

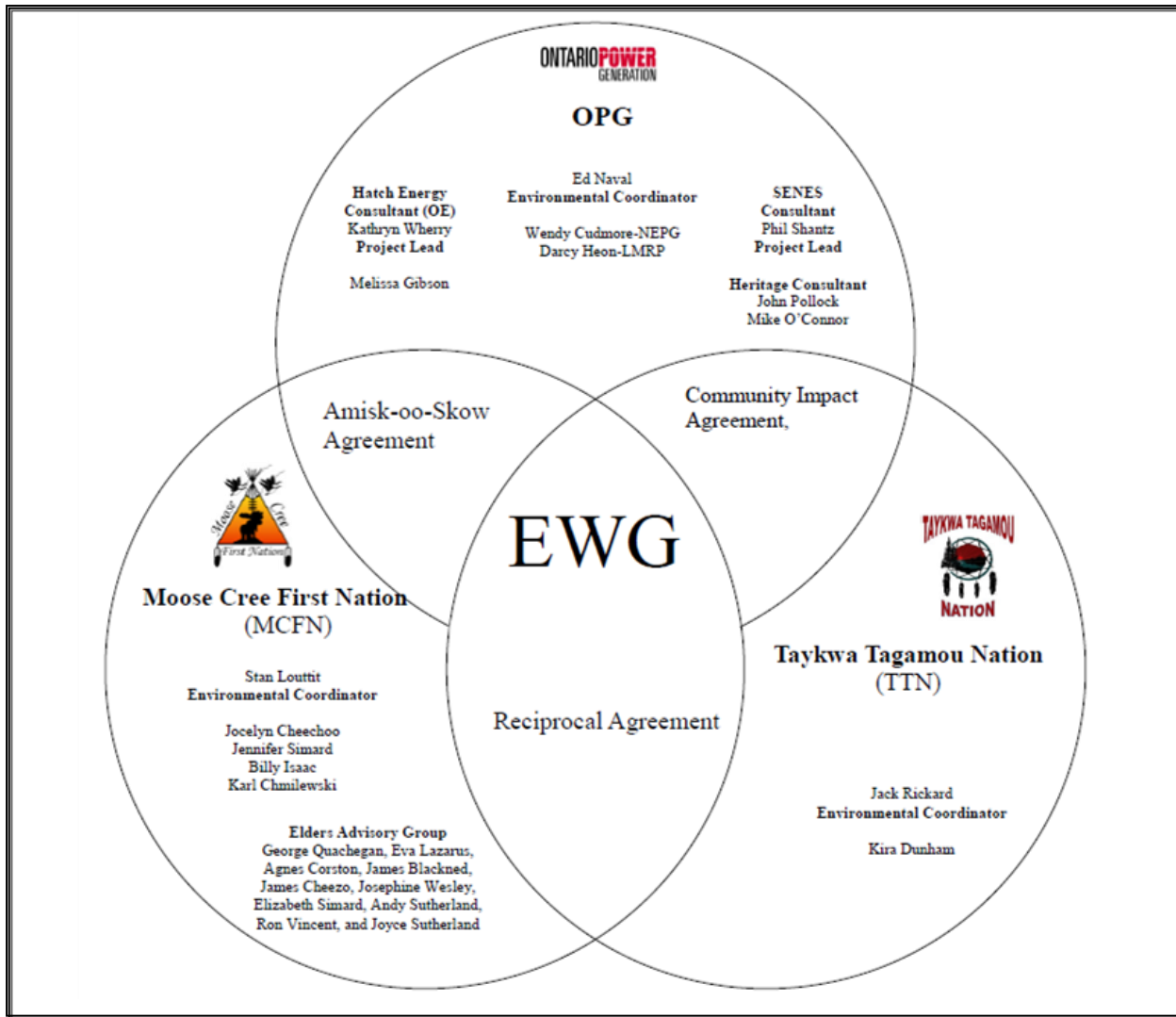
Environmental Working Group

Monthly Report

February 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.
- Ongoing review and compilation of Traditional Ecological Knowledge (TEK) for the Lower Mattagami River Project.
- Revision of Cost Benefit Analysis of Mitigating and Reducing Spill in Adam Creek based on further EWG comments. MCFN has completed a questionnaire and is currently conducting community interviews. TTN is preparing its questionnaire and will be conducting community interviews.
- Operation Overview Report was revised with EWG comments. The EWG presented the results of its review to the MECC.
- Initial review of Environmental Effects Monitoring Workshop Report by workshop discipline leads, in preparation for reviewed by the EWG and workshop participants.
- Coordination of historical text and map required for condition 2c (teleconference held on Feb. 27, 2012).

