# 2018 Preliminary Budget Information for Member Municipalities



Discover • Protect • Restore

Cover page photo: Coreopsis, photo credit John Chambers

# Table of Contents

Vision and Governance	4
Our Strategic Goals	5
2018 Preliminary Budget	7
Municipal Levy - Summary	9
Municipal Operating Levy	11
Municipal Special Projects Levy	12
Municipal General Benefiting Projects Levy	12
Municipal Special Benefiting Projects Levy	12
Budget Process	13
Budget Vote	13
Sources of Revenue	14
Expenditures	15
Statement of Revenue and Expenditures	17
Planning and Regulation	21
Watershed Management	29
Environmental Protection and Restoration	39
Corporate Services	53
Schedule of Overhead	61
General Benefiting	63
Drinking Water Source Protection	65
Website Redesign	69
Digitization of Corporate Records	69
Special Benefiting Projects - Region of Durham	73
Watershed Plan Implementation, 2018	75
Special Benefiting Projects - City of Kawartha Lakes	81
Lake Management Plans	83
Lake Management Plan Implementation	87
Floodplain Mapping Study	93
Digital Imagery Acquisition Project	97
City of Kawartha Lakes, Municipal Agreement, Risk Management Official, Clean Water Act, Part IV, Enforcement	101
City of Kawartha Lakes, Municipal Agreement, Agricultural Drain Classification	105
Special Benefiting Projects - Municipality of Trent Lakes	109
Shoreline Outreach and Stewardship	111
Digital Imagery Acquisition Project	115
Special Benefiting Projects - Municipality of Cavan-Monaghan	119
Digital Imagery Acquisition Project	121

# Vision

A sustainable watershed with clean and abundant water and natural resources assured for future generations.

# 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.

# 2017 Board of Directors

### CHAIR

Ted Smith Township of Brock, Region of Durham

### VICE CHAIR

Peter Raymond Municipality of Trent Lakes

### DIRECTORS

Isaac Breadner City of Kawartha Lakes

Pat Dunn City of Kawartha Lakes

Ron Hooper Municipality of Clarington, Region of Durham

Don Kett Township of Scugog, Region of Durham

Jordan Landry Township of Cavan Monaghan

Gord Miller City of Kawartha Lakes

Tom Rowett Township of Scugog, Region of Durham



# 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



# Protect

Keep people, property, and communities safe from natural hazards such as flooding and erosion.

# **Conserve & Restore**

Conserve and restore a healthy resilient environment.

# Discover

Develop greater scientific knowledge of the watershed that advances decision making.

# Connect & Collaborate

Engage our watershed partners to foster relationships.

# **Optimize Service**

Focus on customer and business service excellence and optimize performance.

2018 Preliminary Budget

# 2018 Preliminary Budget

The 2018 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 on November 29, 2017.

The 2018 operating expenditure budget is organized into business units and each department is intended to reflect all associated costs.

A 3.75% increase in municipal levy, \$55,550, is needed to support the operating expenditures. The operating levy is shared by the municipal partners based on an apportionment percentage supplied to us by the Ministry of Natural Resources and Forestry.

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.

# 2018 Preliminary Budget Municipal Levy – Summary

	Proposed 2018 Operating Levy	Proposed 2018 General Projects Levy	Proposed 2018 Special Projects Levy	Total Proposed 2018 Municipal Levy	Total 2017 Municipal Levy	Levy Increase
City of Kawartha Lakes	\$925,940	\$12,048	\$417,100	\$1,355,088	\$1,301,737	\$53,351
Region of Durham	\$537,236	\$6,990	\$133,900	\$678,126	\$645,156	\$32,970
Municipality of Trent Lakes	\$68,593	\$893	\$8,900	\$78,386	\$77,159	\$1,227
Township of Cavan Monaghan	\$5,331	\$69	\$100	\$5,500	\$5,098	\$402
Total	\$1,537,100	\$20,000	\$560,000	\$2,117,100	\$2,029,150	\$87,950

# 2018 Preliminary Operating Budget Municipal Operating Levy

The Operating Levy is shared by the municipal partners based on apportionment percentages supplied to us by the Ministry of Natural Resources and Forestry. 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.

	2017 Apportionment Percentage	2018 Apportionment Percentage			Increase	% Increase
City of Kawartha Lakes	60.3852%	60.2394%	\$ 894,637	\$ 925,940	\$ 31,303	3.50%
Region of Durham	34.7377 %	34.9512 %	\$ 514,656	\$ 537,236	\$ 22,580	4.39%
Municipality of Trent Lakes	4.5330%	4.4625%	\$ 67,159	\$ 68,593	\$ 1,435	2.14%
Township of Cavan Monaghan	0.3441%	0.3468%	\$ 5,098	\$ 5,331	\$ 233	4.57%
Total	100%	100%	\$ 1,481,550	\$ 1,537,100	\$ 55,550	

# **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**

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 for 2018 include Drinking Water Source Protection (fully funded), website redesign and digitization of corporate records.

Summary of General Benefiting Projects:	2017 Approved General Benefiting Levy	2018 Proposed General Benefiting Levy
City of Kawartha Lakes	-	\$ 12,048
Region of Durham	-	\$ 6,990
Municipality of Trent Lakes	-	\$ 893
Township of Cavan Monaghan	-	\$ 69
		\$ 20,000

# Special Benefiting

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 for 2018 continue our work to complete and implement Lake Management Plans, conduct floodplain mapping and acquire updated Digital Imagery through a South Central Ontario collaborative project.

Summary of Special Benefiting Projects:	2017 Approved Special Benefiting Levy	2018 Proposed Special Benefiting Levy
City of Kawartha Lakes	\$ 407,100	\$ 417,100
Region of Durham	\$ 130,500	\$ 133,900
Municipality of Trent Lakes	\$ 10,000	\$ 8,900
Township of Cavan Monaghan	-	\$ 100
	\$ 547,600	\$ 560,000

# **Budget Process**

On October 25th the Board of Directors received a staff report on the budget pressures projected for 2018 and passed a resolution that the budget guidelines be approved in principle for further deliberation. On November 29th, 2017 the Preliminary Budget, with adjustments, Information for Member Municipalities, was approved for circulation to our watershed municipalities for comments. The Board of Directors will vote on the budget and associated municipal operating levy on January 17th, 2018.

# **Budget Vote**

Directors of the Board will vote on the budget and levy using a weighted vote based on the Current Value Assessment levy apportionment formula.

The provincial regulation governing the weighted votes 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.

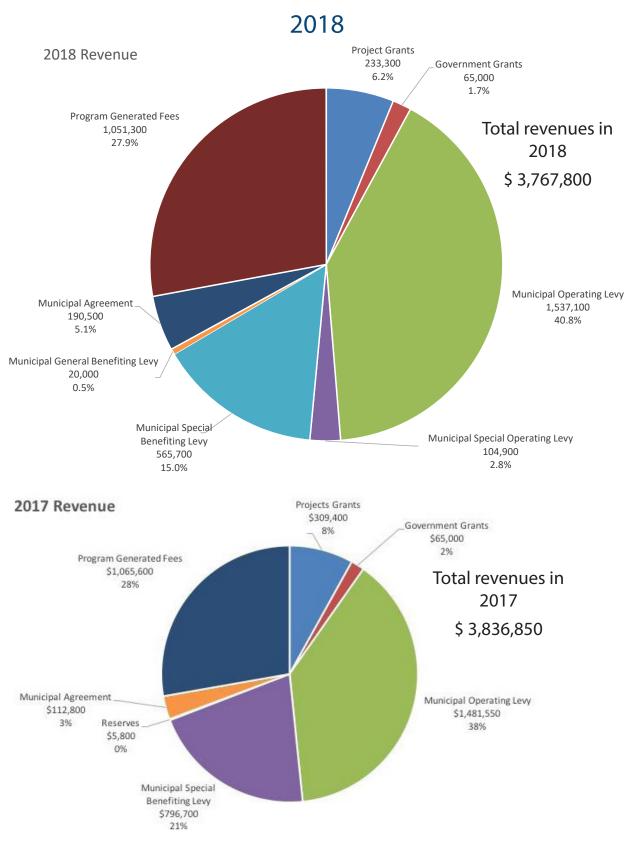
The weighted vote is distributed amongst Directors as follows:

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	10.9880%
2nd of 4 representatives	10.9880%
3rd of 4 representatives	10.9880%
4th of 4 representatives	10.9880%
Municipality of Trent Lakes	
1 representative	5.6117%

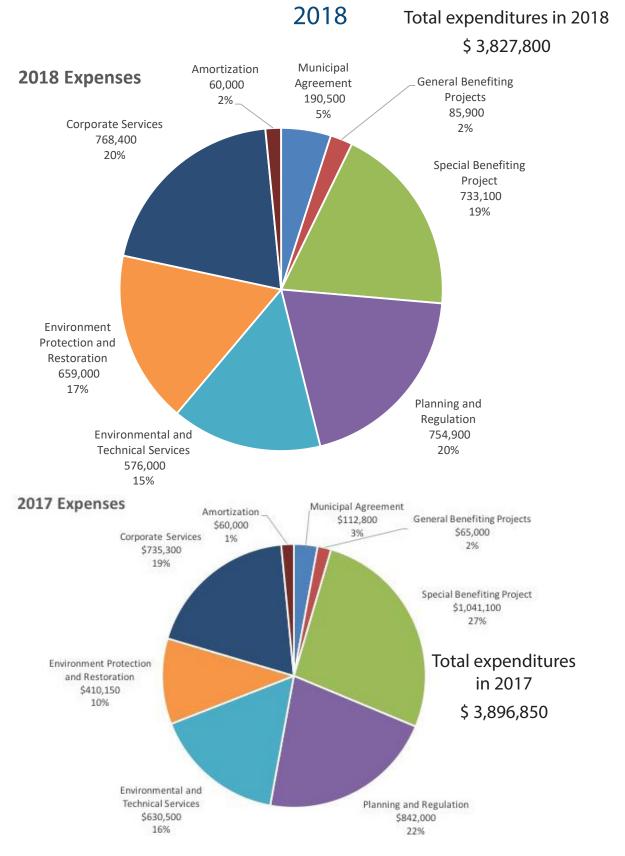
Township of Cavan Monaghan	
1 representative	.4361%

A weighted majority of 51% carries the vote.

# Sources of Revenue



# Expenditures



### KAWARTHA CONSERVATION 2018 Preliminary Budget

### STATEMENT OF REVENUE AND EXPENDITURES



		Audited Actual 2016	Budget 2017	Budget 2018	Variance to 2017 Budget
REVENUE					U
Municipal levy					
Operating	\$	1,424,850	\$ 1,481,550	1,537,100	\$ 55,550
Special operating - Region of Durham		-	71,100	104,900	33,800
General benefiting capital		-	-	20,000	20,000
Special benefiting projects		731,669	725,600	565,700	(159,900)
		2,156,519	2,278,250	2,227,700	(50,550)
Municipal Agreements					
CKL, Risk Management Official, Clean Water Act		86,100	112,800	115,500	2,700
CKL, Agricultural Drain Classification		-	-	75,000	75,000
		86,100	112,800	190,500	77,700
Program Generated Revenue					
Planning and Regulations					
Planning and permitting fees		256,196	250,000	290,000	40,000
Large scale fill permits		6,272	300,000	160,000	(140,000)
Municipal Agreement project management, RMO		23,502	18,600	18,800	200
		285,970	568,600	468,800	(99,800)
Environmental and Technical Services					
Technical services		21,162	11,500	14,500	3,000
MNRF transfer payment		59,503	50,000	50,000	-
Municipal Agreement project management, Ag drain		-	-	60,500	60,500
		80,665	61,500	125,000	63,500
Environmental Protection and Restoration					
Conservation Areas		74,444	65,600	114,300	48,700
Stewardship services		29,124	16,000	25,100	9,100
Conservation Education		32,794 136,362	- 81,600	65,000 204,400	65,000 122,800
		100,002	01,000	201,100	122,000
Corporate Services					()
Fees and services		14,810	8,800	8,000	(800)
Special Projects management		287,785	415,900	310,100	(105,800)
		,	,	,	
Special Projects					
Drinking Water Source Protection		61,609	65,000	65,900	900
Grants, Durham special projects		25,040	14,500	13,900	(600)
Grants, CKL special projects		246,984	219,900	147,500	(72,400)
Grants, Trent Lakes special projects		-	10,000	6,000	(4,000)
		333,633	309,400	233,300	(76,100)
Other		<b></b>			
Amortization of deferred captial contribution		25,791	-	-	-
	*	2 407 625		2 767 000	ć (co oro)
TOTAL REVENUE	\$	3,407,635	\$3,836,850	3,767,800	\$ (69,050)

### STATEMENT OF REVENUE AND EXPENDITURES



		Audited Actual 2016	Budget 2017	Budget 2018	Variance to 2017 Budget	
EXPENDITURES						
Operations						
Planning and Regulations	\$	577,081 \$	842,000 \$	754,900	\$ (87,100)	
Environmental and Technical Services		603,378	630,500	576,000	(54,500)	
Environmental Protection and Restoration		426,118	410,150	659,000	248,850	
Corporate Services		724,036	735,300	768,400	33,100	
Amortization of tangible capital assets		80,157	60,000	60,000	-	
Vehicle pool		(9,755)	(25,000)	(25,000)	-	
		2,401,015	2,652,950	2,793,300	140,350	
Projects						
General Benefiting DWSP		61,609	65,000	65,900	900	
General Benefiting		-	-	20,000	20,000	
Special Benefiting		914,470	1,041,100	733,100	(308,000)	
		976,079	1,106,100	819,000	(287,100)	
Municipal Agreements						
CKL Risk Management Official		86,100	112,800	115,500	2,700	
CKL Agricultural Drain Classification		-	-	75,000	75,000	
-		86,100	112,800	190,500	77,700	
Appropriations to Reserves						
Vehicle and equipment pool			25,000	25,000	-	
TOTAL EXPENDITURES	\$	3,463,194 \$	3,896,850 \$	3,827,800	\$ (69,050)	
	Ş	3,403,134 3	3,830,850 \$	5,827,800	\$ (05,050)	
Net Complete (Definit) for an entropy in a	<u>,</u>		(60.000)		<u>,</u>	
Net Surplus (Deficit) from operations	\$	(55,559) \$	(60,000) \$	(60,000)	<del>،</del> ،	

# **Planning and Regulation**

# Planning

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, 2014). In addition, Conservation Authorities provide plan review advice with respect to the health of watersheds including the Management of water and natural heritage resources. By providing these properties we protect against the loss of life, property damage and social disruption, and encourage the responsible management and protection of environmentally sensitive areas for future generations, while ensuring compliance with provincial legislation at the local level.

