



SOUTH NATION
CONSERVATION
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SOUTH NATION CONSERVATION 2016 FOREST COVER

OVERVIEW & RECOMMENDATIONS

FOREST COVER BENEFITS

The digital analysis of aerial photography of Eastern Ontario from 2008 and 2014 provides South Nation Conservation (SNC) and member Municipalities accurate data on forest cover status. Changes in forest cover include: residential land development, industrial/commercial development, agriculture, solar farms, and other unsustainable forest harvest practices.



FOREST COVER GUIDELINES

30%

Minimum forest cover threshold, high-risk approach that will only support half of the potential species richness, and marginally healthy aquatic systems.

40%

Medium-risk approach that is likely to support more than half of the potential species richness, and moderately healthy aquatic systems.

50%

Low-risk approach that is likely to support most potential species, and healthy aquatic systems.

28%

AMOUNT OF FOREST COVER IN THE SNC JURISDICTION (2014)

ON AVERAGE,
1 MILLION TREES
ARE LOST, PER YEAR,
IN THE SNC JURISDICTION

FOREST DISTRIBUTION

This mixed forest region is composed of hardwoods, such as maple, birch and poplar, with a minor component of coniferous cover with species such as eastern white cedar, red and white pine and white spruce. The majority of the forest is second growth, due to the widespread cutting in the past, with an average age of 80 to 90 years old.

HISTORIC FOREST COVER

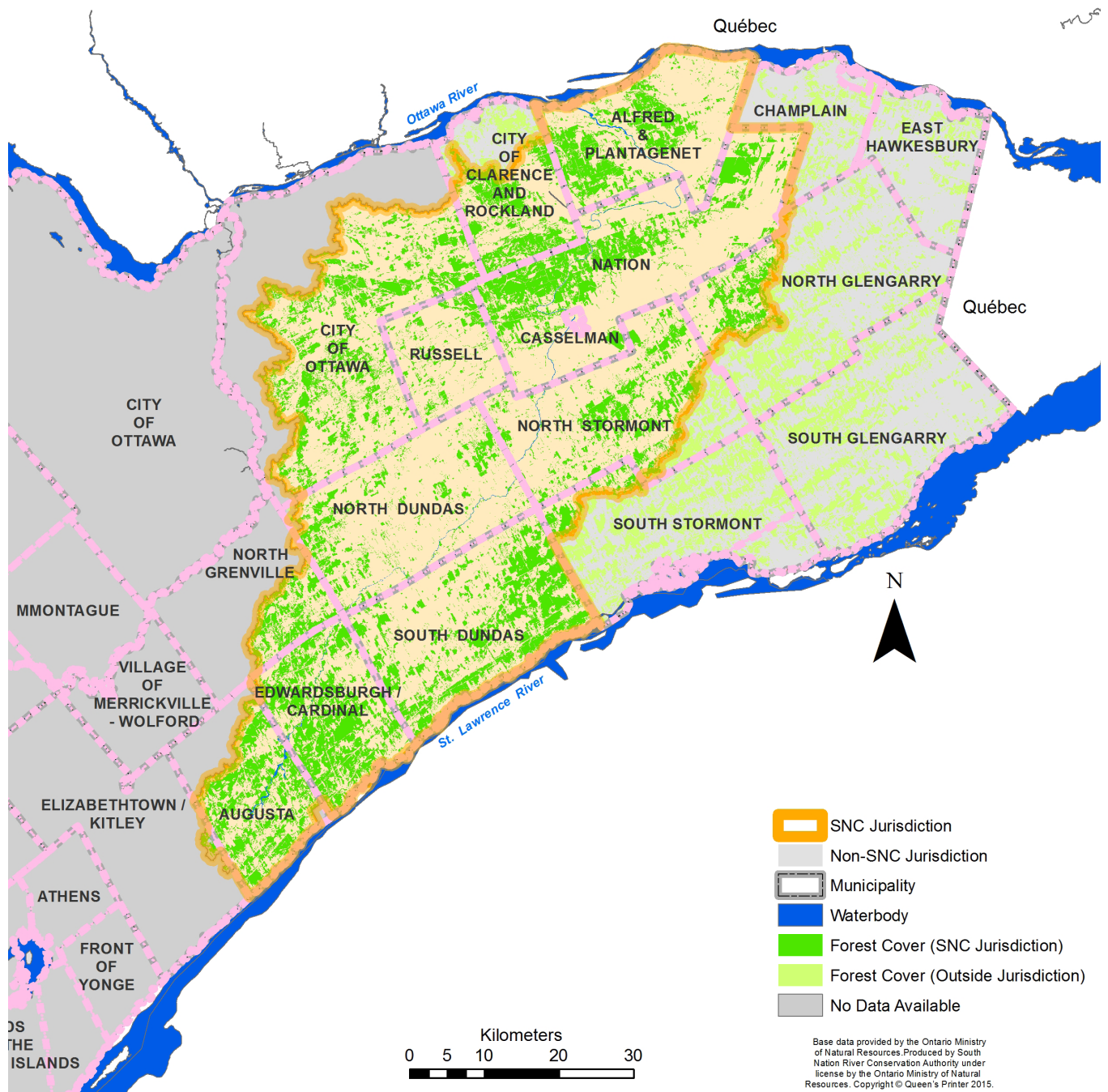
Prior to settlement, the First Nations people had minimal impact on the forests, post-European settlement dramatically altered the landscape with incentives for newcomers to clear the land. By the late 19th century, Eastern Ontario experienced severe flooding, droughts and erosion due to a declining forest cover of less than 30 percent in 32 townships, and in some, a forest cover of less than 10 percent.

