


SOUTH NATION  
CONSERVATION  
DE LA NATION SUD

## 2018 Annual General Meeting

Project Update  
March 15<sup>th</sup>, 2018



[www.nation.on.ca](http://www.nation.on.ca)



### Community Builder Award







Doug Thompson, Past Chair

## Supporting Forest Promotion

Eastern Ontario Model Forest  
Winter Woodlot Conference  
Kemptville

Doug Thompson, Past Chair

## Supporting Municipalities

Annual Augusta Township's Mayor's Breakfast

Angela Coleman, General Manager/Secretary-Treasurer

## Provincial Networking


Angela Coleman, General Manager/Secretary-Treasurer

## Stakeholder Engagement - Forest Conservation


New: **Forest Conservation Working Group**  
First Meeting: March 21 at 10:00 am

John Mesman, Team Lead, Communications and Outreach

## Partnership Engagement - Ottawa River



### Partnership Engagement - Ottawa River



**GOVERNANCE AND COLLABORATION IN THE OTTAWA RIVER WATERSHED**

Across Canada, governments, Indigenous Peoples, industry and others, are increasingly collaborating to resolve shared water challenges. Depending on the nature of play within a given watershed, collaboration has taken various forms, such as new agreements or collaborative bodies, with a variety of structures, mandates, and funding models.

We are seeking your views on whether there is a need for more collaborative approach in the Ottawa River watershed, and if so, what form it should take.

**WHO SHOULD PLAY A ROLE?**

Given the diverse issues and values associated with the Ottawa River watershed, many groups have responsibilities or interests in managing it.

Through the study, we hope to gain your perspective on how these players could collaborate more effectively to protect, manage and enhance the watershed.

**MAIN GOVERNMENT RESPONSIBILITIES, MANY OF WHICH ARE SHARED**

**Federal Government:** Indigenous water quality, fisheries, water flow, pollution, navigation, federal lands and forests.

**Provincial Government:** Water allocation and use, water flows, pollution and land management.

**Municipal Government:** Drinking water and wastewater, zoning.

**Watershed Management Agencies:** Source water protection, monitoring and evaluation.

**OTHER STAKEHOLDERS:** INDIGENOUS GROUPS, INDUSTRIES, ACADEMICS, COMMUNITY AND RECREATIONAL GROUPS, NON-GOVERNMENT ORGANIZATIONS.

**SOME QUESTIONS TO CONSIDER:**

What is needed to enable these involved in managing the watershed to collaborate more effectively?

Would a new collaborative body be created to manage the Ottawa River watershed?

How should technical, cultural and economic values be represented in watershed governance?

**Canada**

### Ottawa River Watershed Study

- Federal study surveying residents and organizations within the Ottawa River Watershed
- SNC participated in Open House and is submitting stakeholder comments by April 6

John Mesman, Team Lead, Communications and Outreach

## Collaboration for the Environment



### Collaboration for the Environment




**Annual SNC Standing Committee Meetings**

March 1<sup>st</sup>, 2018


**Annual SNC Standing Committee Meetings**

March 1<sup>st</sup>, 2018

Ronda Boutz, Team Lead, Special Projects



Engaging with Agricultural Producers



**Dundas Federation of  
Agriculture AGM**  
March 12, 2018

*Enhancing Flood and Drought  
Forecasting Tools in the South  
Nation River Watershed*

Ronda Boutz, Team Lead, Special Projects



Sharing Knowledge



**DFA**  
DUNDAS FEDERATION OF AGRICULTURE



**SOUTH NATION  
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**Drainage Day**

Chesterville Legion Hall, 167 Queen St. Chesterville ON

Friday March 23 at 9:45 am

Geoff Owens – Regulations Officer



## Funding Awarded

- **\$75,000 from the Great Lakes Guardian Community Fund**
  - Low Impact Development Project at SNC Office
  - Enhanced Stream of Dreams Program with Targeted Stewardship
  - Enhanced Habitat, Education and Recreation Opportunities at Robert Graham Conservation Area

Michelle Cavanagh, Team Lead, Stewardship

## Strengthening Partnerships

Grab sample destined for metal analysis

- SNC will pick up 8 surface water baseline sites from City of Ottawa Public Works and Environmental Services
- Locations in Bear Brook and Castor River Subwatersheds

Michelle Cavanagh, Team Lead, Stewardship

## Informed Environmental Planning

McKinnon's Creek Catchment Report - available March 31, 2018

Brent Harbers, Stewardship Technician

## Informed Environmental Planning

Staff deploying sensors in Findlay Creek

- Staff planning 2018 field season to collect baseline data on North Castor
- Monitoring will include:
  - Water quantity (base flow, deployable sensors)
  - Water Quality (grab samples, deployable sensors)
  - Fisheries
  - Benthic invertebrates

Brent Harbers, Stewardship Technician

## Technology and Innovation

### Restoration Project Bank - App

**Potential Restoration Projects**

Date: February 7, 2017

Observer: \_\_\_\_\_

Land Owner: \_\_\_\_\_

Is the proposed project terrestrial or aquatic?  
☐ Terrestrial ☐ Aquatic

Severity Ranking  
 1; Non-Priority   2; Priority   3; High Priority   4; Very High Priority

