

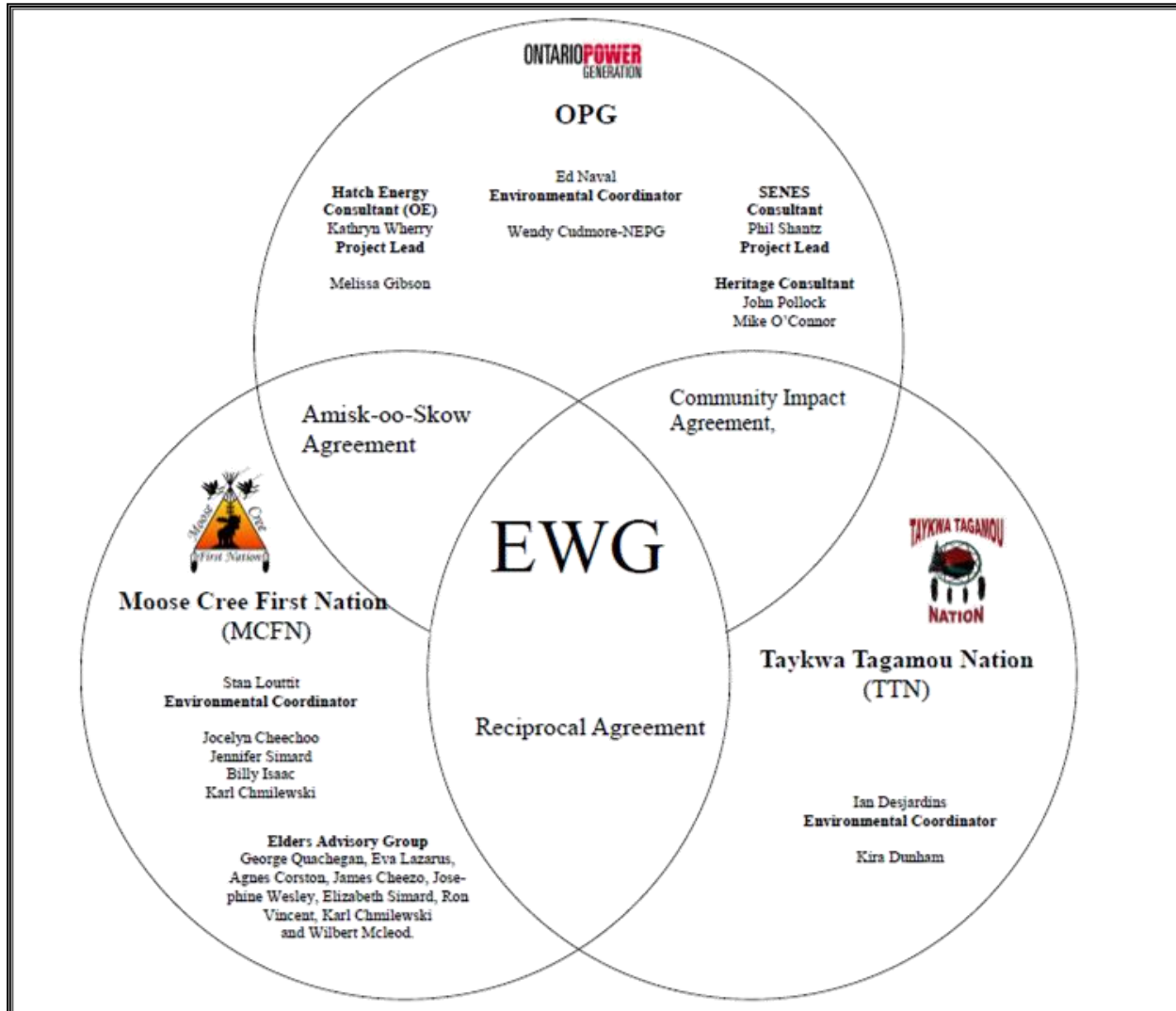
Environmental Working Group

Monthly Report

October 2012




ENVIRONMENTAL WORKING GROUP

Relationship Organizational Chart



- Weekly Environmental Working Group (EWG) and EWG/Kiewit – Alarie, a Partnership (KAP) meetings.
 - The EWG review its Action Items that include priority permit reviews, and deliverables to the Mattagami Extensions Coordinating Committee (MECC).
 - KAP gives EWG a construction up date every week and discusses any upcoming issues and/or urgent permit reviews.
 - Specific items that were discussed are below.
- Inclusion of a First Nation perspective on the Cost Benefit Analysis of Mitigating and Reducing Spill in Adam Creek. TTN and MCFN have completed their interviews and are looking at ways to incorporate the First Nation perspective within the report.
- MCFN and TTN members of the EWG hold weekly Traditional Ecological Knowledge (TEK) meetings to develop TEK monitoring plan as component of Environmental Effects Monitoring Plan and to address term and condition 13 - Aboriginal Knowledge.
- Review of the Fish Habitat Assessment Report and Mercury in Fish Flesh Summary Report intended to fulfill EA Term and Condition 4b is ongoing. Results of the EWG review will be presented at the MECC's October 2012 meeting.
- Reviews of the Terrestrial Habitat Restoration Downstream of Kipling report intended to fulfill EA Term and Condition 5b is ongoing. The report is being amended to include the comments received to date from OPG and TTN on the report.
- Members of the EWG continued their work on the "Peoples of the Moose River Basin" historical text (EA Term and Condition 2c). Several members of the EWG have begun writing portions of the text.
- The EWG held its Team Building Workshop, facilitated by LURA Consulting, in Toronto on October 9, 2012. The Workshop was designed to get a better understanding of where the members of the EWG were coming from in their role with the LMRP. The results of the Workshop were very positive, as it brought out the EWGs problems in a constructive way and proposed several ways to move forward and improve. A follow-up report with LURA Consulting will occur within the next few months to ensure the EWG continuing on its improved path forward.
- The EWG is also held its Face to Face meeting on October 10, 2012, in Toronto. The initial outcome of the Team Building Workshop was discussed, as well as a review of the EWG Term of Reference, and the baseline reports intended to fulfill condition 4b.
- Hatch members of the EWG sent out a final draft of the EWG Environmental Due Diligence Audit held in July 2012, to the rest of the EWG for comment and review.
- As a result of an Action Item from the MECC, the EWG started planning for a Baseline/TEK Workshop to be held in November 2012. The purpose of the workshop is to discuss the EA Terms and Conditions that require some sort of baseline data and monitoring and determine what baseline parameters are required, what will be monitored, why it will be monitored, and where can TEK be incorporated with the condition.