# Permitting

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. The main objectives of the regulation are to ensure public safety and protect property from damage caused by natural hazards, protect watershed health by preventing pollution and damage to sensitive environmental areas such as wetland, shorelines, and watercourses, and promote long term sustainability of the watershed.

# 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.

# Planning & Permitting

# Program & Program Type

- Comments on Planning Act Applications and Municipal Plans from member municipalities (R, L, S).
- Permitting in accordance with Provincial legislation (O.Reg. 182/06) (R).
- Preconsultation meetings (internal & external with Municipal partners) (L, A).
- Mapping of Natural systems and hazards for municipal planning documents (L, A).

Val	lue
<ul> <li>Ensure compliance with Provincial and Federal legislation.</li> <li>Supports all municipal partners in achieving their strategic direction .</li> <li>Protect quality of life associated with healthy</li> </ul>	<ul> <li>lakes and productive sport fishing and recreation opportunities.</li> <li>Sustainable and resilient communities.</li> <li>Community safety and security.</li> <li>Promote coordinated planning.</li> </ul>
Ber	nefit
<ul> <li>Saves municipal time, effort and potential costs of OMB Hearings regarding compliance with Pro- vincial legislation.</li> <li>Environmental expertise on behalf of municipal partners saves municipalities time and costs of hiring external consultants.</li> <li>Protects the natural capital value of wetlands and forests which reduce long-term costs of</li> </ul>	<ul> <li>Protects the investment of homebuilders and developers.</li> <li>Reduces liability associated with unsafe structures.</li> <li>Decreases future emergency response costs resulting from flooding.</li> <li>Decreases liability associated with improper sediment controls.</li> </ul>

- and forests which reduce long-term costs of flood protection and to climate change resilience.
- Avoids cost of re-investment by ensuring infrastructure optimally designed.

# Strategic Plan Link

# Kawartha Conservation

- Provide exemplary customer service
- Be transparent and accountable
- Connect and collaborate
- Protect

# City of Kawartha Lakes

• Strategic goal (A healthy environment); 3.1.4:

Develop and execute Low Impact Development (LID) Standards for the City; 3.1.6: Protect & enhance water quality; 3.1.8: Protect natural features and functions; 3.2.1: Update the City's community preparedness plan (by working with community partners to address both natural hazards, including flooding and erosion as well as man-made hazards and threats to community safety and security); and, E1.1.2: Finalize and execute the City's Core Services Review

## Region of Durham

 Healthy Environment & Sustainable Communities (Protect, enhance and restore the natural environment and build resilient, safe communities that are supported by reliable, affordable transportation systems and services; C.2 (Protect, enhance and where appropriate restore significant water resources, agricultural land, natural heritage and environmentally sensitive areas.); C.5 (Work more closely with local municipalities and other partners to manage growth through effective, progressive and integrated long-term planning).

### Scugog Township

Strategic Direction #5 (Natural Environment) Promote low impact and green development; Work with other stakeholders to maintain a healthy Lake Scugog; Recognize and promote the role of Scugog's countryside (agriculture, Greenbelt, Oak Ridges Moraine and other significant features); Maintain and grow tree cover within Township; Support and implement environmental sustainable policies.

### Municipality of Trent Lakes

• Increasing Pressures: Planning Legislation changes (new Provincial Policy Statement, Source water protection, Official Plan Review and Zoning

### By-law Review). Township of Cavan Monaghan

 Goal 4: Engage residents and stakeholders in community issues and interests; Strategic Objective: Enable greater local awareness and interest in the issues impacting the future of the municipality.

## Brock Township

Strategic Goal: Healthy, Safe, Sustainable Communities (Healthy Connected Communities Explore opportunities to advance walkability, livability, active transportation and community connections. Explore transportation opportunities and, in particular, links to other communities, as well as the creation of natural linkages (trails, natural heritage system linkages, etc.).

## Municipality of Clarington

 Strategic Priority #6 (Enhance access to our unique environment); 6.1) Adopt updated natural heritage preservation policies in the Official Plan; 6.2) Collaborate with community organizations and other stakeholders and partners wishing to advance this priority through events; 6.4) Continue the development of parkland along the waterfront trails to connect our community to the waterfront; 6.5) Prioritize and build additional trails.

# **Regulation Enforcement**

# Program & Program Type

- Regular investigations into potential violations from Public complaints (R, L).
- Remediation Agreements in accordance with Provincial legislation (O.Reg. 182/06) (R).
- Focus on preventing illegal placement of potentially contaminated fill and damage to wetlands and watercourses (L, A).

# Value

- Ensure compliance with Provincial and Federal legislation.
- Supports all municipal partners with environmental expertise.
- Community safety and security.
- Promote coordinated agency collaboration.
- Quality of life.

## Benefit

- Saves municipal time, effort and potential costs of court Hearings and litigation regarding compliance with Provincial legislation.
- Environmental expertise on behalf of municipal partners saves municipalities time and costs of hiring external consultants.
- Multiple jurisdictions promoting compliance activities and reducing time to obtain positive

compliance outcomes.

- Promotes lawful behaviour which reduces enforcement effort in the long term.
- Protects the natural capital value of wetlands and forests which reduce long-term costs of flood protection and to climate change resilience.
- Protects landowners' investment in property and structures.

# Strategic Plan Link

### Kawartha Conservation

- Provide exemplary customer service
- Be transparent and accountable
- Connect and collaborate
- Optimize Service
- Protect

# City of Kawartha Lakes

• Strategic goal (A healthy environment); 3.1.6: Protect & enhance water quality; 3.1.8: Protect natural features and functions.

### Region of Durham

 Healthy Environment & Sustainable Communities (Protect, enhance and restore the natural environment and build resilient, safe communities that are supported by reliable, affordable transportation systems and services; C.2 (Protect, enhance and where appropriate restore significant water resources, agricultural land, natural heritage and environmentally sensitive areas.)

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### Scugog Township

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## **Municipality of Trent Lakes**

 Increasing Pressures: Planning Legislation changes (new Provincial Policy Statement, Source water protection, Official Plan Review and Zoning By-law Review).

### Township of Cavan Monaghan

 Goal 4: Engage residents and stakeholders in community issues and interests; Strategic
 Objective: Enable greater local awareness and interest in the issues impacting the future of the municipality.

### Brock Township

Strategic Goal: Healthy, Safe, Sustainable Communities (Healthy Connected Communities Explore opportunities to advance walkability, livability, active transportation and community connections. Explore transportation opportunities and, in particular, links to other communities, as well as the creation of natural linkages (trails, natural heritage system linkages, etc.).

### KAWARTHA CONSERVATION 2018 Preliminary Operating Budget OPERATIONS

# Draft

### PLANNING AND REGULATION

	 Audited Actual 2016	Budget 2017	Budget 2018	Variance to 2017 Budget
Sources of Revenue				
Municipal operating levy	\$ 314,613	\$ 273,400	\$ 286,100	\$ 12,700
Planning and permitting fees	256,196	250,000	290,000	40,000
Large scale fill permits	6,272	300,000	160,000	(140,000)
Muncipal agreement, RMO	 23,502	18,600	18,800	200
	\$ 600,583	\$ 842,000	\$ 754,900	\$ (87,100)
PLANNING				
Expenditures				
Direct labour	\$ 321,967	\$ 411,400	\$ 425,700	\$ 14,300
Overhead	30,875	28,800	30,600	1,800
Legal	3,461	2,000	2,000	-
Consulting & engineering	32,979	45,000	50,000	5,000
Supplies & equipment	45,249	10,440	10,400	(40)
Professional development	411	2,500	2,500	-
Travel	 3,101	4,100	4,100	-
	 438,043	504,240	525,300	21,060
REGULATION ENFORCEMENT Expenditures				
Direct labour	72,966	77,000	77,900	900
Overhead	7,719	7,200	7,700	500
Legal	44,613	23,000	25,000	2,000
Consulting & engineering	2,993	5,000	3,000	(2,000)
Fill permit compliance costs	6,272	220,000	110,000	(110,000)
Supplies & equipment	2,355	1,560	2,000	440
Professional development	89	500	500	-
Travel	2,031	3,500	3,500	-
	 139,038	337,760	229,600	(108,160)
	\$ 577,081	\$ 842,000	\$ 754,900	\$ (87,100)

# Watershed Management

# **Environmental Information Services**

This program area provides support to many of our programs and projects by managing data in a spatial context and developing maps for various internal and external requirements. All information is stored in our Geographical Information System (GIS) and is available to help make informed and timely resource management decisions.

# **Environmental Monitoring Services**

Municipal planning and watershed planning and management requires a baseline measure for determining watershed health and evaluating the effectiveness of actions taken on the landscape to improve the environment. 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, while combining expertise and experience to ensure consistency and cost efficiency. We partner with provincial ministries, such as the Ministry of the Environment and Climate Change, Ministry of Natural Resources and Forestry, local volunteer groups, Fleming College, Trent University, local high schools and agencies such as the Conservation Authorities Moraine Coalition – a grouping of nine conservation authorities.

# Flood & Water Level Monitoring

Flood forecasting and warning is a fundamental responsibility delegated to conservation authorities by the Province since 1984. We fulfill this duty by monitoring water levels, precipitation, and watershed conditions. Our activities also include the preparation and maintenance of 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 when required.

# **Environmental Information Services**

# **Program & Program Type**

- GIS and mapping (A) •
- Staff and Public web mapping sites (A) •
- Provision of data (A)
- Supporting Planning and Regulation staff, op-

erating programs and special projects, Source Water Protection, Flood Plain Mapping (L, A)

- Mapping services for third parties (A)
- Value
- Consistent, informed decision making to meet legislative requirements.
- Enabler for excellent customer service.
- Information availability promotes autonomy for our clients.
- Personalized mapping services tailored to client needs.
- Enables clear understanding of complex information.
- Easy, digestible information.

# Benefit

- Provide environmental information in a visual, digital format – provides a solid basis to facilitate efficient, effective and critical decisions.
- Ensure consistency and currency of information, saving time and minimizing effort required to initiate work.
- Digital mapping of our regulation limit saves the building community time and effort in preparing applications and streamlines the development process.
- Liaise with municipalities on data sharing opportunities to save staff time and ensure better

Remain the 'go-to' organization in the watershed for science and research based information and

Complete Floodplain mapping projects for prior-

• Optimize Customer Service by investing in tech-

nology to enhance business service delivery, for

decision making, reducing time to respond to client requests.

- Mapping products help the public/stakeholders/ • municipalities and other organizations understand environmental information in a clear, concise and tangible manner saving time and money.
- Provision of information online to the community saves staff time responding to requests to general inquiries and provides the community with instant access to required resources.

# Strategic Plan Link

### Kawartha Conservation

ity flood damage centres.

data.

### example CA Maps.

Supports all main themes of the strategic plan.

# City of Kawartha Lakes

Strategic goal (A healthy environment); 3.1.6: Protect & enhance water quality; 3.1.8: Protect natural features and functions; 3.2.1: Update the City's community preparedness plan (by working

with community partners to address both natural hazards, including flooding and erosion as well as man-made hazards, and threats to community safety and security); and, E1.1.2: Finalize and execute the City's Core Services Review.

# Region of Durham

- Healthy Environment & Sustainable Communities: Protect, enhance and restore the natural environment and build resilient, safe communities that are supported by reliable, affordable transportation systems and services; C.2: Protect, enhance and where appropriate restore significant water resources, agricultural land, natural heritage and
- Environmentally sensitive areas; C.5: Work more closely with local municipalities and other partners to manage growth through effective, progressive and integrated long-term planning.

# Scugog Township

 Strategic Direction #5 (Natural Environment) Promote low impact and green development; Work with other stakeholders to maintain a healthy Lake Scugog; Recognize and promote the role of Scugog's countryside (agriculture, Greenbelt, Oak Ridges Moraine and other significant features); Maintain and grow tree cover within Township; Support and implement environmental sustainable policies.

# Municipality of Trent Lakes

• Increasing Pressures: Planning Legislation chang-

es (new Provincial Policy Statement, Source Water Protection, Official Plan Review and Zoning By-law Review).

## Township of Cavan Monaghan

 Goal 4: Engage residents and stakeholders in community issues and interests; Strategic Objective: Enable greater local awareness and interest in the issues impacting the future of the municipality.

## Brock Township

Strategic Goal: Healthy, Safe, Sustainable Communities (Healthy Connected Communities Explore opportunities to advance walkability, livability, active transportation and community connections. Explore transportation opportunities and, in particular, links to other communities, as well as the creation of natural linkages (trails, natural heritage system linkages, etc.).

