

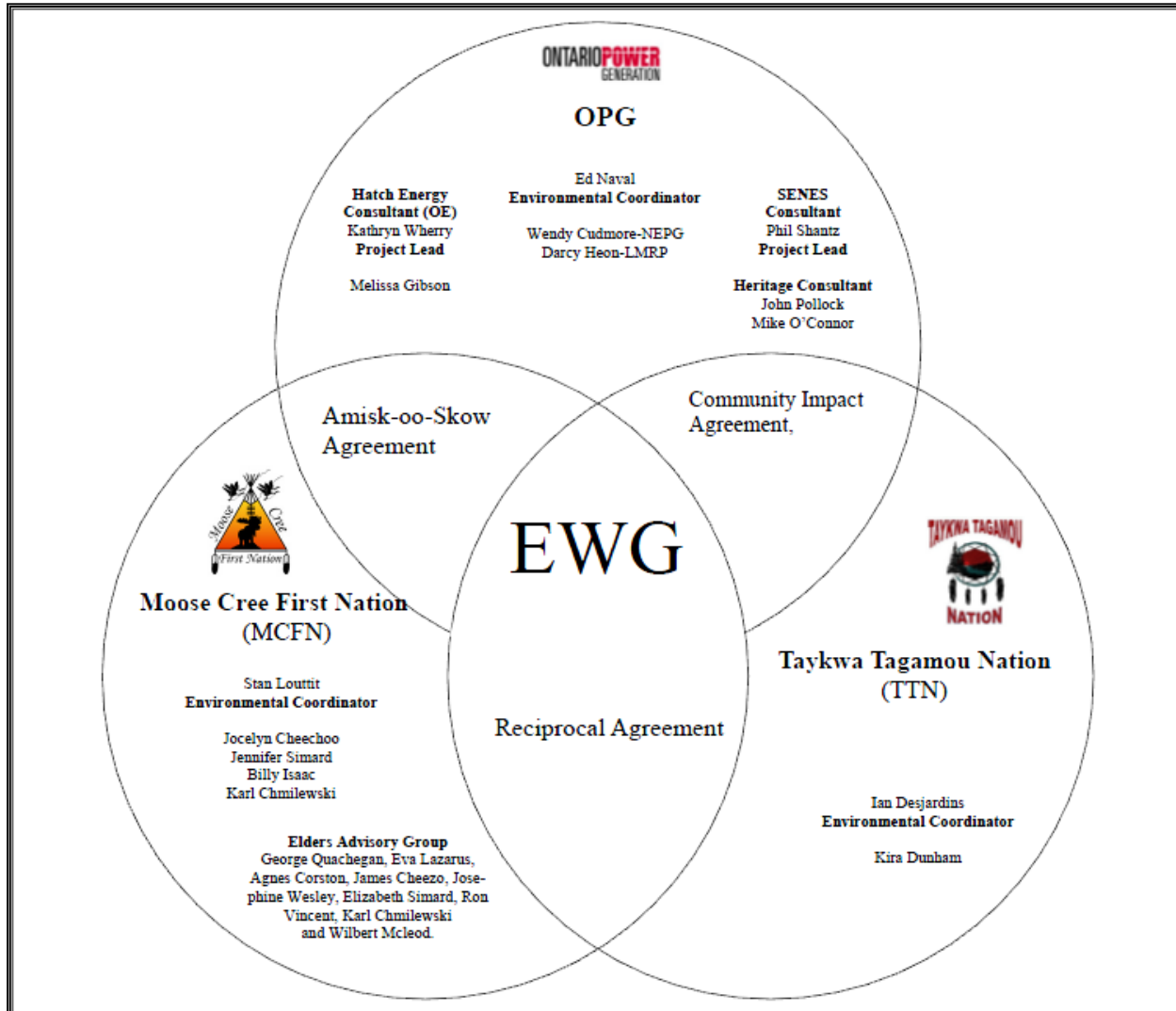
Environmental Working Group

Monthly Report

August 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 is currently conducting community interviews. MCFN have completed their interviews and plan to meet with TTN to coordinate the First Nation perspective.
- MCFN and TTN members of the EWG now conduct 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.
- Reviews of the Terrestrial Habitat Restoration Downstream of Kipling report intended to fulfill EA Term and Condition 5b is ongoing as EWG members obtain clarification from their respective MECC members. In the meantime, the report is being amended to include the comments received to date from OPG and TTN on the report.
- The Interim Measures Agreement as it relates to EA Term and Condition 14c (Permit Review and Compliance Monitoring Protocol) was presented by the EWG to the MECC during its August meeting in Moose Factory (Aug. 15-16). The MECC subsequently passed condition 14c subject to continued monitoring.
- 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.
- MCFN Elders participated in OPG Sturgeon re-location training with TTN youth.
- Members of the EWG have been engaged with Lura Consulting in preparations for the EWG Team Building event, that will take place on October 9, 2012, in Toronto.
- The first blast on July 19, 2012 at Smoky Falls tailrace resulted in several fish mortalities. Second blast on August 15, 2012 took place with no fish mortalities as a result of improved fish mitigation measures which were applied as recommended by MCFN members of the EWG.

