## South Nation Conservation: Watersheds for life.



# SNC Conservation Lands Strategy [Draft]

November 2024











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#### **EXECUTIVE SUMMARY**

**Land Acknowledgement:** South Nation Conservation (SNC) acknowledges that the jurisdiction is within the unceded, traditional territory of the Algonquin people, also known as the Anishinaabe people. SNC also acknowledges that this area is also the traditional and treaty lands of the Haudenosaunee people.

**Purpose and Framework:** SNC's Conservation Lands Strategy guides sustainable land management decisions and conservation activities on SNC owned or controlled lands.

Prepared under Ontario's *Conservation Authorities Act* and Regulation 686/21, the strategy establishes principles, objectives, and processes to fulfill SNC's mandate of managing, conserving and restoring natural resources to enhance regional natural heritage and environmental health.

The approach involves classifying lands based on activities and environmental significance, fostering interconnectivity among natural areas, delivering programs including sustainable harvesting, recreation, education, and periodically reviewing strategy effectiveness.

SNC, as a watershed management authority established in 1947, manages a 4,480 km² jurisdiction in Eastern Ontario, encompassing 16 member municipalities. Governed by a municipally appointed board, SNC collaborates with diverse stakeholders and First Nations to integrate traditional knowledge into conservation efforts.

SNC's vision centers on ensuring water quality, ecosystem health, and sustainable resource use.

**Watershed Characteristics** The watershed comprises various ecosystems, including forests, wetlands, agricultural lands, and waterways, vital for biodiversity and climate adaptation. SNC addresses environmental issues such as forest cover loss and water quality challenges with targeted strategies for sustainable conservation land management.

Conservation Lands and Conservation Areas: SNC owns and manages over 12,000 acres across 187 parcels of land, classified into channelization lands, natural hazard lands, water control infrastructure, and environmental areas like the SNC Forest. These lands protect against the impacts of natural hazards and support natural heritage, passive recreation, and biodiversity. SNC also operates 15 day-use Conservation Areas supported by municipal and community partnership offering recreational and educational amenities.

**Land Securement:** SNC's Land Securement Strategy outlines processes to identify, acquire, and protect ecologically valuable lands. Through partnerships and land donations, SNC aims to expand protected areas to combat habitat loss and bolster climate resilience. Other services include public access to forests, sustainable harvesting, and conservation initiatives aligned with land management and accessibility standards.

**Goals and Objectives:** The strategy emphasizes ecosystem health, community engagement, alignment with conservation goals, and financially responsible and sustainable management. It aims to enhance biodiversity, protect water resources, and create resilient landscapes. Through ongoing monitoring and stakeholder engagement, SNC is committed to achieving long-term sustainability and conservation success across Eastern Ontario.

**Periodic Review:** The strategy will be reviewed every five years to adapt to evolving political, socio-economic, and environmental conditions, ensuring it remains relevant and effective.

#### LAND ACKNOWLEDGEMENT

South Nation Conservation (SNC) works within Turtle Island, now called Canada and recognizes and deeply appreciates the relationship, past and present, that Indigenous Nations have with the lands and waters. SNC acknowledges that Indigenous practices of land stewardship have created the clean waters and healthy forests, meadows, and wetlands that benefit and enrich the lives of all Canadians.

As shared stewards of Ontario's land and water resources – along with First Nations partners - SNC appreciates and respects the history and diversity of the land and its peoples and is grateful to have the opportunity to meet and work in this territory.

The SNC jurisdiction is within the unceded traditional territory of the Algonquin Anishinaabe people and the traditional and treaty lands of the Haudenosaunee people. SNC also acknowledges the other First Nations, Metis, and Inuit peoples in Canada.

In the spirit of the "Dish with One Spoon Treaty", SNC recognizes its own responsibility to protect and steward the environment for future generations. SNC also recognizes and affirms a responsibility to uphold the United Nations Declaration on "the Rights of Indigenous peoples" and the "94 Calls to Action" of the Truth and Reconciliation Commission.

#### 1 INTRODUCTION

#### 1.1 PURPOSE AND REGULATORY FRAMEWORK

South Nation Conservation manages and conserves the land it owns and controls through the delivery of mandatory programs in accordance with Section 21.1 of the *Conservation Authorities Act* and Ontario Regulation 686/21 Mandatory Programs and Services. This Conservation Lands Strategy has been prepared as a necessary component of this program delivery.

The Strategy sets out the guiding principles and objectives of SNC Conservation Lands and will assist SNC with enhancing the delivery of its Programs and Services while identifying program delivering risks. It also identifies opportunities for future programs, services and actions that will help SNC meet its objectives and long-term goals.

Subsection 9(1) paragraph 1 of the Regulation requires all Conservation Authorities to prepare a Conservation Areas Strategy. Per Section 10 of the Regulation, the Strategy will set out the guiding principles and objectives of SNC land including the following:

- Objectives that inform decision-making related to the lands CAs own and control, including decisions related to policies for the acquisition and disposition of lands.
- Identification of the programs and services (Category 1 "mandatory", Category 2 "municipal" and Category 3 "other") that are provided on CA-owned and controlled lands, including the sources of financing for these programs and services.
- An assessment of how CA-owned or controlled land may:
  - Augment natural heritage within the jurisdiction.
  - Integrate with other provincially or municipally owned lands or other publicly accessible lands and trails within the jurisdiction.
- The establishment of land use categories for the purpose of classifying lands in the mandatory "land inventory". These categories are to be based on the types of activities on each parcel of land, or other matters of significance.
- A process for periodic review and updates to the Strategy, including procedures to consult with stakeholders and the public during these periodic reviews.

#### 1.2 ABOUT SOUTH NATION CONSERVATION

SNC has a strong history in watershed management and leadership in environmental planning. SNC is a not-for-profit agency established under the *Conservation Authorities Act of Ontario* in 1947 and is one of Ontario's 36 Conservation Authorities with decades of practical experience protecting the local environment and engaging communities.

**Our Vision:** Improved Water Quality for a Healthy Ecosystem: Our vision encompasses water levels which satisfy the needs of humans and the environment, healthy rivers and natural shorelines, and safe wastewater management practices.

**Our Mission**: To ensure that the management of natural occurrences, natural resources, and human activities results in the protection or improvement of water resources.

**Our Expertise**: Conservation is our core competency. SNC offers natural resource management and planning expertise to help our partners contribute to a healthy region. These contributions include forest, wetland, wildlife, fisheries, urban trees, floodplain, natural hazards, and water management. Community education and engagement initiatives are also an important component of our conservation efforts.

**Working Together**: Located in Eastern Ontario, SNC's jurisdiction encompasses 4,480 km<sup>2</sup> across 16 member municipalities including:

City of Ottawa

United Counties of Prescott-Russell

- City of Clarence-Rockland
- Township of Alfred and Plantagenet
- · Municipality of Casselman
- Russell Township
- Nation Municipality
- Township of Champlain

United Counties of Stormont, Dundas, and Glengarry

- Township of North Stormont
- Township of South Stormont
- Township of North Dundas
- Municipality of South Dundas
- Township of North Glengarry

United Counties of Leeds and Grenville

- Township of Edwardsburgh/Cardinal
- Township of Augusta
- Municipality of North Grenville
- Township of Elizabethtown/Kitley

We carry out our mandate to manage the natural resources in the watershed with the help of many forward-thinking individuals, groups, and agencies.

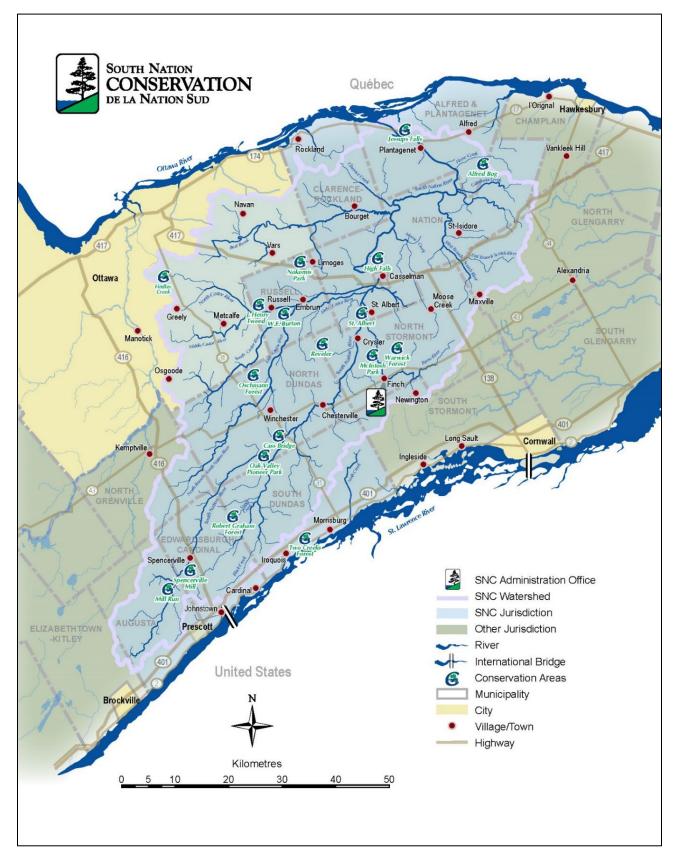


Figure 1. South Nation Conservation jurisdiction in Eastern Ontario.

#### 1.3 GOVERNANCE

SNC's Board of Directors, which oversees SNC's budget, programs, and services, is comprised of 12 appointed representatives, including a Past Chair, from 16 member Municipalities within the jurisdiction.

The Board of Directors membership includes representatives from the City of Ottawa (4), the United Counties of Prescott and Russell (3), the United Counties of Stormont Dundas and Glengarry (3) and the United Counties of Leeds Grenville (2).

SNC's Watershed Advisory Committee was established in 2024 and is comprised of 26 members who capture the scope of stakeholders represented in previous advisory committees to support the development and implementation of SNC's environment programs and services. This Committee reports to SNC's Board of Directors and supports the development of SNC Strategies.



Figure 2. South Nation Conservation's Board of Directors (2024).

#### 2 STRATEGY ADMINISTRATION

#### 2.1 APPLICABLE LEGISLATION

In December 2020, changes to the *Conservation Authorities Act* resulted in the introduction of Mandatory Programs and Services which are to be delivered by all Conservation Authorities. Ontario Regulation 686/21 defines one of the Mandatory Programs as the "conservation and management of lands".

SNC Conservation Lands are also managed in compliance with current legislation and all applicable municipal, provincial, and federal laws, including ratified international conventions and obligatory codes of practice related to the transportation and trade of forestry products.

A list of applicable legislation affecting land management and forest operations is provided below:

- Aggregate Resources Act
- Assessment Act
- Beds of Navigable Waters Act
- Bees Act
- Boundaries Act
- Clean Water Act
- Climate Change Mitigation and Low-Carbon Economy Act
- Conservation Authorities Act
- Conservation Land Act
- Conveyancing and Law of Property Act
- Dangerous Goods Transportation Act
- Drainage Act
- Employment Standards Act
- Endangered Species Act
- Environmental Assessment Act
- Environmental Bill of Rights
- Environmental Protection Act
- Fire Protection and Prevention Act
- Fish and Wildlife Conservation Act
- Fisheries Act
- Forest Fires Prevention Act
- Forestry Act
- Forestry Workers Lien for Wages Act

- Heritage Hunting and Fishing Act
- Income Tax Act
- Invasive Species Act
- Lakes and Rivers Improvement Act
- Lands Title Act
- Line Fences Act
- Migratory Birds Convention Act
- Municipal Act
- Occupational Health & Safety Act
- Occupier's Liability Act
- Off-Road Vehicles Act
- Ontario Heritage Act
- Ontario Trails Act
- Pesticides Act
- Planning Act
- Plant Diseases Act
- Professional Foresters Act
- Road Access Act
- Species at Risk Act
- Trespass to Property Act
- Weed Control Act
- Wild Rice Harvesting Act
- Wilderness Areas Act
- Workplace Safety and Insurance Act

#### 2.2 STRATEGY PREPARATION DETAILS

The purpose of the Conservation Lands Strategy is to set out guiding principles and objectives of the management and conservation of land owned or controlled by SNC.

The Conservation Lands Strategy is supported by a Land Securement Strategy, Forest Policy, Forest Management Plan, Forest Operational Plan, Sign Strategy, and Lands Inventory. These management plans and policies also closely align with the Ontario Land Trust Alliance Standards, the Forest Stewardship Council and Sustainable Forestry Initiative certification criteria.

The Conservation Lands Strategy development was supported by feedback provided by SNC Board, Committees, staff, stakeholders, First Nation partners, volunteers, and visitors.

The publication was prepared by John Mesman, Managing Director, Property, Conservation Lands, and Community Outreach from South Nation Conservation.

#### 2.3 PLANNING CYCLE

Ontario Regulation 686/21 mandates a process for the periodic review and updating of the Conservation Lands Strategy.

This document should be reviewed every five years to allow for consideration of evolving political and socio-economic matters and address emerging environmental issues. It will also give an opportunity for every Board of Directors (4-year appointment term) to review, update and approve the Strategy. Ongoing/annual review by staff will facilitate the five-year review.

Stakeholders and the public should be consulted during these periodic reviews, in a manner that aligns with the degree of revisions and that meets any regulatory requirements.

SNC's land management activities are also subject to the following third-party compliance audits:

- Forest Stewardship Council: annual audit, 5-year re-certification
- Sustainable Forestry Initiative: annual audit, 5-year re-certification
- Managed Forest Tax Incentive Program: 10-year performance audit
- Ecological Gifts Program: periodic audits
- High Conservation Values: annual audits
- Heritage Conservation Easement Agreements: annual audit

Land inventories are also included within the Canadian Protected and Conserved Areas Database with a peer review process through the Ministry of the Environment, Conservation and Parks to ensure SNC lands have mechanisms to protect and conserve natural heritage and biodiversity.

Supporting management plans are also established on the following review periods:

- Forest Management Plan (2018 2037) [20 years]
- Forest Operations Plan (2024-2029) [5 years]
- Land Securement Strategy (2022-2027) [5 years]

#### 2.4 SUMMARY OF CONSULTATION

South Nation Conservation (SNC) engaged with partners and stakeholders during the development of the Conservation Lands Strategy through a variety of outreach activities.

Former Standing Committees (Clean Water, Communications, Fish & Wildlife, and Forestry) provided ongoing feedback to SNC programs and services for over twenty years. Committee memberships varied but was generally comprised of the following representatives: community groups, public citizens, First Nations, agriculture, forestry, industry, media, municipalities, government, and Board members.

The Standing Committees governance structure was redeveloped in 2023, with the four Committees dissolving and a new Watershed Advisory Committee formed in early 2024. The new Committee is comprised of 26 members to capture the scope of stakeholders represented in previous advisory committees to support the development and implementation of SNC's environment programs and services. SNC has been working with the new multi-stakeholder Committee to provide input and feedback into strategy development.

