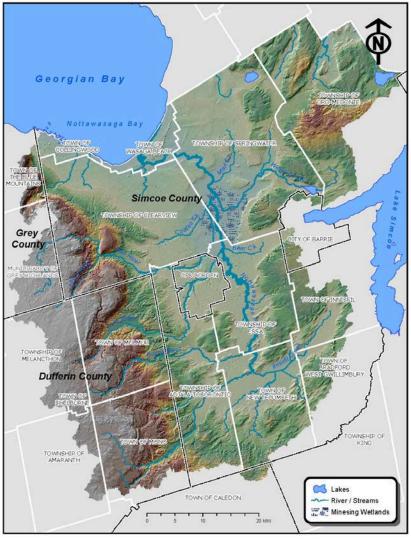


NVCA Profile	3
FUNDING CONSERVATION	4
WATERSHED SCIENCE	5
Drinking Water Source Protection	
EDUCATION	7
RESTORATION SERVICES	8
Forestry Services	
FLOOD MANAGEMENT	10
PLANNING & DEVELOPMENT	11
CONSERVATION LANDS	12
CORPORATE SERVICES	13
Corporate Communications	ation 14 15
Taman Resources Management	,







NVCA Profile

The NVCA employs approximately 50 full-time, parttime, contract and seasonal staff across numerous professional fields. Our employees uphold our mandate under the 7 Service Areas listed on the left and detailed in the pages that follow.

Our mission is working together to deliver innovative, integrated watershed management that is responsive to the environmental, economic and social sustainability of the Nottawasaga Valley watershed.

We envision a sustainable watershed that is resilient to the effects of climate change, urban growth and other stressors and provides for safe, healthy and prosperous people and communities.

FUNDING CONSERVATION

NVCA's 2019 Budget is \$5,089,048, which includes a total levy contribution of \$2,463,029. This represents \$12.45 per watershed resident. The budget includes almost \$1 million in leveraged funding and when combined with fee for service revenues, over 50% of NVCA's budget is funded through non-levy sources of funding. While the average CA levy supporting operations was \$16.42/capita in 2018, for the NVCA it is only \$12.45/capita in 2019.

While this builds a strong case for support, it is not enough to improve the health of our watershed, reduce phosphorous and blue-green algae in our rivers and lakes, provide open spaces and trails that are accessible for people to use, connect and restore forests, wetlands and habitats. These services are essential for communities to build resilience to climate change, and most importantly, attracting and retaining the talent and economic opportunities that this watershed desires.



	Program Name	Cost/ Resident
-	Drinking Source Water Protection	\$0
	Watershed Monitoring	\$1.05
	Education	\$0.14
	Forestry Services	\$0.42
-	Watershed Stewardship & Restoration	\$0.83
	Flood Management	\$1.02
	Corporate Communications	\$0.47
-	GIS & Information Management	\$1.26
	Financial Management	\$1.71
	Governance	\$1.59
	Human Resources	\$0.48
	Conservation Lands	\$1.80
	Planning & Development	\$1.69

Sustaining the watershed is not our work alone. It is what we do together with municipalities, our neighbours, our universities and colleges, our donors, our local and regional agencies, and the many other partners we work with. We need to celebrate our successes, but we also need to increase the scope, scale and intensity of our joint efforts to create a place we can be proud of and celebrate – one we can call home. For life.



WATERSHED SCIENCE

The goal of Watershed Science is to manage water and ecological monitoring and to ensure that the organization has adequate and accurate scientific information to support both internal and external partners. They also work to reduce the risks associated with drinking water to ensure that there is safe, clean and adequate supply of water.

Drinking Water Source Protection

The Source Water Protection Program ensures a sustainable and safe source of clean drinking water to residents, within the South Georgian Bay-Lake Simcoe Source Protection Region. NVCA does this by meeting our legislative requirements within the *Clean Water Act* and ensuring policies in the Source Protection Plan are implemented. This program also includes Risk Management Official duties as prescribed by agreements with municipalities.

2018 Achievements

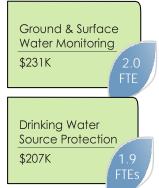
- Provided ongoing local support effort for the implementation of the South Georgian Bay Lake Simcoe Source Protection Plan, while working with the lead source protection authority, Lake Simcoe Region Conservation Authority.
- As the Risk Management Official for Essa, Clearview, Innisfil, Melancthon, Mono, Mulmur, New Tecumseth and Shelburne, NVCA completed risk management plans for significant drinking water threats as identified through the source protection process.

