

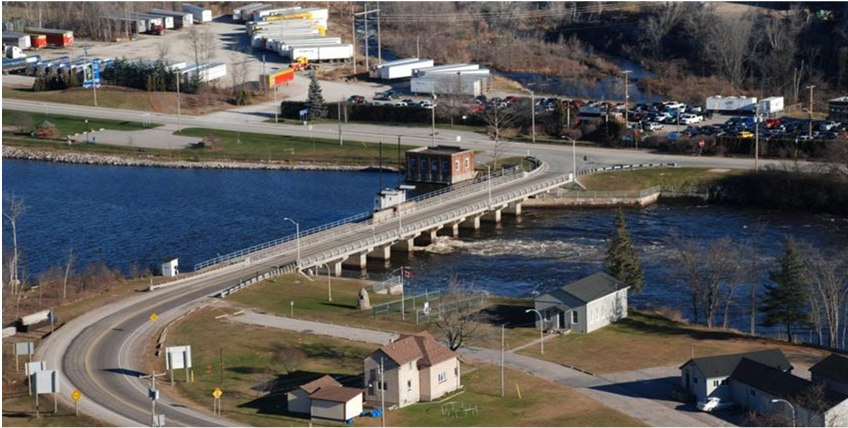


Serving
GOVERNMENT,
serving
CANADIANS.

Au service du
GOUVERNEMENT,
au service des
CANADIENS.

Timiskaming Quebec Dam Replacement

AOO Community Session No.1
May 13, 2021



Public Services and
Procurement Canada

Services publics et
Approvisionnement Canada



Presentation Outline

- Introductions
- Project Overview
- Federal Impact Assessment Process
- Environmental Impact Statement
- Indigenous Consultation
- Questions & Answers



Introduction

Introduction



Trevor Smith
Project Leader

Tina Hearty-Drummond
Environmental Specialist

Judith Brousseau
Project Manager

Jacqueline Roy
Director, Environment

Caroline Coburn
Managing Director



Project Overview

Project Location

- The Timiskaming Dam Complex lies at the intersection of Lake Timiskaming and the Ottawa River, straddling the border of the provinces of Quebec and Ontario.
- Located on Route 101 in the city of Témiscaming (Quebec), which becomes Highway 63 in Ontario.





City of Thorne

City of Témiscaming

Lake Témiscamingue

Ottawa River

ON

QC



Timiskaming Quebec Dam



Timiskaming Quebec Dam – October 2020



Project Overview

EXISTING BRIDGE/DAM

- Constructed**
- 1909 – 1913
 - Rebuilt in 1934-1936 due to foundation failure
 - Widened in 1970
- Function**
- Water Management
 - Interprovincial Bridge
- Characteristics**
- Gravity dam
 - Concrete superstructure
 - Two-lane roadway
 - 10 stoplogs

