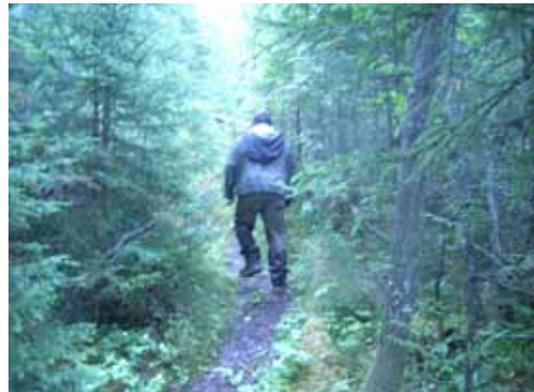


# WELCOME

- Thank you for taking time to visit this Open House.
- Please fill out a Comment Sheet and leave it with us, or take it home and return it later to the address provided.



- A project representative will be glad to answer your questions.
- Your input and comments are an important contribution to helping us develop an environmentally responsible project.



# Purpose of this Open House

- To present to you Ontario Power Generation Inc.'s (OPG) and Coral Rapids Power LP's (CRP) plans to develop a hydroelectric generating station on New Post Creek.



**New Post Creek Today**

- To identify environmental effects and mitigation measures and seek your feedback on these findings.



# Who is Ontario Power Generation?

- OPG is an Ontario-based electricity generation company whose principal business is the generation of electricity in Ontario.
- OPG focuses on the efficient production of electricity from its generation assets, while operating in a safe, open and environmentally responsible manner.
- OPG is a commercial company, owned by the Province of Ontario – its sole shareholder.
- OPG has been given a mandate from the Province of Ontario to develop and expand its hydroelectric capacity.
- This Project will provide more clean, reliable and renewable electricity for Ontario.



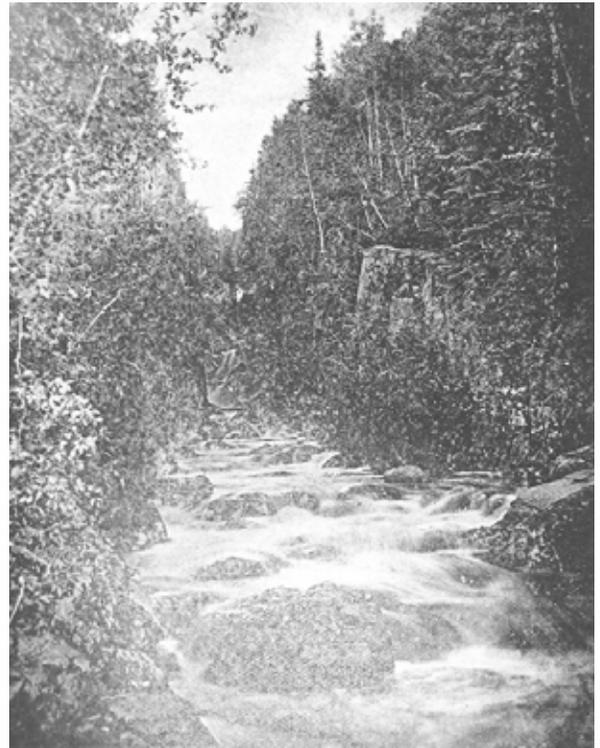
# Who is Coral Rapids Power?

- Coral Rapids Power (CRP) is a company formed and wholly owned by the Taykwa Tagamou Nation (TTN).
- CRP was incorporated by the TTN Chief and Council in 2004 as a vehicle to carry out potential commercial activities related to electricity generation.
- CRP's purpose is to enter into the electricity generation business in Ontario.
- In April 2006, a Memorandum of Understanding was signed between Ontario Power Generation Inc. (OPG) and the Taykwa Tagamou Nation (TTN) to jointly explore hydroelectric development opportunities within the Abitibi River drainage basin, north of Highway 11.
- As a result of this initiative, a potential waterpower generation location was identified on New Post Creek.
- A Grievance Settlement was completed in November 2007 which included a Partnership Term Sheet Agreement between OPG and CRP to move forward with a potential development of the New Post Creek Project. Subsequently in December 2008 the Partnership Agreements were signed.



