



SOUTH NATION  
**CONSERVATION**  
DE LA NATION SUD

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## Joint Standing Committees

# Meeting Agenda

**Date:** March 23<sup>rd</sup>, 2023

**\*\* Luncheon:** 12:00 p.m.

**\*\* Meeting Time:** 1:00 – 3:00 p.m.

**Location:** SNC Meeting Rooms

**Address:** 38 Victoria Street, Finch

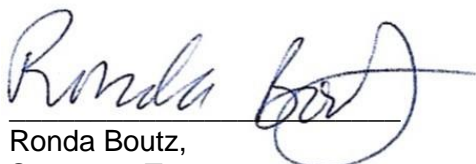


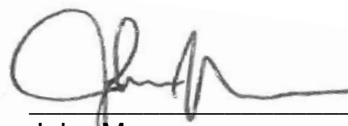
## Joint Standing Committees

# Meeting Agenda

March 23<sup>rd</sup>, 2023 – 1:00 p.m.

1. Welcome and Chair's Remarks
2. Chief Administrative Officer's Comments
3. Approval of Joint Standing Committee Agenda
4. Standing Committee Chair's Remarks
  - a. Clean Water Committee: Jacqueline Kelly Pemberton
  - b. Communications Committee: Charles Armstrong
  - c. Fish and Wildlife Committee: Fred Schueler
  - d. Forestry Committee: Bill Smirle (on behalf of Chair Glenn Mackey)
5. Update: 2022 SNC Annual Report: John 3-20
6. Update: State of the Nation Watershed Report Card: Kat 21-29
7. For Discussion: Draft Watershed Programs and Services  
Business Case: John and Ronda 30
8. Closing Remarks
9. Adjournment

  
Ronda Boutz,  
Secretary-Treasurer.

  
John Mesman,  
Managing Director, Property, Conservation  
Lands, and Community Outreach.



**To:** SNC Joint Standing Committees  
**From:** John Mesman, Managing Director, Property, Conservation Lands,  
and Community Outreach  
**Date:** March 17, 2023  
**Subject:** Update: 2022 SNC Annual Report

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**RECOMMENDATION:**

That the SNC Joint Standing Committees receive and file the 2022 SNC Annual Report.

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**DISCUSSION:**

Annual reports are an important way to highlight South Nation Conservation's (SNC) programs, services, and accomplishments throughout the preceding year. The report also provides partners and stakeholders with information regarding financial performance, Board of Directors membership, and project updates.

Highlights from the 2022 Annual Report (attached) are summarized below:

- **Featured Topics:** SNC's 75<sup>th</sup> Anniversary, Safe Septic Inspection Program, Indigenous Connections and SNC's Development Approvals Programs.
- **Conservation Areas:** Over 152,000 recorded visitors, site improvements at J. Henry Tweed, McIntosh Park and clean up from the May Derecho storm.
- **Use of SNC Lands:** Sustainable timber harvests, hunting and trapping programs, apiculture, maple syrup and agriculture uses.
- **Forestry and Stewardship Initiatives:** Statistics on SNC's tree planting program, Woodlot Advisory Service, Clean Water Programs and Forest Steward, SNC's Land Securement Program and Grasslands Stewardship.
- **Select Project / Program Updates:** Youth Opportunities, Roadside Pollinator Garden, Free Trees for Local Communities, and SNC's New CAO.
- Financial summary and Board of Directors membership.

Printed copies of the 2022 Annual Report will be available in both English and French to be distributed through the year and posted on SNC's website. Following SNC's Annual General Meeting in March 2023, copies will also be distributed to partner municipalities and Conservation Authorities in Ontario.



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**FINANCIAL IMPLICATIONS/ADHERENCE TO SNC POLICY:**

Compliance with Budget: Funding for completing the design of the 2022 Annual Report is included in the 2023 SNC Budget under Communications and Outreach: Media and Communications Products, on pages 84-85.

SNC Policy Adherence: All expenditures will adhere to SNC's Purchasing Policy. For purchases of \$200 up to \$5,000 competitive quotes will be obtained where practical.

John Mesman,  
Managing Director, Property, Conservation Lands, and Community Outreach

Attachment: 2022 Annual Report





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# 2022 Annual Report

South Nation River,  
Township of North Stormont

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## SNC Celebrates 75 Years



Winter Hike at Warwick Forest - 75th Anniversary Kick-off  
SDG Warden Carma Williams, MPP Nolan Quinn, General Manager Angela Coleman, Deputy Mayor and Vice-Chair Steve Densham

### South Nation Conservation (SNC) celebrated 75 years of conservation in 2022!

Established under the *Conservation Authorities Act of Ontario* in 1947, SNC has decades of practical experience protecting our environment and engaging communities while working on behalf of 16 member municipalities in Eastern Ontario.

SNC programs and outreach initiatives helped commemorate this significant milestone by highlighting how water resource management and conservation lands stewardship have helped contribute to a Living Natural Legacy for the region.



2022 Summer Students, Township of North Stormont



With a return of in-person programming, SNC engaged with stakeholders and residents to help reflect on 75 years of conservation and explore the impact of SNC programs on the local communities and the environment .

- A 75 KM Challenge encouraged residents to visit Conservation Areas throughout the year and track their distance, whether they snowshoed, hiked, paddled, or walked. Activities were hosted at Conservation Areas to promote the challenge and the use of public trails and waterways.
- Visitor feedback also contributed to Conservation Areas Strategies to support sign replacements in 2023.
- Land and Water Stewardship Projects were completed with external funding partners and in combination with Emerald Ash Borer tree management that took place on the 20,000 acres of land managed by SNC.
- A 3-year Ontario Power Generation Biodiversity Project, which included stream restoration and tree management, was completed at the J. Henry Tweed Conservation Area.
- A partnership with Ducks Unlimited Canada continued to provide the SNC expertise on wetland restoration projects throughout Eastern Ontario, along with the coordination of several projects on SNC property.
- The 75<sup>th</sup> Anniversary set renewed records for the number of trees planted (over 211,000) and the amount of funding secured for forested land securement in a single year (over \$1.5 million).
- Natural hazard projects were also completed for some of the largest areas studied by SNC, including the Bear Brook and the Ottawa River, with a significant renewal of federal funding to continue water resource management projects in 2023, including projects in partnership with the Ottawa Conservation Partners (South Nation, Rideau Valley and the Mississippi Valley Conservation Authorities).
- Fundraising campaigns saw the return of the “Friends of SNC Golf Tournament” and the launch of a “Taste the Nation Restaurant Partnerships” with approximately \$5,000 raised to support Free Tree Pick Ups which took place in each of SNC’s member municipalities, as part of SNC’s Forest Conservation Initiative.
- SNC’s Annual General Meeting welcomed congratulatory messages from all levels of government and reinforced SNC’s position as a Partner of Choice in Eastern Ontario.

Politicians emphasized the valuable role that Conservation Authorities play in helping to design safe and sustainable communities by balancing the impacts of people and nature, economy and ecology, through environmental and geotechnical planning reviews completed through the Integrated Watershed Management Approach.