DAM REPLACEMENT PROJECT

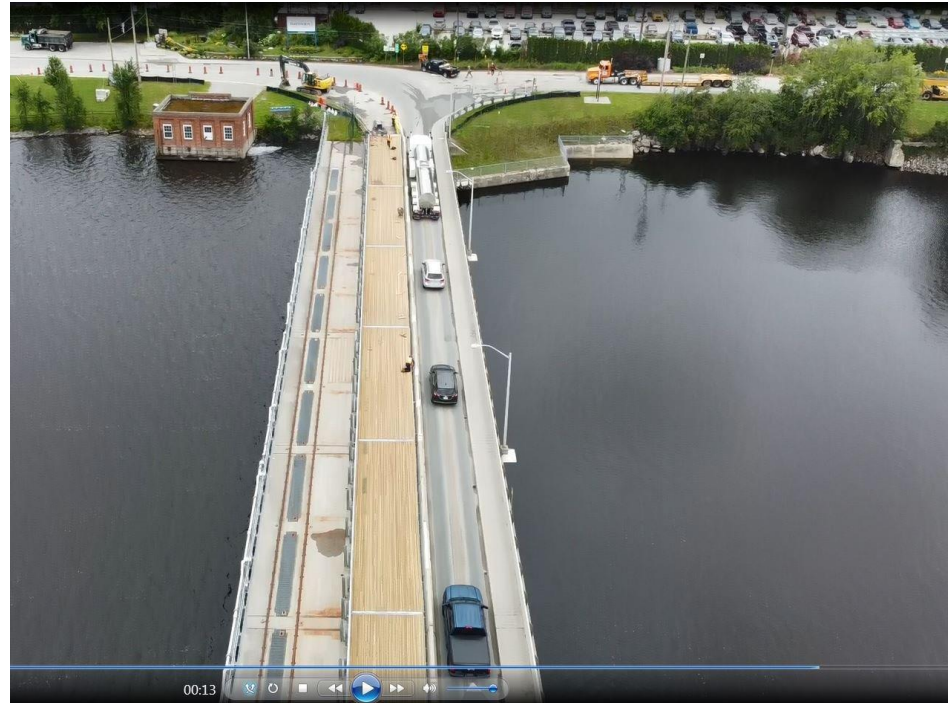
- Objective**
- Replace the dam which is nearing the end of its useful life
 - Address health and safety risks
- Scope of work**
- Build a new structure 25 m downstream
 - Build a fish passage
 - Realign Highway 63 (Ontario) and Highway 101 (Quebec)
 - Demolish the old dam
- Characteristics**
- Similar dam configuration
 - 75 m long
 - 10 mechanical sluiceways
 - Two-lane roadway
 - 140 m long fish passage
- Construction Schedule**
- Expected start in 2026 and end in 2029



Repair Project – Traffic Deck

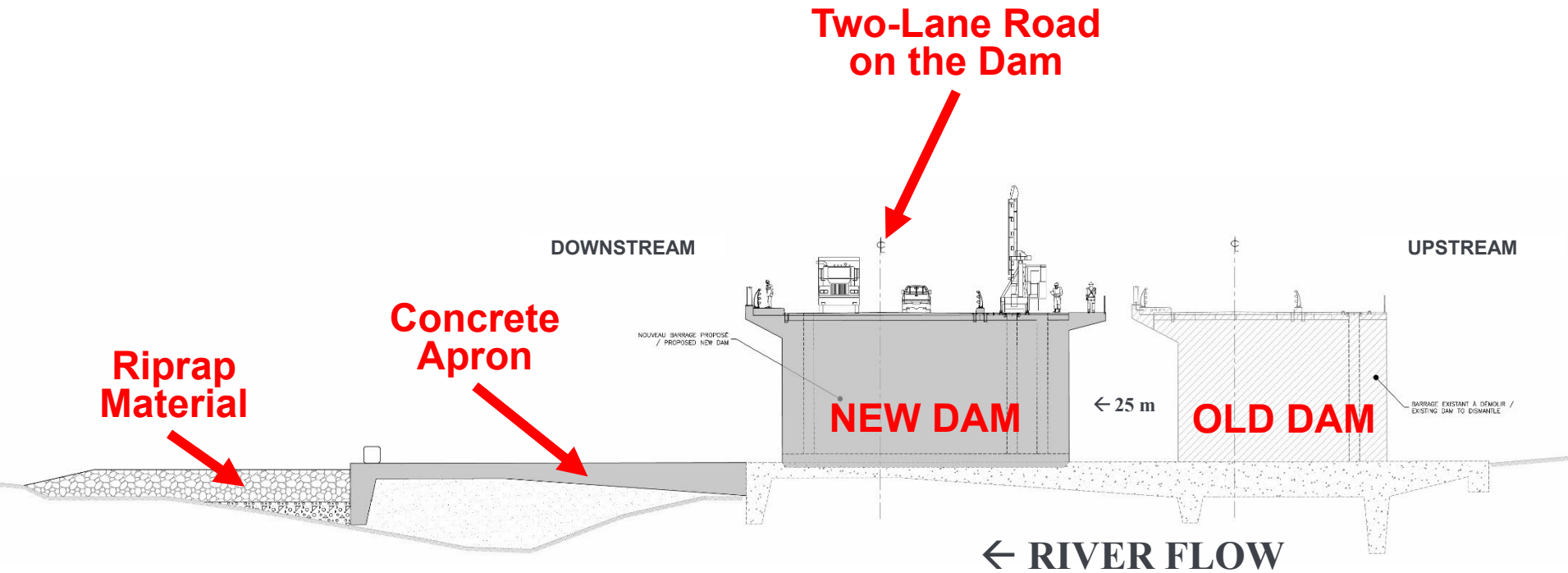
Traffic Deck Project:

- Quebec Dam at its end of useful life:
 - Before proceeding with the full replacement of the dam, urgent repairs were required so that the dam-bridge will remain safe for users.
 - Will extend the life of the Quebec Dam.
 - Allow us to consult with Indigenous groups and to complete the EA process.
- Repairs started in 2019 and will end in 2021.



Traffic Deck - August 2020

Proposed Design



Example of a fish passage

Dam in Manitoba with a fish ladder



Project Schedule / Milestones

Event	Completion Date
Environmental Impact Statement Submission	Summer 2022
Environmental Assessment Report	Fall 2023
Decision of the Minister of Environment and Climate Change	Winter 2024
Department of Fisheries and Oceans Authorization	Winter 2024
Final Construction Documentation	Summer 2024
Indigenous Participation Component	Winter 2025
Tender Call	Winter 2026
Tender Call/ Bid Evaluation	Spring 2026
Construction Contract Award	Summer 2026
Construction Start	Summer 2026
End of Construction	Fall 2029
Environmental Monitoring	Fall 2029 - Spring 2033



Federal Environmental Assessment Process



Federal Environmental Assessment Process

ENVIRONMENTAL ASSESSMENT

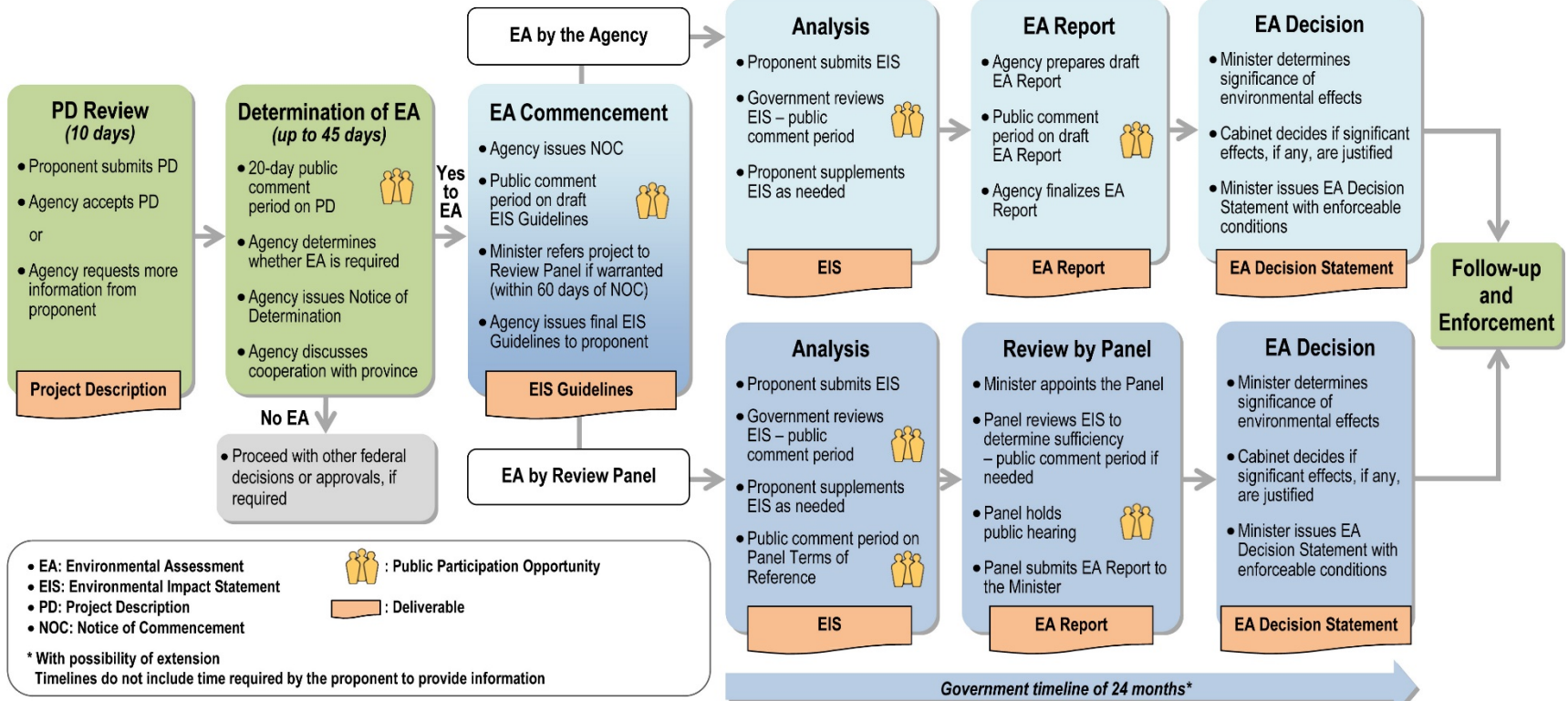
Responsible Authority	<ul style="list-style-type: none">• Impact Assessment Agency of Canada (Agency)
Objective	<ul style="list-style-type: none">• Protect environment from significant negative adverse effect.
Act	<ul style="list-style-type: none">• CEAA 2012, section 14
Approver	<ul style="list-style-type: none">• Minister of Environment and Climate Change
Characteristics	<ul style="list-style-type: none">• Preparation of an Environmental Impact Study (EIS).• Guidelines provided by the Agency for the EIS.• From the EIS submitted, an Environmental Assessment Report will be prepared by the Agency.• Link to access the Agency's Registry: Timiskaming Dam-Bridge of Quebec Replacement Project - Canada.ca (ceaa-acee.gc.ca)