# History of New Post Creek

- New Post Creek, or Cheepilloya Sebee as it is known in Cree (English translation: Great Partridge River) played an important role in the lives of the people of the Taykwa Tagamou Nation (TTN).
- As the only source of fresh, clear water fed from muskeg in the area, it was a popular camping spot for TTN families who were travelling to and from the Bad River system for fishing, hunting and trapping.
- TTN members have indicated that the Creek was only navigable by canoe for most of its length during the spring runoff, and sometimes during the fall after significant rain events. A short portage route which tracks close to the Hudson Bay Company (HBC) site was used to bypass New Post Creek Falls and access the Abitibi River.
- According to TTN elders, In the summer the flow of New Post Creek below the falls was often just a trickle. It is likely that the creek would have had a flow of 1 or 2 cubic meters per second (cms).
- In 1963 flows were diverted from the Little Abitibi River into New Post Creek to increase flow and therefore generation at Otter Rapids Generating Station.



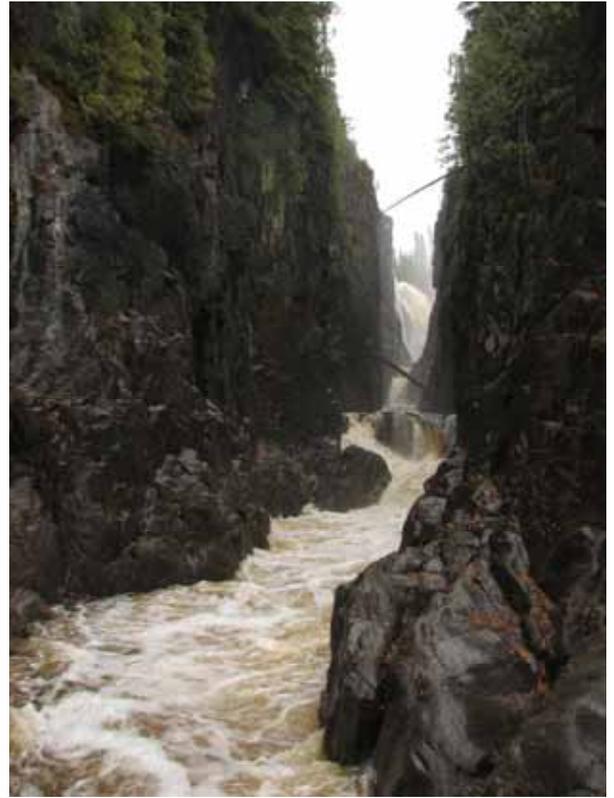
Original New Post Creek



Otter Rapids Generating Station

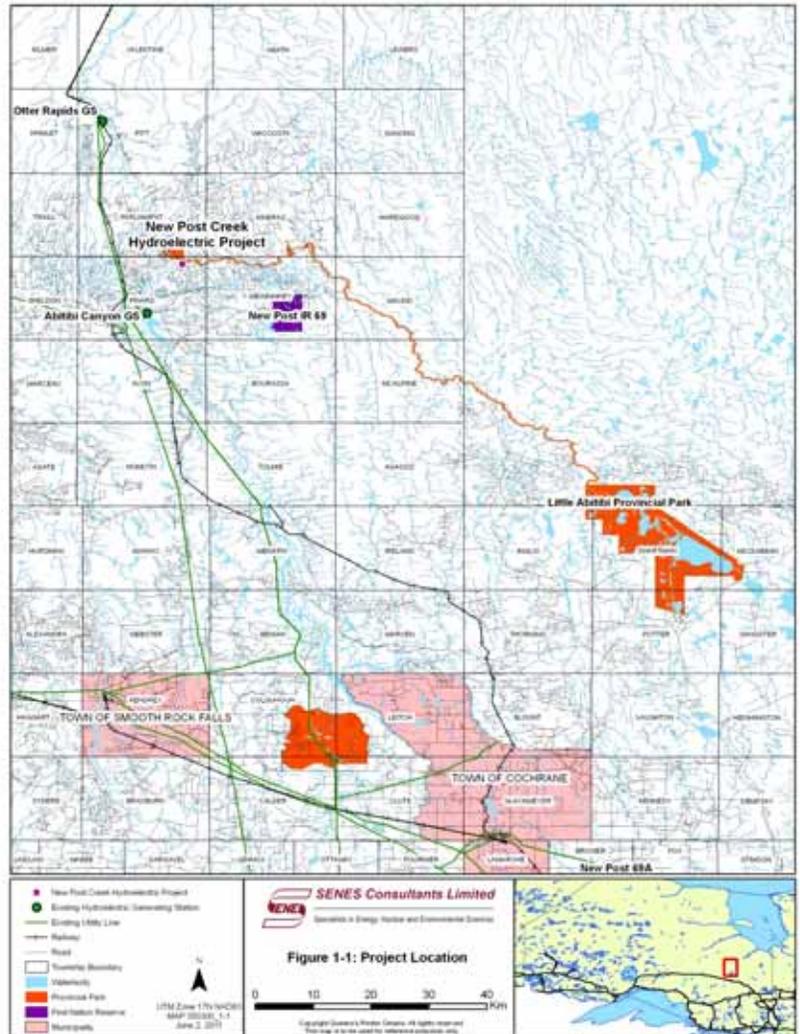
# New Post Creek Today

- The original diversion has significantly altered the Creek.
- Today, flows on New Post Creek and the Abitibi River are regulated by the Abitibi River System Water Management Plan.



# Project Location

- The proposed New Post Creek Project is located in the District of Cochrane within the Geographic Township of Pinard.
- Approximately 100 kilometres (km) north of the Town of Smooth Rock Falls, 13 km northeast of Abitibi Canyon Generating Station and 20 km south of Otter Rapids Generating Station.
- A small part of the Project is currently within Little Abitibi Provincial Park (LAPP).
