growing community to protect our watershed. The Stormwater Monitoring and Restoration program is a new initiative that will consist of two separate subprograms: 1) the Stormwater Monitoring program, and 2) the Urban Restoration program.



Kent Street silva cell installation to help with urban runoff and reduce the heat island effect.

The Urban Restoration program will focus on natural infrastructure-based demonstration projects in our urban centres to build resilient communities in the face of climate change. At the core of natural infrastructure is the principle of Low Impact Development (LID) — an alternative to conventional stormwater management that supplements municipal water infrastructure with practices that treat stormwater at the source, preventing flooding and erosion. Examples of natural infrastructure include permeable pavement, green roofs, raingardens, bioswales, tree cells, and rainwater harvesting and storage. This program aims to create demonstration projects in high traffic, publicly accessible areas to educate and inspire private landowners to adopt similar projects on their properties.

Decentralized LIDs absorb stormwater, reducing pressure on municipal stormwater facilities, and consequently the reducing the probability of stormwater facility failure events that are only likely to increase in the face of climate change and extreme weather. This program will empower private landowners to undertake land stewardship initiatives on their properties by offering free, downloadable landscape templates for Low Impact Development (LID) lawn alternatives. This approach will provide professionally curated resources, instructions, and landscape templates for independent implementation by landowners.

Kawartha Conservation will seek to collaborate with businesses and developers to expand the implementation to corporate grounds and new subdivisions. The primary goal of inspiring private land LIDs is to grow the amount of natural infrastructure and direct stormwater treatment areas across our watershed. Additionally, this program provides secondary benefits including increased biodiversity, habitat quantity and connectivity, community awareness and of natural processes.

### **Urban Restoration**

#### Level 1

- ✓ Increase landowner awareness and engagement through Healthy Gardens webpage updates
- ✓ Increase urban naturalization through **50** digital landowner garden template downloads

Municipal funding: \$17,600
Grant funding: \$0
In-Kind: \$0
Total Value: \$17,600
ROI: 0%

#### Level 2

- ✓ Increase landowner awareness and engagement through Healthy Gardens webpage updates
- ✓ Increase urban naturalization through 100 digital landowner garden template downloads
- ✓ Implement 1-2 public land LID projects
- ✓ Collaborate with 2 businesses/developments to implement LID projects
- Monitor stormwater runoff diversion and water quality at project sites

 Municipal funding:
 \$22,300

 Grant funding:
 \$40,000

 In-Kind:
 \$1,500

 Total Value:
 \$63,800

 ROI:
 187%

### Level 3

- ✓ Increase landowner awareness and engagement through Healthy Gardens webpage updates
- ✓ Increase urban naturalization through 200 digital landowner garden template downloads
- ✓ Implement 3-5 public land LID projects
- ✓ Collaborate with 3

  businesses/developments

  to implement LID projects
- ✓ Monitor stormwater runoff diversion and water quality at project sites
- ✓ Present at 2 public meetings
- Engage 50 community volunteers in public land projects

Municipal funding: \$31,000
Grant funding: \$110,000
In-Kind: \$2,500
Total Value: \$143,500
ROI: 363%

The Advisory Committee recommends starting at a service Level 1, increasing to a Level 2 for 2025-2027 and increasing service to a Level 3 in 2028. Building the program will encourage practical partnership development with the landscape and development industries to reduce urban runoff by facilitating voluntary lot level stormwater management by private landowners in new and existing homes.

Preferred program levels are highlighted in blue boxes. When multiple levels are highlighted it indicates varying levels of implementation over the 5-year period.

Text in bold represents unique activities between the levels.

### Appendix B

### **Prioritization Matrix**

A summary of the recommendations and priorities for all Lake Plans, each recommendation has a weighted value. The final column has been added to indicate which recommendation will be addressed in the new Action Plan programs.