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# **Environmental Monitoring Services**

# **Program & Program Type**

- Ground water program: including the Provincial Goundwater Monitoring Network (PGMN), stream temperature, low water / base flow ground watering (A, L).
- Surface water quality programs such as, chemical and biological programs including the Provin-

cial Surface Water Quality Monitoring Network (PWQMN) (A, L).

- Watershed Report Card (A).
- Natural Heritage supports Provincial Policy Statement (2014), under the Planning Act (A, L).

# Value

- Water monitoring identifies threats to human health and ensures safe drinking water.
- Monitoring for healthy lakes and streams supports high quality recreational opportunities including sport fishing, boating and quality of life.
- Build resilience mechanisms in the face of ongoing climate change.
- Provide opportunities for citizen and youth engagement in the long-term health of their lakes.
- Ensure compliance with Provincial and Federal legislation.
- Foster multi-partner engagement and momentum to improve our lakes for the community and all lake users.

# Benefit

- Healthy lakes and the environment are important community assets, drawing tourists, new residents, and businesses.
- Programs that leverage provincial and federal resources reduces the costs of services provided.
- We provide scientific support to municipalities who have responsibilities pertaining to federal and provincial acts, reducing the cost required to acquire expertise independently.
- Collect flow data to provide the basis for engineering assessments related to culverts and other water crossing infrastructure, saving municipal and developer time and effort.
- Facilitation of a network of 'Citizen Scientists', creating efficiencies and saving staff effort to obtain information.
- Academic collaborations and projects to expand on current findings or to address science gaps and sustain the Kawartha Lakes, facilitating high cost leveraging opportunities.

ects on sediment and erosion control, decreasing costs to remove sediment loading in municipal infrastructure and the environment.

- Identify sensitive areas on the landscape to inform development applications in support of provincial planning legislation ensuring development costs are reduced.
- Develop ecosystem health bench marks for water quality and aquatic life as a means of measuring the health of environmental features over time; and to reduce long term restoration costs and build resillience.
- Protect the natural capital value of wetlands and forests, which reduce long-term costs of flood protection and to foster climate change resilience.
- Provide specialized expertise and presentations upon requests to various municipal working groups, saving time and effort in obtaining information and enabling decision making.
- Programs assist in the identification of environ-

# • Provide technical expertise for construction proj-

mental features of legislative interest saving time and consultant fees while streamlining the

development process.

# **Examples of Applicable Legislation Informing Program Scope**

# Greenbelt Plan, Ministry of Municipal Affairs and Housing, 2005:

- 3.2.3 Water Resource System Policies
- 3.2.4 Key Natural Heritage Features and Key Hydrologic Features Policies

# *Provincial Policy Statement, under the Planning Act, 2014:*

- 2.1 Natural Heritage
- 2.2 Water
- 2.2.1 Planning authorities shall protect, improve or restore the quality and quantity of water by:
  - a) using the watershed as the ecologically

meaningful scale ...

c) identifying water resource systems consisting of ground water features, hydrologic functions, natural heritage features and areas, and surface water features ....

e) implementing necessary restrictions on development and site alteration to:

1 – protect municipal drinking water supplies and designated vulnerable areas; and

2) protect, improve or restore vulnerable surface and ground water, sensitive surface water features and sensitive ground water features and their hydrologic functions.

# Oak Ridges Moraine Conservation Plan, 2002 Places to Grow Act, 2005

# Strategic Plan Link

# Kawartha Conservation

- Protect keep people, property and communities safe from natural hazards such as flooding and erosion.
- Kawartha Conservation Climate Change Strategy, June 2016.
- Implement Lake Management Plans, Climate Change and Stewardship Strategies.
- Development greater scientific knowledge of the watershed that advances decision making.

# City of Kawartha Lakes

 Strategic goal (A healthy environment); 3.1.8: Protect natural features and functions; 3.2.1: Update the City's community preparedness plan (by working with community partners to address both natural hazards, including flooding and erosion as well as man-made hazards and threats to community safety and security).  Supports CKL Integrated Community Sustainability Plan - W4A, ie. Develop groundwater mapping and tracking system. Status: Essential.

### **Region of Durham**

 Natural Environment Sector - Enhance natural capital and build climate resilience in the natural environment. "Community Climate Adaptation Plan, 2016."

### Municipality of Trent Lakes

 Contributes to corporate vision - "Building on our superlative natural assets of land and water, and in a sustainable manner, develop a community that reflects the needs for both permanent and seasonal residents, provides a safe and enjoyable quality of life and provides economic opportunities."

# Flood & Water Level Monitoring

# **Program & Program Type**

- Flood Forecasting and Warning (R).
- Ontario Low Water Response (R).

Development of climate change programming (A).

# Value

- Keep people, property and communities safe from natural hazards such as flooding and erosion.
- Assist municipalities design and implement climate change strategies to ensure urban and agricultural resilience and adaptation.

# Benefit

- Provide professional hydrological assistance for municipal staff with emergency planning, forecasting and response.
- Maintain a 24 hour flood warning system to provide critical, time-sensitive information about potential flood events and assist in emergency

response.

- Reduce risks and liability. ٠
- Monitoring and early response to drought scenarios enables the implementation of conservation efforts, reducing both time and monetarycosts associated with inadequate water supply.

# **Applicable Legislative Context**

Delegation by Ministry of Natural Resources and Forestry to Conservation Authorities for Flood Forecasting and Warning activities, (1984) and flood and drought responsibilities (Emergency Response Plan, 2013).

# Strategic Plan Link

# Kawartha Conservation

- Protect keep people, property and communities safe from natural hazards such as flooding and erosion.
- Kawartha Conservation Climate Change Strategy, June 2016.

# City of Kawartha Lakes

Strategic goal (A healthy environment); 3.1.8:

Protect natural features and functions; 3.2.1: Update the City's community preparedness plan (by working with community partners to address both natural hazards, including flooding and erosion as well as man-made hazards and threats to community safety and security).

# **Region of Durham**

"Emergency Management Office, Risk Specific Plan – Flooding"; "Community Climate Adaptation Plan, 2016."

### **Municipality of Trent Lakes**

• Contributes to corporate vision - "Building on our superlative natural assets of land and water, and

in a sustainable manner, develop a community that reflects the needs for both permanent and seasonal residents, provides a safe and enjoyable quality of life and provides economic opportunities."

#### KAWARTHA CONSERVATION 2018 Preliminary Operating Budget OPERATIONS

#### ENVIRONMENTAL AND TECHNICAL SERVICES



		Audited Actual 2016		Budget 2017		Budget 2018		ariance to 17 Budget
Sources of Revenue								
Municipal operating levy	\$	582,216	\$	619,000	\$	511,500	\$	(107,500)
MNRF transfer payment				50,000		50,000		-
Technical Services fees		9,314		4,000		7,000		3,000
Employment grants		11,848		7,500		7,500		-
Evpandituras	\$	603,378	\$	680,500	\$	576,000	\$	(104,500)
Expenditures WATERSHED MANAGEMENT								
Direct labour	\$	225,743	ć	158,500	ć	95,800	ć	(62,700)
Overhead	Ļ	15,438	Ļ	14,400	Ļ	7,700	Ļ	(6,700)
Supplies		3,307		14,400		1,000		(0,700)
Professional development		2,686		1,200		1,000		(200)
Travel		2,080		600		400		(200)
i avei		247,683		176,200		105,900		(70,300)
						· · ·		
ENVIRONMENTAL INFORMATION SERVICES		62.254		CE 000		<b>CO 800</b>		4 000
Direct labour		62,354		65,800		69,800		4,000
Overhead		7,719		7,200		7,700		500
Supplies & equipment		925		2,400		2,400		-
Technology and data management		4,707		8,800		8,800		-
Professional development		1,085 112		1,000 400		1,000		-
Travel		76,902		85,600		400 90,100		4,500
ENVIRONMENTAL MONITORING SERVICES		122 659		211 500		225 200		12 800
Direct labour		133,658		211,500		225,300		13,800
Seasonal labour		12,831		15,000		15,000		-
Overhead		15,438		14,400		15,300		900
Supplies & equipment		3,991		3,000		3,000		-
Technology and data management Professional development		- 1,231		- 2 000		-		-
Travel		857		3,000 1,000		3,000 1,000		-
Oak Ridges Moraine Alliance		2,500		2,500		2,500		-
Surface water monitoring		3,631		10,600		2,300 7,000		- (3,600)
Groundwater monitoring		6,406		7,500		5,500		(2,000)
		180,543		268,500		277,600		9,100
FLOOD AND WATER LEVEL MONITORING Direct labour		86,311		87,400		89,200		1,800
Overhead		7,719		7,200		89,200 7,700		1,800
Supplies, equipment, gauge maintenance		1,366		1,800		1,800		500
Stream gauge utilities		428		700		1,800 600		(100)
Ontario Low Water Response		136		500		500		(100)
Professional development		1,110		1,100		1,100		-
Travel		1,110		1,100		1,100		-
naver		98,250		1,300		1,500		2,200
	\$	603,378	ć	630,500	ć	576,000	ć	(54,500)

# Environmental Protection & Restoration

# **Conservation Areas**

Kawartha Conservation owns over 800 hectares of natural areas which includes Ken Reid Conservation Area, Durham East Cross Forest, Pigeon River Headwaters and Windy Ridge Conservation Area, and manages another 440 hectares of sensitive habitat Fleetwood Creek Natural Area, Dewey's Island and the Tuckerman Property (Adjacent to Windy Ridge). Our conservation areas provide green spaces for local communities, including schools and special interest groups. Visitors have places to enjoy the outdoors while discovering the natural world around them. This program area strives to ensure these public areas are maintained at the standard required for safe public use.

# Stewardship

The Stewardship program works in partnership with community groups and other organizations to accomplish stewardship goals, which are focused on activities that promote water quality protection and sustainable environmental practices. This program is delivered by working with public and private landowners to enhance property resource management with respect to water quality and quantity improvements, and by the implementation of recommendations from fisheries, lake and storm water and other management plans.

# Education

The Education program is designed to provide a variety of educational and engagement opportunities to all members in our community. The goals of conservation education are linked to our strategic plan and our lake and watershed management plans. We strive to provide excellence in our curriculum and community programs.



Leaders in Integrated Watershed Management

#### (L) Legislated (R) Regulated (S) Service Agreement with Municipality (A) Advisable to Further Mandate

# **Conservation Areas**

#### Program & Program Type

• Conservation Area Management (A).

Land Securement (A).

- Administrative Building Maintenance (A).
- Conservation Area Enforcement (L).

#### Value

- Conservation Areas build a sense of place for our community contributing to local pride and community investment.
- Conservation Areas provide a place where active lifestyles are supported, valued and promoted.
- Conservation Areas protect our natural heritage while providing access to quality greenspace.
- Conservation Areas provide important habitat for wildlife.

#### Benefit

- Conservation Areas contribute to the tourism 'branding' of our community making our destination more appealing to travellers.
- Increases the appeal of our communities from a tourism perspective which results in more tourism money being spent within our community.
- The natural landscapes and restoration projects on CA lands provide economical improvements to our resilience in the face of climate change.
- Enforcement activities decrease our risk exposure caused by trespassers and unlawful activity which saves time and decreases potential lawsuits.

- Our properties promote a healthy lifestyle which helps to reduce the cost pressures on health and aging services in the community.
- Provide opportunities for partnerships and investment from foundations, other levels of government, and other organizations to develop and improve the infrastructure and tourism value of our properties.
- Foundation and community investment leverages es municipal contributions reducing the cost of maintenance and capital costs for our properties.

#### Strategic Plan Link

#### Kawartha Conservation

- Implement the Kawarthas Naturally Connected natural heritage system
- Connect people with nature
- Conserving our natural heritage
- Advance eco health across the watershed
- Conserve and Restore

#### City of Kawartha Lakes

• Goal 3.1.6 Protect & enhance water quality - by

managing properties with key aquatic features such as cold water streams, headwaters, and wetlands.

Goal 3.1.8 Protect natural features and functions

 through land securement and management of
 invasive species at risk habitats on our properties.

#### Township of Scugog

 Strategic Direction #5 Recognize and promote the role of Scugog's country side and significant features
 by managing conservation area properties for natural as well as agricultural significance.  Strategic Direction #5 Maintain and grow tree cover within the Township – by managing forest plantations in conservation areas and by planting additional trees in open spaces when appropriate.

#### Municipality of Clarington

 New Actions 6.1 Adopt updated natural heritage preservation policies – Conservation areas have master plans that link to natural heritage plans including the Oak Ridges Moraine Conservation Plan.

#### Township of Brock

 Strategic Goal "Support a Healthy, safe, sustainable community" – Conservation Areas provide access to walkable trails that support a healthy lifestyle.

#### Municipality of Trent Lakes

 Shoreline Protection Program – Many Conservation Areas protect sections of shoreline on lakes, wetlands, and rivers which provide opportunities to demonstrate wise shoreline stewardship to area residents.

# Stewardship

#### Program & Program Type

- Reforestation (A).
- Native plant distribution (A).

- Stewardship Strategy (A).
- Lake Management Plan implementation (A).

#### Value

- Stewardship programs ensure the local agricultural community is supported and empowered.
- Stewardship programs empower private landowners to take positive action on their own

#### properties.

- Stewardship projects create a safer and more attractive community.
- Stewardship projects improve our quality of life.

#### Benefit

- Provide economical and efficient low impact development projects that improve water quality and support infrastructure longevity and save money.
- Stewardship programs invest in new demonstration sites throughout our Municipalities.
- Increase investment from foundations, other levels of government, and other organizations in the stewardship projects that promote healthy landscapes, healthy waters, and healthy communities.
- Reduces the workload of Municipal Staff to oversee, coordinate, and implement projects.
- Increases community participation and the dissemination of information regarding private land stewardship with reduced impact on municipal staff time.
- Improved water quality results in a greater local investment in property values and tourism draw.
- Agricultural grants provided to farmers help leverage private stewardship actions and investment.
- Improved fish habitat supports our local tourism economy, attracting anglers and their families.