- The proposed generating station would be located on Abitibi River shore lands with the intake at New Post Creek approximately 6 km upstream of its outlet to the Abitibi River.



General Location



# What are OPG and CRP Proposing?

- A new hydroelectric generating station with a capacity in the order of 25 Megawatts (MW) that would produce enough electricity to meet the needs of 25,000 homes (approximately 125 Gigawatt hours (GWh)).
- The proposed intake and spillway would be located about 4 km upstream of New Post Creek Falls and would divert a portion of New Post Creek flows through turbines that would discharge through a powerhouse located on the east shore of the Abitibi River.
- The project is located about 10 km downstream from the Abitibi Canyon Generating Station.
- The proposed Project will consist of the following primary project components/structures:
  - ◆ Intake and spillway structures located on New Post Creek;
  - ◆ Water conveyance system that includes shallow buried penstocks and possibly a portion of open water canal;
  - ◆ Powerhouse structure with multiple generating units located on the Abitibi River; and,
  - ◆ Switchyard and approximately 7 km transmission line that would cross the Abitibi River.



General Location of the Intake  
on New Post Creek



General Location of the Powerhouse  
and Tailrace on the Abitibi River



# Other Facilities

This Project will require a number of other facilities, such as the following.

- Should a construction camp be required, it would be in place for 2 to 3 years in the vicinity of Abitibi Canyon Generating Station.
- At site, work trailers, equipment and material laydown areas and stored materials would all be required.
- Upgrading of access roads to the proposed generating station site.
- A concrete batch plant for construction.
- 7 km transmission line to connect the generating station to the grid.
- Possibly an upgrade to the Parliament Road on the northeast side of the River to allow access.