		Urban/Rural						Rural							
Recommendation	Strategy	Balsam/Cameron	Canal/Mitchell	Scugog	Pigeon	Sturgeon	Four Mile	Head/Rush	Shadow/Silver	# of Highs (3)	# of Mediums (2)	# of Lows (1)	# of Any	Weighted Value	Implementation Action Plan 2024 Programs
										-	4				
Responsible Development and Construction	Urban and Rural Infrastructure	Н	Н	Н	Н	M	Н	Н	Н	7	1	0	8	23	<b>-</b>
Shoreline Naturalization	Stewardship	Н	Н	Н	Н	Н	М	Н	Н	7	1	0	8	23	/
Urban Stormwater BMP Projects	Stewardship	Н	Н	Н	Н	Н	М	Н	Н	7	1	0	8	23	
Invasive Species Management	Stewardship	Н	Н		Н	Н	Н	Н	Н	7	0	0	7	21	
Coordinated Monitoring of Lake Health	Research and Monitoring	М	Н	Н	Н	М	М	Н	Н	5	3	0	8	21	
Septic System Management	Stewardship	M		Н	М	Н	Н	Н	Н	5	2	0	7	19	1
Keeping stakeholders informed	Communications and Outreach	Н			Н	Н	Н	Н	Н	6	0	0	6	18	
Implementing other community plans	Strategic Planning	Н	Н		М	Н	М	M	Н	4	3	0	7	18	
Management of Public Waterfronts	Urban and Rural Infrastructure	М	Н		М	Н	М	Н	Н	4	3	0	7	18	
Public/Technical Advisory Committees	Communications and Outreach	Н	Н	Н	Н	Н	M			5	1	0	6	17	✓ <u> </u>
Stormwater Management Planning	Urban and Rural Infrastructure	Н	Н	Н	Н	Н				5	0	0	5	15	<b>√</b>
Aquatic Plant Management Options	Communications and Outreach	Н	Н		Н	Н	Н			5	0	0	5	15	

		Urban/Rural						Rural							
Recommendation	Strategy	Balsam/Cameron	Canal/Mitchell	Scugog	Pigeon	Sturgeon	Four Mile	Head/Rush	Shadow/Silver	# of Highs (3)	# of Mediums (2)	# of Lows (1)	# of Any	Weighted Value	Implementation Action Plan 2024 Programs
Agricultural BMP Projects	Stewardship	М	Н	Н	М	Н		L	L	3	2	2	7	15	/
Enhanced Shoreline Protection	Strategic Planning	Н	Н		Н	Н	М			4	1	0	5	14	
Pilot Projects	Research and Monitoring	Н	Н	М	Н	M				3	2	0	5	13	/
Profiling Lake Values	Communications and Outreach	Н			Н	Н	М	М		3	2	0	5	13	
Research on Emerging Pressures	Research and Monitoring	L	Н		L	М	М	М	Μ	1	4	2	7	13	
Official Plan Updating and Consistency	Strategic Planning	Н	Н		Н	Н				4	0	0	4	12	
Responsible Boating	Stewardship	М			M	М	М	М	М	0	6	0	6	12	
Obtaining Community Input	Communications and Outreach	Н			Н	Н	M			3	1	0	4	11	<b>/</b>
Sewage Treatment and Landfill	Urban and Rural Infrastructure	M		Н	M	M				1	3	0	4	9	
Reforestation Program	Stewardship	M		M	M	М				0	4	0	4	8	/
Collaboration With Partners	Communications and Outreach	М			Н	М				1	2	0	3	7	<b>√</b>
Lake Level Management Planning	Strategic Planning							Н	Н	2	0	0	2	6	
Shoreline Permitting Coordination	Strategic Planning	М			M	М				0	3	0	3	6	
Youth Programming	Communications and Outreach	М			M	M				0	3	0	3	6	
Protect large tracts of natural lands	Strategic Planning				M		M			0	2	0	2	4	
CANWET and PREDICT models	Research and Monitoring			Н						1	0	0	1	3	
Colonial Waterbird Research	Research and Monitoring							Н		1	0	0	1	3	
Maintain Special Policy Area	Strategic Planning						Н			1	0	0	1	3	
Protecting Significant Groundwater Recharge Areas	Strategic Planning		Н							1	0	0	1	3	