2019 Focus

- Initiate review and amendments to the source protection plan, as directed by Ministerial Order.
- Undertake the development of Risk Management Plans for the nine (Adjala -Tosorontio was added in 2019) delegated municipalities.
- Review planning applications under Section 59 of the Clean Water Act to ensure compliance with the South Georgian Bay Lake Simcoe Source Protection Plan.
- Complete amendments to the source protection plan to include new drinking water systems, as required by Regulation 205 of the Safe Drinking Water Act.

Service Pressures

 This source water protection program (not including Risk Management) has always been fully funded by the Province and there is uncertainty about continued funding.





Watershed Monitoring

The Watershed Monitoring program assesses the health of the water flowing through the Nottawasaga Valley Watershed, the status of fish and benthic macroinvertebrate populations found in rivers and streams. These programs aim to identify emerging issues and document environmental trends to support science-based adaptive management.

2018 Achievements

- Monitored the health of the aquatic environment by examining water chemistry, benthic invertebrates, water temperature, water baseflow and fisheries in addition to forest and marsh bird monitoring.
- Monitored groundwater throughout the watershed for water levels and ambient water quality, as part of the Provincial Groundwater Monitoring Network and other well networks.
- Provided hydrogeological and natural heritage review in support of planning applications.
- Produced a Watershed Report Card for the Nottawasaga Valley watershed to align with the province-wide initiative coordinated by Conservation Ontario.
- Continued support for the Ministry of the Environment, Conservation and Park's (MECP) benthic invertebrate research project and other academic research in the watershed.
- Completed special projects, focusing on bird monitoring, support of the Hine's

Emerald Dragonfly (endangered species), and hydrologic function.

2019 Focus

- Continue to work on a Watershed Monitoring Strategy and complete the NVCA Groundwater Monitoring Network Review and Assessment.
- Undertake a review of community based monitoring and the associated applicability to the Low Water Response Program and examine considerations for soil moisture monitoring.
- Evaluate the watershed monitoring network and issue subwatershed health checks to document the current health of the watershed based on key performance indicators.
- Complete a review of the E. coli sampling program from 2011-2017.

Service Pressures

 There are challenges around predictability and certainty of project-specific funding agreements with municipal, provincial and other partners.



EDUCATION

The NVCA's Education program engages learners of all ages, interests and abilities through programmed learning experiences. The goal of our programs is to raise awareness, share knowledge, create understanding and inspire action that leads to real and lasting change.

2018 Achievements

- Provided high quality outdoor and environmental education to 14,550 youth in all initiatives combined. This included welcoming 436 youth over the summer as part of the Camp Tiffin day camp program.
- Received the first Rekindle the Sparks
 Outdoor Education Conference
 Innovation Award for the Free Play
 Forest at the Tiffin Centre, a safe place
 for young students to explore and
 engage with nature.

2019 Focus

 Continue to high provide quality outdoor and environmental education to the youth in NVCA watershed. Deliver another successful year of summer Camp Tiffin, including adding a new program called Stewardship Camp along with a Christmas and March break camp.

EDUCATION

\$316K

 Continue to enhance and expand programs and services to meet the needs of our visiting groups.

- Geographic expanse of watershed service area has resource implications.
- School board funding uncertainties and potential teacher job action.
- Sharing the educational building with other departments limits current service capacity.





RESTORATION SERVICES

The goal of NVCA's Restoration Services is to manage natural heritage systems within the watershed. We do this by identifying and implementing restoration programs.

Forestry Services

The Forestry Services program aims to implement best forest management practices that contribute to watershed and community health.

2018 Achievements

- Planted 133,200 trees on 30 properties across the watershed.
- Received financial contributions (outside of levy) from provincial and municipal governments, Forests Ontario, corporations and private landowners totaling \$267,347.
- Managed 1,374 acres of forest; worked with 39 landowners to develop their Managed Forest Plans.
- Conducted Arbour Day sales in three municipalities, selling 4,750 tree seedlings to urban and rural landowners.

2019 Focus

- Plant approximately 139,000 trees on 21 properties throughout the watershed.
- Create more than 77 hectares (190

- acres) of new forest cover.
- Assist landowners
 in managing over
 405 hectares (over 1,000 acres) of
 forest to maintain forest health.
- Hold the 30th Annual Arbour Day Tree Sales so landowners can create their own forests.

- Rapid urbanization and competing land use interests' impact available land for tree planting.
- Uncertainty around funding from partners and provincial government.
- Ash mortality due to the expansion of the Emerald Ash Borer will impact forest cover in the watershed.





