

Ganaraska Region Conservation Authority

February 17, 2022

Program Area	Program/Service and Subservices	Description	Category (1,2,3)	Category Rationale	Program Cost Estimate (\$)	Funding mechanism and percentage of costs
Enabling Services: Program Description: Key assistance provided to all departments of the conservation authority, board of directors, member municipalities and the general public to enable Ganaraska Conservation to operate in an accountable, transparent, efficient and effective manner.						
CS	Corporate Services	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 20	257,800	Municipal Levy – 87% Self-Generated – 13%
CS	Financial Management	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 20	76,100	Municipal Levy – 100%
CS	Legal Expenses	Costs related to agreements/contracts, HR, etc.	1	CA Act 20	3,000	Municipal Levy - 100 %
CS	Governance	Supporting CA Boards, Advisory Committees, Office of CAO/ST	1	CA Act Part IV	18,000	Municipal Levy - 100 %
CS	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.	1	CA Act 20	47,900	Municipal Levy – 100 %
CS	Administration Buildings	Administrative office and millennium building used to support staff, programs, and services. Includes utilities, routine and major maintenance, property taxes. Included is a charge out for capital asset replacement.	1	CA Act 20	142,200	Municipal Levy – 90% Self-Generated – 10%
CS	Information Technology Management/ GIS	Data management, records retention. Development and use of systems to collect and store data and to provide spatial geographical representations of data. Included is a charge out for capital asset replacement.	1	CA Act 20	55,000	Municipal Levy - 100%

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Natural Hazard Management Program 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.						
WMHM	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 O.Reg. 686/21 Sec 8	86,200	Municipal Levy – 62% Self-Generated – 38%
EAS	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, approval processes under other applicable law, with comments related to natural hazards, wetlands, watercourses, and Sec. 28 permit requirements.	1	CA Act 21.1 O.Reg. 686/21 Sec 6 and 7	146,700	Municipal Levy – 80%, Self-Generated -20%
EAS	Plan Review Not Related to Natural Hazards (stormwater mgmt., Natural Heritage include review of EIS /NHE & hydrogeology)	Technical information and advice to municipalities on circulated municipal land use planning applications (Oak Ridges Moraine, Official Plan and Zoning By-law Amendments, Subdivisions, Consents, Minor Variances)	2	CA Act 21.1.1	50,000	Municipal Levy – 35% Self-Generated –65%
WMHM	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.	1	CA Act 21.1 O.Reg. 686/21 Sec 2.1	137,000	Provincial Transfer Payment - 29% Municipal Levy – 71%

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WMHM	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. Included is a charge out for capital asset replacement.	1	CA Act 21.1 O.Reg. 686/21 Sec 2.1 Sec 5.1	\$24,900	Provincial Transfer Payment – 44 % Municipal Levy – 56%
WMHM	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 O.Reg. 686/21 Sec 5	Varies from year to year	Provincial WECl– 50% Benefitting Municipal Levy – 50%
WMHM	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 O.Reg. 686/21 Sec 3	3,600	Municipal Levy – 100%
WMHM	Information Management	Data collection, mapping, data sets, watershed photography. Development and use of systems to collect and store data and to provide spatial geographical representations of data. This includes our geographical information systems and support.	1	CA Act 21.1	Varies year to year depending on projects	Benefitting Municipal Levy - 100%
WMHM	Technical Studies and Policy Review	Studies and projects to inform natural hazards management programs including floodplain management, watershed hydrology, regulations areas mapping update, flood forecasting system assessment, floodplain policy, Lake Ontario shoreline management. These projects often for a specific number of years and are distributed over time as human resources and funding is available.	1	CA Act 21.1 O.Reg. 686/21 Sec 1	Varies from year to year	Benefitting Municipal Levy /Self-Generated – 100% Alternate grant funding when available
CL	Natural Hazards Communications, Outreach and Education	Promoting public awareness of natural hazards including flooding, drought, and erosion. Attending public events, supplying materials. Social media services. Media relations. Educate elementary school students through the Spring Water Awareness program about the danger of floodwaters, dangers of dams, etc.	1	CA Act 21.1 O.Reg. 686/21 Sec 1(3)-3	12,000	Municipal Levy – 70% Self-Generated – 30%