Existing access road to the Site

# Environmental Assessment Process

- Under the provincial *Environmental Assessment Act*, the Proposed Undertaking is subject to the Class Environmental Assessment (Class EA) for Waterpower Projects as a new project on a managed waterway.
- A federal screening environmental assessment is not required.
- The Class EA planning process requires CRP and OPG to evaluate the positive and negative environmental effects of the Proposed Undertaking and prepare an Environmental Report.
- The Class EA will examine the following components:
  - ◆ Aquatic Environment (impact on fish habitat/ movement and impacts on other aquatic life)
  - ◆ Terrestrial Environment (habitat and flora and fauna)
  - ◆ Socio-Economic Environment (local economy, local social and economic use)
  - ◆ First Nations, Métis and Aboriginal communities (e.g. rights, values, uses and interests) and
  - ◆ Archaeological Resources.



Copies of the Class EA are available from [www.owa.ca](http://www.owa.ca)



# Environmental Assessment Studies

- Preliminary field work associated with assessing the environmental effects was initiated in 2009.
- More comprehensive field work was carried out in 2010, 2011 and 2012.
- The effects of the Project during construction and operation are now being assessed.
- Measures to avoid, prevent, eliminate, reduce, mitigate and compensate for negative effects will be identified.
- Measures to enhance positive effects will also be identified.



Field research underway in the study area

# Terrestrial Environment

- Terrestrial environment studies are being carried out on all areas impacted by the Project (e.g., generating station, transmission line).
  
- The studies include assessing the Project's potential impact on:
  - ◆ caribou
  - ◆ moose
  - ◆ forest birds
  - ◆ raptors
  - ◆ waterfowl
  - ◆ aquatic feeding areas
  - ◆ vegetation
  - ◆ Species at Risk



# Terrestrial Environment - Effects

- Approximately 270 hectares of land will need to be cleared for the proposed Project.
  - ◆ Approximately, 255 hectares of land will be required for the permanent facilities for the Project including the flooded area, transmission line and the GS.
  - ◆ Approximately, 15 hectares of land will need to be cleared temporarily to allow for construction. This will be for areas to stockpile materials and equipment, provide access for construction, parking, provide space for office trailers, temporary washrooms, etc.
- None of the flora species identified during the field surveys are designated as species at risk.
- The proposed transmission line corridor is situated mainly in areas that were previously logged and are now regenerating naturally and artificially. These areas are dominated by black spruce and trembling aspen.
- The vegetation communities along New Post Creek are generally tolerant to periodic flooding. Dominant vegetation near the intake and in the proposed flooded area consists primarily of speckled alder and willow swamp thickets and intolerant hardwood forests and swamps.
- Near the intake of the GS the proposed construction/laydown area consists of young to mid-aged secondary hardwood forest.
- In the area of the powerhouse and closer to the Abitibi River, the forests are more mature and dominated by black spruce, jack pine and balsam fir.
- Impact on woodland caribou is considered to be minimal because the area has already been extensively harvested.
- During construction it would be expected that sensitive local wildlife will relocate due to construction activities and noise but will return to the area following construction.



# Terrestrial Environment - Mitigation

- Construction contractor for the proposed Project will be required to prepare and implement an environmental management plan for the construction project.
- Contractor is expected to maintain equipment in good working order and have on site equipment and materials (e.g., fire extinguishers, spill kits) to prevent forest fires and accidental releases of deleterious substances to the environment.
- Site activities are to be organized and implemented in a fashion to prevent erosion and not allow sediment to enter local watercourses.
- Clearing of trees and vegetation will require a forest resource licence from the MNR that will provide guidance on harvest and utilization.
- OPG/CRP will be required to reimburse the Province for any Crown dues and charges.
- Clearing of trees and vegetation is to occur outside of the migratory bird nesting season.
- Any potentially flooded areas will be cleared of trees, woody material and vegetation. Stumps will be left in place for fisheries enhancement and to promote soil stability.
- All wastes on the site are to be managed so as to limit attracting nuisance wildlife and to ensure wastes are directed to the appropriate facility (e.g., landfill site, recycling facilities).
- In order to reduce impact on local fisheries and wildlife resources, workers at the construction site will not be allowed to fish, hunt or use ATVs or snowmobiles in their spare time.
- At the end of construction, the contractor is to ensure that the site is stabilized and is restored with natural vegetation.
- Transmission line right-of-way will maintain a vegetation management program to ensure that trees pose no hazards.