ENVIRONMENTAL ASSESSMENT PROCESS MANAGED BY THE AGENCY

Aboriginal consultation is integrated into the EA to the extent possible

Government timeline of 365 days*



Environmental Impact Statement

Environmental Impact Statement (EIS)

EIS in preparation:

- Baseline data gathered over the past few years;
- Few EIS sections partially drafted;
- EIS completion depends on Indigenous participation:
 - Gather information with and from AOO:
 - Validate valued components and spatial boundaries;
 - Conduct Algonquin Knowledge and Land Use Study (AKLUS);
 - Complete and validate Socio-Economic, Health and Well-Being Baseline;
 - Discuss potential effects, mitigation, significance determination, monitoring and follow-up;
 - Assessment using AOO rights-based approach.
 - Incorporate information into the draft EIS.



Environmental Impact Statement (Cont.)

EIS in preparation (cont.)

- Other steps to undertake:
 - Discuss specific topics of concerns/interests to AOO;
 - Conduct additional field programs (spring and fall fish and turtle surveys in 2021);
 - Submit the draft EIS for AOO review – late 2021/early 2022;
 - Submit the final EIS for AOO review – winter/spring 2022;
 - Submit the final EIS to the Impact Assessment Agency – August 2022.



Environmental Impact Statement (Cont.)

List of studies for the EIS (completed / ongoing / future):

Completed studies:

- Fish and fish habitat inventories and monitoring;
- Fauna (birds, turtles, frogs, mammals, etc.) and flora surveys;
- Noise assessment;
- Species at risk surveys;
- Archaeological assessments;

Ongoing studies:

- Algonquin Knowledge and Land Use Study;
- Health and Socio-Economic Study;

Future studies:

- Additional fish and turtle surveys (spring and fall 2021);
- Archaeological survey during construction;
- Species at risk surveys (just before construction).



Baseline Conditions - Fish

- Comprehensive baseline data for fish:
 - Ontario Dam project:
 - Spring fish survey in 2013;
 - Fish monitoring in 2017 (Year one);
 - Fish monitoring in 2018 (Year two);
 - Fish monitoring in 2020 (Year three).
 - Quebec Dam project:
 - Spring fish survey in 2017;
 - Fall fish survey in 2017;
 - Additional fish surveys in spring and fall 2021.