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Provincial Water Quality & Quantity Monitoring						
Program Description: Ganaraska 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.						
WMHM	Provincial Water Quality Monitoring Network (PWQMN)	CA/MECP partnership for stream water quality monitoring at 9 sites. Staff take water samples and MECP does lab analysis and data management. Information is used for watershed report cards and stewardship project prioritization.	1	O. Reg. 686/21 12 (1) 2	5,500	Municipal Levy – 100%
WMHM	Provincial Groundwater Monitoring Network (PGMN)	A long-standing CA/MECP partnership for groundwater level and quality monitoring at 17 stations. Costs include sampling, data collection, analysis, data management and reporting. MECP funded network installation and continues to fund equipment replacements. Data collected supports groundwater monitoring, low water response, and water quality monitoring.	1	O. Reg. 686/21 12 (1) 1	83,900	Benefitting Municipal Levy – 100%
Local Water Quality Monitoring						
Program Description: Ganaraska 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.						
WMHM	Surface Water Quality Monitoring Program	Surface water quality monitoring at 18 surface water sites, (in addition to PWQMN), water quantity measurements at 80 baseflow sites and water quality samples collect at 4 auto sampler sites supporting Lake Ontario nearshore water monitoring. Costs include sampling, analysis, equipment maintenance and reporting.	2	CA Act	130,900	Benefitting Municipal Levy – 100%
Drinking Water Source Protection						
Program Description: The protection of municipal drinking water supplies in the Trent Conservation Coalition (TCC) Region and the Ganaraska Region Source Protection Area through the development and implementation of TCC Source Protection Plans. Ganaraska Conservation is a member of the TCC which is a complex regional grouping of five Source Protection Areas including Ganaraska, Crowe, Otonabee, Kawartha and Lower Trent Authorities						
WMHM	Local Source Protection Area DWSP	Source Protection Authority reports, meetings and governance. Delivery of the activities required by the Clean Water Act and regulations as per Clean Water Act.	1	O.Reg. 686/21 Sec 13	80,000	Provincial Transfer Payment MECP– 100%
WMHM	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	2,000	Municipal Agreements – 100 %

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Core Watershed-based Resource Management Strategy 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	New Project: 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. To be completed on or before December 31, 2024 per requirements of Regulation.	1	O. Reg. 686/21 12 (1) 3	To be determined	Municipal Levy – 100%
Sub-watershed Plans and Projects Program Description: Watershed strategies provide a management framework to provide recommendations which consists of goals, objectives, indicators, and 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.						
WMHM	Natural Heritage Mapping	Ganaraska Conservation incorporates natural heritage information particularly around wetlands to develop planning and regulatory strategies to mitigate downstream natural hazards	2	O. Reg. 686/21 12 (1) 3	33,000	Benefitting Municipal Levy – 100%
EAS	Watershed Ecology	Ganaraska Conservation provides watershed ecology services to specific watershed municipalities.	2	CA Act	46,000	Benefitting Municipal Levy – 100%
Conservation Authority Lands and Conservation Areas Program Description: Ganaraska Conservation owns over 11,000 acres of land which includes conservation areas, the Ganaraska Forest, significant wetlands and flood control structures and surrounding land. Ganaraska Conservation property is essential to watershed management, environmental protection, helps implement the Watershed Management Strategy and provides areas for passive recreation.						
CL	Section 29 Enforcement and Compliance	Conservation Areas/Ganaraska Forest/ regulation enforcement and compliance. Ganaraska Conservation staff and a contracted company patrol the 11,000 acres Ganaraska Forest and conservation areas to ensure that the regulations are being adhere to by the users.	1	CA Act 29 O.Reg 686/21 9(1) 4	20,000	Municipal Levy – 100 %

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CL	Ganaraska Forest	Ganaraska Conservation owns and maintains the 11,000 acre Ganaraska Forest. The forest has 100's of kilometers of multi-use trails that require maintenance year round. This Includes recreation, forest management, risk management program, hazard tree management, gates, fencing, signage, communications, pedestrian bridges, trails, parking lots, picnic shelters, road, restoration, ecological monitoring, carrying costs such as taxes and insurance. The Ganaraska Forest Management Plan guides the management of the forest. The plan's primary goal is "to conserve, enhance and where feasible restore the forest ecosystem to reflect the native biodiversity of the Ganaraska Forest while at the same time embracing recreational, education and social activities that support the health and sustainability of the forest." Category 3 – GRCA also does timber management within the forest. The Forest Management Plan lists principles by which the forest is managed and the last principle states that "the Ganaraska Forest provides a sustainable economic benefit to the GRCA, without compromising the ecological health of the Ganaraska Forest." The revenues vary from year to year based on the plan. Expenses are matched with those revenues.	1,3	CA Act 21.1 O.Reg 686/21 9 (1) 2 i, ii and iv	520,000 200,000	Municipal Levy – 20% Self-Generated – 80% Self-Generated- 100%
CL	Conservation Areas	GRCA is responsible for the management and maintenance of 9 conservation areas, as well as other lands that are not formal conservation areas. This Includes passive recreation, forest management, risk management program, hazard tree management, gates, fencing, signage, communications, pedestrian bridges, trails, parking lots, picnic shelters, road, restoration, ecological monitoring, carrying costs such as taxes, insurance and capital asset replacement.	1	CA Act 21.1 O.Reg 686/21 9 (1) 2 i, ii and iv	242,600	Municipal Levy – 100%