#### Kawartha Conservation

- Lake Management Plan Implementation.
- Implement the Stewardship Strategy.
- Embrace innovative technologies and creative solutions to manage our natural resources.
- Improving the health, safety, and vitality of our communities.
- Complete and help implement the Nogies Creek Waterway.

#### City of Kawartha Lakes

- Goal #3.1.4 Develop and execute Low Impact Development – our urban stewardship program Bluescaping provides municipal demonstration sites as well as promotes LID to private landowners.
- Goal #3.1.6 Protect and Enhance water quality

   our stewardship focus on key areas within the Lake Management Plans where on the ground action can improve local water quality.
- Goal #3.1.7 Protect prime agricultural land (support the sector) agricultural incentive program provides financial assistance to agricultural producers wishing to implement projects.
- Goal #3.1.8 Protect natural features and functions – our demonstration sites protect our local lakes, beaches, and rivers.

#### Township of Scugog

• Strategic Direction #5 Promote low impact and green development - our urban stewardship program Bluescaping provides municipal demonstration sites as well as promotes LID to private landowners.

- Strategic Direction #5 work with stakeholders to maintain a healthy Lake Scugog - our shoreline demonstration sites include volunteer groups and other interest groups in designing and implementing projects to enhance water quality on Lake Scugog.
- Strategic Direction #5 maintain and grow tree cover within township – our tree seedling distribution program promotes reforestation on private lands.

#### Municipality of Clarington

 New Actions # 6.2 Collaborate with community organizations and stakeholders – our stewardship programs engage local volunteers and landowners to encourage private land stewardship investment as well as provide information and incentive to landowners.

#### Township of Brock

Strategic goal "Support a healthy, safe, sustainable community" – our stewardship programs provide a variety of opportunities for landowners to develop sustainable property management options for rural, urban, and shoreline properties.

#### **Municipality of Trent Lakes**

 Shoreline Protection Program – our shoreline stewardship program supports private shoreline naturalization projects.

# **Conservation Education**

#### Program & Program Type

Value

• Outdoor Education Program (A).

• Community Engagement Program (A).

• Summer Camp Program (A).

•	Conservation Education provides the community	•
	with the opportunity to deepen their relation-	
	ship with nature.	

- Conservation Education creates a sense of place within the community.
- Accessible programming ensures that all members of our community are given the chance to connect with nature in a way that is meaningful for them.

#### Benefit

- Encourages investment from foundations and local community members, providing a revenue stream to cover expenses.
- Conservation Education programs provides an economical option for local families to send their kids to camp.
- Community hike program provides opportunities for visitors to engage in activities during their stay, increasing the length of their stay and the

money they spend in our community.

- Provides area schools with an affordable outdoor education option that reduces the amount of time our children spend on a bus to reach this type of programming, and creates local jobs that support the local economy.
- Conservation Education is a revenue generating program.

#### Strategic Plan Link

#### Kawartha Conservation

- Provide exemplary customer service.
- Connect people with nature.
- Educating and Sharing.
- Expand partnerships with universities and colleges.
- Advance eco health across the watershed.
- Expand partnerships with local school boards.

#### City of Kawartha Lakes

 Goal #2.2 Improved wellness and wellbeing & community health – Our educational programs promote an active lifestyle that improves health (L) Legislated (R) Regulated (S) Service Agreement with M

and wellbeing within our community.

#### Township of Scugog

 Strategic Direction #6 Community Engagement – our educational programs offer community hikes and seminars designed to engage all members of our community.

#### Municipality of Clarington

 New Actions #5 Promote Resident Engagement our educational programs offer community hikes and seminars designed to engage all members of our community.

(L) Legislated (R) Regulated (S) Service Agreement with Municipality (A) Advisable to Further Mandate

#### ENVIRONMENTAL PROTECTION AND RESTORATION REVENUE

	 Audited Actual 2016	Budget 2017	Budget 2018	ariance to 17 Budget
Sources of Revenue				
Conservation Area Employment grants	\$ 11,847	\$ 7,500	\$ 7,500	\$ -
Conservation Areas User fees	7,962	8,000	8,000	-
Conservation Areas Parking fees	18,622	19,000	20,000	1,000
Conservation Area Agricultural rent	13,010	12,000	12,000	-
Reserve funds, Windy Ridge	-	5,800	6,800	1,000
Fleetwood Creek cost recovery	-	7,500	7,500	-
Property management fees Fleetwood	8,560	5,800	5,800	-
Property management fees East Cross Forest	 14,443	-	46,700	46,700
	 74,444	65,600	114,300	48,700
Stewardship product sales	13,597	5,000	8,800	3,800
Stewardship tree seedling sales	15,527	11,000	16,300	5,300
	 29,124	16,000	25,100	9,100
Education grants	24,984	-	40,500	40,500
Education user fees	7,810	-	24,500	24,500
	 32,794	-	65,000	65,000
Municipal funds, Region of Durham	89,144	103,200	104,900	1,700
Municipal operating levy	200,612	328,550	349,700	21,150
	 289,756	431,750	454,600	22,850
	\$ 426,118	\$ 513,350	\$ 659,000	\$ 145,650

Draft

#### OPERATIONS

#### ENVIRONMENTAL PROTECTION AND RESTORATION EXPENDITURES

	Audited Actual	Budget	Budget	Variance to
	2016	2017	2018	2017 Budget
PROTECTION & RESTORATION MANAGEMENT				
Direct labour	\$-\$	95,100	\$ 125,300	\$ 30,200
Overhead	ې ب -	7,200	7,700	500
Supplies	-	500	500	-
Professional development	-	500	500	-
Travel	-	200	200	-
	-	103,500	134,200	30,700
CONSERVATION AREAS		,	,	· · · ·
Direct labour	59,600	63,100	133,800	70,700
Seasonal labour	57,965	53,000	15,000	(38,000)
Overhead	23,156	14,400	22,900	8,500
Supplies	1,511	2,000	2,000	-
Brochures and publications	-	-	800	800
Professional development	474	1,100	1,100	-
Travel	914	500	500	-
Ken Reid Conservation Area	39,288	47,950	48,100	150
Pigeon River Headwaters Conservation Area	3,845	11,900	11,900	-
Windy Ridge Conservation Area	5,015	5,800	6,800	1,000
Fleetwood Creek Natural Area	14,443	7,500	7,500	-
Durham East Cross Forest Conservation Area	89,144	103,200	104,900	1,700
Dewey`s Island	32	300	200	(100)
	295,387	310,750	355,500	44,750
STEWARDSHIP				
Direct labour	68,993	76,700	78,800	2,100
Overhead	7,719	7,200	7,700	500
Supplies and equipment	918	1,700	1,700	-
Products for resale	5,610	-	-	-
Professional development	1,029	1,500	1,500	-
Tree seedling program	10,849	11,000	13,600	2,600
Travel	112	1,000	1,000	-
	97,050	99,100	104,300	5,200
CONSERVATION EDUCATION				
Direct labour	21,760	-	40,600	40,600
Seasonal labour	-	-	8,100	8,100
Overhead	-	-	5,900	5,900
Supplies and equipment	10,642	-	9,400	9,400
Travel	1,279	-	1,000	1,000
	33,681	-	65,000	65,000
	\$ 426,118 \$	513,350	\$ 659,000	\$ 145,650

#### KAWARTHA CONSERVATION 2018 Preliminary Operating Budget OPERATIONS

#### SCHEDULE OF CONSERVATION AREAS

# Draft

	Audited Actual 2016			Budget 2017	Budget 2018	Variance to 2017 Budget
Ken Reid Conservation Area						
Road and parking lot maintenance	\$	10,169	\$	12,000 \$	12,000	Ş -
Vehicle usage		1,079		1,500	1,500	-
Equipment usage		4,726		5,000	5,000	-
Supplies and small tools		9,771		10,350	8,500	(1,850)
Infrastructure repair and maintenance		11,144		15,000	17,000	2,000
Utilities		2,343		4,000	4,000	-
Property taxes		57		100	100	-
		39,289		47,950	48,100	150
Pigeon River Headwaters Conservation Area						
Road and parking lot maintenance		-		1,000	1,000	-
Vehicle usage		1,031		1,400	1,400	-
Equipment usage		217		1,000	1,000	-
Supplies and small tools		484		1,350	1,000	(350)
Infrastructure repair and maintenance		1,558		6,500	6,800	300
Property taxes		555		650	700	50
		3,845		11,900	11,900	-
Windy Ridge Conservation Area						
Road and parking lot maintenance		916		-	1,000	1,000
Vehicle usage		757		1,000	1,000	-
Equipment usage		192		350	400	50
Supplies and small tools		593		950	700	(250)
Infrastructure repair and maintenance		2,141		3,000	3,200	200
Property taxes		416		500	500	-
		5,015		5,800	6,800	1,000
Fleetwood Creek Natural Area						
Property management		8,560		5,800	5,800	-
Road and parking lot maintenance		250		-	300	300
Vehicle usage		772		800	800	-
Equipment usage		150		100	200	100
Supplies and small tools		389		800	400	(400)
Infrastructure repair and maintenance		4,322		-	-	-
		14,443		7,500	7,500	-
Dewey's Island						
Travel and equipment		32		300	200	(100)

#### KAWARTHA CONSERVATION 2018 Preliminary Operating Budget SPECIAL OPERATING PROGRAM

# Draft

#### **Region of Durham**

		Audited							
DURHAM EAST CROSS FOREST CONSERVATION AREA	Actual 2016			Budget 2017		Budget 2018		Variance to 2017 Budget	
<b>Sources of Revenue</b> Region of Durham special operating levy Grants and other sources of revenue Deferred revenue	\$	68,600 - 20,544	\$	70,400 14,500 18,300	\$	72,200 - 32,700		1,800 (14,500) 14,400	
	\$	89,144	\$	103,200	\$	104,900	\$	1,700	
Direct labour In-house expertise Security Infrastructure and supplies Travel Equipment usage Property taxes Administration fee	\$	22,752 11,045 22,621 18,058 2,531 221 3,812 8,104	\$	18,000 16,000 28,000 20,000 2,400 1,000 8,500 9,300	\$	4,200 37,200 24,400 17,500 2,500 1,100 8,500 9,500	\$	(13,800) 21,200 (3,600) (2,500) 100 100 - 200	
	\$	89,144	\$	103,200	\$	104,900	\$	1,700	

Durham East Cross Forest is considered to be an operating program funded solely by the Region of Durham effective in 2017

# **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 contributes 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.

# 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 and destruction 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.

# **Corporate Communications**

Corporate communications helps 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.

# **Corporate Services**

#### Program & Program Type

- Administration and Client Services, program to meet operational needs including the Board of Directors (R) (A).
- Human Resources, Health and Safety (L).
- Finance, Budget, Audit (L).
- Record Management (L).

- Technology Infrastructure, a program appropriate to support the functions of the organization (A).
- Insurance, Asset Management, Risk Assessments (L).
- Facilities Management (L).

#### Value

- Oversee and provide direction to business operations.
- Provide support and essential services to all department areas.
- Ensure compliance with Provincial and Federal legislation as well as the Conservation Authorities Act.
- Minimize risks and liabilities.
- Protection of corporate records.

- Provide a safe, accessible work environment and retain professional expertise.
- Meet the requirements of financial reporting to member municipalities and provincial & federal governments.
- Provide customer services.
- Advance information technology to ensure uninterupted services for our clientele.

#### Benefit

#### Administration and Client Services

- Provide client services to the Board of Directors including the preparation of agendas and minutes with adequate information to allow for decision making that is in the best interest of the organization to service the needs of the municipalities and residents.
- Leadership and direction improves business performance to achieve efficiencies and produce valued products cost effectively.
- Policy development and implementation maintains efficient operations and reduces staff time and effort.
- Corporate services programs reduce time for other department management and staff.

#### Human Resources, Health and Safety

• Adherence to employment legislation prevents fines and litigation saving time and money.

- Recruitment and retention of professional experts to deliver the programs reduces costs associated with continuous hiring and orientation.
- Policies and direction provide for more productive teams, improved morale, enhanced performance and improved retention saving time and money.

#### Finance, Budget, Audit

- Meeting legislative requirements for reporting and payments to various government levels avoids costs of penalties.
- Timely information to make decisions to avoid budget overruns and determine areas for savings and revenue generation.
- Financial reporting provides transparency and accountability.

#### **Record Management**

Protection of the corporate records is necessary

#### Benefit, Cont'd

to operational efficiencies and legislative requirements thus saving time, effort and costs associated with the recovery or re-creation of information.

#### Technology Infrastructure

• Implementation of technological advancements and up to date software saves staff time and reduces overall costs.

#### Insurance, Asset Management, Risk Assessments

 The inventory of assets and replacement schedule saves time and costs due to lost or damaged assets ensuring productivity within the organization • Insurance and risk assessments protect the organization from loss and litigation, saving money.

#### Facilities Management

- Maintaining our infrastructure ensures a safe workplace avoiding injuries and increased costs associated with WSIB claims.
- Avoid accidents or injuries to the public and any associated costs.
- A clean, well-maintained facility is important to staff productivity and output.

#### **Additional Applicable Legislation**

- Employment Standards Act.
- Occupational Health & Safety Act.
- Ontario Human Rights Code.
- Accessibility for Ontarians with Disabilities Act.
- Legislation by Canada Revenue Agency.
- Canada Not For Profit Corporations Act.
- Municipal Freedom of Information and Protection of Privacy Act.
- Public Service Accounting Board.
- Regulations of the Ontario Building Codes.