Fish Surveys - Technique

- Similar protocol and extent for the Ontario and Quebec Dam projects;
- Special attention given to spring and fall fish spawning;
- Field work methodology outlined and approved by Fisheries and Oceans Canada (DFO).



Egg mat



Gillnet

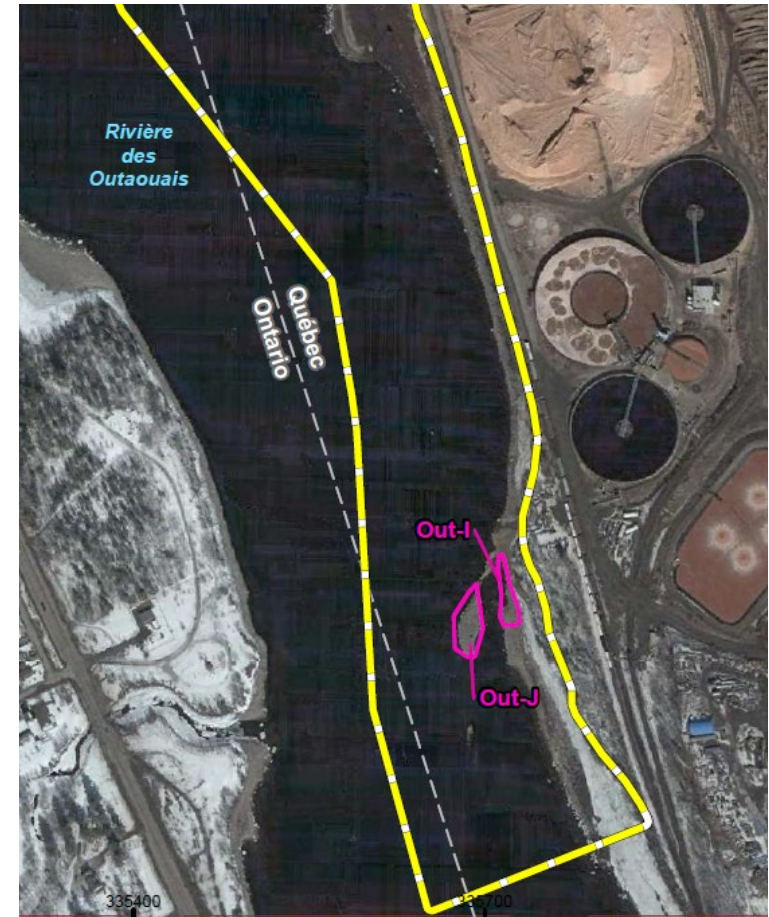
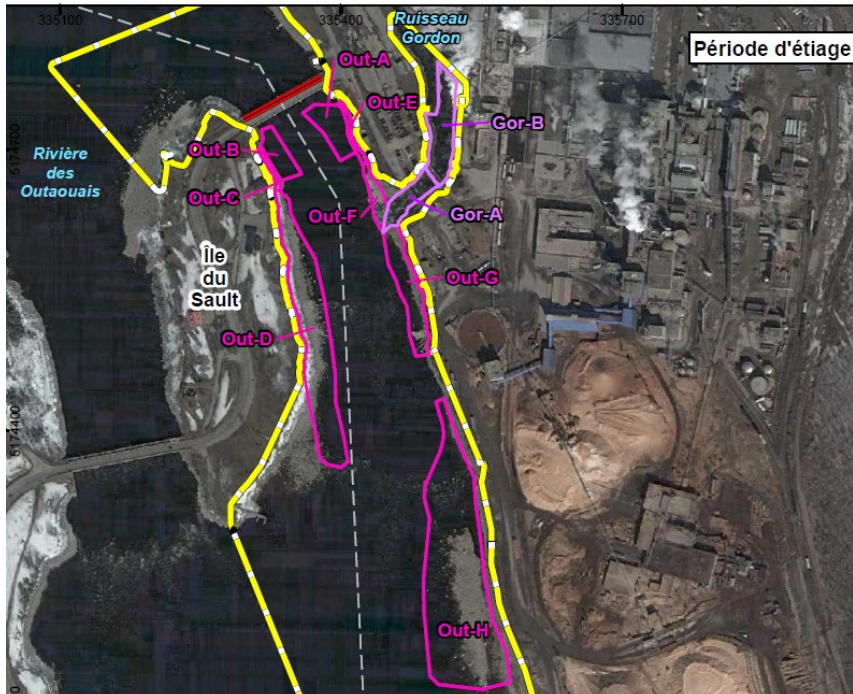