SNC has been working together with the Mohawk and the Algonquin Nations for over 20 years. The Eastern Ontario First Nations Working Group was created so partners could work more closely with each other, on the ground, within shared territories. This working group is non-political and co-chaired by South Nation Conservation, Plenty Canada, and Mohawk Council of Akwesasne's Environment Program. The collaborative uses its diverse compliment of members, bringing their experience and knowledge, to work together to address and guide environmental issues and management plans in Eastern Ontario. SNC continues to work with members and local communities to integrate more Indigenous traditional knowledge into the development and delivery of SNC's programs and services.

SNC engaged with residents and other partner organizations through a dedicated online webpage with access to draft documents and feedback surveys. Consultation opportunities are also promoted in press releases, newsletters, direct engagements and through various social media platforms.

The public engagement for both the draft Watershed-based Resource Management Strategy and the draft Conservation Lands Strategy were held in tandem with a shared feedback survey.

Below is a summary of some of the feedback highlights:

- Tree planting efforts being undermined by clearcutting activities.
- Balancing land use changes with environmental improvement opportunities.
- Ensuring regulatory programs can help protect significant natural features.
- Managing and restoring wetland habitat and ensuring connectivity of natural areas.
- Opportunities to improve water quality and forested/vegetated riparian areas along watercourses.
- Opportunities to support reintroduction of slowly dispersing species at protect Species at Risk.
- Enhanced opportunities and promotion to support private landowner stewardship.
- Ensuring forest management activities are completed sustainably and to improve biodiversity.
- Review of hunting, trapping and land lease opportunities on SNC land.
- Protection of drinking water supply and groundwater aguifer recharge areas.
- Improved access and additional recreational opportunities at Conservation Areas.
- Recognition of First Nation partnerships and two-eyed seeing approach.
- Enhanced promotion of conservation land securement efforts.
- Revenue generation and fundraising needs.



Figure 3. Promotional graphic for public consultations and feedback forms.

#### 3 WATERSHED CHARACTERISTICS

#### 3.1 GENERAL LOCATION, SETTLEMENT, AND JURISDICTION

The South Nation River Watershed jurisdiction is located within the City of Ottawa, and the Counties of Leeds and Grenville, Stormont, Dundas and Glengarry, and Prescott and Russell. This region lies within the unceded and traditional territory of the Algonquin people also known as the Anishinaabe people. This area is also the traditional and treaty lands of the Haudenosaunee people.

More information on Indigenous settlement conditions (8000 BC – 1300 AD+), European settlement (1600s and 1700s) and post-European settlement is included in SNC's Watershed Strategy. It is estimated that the current population within the jurisdiction is approximately 200,000 people.

Since 2005, SNC has undergone several jurisdiction expansions at the request of its member municipalities to include the shorelines and tributaries of the St. Lawrence and Ottawa Rivers. With these additional areas, the jurisdiction now encompasses 4,480 km<sup>2</sup>.



Figure 4. Conservation Authority watershed jurisdictions in Ontario.

#### 3.2 TOPOGRAPHY, GEOLOGY, PHYSIOGRAPHY, AND SOILS

The Watershed's topography is shaped by bedrock valley systems, featuring an undulating to rolling landscape with drumlins (glacial sediment hills) and till ridges. Low areas are often filled with level clay deposits or swamps.

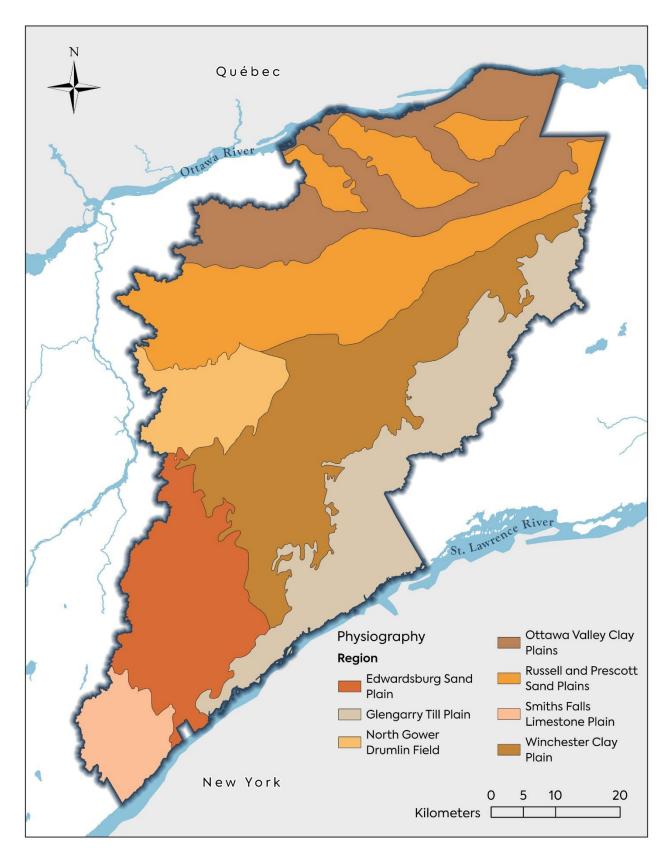
The central region is dominated by the flat Winchester Clay Plain, interspersed with till outcrops and low drumlins. The Edwardsburg Sand Plain, west of the Winchester Clay Plain, has level to gently undulating topography formed on shallow water marine deposits from older glaciofluvial sediments. This area is relatively flat, descending 84 meters from its western edge to the Ottawa River in the east.

The Watershed's underlying bedrock is primarily limestone, with some shale from the Ordovician age (488 million years ago). Exposures are rare except in areas where rivers and streams have eroded surface deposits

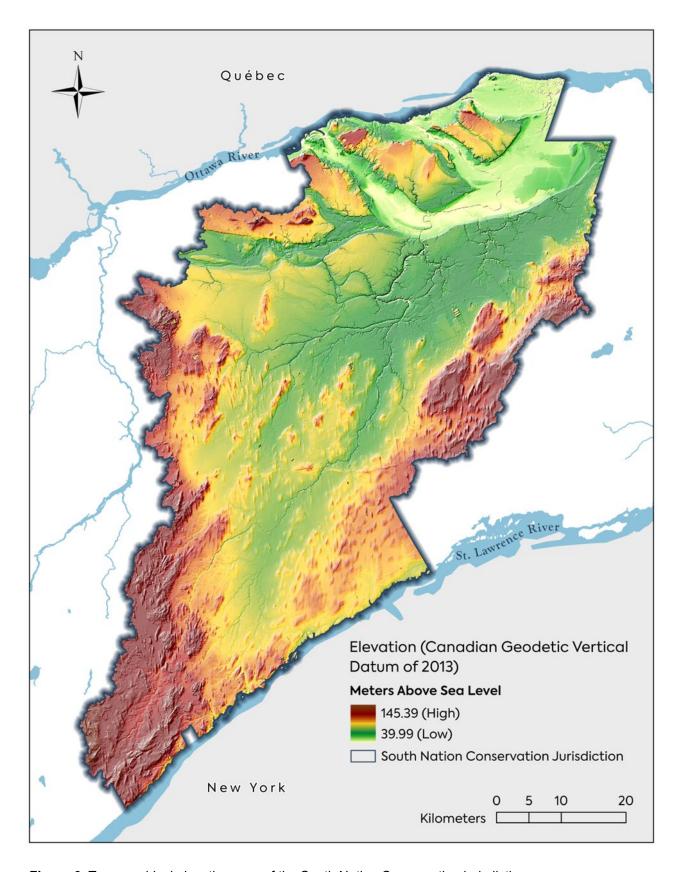
Parent materials consist mainly of sand and clay from the Champlain Sea, a temporary Atlantic Ocean inlet formed during the last ice age 12,000 years ago, covering most of Eastern Ontario. Pockets of glacial tills and postglacial alluviums (floodplain-deposited loose clay, silt, sand, or gravel) are found in Leeds & Grenville, Stormont, Dundas & Glengarry, and Ottawa but are less common in Prescott and Russell.

These unique plains (Figure 5) should be considered when assessing the condition of forest communities and wetlands. The following terms from Cathy Keddy's *Forest History of Eastern Ontario: Information Report NO.1 (1993)* define the physiographic units within the SNC jurisdiction:

- Smith's Falls Limestone Plain: The largest shallow soil tract over limestone in southern Ontario, with poor drainage and numerous wetlands. Old marine beaches provide limited areas of deeper soil for cultivation or construction.
- **Edwardsburg Sand Plain**: Covered by sand over bedrock and boulder clay, this level plain has acidic, nutrient-deficient soils, with some hummocks or ridges.
- Russell & Prescott Sand Plains: Deltaic deposits create sand plains, varying from coarse
  in the north to fine in the south. These well-drained soils extend up to 9 m deep, with water
  emerging from river bluffs into clay valleys.
- Ottawa Valley Clay Plain: Interrupted by rock or sand ridges, this plain has a higher proportion of acidic soil than the Winchester Clay Plain.
- Winchester Clay Plain: Dominated by clay plains but interspersed with till outcrops, low drumlins, and old beaches. The soils are poorly drained.
- **North Gower Drumlin Field**: Drumlins emerge from the clay plain. Drumlins are well-drained, but the surrounding clay soils are poorly drained.
- **Glengarry Till Plain**: An undulating to rolling surface with drumlins and clay flats. The loamy till is generally less than 8 m deep, though it can reach 30 m, with noticeable stoniness.



**Figure 5.** Physiographic regions within the South Nation Conservation jurisdiction.



**Figure 6.** Topographical elevation map of the South Nation Conservation jurisdiction.

Soil provides the water, nutrients and medium to support vegetation growth and is derived from parent material of differing composition, either in place or through transport by water, ice, or wind, creating distinct soil types. Physical properties (texture and structure), chemical properties (pH) and moisture regimes of soil influence forest composition, tree growth and operating conditions.

Of the 97 different soil types found within the watershed, SNC land contains 25 distinct soil types. Approximately 72% of SNC land is predominantly found within sand plains and most of the soil types include fine to coarse sands and sandy loams with biologically significant areas largely contained in undifferentiated organic material, not considered soils, that are home to wetlands. The range of parent material and soils provide for rich biologically diverse conservation lands.

A majority of SNC land (~34%) contain the Achigan Sand soil type which is imperfectly drained containing fine to very fine sands and strongly acidic. The second most predominant soil type (~19%) is undifferentiated eroded mineral material or undifferentiated organic material or water. The third most predominant soil type is the Cheney Sandy Loam which is poorly drained, fine to coarse gravelly sandy loams and strongly acidic.

More information on conservation land characteristics, physiographic units, soil, and climate can be found in SNC's Forest Management Plan which includes detailed summaries for all SNC lands.

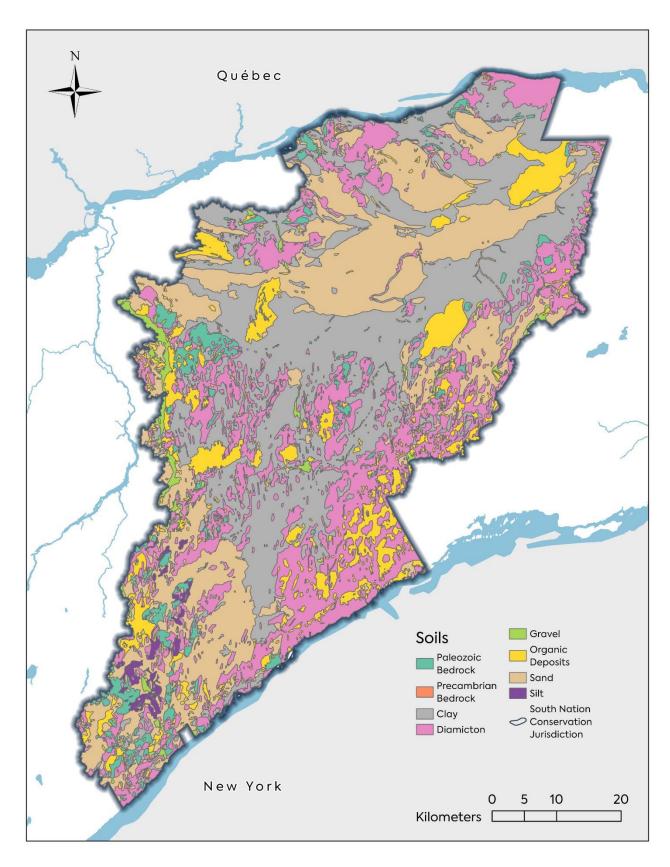


Figure 7. Soil type map within the South Nation Conservation jurisdiction.

#### 3.3 LAND COVER AND USE

Regional landscape changes occurred through the 19<sup>th</sup> century with forestry operations driving the economy from land clearing incentives for European settlement and with white pine, which accounted for 50% of the region's old-growth forests, being the preferred timber for ship masts.

By the start of the 20<sup>th</sup> century little old growth forests remained and municipalities were left with 10 - 30% forest cover, which contributed to severe flooding, droughts, erosion, and poor land management practices. Old growth ecosystems are characterized by the presence of old trees and their associated plants, animals, and ecological processes with little or no evidence of human disturbance. A very small population of the region's forests are considered old growth.

The region's main economic driver transitioned to agriculture, which is well served in the fertile and productive clay plains found throughout the region. Tile draining and other agricultural improvements have further increased productivity and allows many producers earlier access to land generally susceptible to flooding in one of the flattest landscapes in Ontario (Figure 8).

The main rural land use is agriculture. Commercial and industrial uses related to a rural economy are also located in rural areas. Resource-based economic activity, such as licensed pits and quarries, also exist. Urban settlement areas are a mixture of land uses - residential, commercial, industrial and schools, churches, parks and recreational facilities.

Natural areas on the landscape includes a mix of both forest and wetland habitat.

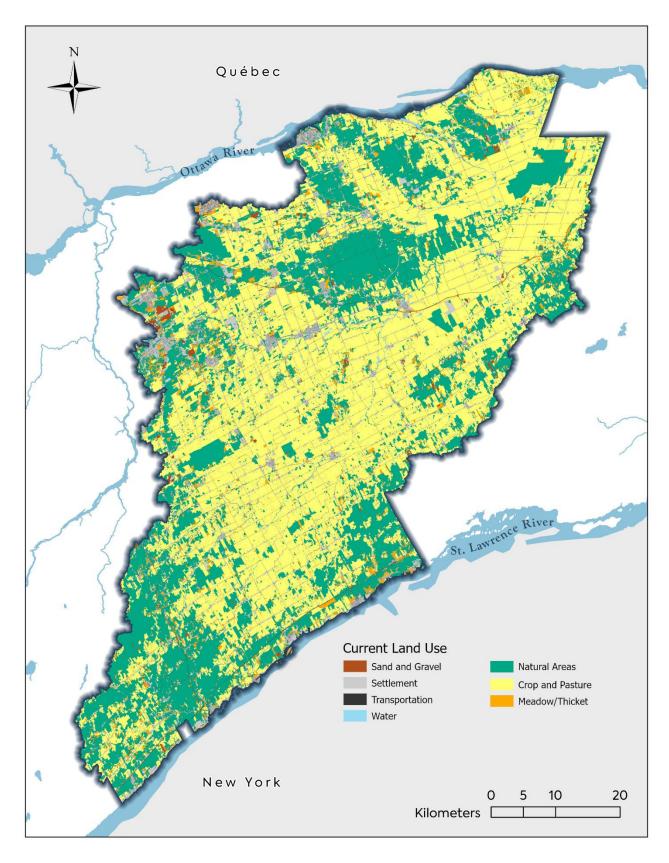


Figure 8. Land Cover Map within South Nation Conservation jurisdiction.