ACTIONS TO BE COMPLETED in 2012

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
EA Terms and Conditions Environmental Compliance Plan – EWG Review and Submission to MECC.												
EWG Environmental Due Diligence Audit #2												
EWG present to the MECC the result of its review of the LMRP “Operations Report” (Condition 4(a) of EA T&Cs).												
EWG present to the MECC the result of its review of the “Fish Habitat Assessment Report”, and “Baseline Fish Methyl Mercury Report” (Condition 4b of EA T&Cs) by Hatch.												
EWG present to the MECC the result of its review of the draft “Cost Benefit Analysis of Mitigating and Reducing Adam Creek Spill” (Condition 4(c) and (e) of EA T&Cs) by Hatch.												
EWG present to the MECC the “Waste Management Plan” (EA T&C 19).												
EWG present to the MECC “The Noise Protocol Plan” (Condition 18 of EA T&Cs).												
EWG present to the MECC “Environmental Monitoring Plan, Lower Mattagami Development” (EA T&C 14).												
EWG present to the MECC the “Erosion Monitoring Plan” (EA T&C 6).												TBD
EWG present to the MECC the “Evaluation of the Need to Conduct Terrestrial Habitat Restoration Downstream of Kipling” (EA T&C 5).												
Draft of Traditional Ecological Knowledge in relation to the Lower Mattagami River Project.												
EWG present to the MECC the results and recommendations of periodic re-evaluations (Condition 10 of EA T&Cs).												
Completed:  Pending:  Delayed pending additional information: 												

Construction

Little Long

- As noted last month concrete work is nearing completion, with only small pours remaining to complete that phase of the work. 117 m³ of concrete was poured this month, bringing the total poured to date to 13,263 m³ of 13,886 m³ total, against a plan of 13,506 m³.
- The siding installation is progressing, with inner panels on the East face of Unit 3 complete and the North wall nearing completion.
- The roof deck installation over the superstructure is complete.
- Andritz has installed the 3 lower sections of the draft tube liner, and has finished leveling and positioning the installed sections. Welding of the sections is in progress.
- The assembly of the discharge ring is advancing in the erection bay and the bottom ring sections have been delivered to site and offloaded in the erection bay.
- Removal of the cofferdam continues, with arc cell 2-3 and cell 3 fully removed. Removal of the sand from cell 2 and arc cell 1-2 is under way and advancing quickly (Figure 1).
- Installation of the new bus bar system required to extend the crane into the Unit 3 powerhouse is complete.
- KAP electricians have begun the installation of the three superimposed cable trays required for the 13.8 kV Unit 3 power cables, and 600 V and 125 V DC distribution cables.