Watershed Stewardship and Restoration

NVCA's Watershed Stewardship and restoration program aims to restore river and wetland habitat and support agricultural and urban water quality improvement projects. This is necessary in order to enhance the ecological health of the watershed and provide enhanced economic and recreational opportunities.

2018 Achievements

- Reconstructed a failed ice control dam and removed 5 woody debris jams in order to restore fish passage and 1km of trout habitat in Beeton Creek near Tottenham. This project represented the culmination of 20 years of partnerships and work!
- Worked with farmers and rural landowners to reduce 79 kg/year of phosphorus runoff to streams and lakes. Protected rivers and wetlands by installing over 3km of fence that limited livestock access. Planted trees along 5.1km of streams.
- Removed more than 3.9 tonnes of invasive common reed (Phragmites) to protect globally rare Great Lakes Coastal wetlands and the internationally significant Minesing Wetlands.
- Engaged more than 2,200 volunteers in hands-on habitat restoration projects across the watershed and leveraged funding and donations to support

projects that improve water quality and restore habitat, worth a total of \$508,220.

2019 Focus

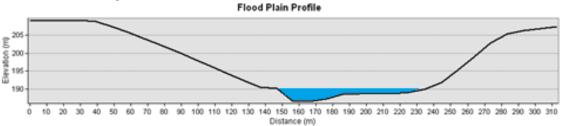
- Complete projects which will control over 200kg of phosphorus loading, eliminate 80 tonnes of topsoil runoff, restrict 100 livestock from rivers, stabilize 320m of eroding stream bank, construct 600m² of floodplain habitat and plant over 5,000 trees.
- Maximize work efficiency by partnering with volunteers and other organizations.

- Loss of provincial funding reduces capacity to match federal grants and to provide financial and technical support to private landowners.
- Corporate sponsors have stepped forward to fill the funding gap but challenges exist with maintaining longterm support from this sector.



FLOOD MANAGEMENT

The goal of the Flood Management program is to the risk to people, property and infrastructure and minimize social disruption due to hazards due to flooding.



Flood Management
\$393K
2.7
FTES

Figure: Cross section profile of a stream

2018 Achievements

- Monitored flood conditions and issued thirteen flood messages, including a flood watch for the early spring melt and rain event in February. NVCA watershed remained out of low-water conditions.
- Inspected and operated flood and erosion control structures, including Utopia, New Lowell and Tottenham dams.
- Continued with ongoing improvements to the NVCA stream and weather gauge network to improve data quality and reliability. Working with Water Survey of Canada, developed plans to install new sensors at the new Pretty River federal gauge in Collingwood.

2019 Focus

- Continue to monitor weather forecasts and watershed conditions while maintaining and improving the monitoring system.
- Continue with infrastructure maintenance, including dam safety reviews as required by the Ministry of Natural Resources and Forestry.
- Finalize the development and implementation of a web based flood monitoring program using current and historical data.

- Increased pressure on staff and resources to respond to flood events.
- Reduced resources due to provincial funding cuts.



PLANNING & DEVELOPMENT

Planning and Development Services, which includes permitting and enforcement, ensures that development in the watershed progresses in a sustainable manner that will protect natural heritage features, direct development away from natural hazard lands and protect our water resources. NVCA follows a planning first principle which ensures that planning permissions are in place before we consider any further approvals under the *Conservation Authorities Act*.

Planning & Development \$1.22M 11.7

2018 Achievements

- Processed 2,450 applications and inquiries under various provincial acts: Conservation Authority Act, Planning Act, Niagara Escarpment Planning and Development Act, Aggregate Resource Act, Green Energy Act, Drainage Act, and Environmental Assessment Act; an increase of 29% over 2017.
- Began work on an updated Integrated Watershed Management Plan (IWMP) for the watershed, a process of managing human activities and natural resources on a watershed basis, taking into account social, economic and environmental issues, as well as local community interests and issues such as growth and climate change. In support of the update, a watershed characterization study was completed, followed by an extensive stakeholder engagement process. The IWMP will provide direction on long-term (20 year) sustainability initiatives in the watershed. The IWMP will be completed in 2019.
- Worked with Information Management staff to develop an on-line planning database, allowing for more efficient file tracking and supporting the move to a paperless application process.

2019 Focus

- Continue looking for opportunities with our municipalities and partners to streamline processes for the review of applications within our watershed.
- Continue to use and provide updates to municipal agreements (MOU's) to provide effective and efficient service.
- Examine improved planning and engineering review procedures to ensure timely approvals for development applications within our watershed
- Promote storm water management/low impact development guidance on municipal plans.