*Tree planting at J. Henry Tweed Conservation Area*



*Friends of SNC Golf Tournament*



*Furry friend participating in the 75km challenge*

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*Habitat restoration tree planting, Township of Russell*



*75th Anniversary Radler Launch at Humble Beginnings Brewery*



*Healthy hike at Maple Weekend at the Oschmann Forest, Township of North Dundas*



*Friends of SNC Golf Tournament Before T-time*



*A toast to Friends of SNC, Municipality of Cassidown*

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## Safe Septic Inspection Program

The Ontario Building Code requires septic systems within highly vulnerable drinking water areas be included in a Mandatory 5-year Sewage System Inspection Program. Septic systems that had not been properly inspected could threaten local drinking water quality.

On-site sewage inspection delivery varies across the Source Protection Region: systems within the City of Ottawa were inspected by the Ottawa Septic System Office; the Townships of North Glengarry and South Glengarry retained their own septic inspectors; and remaining municipalities delegate septic inspection responsibility to SNC.

273 of 274 septic systems in drinking water source protection areas were inspected in 2022, following initial inspections last completed in 2017.



*SNC's septic team works together to inspect private sewage systems under the Ontario Building Code*

## Program Expansion – Municipal Partnerships at Work

Thanks to the program's success, SNC expanded its Septic Program to several municipalities in the United Counties of Leeds and Grenville in 2022 following a decision by the Leeds-Grenville Health Unit to discontinue the service.

These types of programs consolidate resources between municipalities to ensure work is performed by specialized staff with a range of experience managing sewage systems, while reducing administrative costs and timelines to save homeowners time and money when building new homes or completing renovations.

SNC now delivers its Septic Program in 17 municipalities in Eastern Ontario and is one of the largest program delivery agents in Ontario.

## Indigenous Connections – The Healing Place

Two-eyed seeing bridges western science with Traditional Indigenous Knowledge to encourage new perspectives and to help gain a greater depth of understanding of the natural environment. SNC continues to incorporate a two-eyed seeing approach while working in partnership with First Nations to help deliver important conservation land and water stewardship projects.



*The Healing Place Harvest Event - October 2022  
Township of Edwardsburgh/Cardinal*

In 2020, the partners launched "The Healing Place" – a community green space located on the traditional territories of the Algonquin and Mohawk Nations in Eastern Ontario.

In 2022, a Three Sisters Garden was added to support First Nations food sovereignty and to share knowledge and experiences with local communities. Project partners and students from several schools supported planting and harvesting events with food donations made to local food banks.

In addition to the Healing Place, SNC also provided space on property owned in Maxville to support the construction of the Miitig Teaching Lodge, a traditional sweat lodge, which will host cultural ceremonies, teachings, and storytelling.

# SNC Approvals Programs: Planning and Development Reviews, Conservation Authority Regulations, and Municipal Septic Services

The way we plan and build our communities affects our natural environment. Environmental planning is an important part of protecting our land and water resources.

SNC's Approvals Team ensures people and property are protected from natural hazards by participating in local planning and development review to support member municipalities.

With expertise in natural hazards and natural heritage, municipal drinking water source protection, and private servicing, the team also supports development projects and environmental studies.



SNC's Septic Program through the Ontario Building Code (Part 8 - Sewage Systems) works with landowners and contractors to ensure proper installation and repair of septic systems.

SNC's Regulations Program is delivered under Section 28 of the *Conservation Authorities Act* and enables staff to work with municipal and agency partners, developers, landowners, and contractors, to safeguard human life and property from natural hazards, like flooding, erosion, and landslides.

*The following summary identifies the number of development applications processed by SNC in 2022.*

Planning and Development Reviews	Conservation Authorities Act: Section 28 Permits	Sewage Systems Review
<ul style="list-style-type: none"><li>590 development applications</li><li>64 property inquiries</li><li>186 technical reviews</li><li>13 applications reviewed for threats to municipal drinking water</li><li>0 risk management plan established to protect municipal drinking water</li></ul>	<ul style="list-style-type: none"><li>258 permits</li><li>87 occurrence complaints</li><li>87 drain maintenance requests</li></ul>	<ul style="list-style-type: none"><li>437 permits</li><li>164 septic record searches</li><li>80 renovation reviews</li><li>24 occurrence reports investigated</li></ul>

For all planning applications, timelines are established by municipalities depending on the type of development, applicable legislation, and municipal policies.

Timelines for *Conservation Authorities Act* permits are established by the Province of Ontario. The following summary notes the number of permits issued within established timelines.

Permits Issued Within Provincial Timeline	
Major (90 days)	Minor (30 days)
5	178
<hr/>	
Permits Issued Outside Provincial Timeline	
Major (90 days)	Minor (30 days)
0	39

As part of Conservation Ontario’s new Client Service Standards, SNC works to achieve the following service standards:

- 21 days for minor applications,
- 28 days for major applications, and
- 14 days for routine applications.

Additional time is provided for resubmissions.



# 2022 PROGRAM HIGHLIGHTS

## Endless Recreational Opportunities At SNC Conservation Areas

In 2022, SNC's network of 14 Conservation Areas (CA) welcomed over 152,000 recorded visitors to hike, geocache, picnic, kayak, canoe, launch their boat, bird watch, fish, and enjoy their local outdoor environment.

### The most popular destinations?

#### Year-Round Sites:

- W.E. Burton CA in Russell (36,284 visitors)
- J. Henry Tweed CA in Russell (28,050 visitors)
- Warwick Forest CA in North Stormont (10,861 visitors)

#### Seasonal Sites:

- Jessup's Falls CA in Alfred-Plantagenet (22,648 visitors)
- High Falls CA in Casselman (12,688 visitors)
- Cass Bridge CA in North Dundas (8,798 visitors)

In addition to weekly maintenance and annual tree management and trail improvements, SNC also completed several capital projects including:

- Walkway and free Wi-Fi installed at the McIntosh Memorial Park CA,
- Gates at the Reveler and Camp Sheldrick CAs,
- Accessible privy at Cass Bridge CA
- Accessible dock at the Chrysler Boat Launch
- Edible tree buffer established at the Jessups Falls CA
- Shoreline restoration in the J. Henry Tweed CA

SNC also received approximately \$1 million in funding to begin two large capital projects which began in 2022 and will be completed in 2023:

- Accessible Boardwalk Extension at the Findlay Creek CA
- Accessible Washroom at the High Falls CA



*Shoreline restoration, Township of Russell*



*New memorial walkway at the McIntosh Park Conservation Area, Township of North Stormont*



*Cleaning up conservation areas following the derecho storm*



## Land Partnerships Support Local Economy

SNC partners with area businesses and community members to sustainably harvest locally sourced products.



### HUNTING

Nearly 9,000 acres of SNC land is used by hunters; 111 permits issued in 2022.



### HONEY

SNC is gifted 10 lbs of honey annually from local beekeepers; 1 land lease in 2022.



### MAPLE SYRUP

In 2022, 5,500 gallons of sap was collected from the Oschmann Forest and sold to a local producer. 33 acres of land is also leased for sugar bush operations.



### TRAPPING

Nearly 9,000 acres of land is used by trappers; 4 permits issued in 2022.



### CROP PRODUCTION

30 acres of SNC land is leased to local farmers.



*Maple taps at the Oschmann Forest, Township of North Dundas*



*Reveler Conservation Area, Township of North Stormont*

## Living Natural Legacy: SNC Land Securement

SNC's Land Securement Strategy, which is supported by 16 member municipalities, has helped guide the securement of 1,133.9 acres of land since 2014, adding to the over 12,000 acres of land owned by SNC.

The strategy identifies the need for public land securement in Eastern Ontario and has provided a framework for recommending land acquisition decisions to SNC's Board of Directors.