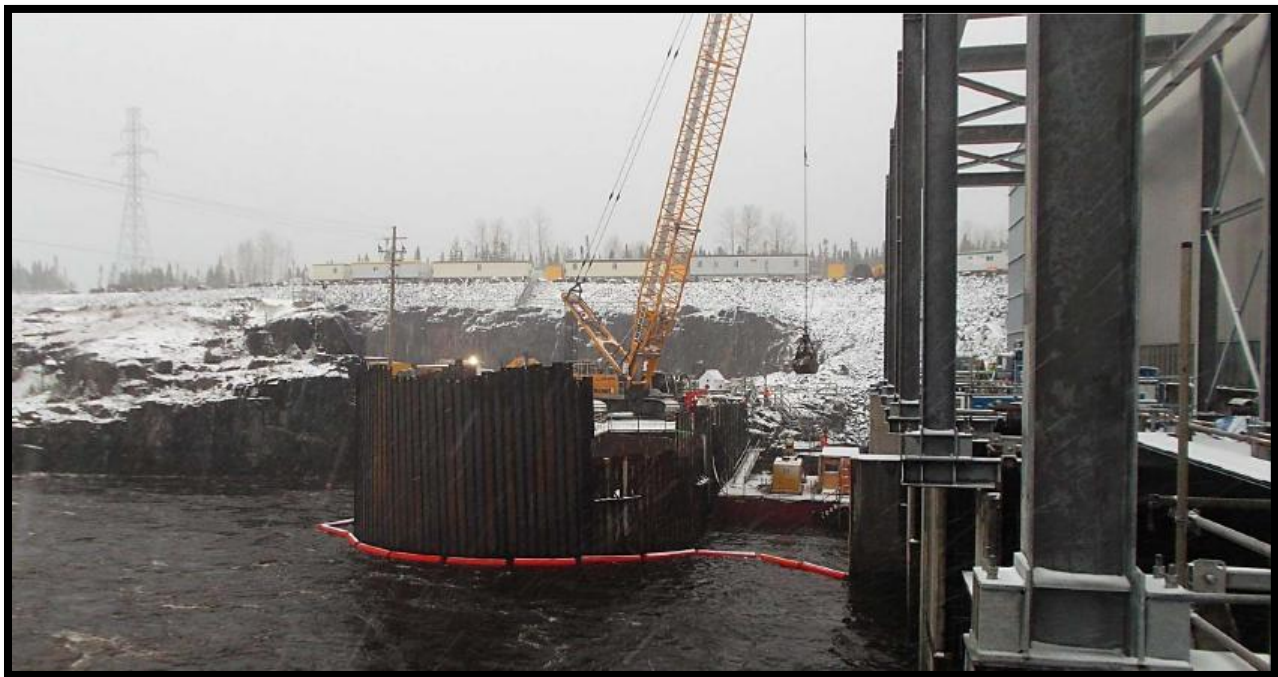


Figure 1: Little Long Cofferdam Removal

Harmon

- 257 m³ of concrete was poured this month, bringing the total poured to date to 9,053 m³ of 12,251 m³ total, against a plan of 8,334 m³.
- Removal of the penstock shoring towers from Unit 3 is now complete.
- Formwork, embedded piping, shoring tower, and rebar installation for the scroll case soffit continues (Figure 2).
- Welding re-work was completed on the pit liner and baffle vane by Andritz.
- Repairs of concrete deficiencies in the scroll case have started.



Figure 2: Harmon overview, scroll case soffit work

Kipling

- 1,419 m³ of structural concrete was poured this month, bringing the total poured to date to 3,185 m³ of 11,647 m³ total, against a baseline plan of 7,443 m³.
- Concrete work in the switchyard (equipment footings and columns) is progressing. PowerTel (electrical sub-contractor) has dismantled the existing disconnect switch and will install the new switch once the concrete support column has been poured and cured.
- Backfilling around the completed lock block retaining wall, transformer, and oil/water separator foundations is ongoing.
- Several large powerhouse concrete pours were completed this month, as well as a couple of intake pours (Figure 3).



Figure 3: Kipling overview, intake and draft tube work.

Smoky Falls

- 7,575 m³ of concrete was poured this month in the service bay, powerhouse, and intake areas, bringing the total poured to date to 74,000 m³ of 155,084 m³ total, against a plan of 77,992 m³.
- At the end of the month, fifteen (15) concrete pours are in various stages of work (formwork started and/or rebar being installed) and progressing in the intake, powerhouse, East gravity dam (Figure 4), and at the permanent bridge. Thirty eight (38) pours were completed during the month.
- Alstom has completed fitting and centering the 4 draft tube cone sections at Unit 1. They are continuing the welding work on the four draft tube cone sections in Unit 2.
- The welding of the Unit 3 draft tube cone sections (in the laydown area) is now complete.
- Work continues to advance on the switchyard and the transmission line, with work having started on the access road and drainage ditch. The installation of wiring, CVTs, and cable trays in the control building continues.
- The steel superstructure erection over the Service Bay West was completed. Ironworkers torque bolts and aligned the overhead crane rails. Superm  tal workers also installed winter heating components such as blowers and electric heaters.
- The 275-ton Kone crane was erected and miscellaneous hardware and conductors are being installed. Temporary power is being installed and testing of the crane is scheduled for early November.
- Installation of the pre-cast wall panels on the Service Bay West has started and is progressing, and at the end of the month, the roof membrane over the Service bay is approximately 70% complete.
- Sluiceway Gate 5 – Graff Concrete Cutting Service completed cutting the concrete in order to remove the existing embedded gate guides. AFI continued concrete removal for the gate guides.
- Valard has completed building and alignment of the installed disconnect switches and all equipment grounding for Structure 17 which is the tower that connects OPG’s Smoky Falls 230 kV line segment to the Hydro One system.