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.	Date to be determined											
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).												
EWG present to the MECC the “Evaluation of the Need to Conduct Terrestrial												

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
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).												

Construction Smoky Falls

- Concrete pours in the service bay, powerhouse, and intake areas continued, with a total of 4,225 m³ of concrete poured in February (February 3rd to March 1st).
- There are ten other pours in total with work under way (rebar and form work) at the end of the month, and more being planned for on a daily basis.
- Work continues under localized hoarding on the reconstruction of the Smoky Falls Unit 2 / Unit 3 bullnose. Installation of form work and rebar installations are progressing.
- Inside the winter shelter, foundations for all of the four concrete placing booms are complete. All of the placing booms are installed and in-service.
- Prefabricated curved draft tube form sections for Unit 2 are being installed inside the winter shelter (Figure 1).

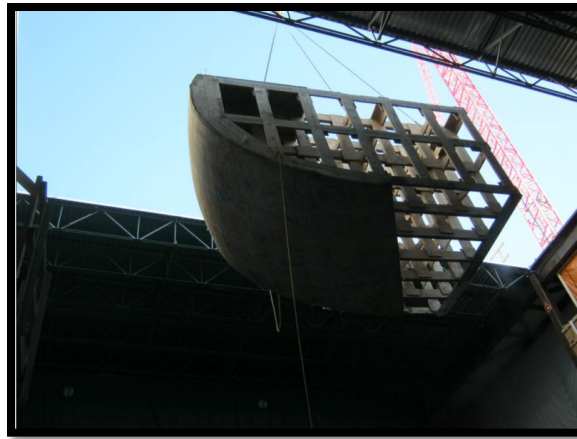


Figure 1: Tower crane transfer of formwork through shelter roof at Smoky Falls

Little Long

- Concrete work is progressing well, with 889 m³ of concrete poured in the powerhouse area. Work continues to advance at an accelerated pace despite occasional extremely cold weather.
- Rebar and form work continues to progress at a good pace.
- A portion of the powerhouse area was transferred to KAP for construction activities.
- Removal of the draft tube form work has started (Figure 2).
- Mud removal operations at the Unit 3 Intake are complete.

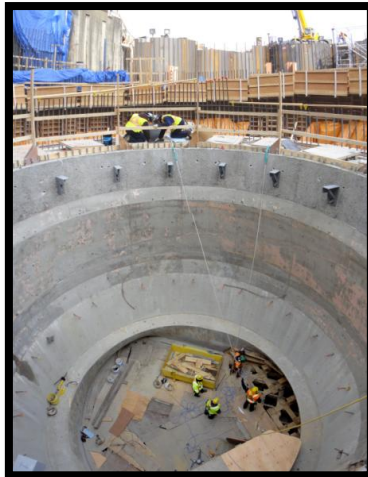


Figure 2: Draft tube shaft at Little Long

Harmon

- The base of the draft tube (658 m3) was poured on February 3rd, as planned.
- Prefabricated curved forms for the draft tube are being lowered into the powerhouse area and assembled. This work is nearing completion as of month-end (Figure 3).
- The first lift of the draft tube pier (84 m3) was poured on February 16th.
- Rebar and form work for the next major powerhouse pour are advancing.



Figure 3: Draft tube work at Harmon

Kipling

- Cofferdam Cell #2 backfill was completed (tremie concrete and sand) and the template was removed (Figure 4).
- Post-tensioned anchors are being installed in Cofferdam Cell #3 and grouting on Cell #3 is complete.
- Drill and grout on Cofferdam Cell #1 is progressing.
- At the shore tie-in, removal of debris is progressing well in preparation for the installation of shore tie-in frames.