SNC is a member of the Ontario Land Trust Alliance and is approved to accept donations of land through Canada's Ecological Gifts Program. SNC's Land Donation Program continues to offer donors a way to preserve the past and provide hope for the future by leaving a natural legacy.

**In 2022, SNC acquired 225 acres of land on 5 properties through partial purchase and donation in the municipalities of: North Stormont, North Grenville, North Dundas and the City of Ottawa.**



*Two Creeks Forest Conservation Area, Municipality of South Dundas*





Surveying stormwater ponds in Limoges, Nation Municipality



Hatchling snapping turtle in Black Creek, Township of Russell



Tweed Community Day, Township of Russell



Metcalfe Fair, City of Ottawa



SNC Office, Township of North Stormont



Tree tapping at the Oschmann Forest, Township of North Stormont





Free Tree Campaign - National Nurses Week



Electrofishing to Classify Municipal Drain, City of Clarence-Rockland



Building beaver dam analogs for wetland restoration, Township of Alfred and Plantagenet



Pond survey, Nation Municipality



South Nation River



Early morning municipal drain sampling, City of Ottawa

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# Conservation Authorities: Protecting People and Property from Natural Hazards

## Floodplain and Erosion Mapping

SNC updates floodplain and erosion maps (or natural hazard maps) on behalf of its partner municipalities when requested, specifically in areas facing increased development pressures.

In 2022, SNC updated hazard mapping for its jurisdiction along the Ottawa River shoreline within Prescott-Russell and the Bear Brook within the City of Ottawa with financial support from the all levels of government.

Projects will be completed after public consultations in 2023.

## Flood Forecasting and Warning Program

SNC is continuously enhancing water resource monitoring programs to advise municipalities and residents of potential flood emergencies. Updates were made to climate stations to support SNC's watershed model, with a new station installed at the Mill Run Conservation Area.

Under the Flood Forecasting and Warning program, which advises of potentially unsafe conditions due to flooding, SNC issued 12 notices in 2022.

Under the Low Water Response Program, which advises of possible drought conditions, SNC did not issue any notices in 2022.



*Ice Jam at South Nation River, Township of North Stormont*



*New climate station installed at Mill Run Conservation Area, Township of Augusta*

## Water Control Structure Management

SNC operates several water control structures including dams, weirs and berms to reduce risk to life and property from natural hazards.



*Chesterville Dam, Township of North Dundas*

## Woodlot Management And Tree Planting

In 2022, SNC:

- Planted a record 211,130 seedlings, adding to the 3 million trees planted since 1990.
- Provided \$190,720 in grants through Forests Ontario's 50 Million Tree Program to help plant trees on private land.
- Completed free Woodlot Advisory Service site visits and provided \$26,950 in grants to 54 property owners to create forest management plans for 3,279 acres of land.
- Continued management of the SNC Forest (over 12,000 acres) and the SDG County Forests (over 9,000 acres).
- Worked with 18 Forest Stewards to monitor forest activity on 45 SNC properties.
- SNC partnered with municipalities to provide over 10,000 free tree seedlings to watershed residents. Approximately \$5,000 was fundraised to support this Forest Conservation Initiative.

## Watershed Monitoring And Reporting

Our environmental monitoring programs focus on quality and quantity of our land and water ecosystems including: surface and ground water; native, invasive, and at-risk species; stream assessments; and municipal drains.

SNC collects and provides scientifically accurate data for stakeholders and municipalities to make informed decisions; data also helps guide SNC stewardship projects and programs.

## Clean Water Program

Provided \$61,193 in cost-share grants for 21 projects that improve water quality within the SNC jurisdiction.

Provided \$279,337 in cost-share grants for 70 projects within the City of Ottawa.

SNC delivers the Ottawa Rural Clean Water Program on behalf of Ottawa's Conservation Partners (the Mississippi, Rideau, and South Nation Conservation Authorities).

## Ottawa Ash Tree Replacement Program

Provided \$61,335 in cost-share grants for 40 projects on private property that helped replace 204 Ash trees and control the invasive Emerald Ash Borer (EAB).

SNC remains committed to controlling EAB within its forest properties through research partnerships and tree management activities within Conservation Areas.

## Grassland Stewardship

Thanks to years of successful industry partnerships to restore grassland habitat for Species at Risk birds, SNC, on behalf of Forests Ontario, is delivering a habitat restoration program called the Grassland Stewardship Initiative. The program has seen a successful launch and now, going into its second year, new projects are proposed to further increase grassland habitat to support critical Species at Risk Birds such as the Bobolink and Eastern Meadowlark.

SNC continues the Grassland Stewardship Project at the Healing Place Property by maintaining the bird-friendly hay harvesting schedule to improve the overall productivity and effectiveness of the habitat. In 2022, SNC worked with private landowners who intend to create, enhance, or maintain grasslands on their property to support the conservation and recovery of grassland bird populations.



# 2022 PROGRAM HIGHLIGHTS

## YOUTH OPPORTUNITIES

SNC is committed to engaging local youth with hands-on educational programs.

Over 110 youth baited a hook and received mentorship through the popular Youth Fish Camps and Youth Hunt Apprenticeship Programs which returned for a 13<sup>th</sup> season after a 2-year pandemic hiatus.

These camps deliver invaluable outdoor learning experiences for youth and help familiarize young people with the natural environment through responsible and sustainable hunting and fishing.

Youth were casting a line at the Cass Bridge Conservation Area, High Falls Conservation Area, Jessup's Falls Conservation Area, and new in 2022, Cardinal's Legion Park.

Supported by the Ottawa Flyfishers Society and the Water Rangers, participants also learned the basics of flyfishing, including tying knots, making flies, and casting out; as well as learning how to test the water quality in rivers and understand what they can do to keep their waterways clean.

The Youth Hunt, delivered through a partnership with Delta Waterfowl, helps teach youth about the importance of ethical hunting, respecting safety, wildlife habitat, and private property.

Everyone is hooked on these fee-for-service programs and SNC continues to encourage safe and responsible hunting and fishing opportunities.

*Photo: Youth Fish Camp, Cardinal Regional Park, Township of Edwardsburgh Cardinal*



*Staff sowing wildflower seeds at Mill Run Conservation Area Township of Augusta*

## MILL RUN CONSERVATION AREA, ROADSIDE POLLINATOR GARDEN

Pollinator populations are declining across North America with the primary cause being the loss of suitable habitat. SNC continues to participate in an Eastern Ontario Community of Practice and has helped several municipalities and community groups complete pollinator gardens and roadside pollinator projects.

Thanks to the funding support provided by the Canadian Wildlife Federation, SNC is transforming 1.5 acres of meadow at SNC's newly acquired Mill Run Conservation Area in Augusta to support native flowering plants and pollinators.

Site restoration, mowing, native seed sourcing and sowing occurred in 2022 with a maintenance and monitoring plan in place for 2023 to coincide with further property development.

The site is expected to be fully restored with an inclusive interpretive trail by 2024.

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## FREE TREES FOR LOCAL COMMUNITIES

SNC donated 500 tree seedlings to hospital nurses for National Nurses Week as the Pandemic continued.

Frontline healthcare staff at the Glengarry Memorial Hospital, Winchester District Memorial Hospital, and the Cornwall Community Hospital received special thank you gifts of free trees. Donated White Pine and White Spruce seedlings were sourced locally from the Ferguson Forest Centre.