Figure 4: Smoky Falls East Gravity Dam.



Figure 5: Smoky Falls overview.

Monthly Summary – September 2012

SPILLS			
No. of Spills:		11; Spill Reports 279-289 (see Figure 6 for LMRP spills breakdown).	
Classification of Spills:		<u>Project Classification</u> Minor – 4 Moderate – 2 Major –1 To Water - 0 <u>MOE Classification</u> Non-reportable - 6 Reportable to MOE <ul style="list-style-type: none">- Class C – 1- Class B – 0- Class A – 0	
<u>Reportable Spills</u>			
No.	Quantity /Product Spilled	Spill Site	Reason for being Reportable
1	Hydraulic Oil/120 L	Smoky Falls – Wet Tailrace	Reportable (due to quantity). The pump truck was parked on the pad in front of the Smoky Falls New Powerhouse, pumping concrete for pour when a main hydraulic line blew causing oil to leak/spray onto the ground. The superintendents and foreman discussed the spill with their crews and remind the crews the importance of conducting the visual inspections of the equipment.
Project Classification (KAP) Minor: ≤ 10L Moderate: Between 10L and 100L Major: ≥100L To Water: Any amount is reportable to the MOE (See Figure 7: KAP Spills Response Flowchart)			MOE Classification Non-reportable: < 100L Reportable to MOE <ul style="list-style-type: none">• Class C - Less Serious• Class B – Serious• Class A – Very Serious
Sediment Pond Exceedance of Effluent Objective			
No. of Exceedance days recorded	Location	Mitigation Measures used	
6 (October 15, 22, and 25-29)	Kipling	These exceedances were due to the water from the sediment pond being discharged to the existing ditch, which was causing some erosion. KAP has extended the discharge pipe to the river, and is no longer discharging to the ditch.	