Comments: \_\_\_\_\_

**Potential Restoration Projects**

Comments: \_\_\_\_\_

Image 01

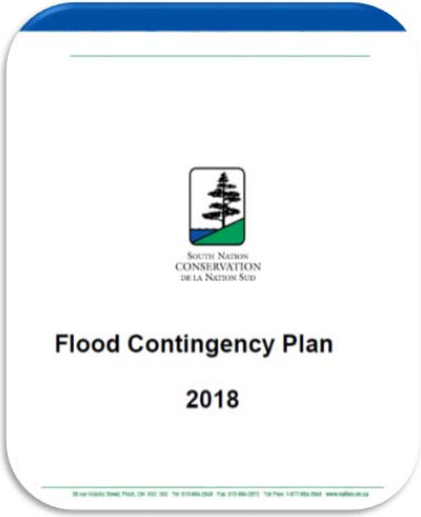
Image 02

Image 03

Image 04

Kiersti McMillan, GIS Analyst

## Supporting our Municipalities



**Flood Contingency Plan**  
**2018**


**Flood Contingency Plan**

Distributed to:


- All Municipalities, and
- Emergency Contacts

Claire-Mérodie Pilault, Water Resource Analyst






Keeping the Public Informed




Payne River  
County Rd 13 - April 6, 2014

**Unseasonably above normal temperatures**




Payne River  
Union St - February 22, 2018

Omar Kana'n, Water Resources Analyst




Keeping the Public Safe



Chesterville  
Feb 26, 2018

**Chesterville Dam Ice Buildup**



Chesterville  
Feb 27, 2018

Sandra Mancini, Team Lead, Engineering



Partnerships: Municipal Education

### 2018 Municipal Information Day



Thursday March 22, 2018 - 65 confirmed attendees

Laura Crites, Planning Assistant



Community Outreach: Ottawa Valley Farm Show



- March 13 – 15, 2018  
– EY Centre, Ottawa
- Promotion of Clean Water Grants Program

Holly Nyenkamp, Communications and Outreach Assistant



## Community Outreach: Maple Weekend



- April 7 – 8, 2018
- SNC will be on-site at maple farms across the jurisdiction!

Holly Nyenkamp, Communications and Outreach Assistant



## Community Outreach: Annual Clean-Up



2017 CITO, Navan

### Cache-In-Trash-Out – Geocaching Community Clean-Up

- April 28, 2018
  - Clarence Creek
- Partnership with the Geocachers of Eastern Ontario

Kelsey Smith, Communications and Outreach Assistant

# Safety First

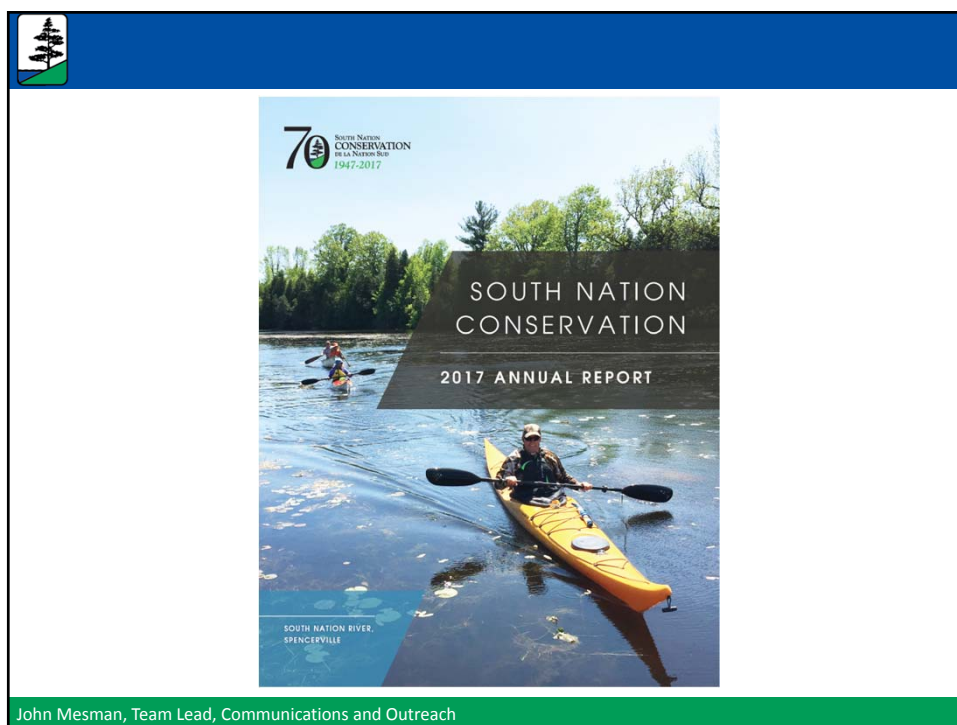
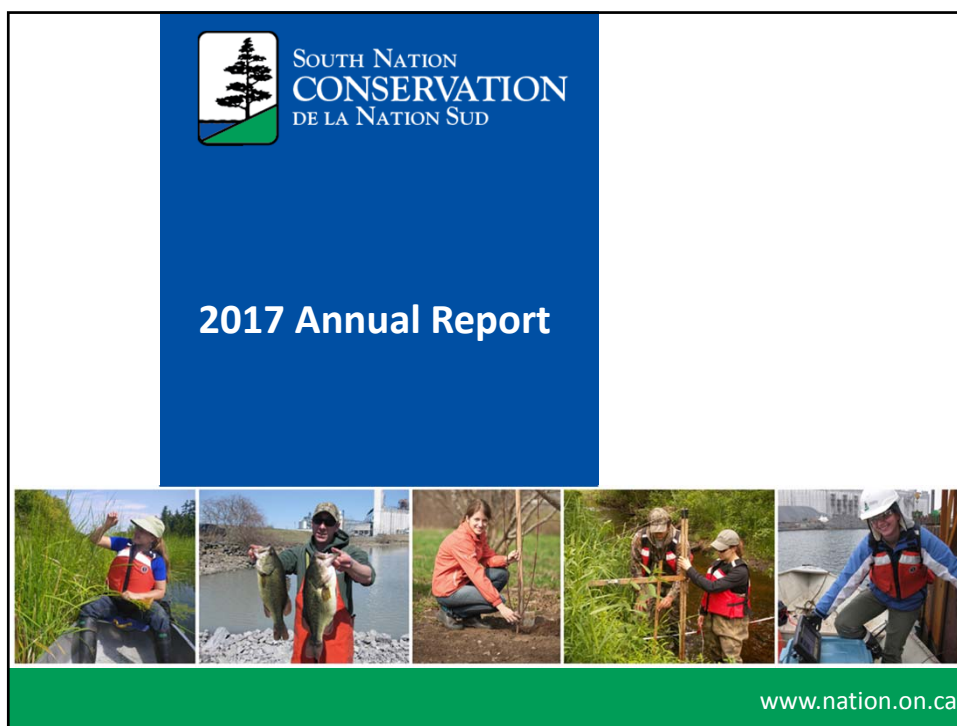
**Surface Ice Field Safety**  
RVCA, MVCA and SNC staff - Comprehensive safety and rescue training