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CL	Conservation Area Major Maintenance	Major maintenance and capital improvements to support public access, safety, and environmental protection such as pedestrian bridges, boardwalks, pavilions, trails. These expenses are covered by the capital asset reserve in most cases.	1	CA Act 21.1	Varies	Self-Generated – 100%
CL	Land Acquisition	Strategic acquisition of environmentally significant properties.	2 3	CA Act 21.1 O.Reg 686/21 9 (1) 2 vi	Varies	Municipal - % Self-Generated – %
New	Inventory of Conservation Authority lands	New Project: The land inventory will include the following information: location, date obtained, method and purpose of acquisition, land use. Project updates as inventory changes. To be completed on or before December 31, 2024 per requirements of Regulation.	1	O. Reg. 686/21 9 (3)	To be determined	Municipal Levy – 100%
New	Strategy for CA owned or controlled lands and management plans	New Project: A strategy to guide the management and use of CA-owned or controlled properties including guiding principles, objectives, land use, natural heritage, classifications of lands, mapping, identification of programs and services on the lands, public consultation, publish on website. Updates of existing conservation area management plans. To be completed on or before December 31, 2024 per requirements of Regulation.	1	O. Reg. 686/21 9 (1)1	To be determined	Municipal Levy – 100%
New	Land Acquisition and Disposition Strategy	Update: Update current policy to guide the acquisition and disposition of land to fulfill the objects of the authority. To be completed on or before December 31, 2024 per requirements of Regulation.	1	O. Reg. 686/21 9 (2) vi	To be determined	Municipal Levy – 100 %

	Program/Service and Subservices	Description	Category (1,2,3)	Category Rationale	Program Cost Estimate (\$)	Funding mechanism and percentage of costs
Watershed Stewardship Program Description: The watershed stewardship program includes a fisheries component, a program funded by municipalities which provides funding for landowners for projects and the landowner tree planting program.						
WS	Private Landowner Stewardship Program	Clean Water-Healthy Land – Financial Assistance Program. In partnership with some of the watershed municipalities, Ganaraska Conservation offers environmental technical and financial assistance, tools and information to any resident, business, school or service club within its jurisdiction and within the participating municipality.	2	CA Act	65,000	Benefitting Municipal Levy – 100%
WS	Tree Planting Services	Clean Water-Healthy Land – Tree Planting GRCA Tree Seedling Program allows property owners to purchase bare root native tree and shrub seedlings at a minimal cost. GRCA also provides full service tree planting to landowners.	3	CA Act	130,000	Self-Generated – 100%
WS	Fisheries Services	In partnership with Fisheries and Oceans Canada, Ganaraska Conservation staff are responsible for the sea lamprey monitoring program on Cobourg Creek which captures and samples many difference species and record the results and submit data. Fish surveys are also done with other partners, such as OPG and Hydro One through agreements.	3	CA Act	28,200	Agreement in place Self-Generated – 100%
WS	Stewardship Partner Projects	Ganaraska Conservation's stewardship program partners with various organizations to deliver environmental programs and projects. These programs are for a limited time period. Example include the Highway of Heroes Tree Campaign tree planting partnership, Forests Ontario and the Durham Collaborative Tree Program.	3	CA Act	Varies from year to year	Agreement in place Self-Generated – 100%

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Other Program Areas Program Description: Ganaraska Conservation delivers other programs that are not part of the mandatory programs and services as outlined in O. Reg. 686/21. All of these programs are funded without municipal general levy. All of the programs influence and enhance the health and watershed management of the GRCA and are part of a larger integrated watershed management model.						
CL	Outdoor Education	The Ganaraska Forest Centre, located in the heart of the Ganaraska Forest, is home to the outdoor education program of the GRCA where thousands of students visit for a day or overnight to learn about their environmental footprint and become familiar with the natural world around them. Taught by Ontario – certified teaching staff, the GFC offers curriculum-based education programs for elementary and secondary students. These programs focus on local watersheds, ecosystems, and environmental issues. Programs take can also take place at schools (indoors and outdoors) or through online learning.	3	CA Act 21.1.2	402,800	Self-Generated – 100%
NEW	Other	Opportunities for new projects or programs 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.	3	CA Act 21.1.2		Self-Generated and/or Benefitting Municipal Levy

Appendix

- 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 2022 preliminary budget for Ganaraska Conservation. COVID-19 has had a significant impact on the revenues of GRCA and therefore 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.