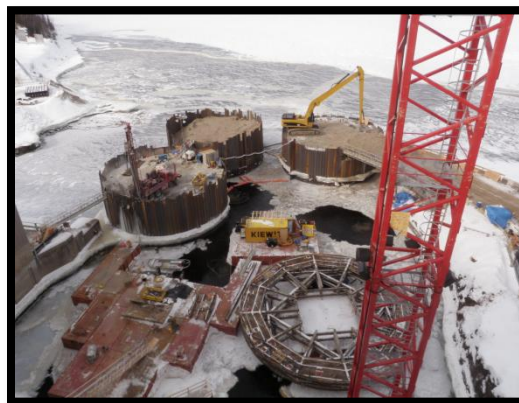


Figure 4: Backfill progress at the Kipling cofferdam

Monthly Summary – February 2012

SPILLS			
No. of Spills:		11; Spill Reports 189-199 (see Figure 6 for LMRP spills breakdown).	
Classification of Spills:		<u>Project Classification</u> Minor – 8 Moderate – 3 Major – 0 To Water - 0 <u>MOE Classification</u> Non-reportable - 0 Reportable to MOE <div>- Class C – 0 - Class B – 0 - Class A – 0</div>	
Reportable Spills			
No.	Quantity /Product Spilled	Spill Site	Reason for being Reportable
0	n/a	n/a	n/a
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 <div>• Class C - Less Serious • Class B – Serious • Class A – Very Serious</div>
Sediment Pond Exceedance of Effluent Objective (>15mg/L)			
No. of Exceedance days recorded	Location	Mitigation Measures used	
2 (Feb 5-6)	Harmon	KAP determined that the increase in the pH levels were due to the large concrete pour (700m³) that was took place on February 5. KAP proceeded to add citric acid to the pond as a corrective measure. The dosage for the citric acid followed KAP’s Harmon Sedimentation Pond Effluent Monitoring Corrective Measures Plan.	

