

## INTRODUCTION:

South Nation Conservation (SNC) owns land including forests and wetlands. These lands are managed in accordance with an approved forest management plan which provides for sustainable timber harvest that generates revenue, improves forest health, provides wildlife habitat, protects natural heritage and creates recreational opportunities. As at December 31, 2018, the total area of land owned by SNC was 4,708 hectares.

This report outlines the administrative and operational activities that have been carried out from January 1, 2019 to December 31, 2019.

#### FOREST ADMINISTRATION:

#### FOREST ACCRUALS AND DEPLETION

In 2019, two parcels of land were added to the SNC Forest. There were no depletions in 2019. The area of land owned by SNC at the end of the operating period was 4,758.2 hectares. Table 1 provides a summary of changes to the SNC Forest land base.

Table 1
South Nation Forest
Summary of Accruals and Depletions

Comp.	Municipality		Туре	Area (ha.)	Value
SNC 164	Edwardsburgh/Cardinal	Accrual	Split Receipt	36.0	\$387,000.00
SNC 165	City of Ottawa	Accrual	Donation	14.2	\$95,000.00
Total Accruals					\$482,000.00
Total Depletions					\$0.00

Several requests for exchange of lands between SNC and private interests were presented to the Board of Directors for consideration and were subsequently denied as the land exchanges did not serve the objectives of the Conservation Authority.

#### FOREST CERTIFICATION

The SNC Forest maintained Forest Stewardship Council (FSC) certification during the operating period under Group Certificate RA-FM/COC-000232. SNC submitted all documents required for independent annual audits under group certification but were not selected for field audit during the 2019 operating period. There were no non-conformities with FSC principles & Criteria.

On April 10<sup>th</sup>, 2019, the SNC Forest was subject to an activity assessment report conducted by the Group Certificate holder (EOMF) in compliance with FSC requirements. Management activities, social, economic and environmental impacts were monitored in relation to the scale of the operation. The assessment concluded that the forest was managed in compliance with operational standards and FSC Principles & Criteria.

The Annual Reporting Form was submitted to the Group Certificate holder (EOMF) on September 13, 2019. The annual report indicated for the period July 1<sup>st</sup>, 2018 to June 30<sup>th</sup>, 2019 an annual harvest volume of 4,366.00 m<sup>3</sup>, no area added to the forest and no area removed from the forest,

4.0 liters of Roundup-Weathermax with Transorb II were used to treat 4.0 ha. for invasive species control, and a total forest area of 4,255.0 hectares.

Annual reporting also included record of the following use of exotic species. The following exotic insect species and quantities were released in partnership with Natural Resources Canada, Canadian Forest Service, as a test control of Emerald Ash Borer: *Tetrastichus planipennisi* (3,958); *Oobius agrili* (1,600); and *Spathius galinae* (580).

The annual report also included the following staff changes and forestry training acquired during the operating period:

#### **New Staff**

Martin Streit, B.Sc.F., R.P.F., Forester (part-time)
Caroline Goulet, B. Am. For., Dipl. Forestry & Wildlife Management

#### **New Accreditations**

Cheyenne Brunet, R.P.F. in Training Caroline Goulet, Certified Arborist, R.P.F. in Training

## **Forestry Training**

Tree Marker Certification (3 staff)
Natural Heritage Information Centre (NHIC) Data Sensitivity Training (4 staff)
Certified Arborist (1 staff)
Certified Seed Collector (2 staff)
Butternut Health Assessor (3 staff)

#### PROPERTY TAX PROGRAMS

## Managed Forest Tax Incentive Program

There were no changes under the Managed Forest Tax Incentive Program (MFTIP) during 2019. The total eligible area remained 3,989.38 hectares under SNC Forest Management Plan No. H9816. Plan No. H9816 was accepted to the MTIP under Ontario Regulation 282/98 of the Assessment Act on September 10<sup>th</sup>, 2018.

#### Conservation Lands Tax Incentive Program

In 2019, seventeen compartments within the SNC Forest had areas eligible under the Conservation Lands Tax Incentive Program (CLTIP) and voluntarily registered under CLTIP for the 2020 tax year. The total area was 542.11 hectares. These properties are all Provincially Significant Wetlands (PSW) and /or Areas of Natural & Scientific Interest – Life Sciences (ALS).

#### **CONSERVATION EASEMENTS**

## **Ontario Heritage Trust**

The SNC Forest contains 623.04 hectares subject to Heritage Conservation Easement Agreements (HCEA) to the interest of the Ontario Heritage Trust (OHT).

Under the terms of the HCEA, the SNC Forest can be subject to a compliance audit by an OHT representative. There were no compliance audits scheduled during the operating period.

#### FOREST MANGEMENT PLANS

# Twenty-Year Forest Management and Five-Year Operational Plan

The Forestry Committee reviewed the Twenty-Year Forest Management Plan and Five-Year Operational Plan and recommended the plans to the Board of Directors in March 2018 subject to final comments until March 15<sup>th</sup>, 2018. The Board of Directors approved the plans in June 2018 (BD-119/18). There were no changes to the Twenty-Year Forest Management Plan or Five-Year Operational Plan during the current operating period.

## SNC Forest: 2020 Annual Plan Silvicultural Prescriptions

The 2020 Annual Plan was prepared in May 2019 and based on the schedule of operational activities within the five-year operational plan. The 2020 Annual Plan was recommended to the Board of Directors at the June 2019 Forestry Committee meeting and approved by the Board of Directors (BD-91/19) subject to approval of the 2019 SNC Budget. Planned activities remained unchanged and approved in the 2020 SNC Budget (BD- 185/19).