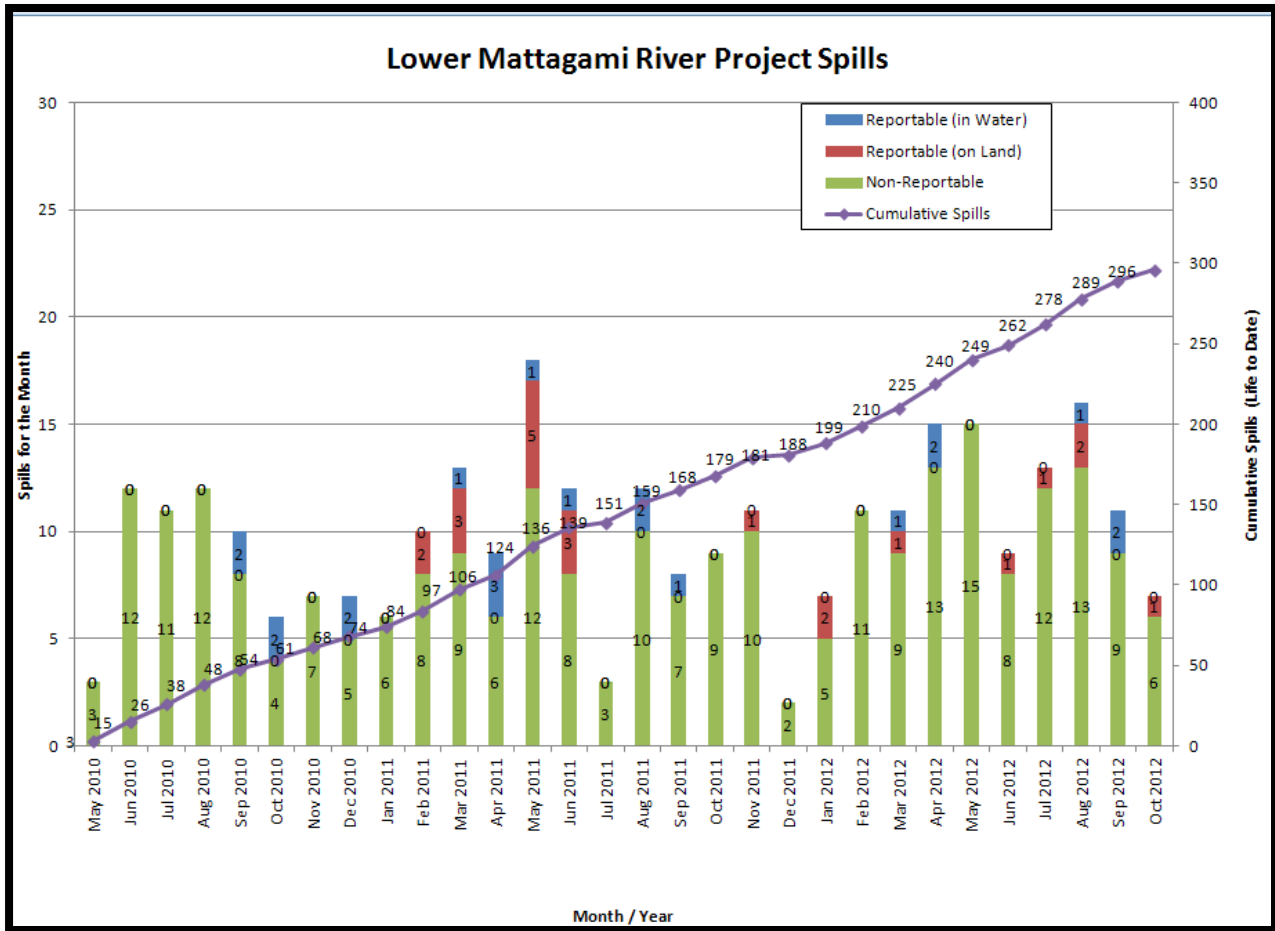
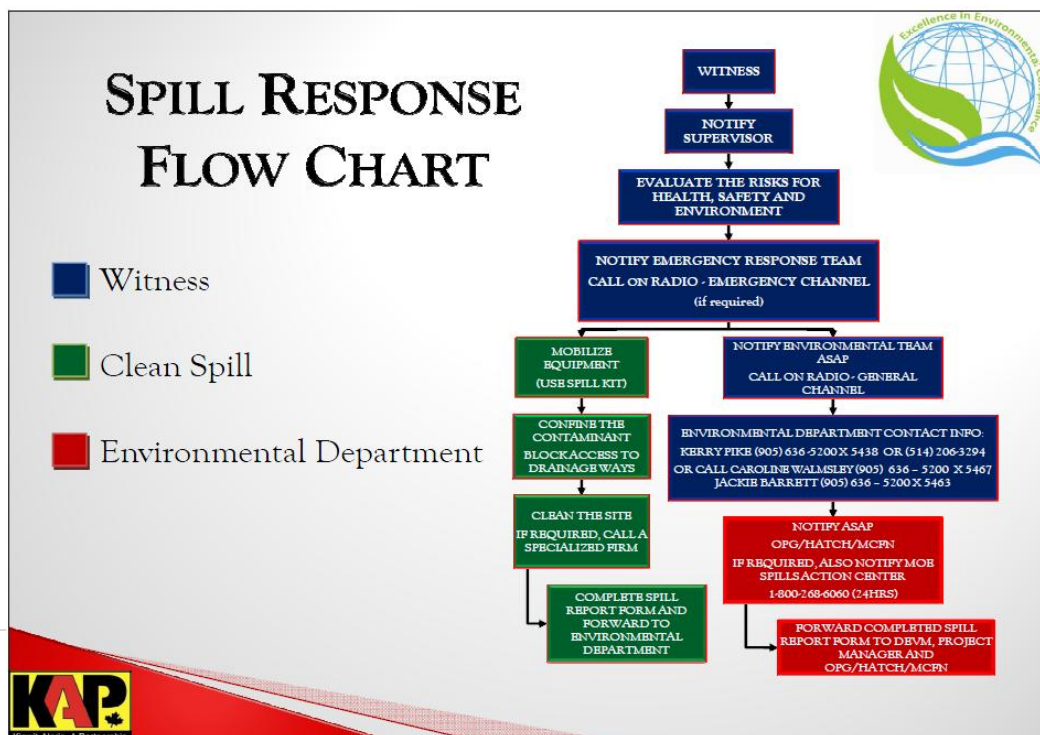


Figure 6: Lower Mattagami River Project spills

Figure 7: KAP Spills Response Flowchart



PERMIT AND APPROVAL REVIEW			
No. Reviewed:	0	List:	
No. Sent to KAP:	0	List:	
Reports Review			
No. Reviewed for KAP	0	List:	
No. Sent to KAP	0	List:	
No. Reviewed for MECC	5	List:	On-going: <ul style="list-style-type: none"> • Cost Benefit Analysis of Mitigating and Reducing Spill in Adam Creek. • Mercury in Fish Flesh Summary Report. • Fish Habitat Assessment Report • Terrestrial Habitat Restoration Downstream of Kipling GS
No. Review Completed	4	List:	<ul style="list-style-type: none"> • Operation Overview Report. • Waste Management Plan • Noise Control Plan • The Interim Measures Agreement as it relates to EA Term and Condition 14c (Permit Review and Compliance Monitoring Protocol)
REQUESTS FOR INFORMATION (RFIs)			
No. Reviewed:	0	List:	n/a
No. Sent to KAP:	0	List:	n/a
See figures 8 to 13 below for site location of the permits that have been or are pending approval.			