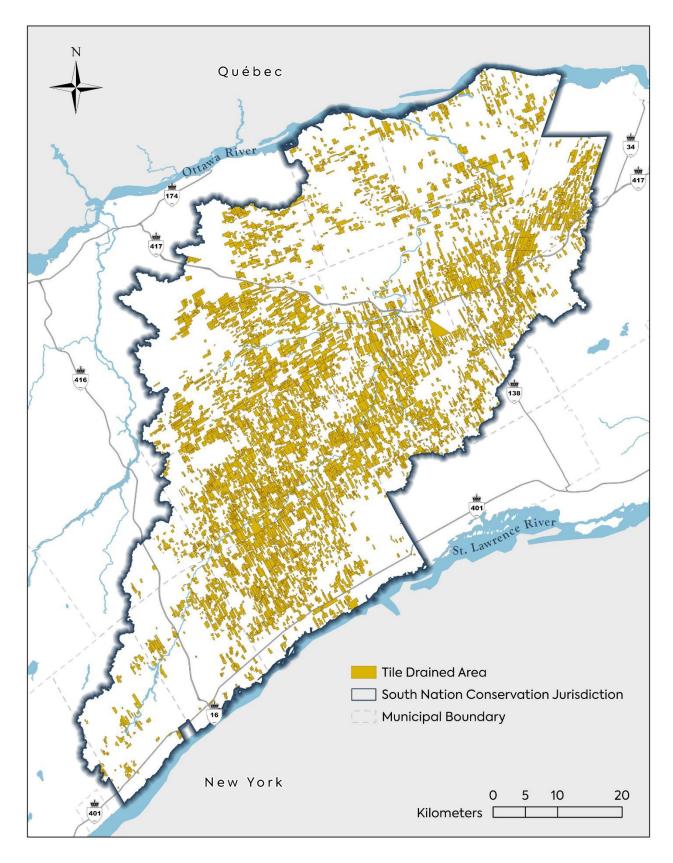


Figure 9. Tile Drained Area within South Nation Conservation jurisdiction.

#### 3.4 SUB-WATERSHEDS AND RIVER SYSTEMS

The South Nation River Watershed flows in a north-easterly direction from the headwaters near Brockville before discharging into the Ottawa River near Plantagenet. The Watershed is approximately 3,900 km² and drops 80 metres over a 180 km length of the main South Nation River channel.

The jurisdiction also includes 7 Sub-Watersheds, including main tributaries to the South Nation, Ottawa, and St. Lawrence Rivers (Table 1, Figure 10).

Table 1. Summary of Subwatersheds and Major Rivers within the South Nation Watershed.

Sub-Watershed	Major Rivers and Tributaries
Upper South Nation	<ul><li>South Nation River</li><li>North Branch South Nation River</li><li>South Branch South Nation River</li></ul>
Middle South Nation	<ul> <li>South Nation River</li> <li>Hess Creek</li> <li>Payne River</li> <li>Butternut Creek</li> <li>Little Castor Creek</li> </ul>
Castor	<ul> <li>Castor River</li> <li>South Castor River</li> <li>Middle Castor River</li> <li>East Castor River</li> <li>North Castor River (including Findlay Creek and Shields Creek)</li> </ul>
Bear Brook	<ul> <li>Bear Brook</li> <li>South Bear Brook</li> <li>North Indian Creek</li> <li>South Indian Creek</li> <li>McKinnon's Creek</li> <li>Shaw's Creek</li> </ul>
Lower South Nation	<ul> <li>South Nation River</li> <li>Moose Creek</li> <li>East Branch Scotch River</li> <li>West Branch Scotch River</li> <li>Cobb's Lake Creek</li> <li>Dickenson Creek</li> <li>Horse Creek</li> <li>Caledonia Creek</li> <li>Paxton Creek</li> </ul>
Ottawa River	Atocas Creek     Clarence Creek
St. Lawrence River	<ul><li>Nash Creek (formerly Hoasic Creek)</li><li>Doran Creek</li><li>Flagg Creek</li></ul>

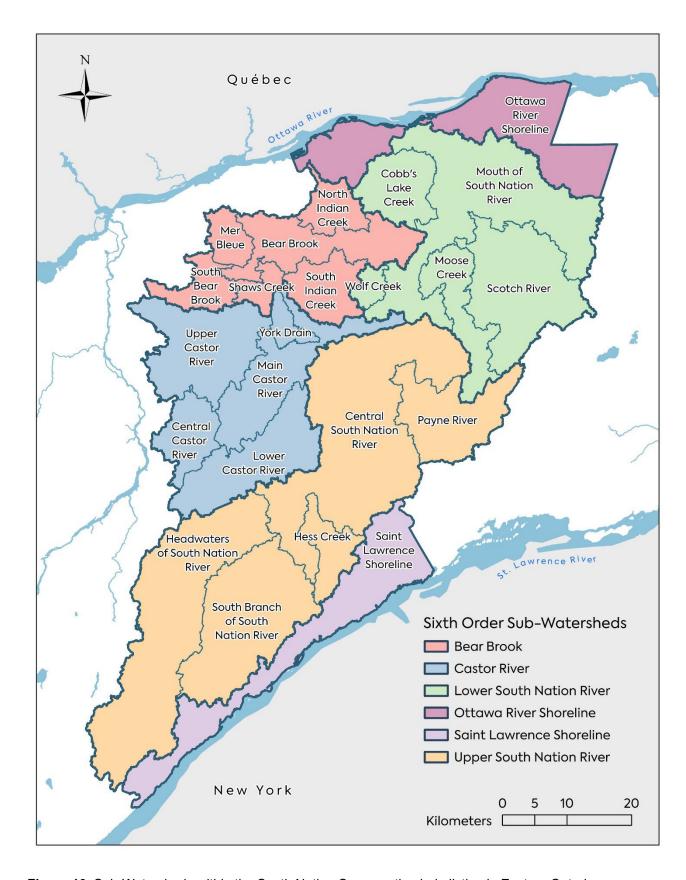


Figure 10. Sub-Watersheds within the South Nation Conservation jurisdiction in Eastern Ontario.

#### 3.5 NATURAL HERITAGE

A natural heritage system is a network of interconnected natural features and areas such as forests, lakes, rivers, agricultural lands, and wetlands.

The Province of Ontario requires municipalities to identify Natural Heritage Systems and preserve the diversity and connectivity of these features. This requirement is translated into policies that inform development, stewardship actions, climate change resiliency, environmental studies, and conservation efforts.

The City of Ottawa and the United Counties of Leeds and Grenville studied and identified their natural heritage systems and linkages in 2012-2013 and the United Counties of Stormont, Dundas, and Glengarry and the United Counties of Prescott-Russell contracted SNC to complete their natural heritage systems study in 2019-2021 (Figure 13).

Natural heritage systems conserve biological diversity and maintain the health of the landscape and communities; are the essential backbone of sustainability (economic, environmental, social, and cultural); and support the full life cycle of living creatures in their environment.

Natural heritage systems can include natural areas, areas with the potential to be restored, areas that support hydrologic functions, and working landscapes that enable ecological functions.

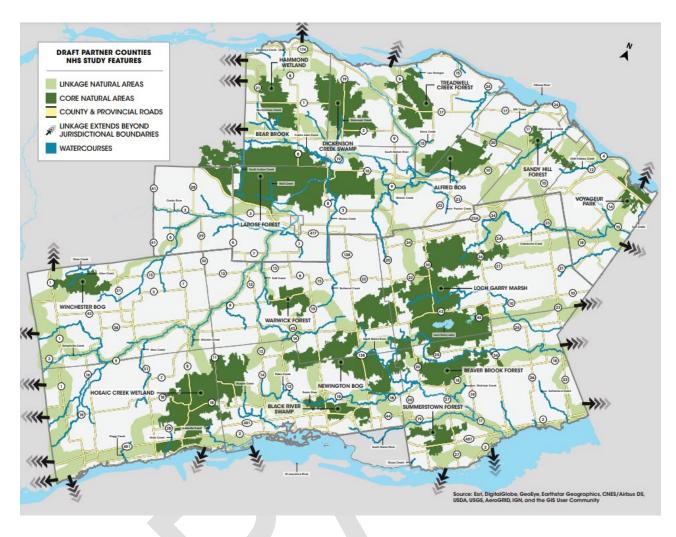
The goals of the Natural Heritage System are to:

- Identify key natural heritage features and supporting areas.
- Recognize local and regional linkages and wildlife corridors between natural heritage features.
- Improve existing environmental policies to better protect environmentally significant areas and the linkages that connect them.
- Provide a scientific basis for land and water stewardship activities.
- Protect and enhance regional biodiversity, indigenous species, and ecosystems.
- Help to mitigate the effects of climate change such as flooding and drought.
- Conserve natural legacy for future generations.

The Natural Heritage System contributes to the health and wellbeing of residents by making important contributions to surface and ground water quality, forest cover, flood and erosion control, wildlife habitat, air quality, pollination, property values, and quality of life, while reducing risks associated with climate change.

SNC conservation lands play a crucial role in augmenting natural heritage within the region and present valuable opportunities for integration with other public lands. SNC's Land Securement Strategy ensures integration with other public lands is a priority and many of the existing core natural heritage areas on the landscape are a result of SNC conservation land ownership.

Collaboration with public agencies, funding and management partners, and First Nations are key to continued protection of significant natural heritage features.



**Figure 10.** Natural Heritage Systems Map within the United Counties of Prescott Russell and the United Counties of Stormont, Dundas, and Glengarry.

#### **FOREST COVER**

Forest cover loss is an ongoing environmental concern; the South Nation River watershed was found to have less than 28% forest cover, 8% interior forests and 22% riparian cover in 2014, with some municipalities containing less than 13% forest cover.

SNC has partnered with the Ontario Woodlot Association to update forest cover for the jurisdiction utilizing LiDAR (Light Detecting and Ranging) data acquired in 2021/2022 and updated forest cover data is expected in late 2025.

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. These minimum forest cover thresholds are considered a high-risk approach necessary to support half of the potential species richness and marginally healthy aquatic systems in a watershed. Guidelines acknowledge that 40% forest cover is a medium-risk approach and that 50% is a low-risk approach that is likely to support most potential species and healthy aquatic systems (Environment Canada, 2013).

Forest and wetland loss have continued to increase, with over 13,000 acres of forest lost between 2008 and 2014, and an approximate 1,000,000 trees being cut per year in the region (SNC's "Forest Cover and Trends Analysis", 2016). This loss not only diminishes habitat and natural heritage connectivity, it also removes natural infrastructure that is essential for mitigating flooding.

In response to studies on forest cover trends, SNC established a Forest Conservation Initiative and recommendations for SNC and its member municipalities following two years of input from local stakeholders and government representatives, through the Agricultural Forest Cover Working Group and the Forest Conservation Working Group ('Protecting and Increasing Forest Cover in the South Nation Conservation Jurisdiction', 2018).

SNC's Forest Conservation Initiative includes policy recommendations, land securement needs, program enhancements and outreach initiatives. Forests are important natural resources, vital to communities and the environment. They provide important environmental, economic, social and cultural benefits - and they're worth conserving, restoring and managing.



Figure 11. South Nation Conservation's Forest Conservation Initiative graphic.

#### WETLAND COVER

Wetlands provide valuable ecological and hydrological functions at site-specific and watershed scales. Many of southern Ontario's flora and fauna inhabit wetlands during part or all of their life cycle, including many species at risk. Wetlands are known to be biologically diverse habitats, tending to support a wider range of flora and fauna than other habitat types, particularly on a species per area basis (Environment Canada, 2013).

Wetlands also play a crucial role in mitigating the effects of flooding and drought. They capture and hold water during intense rainfall events, slowly releasing it into receiving watercourses, and allow surface water to infiltrate and recharge groundwater resources.

Environment and Climate Change Canada recommends that at a minimum, the greater of 10% of the watershed or 40% of the historic watershed wetland coverage, be protected and restored (Environment Canada, 2013). It is also recommended to ensure no net loss of wetland area, and to focus on maintaining and restoring wetland functions at a watershed and subwatershed scale based on historic reference conditions.

Pre-settlement (c. 1800) wetland cover estimates for the SNC jurisdiction are at 40% to 50% while current wetland cover is at 17% (based on 2014 data). Maintenance of wetland cover across the watershed provides many ecological and hydrological benefits, and tangible benefits for communities and wildlife can be achieved through the protection, enhancement, restoration, and creation of wetlands.

SNC's relatively flat terrain supports a variety of wetlands. There are four main wetland types across the SNC jurisdiction: swamps, marshes, fens, and bogs. Each has unique characteristics that define which category it falls into and what ecological role it plays. A majority of wetlands within the jurisdiction are considered swamps.

**Swamp:** a wooded wetland dominated by trees or tall shrub cover, often characterized by lowland seasonal flooding. The provincially significant Hosaic Creek Wetland is an example.

**Marsh:** typically permanent, treeless water bodies that feature grasses, sedges, cattails, and rushes. The provincially significant Rockland Marsh is an example.

**Bog:** an acidic, low mineral, peat-dominated wetland that often supports growth of sedges, shrubs, and sphagnum moss. Bogs support a low diversity of plants. The provincially significant Alfred Bog is an example.

**Fen:** similar to a bog in that this wetland features peat, but instead has an alkaline chemistry and is fed by mineral-rich groundwater/surface water which supports grasses, sedges, rushes, and wildflowers. Fens may support a high diversity of plants. The provincially significant Long Swamp Fen is an example.

#### HABITAT AND SPECIES

The South Nation River Watershed is a diverse and ecologically significant area that encompasses forests, wetlands, rivers, agricultural land, and small communities, making it an important habitat for a variety of species. The watershed supports ecosystems that are vital for both aquatic and terrestrial life. However, human activity, agricultural development, and climate change have impacted many species within this watershed, placing them at risk.

Key animal migration routes and habitats for keystone species like moose play a critical role in establishing natural heritage areas and advancing conservation efforts. Larger tracts of interior forest habitat and naturalized corridors are essential for sustaining wildlife populations while supporting biodiversity and genetic diversity (Figure 12).

The Watershed provides an important aquatic environment for species like mussels, fish, and various amphibians. The river itself meanders through wetlands, which are critical breeding grounds for birds and amphibians, as well as riparian zones that support rich biodiversity.