- Program operates on a cost recovery basis.
- Increasing growth and development in the watershed.
- Continued growth and issues with excess fill have resulted in an increase in the number of violations.
- Uncertainty around legislative amendments through provincial review of conservation authority permitting processes and how that will impact delivery.



CONSERVATION LANDS

Conservation Lands ensures that valuable greenspace is protected and that recreational opportunities are provided in safe, well maintained natural settings, so that our watershed residents can enjoy a high quality of life. The NVCA manages 13,001 acres of conservation land, including the internationally significant Minesing Wetlands.



2018 Achievements

- Hosted 50,000 visitors at 12 conservation areas across the watershed.
- Partnered with groups to maintain and improve recreational opportunities at conservation areas and maximized work efficiency by working with volunteers.
- Hosted groups and events at the Tiffin Centre for Conservation (Tiffin CA).
 Additionally, hosted twenty wedding celebrations and other events such as celebrations of life and corporate meetings.
- Offered one hundred hunting passes for Minesing and Osprey Wetlands, and secured hunters for exclusive hunting properties.
- Assisted with the development of the Utopia Conservation Area Master Plan and oversaw further restoration and clean-up of the historic Bells Gristmill, located at Utopia Conservation Area.

2019 Focus

- Host thousands of guests through passive recreational outings, festivals, workshops, weddings and corporate events within all 12 conservation areas.
- Initiate a comprehensive hazard tree removal program at Tiffin CA
- Work with community partners to construct "green energy" outdoor accessible washroom at Tiffin CA
- Work with community partners to secure

- funding and develop an accessible trail and parking area at Utopia Conservation Area.
- Provide controlled hunting opportunities through a permit system on 4,500 hectares of CA land.
- Maintain property leases with local partners and municipalities to provide agricultural and recreational opportunities within the watershed.

- Opportunities to enhance recreational options on our properties are limited due to resources.
- Potential liability associated with providing recreational opportunities is increasing.
- Lack of funding resources results in delays for recreation and infrastructure improvements.
- Proximity to large urban centers increases guest expectations of facilities and conservation areas. Combined with increased population density within the watershed leads, NVCA faces increasing land management challenges and higher maintenance needs.
- Changing climate resulting in noticeable impacts on infrastructure and recreational opportunities.
- Increased land value resulting in fewer opportunities for land acquisition.



CORPORATE SERVICES

Corporate Services plays a critical supportive role to the board of directors and across the organization, providing finance, human resources, communications and administrative leadership. This department is an enabling service, supporting the other six service areas in the organization. Corporate Services consists of the following program areas:











Corporate Communications

Corporate Communications provides strategic advice and services designed to inform, inspire, influence and motivate municipal, provincial, federal partners and people of all ages in our watershed communities, to support the work of NVCA.

2018 Achievements

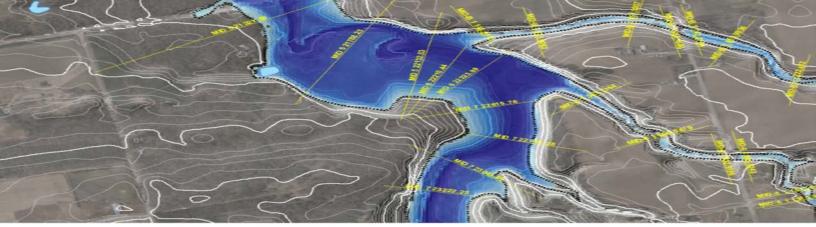
- Shared information about NVCA through our website (95,200 visitors), social media (556,000 impressions), traditional media, e-newsletter (1,040 subscribers) and other channels and venues.
- Celebrated conservation champions, volunteers, and partners at the annual Evening of Thanks.

2019 Focus

- Continue to build internal communication programs.
- Increase targeted outreach for NVCA programs and services to build

- participation and subscription.
- Continue to ensure AODA compliance with provincial standards.

- Dealing with challenges associated with effectively reaching audiences and changing population across the watershed while keeping in mind the geographic, demographic and socioeconomic span and diversity of the watershed.
- Clarify NVCA's role and services in urban and rural areas



Geographic Information Systems & Information Management

Geographic Information Systems (GIS) and Information Management is responsible for providing data integrity while managing a secure, reliable and integrated information technology environment that aligns our business and strategic goals.