#### **Strategic Plan Link**

#### Kawartha Conservation

- Attract and retain a skilled workforce, utilize our talent management program to succession plan and build professional leaders.
- Perform Value for Service Review to general sustainable revenues and create efficiencies.
- Develop performance metrics standards to focus organizational performance and accountability
- Implement Asset Management Plan.
- Invest in Technology to enhance business service delivery.
- Find methods to collaborate and share services with neighbouring conservation authorities.
- Expand partnerships with universities and colleges.

#### **Municipalities**

 Mirroring similar strategic goals of partner municipalities.

#### City of Kawartha Lakes

- Strategic Enablers.
- Responsible Fiscal Resource Management: E1.1.
- Effective Human Resources Management: E2.1, E2.2.

- Service Excellence: E3.1, E3.2, E3.3.
- Efficient Infrastructure and Asset Management: E4.1, E4.2.

#### Township of Scugog

- Strategic Direction:
- #2 Financial Sustainability such as pursuing alternative revenue sources and conducting
- Core Service Review.
- #4 Municipal Services such as implementing modern technologies to improve productivity and customer service.
- Pursuing customer service excellence opportunities and encouraging staff development and training to achieve service excellence *Township of Brock*
- Service Excellence.
- Connect With Others.
- Share Our Success.

#### Municipality of Clarington

 #2.2 Investigate putting in place an ongoing evaluation where specific services are identified and systematically reviewed to determine the most efficient and effective way to provide them.

- 2.3 Review opportunities for joint capital and/or operations with School Boards, Regional Government and other public agencies.
- Township of Cavan Monaghan
- Action 2.
- Ensure that the Township's Management is both accountable and measured for successful outcomes. Initiate the development of 4 year departmental business plans that establishes:
- Departmental core values.
- Resource requirements associated with long term priorities that will be reviewed annually as part of the budgeting/business planning process.
- Performance measures and success indicators. *Municipality of Trent Lakes*
- Succession planning
- Organizational review

# **Corporate Communications**

#### Program & Program Type

- Corporate Communications supports corporate functions including all internal departments, Board of Directors and Foundation (A).
- Critical communication for flood and low water warnings and advisories including planning and Lake Management Planning (L).
- Supports all departmental communications both

#### internal and external (A).

- Manages all website functions, content and updates (A).
- Develops and executes strategic social media across multiple platforms to expand reach of critical information (A).

#### Value

- Critical to the success of strategic initiatives, goals and actions.
- Ensures corporate image is professional which attracts professional employees as a preferred employer.
- Builds relationships with community.
- Provide consistent messaging to avoid confusion
- Provides crisis communication when an event occurs that threatens the public.
- Produce communication strategies specific to project objectives and outcomes.

- Attracts volunteers and donors and engages the community to attend conservation areas and events.
- Supports the Foundation communication needs.
- Promotes, encourages and supports education and understanding of nature and the environment to the community.
- Maintain and develop relationships with municipal partners and staff through targeted communications.

#### Benefit

- Reduces effort, time and cost associated with communication needs of all departments and project leaders.
- Contributes to public safety with the potential to save lives and reduce property damage costs.
- Contributes to new sources of revenue through donations, parking fees and demand for children's education programs.
- Increased community engagement attracts volunteers to accomplish projects and save staff time and project costs.
- Professional corporate image reduces the cost of

staff turnover and recruitment.

- Consistent, open and transparent communication creates an understanding and respect for corporation and reduces time and effort associated with continual misunderstandings.
- Promote information and knowledge transfer.
- Develops and executes a plan for greater earned media coverage, increasing profile and positive recognition of Kawartha Conservation and the member municipalities.

#### **Strategic Plan Link**

#### Communications and Marketing supports the Strategic Goals and Enablers of the 2017-2021 Kawartha Conservation Strategic Plan in their entirety under the five themes of:

- Protect
- Conserve
- Discover
- Optimize Service
- Collaborate
- City of Kawartha Lakes
- Goal 1: A Vibrant and Growing Economy. Communications and Marketing aligns with Objective 1.2: Better marketing and improved community visibility by promoting our conservation areas, day visits, trail use, health and wellness as well as promoting the value of green space to local residents including the GTA.
- Goal 2: An Exceptional Quality of Life. Communications and Marketing aligns with, and supports, Objectives 2.1: A more culturally vibrant community promoting culture, arts and heritage, and 2.2:

Improved Wellness, Well-Being and Community Health, through promotion of walkable trails, particularly at Ken Reid Conservation Area, and developing and launching campaigns (Healthy Hikes, Step Into Nature) to lead to a more active and healthy lifestyle by community residents throughout our watershed.

 Goal 3: A Healthy Environment. Communications and Marketing supports the City of Kawartha Lakes 3.1: A healthier environment Strategic Plan objective through promoting, sharing and informing residents and visitors about opportunities and strategies to protect and enhance water quality, protect natural features and functions, and others.

#### Township of Scugog

 Communications and Marketing supports Strategic Direction #5 – Natural Environment - of the Township of Scugog Strategic Plan, by working with other stakeholders to maintain a healthy Lake Scugog.

#### KAWARTHA CONSERVATION 2018 Preliminary Operating Budget OPERATIONS

#### CORPORATE SERVICES



	Audited Actual 2016	Budget 2017	Budget 2018	Variance to 2017 Budget
Sources of Revenue				
Municipal operating levy	\$ 711,229	\$ 726,500	\$ 760,400	\$ 33,900
Investment income	7,865	3,500	6,000	2,500
Donations	2,003	-	-	-
Recovery long term debt interest	 4,942	 5,300	 2,000	 (3,300)
	\$ 726,039	\$ 735,300	\$ 768,400	\$ 33,100
Expenditures				
CORPORATE SUPPORT				
Direct labour	\$ 550,049	\$ 561,100	\$ 589,600	28,500
Overhead	30,875	28,800	30,600	1,800
Directors per diems and expenses	21,097	20,000	15,000	(5,000)
Supplies	17,841	19,000	22,000	3,000
Travel	4,141	4,000	4,000	-
Interest on long term debt	 4,943	5,300	2,000	(3,300)
	 632,759	642,200	667,200	 25,000
CORPORATE COMMUNICATIONS				
Direct labour	78,686	81,000	81,000	-
Overhead	7,719	7,200	7,600	400
Supplies and publications	2,348	2,500	3,000	500
Technology, software and licences	-	-	4,700	4,700
Annual report design and print	-	-	2,000	2,000
Professional development	1,273	1,000	1,500	500
Travel	273	400	400	-
Strategic plan process, design and print	 978	1,000	1,000	-
	 91,277	 93,100	 101,200	8,100
	\$ 724,036	\$ 735,300	\$ 768,400	\$ 33,100

#### KAWARTHA CONSERVATION 2018 Preliminary Operating Budget

#### **OPERATIONS**

#### Schedule of OVERHEAD



	 Audited Actual 2016		Budget 2017		Budget 2018		Variance to 2017 Budget
Administration building utilities	\$ 16,160	\$	20,000	\$	18,000	\$	(2,000)
Administration building maintenance	33,816		24,000		24,000		-
Office equipment	(3,942)		5,000		3,000		(2,000)
Telephone & internet	5,815		7,000		8,000		1,000
Audit and legal	8,758		8,500		8,700		200
Banking fees and interest	5,322		4,500		5,500		1,000
Insurance	27,952		28,000		29,000		1,000
Conservation Ontario membership	21,473		23,000		24,000		1,000
IT/IMS support services	32,691		21,000		31,000		10,000
Human Resources & Safety	 6,331		3,000		2,000		(1,000)
	\$ 154,376	\$	144,000	\$	153,200	\$	9,200
Distributed to departments:	20%	ć	28,800	\$	30,600	\$	1 800
Planning and Regulations Regulation Enforcement	20% 5%	•	28,800	Ş	7,700	Ş	1,800 500
Environmental Technical Services	5%	ç	14,400		7,700		(6,700
Environmental Information Services	5%		7,200		7,700		500
Environmental Monitoring Services	10%		14,400		15,300		900
Flood and Water Level Monitoring	5%		7,200		7,700		500
Protection and Restoration Services	5%		7,200		7,700		500
Conservation Areas	15%		14,400		22,900		8,500
Stewardship	5%		7,200		7,700		500
Corporate Support Services	20%		28,800		30,600		1,800
Corporate Communications	 5%		7,200		7,600		400
	100%	¢	144,000	\$	153,200	\$	9,200

# Proposed Special Projects General Benefiting, 2018

General benefiting special projects are those projects considered to be watershed-wide and benefiting all municipalities.

	2018 Municipal Levy	2018 Total Project Cost
Drinking Water Source Protection	\$-	\$ 65,000
Website Design and Update	\$ 5,000	\$ 5,000
Digitization of Corporate Records	\$ 15,000	\$ 15,000
Total Contributions	\$ 20,000	\$85,000

# Proposed General Benefiting Project 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

Source Protection Committee (SPC) representatives include one-third municipal, and two-thirds of local stakeholders, including economic sectors (agriculture, industry and commerce) and environmental, rural and urban property owners. The Committee is responsible for the development of an effective and proactive approach to protect municipal drinking water sources 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 the Environment.

#### 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.

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 form the next phase in the planning cycle. Activities include the update of planning policies (Official Plans, Zoning by-Laws), 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.

#### 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 needed

#### KAWARTHA CONSERVATION 2018 Preliminary Special Project Budget GENERAL BENEFITING PROJECT

# Draft

#### DRINKING WATER SOURCE PROTECTION PLAN

	udited Actual 2016	Budget 2017	Budget 2018		
Sources of Revenue					
Regional Transfer funds	\$ 58,077	\$ 65,000	\$ 65,90		
Expenditures					
Direct labour	\$ 21,785	\$ 21,000	\$ 39,20		
In-house expertise	26,475	34,000	17,00		
Project admin fee	5,280	6,500	6,00		
Travel	1,294	500	70		
Supplies & equipment	 3,243	3,000	3,00		
	\$ 58,077	\$ 65,000	\$ 65,90		

# **General Benefitting**

#### Website Redesign

This project will allow Kawartha Conservation to initiate municipal, community and staff consultation to build the framework for a new user-friendly corporate website with two priority focuses:

- Enable customers to quickly, easily and efficiently find the information they need, and utilize online services provided with a particular aim to improve planning and permitting services.
- Promote our conservation areas and natural areas as an economic development and tourism initiative to support the overall tourism and development initiatives of our municipal partners.

The Website Redesign project is projected to span three years, with initial work starting in 2018, followed by substantial work in following years (\$40,000 in 2019, \$20,000 in 2020).

#### Digitization of Corporate Records

This project will focus on digitizing all corporate records over a five year period. 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.

#### KAWARTHA CONSERVATION 2018 Preliminary Project Budget GENERAL BENEFITING PROJECTS



		Audited Actual 2016		Budget 2017	Budget 2018
Website design and update Digitization of corporate records		\$	- ç	5 -	\$ 5,000 15,000
		\$	- \$	<b>;</b> -	\$ 20,000
Apportionment share:					
City Kawartha Lakes	60.2394	\$	- ¢	5 -	\$ 12,048
Region of Durham	34.9512		-	-	6,990
Municipality of Trent Lakes	4.4625		-	-	893
Cavan Monaghan	0.3468		-	-	69
		\$	- \$	<b>;</b> -	\$ 20,000
	100.0000				

The budgets for the above projects are for the services of consultants and professionals to prepare reports and provide services.

## Proposed Special Benefiting Projects Region of Durham, 2018

The following special projects are brought forward for consideration by the Region of Durham. These projects are undertaken only upon municipal approval and financial support.

	2018 Municipal Levy	2018 Total Project Cost
Watershed Plan Implementation	\$ 133,900	\$ 147,800

## Proposed Special Benefiting Project, Region of Durham Watershed Plan Implementation 2018

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) and the Port Perry Stormwater Management Plan, endorsed in 2014. 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 waterfront, with enhanced stormwater management, are critical 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:

- 1. Stewardship and Natural Heritage
- 2. Scugog WATER fund
- 3. Water Quality Monitoring
- 4. Lake Scugog Enhancement

## Stewardship and Natural Heritage

Effectively engaging residents and the community will result in targeted stewardship activities, such as:

- Long-term management of sediment input and 30-35% reduction of annual nutrient input to public waterbodies from a variety of urban, rural and shoreline sources.
- Limiting the proliferation of invasive species that have become a significant threat to all natural areas within southern Ontario, which are now impacting certain agricultural lands, structures (Japanese knotweed) and, with species such as giant hogweed and wild parsnip, human health.
- Reforestation and Natural Heritage enhancement. The total forest cover in the Lake Scugog
  watershed represents 24.8% of the watershed area below the 30% cover recommendation within
  the Great Lakes Areas of Concern (Environment Canada, 2004) and the Durham Region Official Plan
  (2008). In addition, the Region of Durham has identified a target of five million trees to be planted
  over 10 years to mitigate climate change impact.
- Implementing the BlueScape Program (supported by Eco-Action and Royal Bank of Canada Blue Water funding). This program was initiated in 2015 to promote lot level runoff management, water conservation, and climate change adaptation measures within urban areas.

#### Urban deliverables for 2018 include

- Continued implementation of the BlueScape program including the completion of the William's Creek demonstration site.
- Continued technical support for community rain garden projects.
- Ongoing participation in the planning and implementation of TD Tree Day reforestation projects with more than 250 trees to be planted.
- Community engagement through community events and workshops to promote and support private land stewardship

#### Rural deliverables for 2018 include

- Continued support for rural landowners to connect them with the 50 Million tree program.
- Continued support of small scale reforestation projects through our seedling distribution program. Local

distribution through the Willow Tree Farm location has increased program participation in recent years.