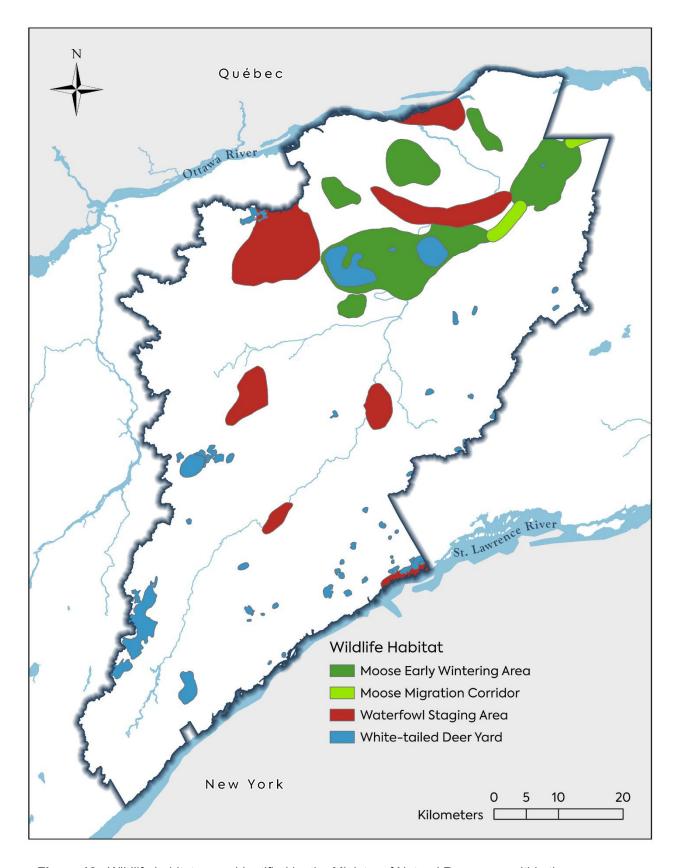
Wetlands also act as natural filters for water quality and help to regulate the water table, playing a key role in flood prevention. Forested areas are home to mammals like deer, foxes, and raccoons, along with a diverse variety of bird species.

SNC lands contains 51 unique ecological communities that include groups of different organisms that form closely integrated communities that contribute to regional ecosystem integrity.

Information on habitat and species found on SNC lands are included in Baseline Documentation Reports prepared for each parcel of land. Ecological communities and a list of documented species is also included in SNC's Forest Management Plan.

First Nations partner projects have also enabled plant inventories for culturally significant species, medicinal plants, and black ash trees.

More information on species diversity, species at risk, and actions to improve conservation and restoration activities are included in SNC's Watershed Strategy.



**Figure 12.** Wildlife habitat areas identified by the Ministry of Natural Resources within the South Nation Conservation jurisdiction.

#### 3.6 NATURAL HAZARDS

Natural hazards are naturally occurring physical events or processes, such as floods, droughts, erosion, earthquakes, or landslides, that have the potential to cause harm to people, property, or the environment. Information on surface and ground water resources, climate conditions, as well as a fulsome summary of natural hazards are contained within SNC's Watershed Strategy.

#### **FLOODING**

Flooding is normally associated with spring runoff but can occur at any time. Flat landscapes create low-lying areas generally susceptible to flooding, including the following 8 flood prone areas:

- Brinston Oak Valley Area (North & South Dundas)
- Plantagenet Fournier Area (Nation & Alfred-Plantagenet)
- Bear Brook Area (Cumberland & Clarence-Rockland)
- South Castor Area near Vernon (Osgoode)
- Middle Castor Area upstream of Metcalfe (Osgoode)
- Lords Mills (Augusta & Edwardsburgh Cardinal)
- St. Lawrence River
- Ottawa River

#### **EROSION AND UNSTABLE SLOPES**

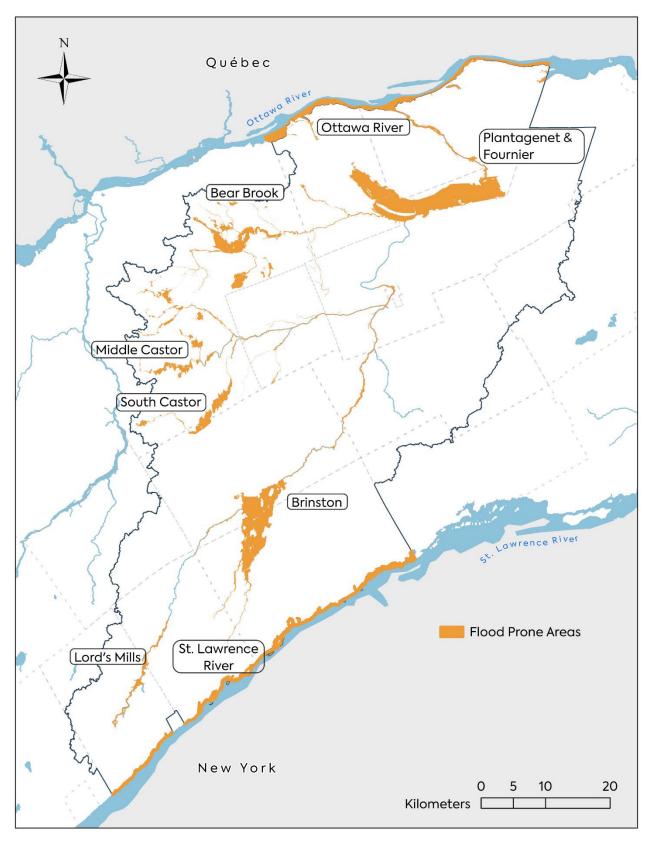
The interplay of geological and hydrological conditions significantly contributes to erosion and unstable slopes, presenting challenges for both infrastructure and environmental sustainability. The varied topography, characterized by valleys and sedimentary deposits, creates conditions where rainfall and runoff can lead to substantial soil erosion.

The presence of sensitive soils, particularly glaciomarine clays, like Leda clay, exacerbates the instability of slopes. These clays, when saturated, can lose cohesion and lead to retrogressive landslides, particularly on slopes exceeding eight meters in height.

Although erosion is a natural process, it can be dramatically accelerated by land use changes, such as shoreline vegetation removal. Without healthy vegetated buffers, shorelines have reduced resistance against erosion, potentially resulting in a loss of habitat, soil stability and land.

#### **KARST**

Karst formations are landscapes shaped by the dissolution of limestone and dolomite bedrock by water, resulting in features like sinkholes, trenches, and underground caverns. Named after the Karst region in Yugoslavia, their size and complexity depend on factors such as water acidity, rock solubility, fracture density, water table depth, and impermeable layers. These formations create unstable ground, posing significant challenges for development due to the risk of sudden subsidence.



**Figure 14.** Map of flood prone areas within the South Nation Conservation jurisdiction.

#### 4 PROPERTY INFORMATION

#### 4.1 PROPERTY OWNER INFORMATION

Property owner registration is established with the following information:

Name: South Nation River Conservation Authority

Address: 38 Victoria Street, PO Box 29, Finch, ON, K0C 1K0

Telephone: (613) 984-2948

Email: info@nation.on.ca

#### 4.2 PROPERTY CLASSIFICATION

Land ownership is one method SNC uses to attain its goal to ensure that the management of natural occurrences, natural resources, and human activities results in the protection or improvement of water resources. SNC owns 187 parcels of conservation land including natural areas and developed infrastructure.

Environmental Areas (SNC Forest) include forest and wetlands.

**Forests** are defined as an area of land occupied by a community of trees and other woody vegetation, growing closely together and managed for timber production and other forest products, or maintained under woody vegetation for such indirect benefits such as site protection, wildlife habitat or recreation. **Productive forest** is an area of forest, where the primary management objective is the protection of non-timber, cultural or natural heritage values. **Protection forest** is an area of forest, where the primary management objective is protection of site or high conservation values.

**Wetlands** are an area of land inundated by water, either permanently or seasonally, where aquatic plants, adapted to the unique hydric soils, prevail.

Developed **Infrastructure** includes the land area associated with the SNC administrative office, landscaped parks and boat launches, dams, dykes, hazard lands, and other lands associated with works of the Conservation Authority.

Natural areas include productive forests (7,345 acres), protected forest (1,540 acres) and wetlands (1,629 acres). Developed infrastructure accounts for 1,119 acres, including flood control and hazard lands (836 acres); parks (192 acres); habitat restoration (57 acres) and various other lands (34 acres). Table 2 provides a breakdown of SNC property area by property classification.

SNC's Administrative Office building would be the only property considered an **Administrative Area**. Located in Finch, Ontario, SNC's Office supplements the delivery of services to residents, visitors, stakeholders, and partners, while also serving as a community resource meeting space and for emergency services. Most of the Authority's approximately 50 staff are based at this location.

**Table 3. South Nation Conservation Lands by Property Classification.** 

Dunantu Olasaifiashian	Area				
Property Classification	Acres	Hectares			
Administration					
Administrative Office	2.69	1.1			
Infrastructure					
Channelization Lands	601.10	243.3			
Natural Hazard Lands	201.91	81.7			
Water Control Infrastructure	8.78	3.6			
Environmental Areas (SNC Forest)					
Forest Management	7,796.11	3,155.0			
Natural Heritage	1,926.51	779.6			
Protection Forest	1,584.12	641.1			
Conservation Areas					
Parks and River Access	192.71	78.0			
Total	12,313.93	4,983.4			

More information on SNC properties and assets is included in SNC's Land Inventories.

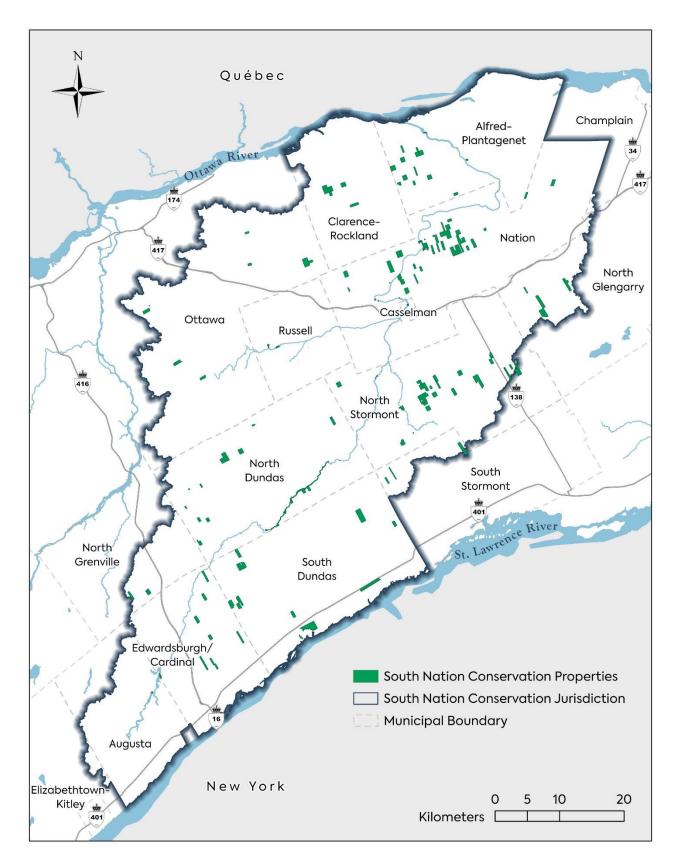


Figure 15. Map of South Nation Conservation properties.

### 4.3 PROPERTY TAX PROGRAMS AND EASEMENTS

South Nation Conservation pays municipal tax on all its land as a property owner and participates in two property tax incentive programs, the Managed Forest Tax Incentive Program (MFTIP) and the Conservation Land Tax Incentive Program (CLTIP). Individual properties are registered to one or both programs based on the eligibility requirements of the respective tax incentive program. Although a property may be registered under both tax incentive programs, the specific area associated with each program is unique. Several properties are not eligible for any tax incentive programs and are assessed at the full residential tax rate.

A full inventory of properties, assessment types, easements, tax incentive programs and size are included in SNC's Forest Management Plan.

### MANAGED FOREST TAX INCENTIVE PROGRAM

The Managed Forest Tax Incentive Program (MFTIP) is a voluntary tax incentive program applicable to forested land 4 hectares (9.88 acres) or greater, and subject to an approved forest management plan. Under the MFTIP, participating landowners have the forested portion of their property reassessed and classified as Managed Forest and taxed at 25 percent of the municipal tax rate set for residential properties.

### CONSERVATION LAND TAX INCENTIVE PROGRAM

The Conservation Land Tax Incentive Program (CLTIP) encourages the protection of significant natural heritage features through property tax relief. Requirements for CLTIP are set forth under the *Assessment Act* and Ontario Regulation 282/98 and administered by the Ontario Ministry of Natural Resources.

All SNC properties included in the CLTIP are Provincially Significant Wetlands (PSW) and/or Areas of Natural & Scientific Interest – Life Sciences (ANSI).

### **CONSERVATION EASEMENTS**

In 2009, SNC began acquiring forested lands under the Natural Spaces Land Acquisition and Stewardship Program administered by the Ontario Heritage Trust. Many of these lands include key natural heritage features, PSWs and ANSIs and are protected under registered Heritage Conservation Easement Agreements to the interest of the Ontario Heritage Trust. These agreements restrict operational activities that may harm the natural heritage features identified in Baseline Documentation Reports of the property. Other Conservation Easements with funding partner organizations, like Ducks Unlimited Canada, are also established.

### UTILITY EASEMENTS

Several properties are subject to utility easement agreements registered on title, with regular maintenance activities conducted by the easement holder.

# 5 CONSERVATION LANDS

### 5.1 CHANNELIZATION LANDS

In 1979, South Nation Conservation commenced a major undertaking to alleviate flooding throughout the area known as the Brinston Flood Plain. The project consisted of dredging and realignment of the river between Chesterville and Oak Valley. Land acquired for the project was expropriated over several years. The channelization project began in 1979 and continued until 1986.

Table 3. South Nation Conservation land acquisition to support river channelization between Chesterville and Oak Valley.

Year	Area (acres)
1979	22.68
1980	156.40
1981	264.09
1982	48.06
1983	48.12
1984	5.26
1986	5.93

Restoration of the shoreline occurred along the full length of the channelization and subsequent monitoring reported on the success of restoration efforts. There were several property acquisitions that were acquired for the channelization projects which have been adapted to other uses such as conservation areas or restored to specific habitat features. These include:

- Cass Bridge Conservation Area
- Oak Valley Pioneer Park
- Camp Sheldrick
- Reforestation
- Endangered Species Habitat

The channelization land acquisitions eliminated development of the lands for other purposes. The lack of development has left enclaves of regionally significant species, such as Hackberry (*Celtis occidentalis*) and Swamp White Oak (*Quercus bicolor*).

SNC also implemented channelization efforts in other regions including Augusta; South Branch; Chesterville (multiple phases); and Plantagenet Springs. Plantagenet Springs was the only other project that involved land acquisition (7.45 acres acquired in 1980).

### 5.2 NATURAL HAZARD LANDS

Natural hazard lands include floodplain areas, areas of riverine erosion, unstable slope, unstable soils, and unstable bedrock. Sometimes these natural hazards can be mitigated to allow development or use of the property, however, in other cases such as in the Casselman to Lemieux Potential Retrogressive Landslide area, mitigation is not possible.

Where natural hazards are significant and could pose a serious threat, land securement by public bodies is an effective way to protect people and property. Natural hazard land securement helps build adaptive capacity, reduce disaster risk and increase resiliency, especially when considering the impacts of a changing climate.