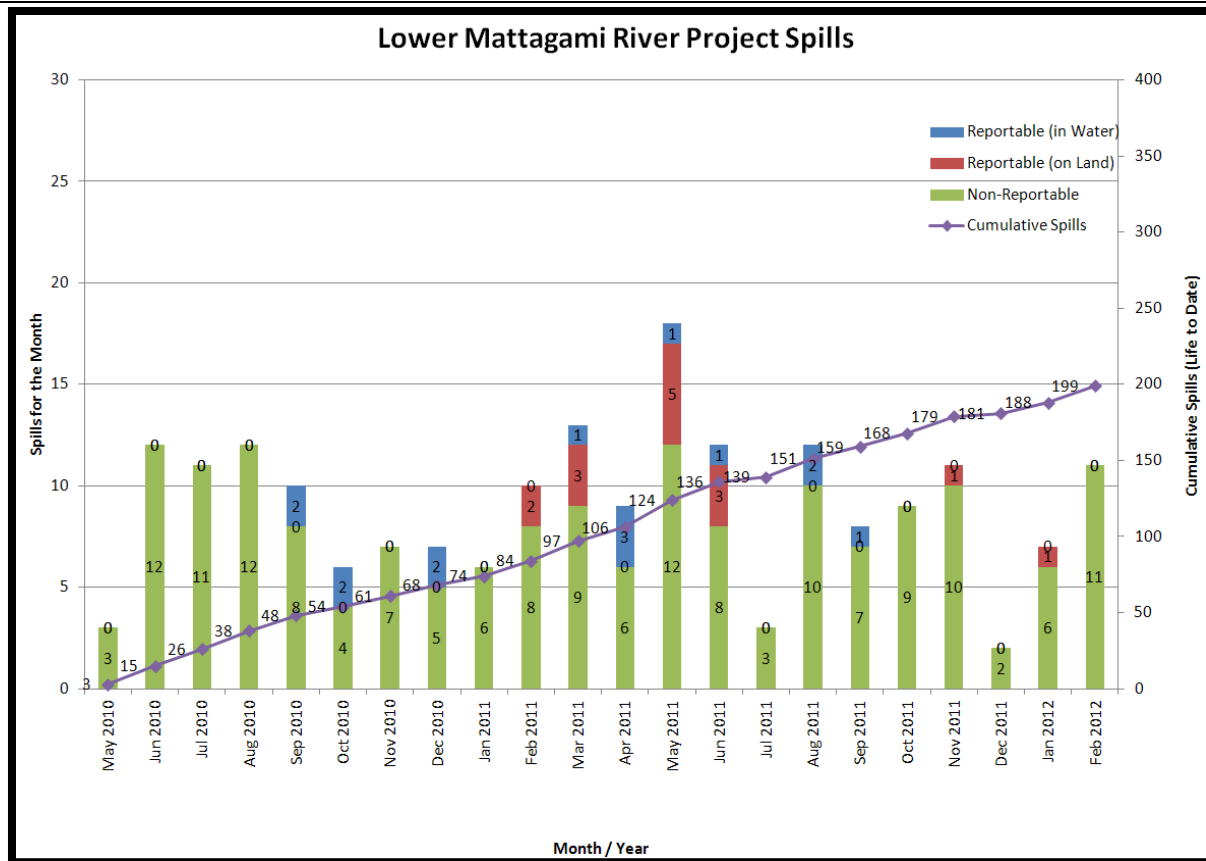


Figure 6: Lower Mattagami River Project spills

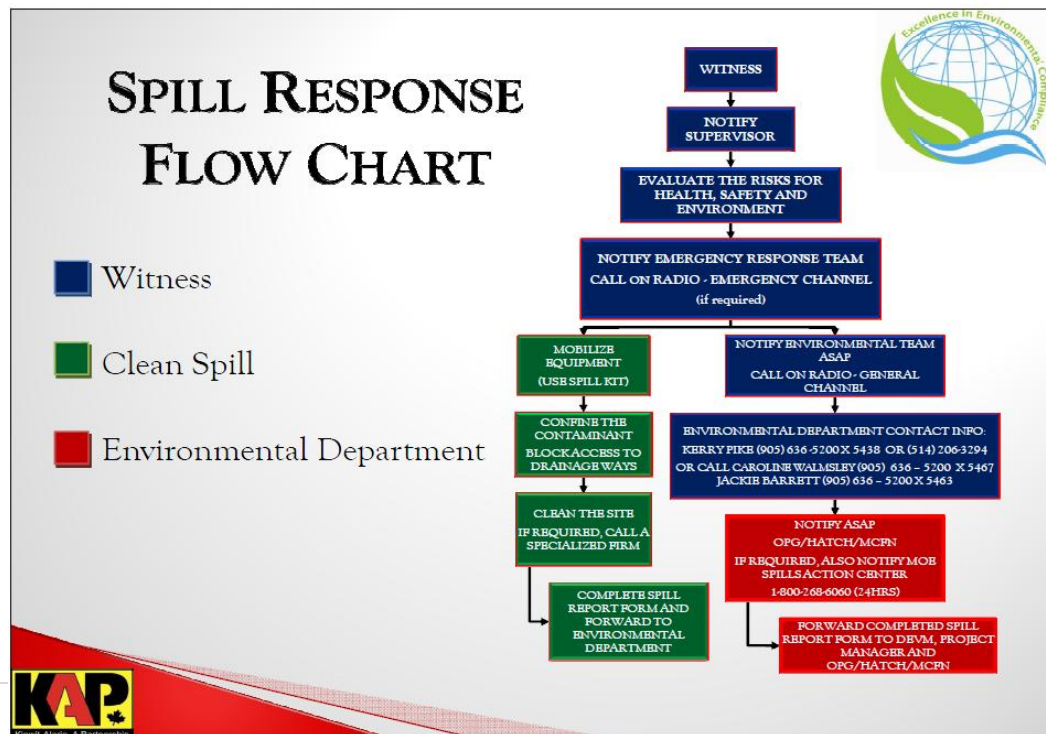


Figure 7: KAP Spills Response Flowchart

PERMIT AND APPROVAL REVIEW			
No. Reviewed:	0	List:	
No. Sent to KAP:	0	List:	
Reports Review			
No. Reviewed for KAP	2	List	<ul style="list-style-type: none"> • Environmental Management Plan • Hazardous Material Management Plan
No. Sent to KAP	2	List	<ul style="list-style-type: none"> • Environmental Management Plan • Hazardous Material Management Plan
No. Reviewed for MECC	3	List	On-going: <ul style="list-style-type: none"> • Cost Benefit Analysis of Mitigating and Reducing Spill in Adam Creek. • Operation Overview Report. • Baseline Methyl Mercury Reports and Mercury in Fish Flesh Summary Report.
No. Review Completed	1		<ul style="list-style-type: none"> • Operation Overview Report.
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