## Fieldwork and Studies

- Aquatic field work was conducted from 2009 through 2012.
- Aquatic fieldwork included:
  - ◆ Habitat and fish community assessments;
  - ◆ Fish spawning assessments;
  - ◆ Assessment of mercury levels in fish; and
  - ◆ Water quality sampling.
- The entire fish community was studied but particular focus has been paid to walleye, sturgeon and whitefish.
- Water flow and temperature gauges have been installed on New Post Creek to better understand the flow and temperature patterns.
- Hydrological modeling and fisheries assessments were conducted to better understand possible effects under different flow regimes for New Post Creek.

## Findings

- Above the Falls, New Post Creek has a simple and sparse fish community.
- The base of New Post Creek Falls is a known walleye spawning area but OPG/CRP are of the opinion that whitefish and sturgeon do not spawn in this location.



# Aquatic— Effects and Mitigation

- Construction contractor for the Project will be required to prepare and implement an environmental management plan for the construction project.
- The construction of the project will be managed to prevent releases of substances and sediment into New Post Creek or the Abitibi River.
- Any potentially flooded areas will be cleared of trees, woody material and vegetation. Stumps will be left in place for fisheries enhancement and to promote soil stability.
- The proposed new GS tailrace will enhance local habitat in the Abitibi River by adding a new substrate type that can be utilized by fish.
- The project will result in a net addition of aquatic habitat area.
- Any in-water construction activities will need to adhere to government approved timing windows.
- A proposed operating regime for the GS has been agreed to and is discussed on the “Operating Regime” panel.



# Proposed Operating Regime

- OPG, CRP, MNR, Ontario Parks and DFO have been discussing a proposed operating regime for the facility for over a year.
- All parties have been working towards an operating regime that:
  - ◆ Continues to provide important ecological functions.
  - ◆ Ensures that the project is economically viable.
  - ◆ Respects TTN's historic and modern day interests.
  - ◆ Ensures and enhances public safety.
  - ◆ Ensures continual flow down New Post Creek and over the Falls to maintain aesthetic value.
- As a pre-condition, it was agreed that the proposed Project will not change the total volume of water flowing into the Abitibi River or the operating considerations for OPG's Abitibi Canyon and Otter Rapids generation facilities.
- The following minimum flows are proposed for New Post Falls.
  - ◆ Spring time flow for spawning of 15 cubic meters per second (cms).
  - ◆ Transitional Flow from the end of spawning to approximately the Canada Day Weekend (i.e. July 1).
  - ◆ Summer flow (i.e. Canada Day weekend to September 1) of 7.5 cms.
  - ◆ 5 cms for September 1st to 30<sup>th</sup>.
  - ◆ 2 cms for the period of October 1<sup>st</sup> to the start of walleye spawning.
- Proposed operating regime is subject to further discussions with key stakeholders on ecological, economic and social concerns and adaptive management will be a key principle moving forward.



# Socio-Economic Assessment

- Except for the portion of the Project that occurs within Little Abitibi Provincial Park the Project occurs on general crown use land area that permits hydroelectric development and most other resource uses.
- Because of the small footprint of the project, it will have negligible effects on other resource activities such as forest harvesting or mineral exploration.
- New Post Creek is rarely used as a canoe route but OPG/CRP are proposing to construct a portage around the GS that will allow for safer use than the current situation.
- Flows over the Falls are proposed that balance economic, environmental and social objectives.
- Project will produce about 25MW of power enough energy to generate electricity for about 25,000 homes.
- Project is expected to result in approximately 150 - 200 direct person years of construction employment.
- Project is expected to generate greater than \$150M in gross revenue charges to the Province over the course of its lifetime.



# Cultural Heritage Assessment

- Assessment of the Project's impact on cultural heritage has been carried out according to the *Ontario Heritage Act*.
- Areas studied included all areas proposed for development.
- Cultural heritage field work was done in conjunction with the Taykwa Tagamou Nation.
- Fieldwork has helped in identifying some of TTN's historic trails and portages in the area.
- Proposed project will not impact on any known archaeological resources, TTN traditional values or the Hudson's Bay Trading Post.



