

# Lower Trent Conservation Inventory of Programs and Services

Update: August 17, 2023

	Program/Service and Subservices	Description	Category (1,2,3)	Category Rationale Act/Regs	Program 2023 Cost Estimate (\$)	Funding mechanism and percentage of costs
<b>Enabling Services:</b>						
Program Description: Key assistance provided to all departments of the conservation authority, board of directors, member municipalities and the general public to enable Lower Trent Conservation to operate in an accountable, transparent, efficient and effective manner.						
	Corporate Services Administration Human Resources	Administrative, human resources, operating and capital costs which are not directly related to the delivery of any specific program or service, but are the overhead and support costs of a conservation authority. Includes health and safety program, overseeing programs and policies.	1	CA Act 21.1	\$797,825	Municipal Levy - 67%  Self-Generated – 33%
	Financial Services	Annual budget, accounts payable and receivable, payroll, financial analysis, financial audit, administration of reserves and investments, financial reports for funding agencies, preparing and submitting reports to CRA, benefits program administration.	1	CA Act 21.1		
	Legal Expenses	Costs related to agreements/contracts, HR, etc.	1	CA Act 21.1		
	Governance	Supporting CA Boards, Advisory Committees, Office of CAO/ST	1	CA Act Part IV		
	Communications and Outreach	Public awareness-natural hazards, flood forecasting and warning, permitting requirements, natural hazard identification, mitigation, readiness and response, governance, policy, municipal and public relations and engagement, conservation lands. Website and social media content management.	1	CA Act 21.1		
	Administration Buildings	Office buildings and workshop used to support LTC staff, programs, and services. Includes utilities, routine and major maintenance, property taxes.	1	CA Act 21.1		
	Information Management/ Information Technology/GIS	Data management, records retention. Development and use of systems to collect and store data and to provide spatial geographical representations of data. Data collection, mapping, data sets, watershed photography. This includes geographical information systems and support.	1	CA Act 21.1		

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<b>Natural Hazard Management</b> Program Description: Conservation Authorities (CAs) are the lead provincial agencies on Natural Hazard issues. The goal is to protect life and property from flooding and erosion. This watershed-wide, comprehensive program includes development applications and permits, municipal plan input and review, environmental planning and policy, flood forecast and warning, flood and erosion control infrastructure, technical studies, ice management, education, and public awareness.						
	Section 28 Permit Administration	Reviewing and processing permit applications, associated technical reports, site inspections, communication with applicants, agents, and consultants and legal costs.	1	CA Act 21.1(1)	\$605,638	Municipal Levy – 43% Self-Generated – 57%
	Enforcement and Compliance	Under Part VII of the Conservation Authorities Act – enforcement and compliance to Part VI Section 28 permits	1	CA Act 21.1(1), 28		
	Municipal Plan Input and Review	Technical information and advice to municipalities on circulated municipal land use planning applications (Official Plan and Zoning By-law Amendments, Subdivisions, Consents, Minor Variances). Input to municipal land-use planning documents (OP, Comprehensive ZB, Secondary plans) related to natural hazards, on behalf of Ministry of Northern Development, Mines, Natural Resources and Forestry (MNDMNR), delegated to CAs (1983). Input to the review and approval processes under other applicable law, with comments principally related to natural hazards, wetlands, watercourses, and Sec. 28 permit requirements.	1	CA Act 21.1(1)		
	Flood Forecasting and Warning	Daily data collection and monitoring of weather forecasts, provincial and local water level forecasts, watershed conditions, snow surveys, flood event forecasting, flood warning, communications and response and equipment maintenance. Annual meeting with municipal flood emergency coordinator.	1	CA Act 21.1(1)	\$68,831	Provincial Transfer Payment – 100%