Kiewit - Alarie, A Partnership

Created By: Caroline Walmsley

Datum: Zone 17U

Date: January 19, 2012

Scale: 1: 5,500



ONTARIO POWER
GENERATION

0 100 200 400
Meters

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



Figure 10:
Lower Mattagami River Project
Kipling GS - Permits

Legend

Department of Fisheries & Oceans

Letter of Advice

Transport Canada

Approval - Navigable Waters Protection Act - Kipling 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 Rivers Improvement Act - Phase 1A-1 Deflector Wall

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

Lakes Rivers Improvement Act - Phase 1B Temporary Cofferdam

Lakes Rivers Improvement Act - Phase 2 Powerhouse Upgrades

Licence to Collect Fish for Scientific Purposes



Kiewit - Alarie, A Partnership

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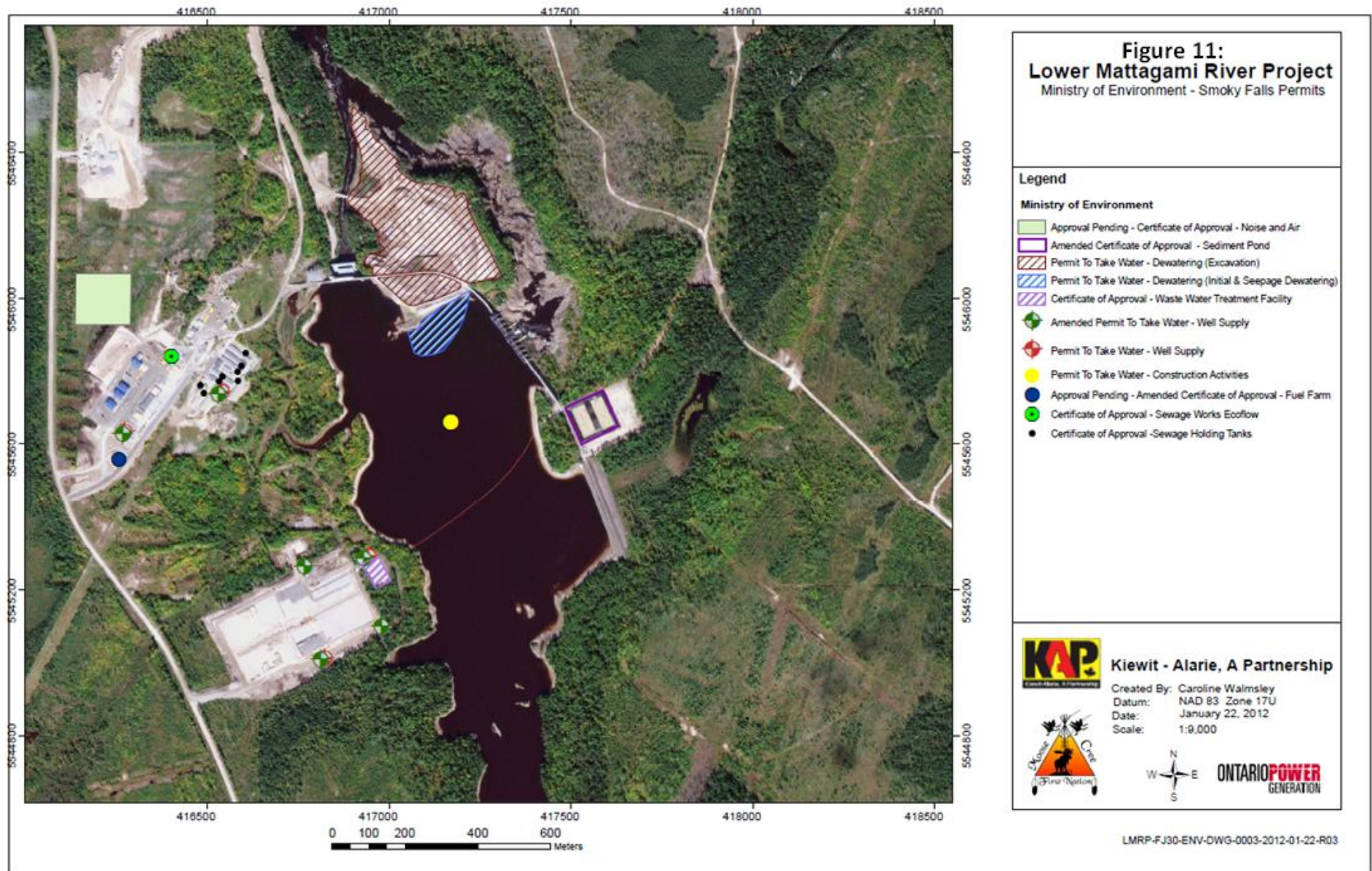
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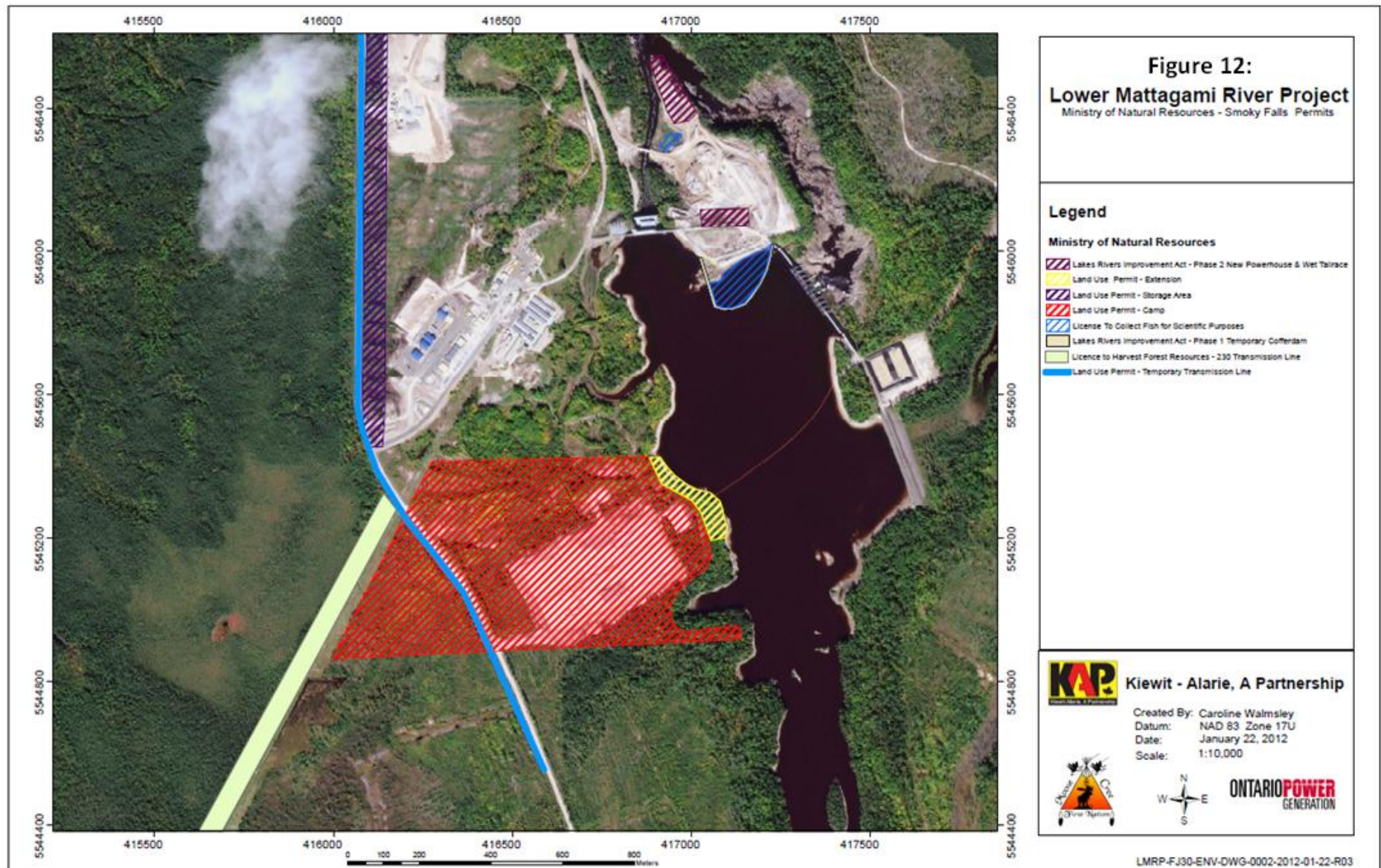
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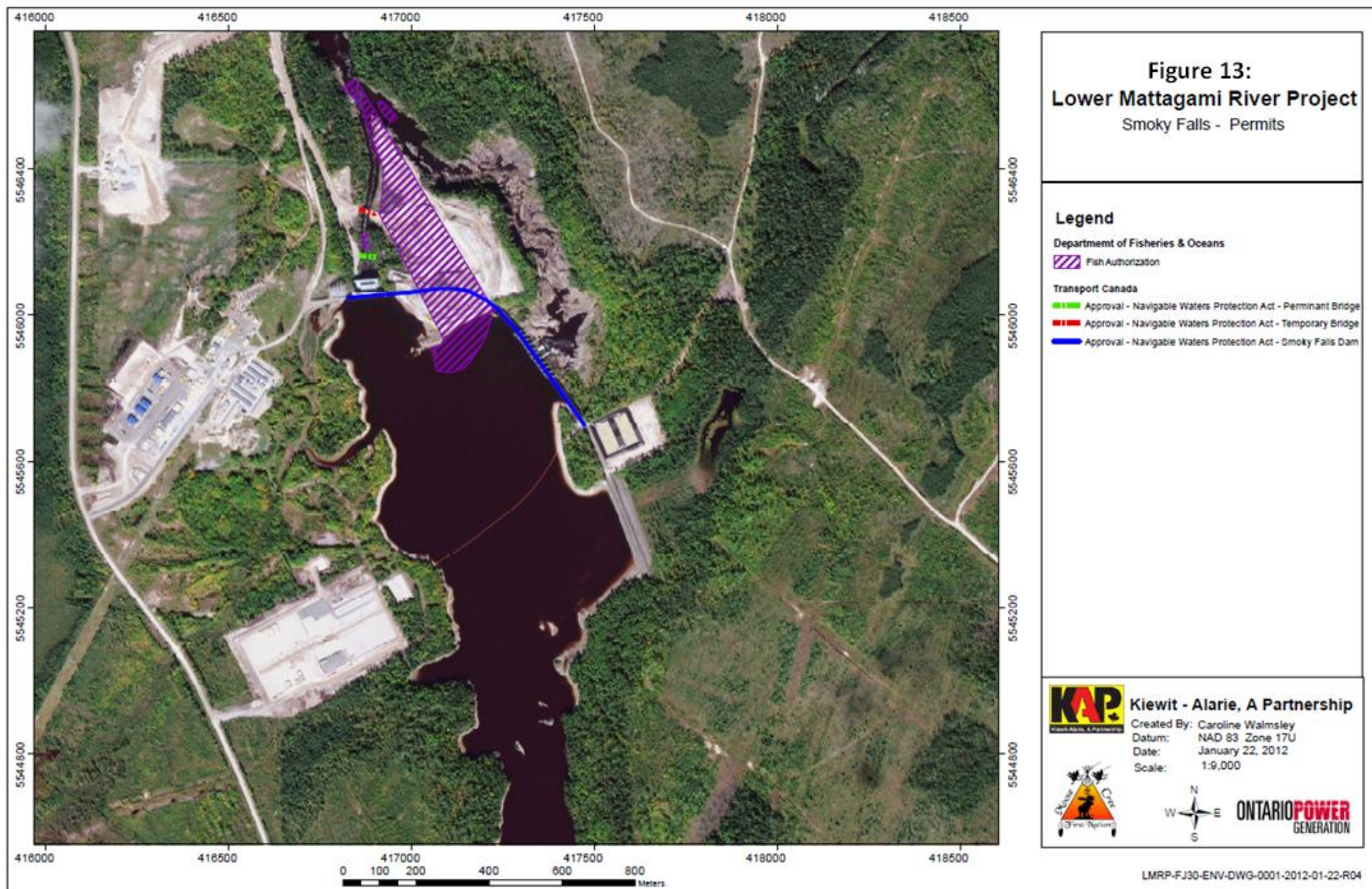


ONTARIO POWER
GENERATION

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







Issues and Concerns

- FN disagreement on background section of the Terms of Reference for the MECC Adam Creek Study.

Action Required: MECC study on hold pending direction resulting from FN Chief and Council discussions.

- MECC interpretations required for EA Terms and Conditions to be provided to EWG.

Action Required: MECC to begin providing interpretations to EA Terms and Conditions.