Landslides are quite common in slopes composed of materials deposited when the area was submerged thousands of years ago by the Champlain Sea. The landslides can be small, comprising less than 50 cubic metres of earth, or large involving several hundred thousand cubic metres of material.

A twenty-kilometre section of the South Nation River within The Nation Municipality between the Village of Casselman and the former Hamlet of Lemieux is subject to large scale retrogressive landslides. This area, identified as the Casselman to Lemieux Potential Retrogressive Landslide Area, has been the subject of decades of geotechnical studies.

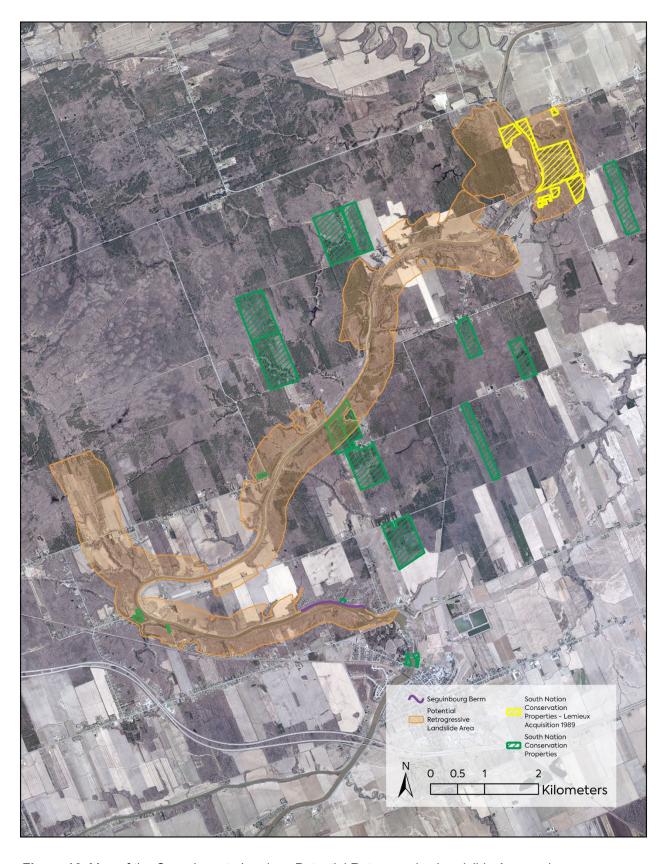
Geotechnical and historical data conclude that a major retrogressive landslide could occur in the potential retrogressive landslide area at any time, endangering lives and resulting in the loss of buildings, infrastructure, and land.

Since 1850, five large retrogressive landslides have been documented between Casselman and Lemieux and the scars of an additional seven or eight older retrogressive landslides are evidence that the process has been ongoing for a considerable time. The two most recent major retrogressive landslides occurred in 1971 and 1993.

On May 16, 1971, 4.5 km upstream of the hamlet of Lemieux, a large clay flow destroyed 28 hectares of farmland. The landslide left a scar 750 m wide with a headward retrogression of 450 m. About 6 million cubic metres of sediment flowed into the South Nation River, damming the river for months.

The most recent landslide on June 20, 1993, occurred two years after the hamlet of Lemieux was abandoned and residents were relocated because of the efforts of South Nation Conservation. The failure involved 2.5 to 3.5 million cubic metres of sand, silt, and clay flowing into the South Nation Valley, inundating 3.3 km of the valley bottom and damming the South Nation River for four days. The landslide created a scar 320 m wide, 680 m in length, and 10 to 20 m deep.

Most of SNC's natural hazard lands are found within the Casselman to Lemieux Potential Retrogressive Landslide Area. More information is available at <a href="https://www.nation.on.ca/C2LPRLA">www.nation.on.ca/C2LPRLA</a>.



**Figure 16.** Map of the Casselman to Lemieux Potential Retrogressive Landslide Area and South Nation Conservation properties.

### 5.3 WATER AND EROSION CONTROL INFRASTRUCTURE

SNC owns, operates, and maintains seven water control structures and has completed four flood control channelization projects across the watershed. This infrastructure supports flood and erosion control, low-flow augmentation, water supply, and recreation. Each operable water control structure follows an Operations Manual aligned with SNC policies, the Canadian Dam Association, and Dam Safety Guidelines to ensure proper operation, maintenance, and monitoring.

### **Chesterville Dam**

**Built: 1978** 

**Location:** Chesterville, Ontario, on the South Nation River.

Drainage Area: 1,050 km<sup>2</sup>

**Structure:** Six-bay reinforced concrete structure with automatic gate control.

**Uses:** Previously supplied water to the Nestlé Canada Inc. plant; currently supports flood control.

**Safety Features:** Operational plans establish seasonal water levels, public awareness materials

and require public notification of water level changes.

# **Crysler Dam**

Built: Circa 1900; modified in 1975.

**Location:** Crysler, Ontario, on the South Nation River.

Drainage Area: 1,300 km<sup>2</sup>

**Structure:** Features an overflow section, retaining walls, and a stop log channel. Original intake

channel (now plugged) was used for milling.

Uses: Improves water quality through low-flow augmentation and provides recreational opportunities.

**Modifications:** Strengthened stone and timber construction, added a downstream concrete apron, and constructed flow channels for low-flow augmentation.

### **Crysler Dyke**

**Built:** 1980s in response to a Flood Damage Reduction Study.

**Location:** Northeast of the Crysler Dam, along the South Nation River.

**Structure:** Earth berm (420 m long, 3–5 m high) with internal drainage systems, including storm

drains with backflow valves, concrete catch basins, culvert pipes, and manholes.

**Purpose:** Mitigates flood hazards for the Village of Crysler by protecting the southern bank of the

South Nation River.

### Casselman Weir

Built: 1958; raised in 1996 by 0.6 m.

**Location:** Casselman, Ontario, on the South Nation River.

**Structure:** Overflow section with a one-bay stop log channel.

**Uses:** Supports recreation, low-flow augmentation, municipal water supply, and hydroelectric generation.

Hydroelectric Plant: A 375 kW facility, constructed in 1987, diverts water upstream of the weir.

### **Russell Weir**

**Built:** 1967 (replacing an unreinforced dam built in 1916 that failed in 1959).

Location: Russell, Ontario, on the Castor River.

Structure: Reinforced concrete weir with a stilling basin (21 m long, 5 m wide, 1.2 m deep) and a

non-operational steel sluice gate.

**Purpose:** Regulates discharge from the Castor River to manage water flow.

### **Plantagenet Weir**

Built: 1980 to replace a natural limestone ledge.

**Location:** Plantagenet, Ontario, on the South Nation River.

Structure: 117.5 m long, 0.6 m thick, and 1.2 m high with galvanized wear plates bolted to

angle-iron plates anchored into the concrete crests.

**Drainage Area:** 3,810 km<sup>2</sup> with a 10 km impoundment length.

**Purpose:** Prevents flooding and manages water flow by mitigating spring freshet debris jams.

### Seguinbourg Berm

Built: Between 1987 and 1990 to stabilize riverbanks.

Location: Approximately 2 km north of Casselman, Ontario, along the northeast bank of the

South Nation River.

**Structure:** Rock berm spanning 1,800 m, constructed to prevent toe erosion along the riverbank.

**Purpose:** Protects more than 50 residential properties in a potential retrogressive landslide area.

### Spencerville Weir

**Built:** Early 19th century.

Location: Spencerville, Ontario, adjacent to the historic Spencerville Mill on the South Nation River.

**Structure:** Designed to create a millpond for the Spencerville Mill, with historical community significance.

**Uses:** Supports recreational activities, such as upstream canoeing, and preserves the milling heritage of the area.

**Current Status:** Owned and maintained by the Spencerville Mill and Museum Foundation as a heritage feature contributing to recreation and local history.



Figure 17. Chesterville Dam photo in Chesterville, Ontario.



Figure 18. Crysler Dam photo in Crysler, Ontario.

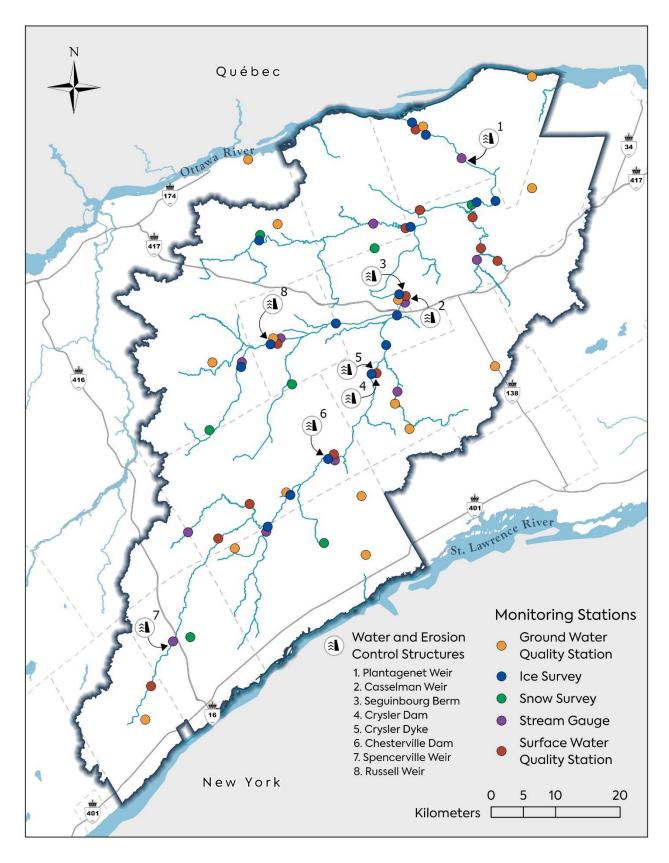


Figure 19. Map of South Nation Conservation Water and Erosion Control Structures and Monitoring Stations.

# 5.4 ENVIRONMENTAL AREAS (SNC FOREST)

The SNC Forest was established in 1961, in partnership with the Province of Ontario, under the *Agreement Forest Act*. Managed in partnership with the Ministry of Natural Resources for 40 years and then through SNC's own 20-year management plan, produced in 1998.

To further ensure good forest sustainability management practices, SNC obtained certification by the Forest Stewardship Council (FSC) under the Eastern Ontario Model Forest's group certificate (RA-COC-000232) in 2005. Annual audits are performed to retain this certification.

Detailed information on conservation lands is contained within SNC's Forest Management Plan. This publication includes information on the following:

- Plan Administration
- Property Information
- SNC Forest Policy
- Physical Features
- Forest Management History
- Current Forest Conditions
- Natural and Cultural Heritage Values
- Cultural and Recreation Opportunities
- Report of Activities

Many of the originally secured properties were acquired as abandoned farmland and the primary focus of early management of the SNC Forest was tree planting and tending of those plantations. Due to the stage of development of the Forest, minimal management was performed elsewhere until 1997, when SNC began to take a more active role in managing its forest resources.

In 1999, a change in provincial government priorities resulted in the end of the Agreement Forest Program and the Ministry of Natural Resources returned the full responsibility of forest management to SNC in 2000. In return for releasing the Province from its responsibilities, the accumulated debt incurred to date in land acquisition and forest management was forgiven provided the properties continue to be managed in accordance with Provincial interests in accordance with the *Forestry Act*.

SNC's conservation land management was tailored to SNC's mandate, and these lands now form part of a network of publicly owned lands providing outdoor recreational opportunities. Sustainable timber supplies for the local economy, protection and conservation of environmentally sensitive lands and extensive wildlife habitat and animal migration corridors are among the benefits. SNC has recognized that a landscape level, ecosystem-based approach was the best method to balance the social, environmental and economic values of these conservation lands.

Public access is available for partnership agreements to harvest local products including maple syrup and honey, scientific research, recreational opportunities, and for sustainable hunting and trapping through annual permits.

### 5.5 SNC FOREST MANAGEMENT POLICY

South Nation Conservation is committed to the concept of sustainable development and an ecosystem-based approach in the planning and managing of its forest resources.

### LEGISLATIVE COMPLIANCE

The management of the Forests on SNC Land shall comply with all SNC policies and all applicable local municipal, provincial and federal laws, including ratified international conventions and obligatory codes of practice relating to the transportation and trade of forest products within and from South Nation Forests.

### This shall include:

- To maintain a list of legislative compliance requirements for forest management activities.
- To maintain a list of legal agreements and contractual obligations on the SNC Forest.

### SUSTAINABILITY

The South Nation Forests shall be managed to provide a range of products and services that will maintain or enhance the long-term economic viability and the range of environmental and social benefits.

### This shall include:

- To provide for the conservation and restoration of natural forest ecosystems in a landscape context.
- To identify, protect and preserve rare, threatened and endangered species of flora and fauna.

## FOREST PRACTICES

SNC will employ silvicultural practices that are ecologically appropriate for the vegetation, species, sites and management objectives that maintain and/or enhance long term forest diversity, health and productivity of the South Nation Forest.

### This shall include:

- To employ silvicultural practices that will maintain or increase fiber capital of the forest.
- To employ silvicultural practices that will maintain or increase forest annual growth.
- To maintain or improve forest health through protection against fire, insects and disease.

### IMPACT OF FOREST PRACTICES

SNC forest operations will be evaluated for impacts on community relations, human health, and the natural environment, in addition to compliance with current laws and regulations.

### This shall include:

- SNC will ensure that protection of public health and safety is an integral part of forest operations.
- SNC will ensure compliance with SNC Health & Safety Policies.
- SNC will provide training for SNC employees and volunteers.
- SNC will modify forestry operations to minimize environmental and aesthetic impacts.

- SNC will ensure the well-being of the forest ecosystem shall be a priority in the planning and implementation of all forest operations.
- SNC will maintain an emergency response plan.
- SNC will encourage scientific forest research.

### FOREST POLICY REVIEW

SNC shall review the forest policy and incorporate new objectives and knowledge.

### **AUDITS**

South Nation Conservation shall conduct audits of forest management to ensure consistency with the forest policy and shall make the results of those audits available to the public.

### This shall include:

- SNC will conduct internal operational audits of all forestry operations.
- SNC will participate in annual surveillance audits of the forest certification body as is required.
- SNC will participate in five-year compliance audits of the forest certification body as is required.

### **EFFECTIVENESS**

South Nation Conservation shall administer and manage the forest to provide effective attainment of all the objectives utilizing professional standards.

### FOREST PROTECTION

South Nation Conservation shall protect the South Nation Forest from unauthorized or illegal resource use, settlement or other illegal activities.

### FOREST CERTIFICATION

The management of the South Nation Forest shall adhere to the most current Forest Stewardship Council Principles and Criteria and related policies and standards.

### NATIVE PLANT AND ANIMAL COMMUNITIES

The management of the South Nation Forest shall employ methods to maintain or restore natural conditions through the promotion of native plant and animal communities.

### HIGH CONSERVATION VALUES

South Nation Conservation shall identify High Conservation Values and shall develop strategies and/or actions, through engagement with affected stakeholders, to maintain and/or enhance those values using a precautionary approach.