#### Shoreline deliverables for 2018

- Follow-up on Blue Canoe outreach activities from 2017.
- Provide relevant lot level information materials to Real Estate agencies to share with new landowners.
- Provide technical support to private landowners wishing to improve their shorelines.
- Continued community engagement through event and workshop coordination and participation.
- Development and distribution of a Managing Aquatic Plants information kit for shoreline owners and lake users.

## Scugog WATER Fund

Since 2007, the Scugog Water and Terrain Environmental Restoration (WATER) Fund has assisted over 95 landowners with small financial incentives in support of various water quality projects. Deliverables for 2018 include:

- Continue to promote the program and provide 'seed funding' to support water quality projects.
- Work with the Fund Advisory Committee to identify new project possibilities and expand our reach into the agricultural community.
- Continue to provide support for community and private BlueScape projects throughout the urban landscape.

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

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, identifying hotspots for future stewardship priorities, and providing recommendations for landuse planning.

### Deliverables for 2018

- Conduct five rounds of water quality sampling on Lake Scugog at six open water sampling stations and 12 rounds of water quality sampling on Oak Ridges Moraine tributaries with inputs to the lake.
- In 2018, we are adding William's Creek, and urban tributaries in Port Perry.
- Measure flow volumes of East Cross Creek and Layton River monthly rating curve measurements and maintenance.

### Lake Scugog Enhacements

The purpose of this project is to provide technical and project management support to the Working Group for a Healthy Lake Scugog as they consider options to revitalize Port Perry Bay, in conjunction with a constructed wetland to improve urban storm water treatment. Proposed strategies involve a combination of activities such as dredging, creating a berm and wetland, 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 lead the public consultation process. A draft conceptual design was unveiled in the fall of 2016 for public review and input, and an open house in late 2017, with further work being undertaken by GHD in response to recommended project refinements.

### **Deliverables For 2018**

- Provide ongoing science and technical support in addition to project management services, in collaboration with the Township of Scugog.
- Oversee GHD Consulting for investigating options, developing of a project plan, and leading the public consultation process including a Municipal Class Environmental Assessment, Basic Impact Analysis (as necessary for Parks Canada and DFO fisheries authorization).
- Conducting additional biological/ecological surveys required to satisfy various permitting criteria for managing ecological impacts (e.g. Species at Risk, fisheries habitat).
- Ongoing scientific and technical support to obtain permits for the project.

#### KAWARTHA CONSERVATION 2018 Preliminary Special Project Budget SPECIAL BENEFITING PROJECTS



Region of Durham WATERSHED IMPLEMENTATION PROJECTS	Audited Actual EMENTATION PROJECTS 2016			Budget 2017	Budget 2018		
		2010		2017	2018		
Sources of Revenue-Stewardship programs							
Special project funding, Region of Durham	\$	78,757	\$	130,500	\$ 74,700		
Grants, Provincial		11,423			8,000		
Grants, other		16,582		14,500	5,400		
Landowner contributions					500		
	\$	106,762	\$	145,000	\$ 88,600		
Expenditures-Stewardship programs							
Direct labour	\$	32,293		22,900	14,600		
In-house expertise		25,800		33,100	28,000		
Supplies & professional fees		11,293		18,000	9,600		
Project contractor		-		-	6,000		
Landowner grants		26,546		24,000	20,000		
Communications		149		3,400	400		
Travel		3,388		5,500	2,000		
Project administration fee		7,293		9,300	8,000		
	\$	106,762	\$	116,200	\$ 88,600		
Sources of Revenue-Science and Technical							
Special project funding, Region of Durham	\$	81,180			\$ 59,200		
Expenditures-Science and Technical							
Direct labour		9,160		500	1,000		
In-house expertise		12,425		17,500	33,800		
Supplies & professional fees		45,983		4,500	2,100		
Communications				-	500		
Travel		1,051		3,100	3,400		
Lab costs		5,181		-,200	13,000		
Project administration fee		7,380		3,200	5,400		
	\$	81,180	\$	28,800	\$ 59,200		
PROJECT TOTAL	\$	187,942	\$	145,000	\$ 147,800		

## Proposed Special Benefiting Projects City of Kawartha Lakes, 2018

The following special projects are brought forward for consideration by the City of Kawartha Lakes. These projects are undertaken only with municipal approval and financial support.

	2018 Municipal Levy	2018 Total Project Cost
Lake Management Plans - Page 83	\$ 68,000	\$ 73,700
Lake Management Plans- Implementation - Page 87	\$ 165,600	\$ 244,100
Floodplain Mapping Study - Page 93	\$ 173,500	\$ 242,500
Digital Imagery Acquisition - Page 97	\$ 10,000	\$13,000
Total Contributions	\$ 417,100	\$ 573,300

## Agreements

Risk Management Official - Page 101	\$ 115,500	\$ 115,500
Municipal Drain Classification - Page 105	\$ 75,000	\$ 75,000

NOTE: 2018 is the last year for the City of Kawartha Lakes Debt Retirement for the Administration Building set at \$60,000. The debt will be retired in 2019.

## Proposed Special Benefiting Project, City of Kawartha Lakes Lake Management Plans 2018

## Purpose

Lake Management Planning for significant lakes is a key strategic priority for the City of Kawartha Lakes, given their economic and environmental significance. Lake Management Plans provide crucial information on the health of our major lakes. This information is used to assist in land use planning and identifying strategic stewardship priorities.

## Background and detail

In 2009, the City of Kawartha Lakes and Kawartha Conservation began a 9-year monitoring program that would result in comprehensive lake managements plans for Sturgeon, Balsam, Cameron, Canal, Mitchell, Pigeon, Head and Shadow Lakes.

Comprehensive monitoring of water quality, quantity, shoreline inventories and biotic parameters have been undertaken for each of these water bodies and surrounding watersheds.

The process combines the watershed studies, community input from stakeholders, and the strategic goals of the municipality to facilitate the development of comprehensive recommendations for priority lake management planning with projects and implementation.

This planning process has fostered community participation through the development of three committees:

- Community Advisory Panel
- Science and Technical Committee
- Executive Liaison Group

To date, the Sturgeon, Balsam, Cameron, Canal, Mitchell Lake and Four Mile Lake Management Plans have been completed and endorsed by the Board.

### Deliverables

- Finalize the Lake Plans for the following lakes: Pigeon, Head, Shadow through receiving stakeholder and municipal endorsement.
- Produce a summary document combining key technical information from each lake management plan to act as a primary resource for municipal planners
- Consolidate 9-years of data into WISKI centralized database.
- Host meetings of three key lake plan implementation advisory groups: Community Advisory Panel, Science and Technical Committee, and Executive Liaison Group.
- Meet directly, on a routine basis, with lake associations and others stakeholders to ensure their priorities and expectations for their lake are met as plan development evolves into plan implementation.
- Work with the CKL to initiate a study to summarize the economic impact and contributions of a healthy lake environment.



City of Kawartha Lakes	Audited Actual 2016			Budget	Budget
LAKE MANAGEMENT PLANS, Kawartha Lakes				2017	2018
Sources of Revenue					
Special project funding, City of Kawartha Lakes	\$	192,100	\$	121,400	\$ 68,000
Deferred revenue		-		-	5,700
	\$	192,100	\$	121,400	\$ 73,700
Direct labour In-house expertise Communications	\$	55,394 79,545 1,544	\$	12,000 79,000 800	\$ 2,500 63,500 -
Supplies		31,506		13,100	300
Travel		6,647		5,400	700
Project administration fee		17,464		11,100	6,700
	\$	192,100	\$	121,400	\$ 73,700

## Proposed Special Benefiting Project, City of Kawartha Lakes

# Lake Management Plan Implementation 2018

### Purpose

This project implements recommendations to achieve high priority objectives identified within several lake management plans – Lake Scugog Environmental Management Plan (2010), Sturgeon Lake Management Plan (2014), Balsam Lake Management Plan (2015), and Cameron Lake management Plan (2015), Canal and Mitchell Lake Management Plans (2016) and Four Mile Lake Management Plan (2017) with Pigeon, Head and Shadow Lakes pending.

Healthy lakes are essential to the economic and social wellbeing of the entire City of Kawartha Lakes community. Seasonal and year round residents located within the shoreline communities contribute significantly to the municipal tax base, as well as to local businesses. The Kawartha Lakes, in their entirety, are considered to be the second largest recreational fisheries in the province, as well as one of the highest ranking tourist destinations.

Implementation activities are geared to the improvement of lake health and water quality with a focus on supporting the sustainability of this economic driver in our community. Activities are categorized into three major groupings identified below:

- Stewardship
- Urban and Rural Infrastructure
- Research and Monitoring

#### Stewardship

Stewardship programs are designed to implement the key elements within the lake management plans in Kawartha Lakes. Ensuring the sustainability of our lakes requires the informed management of private lands including urban, rural, agricultural, and shoreline properties. Kawartha Conservation continues to see an increase in the requests from communities for support services related to water quality concerns.

### Urban deliverables for 2018

- Continued implementation of the BlueScape program including the completion of a storm water runoff project at Omemee Beach.
- Completion of a rain garden implementation in Fenelon Falls.
- Continued technical support for community rain garden projects.
- Ongoing participation in the planning and implementation of TD Tree Day reforestation projects with more than 250 trees to be planted.
- Community engagement through events and workshops to promote and support private land stewardship.

### Agricultural and Rural deliverables for 2018

- Continued delivery of the Kawartha Lakes Farmland Stewardship Fund to assist landowners with the implementation of agricultural BMP's.
- Continued delivery of an Agricultural water quality habitat restoration project in partnership with the Ministry of Natural Resources and private landowner(s).
- Continued support of small scale reforestation projects through our seedling distribution program

particularly in sub-watersheds that do not meet forest cover benchmarks.

• Continue to facilitate technical support to landowners wishing to participate in the 50 Million Trees program.

## Shoreline deliverables for 2018

- Develop and begin implementation of a shoreline enhancement project at Centennial Beach to address ongoing pressures from Canada Geese populations and increased E-coli readings at the public beach.
- Collaborate with City of Kawartha Lakes staff on the development of a restoration strategy for the Bobcaygeon Beach and trailer park that will combine shoreline and BlueScaping components to address the elevated E-coli readings in soil and water tests.
- Provide relevant lot level information materials to real estate agencies to share with new landowners.
- Provide technical support to private landowners wishing to improve their shorelines.
- Continued community engagement through event and workshop coordination and participation.
- Distribution of a Managing Aquatic Plants information kit for shoreline owners and lake users.

### Urban and Rural Infrastructure

Sustainable, ongoing development is a priority for local municipalities. The movement of sediments from construction and development sites to local watercourses has significant long-term impacts, including filling in shallow shorelines, smothering fish habitat, increased aquatic vegetative growth, water pollution, and poor aesthetics. Establishing effective erosion and sediment control management is a priority recommendation in all Lake, Watershed, and Stormwater Management Plans. Sediment and erosion control planning and staff expertise is critical to ensuring the long-term health of our lakes and rivers when developing or improving properties or public works.

## Deliverables for 2018

- Develop and deliver training session(s) for Drainage Superintendents on sedimentation and erosion control measures
- Develop and deliver training and specifically for Municipal Staff on erosion and sedimentation control measures, permitting basics, application processes, shoreline works, and greening construction options.
- Develop and deliver multi-partner technology and training opportunities within our development community that focus on erosion and sedimentation control measures, permitting basics, application processes, shoreline works, and greening construction options.

## Research and Monitoring

Research and monitoring activities conducted for the lake management plans provide baseline information on water quality and quantity. Based on this data collected, during the lake management planning process, we have identified several areas where more specific information is required in order to make effective stewardship recommendations: accurate information regarding near shore areas on our lakes, point source contamination identification, and site specific data collection on public beach areas.

Near Shore deliverables for 2018

- Bi-weekly sampling chemical, biological and physical parameters of lake water quality, up to 20 sites per lake.
- Provide training and support of 'Citizen Scientists' on proper sampling protocols

## Determining Point Source Contaminant Input Deliverables for 2018

- Sampling water quantity and quality during high and low flow events for tributaries within the watershed. (Priority tributaries include Reforestation Creek, McLaren's Creek, and Jennings Creek).
- Analysis of data to inform stewardship project design and implemenation.

### Bond Beach Assessment deliverables for 2018

- Daily E-coli sampling conducted on 5 sites from June to August.
- Weekly water chemistry sampling on 5 sites from June to August.
- Weekly E-coli transection sampling conducted on beach sand to determine the source of E-coli contamination from June to August.

We respect the direction from Council to develop a multi-year strategic plan to address lake management plan implementation. While we have made progress on this front, such as through the hosting of a successful Stewardship Summit in June which was focused on understanding community needs and potential projects, we have not moved as far forward as we anticipated on this implementation plan. We want to ensure that the plan is appropriately focused with activities geared towards both willing and able partners. This plan will require more community consultation to ensure implementation will meet their needs, and this in turn will ensure the best use of municipal investment for the long-term. A multi-stakeholder Task Force, which was a key outcome of our Community Advisory Panel, will be developed to create the preferred implementation plan. We look forward to sharing this with City of Kawartha Lakes Council in the spring of 2018.