David Fitch, Works Superintendent Assistant

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## 2017 YEAR IN REVIEW

### ST. LAWRENCE RIVER STUDENT SUMMIT

**Providing Opportunities for Students to Experience their Local Environment**

In partnership with Ontario's Ministry of Education and the Ministry of the Environment and Climate Change, South Nation Conservation (SNC) hosted nearly 100 Specialist High Skills Major students for the inaugural St. Lawrence River Student Summit during October.

The three-day Summit featured a range of environmental, leadership and educational programming, including: invasive species removal, water quality testing, an Indigenous sunrise ceremony, and a boat cruise along the St. Lawrence River.

Student teams were tasked with delivering innovative pitches on how to solve problems related to the loss of riparian habitat to a panel of Great Lakes decision-makers at the end of the Summit.

In any given year, SNC reaches over 4,000 youth through hands-on environmental education programs in Eastern Ontario. Guided by SNC's environmental specialists, youth learn about a range of conservation topics.



*Student team at St. Lawrence River Student Summit Pitch Session at Fort Henry in Kingston*

### FEDERAL GOVERNMENT INVESTS ONE MILLION DOLLARS IN TECHNOLOGY TO HELP MANAGE RISKS

**Protecting Communities with Science**

With Agriculture and Agri-Food Canada's financial support, SNC is developing state-of-the-art technology in predictive watershed modelling.

The model will enhance existing Flood Forecasting and Warning and Low Water Response programs, allowing SNC to provide more advanced, accurate notice for flood events so that farmers, municipalities, and residents can prepare accordingly.



*Predictive watershed modelling equipment site in Winchester*

## 2017 YEAR IN REVIEW

### SNC CELEBRATES 70 YEARS OF CONSERVATION

**Recognizing Leadership in Watershed Management**

2017 marked the celebration of SNC's 70th anniversary of environmental conservation. Residents and partners were invited to share in SNC's dedication to watershed management, environmental stewardship, and community engagement at monthly events.

Retiring in May, Dennis O'Grady had served as SNC's General Manager for 35 years, welcoming Angela Coleman as SNC's new leadership.

In May, SNC was home to a public open house, an eco-adventure day, and an anniversary and retirement celebration for Dennis O'Grady.



*Students learning about aquatic invertebrates found in the SNC Watershed at SNC's Eco-Adventure Day in Finch*

### PROTECTING ONTARIO'S RARE HABITATS

**\$16,000 Patagonia Investment**

In 2017, SNC worked to reduce the trend of declining wetlands in Eastern Ontario through projects that promote habitat restoration, improve biodiversity, and increase awareness on the importance of green infrastructure.

Stewardship efforts included the enhancement of approximately 1 acre of rare fen habitat in the Lettern Wetland through invasive species removal and native tree planting.

This year's fen restoration project is just one of the many ongoing initiatives that SNC completes within the Findlay Creek Community each year. Other 2017 activities included a spring clean-up and shrub giveaway event, riparian tree planting events for students, interpretive hikes along the boardwalk, a local wildlife show, and a visit from Ontario's Invasive Species Council.



*SNC Stewardship Staff and volunteers planting trees as part of the Lettern Wetland fen restoration project in Ottawa*

**John Mesman, Team Lead, Communications and Outreach**


## 2017 PROGRAM HIGHLIGHTS

### ENDLESS RECREATION OPPORTUNITIES AT SNC CONSERVATION AREAS


In 2017, SNC's network of 14 Conservation Areas (CA) welcomed over 65,000 visitors to hike, picnics, kayak, canoes, launch their boat, bird watch, fish, and enjoy their local environment.

**The most popular destinations?**  
J. Henry Tweed CA in Russell with 20,562 visitors and W.E. Burton CA in Russell with 16,461 visitors.


2017 was a year of many CA upgrades! Improvement highlights included a new accessible dock at Cass Bridge CA, the installation of 100 new property identification signs on SNC-owned land, the addition of 2 new park benches and the maintenance of 10 partnership docks.



*Hike at Warwick Forest Conservation Area in Berwick*



*Property identification sign at a SNC property in South Dundas*



*Kayaking at Cass Bridge Conservation Area in Winchester*

### LAND PARTNERSHIPS SUPPORT LOCAL ECONOMY

SNC partners with area businesses and community members to sustainably harvest locally-sourced products from our land and to support the local economy.