Figure 9:
Lower Mattagami River Project
Harmon GS - Permits

Legend

Department of Fisheries & Oceans


 Letter of Advice


Transport Canada

 Navigable Waters Protection Act - Temporary Bridge


 Navigable Waters Protection Act - Harmon Dam


Ministry of Environment


 Amended - Certificate of Approval - Sediment Pond


 Permit To Take Water - Dewatering

Ministry of Natural Resources

 Lakes Rivers Improvement Act - Phase 1A Marine Access Pad

 Lakes River Improvement Act - Phase 1B - Temporary Cofferdam

 Lakes River Improvement Act - Phase 2 Powerhouse Upgrades

 License To Collect Fish for Scientific Purposes



0 100 200 400
Meters



Kiewit - Alarie, A Partnership

Created By: Caroline Walmsley

Datum: Zone 17U

Date: January 19, 2012

Scale: 1: 5,500



ONTARIO POWER
GENERATION

LMRP-FJ28-ENV-DWG-0001-2012-01-19-R04



Figure 10:
Lower Mattagami River Project
Kipiting GS - Permits

Legend

Department of Fisheries & Oceans

Letter of Advice

Transport Canada

Approval - Navigable Waters Protection Act - Kipiting Dam

Ministry of Environmental

Amended Certificate of Approval - Sediment Pond

Permit To Take Water - Dewatering

Ministry of Natural Resources

Lakes River Improvement Act - Phase 1A - Marine Access Pad

Lakes River Improvement Act - Phase 1A-1 Deflector Wall

Lakes River Improvement Act - Phase 1A-2 Spillway Location Revised

Lakes River Improvement Act - Phase 1B Temporary Cofferdam

Lakes River Improvement Act - Phase 2 Powerhouse Upgrades

Licence to Collect Fish for Scientific Purposes



Kiewit - Alarie, A Partnership

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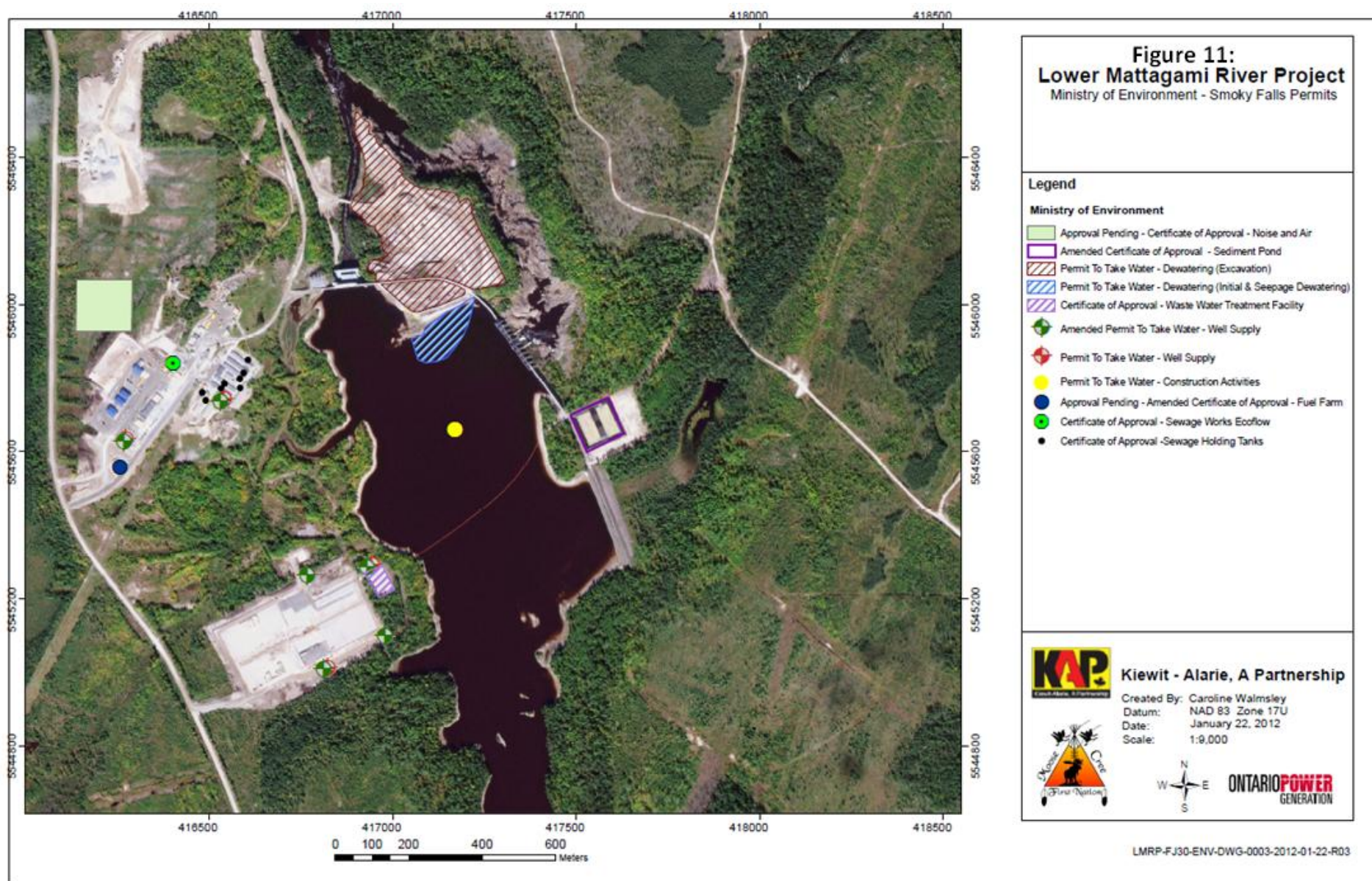
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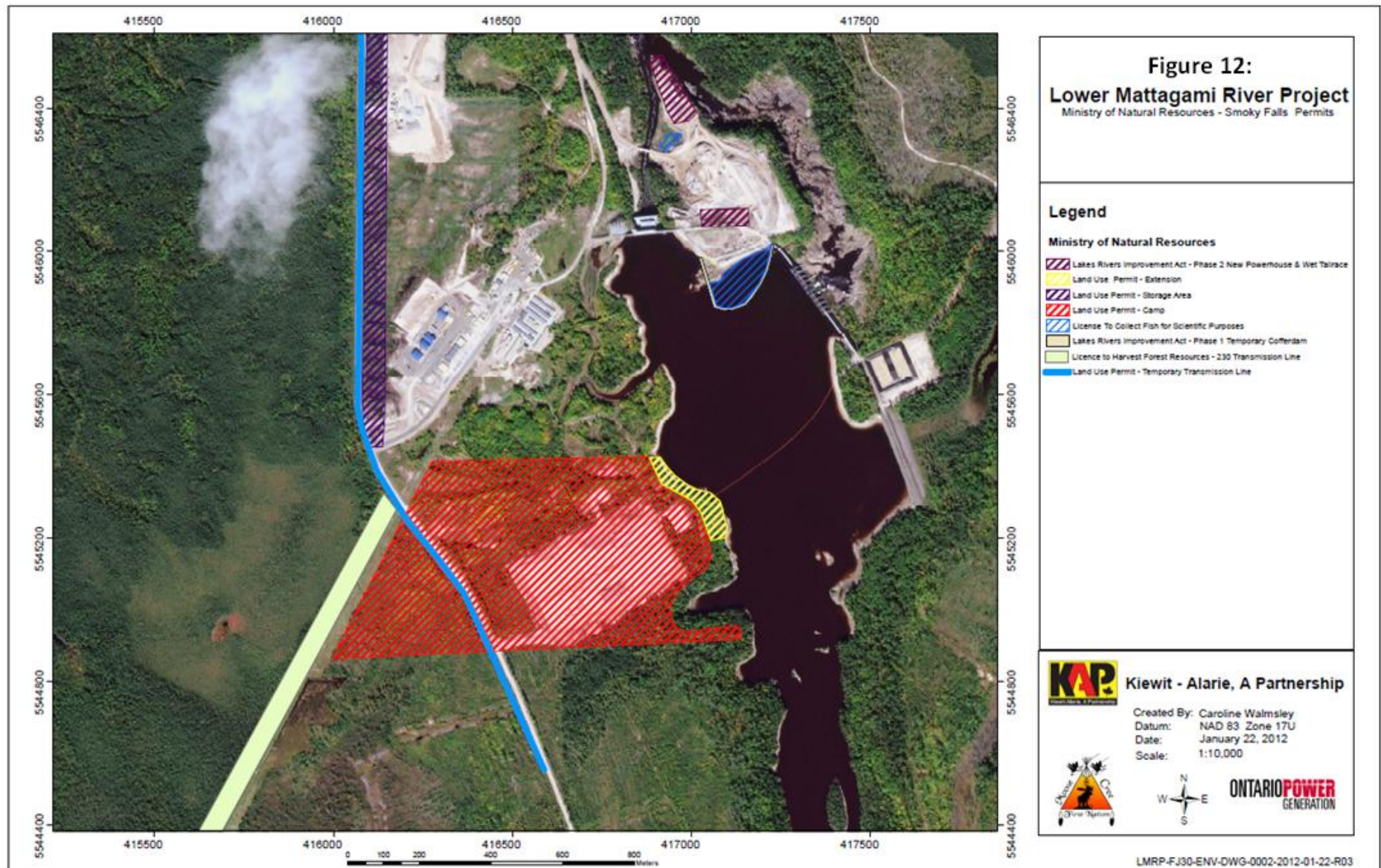