In the face of tragedy, trees can become a symbol of resilience, perseverance, and hope.

SNC once again co-hosted Free Tree Days with our municipal partners to promote environmental stewardship in our communities and showcase effective municipal and Conservation Authority partnerships at work.

Over 400 free tree seedlings were distributed within each partner municipality from the recommendation in SNC's 2018 Forest Conservation Report.

*Photo: Municipal Free Tree Pickup*



## SNC'S NEW CAO – CARL BICKERDIKE

SNC's Board of Directors was pleased to appoint Carl Bickerdike as the new Chief Administrative Officer (CAO) in October 2022. Carl succeeded Angela Coleman, who departed to take the helm as General Manager at Conservation Ontario, an agency that represents the 36 Conservation Authorities in Ontario.

After first joining the Authority in 2002 Angela held several posts at SNC, from communications coordinator to property and approvals director, before becoming SNC's CAO in 2017. Angela joined the organization in time to support Conservation Authorities transition through the Province's *Build Homes Faster Act*, which proposed limits to the roles of environmental planning and technical review services for municipalities.

While Angela is now a leader at Conservation Ontario in Newmarket, she remains local in North Stormont, where she owns and operates Sand Road Maple Farm in Moose Creek with her husband Scott Coleman.

Taking over as CAO, Carl Bickerdike, a leader with significant knowledge of SNC's operations, has brought a wide range of experience to the position. Mr. Bickerdike graduated in 2012 with a Master of Arts in Urban and Environmental Policy and Planning from Tufts University in Medford, Massachusetts. He has held various roles at SNC including Corporate Services and Project Lead and Managing Director. Prior to working with SNC, he worked as a Program Director for the YMCA in Massachusetts and Quebec, leading outdoor and environmental education programs.



*New CAO, Carl Bickerdike*

## 2022 BOARD OF DIRECTORS

*SNC's Board of Directors consists of 13 appointed representatives from SNC's 16-member municipalities who govern and provide direction for all the work completed by SNC staff.*



### The 2022 Board of Directors include:

Pierre Leroux, Chair, Prescott-Russell;  
Steve Densham, Vice-Chair, Stormont, Dundas & Glengarry;  
George Darouze, Past Chair, City of Ottawa

### City of Ottawa:

Catherine Kitts, Allan Hubley, Gerrie Kautz

### United Counties of Prescott-Russell:

François St. Amour, Mario Zanth

### United Counties of Stormont, Dundas and Glengarry:

Bill Smirle, Archie Mellan

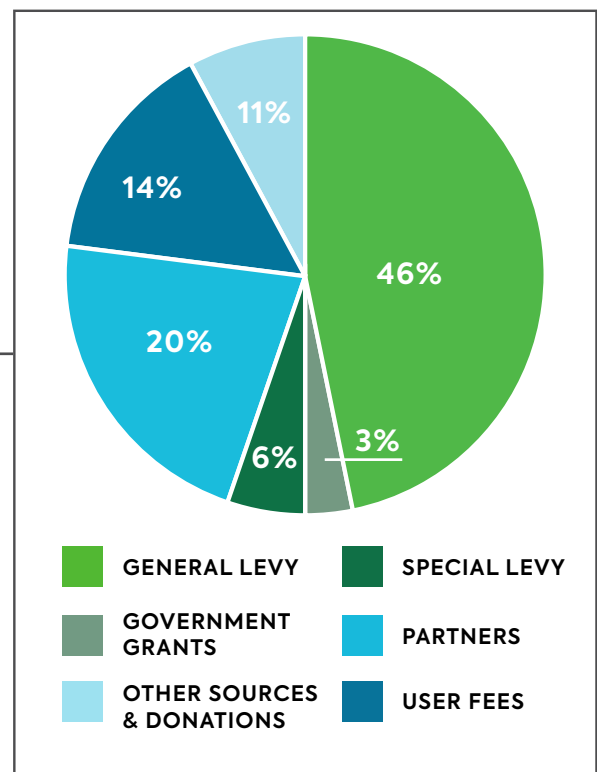
### United Counties of Leeds and Grenville:

Dana Farcasiu, John Hunter

## 2022 SNC BUDGET SUMMARY

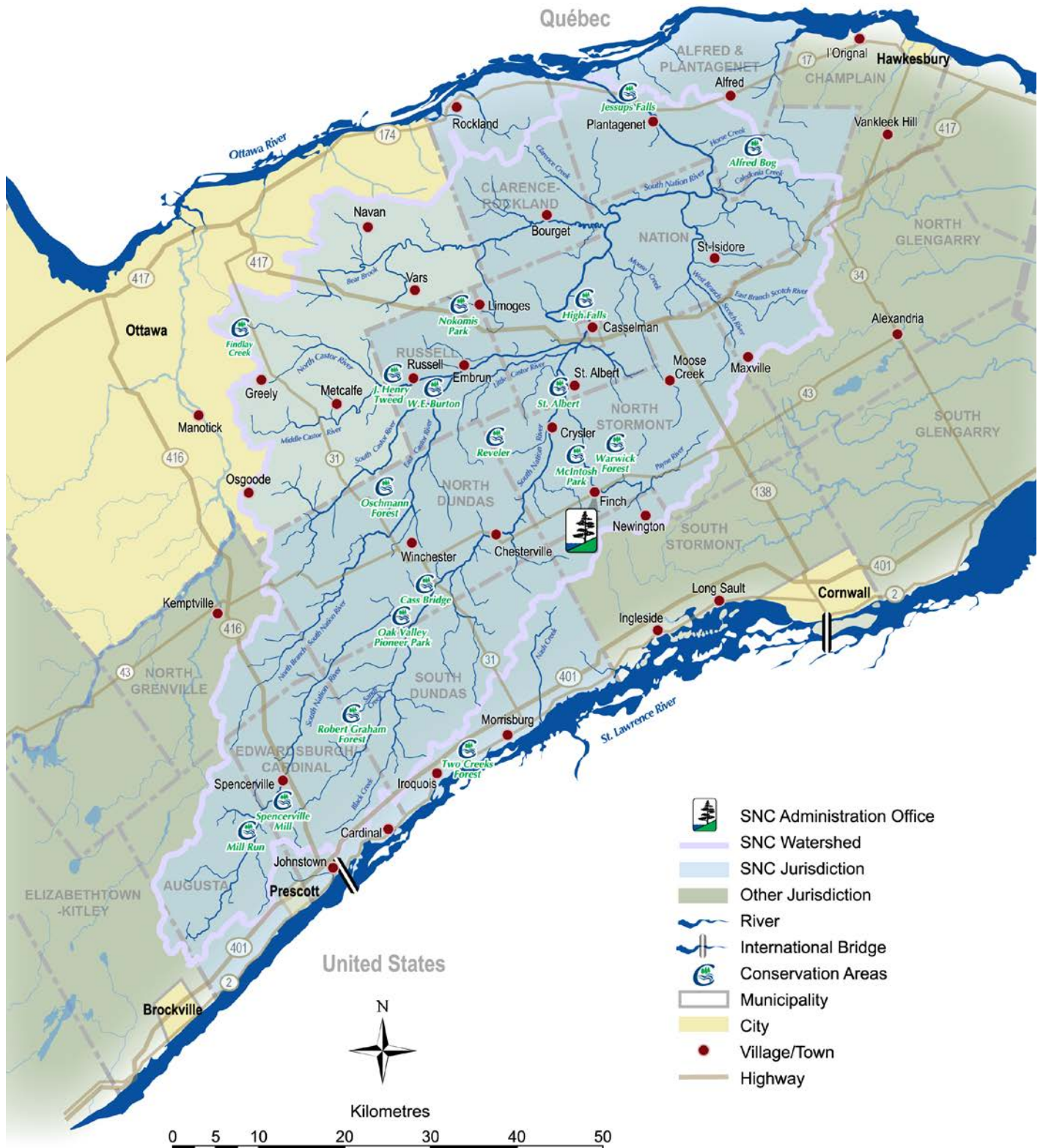
**2022 Budget:** \$8,170,058

- General Levy: \$3,768,377
- Special Levy: \$509,500
- Government Grants: \$282,100
- Partners: \$1,590,715
- User Fees: \$1,137,550
- Other Sources and Donations: \$881,816





OUR LOCAL ENVIRONMENT; WE'RE IN IT TOGETHER.  
NOTRE ENVIRONNEMENT LOCAL, PROTÉGEONS-LE ENSEMBLE.