### USE OF CHEMICALS

Management of the South Nation Forest shall employ integrated pest management and silviculture systems that avoid, or aim at eliminating, the use of fertilizers and chemical pesticides.

# 6 CONSERVATION AREAS

### 6.1 OVERVIEW

SNC maintains seasonal and year-round Conservation Areas (193 acres) designated for passive recreational activities including walking, hiking, on-leash dog walking, winter recreation, birdwatching, geocaching, boating/canoeing/paddling, fishing, river access, and picnicking.

These lands include signage, trails, parking lots, boat ramps, docks, picnic areas and gazebos, and may have permanent or temporary washroom facilities. These lands typically are not staffed, but rather visited by staff for maintenance and monitoring.

15 Conservation Areas are actively maintained where public access is encouraged, along with several partner sites, managed through agreement:

- Cass Bridge Conservation Area, Winchester, ON
- Findlay Creek Boardwalk, Ottawa, ON
- High Falls Conservation Area, Casselman, ON
- Jessup's Falls Conservation Area, Plantagenet, ON
- J. Henry Tweed Conservation Area, Russell, ON
- McIntosh Park Conservation Area, Berwick, ON
- Oak Valley Pioneer Park Conservation Area, Winchester Springs, ON
- Oschmann Forest Conservation Area, Winchester, ON
- Reveler Conservation Area, Crysler, ON
- Robert Graham Conservation Area, Brinston, ON
- St. Albert Conservation Area, St. Albert, ON
- Two Creeks Forest Conservation Area, Morrisburg, ON
- Warwick Forest Conservation Area, Berwick, ON
- W.E. Burton Conservation Area, Russell, ON
- Mill Run Conservation Area, Augusta, ON

Other recreational partner sites supported by SNC include:

- Chesterville Waterfront and Community Docks
- Spencerville Mill and Riverside Park
- Russell Recreational Trail
- Embrun Boat Launch
- Nokomis Park in Limoges
- Alfred Bog Walk

Recreational river routes are promoted for canoe and kayak access through main stretches of the South Nation River including:

- Mill Run Route (Start in Spencerville, end in South Mountain, 22 km, 6 hours)
- Great Blue Heron Route (Start in South Mountain, end in Chesterville, 28 km, 7.5 hours)
- King Fisher Route (Start in Chesterville, end in Casselman, 38 km, 9.5 hours)
- Swallows Path (Start in Casselman, end in Fournier, 40 km, 10 hours)
- Mallard Way (Start in Fournier, end in Plantagenet, 22 km, 6 hours)

Memorandums of Understanding are established for each Conservation Area with member municipalities, partner agencies, or local volunteer groups to support the management costs, maintenance, monitoring, and upgrades.

Municipal properties managed by SNC require that 100% of management costs are recovered through municipal funding.

Certain Conservation Areas, including the McIntosh Park and the Oak Valley Pioneer Park, are also supported through volunteer committees that support management activities, improvements, and fundraising efforts.

The Warwick Forest Conservation Area also includes properties owned by the Province of Ontario and the United Counties of Stormont, Dundas, and Glengarry and are managed as one public asset.

Memorial tree planting, bench installation, and private event opportunities are available on all SNC Conservation Areas, through donations established in SNC's Fee Schedule.

Currently, all SNC Conservation Areas contain parking lots and are available for free.

# 6.2 PERMITTED AND RESTRICTED USES

The following chart includes a summary of permitted activities in Conservation Areas.

**Table 4. Permitted Land Uses at SNC Conservation Areas in Eastern Ontario.** 

Seasonal Conservation Areas	66		مثل الله			Ä	<b>7</b>	SJ)
	Birding	Boat Launching	Canoe/ Kayak	Fishing	Geocaching	Hiking	Picnicking	Winter Recreation
Cass Bridge	X	Х	Х	X	X		Х	
Findlay Creek	Х				X	Х		
High Falls and Doran Park	Х	X	Х	X	X		X	
Jessup's Falls	Х	Х	X	Х	X	Х	Х	
McIntosh Park	Х				X		Х	
Mill Run	Х		Х		X		X	
Oak Valley Pioneer Park	х		Х	х	Х	Х	Х	
St. Albert	Х	Х	X	х	Х		Х	

Year-Round Conservation Areas	66		شش			Ä	<b>7</b>	SJ)
	Birding	Boat Launching	Canoe/ Kayak	Fishing	Geocaching	Hiking	Picnicking	Winter Recreation
J. Henry Tweed	Х				Х	Х		Х
Oschmann Forest	Х				Х	х	Х	Х
Reveler	X				х	х	X	X
Robert Graham Forest	Х				х	X	Х	х
Two Creeks Forest	Х				Х	Х		Х
Warwick Forest*	Х				х	Х		х
W.E. Burton	Х				x	Х	Х	х

<sup>\*</sup>Please note that horseback riding is permitted in the Warwick Forest Conservation Area.

The following activities are not permitted on SNC Conservation Areas:

- Hunting and Trapping
- Harvesting and Plant Picking
- Motorized Vehicle Access
- Bicycles and Mountain Bikes
- Open Fires
- Camping













### 6.3 MONITORING

Beginning in 2013, SNC began collecting data from car and trail counters. To date, SNC has installed counters in all its day-use Conservation Areas. Car counters record each vehicle as it enters the CA entrance (counters assume that there are two visitors per vehicle, on average). Trail counters record individual visitors as they pass by a designated location along the trail. This data provides insight on visitation and trail use at monitored locations.

Objectives of the Conservation Area Monitoring Program:

- 1. Gauge public use of SNC Conservation Areas;
- 2. Guide improvements to CA infrastructure based on usage; and
- 3. Communicate and build support for SNC's Conservation Areas.

### RECREATIONAL TRAIL CONSERVATION AREAS

SNC maintains over 25 km of trails at 8 Conservation Areas throughout its jurisdiction. Usage varies amongst the recreational trails, due to location, trail features, user groups and interests, and seasonal trail conditions.

SNC performs weekly inspections on its recreational trails to ensure safe and enjoyable access for its users. Routine maintenance occurs annually, with planned replacements occurring when assets approach end of life cycle. Data collected allows SNC to assess the amount of traffic trail systems experience throughout different seasons and years.

Table 5. Recreation Trail Usage Recorded at SNC Conservation Areas (2014-2023).

Year	J. Henry Tweed	W. E. Burton	Two Creeks	Robert Graham	Findlay Creek	Warwick	Reveler	Oschmann Forest
2023	34,926	40,755	N/A*	7,972	19,052*	17,909	4,373	7,416
2022	28,050	36,284	3,071	6,294	3,209*	14,481	7,006	5,392*
2021	39,281	43,489	9,819	6,331	7,591	9,574	3,824	10,445
2020	45,490	40,149	8,460	1,114	6,993*	4,946*	2,854	3,520*
2019	19,866	17,658	3,084	694	8,090	1,448	424	3,070
2018	21,503	16,090	3,711	410	12,037	960	380	302
2017	20,592	16,461	2,631	497	7,375	1,303	300	
2016	22,461	14,664	2,273	1,417	5,763	1,213	608	
2015	9,389		3,897		18,288			
2014	9,713		3,780		17,734			

<sup>\*</sup>Data not available for the full year either due to damaged counters, closures, or redeployment.

# RIVER ACCESS AND PICNIC CONSERVATION AREAS

SNC maintains picnic and river access at 7 Conservation Areas and 6 municipal boat launches throughout its jurisdiction. These Conservation Areas operate seasonally between May and November annually. Of these 7 sites, 4 are river access locations complete with boat launches, docks, and trailer parking.

Usage varies due to location, amenities available, user groups, and interests. SNC performs weekly inspections of its picnic and river access sites during the operating season to ensure safe and enjoyable access for its users.

Table 6. Recreational River and Picnic Usage Recorded at SNC Conservation Areas (2014-2023).

Year	Jessup's Falls	High Falls and Doran Park	St. Albert	Cass Bridge	Oak Valley Pioneer Park	McIntosh Park
2023	18,022	22,150	5,102	8,501	2,916	1,780
2022	30,197	16,917	6,292	11,730	2,244	2,346
2021	34,722	31,606	5,521	18,641	681	741
2020	25,564	22,448	3,367	11,887	284	368
2019	14,018	14,801	3,023	8,209	525	1,662
2018	11,387	9,291	3,235	6,366	405	1,816
2017	13,060	12,292	2,687	8,229	341	1,743
2016	16,824	17,906	5,222	10,314	1,014	4,194
2015	8,153	13,825				
2014	7,884	13,406				

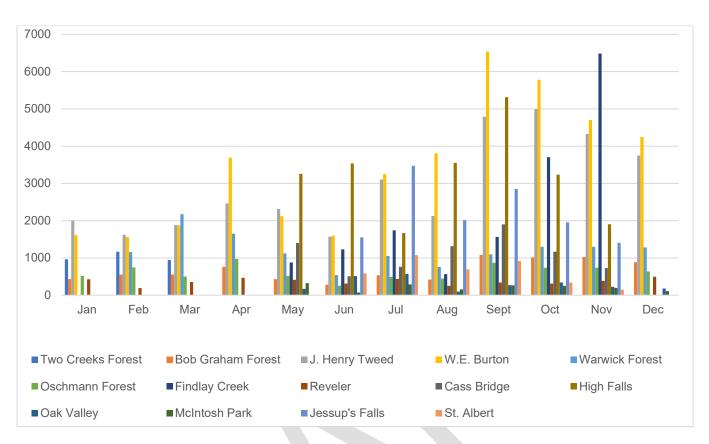


Figure 20. South Nation Conservation Annual Conservation Area Visitor Statistics by Month (2023).

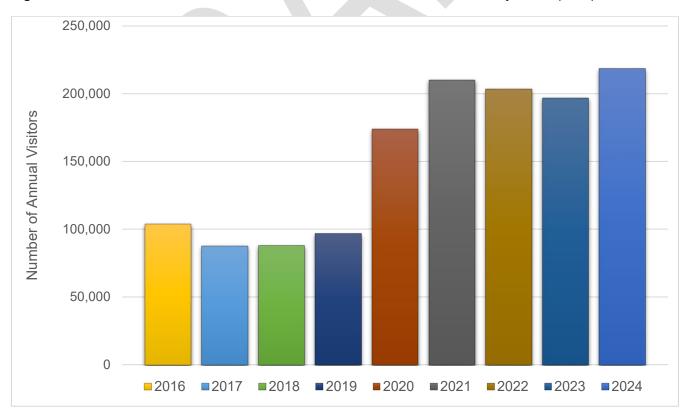


Figure 21. South Nation Conservation Area Annual Conservation Area Visitor Statistics (2016-2023).



Figure 22. Findlay Creek Boardwalk, City of Ottawa, Ontario.



Figure 23. Children fishing at Jessup's Fall Conservation Area, Plantagenet, Ontario.

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# 7 LAND SECUREMENT STRATEGY

### 7.1 LAND SECUREMENT FRAMEWORK

Land securement by public bodies is an effective way to preserve and enhance natural heritage for public benefit. South Nation Conservation conserves approximately 13,000 acres of land throughout its jurisdiction and has a history of land securement going back more than 60 years.

The forests and wetlands preserved in SNC land holdings contribute to the sustainability of the jurisdiction and are a natural legacy for the future and provide a range of environmental, economic, and social benefits, including:

- Flood attenuation and control.
- Clean air and water.
- Soil conservation and erosion control.
- Wildlife and Species at Risk habitat conservation.
- Preservation of biodiversity and ecological function.
- · Climate change mitigation.
- Passive and active recreational opportunities.
- Spiritual and cultural opportunities.
- Local economic diversification.
- Protect people and property.

More information is available in SNC's Land Securement Strategy which guides the decisions of the Board of Directors and staff when making land securement decisions.

Specifically, the Strategy:

- Provides a framework for recommending land for securement to the Board.
- Serves as a point of reference for external funding partners.
- Provides potential sellers and donors with an understanding of SNC's land securement process and options.
- Ensures the wise use of public funds.

Forest cover and wetlands in SNC's jurisdiction, a factor closely linked to ecological health and biodiversity, has fallen below minimum recommended levels. Population growth and rising agricultural land prices increase pressure to convert natural heritage land to housing and farmland. At the same time the demand for environmental, social, and economic functions provided by natural heritage lands is increasing.

The Strategy seeks to satisfy five core principles when identifying land suitable for securement:

- Environmental benefit.
- Social benefit.
- · Economic benefit.
- Protection of people and property from natural hazards.
- Geographic locations that ensure a distribution of holdings throughout the jurisdiction.

SNC works with willing property owners, partner municipalities, the province, the federal government, and funding partners to acquire the best possible land for conservation. A case-by-case assessment will be undertaken, based on the framework outlined in the Land Securement Strategy, to determine the quality and significance of all properties considered for securement.

SNC will prioritize the protection of lands by holding title (fee simple) either through donation or purchase and may consider easements and covenants where they are desirable. Participants in land transactions will be willing buyers and willing sellers.

The greatest potential growth in land securement may occur in land donation. This method of land transfer should be viewed as both an opportunity and service to property owners interested in leaving a natural legacy. Such gifts often qualify as charitable donations under the Federal *Income Tax Act* as SNC is qualified to receive land donations through Canada's Ecological Gifts Program.

The Land Securement Strategy provides guidance for staff by outlining the land securement process and provides evaluation criteria, based on the five core principles, to be used by staff in evaluating potential land for securement. Some recommendations for further actions to advance land securement within SNC jurisdiction are identified within the strategy, in a separate publication.

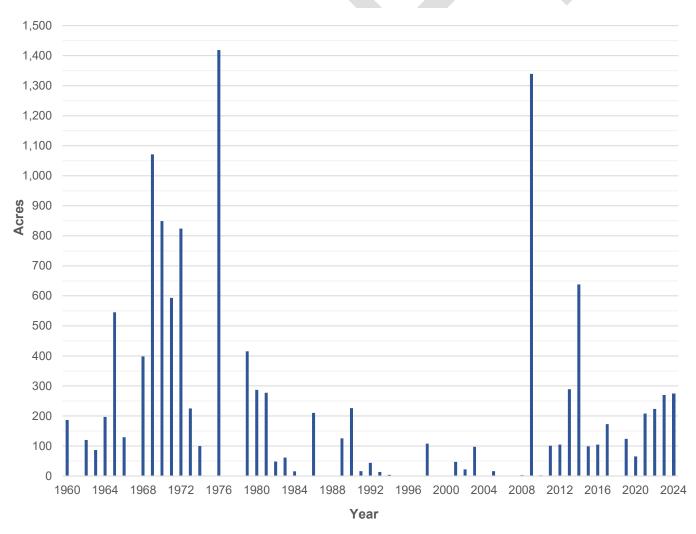


Figure 24. South Nation Conservation Land Securement History in Acres by Year (1960 – 2024).

SNC maintains land holdings across its jurisdiction with properties in 14 partner municipalities.

Table 7. South Nation Conservation land holdings by municipality.