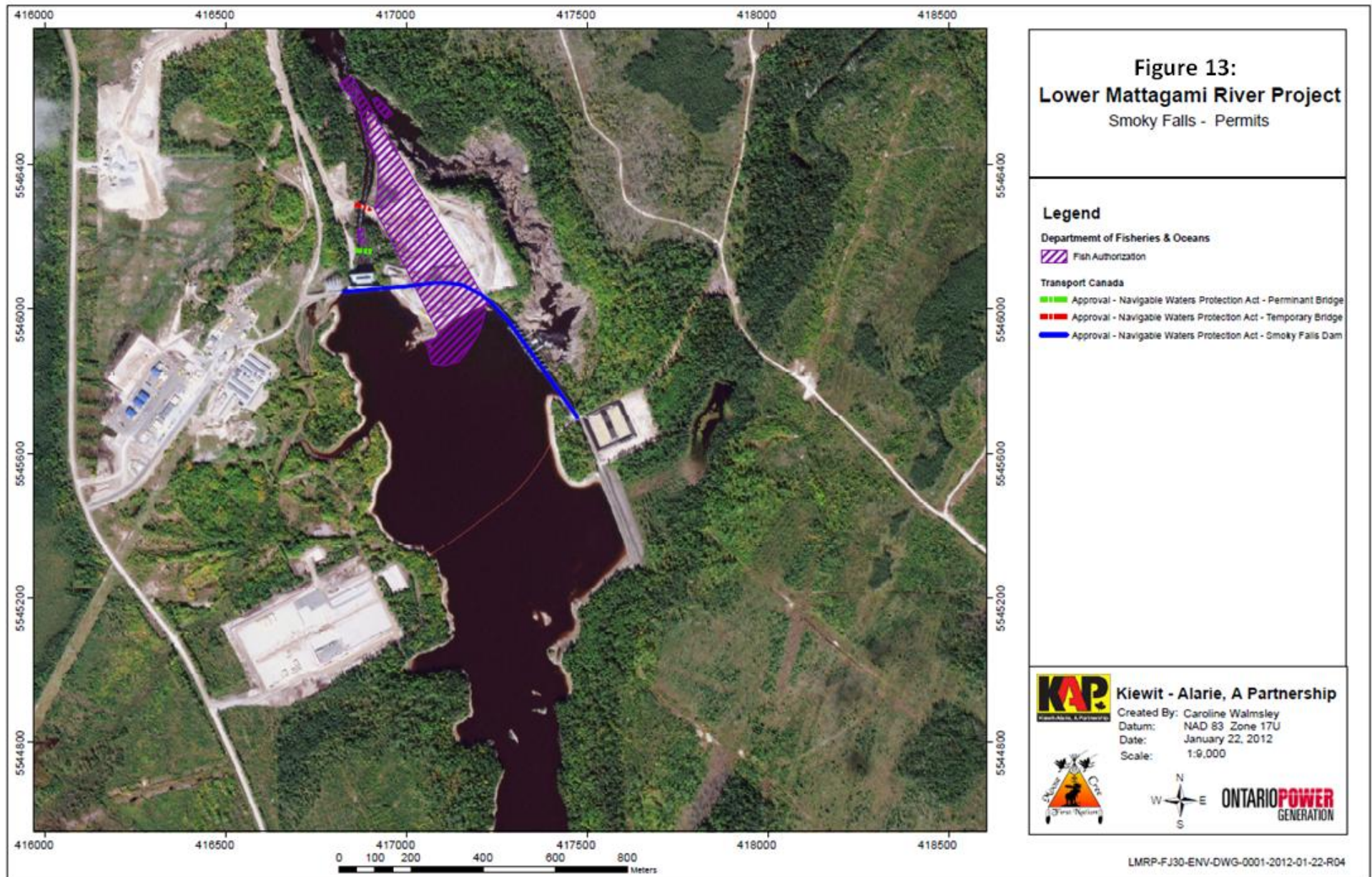
ONTARIO POWER
GENERATION

0 100 200 400 Meters

LMRP-FJ27-ENV-DWG-0001-22012-01-19-R04







Issues and Concerns

- MCFN members of EWG were concerned with a beaver house being washed out as a result of the Little Long Spill way opening. The EWG members would like to be notified ahead of time (if possible) of when the spillways will be opened as a result of construction related activities.

Action: OPG members of the EWG are to follow-up with OPG and find out if some sort of notification can be given ahead of time when spillways are opened as a result of construction related activities.