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**To:** SNC Joint Standing Committees  
**From:** Katherine Watson, Water Resources Specialist  
**Date:** March 17<sup>th</sup>, 2023  
**Subject:** Update: State of the Nation Watershed Report Card

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**RECOMMENDATION:**

The SNC Joint Standing Committees receive and file the State of the Nation Watershed Report Card.

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**DISCUSSION:**

The State of the Nation Watershed Report Card is an important communication product that relays information on the state of SNC's forest, wetland, surface water, and ground water quality conditions.

Watershed Report Cards are produced every 5 years by Ontario Conservation Authorities. A provincial campaign beginning on World Water Day (March 22<sup>nd</sup>, 2023) will launch a new interactive map and online platform to share information from all of Ontario's Watershed Report Cards.

Resource conditions are assessed using published guidelines and objectives. Measuring helps identify areas that are faring well versus those needing improvement so that projects and programs can be focused where they are needed most. This report also tracks changes and progress over time.

Hard copies of the report will be available at the meeting and will be distributed to municipalities in April 2023.

**FINANCIAL IMPLICATIONS/ADHERENCE TO SNC POLICY:**

Compliance with Budget: Monitoring and analysis to support the Watershed Report Cards are included in the 2023 SNC Budget: Resource Management; Water Response Programs: pages 14 and 15.

Development of the publication and community outreach is included in the 2023 SNC Budget: Communications and Outreach: Media and Communications Products, pages 84 and 85.

SNC Policy Adherence: All purchases followed SNC Purchasing Policy for purchases \$200-\$5,000. All field work followed SNC's Health and Safety Policies.

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Katherine Watson,  
Water Resources Specialist.

Attachment: State of the Nation: Watershed Report Card 2023

# State of the Nation

## Watershed Report Card 2023



South Nation Conservation has prepared this report card as a summary of the state of your forests, wetlands, and water resources. Measuring helps us better understand our watersheds. We can focus our work where it is needed and track progress.



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# WHERE ARE WE?



## What is a Watershed?

A watershed is an area of land drained by a creek or stream into a river which then drains into a body of water such as a lake or pond. Everything in a watershed is connected. Our actions upstream can affect conditions downstream.

## Why Measure?

Measuring helps us better understand our watershed. We can target our work where it is needed and track progress. We measured:



**Groundwater Quality**



**Surface Water Quality**



**Forest Conditions**



**Wetland Conditions**

## GRADING

**A** Excellent

**B** Good

**C** Fair

**D** Poor

**F** Very Poor

Insufficient Data

## What is a watershed report card?

Ontario's Conservation Authorities report on watershed conditions every five years.

The watershed report cards use Conservation Ontario guidelines and standards developed by Conservation Authorities and their partners.



# SOUTH NATION CONSERVATION



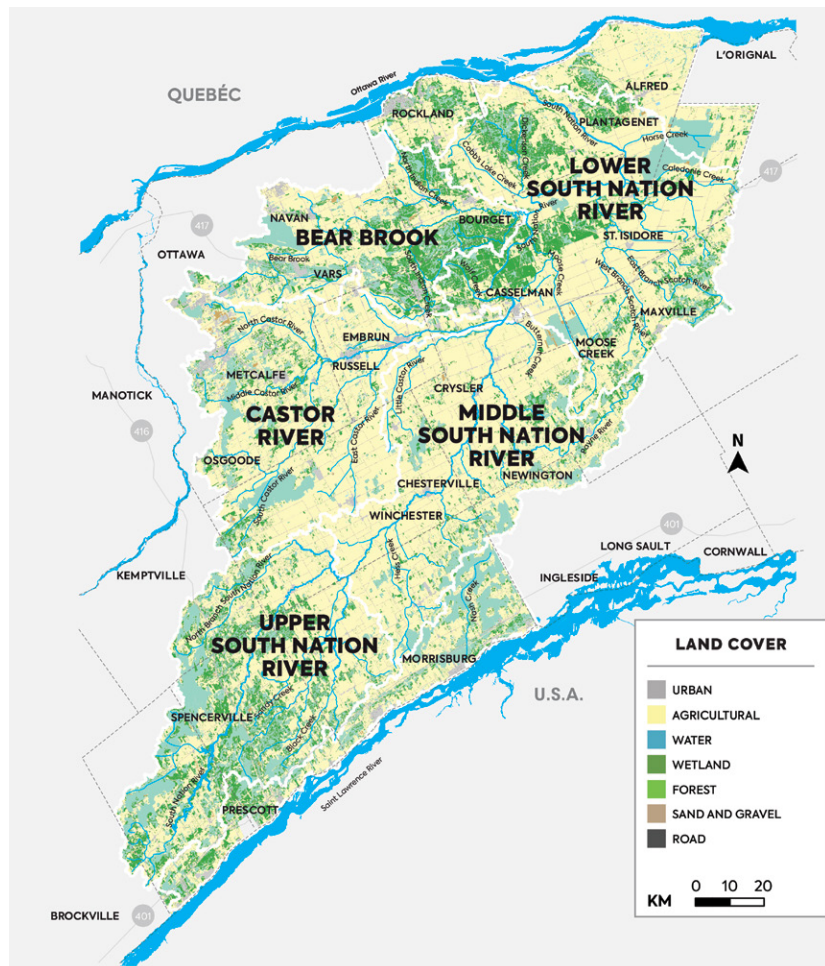
## Conservation Authorities

South Nation Conservation (SNC) is one of thirty-six Conservation Authorities in Ontario. Conservation Authorities are community-based environmental organizations dedicated to conserving, restoring, and managing natural resources on a watershed scale.

## Where South Nation Conservation Operates

The SNC jurisdiction encompasses 4,441 km<sup>2</sup> of Eastern Ontario, providing invaluable resources to parts of the City of Ottawa, United Counties of Leeds and Grenville, United Counties of Stormont, Dundas and Glengarry, and United Counties of Prescott and Russell.

From headwaters north of Brockville, the South Nation River flows northeast for 175 kilometers, and empties into the Ottawa River near Plantagenet. The jurisdiction also includes areas that drain to the St. Lawrence River and Ottawa River.