Severe deforestation in addition to land management practices, and flooding, led to the creation of Conservation Authorities (CAs). With the support of government agencies, the Ministry of Natural Resources and Forestry (MNRF) and CAs began land restoration activities through intensive replanting efforts to increase forest cover to 30 percent or above.

SNC JURISDICTION

The SNC jurisdiction includes 16 member Municipalities and encompasses a total area of 4,384 km², containing an approximate population of 120,000 people.

The vast majority of both forested and non-forested land is under private ownership with less than 10% under public ownership. With more than half of the highest quality farming soil found in Ontario, agriculture is the predominant land use within the jurisdiction representing approximately 60 percent of total lands.



FOREST COVER THROUGH THE REGION

Development and land conversion to sustain increased populations and expanded agricultural production in Eastern Ontario is impacting the presence of forest cover and its ecological benefits for a healthy environment. The forest cover loss is represented as the percentage of change, from 2008 to 2014, exclusively for forested land.

FORESTS
IN THE SNC
JURISDICTION



85% NATURAL FORESTS

12% PLANTATIONS

3% HEDGEROWS

Total forest cover in 2014 and trend (percent) from 2008 to 2014, by Municipality.

Municipalities	Forest Cover (%)	Forest Cover Change (%)
Alfred-Plantagenet	25.5	- 3.0
Augusta	46.4	- 0.2
Casselman	3.4	- 6.5
Champlain	24.1	- 5.3
Clarence-Rockland	37.6	- 1.4
Edwardsburgh/Cardinal	48.9	- 1.9
Elizabethtown-Kitley	46.8	0.0
Nation	25.4	- 4.6
North Dundas	13.3	- 2.1
North Glengarry	33.6	- 2.1
North Grenville	44.9	- 0.6
North Stormont	25.6	- 6.5
Ottawa	26.2	- 3.7
Russell	12.7	- 11.3
South Dundas	31.5	- 4.1
South Stormont	41.1	- 3.7
Stormont, Dundas and Glengarry	29.0	- 4.3
Leeds and Grenville	47.4	- 1.1
United Counties of Prescott and Russell	24.8	- 4.5

For additional analyses and study results, please refer to "SNC Forest Cover and Trends Analysis Report 2016".

COMMUNICATING THE RESULTS

SNC has been communicating the preliminary results of the 2016 Forest Cover and Trends Analysis Report broadly with agricultural, environmental and community groups. Comments included both concern and support for forest conservation bylaws, support for stewardship and forested land acquisition programs and future opportunities to work with community organizations to promote the value and benefit of forests.

For additional, please refer to "Forest Cover and Trends Analysis, June 2016, Appendix E – List of Public Presentations and Summary of General Comments."

FORESTRY PROGRAMS



Approximately **1 million trees** are being lost each year in the SNC jurisdiction.



2.8 million trees (over 100,000 per year) have been planted since 1990 through SNC's tree planting programs.



SNC is a management partner of approximately **20,000 acres** of land, including SNC owned land.



Since 2000, SNC has secured over **3,000 acres** of forested land through purchase.



Site visits have been conducted on over **10,000 acres** of forested land since 2009 through SNC's Woodlot Advisory Service.



Every year, approximately **50 acres** of land is donated to SNC.



To reach a minimum forest cover of **30 percent**, an additional **19,600 acres** of land would need to be planted with **16 million trees**.



Each year, approximately **2,200 acres** of forested land was lost between 2008 and 2014 in the SNC jurisdiction.