Silvicultural prescriptions were prepared for operational activities on six SNC Forest properties. Operational activities ranged from invasive species control, tree planting and thinning. Table 2 summarizes the prescription activities.

Table 2
Summary of Silvicultural Prescriptions Prepared in 2019

Compartment	Treatment	Area (Ha.)	Species	Quantity	
SNC 5	Thinning – Selection	39.3	Pr, Pw, Sw	4 500 2	
SNC 7	Thinning – Selection	39.3	Pr, Pw, Sw	1,500 m <sup>3</sup>	
SNC 18	Tree Planting	4.0		4,000	
SNC 25	Thinning - Selection	25.4	Pr, Pj, Sw	906 m <sup>3</sup>	
SNC 164	Tree Planting	2.4		4,200	

#### **Site Preparation**

In the fall of 2019, 2.4 hectares were brush cut in preparation for spring 2020 tree planting. Site preparation and tree planting costs are supported by the 50 Million Tree Program and the Highway of Heroes Tree Planting Program.

Table 3
2019 Site Preparation Summary

Compartment	Treatment	Area (Ha.)	Species	Quantity	Comment
SNC 164	Brush Cut	2.4	-	-	

## **Tree Planting**

In the spring of 2019, 11.0 hectares of Red Pine plantation was under-planted with White Pine. Total tree planting cost \$5,640.00. Survival will be assessed during the growing season in 2020.

Table 4 2019 Tree Planting Summary

Compartment	Treatment	Area (Ha.)	Species	Quantity	Comment
SNC 12	Tree Planting - understorey	3.0	White Pine	3,000	bare root
SNC 13	Tree Planting - understorey	4.0	White Pine	4,000	Bare root
SNC 23	Tree Planting - understorey	4.0	White Pine	4,000	Bare root

## **Invasive Species Control**

#### **Emerald Ash Borer**

In partnership with Canadian Forest Service, release of parasitoid wasps continued in 2019. Species released included *Tetrastichus planipennisi*, *Oobius agrili* and *Spathius agrili*.

During October, four trees were selected at each site, felled and cut to 20-foot length for removal. The sampled trees were transported to the Canadian Forest Service labs in Sault St. Marie for parasitoid rearing. The sampling will determine the success of the parasitoid release in controlling the Emerald Ash Borer.

#### **Buckthorn**

In July 2018, 4.0 hectares of plantation was treated for removal of invasive Buckthorn spp. Treatments consisted of cutting mature Buckthorn (Figure 1) and contact application of Roundup-Weathermax with Transorb II with blue dye marker to cut stumps (Figure 2).



Figure 1
Buckthorn Removal Before and After



Figure 2 After Herbicide Application

Treatment effectiveness was monitored during the summer of 2019. Based on observations, a second treatment prescription will be developed for implementation during the 2020 growing season.

### **Harvest Summary**

During 2019, harvest was completed on one compartment, SNC 25 located in North Stormont. Table 5 provides a summary of the completed harvest.

Table 5
Summary of Annual Harvest
2019

Harvest Year	Compartment(s)	Contract Award Date	Species <sup>1</sup>	Estimated Volume (m³)	Actual Volume (m³)	Harvest Area (ha.)	Value (gross)
			Pr	412.0	131.1	5.4	\$1,835.14
2019 SNC 25	2019	Pj	222.0	750.0	20.0	40.750.00	
2013	3140 23	2019	Sw	972.0	750.0	20.0	\$9,750.00
			Hdwd	•	25.2	-	\$90.34
Total Ani	Total Annual Harvest				906.3	25.4	\$11,675.48

The harvest started on November 18<sup>th</sup>, 2019 and was completed by December 13, 2019. The harvest consisted of first thinning in mixed conifer. Figure 3 and Figure 4 shows various stages of the harvest operations.



Figure 3
Row Removal in White Spruce Plantation



Figure 4
Red Pine logs on landing

## Forest Infrastructure

Several infrastructure projects were completed on the SNC Forest in 2019. Table 6 provides a summary of forest infrastructure works undertaken.

<sup>&</sup>lt;sup>1</sup> Pr-Red Pine; Pj-Jack Pine; Sw-White Spruce; Hdwd-Hardwood

Table 6
Summary of Forest Infrastructure Improvements 2019

Type	Compartment	Quantity	Comments
Landings	SNC 25	3	
Entrance Culverts (permanent)	SNC 25	1	Municipal Permit
Entrance Culverts (temporary)	SNC 25	2	Municipal Permits
Culverts (Trails)	SNC 1; SNC 4	8	
Aggregates	SNC 1; SNC 4; SNC 25	200 T	
Roads/Trails (maintenance)	SNC 1	950 m.	

Additional trail improvements were completed on SNC1 (Robert Graham Trail). Damaged infrastructure was removed (Figure 5). General landscaping was completed, including stump removal, drainage improvements and grading (Figure 6) in preparation of spring 2020 seeding.



Figure 5 Removal of Old Infrastructure Robert Graham Trail



Figure 6 Stump Removal Robert Graham Trail

Final cleanup of SNC 4 was completed with installation of new culverts and aggregate following completion of forest operations'

Landings were constructed, and culverts installed to complete forest operations on SNC 25. SNC 25 is divided by two maintained township roads which required the construction of three separate landings and entrances (two temporary and one permanent). Figure 7 shows a typical landing constructed. All landings will be seeded during spring 2020. Figure 8 shows the construction of a temporary entrance on Bender Road, North Stormont.



Figure 7 Landing on SNC 25 North Stormont



Figure 8
Entrance on Bender Rd. North Stormont