**HUNTING**  
Nearly 9,000 acres of SNC land is used by hunters; 17 permits issued in 2017.


**TRAPPING**  
Nearly 9,000 acres of lands used by trappers; 6 permits issued in 2017.

**HONEY**  
SNC is gifted 10 lbs of honey annually from local beekeepers; 1 barrel loaned in 2017.

**MAPLE SYRUP**  
15 acres of SNC land is leased for sugar bush operations. SNC land has the potential for approximately 2,300 taps, which could make 825 gallons of sweet maple syrup!

**CROP PRODUCTION**  
30 acres of SNC land is leased to local farmers.

The guidance, wisdom, and holistic perspectives shared through partnerships with First Nations ensure the protection of culturally significant spaces.



*Beekeeping at Andromeda Apiaries in Berwick*

### WOODLOT MANAGEMENT AND TREE PLANTING


- Planted 98,370 trees, adding to the 2.94 million trees planted since 1980.
- Worked with 17 Forest Stewards to monitor forest activity on 39 SNC properties.
- Provided over \$113,000 in grants through Forest Ontario's 50 Million Tree Program to help plant trees on private land.
- Provided \$15,670 in grants and free Woodlot Advisory Service visits to 32 property owners to create forest management plans for 1,152 acres of land.
- Assessed 238 acres of land for species at risk.
- Worked with local farm producers and agricultural organizations to help provide recommendations on ways to improve forest cover.

### CLEAN WATER PROGRAM


- Awarded over \$30,000 in cost share grants to residents for projects that improve water quality.

### WATERSHED MONITORING AND REPORTING

- Surface water, groundwater, and fisheries sampling was conducted to produce the Bear Brook Subwatershed Report Card.



*Watershed monitoring being conducted by SNC Stewardship Staff and summer students*



*Oschmann Forest in Ormond*


### LAND SECUREMENT

Three new properties were acquired through donation or purchase in 2017.

**Oschmann Forest, Township of North Dundas**  
This unique 18-acre forest near Ormond, previously owned by the Oschmann Family, boasts a diverse woodlot with mature Maple, Oak, Ash, and even Butternut trees. The property was also actively managed for maple syrup production for 50 years.

**Riddell Property, City of Clarence Rockland**  
Located adjacent to an existing SNC property, a portion of this 50-acre property is designated as a Provincially Significant Wetland.

**Vas Nunes Property, Township of North Stormont**  
This 57-acre property is a headwater feature of Moose Creek and features an extensive wetland and a white spruce and pine plantation.



*Oschmann Forest Official Opening in June 2017*

**John Mesman, Team Lead, Communications and Outreach**



## 2017 PROGRAM HIGHLIGHTS

**SOURCE WATER PROTECTION – RISK MANAGEMENT PLANS COMPLETE**

In 2017, the Rain-South Nation Source Protection Team managed 702 drinking water threats on 210 properties and worked with landowners to develop 94 plans to mitigate risks to drinking water sources.

**COMMUNITY ENVIRONMENTAL GRANTS**

Grants are offered to community groups and non-profit organizations to support events and projects within SNC's jurisdiction that promote recreational use of our river, protect the environment, and celebrate the natural heritage of the area.

In 2017, over \$6,000 were awarded to groups across the jurisdiction supporting local fishing debates, festivals, agriculture events, canoe and kayak runs, and heritage events.

**HABITAT RESTORATION**

The ability to work and report changes to an ecosystem is dependent on sound, science-based monitoring programs. SNC collects information on surface and ground water, water quality and quantity and native, invasive and at-risk species.

In 2017, our monitoring efforts guided over 5 restoration projects to improve water quality, stream flow, mitigate erosion, protect people and property and enhance ecosystems including sites along Sheeh's Creek and the South Carleton River in Ottawa.

**SUPPORTING SUSTAINABLE DEVELOPMENT**

SNC reviews development applications and provides technical advice on environmental aspects of projects. In 2017, 461 planning and 68 regulations applications were submitted for review, and 165 permits were issued.

SNC officials also conduct septic inspections for municipalities. In 2017, the City of Cornwall expanded part of SNC's jurisdiction, allowing SNC to deliver Part 8 of the Ontario Building Code (septic systems) on their behalf, becoming the 13th municipality to partner in this program. In 2017, over 370 septic permits were issued to residents across the jurisdiction.

**FLOOD FORECASTING AND WARNING**

The Flood Forecasting and Warning program advises and updates municipalities and the public of potentially unsafe conditions due to flooding. In 2017, 34 watershed conditions and flood statements were issued for the SNC jurisdiction, an additional 20 were issued in response to the Ottawa River flooding, and 18 for the St. Lawrence River flooding. Both flood events were historic.

SNC also operates several water and erosion control structures including dams, weirs, and berms to reduce risk to life and damage to property.



### 2017 BOARD OF DIRECTORS

SNC's Board of Directors consists of 12 appointed representatives from SNC's 16 member municipalities who govern and provide direction for all the work completed by SNC staff.

Front (left to right): Fernand Duane, Vice Chair, Prescott Russell, François St. Amour, Chair, Prescott Russell, Doug Thompson, Past Chair. Back (left to right): Angèle Chénier, General Manager/Secretary, Treasurer, SNC, George Demers, City of Ottawa, François Loring, Sherbrooke, Dorothea and Géraldine, Arlette Mallon, Stormont, Dundas and Glengarry, Glenn Mackay, Leeds and Grenville, Peggy Taylor, Leeds and Grenville, Peter Lewis, Prescott Russell, Bill Smith, Stormont, Dundas and Glengarry, Robert Stephen Blair, City of Ottawa, Magda Kabanowski, City of Ottawa.