	<b>Program/Service and Subservices</b>	<b>Description</b>	<b>Category (1,2,3)</b>	<b>Category Rationale Act/Regs</b>	<b>Program Cost Estimate (\$)</b>	<b>Funding mechanism and percentage of costs</b>
	LTC Owned Flood and Erosion Control Infrastructure Operation and Management	Water and erosion control infrastructure operations and management. Includes all water management structures (flood control, dams and channels, berms, erosion control, etc.) that are annually inspected, and routine maintenance work completed. These structures are included in the asset management plan.	1	CA Act 21.1(1)	\$75,591	Municipal Levy – 100%
	Non-LTC Owned Flood and Erosion Control Infrastructure Operation and Management	Water and erosion control infrastructure operations and management. Includes all water management structures (flood control, dams and channels, berms, weirs, erosion control, etc.) that are annually inspected, and routine maintenance work completed.	2	CA Act 21.1.1	\$5,916	Municipal Levy – 100% Benefit Based Apportionment Levy – 100% for 2024
	Flood and Erosion Control Infrastructure Major Maintenance	Major maintenance on flood and erosion control structures as required. Projects are dependent on Water and Erosion Control Infrastructure (WECI) funding from the province and support from our municipal partners.	1	CA Act 21.1(1)	Varies from year to year	Provincial WECI– 50% Benefit Based Apportionment Levy – 50%
NEW	Low Water Response	Conditions monitoring and analysis. Technical and administrative support to the Water Response Team representing major water users and decision makers, who recommend drought response actions.	1	CA Act 21.1(1)	Currently included under FFW	Municipal Levy – 100%
	Natural Hazards Communications, Outreach and Education	Promote public awareness of natural hazards including flooding, drought, and erosion. Attending public events, supplying materials. Social media services. Media relations. Educate elementary school students and the public about the danger of floodwaters, dangers of dams, etc.	1	CA Act 21.1(1)	\$9,259	Municipal Levy – 100%
	Technical Studies and Policy Review	Studies and projects to inform natural hazards management programs including floodplain management, watershed hydrology, regulations areas mapping updates, flood forecasting system assessment, floodplain policy, Floodplain (FHIMP) project management. These projects often last one to two years and are distributed	1	CA Act 21.1(1)	Varies from year to year	Municipal % Province % Federal % Other Grant funding when available  FHIMP Municipal – 50%

		over time as human resources and funding is available.				Federal – 50%
	Program/Service and Subservices	Description	Category (1,2,3)	Category Rationale Act/Regs	Program Cost Estimate (\$)	Funding mechanism and percentage of costs
<b>Provincial Water Quality and Quantity Monitoring</b>						
Program Description: Lower Trent Conservation, in partnership with Ministry of Environment, Climate Change and Parks (MECP), has established long term sites to monitor surface and ground water conditions as well as an investment into long-term monitoring of climate change trends.						
	Provincial Water Quality Monitoring Network (PWQMN)	CA/MECP partnership for stream water quality monitoring at 9 sites. LTC staff take water samples and MECP does lab analysis and data management. Information is used for watershed report cards and watershed project prioritization.	1	CA Act 21.1(1) O. Reg. 686/21 12 (1) 2	\$10,112	Municipal Levy – 100%
	Provincial Groundwater Monitoring Network (PGMN)	A long-standing CA/MECP partnership for groundwater level and quality monitoring at 11 stations. Costs include equipment, data collection, analysis, data management and reporting. MECP funded network installation and continues to fund equipment replacements. Data collected supports flood forecast and warning, low water response, and water quality monitoring and watershed report cards.	1	CA Act 21.1(1) O. Reg. 686/21 12 (1) 1		Municipal Levy – 100%
<b>Local Water Monitoring</b>						
Program Description: Lower Trent Conservation, in partnership with community organizations, municipalities, and federal and provincial agencies has established sites to monitor surface water quality and quantity as well as many other parameters to support a healthy ecosystem.						
	Surface Water Quality Monitoring  Benthic Macroinvertebrates  Baseflow Monitoring	Surface water quality monitoring at 29 baseflow sites, (in addition to PWQMN), 9 additional surface water quality monitoring locations, benthic monitoring at 26 OBBN sites across the watersheds. Costs include equipment and calibration, sampling, analysis, and reporting. Information is used for watershed report cards and watershed project prioritization.	3	CA Act 21.1.2	\$46,235	Municipal Levy – 100%  2024 MOU – 100%