Manadala	Area				
Municipality	Acres	Hectares			
Alfred-Plantagenet	912.87	369.4			
Augusta	8.50	3.4			
Casselman	6.04	2.4			
Clarence-Rockland	467.09	189.0			
Edwardsburgh-Cardinal	662.25	268.0			
Nation	3,113.71	1,260.1			
North Dundas	1,263.87	511.5			
North Glengarry	615.56	249.1			
North Grenville	99.22	40.1			
North Stormont	2,198.48	889.7			
Ottawa	543.89	220.1			
Russell	76.02	30.8			
South Dundas	2,053.67	831.1			
South Stormont	292.76	118.5			
Total	12,313.93	4,983.2			

Several clusters of SNC land holdings exist in the following locations:

- North Dundas around Winchester Swamp/Bog
- North Dundas, south of Mountain (acquired during channelization of the South Nation River)
- North Stormont, east of Berwick (Warwick Forest)
- The Nation, north of Casselman (Larose Forest)
- The Nation, south of Pendleton Swamp (parcels acquired around Lemieux Landslide Area)
- Alfred and Plantagenet around Dickenson Creek Swamp

The principal support for the SNC Land Securement program is through a former special levy supported by SNC's member municipalities, now captured through separate Category 3 Agreements for use of SNC's General Municipal Levy.

Only 15% of SNC land acquisitions are independent of any additional external funding. Subject to availability, SNC relies on Federal/Provincial government programs, corporate trust funds, or private donations, either partial or full, to extend its ability to secure conservation land.

The following figure summarizes acquisitions by funding source over a 10-year period.

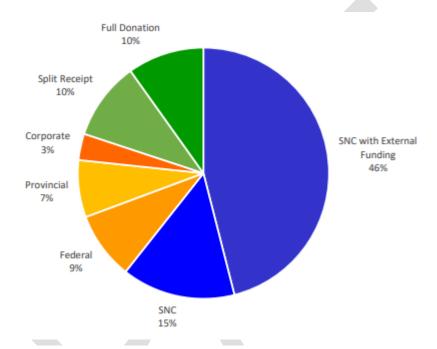


Figure 25. South Nation Conservation land securement by funding source (2011 and 2021).

SNC is one of many public agencies or government departments which own land within the SNC jurisdiction. Though other public agencies or departments own land for a variety of purposes, the location of publicly owned lands in a natural state can provide additional information in determining the benefits of a potential property for securement.

Location of a potential parcel for securement adjacent to a property owned by another public agency or government department may offer similar ecological benefits to lands for potential securement adjacent to SNC lands.

There are several clusters of publicly owned land in a natural state across the SNC jurisdiction. These clusters are often reflective of significant natural heritage features.

SNC will work with willing property owners, municipalities, and partners to acquire the best possible land for conservation. A case-by-case assessment will be undertaken by SNC to determine the quality and significance of all properties considered for securement. Based on the individual property assessment, SNC will determine whether securement will be pursued. The following figure outlines the land securement process, more information is included in the complete Land Securement Strategy.



Figure 26. Outline of South Nation Conservation Land Securement Process.

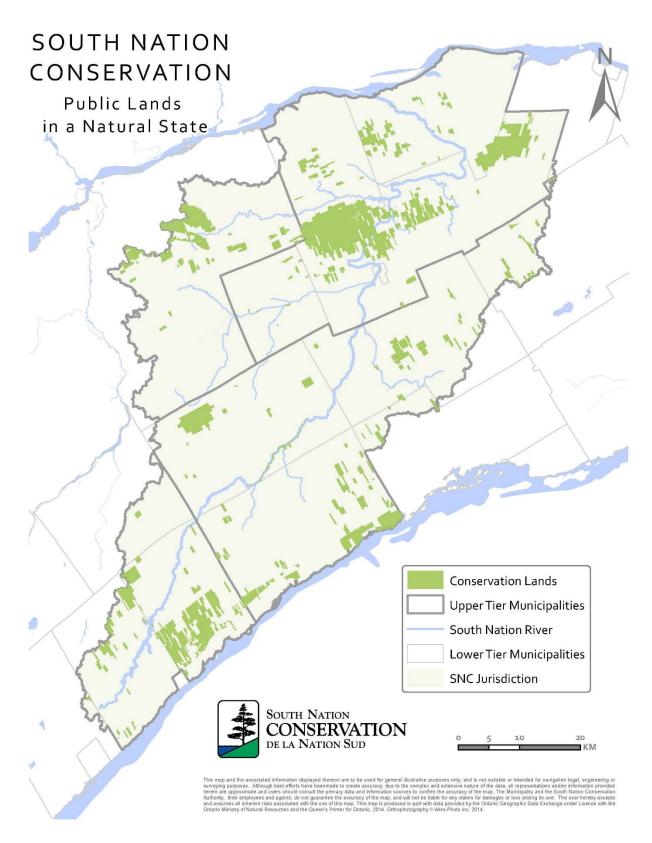


Figure 27. Map of public lands in a natural state within South Nation Conservation's jurisdiction.

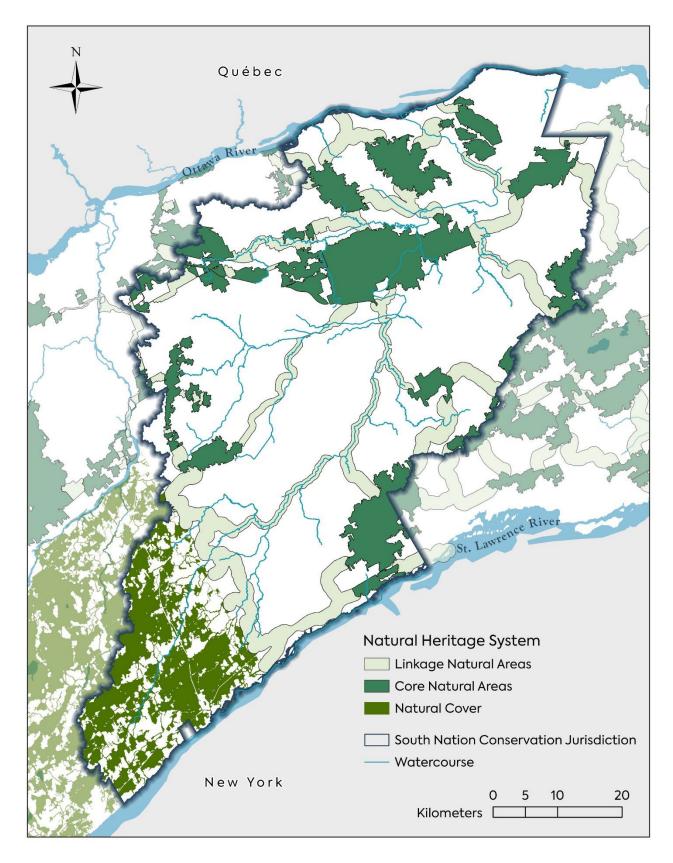


Figure 28. Map of the natural heritage system within the South Nation Conservation jurisdiction.

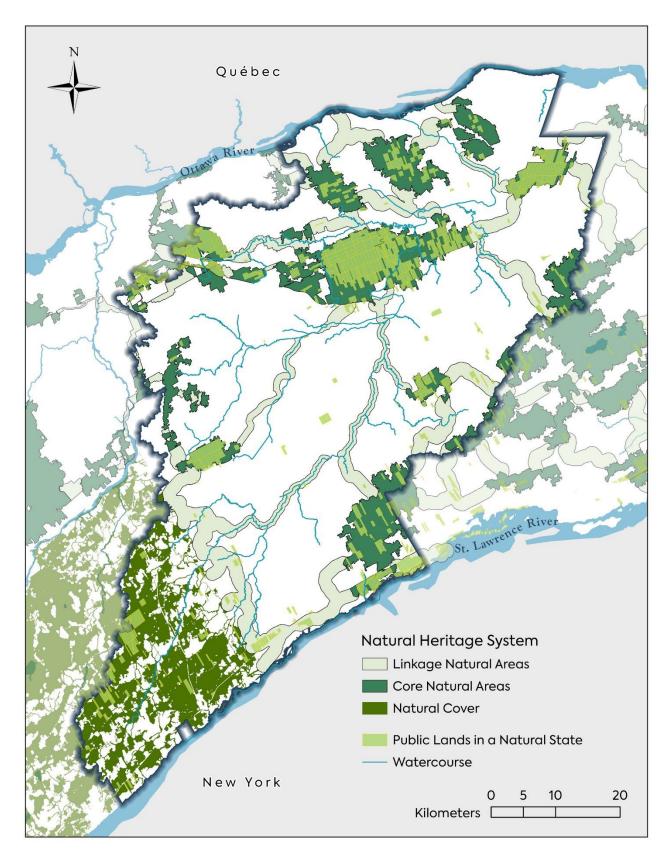


Figure 29. Public Lands in a Natural State within the Natural Heritage System

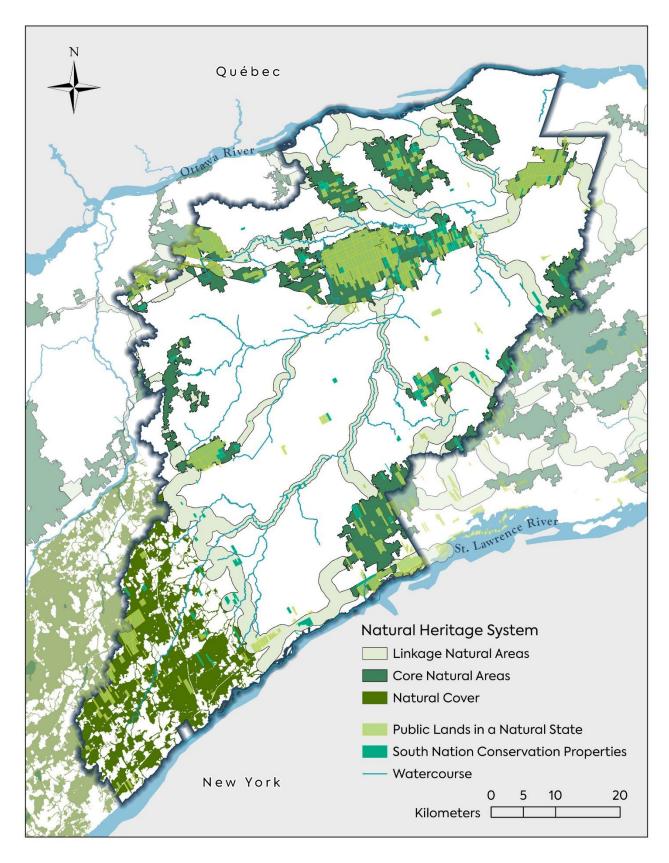


Figure 30. SNC lands and Public Lands in a Natural State within the Natural Heritage System

### 7.2 LAND DISPOSITION POLICY

SNC does not normally endorse selling off conservation lands and does not have plans to do so.

Where revenues are realized through the sale of any surplus lands or land required by municipal or other government agency for infrastructure or other public projects, these monies will be applied to properties identified as suitable for securement.

In the case of trade lands, these transactions are used to secure lands of greater environmental, economic, or social benefit.

Any land disposition must follow SNC Policy, applicable legislative requirements and legal commitments, including requirements under the *Conservation Authorities Act*. The SNC Administrative By-laws, Part II Section 8(o) requires approval by the Board of Directors for any proposed acquisition or disposition of land, subject to legislative requirements.

The Conservation Authorities Act, Part V Chapter 21 empowers the Board of Directors to acquire by purchase, lease or otherwise any land that it may require, and, to sell, lease or otherwise dispose of land so acquired. The Conservation Authorities Act further stipulates the following:

"If the Minister has made a grant to an authority under section 39 in respect of land, the authority shall not sell, lease or otherwise dispose of the land under clause (1) without the approval of the Minister except if, the disposition is for provincial or municipal infrastructure and utility purposes; the province, the provincial agency, board or commission affected by the disposition or the municipal government, agency, board or commission affected by the disposition has approved it; and the authority informs the Minister of the disposition. 2010, c. 16, Sched. 10, s. 1 (1). (Note: Approval is now delegated to MNRF District Manager)

**Terms and conditions** The Minister may impose terms and conditions on an approval given under subsection (2), including a condition that the authority pay a specified share of the proceeds of the disposition to the Minister. 1996, c. 1, Sched. M, s. 44 (3)."

Disposition of land, except for disposition for use of the Province of Ontario, by SNC, as a former Agreement Forest partner, is subject to the *Forestry Act*, section 2(5) to 2(6) states:

"Land in respect of which grants have been made [, by the Minister under the Forestry Act,] shall not, without the approval of the Minister, be sold, leased or otherwise disposed of during or after the term of the agreement. 1998, c. 18, Sched. I, s. 20." (Note: Approval is now delegated to MNRF District Manager) "The proceeds from any sale, lease or other disposition of land in respect of which grants have been made under subsection (2) or a predecessor provision shall be divided as the Minister directs between the conservation authority ... and the Province of Ontario, with the conservation authority ... receiving not less than 50 per cent of the proceeds. 2000, c. 26, Sched. L, s. 4 (2)."

South Nation Conservation is an eligible recipient of lands donated under the Canada Ecological Gifts Program. Under this program, environmentally sensitive lands are protected against changes in land use or through disposition. These lands are monitored by Environment & Climate Change Canada. Under the *Income Tax Act*, section 207.31, unauthorized change in use or disposition subjects the recipient (SNC) to a tax equal to 50% of the fair market value on the land at the time of the unauthorized change in use or disposition.

# 8 PROGRAMS AND SERVICES

### 8.1 OVERVIEW AND FUNDING

The Conservation Authorities Act outlines three categories of programs and services:

**Category 1: Mandatory programs and services** required by regulation (s21.1 of the Act). These programs are funded through municipal levy and include:

- Programs and services related to the risk of natural hazards.
- Programs and services related to the conservation and management of lands owned or controlled by the authority.
- Programs and services related to the authority's duties, functions and responsibilities as a source protection authority under the *Clean Water Act*, 2006.
- Programs and services related to the authority's duties, functions and responsibilities under an Act prescribed by the regulations.

**Category 2: Municipal programs and services** provided at the request of a municipality (s21.1.1 of the Act). These programs can be funded through government and other agency grants and/or municipal funding under a memorandum of understanding or agreement with the municipality.

**Category 3: Other programs and services** the Conservation Authority determines are advisable (s21.1.2 of the Act). These programs can be funded through self-generated revenue, user fees, government and other agency grants, donations, etc. Any use of municipal levy requires an agreement and would be subject to cost apportionment.

The following includes a list of Mandatory Category 1 Programs – supported by Municipal Levy and Self-Generated Revenue (Partnerships, Government and Industry Funding, User Fees):

- Infrastructure Lands Management (Administrative, Channelization, and Water Control Structures)
- Conservation Land Management (Forests, Wetlands, Natural Hazards)
- Conservation Area Management (Recreation Trail and River Access Conservation Areas)
- Sustainable Forest Products: Timber, Maple Syrup, Honey, Hunting and Trapping

The following includes a list of Mandatory Category 1 and Municipal Category 2 Programs – supported by municipal revenue through agreement:

Partner properties (municipal parks, waterfronts, boat launches)

The following includes a list of Other Category 3 Programs – supported by Municipal Levy and Self-Generated Revenue (Partnerships, Grants, User Fees) – Private Landowner Stewardship and Outreach and Conservation Lands Securement Agreements established with 16 municipalities:

- Conservation Lands Securement
- Maple Syrup Education
- Youth Fish Camps

### 8.2 HUNTING AND TRAPPING AND LAND LEASES

Sustainable harvesting, scientific research and land lease opportunities are available on SNC conservation lands. Agreements are negotiated on a case-by-case basis using current market rates. Examples include the collecting of maple sap, apiaries, and other agricultural production.