**2017 SNC BUDGET SUMMARY**

Budget: \$7,708,345


- General Levy: \$3,147,471
- Special Levy: \$550,000
- Government Grants: \$191,500
- Partners: \$1,939,790
- User Fees: \$761,235
- Other Sources and Donations: \$1,118,349



Category	Percentage
General Levy	41%
Special Levy	7%
Government Grants	25%
Partners	10%
Other Sources & Donations	2%
User Fees	14%


John Mesman, Team Lead, Communications and Outreach

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**SOUTH NATION  
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DE LA NATION SUD

**Enhancing Flood and Drought  
Forecasting Tools  
in the South Nation River  
Watershed**


SNC Annual General Meeting  
March 15, 2018

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## Forecasting Watershed Conditions



St. Lawrence River - 2017  
Edwardsburgh Cardinal

- Services:
  - Flood Forecasting and Warning
  - Low Water Response
- SNC's role:
  - Collect data and monitor local conditions
  - Assess local conditions and weather forecast
  - Provide advance notice to municipalities and residents

Sandra Mancini, Team Lead, Engineering



## Enhanced Forecasting Project – aka AgriRisk

- Real-time forecasting model that will be able to predict soil moisture, groundwater levels, surface water levels and evaporation 14 days into the future
- The 14 day forecast will be accessed through an online portal
- Proof of concept model/dashboards for March 31<sup>st</sup>, 2018

### Partners:



Sandra Mancini, Team Lead, Engineering



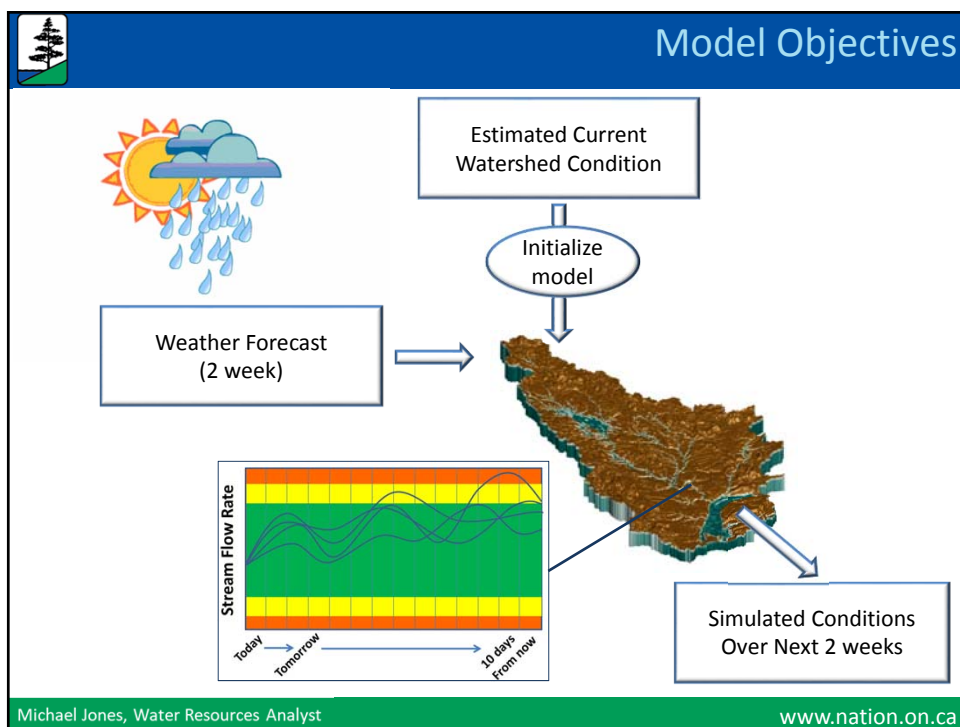
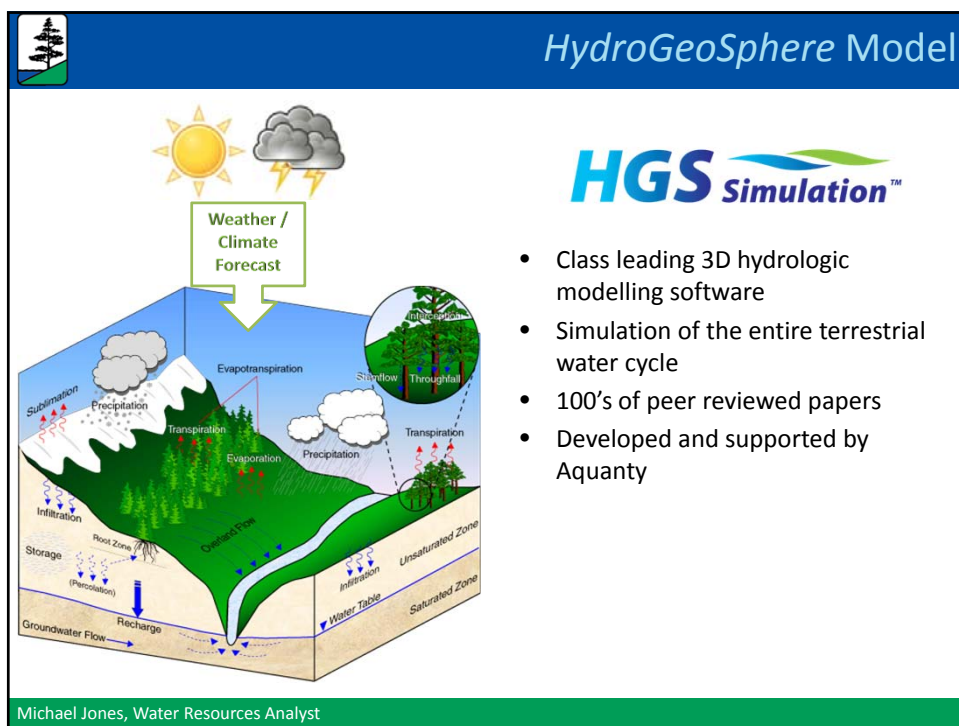
## Improved Field Data