	Program/Service and Subservices	Description	Category (1,2,3)	Category Rationale Act/Regs	Program Cost Estimate (\$)	Funding mechanism and percentage of costs
<b>Drinking Water Source Protection</b>						
Program Description: The protection of municipal drinking water supplies in the Trent Conservation Coalition (TCC) Region and the Lower Trent Conservation Source Protection Area through the development and implementation of TCC Source Protection Plans. The TCC is a complex regional grouping of five Source Protection Areas including Lower Trent, Crowe, Otonabee, Kawartha and Ganaraska Conservation Authorities						
	Regional Drinking Water Source Protection Program (DWSP)	Coordination of the Trent Conservation Coalition Source Protection Region. Governance support of the Source Protection Committee, administration, technical support. Section 34, 35 and 51 amendments, Section 36 reviews of the Source Protection Plans and Assessment Reports. Activities required by the Clean Water Act and regulations.	1	CA Act 21.1(1)  Clean Water Act	\$332,071	Provincial Transfer Payment– 100 %
	Local Source Protection Area DWSP	Source Protection Authority reports, meetings and governance. Delivery of the Activities required by the Clean Water Act and regulations.	1	CA Act 21.1(1) Clean Water Act	\$56,211	Provincial Transfer Payment – 100%
	DWSP Risk Management Official	Carrying out Part IV duties of the Clean Water Act on behalf of municipalities through service agreements.	2	CA Act 21.1.1	\$104,000	Existing Municipal Agreements – 100 %  2024 MOU – 100%
	DWSP Education and Outreach	Carrying out Source Protection Plan policy G5: Education and Outreach specified action responsibilities on behalf of municipalities through service agreements.	2	CA Act 21.1.1	\$18,120	Existing Municipal Agreements – 100 %  2024 MOU – 100%
<b>Watershed-based Resource Management Strategy</b>						
Program Description: The purpose of a watershed plan is to understand the current conditions of the watershed, and identify measures to protect, enhance, and restore the health of the watershed. Watershed strategies provide a management framework to provide recommendations which consists of goals, objectives, indicators, and management recommendations. This addresses existing issues in the watershed and mitigate impacts from potential future land uses, while recommending appropriate actions to protect, enhance, and restore the watershed.						
NEW	Strategy Development	<b>New Project:</b> Collate/compile existing resource management plans, watershed plans, studies, and data. Strategy development, implementation, and annual reporting. This project builds on previous Watershed Management Strategies.	1	CA Act 21.1(1) O. Reg. 686/21 12 (1) 3	\$36,768	Surplus Funds – 100%

	Program/Service and Subservices	Description	Category (1,2,3)	Category Rationale Act/Regs	Program Cost Estimate (\$)	Funding mechanism and percentage of costs
<b>Conservation Authority Lands</b>						
Program Description: Lower Trent Conservation owns over 3,707 acres (1,500 ha) of land which includes conservation areas, management areas, forests, farmland and flood control structures and surrounding land. Lower Trent Conservation, property is essential to watershed management, environmental protection, helps implement the Watershed Management Strategy and provides areas for passive recreation.						
	Section 29 Enforcement and Compliance	Conservation Areas regulation enforcement and compliance.	1	CA Act 21.1(1) CA Act 29	\$330,646	Municipal Levy – 100 %
	Conservation Lands Management	Management and maintenance of all LTC properties including 10 conservation areas and 7 natural heritage areas with over 20 kilometers of recreational trails. Includes passive recreation, forest management, risk management program, hazard tree management, gates, fencing, signage, brochures, communications, pedestrian bridges, trails, parking lots, pavilions, roadways, stewardship, restoration, ecological monitoring, carrying costs such as taxes and insurance.	1	CA Act 21.1(1)		Municipal Levy – 80%, Self-Generated – 20%  Costs greater than \$5,000 in capital budget
	Major Maintenance	Major maintenance and capital improvements to support public access, safety, and environmental protection such as pedestrian bridges, boardwalks, pavilions, trails.	1	CA Act 21.1(1)		Municipal Levy – 100% Major works greater than \$5,000 in capital budget
	Land acquisition	Strategic acquisition of environmentally significant properties.	2/ 3	CA Act 21.1	varies	
	Vehicles and Equipment	Vehicles and equipment to support the work of LTC, including, fuel, licenses, repairs, and maintenance. Programs and projects are charged for the use of the vehicles and equipment.	1	CA Act 20	\$16,365	Municipal Levy - 100% Costs greater than \$5,000 in capital budget
NEW	Conservation Authority Lands Inventory	<b>New Project:</b> The land inventory will include the following information: location, date obtained, method and purpose of acquisition, land use. Project updates as inventory changes.	1	CA Act 21.1(1) O. Reg. 686/21 9 (3)	unknown	Municipal Levy – 100%
NEW	Conservation Lands and Area Strategy	<b>New Project:</b> A strategy to guide the management and use of CA-owned or controlled properties including guiding principles, objectives, land use, natural heritage,	1	CA Act 21.1(1)	Combined with WBRMS	

		classifications of lands, mapping, identification of programs and services on the lands, public consultation, publish on website. Updates of existing conservation area management plans.		O. Reg. 686/21 9 (1)		
NEW	Land Acquisition and Disposition Policy	<b>Update:</b> Update current policy to guide the acquisition and disposition of land to fulfill the objects of the authority.	1	CA Act 21.1(1) O. Reg. 686/21 9 (2) vi	unknown	Municipal Levy – 100 %