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		Urban/Rural			Rural										
Recommendation	Strategy	Balsam/Cameron	Canal/Mitchell	Scugog	Pigeon	Sturgeon	Four Mile	Head/Rush	Shadow/Silver	# of Highs (3)	# of Mediums (2)	# of Lows (1)	# of Any	Weighted Value	Implementation Action Plan 2024 Programs
Routine Water Levels Communications	Communications and Outreach								Н	1	0	0	1	3	
Scugog WATER Fund	Stewardship			Н						1	0	0	1	3	
Watershed Planning	Strategic Planning			Н						1	0	0	1	3	
Wild Rice Management	Strategic Planning				Н					1	0	0	1	3	
Stewardship Strategy	Stewardship		Н							1	0	0	1	3	
Socioeconomic Valuation	Research and Monitoring	L			لــ	L				0	0	3	3	3	
Lake Dredging	Urban and Rural Infrastructure			М						0	1	0	1	2	
Regulation	Strategic Planning	_		М						0	1	0	1	2	
Rural Landowner Stewardship Guide	Stewardship			М						0	1	0	1	2	

# Appendix C

# Status Update Report













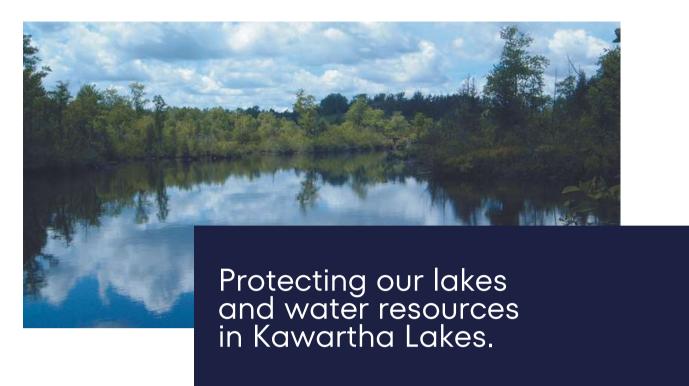
KAWARTHA CONSERVATION

www.kawarthaconservation.com

277 Kenrei Road, Lindsay



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### **Kawartha Conservation**

Kawartha Conservation is a science and information based organization that manages natural resource features that are essential for sustaining water quality and quantity.

Through scientific monitoring and best stewardship practices, our programs and services promote an integrated watershed approach that balances human, environmental, and economic need.



# Lake Management Implementation Action Plan

The Lake Management Implementation Action Plan proposed to maintain and build on the momentum of involvement and investment generated through the lake planning process with the goal to preserve and improve the appeal of our lakes as an engine for economic growth.

## **Spotlight on Success**



## **HIGHLIGHTS**







The team has hit significant milestones during the last four years. Each year Kawartha Conservation has increased the number of trees, shrubs and native species planted. Along with that, a significant amount of shoreline, that plays a crucial role in the health of our lakes, has been repaired.





- Nine community projects completed
  - Educational awareness campaign, lake health optimization, climate change initiative through tree planting, rain garden planting, aquatic plant removal and shoreline erosion control and naturalization
- Granted a total of \$46,837 and leveraged an additional \$26,242 in completed projects

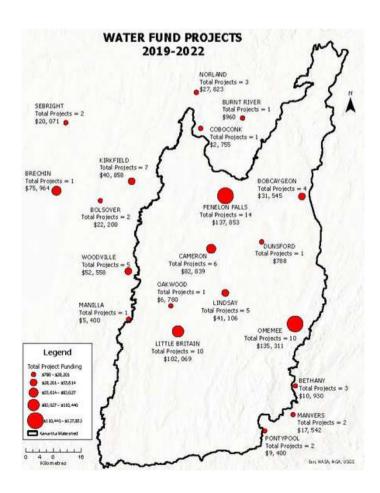


- Successfully completed a total of 79 private landowner projects
  - o 24 Agricultural projects
  - o 19 Rural projects
  - 22 Waterfront projects
  - o 5 Urban projects
- Granted a total of \$122,856 and leveraged an additional \$296,711 in completed projects





- Worked with CAP (Community Advisory Panel), Science and the Technical Advisory Committee to design interactive map on Kawartha Conservations website
  - Provides a place for community groups and private landowners to go to promote their projects
- Connected with outside agencies to create lasting relationships including
  - Trent Severn Waterway
  - Carleton University
  - OMAFRA (Ontario Ministry of Agriculture Food and Rural Affairs)
  - ALUS (Alternate Land Use Services)