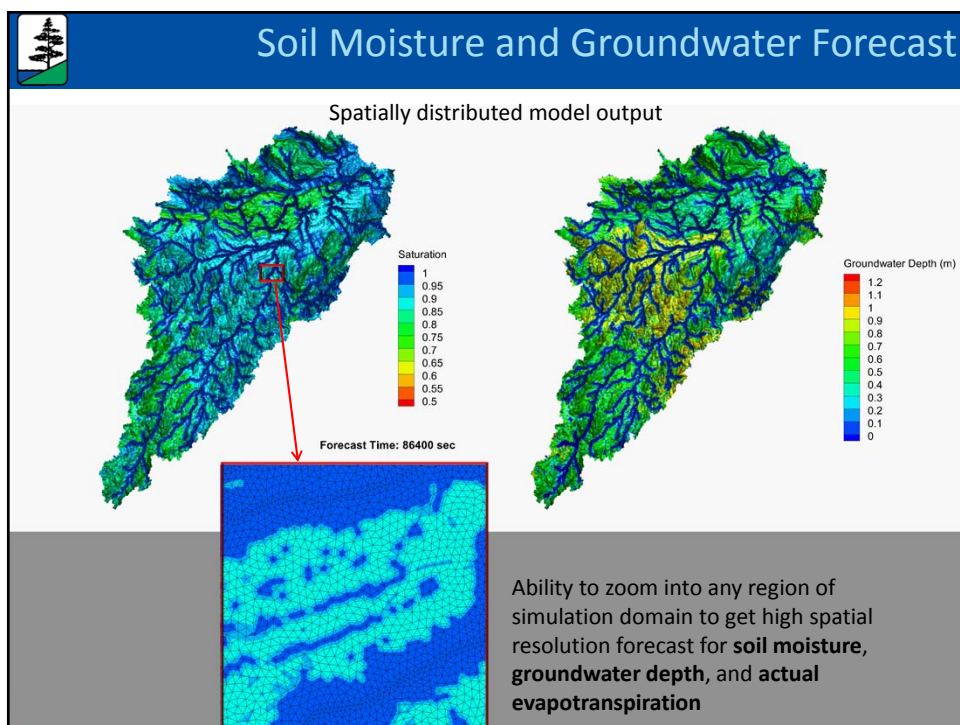
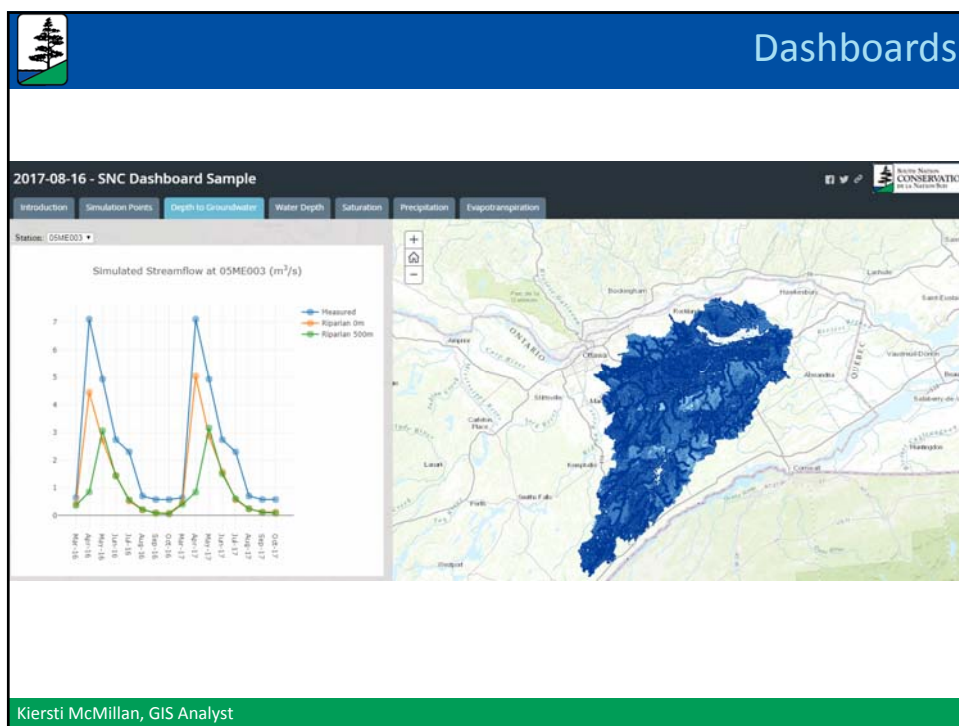
Installation of new real-time monitoring equipment, Winchester site

- 10 existing real-time stream flow gauges
- 11 upgraded monitoring stations to real-time
  - Temperature
  - Rain and snow equivalent
  - Groundwater levels
  - Soil moisture
- All water management database - WISKI

Sandra Mancini, Team Lead, Engineering







## Communications and Outreach

Official announcement, August 23, 2017  
Winchester Monitoring Site

- Official Announcement
- Article in Saskatchewan Business Magazine
- Presentations:
  - AgriRisk Forum
  - A.D. Latornell Conservation Symposium
  - Eastern Ontario Crop Conference
  - Geoscience Conference
  - Dundas Federation of Agriculture AGM
  - Municipal Information Day
  - Flood Forecasting and Warning Provincial Workshop (September 2019)