Telemetric fish tag



Fish Surveys – Habitat Identified

Quebec Dam - Spawning Grounds (Spring/Fall 2017 – Biofilia)



Legend

- Out = spawning ground identified in Ottawa River (33,168 m²)
- Gor = spawning ground identified in Gordon Creek (3,956 m²)

Fish Surveys – Major Findings

- Good fish habitat in study zone:
 - 8 species identified in spring 2013;
 - 30 species identified in spring/fall 2017;
 - 1 designated species by Quebec and COSEWIC (Lake Sturgeon);
 - 12 potential spawning areas identified (2017);
 - 4 potential spawning areas identified (2013);
 - Spawning confirmed in 10 areas in 2017 and in 2 areas in 2013.



Baseline Conditions – Flora and Fauna

Habitat Identified



Legend

Vegetation cover (31% of study area)

- Grass land (3,648 m²)
- Fallow land (19,846 m²)
- Wooded river bank/Woodland (11,324 m²)

Migratory bird – Nesting probable

- American yellow wabler (female and chicks)

Migratory bird – Nesting possible

- Song sparrow
- American robin

Migratory bird – Nesting confirmed

- Common merganser (female and chicks)
- Tree swallow (nest)
- Eastern phoebe (nest)

Other animal

- American toad (individual)
- North American beaver
- Marmot

Findings:

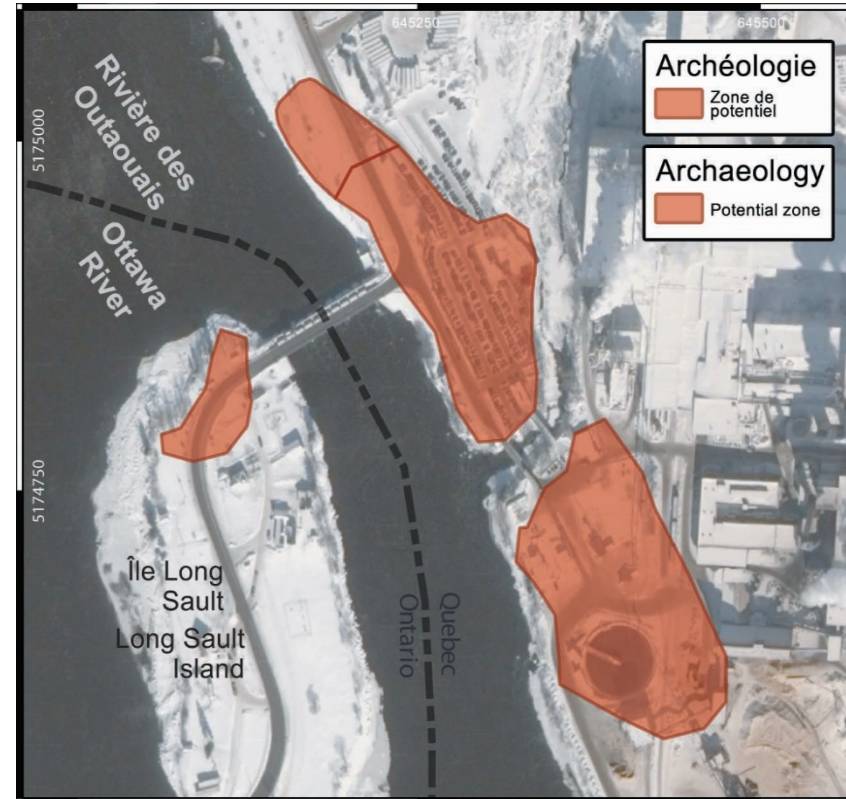
- Poor vegetation habitat in study zone;
- Little suitable habitat for fauna (birds, turtles, frogs, mammals, etc.).