- Renewal of CISEC: Certified Inspector of Sediment and Erosion Control
- Attendance at TRIECA (professional development workshop)
- Hosted public workshops to educate private landowners and contractors on the importance of erosion and sediment control
- Attended site visits to landowner properties to better understand the deficiencies and identify local contractor approaches
- Creation of five fact sheets, distributed during permitting process
  - Silt Fencing
  - Fibre Rolls
  - Straw Bale Check Dams
  - Erosion Control Blankets
  - Calculating Erosion Risk and Slope







Investigative Upstream

Monitoring



- More than 26 consultations with private landowners for implementation of best management practices
- Attended agricultural commodity group meetings
  - Kawartha Agricultural tour, Fenelon Falls Country Living Show, Environmental Farm Plan, Victoria Soil and Crop Association, etc
- Agricultural Symposium with presentation from Thames River Phosphorous Reduction Collaborative
- Hosted webinar alongside:
  - Ontario Ministry of Agriculture, Food and Rural Affairs
  - Lake Simcoe Region Conservation Authority
  - Toronto Region Conservation Authority
- Monitored three streams over a three year period
  - o McLaren Creek, Jennings Creek and Reforestation Creek
- Each creek exceeds provincial guidelines for phosphorous
  - Data was provided to the Stewardship department for consideration during project implementation



- Funding received from the Forest Recovery Program
  - o Four sites, 5,500 trees in the ground
- For two seasons now, funding has been received from the 50 Million Tree Program
  - Six sites in 2021, 6,700 trees planted
  - o Four sites in 2022, 11,475 trees planted
- OTC Seedling Sale saw 58,410 seedlings sold













- Currently testing one brand of aerator, the Kasco 3/4 Horsepower Dock Mount Aquatic Thruster
- Three study locations including Lake Scugog, Balsam Lake, and Sturgeon Lake
- Preliminary data show significant reductions in plants growing in the immediate "zone of influence", plant coverage has declined to about one-third.
- Partner in a research collaborative starting in 2023 with Carleton University as the lead
- Studying:
  - o impacts of aquatic plant control techniques
  - o nearshore aquatic ecosystems
  - o impact of boat wakes on shoreline erosion
  - strategies for naturalizing shorelines in urbanized settings
- Project will be completed with Trent Severn Waterway and Rideau Canal







- Informed on rural zoning reviews with City of Kawartha Lakes (CKL) Planning Department
- Provided feedback on where CKL compares to other municipalities with respect to shoreline land use policies
- Conducted research on socioeconomic and environmental changes with help from an enviroanalytic company
  - Created a data snapshot of the income and dwelling permanency around the lakes



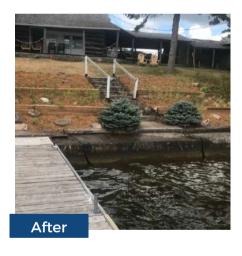


- 170 Citizen Scientists engaged in monthly monitoring of:
  - Shared side of Lake Scugog
  - Balsam Lake
  - Cameron Lake
  - Sturgeon Lake
  - Pigeon Lake
- Data collected used to issue reports and provide recommendations for stewardship activities
- Peer reviewed article, "Community science- based monitoring reveals the role of land use scale in driving nearshore water quality in a large, shallow, Canadian lake" accepted to Lake and Reservoir Management









- More than 50 consultations completed with private landowners and community groups
- Watershed Welcome created for local realtor's to provide to new home buyers
- Shoreline restoration project completed at Sturgeon Point Golf Club
- Kawartha Conservations Integrated
   Watershed Management team worked with
   Kawartha Pineridge District Health Unit to
   monitor local beaches, help with postings,
   and provide recommendations to CKL on
   stewardship projects





- Received an RBC grant to complete impactful demonstration sites;
  - Kent Street silva cell installation for Lindsay's downtown revitalization project
  - Rain garden and tree planting at Alexandra Public School
  - Rain garden at Ken Reid Conservation Area
  - o Rain garden at Omemee Beach