Ronda Boutz, Team Lead, Special Projects [www.nation.on.ca](http://www.nation.on.ca)

## Future Development of the Model

- Make model more robust to provide field level forecast data
- Deploy additional soil moisture probes to enhance spatial data
- Public dashboard portal to view forecast data

Ronda Boutz, Team Lead, Special Projects

Next Steps


- Gather farmer's input on model "wish list" for future uses
- Finalize Phase II deliverables
- Prepare funding proposal
- Secure funding to move forward

Ronda Boutz, Team Lead, Special Projects

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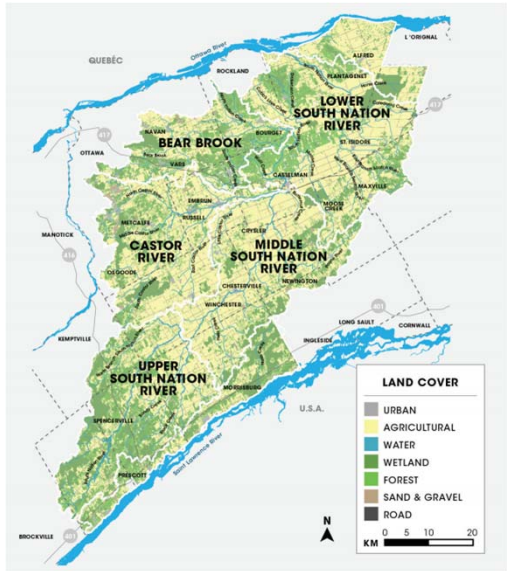
## State of the Nation

[www.nation.on.ca](http://www.nation.on.ca)



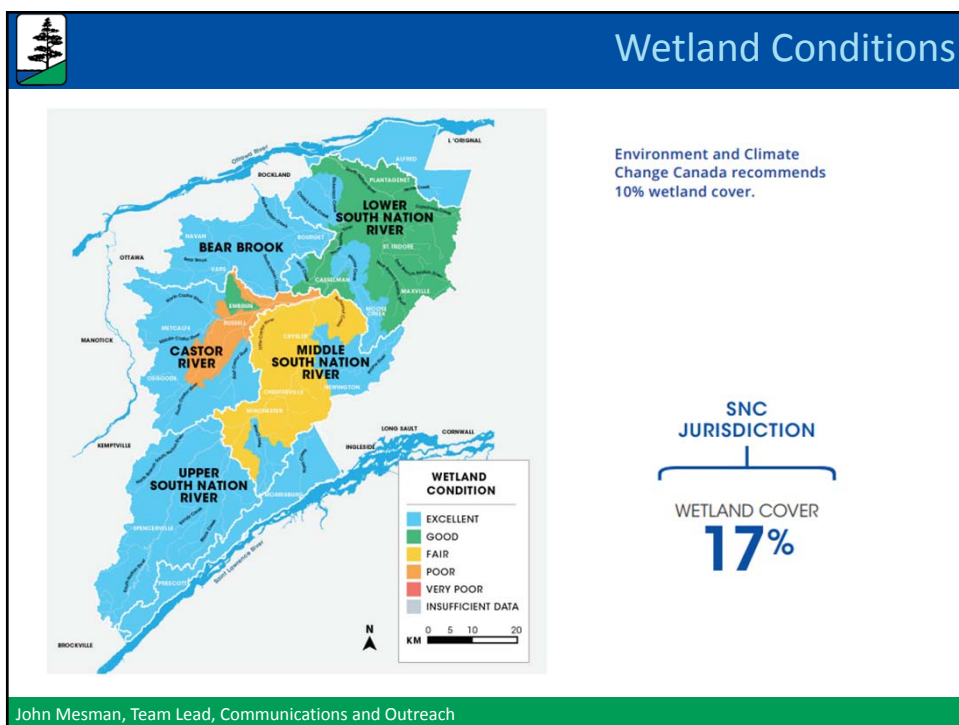
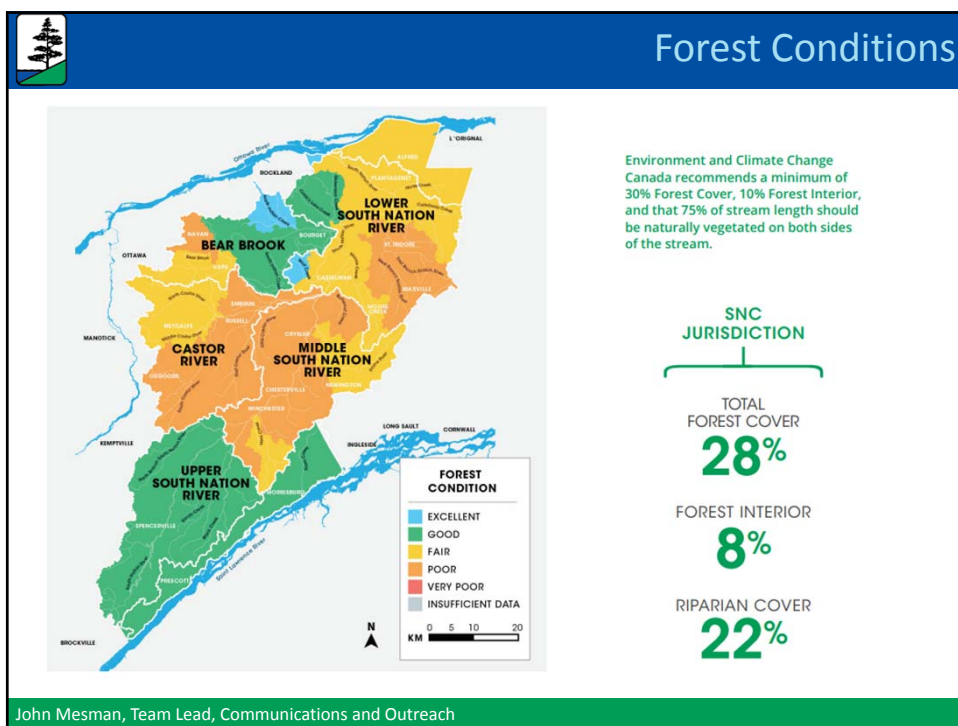
## 2018 Watershed Report Card