Archaeological Team and TTN Members  
Investigating the Project Area, 2011

# Proposed Project and Little Abitibi Provincial Park

- To carry out the Proposed Undertaking the deregulation of a small portion of the Little Abitibi Provincial Park is needed to align with requirements of the Provincial Parks and Conservation Reserves Act, 2006.
- Replacement lands adjacent to the Park boundary have been identified resulting in a larger Park and enhanced ecological integrity.
- TTN, CRP, MNR and OPG were involved in the process to determine these replacement lands.
- The Class EA for Waterpower Projects process will be coordinated with the Ontario Ministry of Natural Resources Crown land use amendment and Class EA process to amend the park boundary for the Proposed Undertaking.



# Next Steps

- The feedback and information received from Community Meetings and Public Open Houses will be used for the Environmental Report.
- The Environmental Report and the Technical Support Documents will be based on all fieldwork and research conducted over the last several years.
- Completed documents will be provided to regulators including the Ministry of Environment, Ministry of Natural Resources, Ontario Parks, Department of Fisheries and Oceans and Transport Canada for their review and comment.
- Documents will be revised based on input received from the regulators; and the revised reports will be provided for Aboriginal and public review.



- If all goes as expected construction would begin in 2014.
- Prior to and throughout construction a wide variety of other permits and approvals would be required for the project from the Ministry of Natural Resources, Ministry of the Environment, Department of Fisheries and Oceans, etc.



# We Value Your Opinion

- Please take the time to ask questions and complete the Comment Sheets.
- Consultation is a key component of the EA process as it provides you with an opportunity to contribute and inform decisions relating to the Project.
- Consultation will continue with Aboriginal groups.
- We would like to know if there are any important environmental or social values, interests or concerns you might have about the Project.
- Please indicate your interests on the Comment Sheet.
- There will be additional opportunities for you to participate in the EA process. Please indicate your interests on the Comment Sheet.

**COMMENT SHEET**  
FOR THE ENVIRONMENTAL ASSESSMENT  
OF THE NEW POST CREEK HYDROELECTRIC PROJECT

Ontario Power Generation Inc. (OPG) and Coral Rapids Power LP (CRP) are proposing to develop approximately 25 megawatts of renewable hydroelectric power through the construction of a generating station on New Post Creek near the Abitibi River.

Do you have any comments about the proposed New Post Creek Project?

Are you aware of any particular environmental, social or economic features or values near the New Post Creek Project that we should be aware of?

Do you have any other comments, questions, concerns or issues about the project?

Would you like to receive a call from a team member about your questions, concerns or issues?  
Yes No

Please provide your contact information below (please print):

Name: \_\_\_\_\_ Postal Code: \_\_\_\_\_  
Street Address: \_\_\_\_\_ Email: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
City: \_\_\_\_\_ Fax: \_\_\_\_\_

If you have any questions or comments about the project in the future please contact:

Phil Shantz  
Manager - Aboriginal, Land, Resource and Northern Projects  
SENES Consultants Limited  
121 Granton Drive, Unit 12  
Richmond Hill, Ontario, L4B 3M4  
phil@senes.ca  
Project Information : [www.newpostcreek.com](http://www.newpostcreek.com)

Please drop the comments in the box provided or send to Phil Shantz no later than January 9, 2013.

 ONTARIO POWER GENERATION



# How Hydroelectric Power Works

- Hydroelectric power stations convert the kinetic energy of falling water into electrical energy.
- Hydroelectric stations use either the natural drop of a river, such as a waterfall, or a dam built across a river to raise the water level and provide the drop (head) needed to create a driving force.
- Water is collected at the top of the dam in what is called the forebay. From there, the water flows into a pipe called a penstock which carries it down to a turbine water wheel.
- The water pressure increases as it flows down the penstock. The pressure and flow of the falling water drives a turbine which in turn spins a generator.
- This creates electricity that can be sent to the transmission grid.