The current cost of SNC's tree planting and land acquisition programs is approximately **\$300,000**.



An increase in forestry and outreach programs, developed with partner groups, is needed to address the loss in forest cover.



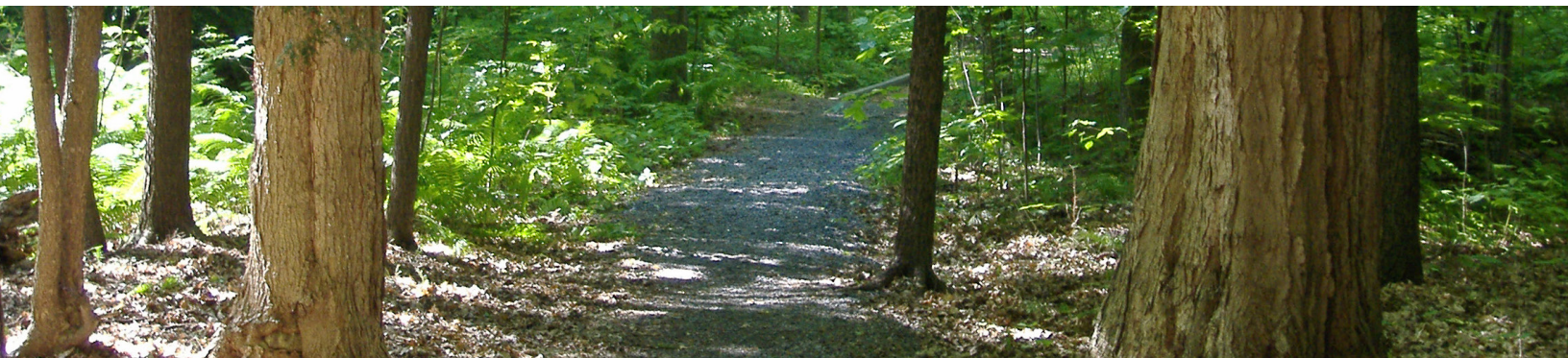
Partner organizations like the Eastern Ontario Model Forest, Boisés Est, the Ontario Woodlot Association, the Ontario Farmers Association, First Nations, local stewardship, environmental and field naturalists groups, along with government agencies will need to work together to address the issues associated with forest cover loss.

START THE CONVERSATION

Forest cover in the jurisdiction, which is closely linked to ecological health, has fallen below Environment and Climate Change Canada's minimum forest cover threshold of 30%. This high-risk approach may only be able to marginally support the ecosystems in these areas.

In 2014, the forest cover within the jurisdiction was 28%, with over 13,000 acres of forests being lost between 2008 and 2014. SNC's current approach to forestry-related services is not enough to address the growing concerns that are arising due to the loss of forest cover.

Get involved by sharing your thoughts with the team at SNC, it's time to start the conversation on forest cover loss and its impact on its ecological benefits for a healthy environment.





FOREST CONSERVATION

FORESTRY PROGRAMS AND SERVICES

SNC maintains extensive private land forestry programs including tree planting and woodlot advisory services. Given that most of the forested land is under private ownership, it is important that landowners have access to financial and technical resources to encourage best management practices.

Long-term funding for programs and services focused on private woodlands need to be secured and increased.

A greater emphasis on land donation would help lower the cost of land securement. Through purchase and donations, these lands will contribute to the conservation of forest cover in perpetuity.

An increase in funding for the land acquisition program would provide direct and long-term social, economic and environmental benefits.

EDUCATION & OUTREACH

By working with partner organizations, education and outreach initiatives provide an opportunity to share knowledge and create awareness of local issues affecting environmental health.

A greater emphasis on the value and benefits of forest ecosystems would provide a more comprehensive approach towards understanding and addressing the issues affecting the status of forest cover.

SCIENCE-BASED DATA FOR MANAGEMENT DECISIONS

Using science-based data, areas providing the greatest ecological benefit from stewardship projects could be identified, such as areas where tree planting efforts would increase forest cover in addition to forest connectivity and interior forests.

Forest Conservation By-Laws, passed through Municipal Councils, are used throughout Southern Ontario, to limit the loss of tree cover on private land.

At the request of member Municipalities, SNC could provide assistance in the development of this regulatory tool.

Greater analysis of forest cover data using GIS software could facilitate a more coordinated approach in both conservation and restoration efforts.

Further analysis would provide additional information which would also benefit local planning departments in assessing the impact of proposed land development projects, and provide opportunities to integrate forested areas in natural space planning.



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