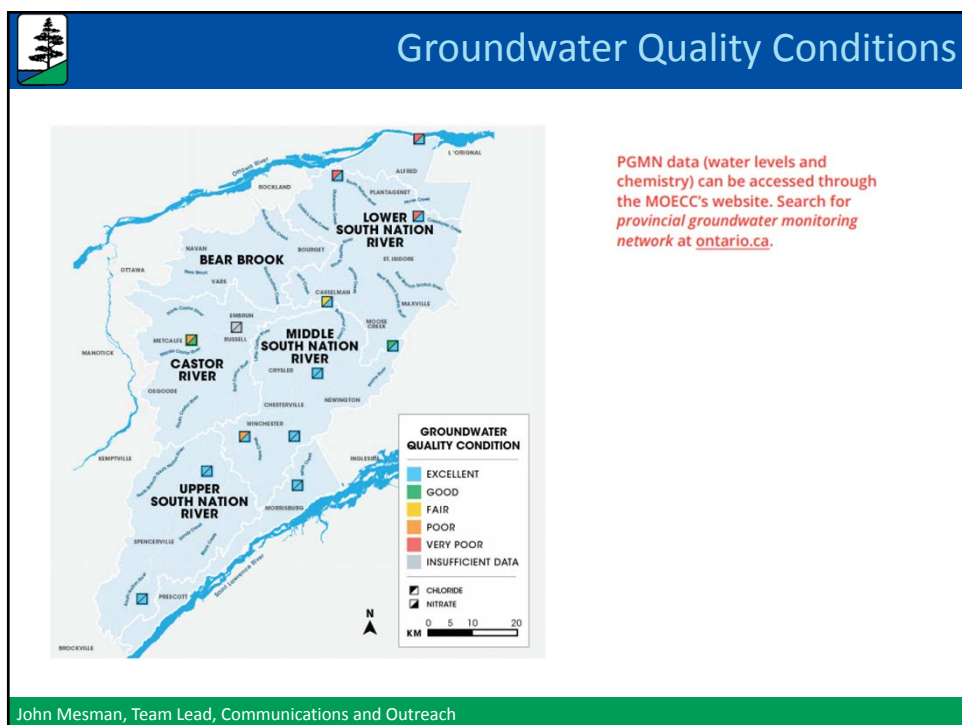
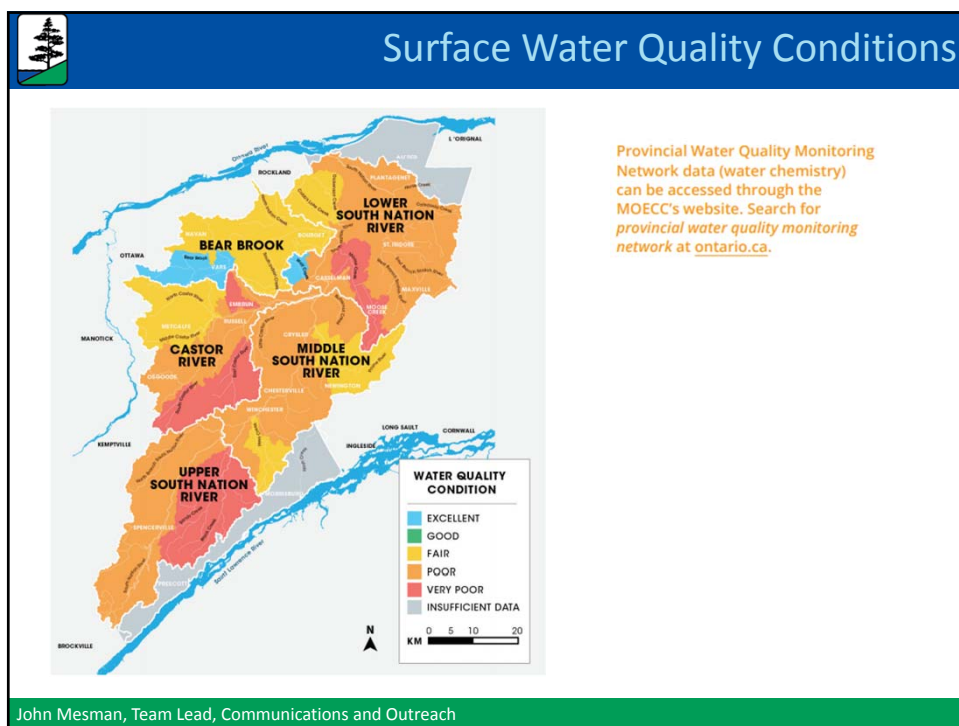
**WHAT IS A WATERSHED REPORT CARD?**


Ontario's Conservation Authorities report on watershed conditions every five years. The watershed report cards use Conservation Ontario guidelines and standards developed by Conservation Authorities and their partners.

John Mesman, Team Lead, Communications and Outreach












## 2018 Watershed Report Card



**STATE OF  
THE NATION**


WATERSHED REPORT CARD 2018

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

John Mesman, Team Lead, Communications and Outreach

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