# South Nation Conservation FOREST CONDITIONS

GRADE

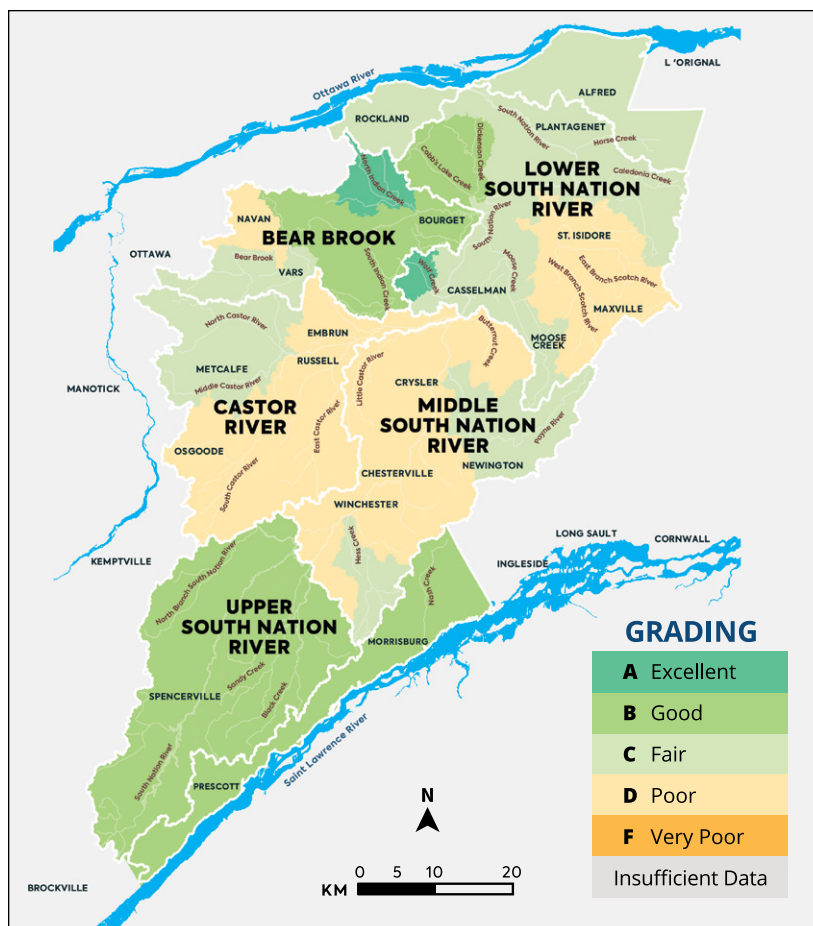
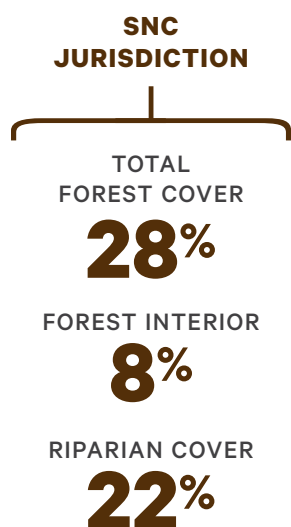
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Forests are an essential part of a healthy watershed. Trees filter our air and water, prevent flooding and erosion, and provide food and habitat for wildlife. They also provide many economic, recreational, cultural, and social benefits. The quality of forest cover conditions were measured using Geographic Information Systems (GIS) and aerial imagery from 2014, and based on:

- **FOREST COVER** – the total area that is covered in trees.
- **FOREST INTERIOR** – the wooded area that is more than 100 metres from a forest's edge (required by many species for survival).
- **FOREST RIPARIAN ZONE** – the amount of forest within 30 metres on either side of a watercourse.

Environment and Climate Change Canada recommends a minimum of 30% Forest Cover, 10% Forest Interior, and that 75% of stream length should be naturally vegetated on both sides of the stream.

These recommendations are based on guidelines for habitat requirements to sustain minimum viable wildlife populations and maintain ecosystem functionality.



Total Forest Cover in the SNC jurisdiction is fair at **28%** (based on data from 2014), ranging from excellent to poor on a subwatershed basis. Overall, forest interior is fair at **8%**, ranging from excellent to very poor. Riparian cover is poor at **22%** and needs improvement across the jurisdiction.

SNC is helping landowners and municipalities increase forest cover through programs such as the Tree Planting Program, the Woodlot Advisory Service, and the Clean Water Grant Program. Forests grow slowly, but environmental benefits begin as soon as trees are planted.





# South Nation Conservation WETLAND CONDITIONS

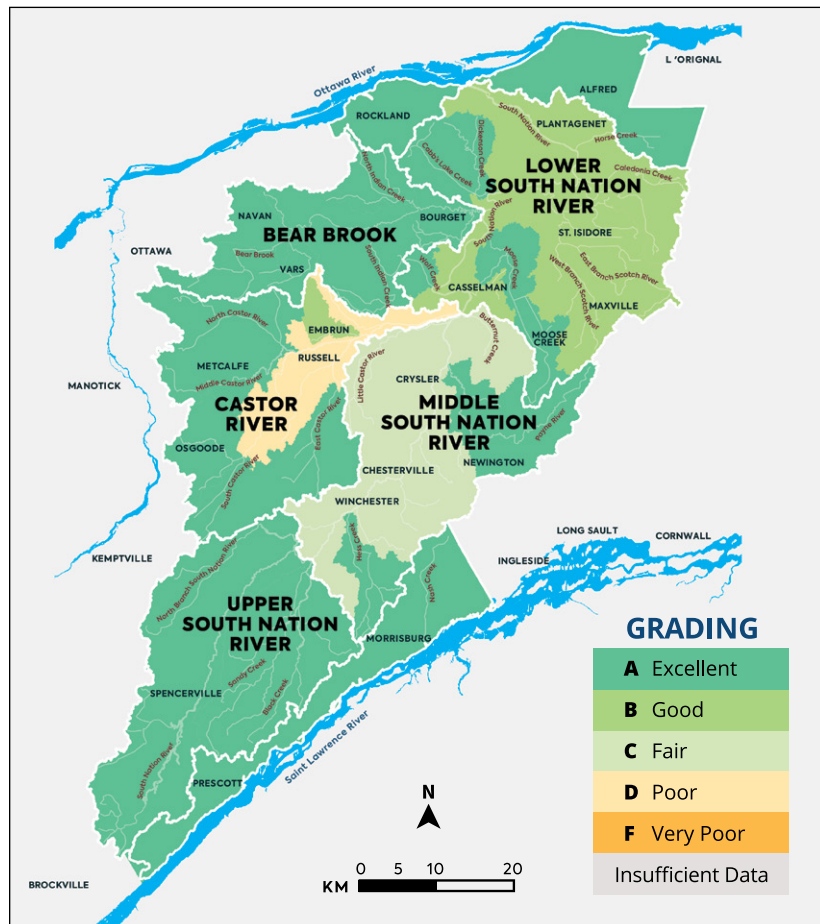
GRADE

A

Wetlands provide natural flood control during peak flows and act as water reservoirs during dry weather. They filter pollutants before they enter streams, provide important habitat for plants and animals, and provide numerous economic, recreation, and aesthetic benefits.

- **WETLAND COVER** – the total area that is covered in swamp, marsh, fen, and bog habitat. Wetland cover is measured using Geographic Information Systems (GIS) and aerial imagery.

Environment and Climate  
Change Canada recommends  
10% wetland cover.