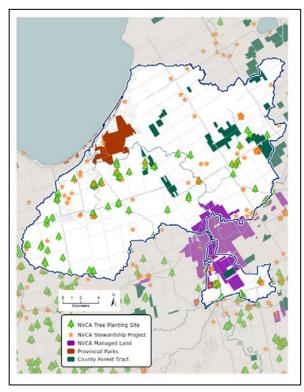
2018 Achievements

- Completed a slope and meander/erosion hazard update to NVCA's mapping, and updated the wetlands area of interference.
- Supported NVCA's plan review and permitting role with improvements to the internal planning database and file uploading tool.
- Updated CAMaps (the on-line platform for NVCA's GIS/mapping) with current data and services.
- Implemented continuous improvements to various database products, including the Source Water Annual Reporting system and the NVCA staff intranet.

2019 Focus

- Development of a Watershed Science data platform, providing viewing, upload and querying capabilities linked to the GIS system.
- Flood hazard mapping of Nottawasaga River for risk assessment
- Updating the land use layer using ortho imagery to support various program areas
- Creation of online line tools (for the public) for efficiencies of the application and registration processes.

- Systems security is a constant threat that must be balanced with the costs to keep our network running smoothly and safely.
- Maintaining larger and more complex data holdings as the need for program support and analysis continues to increase.
- There has been a significant increase in provincial, municipal and public expectations for information, data analysis tools and predictive modeling.





Financial Management

Financial management is responsible for all of our day-to-day financial operations, such as payroll and accounts payable/receivable. Other areas include budgeting, procurement, risk management, legal, quarterly and annual financial reporting, records management, reception, and freedom of information requests/reporting.

2018 Achievements

- Updated procurement/purchasing policy to address changing needs and to improve internal workflow effectiveness.
- Processed five Freedom of Information requests.
- Started the paperless initiative to reduce our environmental impact.

2019 Focus

- Implement Asset Management database to increase efficiency in managing NVCA's assets.
- Investigate software to improve budgeting processes.

- Budget pressures to minimize the levy requirements from member municipalities while still achieving integrated watershed management plan activities.
- Financial management requires continued compliance with changing external legislation for reporting, payroll and tax.



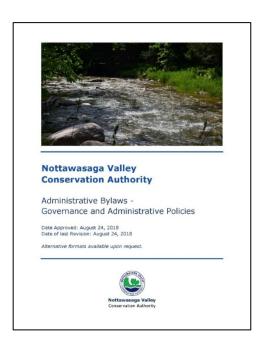


Governance

The Chief Administrative Officer (CAO) provides expert knowledge, strategic advice and recommendations to the Board of Directors with regard to policy, program and budget decisions. The CAO also provides operational leadership to staff to guide and influence processes, decisions and implementation, with the goal of advancing our mission.

2018 Achievements

- Efficiently and effectively managed water resources in the NVCA watershed for current and future generations through essential and integrated programs.
- Began stakeholder and community engagement for the new Integrated Watershed Management Plan.
- Ensuring the NVCA Board of Directors is acting on the long term best interests of the NVCA by providing an overarching perspective in managing strategic, structural, cultural, economic and technological changes while ensuring that new initiatives are well aligned with the NVCA's portfolio and abilities.
- Built new partnerships and new business models, while continuing to develop relationships with existing partners, such as businesses, watershed stakeholders, municipalities, as well as provincial and federal governments, to ensure the implementation of programs and services.



2019 Focus

- Ensure efficient, effective core and integrated program delivery through an internal operations review.
- Cultivate partnerships with the private sector, watershed municipalities, ENGOs, provincial and federal governments to ensure we continue to implement programs and services.
- Continue to lead and advocate for innovative approaches and projects to support the Integrated Watershed Management Plan.

Service Pressures

 Possible regulatory and mandated changes to conservation authority programs and services.



Human Resources Management

Responsible for the effective management of people in the organization through the provision of services such as staff recruitment, health and safety, diversity, inclusion and accessibility, employee learning and development, benefit and insurance administration and performance management.

2018 Achievements

- Completed and implemented staff compensation review.
- Updated employment policies as required.

2019 Focus

- Respond to unknown/emerging recruitment needs.
- Review and update employment policies.

- Finding talent to replace "hard to fill" positions as required.
- Responding to matters resulting from the Provincial government's review of municipalities and conservation authorities.









The Nottawasaga Valley Conservation Authority (NVCA) is your public agency dedicated to the preservation of a healthy environment. As your partner, the NVCA provides the expertise to help protect our water, our land, our future.

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