Baseline Conditions - Archaeology

- No material culture uncovered during archeological dig on Long Sault Island;
- Area visited by Indigenous Peoples for thousands of years;
- Archaeological potential zones heavily comprised by urban structures (road, building, factory);
- No significant archaeological potential zone in project area;

Next steps:

- Archeological survey when the cofferdam is built, and constant monitoring during construction in case of artifact discovery.



Health and Socio-Economic Study

- Assess impacts on AOO member health and socio-economic conditions as a result of changes to the environment from the project in each of the phases (construction, operation, demolition)
- Potential impacts (positive and negative) to: flood control, employment and business, access to services, recreation and harvesting fish, plants, wildlife, other?
- Close connection of socio-economic/health study with ATKLU Study and assessment of rights impacts
- Discussion of legacy cumulative effects on Indigenous groups from dam construction and operations in the Ottawa River



Cumulative Effects Assessment

Ongoing discussion on how to assess the CEs

Temporal Boundaries

Period 1	Pre-contact / pre-disturbance
Period 2	Colonization period – including influences of Indian Act, Residential Schools, Settlement, Industrialization and River / Tributary control structures. Recognition of changes over time in environmental protection measures? Other historical influences that should be considered here?
Period 3	Future project construction and future foreseeable projects/activities and climate change
Period 4	Future project operation and future foreseeable projects/activities and climate change



Cumulative Effects Assessment (Cont.)

Spatial Boundaries

Valued Components	Regional Study Area Boundaries
AOO indigenous community health and socio-economic conditions	Ottawa River Watershed
AOO land uses and knowledge systems	Ottawa River Watershed
Any structure, site or thing that is of historical, archaeological, paleontological or architectural significance	To discuss
Algonquin Rights	To discuss / AOO to provide
Fish and fish habitat	Ottawa River Watershed
Terrestrial	To discuss
Migratory birds	To discuss
Other VCs?	To discuss

Cumulative Effects Assessment (Cont.)

List of future foreseeable and past projects or activities:

- Alexandra and Chaudière Bridge Replacement projects;
- Rayonier plant operational changes over time;
- Projects undertaken for Atomic Energy of Canada Limited at Chalk River;
- All dams and structures that are influencing flows in the Ottawa River watershed (including on all tributaries);
- Ministry of Transportation projects;
- Activities at Petawawa;
- Agricultural, Forestry, Mining and other resource development activities in the watershed
- Human settlement
- Parks and protected area designations
- Government policy including Indian Act policies, residential schools, and other policies that have influenced health and socio-economic conditions over time.
- Climate change
- Other?



Indigenous Consultation



CEAA 2012: Indigenous Peoples' Considerations

An effect of any change that may be caused to the environment on:

- Health and socio-economic conditions
- Current use of lands and resources for traditional purposes
- Physical or cultural heritage
- Any feature, site or thing that is of historical, archaeological, paleontological or architectural significance.



Indigenous Consultation

- AOO has been engaged for the replacement of the Ontario Dam project:
 - Latest engagement – Participation in the fish monitoring program (2017-2020).
- For the replacement of the Quebec Dam, discussion with AOO has started since 2017;
- A consultation work plan has been developed and funding has been secured for:
 - Monthly meetings on specific topics of interest for AOO;
 - 3 community presentations;
 - Algonquin knowledge and land use study;
 - EIS document review;
 - Indigenous benefit plan preliminary discussion.



Questions & Answers

Thanks!

Contact Information

Name	Phone	E-Mail
Trevor Smith, PSPC	613-793-2646	trevor.smith2@tpsgc-pwgsc.gc.ca
Judith Brousseau, PSPC	613-407-9183	Judith.brousseau@tpsgc-pwgsc.gc.ca
Tina Hearty-Drummond, PSPC	613-736-3070	Tina.hearty-drummond@pwgsc.gc.ca