Wetland cover in the SNC jurisdiction is excellent at **17%** (based on data from 2014), with most subwatersheds meeting the minimum guideline of **10%**. Wetland cover in some subwatersheds is poor, requiring more wetland habitat in strategic locations.

Although wetland cover in the jurisdiction is meeting minimum guidelines, wetlands have been greatly reduced over the last 200 years. Pre-settlement (c. 1800) wetland cover estimates for the jurisdiction are at **40% to 50%** – largely the result of the last ice-age. The Champlain Sea was a temporary inlet of the Atlantic Ocean created by retreating glaciers during the close of the last ice age. The best evidence of this former sea is the vast clay plain deposited along the Ottawa and St. Lawrence Rivers. This resulted in distinctive forest types, large wetlands, and associated ecosystems.



## South Nation Conservation **SURFACE WATER QUALITY**

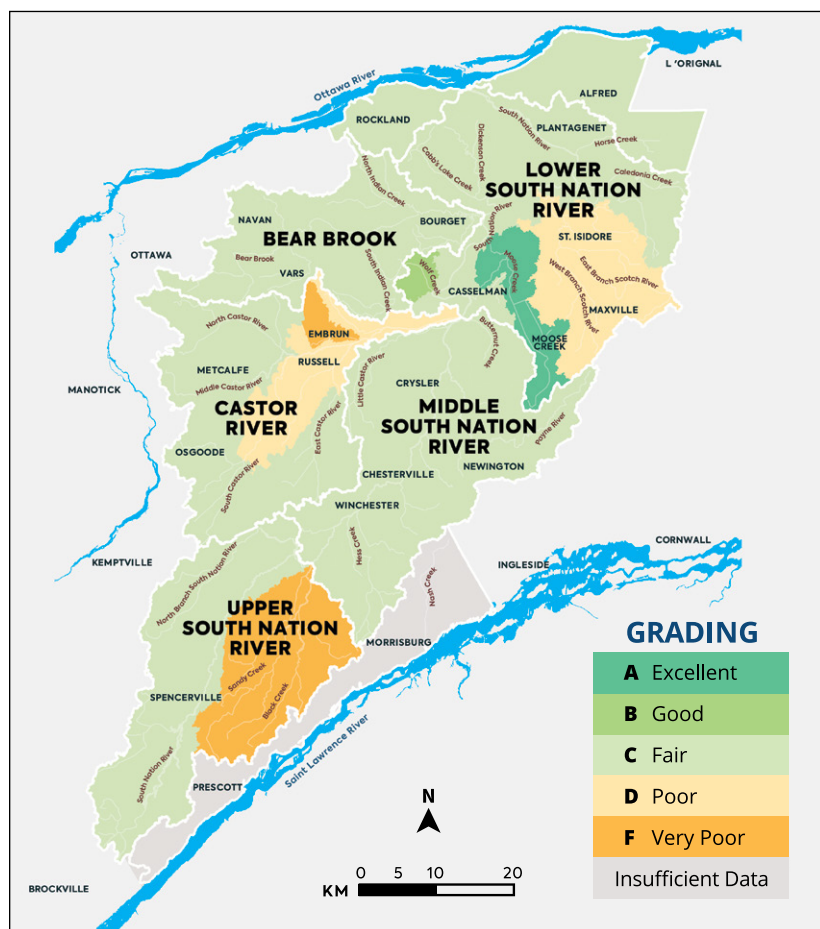
GRADE

**C**

Healthy river systems provide invaluable services and benefits that sustain life and fuel human economies. Surface water quality is essential to healthy rivers; two indicators that help determine water quality are:

- **Total Phosphorus** – naturally occurring in rivers, but can be elevated due to detergents, fertilizers, and sewage. Too much can result in algae blooms, affecting oxygen levels, and the fish and biota that live there.
- **Benthic macroinvertebrates** – small creatures that live in the river including: insects, mollusks, and worms. They are very sensitive to pollution and are excellent indicators for water quality and stream health.

Provincial Water Quality Monitoring Network data (water chemistry) can be accessed through the MECP's website. Search for *provincial water quality monitoring network* at [ontario.ca](https://ontario.ca).



Water quality in the South Nation jurisdiction ranges from excellent to very poor. Phosphorus levels routinely exceed the Provincial Water Quality Objective (0.03 mg/L), while benthic invertebrate communities range from reference (unimpaired) condition to poor (impaired) condition depending on location.

Sites in good stream health tend to have good forest cover, especially along the banks of rivers (riparian area). Sites requiring improvement typically have low forest cover and are prone to erosion and sedimentation.

Programs administered by SNC offer cost-share grants to property owners to help improve the condition of local water resources. These programs have received national and international recognition as effective tools to improve water quality.



## South Nation Conservation **GROUNDWATER QUALITY**

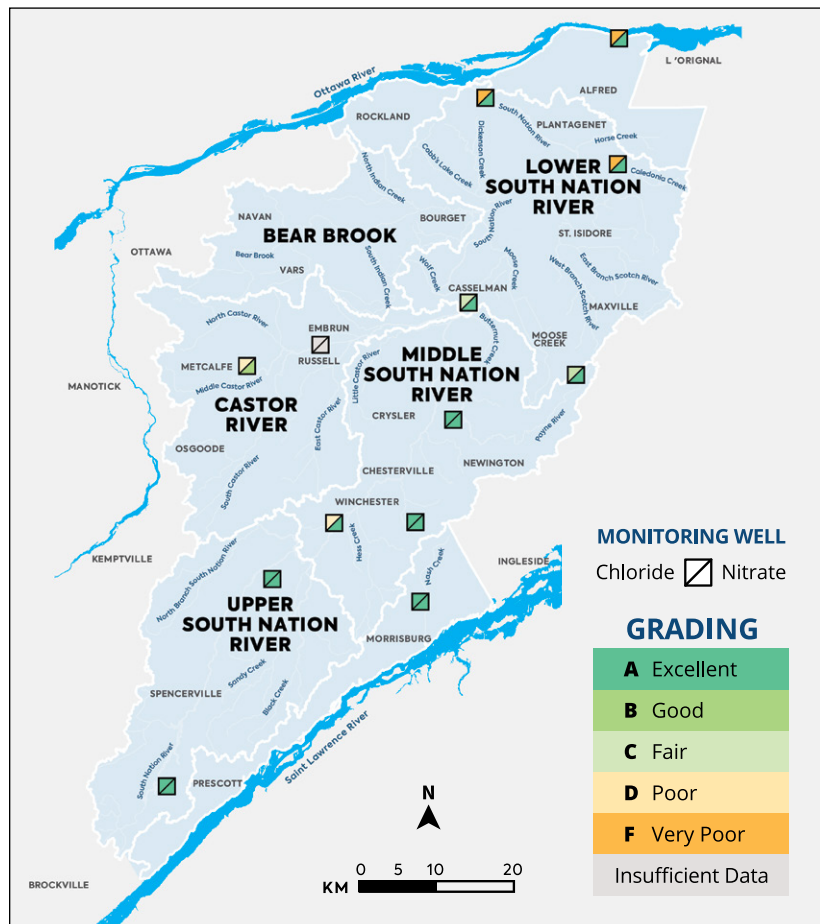
Groundwater, which is found in underground aquifers, is an important and vital natural resource. Groundwater provides drinking water to more than **95%** of the rural population within the jurisdiction.

