

# ST. LAWRENCE RIVER STUDENT SUMMIT

### OVERVIEW | OCTOBER 16-18, 2017

The inaugural St. Lawrence River Student Summit is proudly hosted by South Nation Conservation (SNC) in partnership with the Ministry of Education's Specialist High Skills Major program, with funding support from the Ministry of the Environment and Climate Change (MOECC).

Over 100 grade 11 and 12 high school students from 3 participating school boards will be brought together for 3 exciting days of discovery, innovation and collaboration!

Over the course of the Summit, students will learn about the importance of protecting and restoring freshwater ecosystems for future generations. Students will need to be entrepreneurial in putting together creative solutions to a local problem, while balancing human and environmental needs.

On the final day of the Summit, student groups will share their results from the Challenge Statement to a panel of Great Lakes – St. Lawrence River decision-makers.

### **CHALLENGE STATEMENT**

The Great Lakes – St. Lawrence River ecosystem forms the largest freshwater system in the world, which holds 20% of all the liquid freshwater on the planet.

Nearly 99% of Ontarians live in this basin which consists of a network of connecting lakes and watercourses and supplies people with the water needed to sustain life and livelihoods.

Riparian areas link water to land and surround waterbodies. They are composed of moist to saturated soils, water-loving plant species, tree cover and associated ecosystems. They consist of complex interactions between water, soil, microorganisms, plants and animals, while linking ecosystems across the landscape.

People have long relied on riparian areas for the abundant food, water and material resources they supply. Historically, they provided transportation corridors for travel by boat and were often the only flat areas suitable for building roads, farms and cities. For these reasons, many riparian areas are among the most densely populated urban regions.

Development within riparian areas comes with a cost. Loss of riparian areas threatens the survival of wildlife, as well as the continued functioning of their associated ecosystems, upon whose services we rely. Removal of riparian areas reduces water quality, increases risk of erosion and flooding, and threatens ecosystem connectivity across the landscape.

How might we enhance, restore, and increase the value of riparian areas for the improvement of the Great Lakes and St. Lawrence River basin?

### ONTARIO'S CONSERVATION AUTHORITIES



Over 90 percent of the province of Ontario falls within the boundary of a Conservation Authority. Conservation Ontario is the network of 36 Conservation Authorities – regional agencies that deliver programs and services that protect and manage natural resources together with government, landowners and partner organizations. Created in 1946 by an Act of the Ontario Legislature, Conservation Authorities promote an integrated watershed approach balancing human, environmental, and economic needs.

#### SOUTH NATION CONSERVATION

South Nation Conservation has a strong history in watershed management and leadership in applying sustainability practices. As an environmental agency established in 1947, SNC has decades of practical experience in protecting our local environment and engaging communities. Today, it manages 4,384 km² of land in Eastern Ontario; employs more than 50 staff; and has led hundreds of stewardship projects to success.

#### SPECIALIST HIGH SKILLS MAJOR PROGRAM

Specialist High Skills Major programs are for high school students in grades 11 and 12 who are planning to attend college, university, apprenticeship training or heading straight to the workforce. The program allows students to explore and gain insight into a career path that matches their skills and interests, while meeting the requirements of the Ontario Secondary School Diploma.

#### INNOVATION, CREATIVITY AND ENTREPRENEURSHIP TRAINING

Innovation, Creativity and Entrepreneurship training helps to prepare students for life in the workforce. This training exercise provides students with an opportunity to work through real-world problems by developing problem solving skills to overcome challenges that may impact their future careers.



# **AGENDA**

## OCTOBER 16 - 18, 2017

DAY 1: MONDAY, OCTOBER 16		
8:30 AM	Departure from schools Interpretive Watershed Bus Tours Stops include: the Spencerville Mill and Museum, Baxter Conservation Area and Marble Rock Conservation Area.  Gear 1: Empathy & Needs Finding	
11:30 AM	Lunch	
1:00 PM	St. Lawrence River – 1,000 Islands Boat Cruise • Interpretive Natural Heritage Tour	
3:30 PM	Depart from Gananoque to Kingston	
4:00 PM	St. Lawrence River and Great Lakes 101 Presentation at Bayridge Secondary School in Kingston  Delivered by the MOECC and the St. Lawrence River Institute	
5:00 PM	Dinner at Bayridge Secondary School • Prepared by hospitality students	
6:00 PM	Departure from Kingston to Camp IAWAH in Godfrey	
7:00 PM	Check-in at Camp IAWAH	
8:30 PM	Introductions and Ice Breaker Activity	
9:30 PM	Evening Snack	
10:00 PM	Prepare for bed/evening showers	
10:30 PM	Quiet Time	
11:00 PM	Lights Out	