#### KAWARTHA CONSERVATION 2018 Preliminary Special Project Budget



IMPLEMENTATION         2016         2017           Sources of Revenue-Stewardship programs         \$         67,190         \$         85,200         \$           Grants, Federal         11,423         141,150         190,474         21,400         \$           Grants, Provincial         190,474         21,400         27,500         \$         \$           Grants, other         281,727         275,250         \$	Budget		Budget		Audited Actual		ity of Kawartha Lakes AKE MANAGEMENT PLANS,	
Special project funding, CKL         \$         67,190         \$         85,200         \$           Grants, Federal         11,423         141,150         190,474         21,400         27,500           Grants, other         281,727         275,250         281,727         275,250           Expenditures-Stewardship programs         12,640         27,500         281,727         275,250           Expenditures-Stewardship programs         12,679         20,200         200         200           Communications         538         9,450         11,955         20,200           Contractor services         -         18,800         17,950         20,200           Contractor services         -         18,800         4,860         72,700         \$           Project administration fee         11,095         25,250         281,727         275,250           Sources of Revenue-Science and Technical         \$         12,618         \$         72,700         \$           Special project funding, CKL         \$         12,618         \$         72,700         \$           Fees and sponsors         -         12,000         12,618         84,700         \$           Professional development         780         -	2018		-					
Special project funding, CKL         \$         67,190         \$         85,200         \$           Grants, Federal         11,423         141,150         190,474         21,400         27,500           Grants, other         12,640         27,500         281,727         275,250           Expenditures-Stewardship programs         281,727         275,250         281,727         275,250           Expenditures-Stewardship programs         12,640         27,500         281,727         275,250           Expenditures-Stewardship programs         12,679         20,200         200         200           Communications         538         9,450         11,950         25,250         20,200           Contractor services         -         18,800         17,950         20,200         20,200           Contractor services         -         18,800         14,440         4,860         21,095         25,250           Project administration fee         11,095         25,250         281,727         275,250           Sources of Revenue-Science and Technical         \$         12,618         \$         72,700         \$           Special project funding, CKL         \$         12,618         \$         72,700         \$								
Grants, Federal         11,423         141,150           Grants, Provincial         190,474         21,400           Grants, other         12,640         27,500           281,727         275,250         281,727 <b>Expenditures-Stewardship programs</b> Direct labour         60,350         41,440           In-house expertise         33,880         37,300           Supplies and events         12,679         20,200           Communications         538         9,450           Landowner agricultural grants         159,685         117,950           Contractor services         -         18,800           Travel         3,500         4,860           Project administration fee         11,095         25,250           Sources of Revenue-Science and Technical           Special project funding, CKL         \$         12,618         \$           Fees and sponsors         -         12,000         12,618         84,700           Direct labour         2,070         15,250         12,618         84,700           Professional development         780         -         12,000         -           Supplies         375         33,400         -								
Grants, Provincial         190,474         21,400           Grants, other         12,640         27,500           Expenditures-Stewardship programs         281,727         275,250           Expenditures-Stewardship programs         60,350         41,440           In-house expertise         33,880         37,300           Supplies and events         12,679         20,200           Communications         538         9,450           Landowner agricultural grants         159,685         117,950           Contractor services         -         18,800           Travel         3,500         4,860           Project administration fee         11,095         25,250           Sources of Revenue-Science and Technical         \$         12,618         \$           Special project funding, CKL         \$         12,618         \$         72,700         \$           Fees and sponsors         -         12,000         \$         12,618         \$4,700           Expenditures-Science and Technical         \$         12,618         \$         72,700         \$           Fees and sponsors         -         12,618         \$         72,700         \$           In-house expertise         2,975 <td< td=""><td>64,70</td><td>\$</td><td></td><td>\$</td><td></td><td>\$</td><td></td></td<>	64,70	\$		\$		\$		
Grants, other         12,640         27,500           281,727         275,250           Expenditures-Stewardship programs           Direct labour         60,350         41,440           In-house expertise         33,880         37,300           Supplies and events         12,679         20,200           Communications         538         9,450           Landowner agricultural grants         159,685         117,950           Contractor services         -         18,800           Travel         3,500         4,860           Project administration fee         11,095         25,250           281,727         275,250         281,727           Special project funding, CKL         \$         12,618         \$           Special project funding, CKL         \$         12,618         \$         72,700           Special project funding, CKL         \$         12,618         \$         72,700         \$           Fees and sponsors         _         -         12,000         12,618         \$         72,700         \$           In-house expertise         2,975         25,600         -         -         12,000         -           Supplies         375         <								
281,727         275,250           Expenditures-Stewardship programs         0,350         41,440           In-house expertise         33,880         37,300           Supplies and events         12,679         20,200           Communications         538         9,450           Landowner agricultural grants         159,685         117,950           Contractor services         -         18,800           Travel         3,500         4,860           Project administration fee         11,095         25,250           Special project funding, CKL         \$         12,618         \$           Fees and sponsors         -         12,000         \$           Direct labour         2,070         15,250         \$           In-house expertise         2,975         25,600         \$           Professional development         780         -         \$           Supplies         375         33,400         \$           Laboratory fees         3,698         -         -           Supplies         3,698         -         -           Supplies         36,988         -         -           Communications         -         -         - <td>65,00</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	65,00							
Expenditures-Stewardship programs           Direct labour         60,350         41,440           In-house expertise         33,880         37,300           Supplies and events         12,679         20,200           Communications         538         9,450           Landowner agricultural grants         159,685         117,950           Contractor services         -         18,800           Travel         3,500         4,860           Project administration fee         11,095         25,250           Sources of Revenue-Science and Technical         5         12,618         \$ 72,700         \$           Special project funding, CKL         \$ 12,618         \$ 72,700         \$         \$           Fees and sponsors         -         12,000         \$         12,618         84,700           Expenditures-Science and Technical         \$         12,618         \$ 72,700         \$           Fees and sponsors         -         12,618         \$ 72,700         \$           In-house expertise         2,975         25,600         \$           Professional development         780         -         \$           Supplies         375         33,400         \$           Lab	6,50		27,500		12,640		Grants, other	
Direct labour         60,350         41,440           In-house expertise         33,880         37,300           Supplies and events         12,679         20,200           Communications         538         9,450           Landowner agricultural grants         159,685         117,950           Contractor services         -         18,800           Travel         3,500         4,860           Project administration fee         11,095         25,250           Sources of Revenue-Science and Technical           Special project funding, CKL         \$         12,618         \$         72,700         \$           Fees and sponsors         -         12,000         -         12,618         84,700           Expenditures-Science and Technical           Direct labour         2,070         15,250           In-house expertise         2,975         25,600           Professional development         780         -           Supplies         375         33,400           Laboratory fees         3,698         -           Communications         -         -           Professional fees         967         -           Project administration fee	136,20		275,250		281,727			
In-house expertise       33,880       37,300         Supplies and events       12,679       20,200         Communications       538       9,450         Landowner agricultural grants       159,685       117,950         Contractor services       -       18,800         Travel       3,500       4,860         Project administration fee       11,095       25,250         Sources of Revenue-Science and Technical       281,727       275,250         Special project funding, CKL       \$       12,618       \$         Fees and sponsors       -       12,000       \$         In-house expertise       2,975       25,600       \$         Professional development       780       -       \$         Supplies       3,508       -       \$         Supplies       3,698       -       \$         Communications       -       -       -         Professional fees       967       -       -         Project administration fee       1,147       7,600							xpenditures-Stewardship programs	
In-house expertise       33,880       37,300         Supplies and events       12,679       20,200         Communications       538       9,450         Landowner agricultural grants       159,685       117,950         Contractor services       -       18,800         Travel       3,500       4,860         Project administration fee       11,095       25,250         Sources of Revenue-Science and Technical         Special project funding, CKL       \$       12,618       \$       72,700       \$         Fees and sponsors       -       12,000       12,618       84,700         Expenditures-Science and Technical         Direct labour       2,070       15,250         In-house expertise       2,975       25,600         Professional development       780       -         Supplies       375       33,400         Laboratory fees       3,698       -         Communications       -       -         Professional fees       967       -         Professional fees       967       -         Travel       606       2,850         Project administration fee       1,147       7,600	19,00		41,440		60,350		Direct labour	
Supplies and events         12,679         20,200           Communications         538         9,450           Landowner agricultural grants         159,685         117,950           Contractor services         -         18,800           Travel         3,500         4,860           Project administration fee         11,095         25,250           Sources of Revenue-Science and Technical         281,727         275,250           Special project funding, CKL         \$         12,618         \$         72,700         \$           Fees and sponsors         -         12,000         12,618         84,700         \$           Expenditures-Science and Technical         2,975         25,600         \$         -         12,000         \$           In-house expertise         2,975         25,600         -         -         -         2         \$           Professional development         780         -	35,40						n-house expertise	
Communications         538         9,450           Landowner agricultural grants         159,685         117,950           Contractor services         -         18,800           Travel         3,500         4,860           Project administration fee         11,095         25,250           Sources of Revenue-Science and Technical         281,727         275,250           Special project funding, CKL         \$         12,618         \$         72,700         \$           Fees and sponsors         -         12,000         12,618         84,700           Expenditures-Science and Technical         2,070         15,250         12,618         84,700           Direct labour         2,070         15,250         10         10         10         10         10         10         10         10         11,095         25,600         12,618         84,700         15,250         10	16,40						-	
Landowner agricultural grants       159,685       117,950         Contractor services       -       18,800         Travel       3,500       4,860         Project administration fee       11,095       25,250         Sources of Revenue-Science and Technical       281,727       275,250         Special project funding, CKL       \$       12,618       \$       72,700       \$         Fees and sponsors       -       12,000       12,618       84,700         Expenditures-Science and Technical       0       12,618       84,700         Direct labour       2,070       15,250       15,250         In-house expertise       2,975       25,600       -         Professional development       780       -       -         Supplies       375       33,400       -         Laboratory fees       3,698       -       -         Professional fees       967       -       -         Professional fees       967       -       -         Professional fees       967       -       -         Project administration fee       1,147       7,600       -	,		,					
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Travel       3,500       4,860         Project administration fee       11,095       25,250         281,727       275,250         Sources of Revenue-Science and Technical         Special project funding, CKL       \$ 12,618       \$ 72,700         Fees and sponsors       -       12,000         Expenditures-Science and Technical         Direct labour       2,070       15,250         In-house expertise       2,975       25,600         Professional development       780       -         Supplies       3,75       33,400         Laboratory fees       3,698       -         Communications       -       -         Professional fees       967       -         Project administration fee       1,147       7,600	1,00				100,000			
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Special project funding, CKL\$12,618\$72,700\$Fees and sponsors-12,00012,61884,700 <b>Expenditures-Science and Technical</b> Direct labour2,07015,250In-house expertise2,97525,600Professional development780-Supplies37533,400Laboratory fees3,698-CommunicationsProfessional fees967-Travel6062,850Project administration fee1,1477,600	136,20							
Direct labour2,07015,250In-house expertise2,97525,600Professional development780-Supplies37533,400Laboratory fees3,698-CommunicationsProfessional fees967-Travel6062,850Project administration fee1,1477,600	100,90 7,00 107,90	\$	12,000	\$		\$	pecial project funding, CKL	
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Laboratory fees3,698-CommunicationsProfessional fees967-Travel6062,850Project administration fee1,1477,600	6,50		33,400		375			
Professional fees         967         -           Travel         606         2,850           Project administration fee         1,147         7,600	18,20		-		3,698			
Travel         606         2,850           Project administration fee         1,147         7,600	1,40		-		-		Communications	
Project administration fee 1,147 7,600	1,50		-		967		Professional fees	
	6,80							
\$ 12,618 \$ 84,700 \$	9,80						roject administration fee	
	107,90	\$	84,700	\$	12,618	\$		
PROJECT TOTAL \$ 294,345 \$ 359,950 \$	244,10	<u>,</u>		*		•		

## Proposed Special Benefiting Project Floodplain Mapping Study

### Purpose

Kawartha Conservation proposes to continue floodplain mapping for 10 priority flood prone sub-watersheds in the City of Kawartha Lakes, to assist in planning future growth and development, and inform the City's Emergency Management Plans.

## Project Background and Detail

One of the most effective ways to avoid damage to property, and to ensure personal safety during a flooding event, is by taking preventative measures to ensure floodplains, or portions of floodplains, are maintained in their natural state. Proactively managing land use and development to protect the integrity and functionality of floodplains, along with the benefits they provide such as, flood storage capacity, conveyance of stormwater runoff, and minimizing non-point source water pollution are also important. Changes in land use, intensification of development/infrastructure, and changes in climate patterns (e.g. intensity/frequency of precipitation events) can have a significant impact on floodplain characteristics and their functionality in mitigating flooding hazards. Up-to-date floodplain mapping for the regulatory flood standard is important to municipalities in planning future growth and development in settlement areas, and is especially important in planning for flood emergencies. The protection of property and public safety from the threat of flooding hazards is a provincial land use policy requirement under the Provincial Policy Statement, and accordingly, flood hazards (flood-plains) must be protected from the adverse impacts of development in municipal land use documents.

### Benefits

- Land Use/ development planning Prevent flood damage for future development.
- Emergency management planning Identify flood hazard and high-risk areas (public safety and at risk private and public property assets).

## Components of the Floodplain Mapping Study

- Establishment of a Technical Committee comprised of representatives from City of Kawartha Lakes, Kawartha Conservation and a Technical Staff from Ganaraska Conservation Authority to guide the mapping studies;
- Development of a Peer Review process and Terms of Reference for each study area;
- Collection of floodplain elevation data for flood damage sub-watersheds through the use of digital elevation model based on LiDAR mapping;
- On the ground surveys to verify the accuracy of the digital elevation model, collect watercourse sectional profiles and measure man-made infrastructure (culverts, bridges, etc.);
- Hydrologic and Hydraulic Modeling to generate the 1-zone (and 2-zone where applicable) in the Regional (or 1 in 100 year) flood event; and,
- GIS production of maps for floodplains.