SNC monitors 17 *Provincial Groundwater Monitoring Network* (PGMN) wells in 13 locations across the jurisdiction in partnership with the Ministry of the Environment, Conservation and Parks (MECP). Two indicators that help determine groundwater quality are:

- **Chloride** – a naturally occurring element; however, concentrations can be increased in shallow groundwater systems due to human activity (e.g., road salt, landfills, and septic systems), and in deeper wells it occurs naturally from deposits of the previous Champlain Sea from post-glacial melting and flooding. The Canadian Drinking Water Quality Guideline for chloride is an Aesthetic Objective (AO) of 250 milligrams per litre (mg/L).
- **Nitrate** – can naturally occur in rocks and groundwater; however, concentrations can be increased by human activities such as leaky septic systems and application of excessive amounts of fertilizer. The Ontario drinking water quality standard for nitrate is 10 milligrams per litre (mg/L).

PGMN data (water levels and chemistry) can be accessed through the MECP's website. Search for *provincial groundwater monitoring network* at [ontario.ca](https://www.ontario.ca).

The South Nation Source Protection Area includes 19 municipal drinking water systems (11 groundwater and 8 surface water). For more information on how these sources of municipal drinking water are protected, visit: [www.yourdrinkingwater.ca](https://www.yourdrinkingwater.ca).



Chloride and nitrate concentrations are better than drinking water standards in most wells. Several wells have higher chloride concentrations; which are naturally occurring due to the influence of the Champlain Sea.

The quality of your well may be different from that of the monitoring wells. Visit [www.ontario.ca/page/wells-your-property](https://www.ontario.ca/page/wells-your-property) for information and rules on proper location, construction, maintenance and abandonment of a well. If you have a private well, it is important to test your water regularly for bacteria and other impurities. Contact your local health unit for free water testing.



# HOW CAN WE ENHANCE THE WATERSHED?



## Protecting the SNC Jurisdiction

SNC is an agency with a mandate to conserve, restore, and manage the water, land, and natural habitats of the 4,441 km<sup>2</sup> SNC jurisdiction. SNC works closely with partner municipalities, government agencies, individual landowners, and community groups to maintain and improve the natural environment.

## Sustainable Development

Land use planning input and administration of Ontario Regulation 170/06 (Development, Interference with Wetlands and Alterations to Shorelines and Watercourses) ensures the protection of people and their property, and that development does not negatively impact wetlands, shorelines, or waterways.

## Environmental Monitoring and Reporting

Data collected through a variety of monitoring activities, including surface water, groundwater, and fisheries sampling, is used to evaluate and report on existing watershed conditions, identify changes, and target stewardship activities.

## Flood Forecasting and Warning, and Low Water Response

Data, including weather information, water levels and flows, snow pack, and ice conditions, are used to help protect life and property from natural hazards such as high and low water conditions.

## Education, Outreach, and Stewardship

Public workshops, school programs, summer youth camps, and local events provide environmental education opportunities. Programs provide technical advice and financial assistance to landowners to implement stewardship projects to enhance the region.

## Conservation Land and Forestry Program

SNC will have served over 1,000 property owners through tree planting programs and will have planted its 4 millionth tree in 2023 to act as windbreaks, control erosion along stream banks, and reforest idle land. SNC is a partner in the management of over 20,000 acres of conservation land in Eastern Ontario. SNC encourages responsible, recreational use of our forests and maintains 14 day-use Conservation Areas for the public to step outdoors and into nature.

## Be a Watershed Steward!

By working together, we can make a difference. Improving the health of the South Nation Watershed requires us to make choices that balance environmental concerns with everyday life.

Here are some examples of stewardship activities that we can help you undertake to enhance your property and protect human and environmental health.

## Clean Water Grants

Cost-share funding is available for projects that help improve water quality on private property, including: stream bank and erosion control, decommissioning abandoned wells and septic systems, and on-farm projects, nutrient management, and education initiatives.

## Woodlot Advisory Service

Would you like to save up to 75% on your property taxes, while maximizing the potential of your woodlot? SNC's Woodlot Advisory Service promotes sustainable management of private forests by offering free site visits, technical advice, and grants to help create Forest Management Plans.

## Tree Planting Program

Everyone can benefit from planting suitable trees on their property. SNC partners with Forests Ontario to offer seedlings, site preparation/tending, and planting for a subsidized fee, with additional subsidies available in the City of Ottawa.

## What Can Your Community Do?

- Plant native trees and shrubs on idle land and along streambanks.
- Control soil erosion through the use of trees or grass buffers, berms, cover crops, or crop residue.
- Install bird, bat, and pollinator boxes to provide wildlife habitat.
- Prevent the spread of invasive species by gardening with non-invasive plants, washing your boat, disposing bait away from water, and cleaning shoes after using trails.
- Apply nutrients at rates and times that optimize crop uptake. If property is tile drained, consider installing controlled tile drainage structures at outlets.
- Be septic smart! Pump and inspect septic systems every 3–5 years.
- Reduce your use of household chemicals including, detergents, cleaners and lawn chemicals. Salt responsibly during the winter.
- Dispose of chemicals properly through household hazardous waste days or drop-off locations.
- Don't pour anything down storm drains — they are not treated and flow directly into local watercourses.
- Support development decisions that protect natural features and enhance ecosystems.
- Participate in local water quality and quantity monitoring initiatives, and volunteer in the community!

The State of the Nation is available online  
and in other formats upon request.



SOUTH NATION  
CONSERVATION  
DE LA NATION SUD



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**To:** SNC Joint Standing Committees  
**From:** Ronda Boutz, Secretary-Treasurer  
John Mesman, Managing Director, Property, Conservation Lands, and  
Community Outreach  
**Date:** March 17, 2023  
**Subject:** For Discussion: Draft Watershed Programs and Services Business Case

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**RECOMMENDATION:**

The SNC Joint Standing Committee provide feedback on the Draft Watershed Programs and Services Business Case.

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**DISCUSSION:**

As per the "South Nation Conservation Programs and Services Work Plan for Municipal Engagement" work plan endorsed by the Standing Committees in November 2022; staff have prepared a draft business case for Category 3 programs and services.

Staff are seeking Committee feedback on the Draft Watershed Programs and Services Business Case; the draft document will be circulated via email prior to the meeting. The final draft will be presented to the Board for approval at their April 2023 meeting.

**Please note the business case is still a draft and should not be circulated beyond the Standing Committees at this point.**

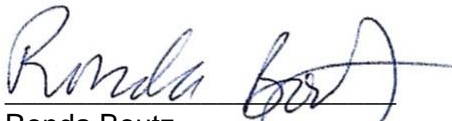
Committee members are encouraged to review the document and provide feedback at the meeting or via email if they are unable to attend.

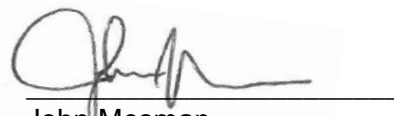
Committee members are also asked to prepare testimonials related to their experience with Category 3 Programs and Services to be included in an Appendix.

**FINANCIAL IMPLICATIONS/ADHERENCE TO SNC POLICY:**

Compliance with Budget: No impact on the 2023 Budget

SNC Policy Adherence: Subsection 21.1.2 (2) of the Conservation Authorities Act enables SNC to provide Category 3 programs and services where member municipalities and SNC have entered into a cost apportionment agreement.

  
Ronda Boutz,  
Secretary-Treasurer.

  
John Mesman,  
Managing Director, Property, Conservation  
Lands, and Community Outreach.