# AGENDA

## OCTOBER 16 - 18, 2017

DAY 2: TUESDAY, OCTOBER 17		
7:00 AM	Breakfast	
7:45 AM	Sunrise Ceremony  Led by First Nations Elder	
8:30 AM	Team Challenges and Low Ropes Course – Leadership Certification	
12:00 PM	Lunch	
1:00 PM	Introduction of Summit Challenge Statement Innovation, Creativity and Entrepreneurship Workshop  Gear 2: Ideation and Prototyping  Gear 3: Strategy	
5:00 PM	Dinner	
6:00 PM	Innovation, Creativity and Entrepreneurship Workshop  Gear 3: Testing	
6:45 PM	Break	
7:00 PM	<ul> <li>Evening Activity</li> <li>Option 1: Campfire and Relaxation</li> <li>Option 2: Board Games</li> <li>Option 3: Sports (Ultimate Frisbee, Basketball, etc.)</li> </ul>	
9:00 PM	Evening Snack	
10:00 PM	Prepare for bed/evening showers	
10:30 PM	Quiet Time	
11:00 PM	Lights Out	



# AGENDA

## OCTOBER 16 - 18, 2017

DAY 3: WEDNESDAY, OCTOBER 18		
7:00 AM	Breakfast	
8:00 AM	<ul> <li>Watershed Stations – Environmental Certification</li> <li>Station 1: Citizen Science Water Quality Testing with the Water Rangers</li> <li>Station 2: Fish Sampling</li> <li>Station 3: Benthic Invertebrate Sampling</li> <li>Station 4: Interactive Watershed Model</li> </ul>	
10:00 AM	Practice Innovative Solutions Test Pitch in Groups	
11:00 AM	Pack and load buses	
11:30 AM	Depart from Camp IAWAH	
12:30 PM	Arrive at Fort Henry in Kingston	
1:00 PM	Sharing Summit Results: Student Pitch Session  Group presentations on innovative ideas to address the Summit's Challenge Statement.  Senior St. Lawrence River decision-makers will listen and respond to the proposed solutions from the student presentations.	
2:30 PM	Summit wrap-up	
3:00 PM	Bus departures	

### ST. LAWRENCE RIVER DECISION-MAKERS

#### ANGELA COLEMAN

General Manager/Secretary-Treasurer, South Nation Conservation Authority

Angela is a graduate from the University of Ottawa's Faculty of Law and was admitted to the Bar of the Province of Ontario in 2010. Angela articled and practiced with a large Ottawa law firm, and now works with the South Nation Conservation Authority as General Manager.

The shift from city to country was spurred by the purchase of a local maple syrup operation in 2010. Angela now owns and operates Sand Road Maple Farm, in Moose Creek Ontario, with her husband. The Maple Farm operates as a traditional maple farm and pancake house in the early spring, and wedding and meeting destination throughout the year. Angela is a director and volunteer with many community groups and associations and is proud to live and work in Eastern Ontario. With a background this diverse: you just never know where you might find her!

### **DR. BRIAN HICKEY**

Program Leader Education / Research Scientists, St. Lawrence River Institute

Dr. Brian Hickey is a Senior Research Scientist and the Education Program Leader for the St. Lawrence River Institute. He received his graduate degree in Biology from York University, where he studied the behavioural and physiological variation of red and hoary bats in response to changing environmental conditions. Brian's current research efforts are directed at evaluating the responses of fish and wildlife communities to habitat degradation, restoration efforts, and ecological effects of water level variation.

#### **WALTER OEGGERLI**

Chair, St. Lawrence River Restoration Council and Owner/Operator at Heidi Farms Inc.

Walter has been the Chair of the St. Lawrence River Restoration Council since 1998. He currently serves as the Chair of the St. Lawrence River Institute's Board of Directors and acts as an agricultural representative on the Raisin-South Nation Source Protection Committee. Committed to a career in agriculture, Walter is also the current owner/operator of Heidi Farms Inc. in Bainsville, ON.

#### **CLAUDIA RIBEIRO**

Project Coordinator, AquaHacking Challenge

A large-scale social project manager, Claudia Ribeiro has been involved in philanthropy for the last seven years. Working with the de Gaspé Beaubien Foundation since 2014, Claudia has been responsible for the technological component of the AquaHacking movement, whose mission is to preserve the Great Lakes and St. Lawrence River basin by supporting the development and implementation of tech-based solutions.

As a highly dedicated and proactive individual, Claudia has contributed to the successful deployment of three editions of the Aqua-Hacking Challenge, an annual event bringing together hundreds of water experts, hackers, engineers and creative minds to develop tech solutions to solve water issues. She has continually improved the hacking challenge experience since its beginnings, developing strong relationships with tech communities, universities, mentors, incubators and water experts, seeking new partnerships and opportunities, all while moving to a different body of water each year.

#### **HOLLEE KEW**

Director, Eastern Region, Ontario Ministry of the Environment and Climate Change

Hollee is the co-chair of the Canada-Ontario Agreement on Great Lakes Water Quality and Ecosystem Health Management Committee. As the lead director, she is responsible for overseeing the management of MOECC's \$15 million annual Great Lakes budget for the implementation of programs under Ontario's Great Lakes Protection Act, Ontario's Great Lakes Strategy, and the Canada-Ontario Agreement on Great Lakes Water Quality and Ecosystem Health.

As Director of MOECC's Eastern Region she is also responsible for the inspection of waste disposal sites, water and sewage facilities, regulation of pollutants emission, approvals under the Environmental Protection Act, and field assessments of air, land and water conditions.