	Program/Service and Subservices	Description	Category (1,2,3)	Category Rationale Act/Regs	Program Cost Estimate (\$)	Funding mechanism and percentage of costs
<b>Special Projects</b>						
Program Description: Lower Trent Conservation delivers other programs that are not part of the mandatory programs and services as outlined in O. Reg. 686/21. Most of these programs are funded without municipal levy but occasionally there are opportunities for municipal participation based on special benefitting funding. All of the programs influence and enhance the health and watershed management of the LTC. They are part of a larger integrated watershed management model.						
	Bay of Quinte Remedial Action Plan Office	To fulfil the delisting criteria for the Bay of Quinte Area of Concern under the Great Lakes Water Quality Agreement. Includes governance, administration, stakeholder and public outreach, First Nation engagement, communications, stewardship programs, data compilation and analysis, science coordination and review, strategic planning and reporting	3	Great Lakes Water Quality Agreement  CA Act 21.1.2	\$215,000	Provincial funding - 50%  Federal Funding - 50%  No Municipal funding, no MOU/agreement required
	Youth Education	The portion of the education program not directed to mandated programs primarily centered on watershed and natural environment curriculum	3	CA Act 21.1.2	\$92,118	Self-Generated –100%  2024 MOU - 0.5 FTE
	Community Outreach and Stewardship	Programs that include stewardship and community outreach. Examples include the annual native plant and wildflower sales, private land stewardship including tree planting, guided conservation area field trips, webinars, 50 Million Tree program, etc.	3	CA Act 21.1.2	\$25,000	Municipal Levy – 90% Self-Generated – 10%  2024 MOU - 0.2 FTE and related expenses

NEW	Future Initiatives	<p>Opportunities for new projects that benefit the watershed and its municipal partners can occur anytime and can have varying durations. These projects may require matching funding or be self-sustaining. New projects may require municipal participation and/or funding. Examples include but are not limited to:</p> <ul style="list-style-type: none"> <li>Watershed/Subwatershed Plans</li> <li>Technical Projects</li> <li>Mapping Projects</li> <li>Stewardship and Restoration</li> <li>Flood and Erosion Control</li> <li>Significant Partnership Opportunities</li> </ul>	3	CA Act 21.1.2		
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**Appendix 1**

Caveats –

- 1) All of the financial information provided is based on estimates, including the percentage of the total annual fund contributions of the various funding providers.
- 2) Under O. Reg. 687/21 Section 6. (2)(c)(i)(D) if the authority is of the opinion that the average annual cost determined under sub-subclause (A) or (B) does not reflect the average annual cost to provide the program or service in the future, adjust the average annual cost and provide an explanation for this adjustment

The costs associated with each program and service are estimated based on the 2023 approved budget for Lower Trent Conservation. Due to the COVID pandemic affecting costs for the past few years, a five-year estimate is not reflective of current and future costs. The costs for programs and services increase annually due to increases in wages and benefits and the increased operational costs due to inflation. As well program operations are often modified based on best management practices.

- 3) The financial information included in the tables are associated with operational costs only.

**Appendix 2**

Category 2 Summary Information

New or Existing MOUs	Category 2 Service	Participating Municipalities	Date of agreement (most recent version)
Existing	DWSP Risk Management Official	Alnwick-Haldimand Brighton Cramahe Stirling-Rawdon Trent Hills	January 2020
Existing	DWSP Education and Outreach	Alnwick-Haldimand Brighton Cramahe Stirling-Rawdon Trent Hills	January 2020
NEW	DWSP Education and Outreach	Quinte West	No agreement in place, invoice for service MOU required
NEW	Non-LTC Owned Flood and Erosion Control Infrastructure Operation and Management	Quinte West Trent Hills Stirling-Rawdon	MOU to be developed, to date the service has been paid from municipal levy Category 2 services MOUs required for benefit based apportionment
NEW	Future Initiatives Opportunities for new programs or services that benefit the watershed and its municipal partners can occur at anytime. These programs and services may be requested by a municipality.		MOUs developed as required

### **Appendix 3**

#### Category 3 Summary Information

New or Existing MOUs	Category 3 Service	Participating Municipalities	Date of agreement (most recent version)
NEW	Local Water Monitoring Program	All municipalities	No agreement in place, Board directive MOU required
NEW	Youth Education	All municipalities	No agreement in place - MOU required
NEW	Community Outreach and Stewardship	All municipalities	No agreement in place - MOU required

#### Category 3 Summary Information

For existing Category 3 programs and services, the Local Water Monitoring program and Community Outreach and Stewardship have been financed through the levy apportionment.

Youth Education has been self-funded with no municipal funds required.

Future initiatives under Category 3 programs and services, the potential exists to seek funding for projects from municipal partners. Projects that are beneficial to the watershed as a whole or that are benefitting to a particular municipality are variable and generally dependent on other funding sources and their funding criteria.

Lower Trent Conservation will continue to actively search for alternate funding for beneficial watershed and research projects.

Lower Trent Conservation intends to enter into cost apportioning agreements with municipalities as projects are developed and executed, when necessary.