### **Project Timeline**

Early Years (2012-2014): This multi-year project commenced in 2012, with the Conservation Authority assisting the City in preparing specifications and an RFP for the procurement of LiDAR, a high-precision, radar-based mapping for the 10 flood damage centres. Survey work began on the highest priority study area, the Ops #1 Drain /Jennings Creek in Lindsay. Hydrologic and hydraulic models were developed. Field survey work was also completed for Sinister Creek, Fenelon Falls North and South Tributaries and started for Omemee East Tributary, Emily Creek and Bobcaygeon Tributary. Floodplain mapping was developed and approved for Ops #1 Drain / Jennings Creek. This followed extensive consultation with the development community given the extent of both existing and proposed development in various floodplain areas, the commercial area upstream of Hwy 7 and the development lands east of Hwy 35 respectively. The development community advocated that policies be developed concurrently with the approval of the regulatory floodplain to facilitate development.

More Recently (2015-2017): Floodplain mapping was developed for Sinister Creek (incl. public consultation). Background review, field survey and modelling work for the Omemee East and Fenelon Falls North tributaries were completed, with floodplain mapping completed for the Fenelon North Tributary. Draft mapping, public consultation and Board approval of final floodplain mapping for the Omemee East tributary was completed in 2016. The team contributed to the City of Kawartha Lakes' National Disaster Mitigation Program (NDMP) funding application for floodplain mapping in the Burnt River study area (50% matched funding). In 2017, Federal funding contributions (through NDMP) allowed the commencement of technical works and mapping of the Burnt River study area – to be completed in March 2018. In addition, 2017 also saw the successful NDMP funding (matched by the City of Kawartha Lakes) for works to commence in 2018 for Mariposa Brook Flood Plain Study.

Looking Forward (2018-2020): Work on Dunsford Creek/Emily Creek and Bobcaygeon Tributary is to be completed by early 2018. Subsequently, complete Floodplain Mapping for 4 Watersheds (the Burnt River, Mariposa Brook-Little Britain, McLarens Creek, and Fenelon Falls South) will be undertaken including, Hydrologic and Hydraulic Modeling, public consultation, complete peer review of model-ing results, preparation of floodplain maps and Conservation Authority Board approval of Regulatory mapping for all 4 Watersheds.

Project Management: The project is being managed in-house by Kawartha Conservation staff. The main engineering lead will be via Ganaraska Region Conservation Authority. The project is also guided by a Technical Committee consisting of representatives from the City of Kawartha Lakes, Kawartha Conservation, Ganaraska Region Conservation Authority, and Ministry of Transportation, as necessary. All methodologies and final outcomes are evaluated by an independent peer review.



City of Kawartha Lakes			
	Audited		
FLOOD PLAIN MAPPING	Actual	Budget	Budget
FLOOD DAMAGE CENTRES - CKL	2016	2017	2018
Sources of Revenue			
Special project funding, City of Kawartha Lakes	\$ 187,085	\$ 127,800 \$	173,500
Grant - NDMP	-	69,400	69,000
	187,085	197,200	242,500
Expenditures			
Direct labour	59,331	50,700	90,000
In-house expertise	11,375	9,400	11,200
Supplies	5,209	10,650	11,000
Communications	1,595	1,000	1,000
Professional services	90,936	104,450	105,000
Travel	1,631	2,500	2,900
Project administration fee	 17,008	18,500	21,400
	\$ 187,085	\$ 197,200 \$	242,500

## Proposed Special Benefiting Project, City of Kawartha Lakes Digital Imagery Acquisition Project

## City of Kawartha Lakes

## Background

The Digital Imagery Acquisition project for South Central Ontario (SCOOP) will provide Kawartha Conservation high resolution, leaf off, multi-spectral imagery flown in spring of 2018 that is accurate to approximately 50cm "on the ground" resolution. Kawartha Conservation will look to acquire approximately 4900 square kilometres of imagery for the entire City of Kawartha Lakes and portions of the Municipality of Trent Lakes and Township of Cavan Monaghan that lies within our watershed boundary. Digital Imagery products are used daily in our business, including operating programs in all management department areas, and in past capital projects, such as Ecological Land Classification and generic regulations. This project will be divided over 2018/2019.



Shared cost Digital Imager	y Acquisition	Ac	dited tual 016	Budget 2017	Budget 2018
City of Kawartha Lakes	3939 km	\$	- \$	-	\$ 10,000
Trent Lakes	566 km		-	-	2,900
Cavan Monaghan	16 km		-	-	100
		\$	- \$	-	\$ 13,000

Note: the project has been divided over two years for the CKL. An additional \$10,000 will be required in 2019 for completion.

## Special Project City of Kawartha Lakes, Municipal Agreement Risk Management Official Clean Water Act, Part IV, Enforcement

#### Purpose

Help implement a multi-barrier approach to strengthen the protection of municipal drinking water sources, by implementation of source protection plan policies requiring a risk management official (RMO) as per the Clean Water Act. A Source Protection Plan is based on threats assessments of groundwater and surface water quality on a site specific and watershed scale. Activities 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. The Trent Source Protection Plan was approved in 2014 with an effective implementation date of January 2015.

#### **Benefits**

Source Protection Plans were developed by Source Protection Committee (SPC) representatives composed of one-third municipal representatives, and the other two-thirds composed of local stakeholders in the economic sectors (agriculture, industry and commerce) and environmental, rural and urban property owners. 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 in a suitable way will be required surrounding water supply system. This is a proactive method of ensuring contamination risks are reduced and expensive clean-up costs can be averted.

### 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 2017 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 have been prioritized to focus on agricultural and residential fuel oil and must be developed within 5 years. Risk management plans will need to be negotiated with landowners, 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 staff and staff at Kawartha Conservation.

#### KAWARTHA CONSERVATION 2018 Preliminary Special Project Budget SPECIAL BENEFITING AGREEMENT

City of Kawartha Lakes Risk Management Official CLEAN WATER ACT, PART IV, ENFORCEMENT	Audited Actual Budget 2016 2017		Budget 2018		
Sources of Revenue					
City of Kawartha Lakes, agreement	\$	86,101	\$ 112,800	\$	115,500
Expenditures					
Direct labour	\$	56,625	\$ 86,200	\$	87,800
In-house expertise		17,790	10,000		10,000
Supplies		4,015	3,100		3,200
Technology and data management		354	3,000		3,100
Travel		1,605	1,900		2,600
Administration fee		5,712	8,600		8,800
	\$	86,101	\$ 112,800	\$	115,500

Draft

## **Special Project**

# City of Kawartha Lakes, Municipal Agreement, Municipal Agricultural Drain Classification - Update

## Background

Municipal agricultural drains are an integral component of the CKL rural infrastructure, requiring routine maintenance to ensure effective drainage of crop production areas. Maintenance activities are undertaken within regulated features, particularly watercourses (with fish habitat) and wetlands. Fish habitat downstream from permitted work activities are at risk due to insufficient sedimentation safeguards. In the early 2000's, CKL partnered with KRCA and DFO to undertake a drain classification project whereby all drains were field sampled and characterized to streamline the approval process for maintenance works.

More than 15 years have passed with several changes to managing municipal drains through this period including construction of new drains, natural changes in the sensitivity of watercourses and wetlands, changes in land use policies, changes to the classification process, and increased tile drainage, among others. Given that CKL places a priority on facilitating timely municipal drainage works, an update to the classification project is required to expedite the approval process.

This is proposed as a 1-year project that requires an integrated effort among Kawartha Conservation technical and planning staff, and collaboration with drainage-related and planning staff at the municipality.

## Deliverables

- Project report and data files summarizing reclassification of 55 drains within CKL.
- Field sampling of 160 sites along drains that were previously sampled in 2002.
- Classification of several new drains constructed since 2002.
- A standardized protocol to streamline the drain maintenance approval process.
- Integration and sharing of drain data, and records including engineering reports between CKL and Kawartha Conservation.
- Ongoing coordination between CKL drainage staff and Kawartha Conservation technical and planning staff.

### KAWARTHA CONSERVATION 2018 - 2022 Preliminary Special Project Budget SPECIAL BENEFITING AGREEMENT



City of Kawartha Lakes AGRICULTRUAL DRAIN CLASSIFICATION	Act	-		Actual Budget		
Sources of Revenue						
City of Kawartha Lakes, agreement	\$	- \$	- \$	75,000		
Expenditures						
Direct labour		-	- \$	8,000		
In-house expertise		-	-	54,000		
Supplies		-	-	3,500		
Travel		-	-	3,000		
Administration fee		-	-	6,500		
	\$	- \$	- \$	75,000		

# Proposed Special Benefiting Projects Municipality of Trent Lakes, 2018

The following special projects are brought forward for consideration by the Municipality of Trent Lakes. These projects are undertaken only with municipal approval and financial support.

	2018 Municipal Levy	2018 Total Project Cost			
Shoreline Outreach and Stewardship - Page 111	\$ 6,000	\$ 12,000			
Digitial Imagery Acquisition Project - Page 115	\$2,900	\$ 13,000			
Total Contributions	\$ 8,900	\$ 25,000			

### Proposed Special Benefiting Projects, Municipality of Trent Lakes Shoreline Outreach and Stewardship

#### Background and Detail

Stewardship programs are designed to implement the key elements within the lake management plans. Ensuring the sustainability of our lakes requires informed management of private lands including urban, rural, agricultural, and shoreline properties. Kawartha Conservation continues to see an increase in the requests from communities for support services related to water quality concerns.

#### Rural deliverables for 2018 include

- Continued support of small scale reforestation projects through our seedling distribution program particularly in subwatersheds that do not meet forest cover benchmarks.
- Continue to facilitate technical support to landowners wishing to participate in the 50 Million Trees program.

#### Shoreline deliverables for 2018 include

- Follow-up on the outreach from the Blue Canoe project in 2017.
- Provide relevant lot level information materials to Real Estate agencies to share with new landowners.
- Provide technical support to private landowners wishing to improve their shorelines.
- Continued community engagement through event and workshop coordination and participation.
- Distribution of Managing Aquatic Plants information kits for shoreline owners and lake users.

### KAWARTHA CONSERVATION 2018 Preliminary Special Project Budget



#### Municipality of Trent Lakes

		Audited Actual		Budget		Budget
SHORELINE OUTREACH & STEWARDSHIP		2016		2017		2018
Sources of Revenue						
Special project funding, Trent Lakes	\$	7,043	\$	10,000	\$	6,000
Grants, other		7,500	•	10,000		6,000
		14,543		20,000		12,000
Expenditures						
Direct labour		10,464		9,700		5,000
In-house expertise		980		6,200		3,900
Supplies		1,035		700		800
Communications		38		850		400
Travel		704		750		800
Project administration fee		1,322		1,800		1,100
	\$	14,543	\$	20,000	\$	12,000

## Proposed Special Benefiting Project, Municipality of Trent Lakes Digital Imagery Acquisition Project

### Background

The Digital Imagery Acquisition project for South Central Ontario (SCOOP) will provide Kawartha Conservation high resolution, leaf off, multi-spectral imagery flown in spring of 2018 that is accurate to approximately 50cm "on the ground" resolution. Kawartha Conservation will look to acquire approximately 4900 square kilometres of imagery for the entire City of Kawartha Lakes and the portions of Municipality of Trent Lakes and Township of Cavan Monaghan that lies within our watershed boundary. Digital Imagery products are used daily in our business, including operating programs (in all management department areas), and in past capital projects, such as Ecological Land Classification and generic regulations. This project will be divided over 2018/2019.



Shared cost Digital Imagery Acquisition		Audited Actual 2016		Budget 2017		Budget 2018	
City of Kawartha Lakes	3939 km	\$	- \$		\$	10,000	
Trent Lakes	566 km		-	-		2,900	
Cavan Monaghan	16 km		-	-	1	100	
		\$	- \$		\$	13,000	

Note: the project has been divided over two years for the CKL. An additional \$10,000 will be required in 2019 for completion.

## Proposed Special Benefiting Projects Municipality of Cavan Monaghan

The following special projects are brought forward for consideration by the Municipality of Cavan Monaghan. These projects are undertaken only with municipal approval and financial support.

	2018 Municipal Levy	2018 Total Project Cost		
Digitial Imagery Acquisition Project - Page 121	\$100	\$ 13,000		

### Proposed Special Benefiting Project, Municipality of Cavan Monaghan

# **Digital Imagery Acquisition Project**

### Background

The Digital Imagery Acquisition project for South Central Ontario (SCOOP) will provide Kawartha Conservation high resolution, leaf off, multi-spectral imagery flown in spring of 2018 that is accurate to approximately 50cm "on the ground" resolution. Kawartha Conservation will look to acquire approximately 4900 square kilometres of imagery for the entire City of Kawartha Lakes and the portions of Municipality of Trent Lakes and Township of Cavan Monaghan that lies within our watershed boundary. Digital Imagery products are used daily in our business, including operating programs (in all management department areas), and in past capital projects, such as Ecological Land Classification and generic regulations. This project will be divided over 2018/2019.

#### KAWARTHA CONSERVATION 2018 Preliminary Special Project Budget



Shared cost Digital Imagery Acquisition		Audited Actual 2016		Budget 2017		Budget 2018	
City of Kawartha Lakes	3939 km	\$	- \$		\$	10,000	
Trent Lakes	566 km		-	-		2,900	
Cavan Monaghan	16 km		-	-		100	
		\$	- \$		. \$	13,000	

Note: the project has been divided over two years for the CKL. An additional \$10,000 will be required in 2019 for completion.

#### Kawartha Conservation

T: 705.328.2271, F: 705.328.2286 277 Kenrei Rd., Lindsay ON K9V 4R1 GenInfo@KawarthaConservation.com KawarthaConservation.com