Hunting and trapping opportunities are available on select SNC Conservation Lands (approximately 8,500 acres or 3,440 hectares) and are not permitted on SNC Conservation Areas and active trail systems open for public recreation.

Hunting areas are determined based on a variety of factors including property agreements and easements, donor wishes, property management, restoration activities, and public access. Areas are noted through SNC's online public mapping portal.

Annual hunting permits are issued to hunters with valid provincial permits, outdoors cards, hunting tags, proof of firearm accreditation, and liability insurance. Fees are established by SNC's Board of Directors through the SNC Fee Schedule. Fees have remained consistent through the years, except for when fees were doubled in 2016 and have remained at \$100 since then.

Trapping opportunities are subject to longer term exclusive use agreements.

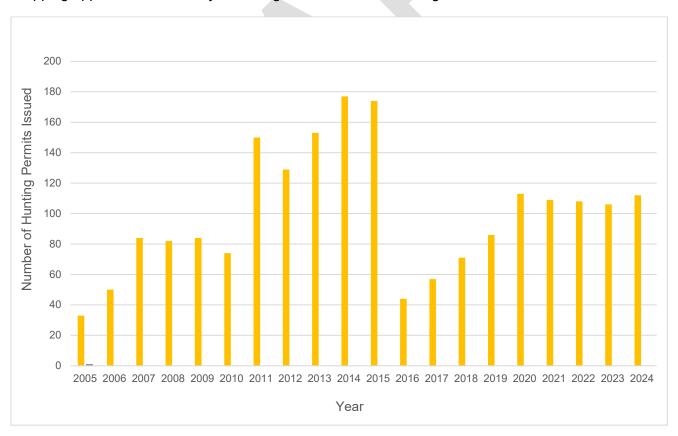


Figure 31. Number of hunting permits issued per year by South Nation Conservation.

### 8.3 EDUCATION OPPORTUNITIES

SNC's education and outreach efforts aim to promote environmental programs and services that protect natural spaces, encourage landowner stewardship, and engage the community with their local environment.

Education programs are offered on a cost-recovery basis and provide students with opportunities to earn certifications (e.g., Specialist High Skills Major Program) and training through hands-on work at various conservation lands, project sites, and monitoring stations.

Education programs include Stream of Dreams Environmental Education, Maple Education, Geocaching, Youth Fish Camps, and a Youth Hunt. All of these programs are delivered in Conservation Areas except the Stream of Dreams Program, which is only delivered in classrooms.

The Maple Education Program provides Kindergarten to Grade 12 level students with a hands-on environmental learning experience at the Oschmann Forest Conservation Area. Students learn the process of maple syrup production as it has evolved from First Nations' traditions through to modern day production techniques, with the goal of connecting students to the natural environment. Participants are guided on an interpretive forest walk, where they learn about natural heritage, forest management and ecosystem habitats. Demonstrations of maple syrup production and sap collection are delivered, as well as a delicious maple treat.

SNC's Fish Camps offer youth the opportunity to have fun while learning how to fish. Participants learn about the skills and tools needed to fish responsibly all while becoming more familiar with their local environment. Participants enjoy two days of catch and release fishing at various Conservation Areas and municipal partner sites where they will learn about fishing rules and regulations along with new fishing techniques to help them "Learn to Fish".

All education programs are cost-recovered through fundraising and user fees, with fees established by SNC's Board of Directors annually through the SNC Fee Schedule.

# 9 ACCESSIBILITY STANDARDS

The Accessibility Regulation 429/07, created under The Accessibility for Ontarians with Disability Act, 2005 (AODA), came into effect on January 1, 2008 and set obligations for certain persons, businesses, and other organizations, to provide goods and services in a way that is accessible to people with disabilities in Ontario.

This policy ensures that people with disabilities are given equal opportunity to obtain, use, and benefit from SNC programs and services.

SNC maintains an Accessibility Policy and Client Service Policy to ensure regulatory compliance and to ensure the delivery of effective and efficient service to clients, partners, and visitors. As part of compliance, SNC programs and services will be delivered:

- Ensuring that all customers receive the same value and quality.
- Allowing customers with disabilities to do things in their own way and at their own pace when accessing goods and services, (as long as this does not present a safety risk).
- Using alternative methods, when possible, to ensure that customers with disabilities have access to the same services, in the same place, and in a similar manner.
- Taking into account individual needs when providing goods and services.
- Communicating in a manner that takes into account the customer's disability.

SNC is committed to providing optimal customer service to all its clients and customers. The goal is to ensure that people with disabilities are provided with an equal opportunity to enjoy the same SNC programs and services as people without disabilities. This Policy applies to the provision of goods and services and not to the services themselves.

More information is available at: https://www.nation.on.ca/about/accessibility-policy.

# 10 SIGN STRATEGY

SNC's Sign Design Guide provides guidance and standards for the development of signs used on SNC property based on SNC's Brand Design Guide to ensure that information is presented based on best practices in accessibility, bilingualism, legibility, and brand recognition.

To comply with accessibility and bilingualism requirements (English and French) and uphold SNC's commitment to providing access to all, new accessible sign products are being designed to replace most signage, in accordance with SNC's Design Guides.

Entrance signs are being redeveloped to increase SNC's brand recognition and ensure consistency and easy access to information.

Bilingual trailhead signs are designed to inform visitors about the history, location and important facts of the Conservation Area they are visiting.

Interpretive signage can be found at select trails for enhanced outdoor learning experiences.

Other signs are displayed for safety purposes to inform the public of hazards around docks, shorelines and water control structures.

More information is available in SNC's Sign Design Guide, a separate publication.



Figure 32. Bilingual trailhead sign at Findlay Creek Conservation Area, City of Ottawa.

# 11 VOLUNTEER OPPORTUNITIES

SNC recognizes that a healthy watershed is the result of the efforts of all the people within it.

SNC is fortunate to have many volunteers who are passionate about their local environment and work together to support the management, conservation, and restoration of natural resources.

SNC maintains a network of active volunteers through a Forest Steward Program to help monitor and report activities on conservation land properties. Volunteers act as eyes and ears on the ground and support the management of SNC lands. Becoming a Forest Steward is a great way to get involved and help monitor properties in local areas or natural spaces of interest.

SNC also works with a variety of community volunteer groups including the Oak Valley Pioneer Park Conservation Area in North Dundas and McIntosh Memorial Park Conservation Area in North Stormont, and others. These groups offer their time and expertise to help fundraise, manage, and improve these natural spaces.

Other volunteer opportunities include working with the City Stream Watch Collaborative, joining the Rain Gauge Network and other Stewardship Projects.

Connect with SNC through its regular newsletter, the SNC Current, to stay up to date and learn more about volunteer opportunities at <a href="https://www.nation.on.ca/subscribe">www.nation.on.ca/subscribe</a>.



**Figure 33.** Forest Steward and Land Donor Hennie Velema with her family at one of their SNC Land Donation sites, North Stormont.

# 12 GOALS AND OBJECTIVES

South Nation Conservation has established key objectives to serve as the Strategy's framework.

1. Manage SNC Conservation Lands in compliance with relevant Federal, Provincial, Municipal and Conservation Authority regulations, policies, and guidelines.

The Conservation Authorities Act is the main governing legislation that defines the mandatory programs and services of all conservation authorities in Ontario. Additionally, SNC-owned lands are governed by other municipal, provincial, and federal regulations that affect operational processes and land management practices.

### **Outcomes**

- Alignment with Conservation Authority mandatory programs and services.
- A management framework for program budgets, funding structures, and financial transparency.
- Defined legal responsibilities as a private landowner to manage risk and liability.
- An enforcement framework for addressing unauthorized activities.

### **Future Direction**

SNC is committed to compliance with all regulatory requirements as prescribed by governing organizations. As legislation and regulations evolve, SNC will update processes, integrate changes into operational procedures, and meet identified deliverables within timelines.

2. Consider watershed health, resilience, and natural heritage system enhancements when making land management decisions.

SNC owns many parcels of land with water management infrastructure as well as natural heritage and hazard features that provide valuable ecosystem functions and services.

Conserving and managing natural assets (e.g., forests, wetlands, riparian areas) on the SNC lands can provide many benefits, including water storage, pollution control, wildlife habitat and biodiversity. Restoring and enhancing ecosystem functions can help improve resiliency to climate change.

#### **Outcomes**

- Reduction of flood and erosion damages as a result of well-maintained and operated water management infrastructure.
- Maintained and improved hydrologic functions, such as infiltration of precipitation and groundwater recharge, groundwater storage and discharge, and capture of precipitation runoff.
- Improved natural cover in riparian, forest, wetland and grassland ecosystems on suitable lands.
- Conservation of ecologically sensitive lands and improved biodiversity.
- Increased resiliency to climate change impacts and other disturbances.

### **Future Direction**

As communities continue to grow, climate changes, and competing pressures rise on lands and waters, SNC's landholdings and infrastructure will continue to make important contributions to water management and natural heritage. Considering ecosystem health and watershed science in land management decisions will help ensure SNC's lands are resilient to changing conditions and contribute to the health of the South Nation River Watershed.

### SNC will:

- Develop restoration strategies to identify priorities for natural heritage projects and resources.
- Consider climate change and other disturbances (e.g., invasive species) when developing future land management strategies.
- Update and implement Asset Management Plans to support the operation, maintenance, and repair of water and erosion control infrastructure and assets within conservation lands.

# 3. Provide sustainable outdoor recreational and educational opportunities and connections with the natural environment.

SNC's Conservation Areas offer passive recreational and educational opportunities where visitors are encouraged to connect with the environment to foster an appreciation for nature.

Educational programming in Conservation Areas is limited to seasonal fee-for-use outdoor environmental education programs. Access to Conservation Areas is currently provided for free.

### **Outcomes**

- Access to greenspaces to enjoy a wide range of natural landscapes, celebrate the ecological diversity of the watershed, and experience the benefits of being outdoors.
- Programs that prioritize both environmental sustainability and financial resilience.
- Access to outdoor programs in a safe, welcoming, and managed setting.
- A variety of outdoor recreational opportunities that resonate with visitors on a personal level.

### **Future Direction**

Providing memorable outdoor experiences and cultivating visitor relationships is core to the SNC's outdoor recreational, educational and environmental programs. With an annual rise in visitation rates and an expanding customer base, it is important that program areas adapt to match the current user demands while ensuring sustainable environmental and financial resources.

### SNC will:

- Develop and update Master Plans for SNC Conservation Areas to better document current and future asset needs and property development.
- Identify opportunities to improve accessibility and reduce potential barriers where possible.
- Identify opportunities for trail creation and additional passive recreation opportunities.
- Continue the Conservation Areas Monitoring Program to understand visitation trends, capacity pressures and property development opportunities.
- Maintain environmental health within Conservation Areas and Lands.
- Continue to evaluate all programs identified as Category 3, per O. Reg. 686/21, to ensure they have sustainable funding sources; and explore alternative revenue generation opportunities.
- · Maintain a holistic operating approach and encourage organizational synergies.
- Review existing plans and projects related to management plans, operations, capital projects and policies, and ensure they are current and applicable.
- Implement SNC's Sign Strategy to enhance visitor experiences, ensure bilingualism (English and French), improve accessibility, and brand recognition across SNC lands.
- Develop and update Standard Operating Procedures for Conservation Area management.
- Complete updates to SNC's website to ensure conservation land opportunities are well represented and understood.
- Improve communications to ensure the public is informed of management activities, projects and potential service or access disruptions.
- Explore revenue generation opportunities at Conservation Areas.

# 4. Enhance community partnerships on SNC properties.

SNC partners with municipalities, public agencies, First Nations, environmental and community organizations, and others to support mutual benefits on SNC-owned lands. Shared interest among partnerships includes river-access sites and trails, land management, winter recreation, educational and economic opportunities, and areas that support public infrastructure.

### **Outcomes**

- Increased access to outdoor spaces fosters community connections, public knowledge, environmental awareness and stewardship.
- · Opportunities for tourism and economic development.
- Synergistic, collaborative and effective relationships with organizations with shared priorities.
- Opportunities to share resources, generate revenue, and fulfill service gaps.
- · Opportunities for environmental conservation, research, and habitat management.
- Continued work through the Eastern Ontario First Nations Working Group and maintaining relationships and collaborative partnerships with First Nations.

### **Future Direction**

Partnerships are key to the ongoing success of land management programs, and many projects and services rely on these collaborative relationships.

### SNC will:

- Maintain positive and effective relationships with partners.
- Identify opportunities for new partnerships with organizations with similar interests and values.
- Explore opportunities for revenue generation through outdoor recreational partnerships.
- Identify how properties and programs benefit municipalities and influence the economic landscape.
- Enhance relationships with the Mohawk Council of Akwesasne and the Algonquins of Pikwakanagan.
- Maintain and improve public access to recreational opportunities, where suitable, through maintenance agreements with local municipalities.

# 5. Manage SNC landholdings in a strategic, fiscally responsible, and sustainable way.

SNC's conservation lands contribute to a living natural legacy for the South Nation River Watershed and provide a wide range of environmental and community benefits. Thanks to the municipal partnerships at work and funding agencies, SNC's land securement program continues to secure conservation land for the benefit of future generations.

### **Outcomes**

- Fiscally responsible land ownership that aligns with SNC's strategic priorities and mandatory programs and services.
- Land management programs aimed to reduce risk and liability, promote public safety, and ensure appropriate use of land.
- Collaborate with municipalities and other agencies to manage conservation lands.

### **Future Direction**

Strategic and financially responsible management decisions are essential to maintain SNC's land portfolio and programs. As environmental and economic factors change, SNC must review program areas and permitted uses on SNC lands.

### SNC will:

- Maintain the land inventory with up-to-date property ownership information.
- Establish criteria to prioritize updating and developing land management plans.
- Ensure effective strategies are in place for managing trespassing, encroachments, encampments, and prohibited activities including public education and enforcement.
- Consider new opportunities to generate revenue and help offset operating costs and capital needs.

# 11 CONCLUSION

The South Nation Watershed is a dynamic and interconnected network that supports natural environments, local communities, and the local economy. As stewards of the land and water, it is crucial for SNC to work collaboratively and innovatively with all levels of government, member municipalities, First Nations, and other partners and stakeholders. This cooperation is essential to maintaining a healthy, vibrant, and resilient watershed for future generations.

The implementation of this Conservation Lands Strategy creates a cohesive pathway to achieve goals, sustainably manage lands, conserve the natural environment, and provide programs and services aligned with SNC's mission, values, and strategic priorities.