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												

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

Construction

Little Long

- Concrete work is progressing well and nearing completion, with 596 m³ of concrete poured, bringing the total poured to date to 13,138 m³ of 13,886 m³ total, against a plan of 12,978 m³.
- Concrete work (forms, rebar, pours) for the mezzanines continues.
- Work on transmission towers (formwork and rebar for foundation pours) is ongoing.
- A steel beam ramp was installed between cofferdam Cell 1 and the mobilization pad to create crane access, and a crane pad was prepared at the cofferdam for the crane to be used for the superstructure erection, sectional gate hoist structure erection, and the cofferdam removal.
- The superstructure erection is under way and progressing (Figure 1).
- Three stator frames have been received at the site.
- Machining of the stay ring bottom flange is complete.
- The existing east powerhouse wall external cladding removal has started.



Figure 1: Little Long – Superstructure Progress

Harmon

- 1,493 m³ of concrete was poured this month, bringing the total poured to date to 8,423 m³ of 12,251 m³ total, against a plan of 6,869 m³.
- The concrete work this month was focused on the intake soffit and the scroll case outer walls.
- The stay ring jack bearing plate installation was completed and stay ring sections have been delivered to the site.
- Removal of the tailrace soffit shoring modules continues to advance.
- The three pit liner sections were delivered to the site this month. KAP has dry fit them and is preparing to begin welding them.
- Installation of the bottom stay ring anchors is under way (Figure 2).

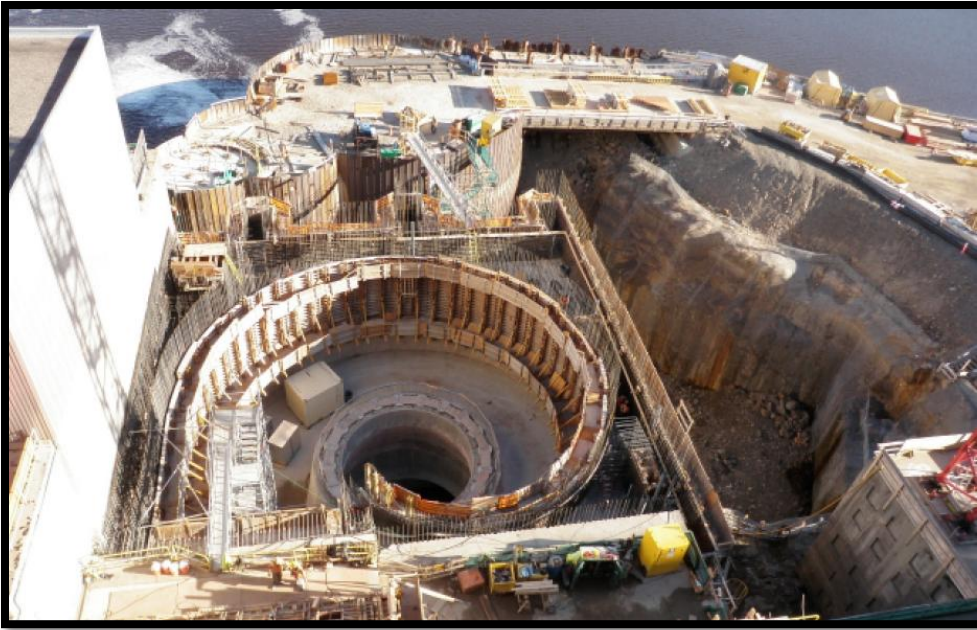


Figure 2: Harmon Site Overview

Kipling

- 283 m³ of structural concrete was poured this month, bringing the total poured to date to 283 m³ of 11,169 m³ total, against a baseline plan of 5,220 m³.
- Bullnose rock stabilization efforts are under way and wire mesh was installed over the east rock face of the excavation area.
- Excavation work in the powerhouse area was completed.
- A minor leak detected during dewatering at the interface of cofferdam Cell 3 and the pier tie-in was repaired using a chemical grout.
- Concrete work in the intake has progressed, with the base completed and progress being made on the East and West intake walls.
- The RSW geologist cleared KAP to begin pouring concrete after inspecting the powerhouse area. Two large powerhouse mud slabs and the sump shaft mud slab were poured (Figure 3).
- The transformer pad with oil containment walls was poured at the switchyard.



Figure 3: Kipling mud slab pour

Smoky Falls

- 9,599 m³ of concrete was poured this month in the service bay, powerhouse, and intake areas, bringing the total poured to date to 58,823 m³ of 155,084 m³ total, against a plan of 62,777 m³ (Figure 4).
- At the end of the month, twenty two (22) concrete pours are in various stages of work (formwork started and/or rebar being installed) and progressing in the intake, powerhouse, East gravity dam, and at the permanent bridge.
- Work continues on the switchyard and the transmission line, with grounding rod drilling complete in the switchyard and foundations for a number of towers completed.
- The steel superstructure erection is under way and progressing.
- Work has started on Sluiceway Gate 5 by AFI. The hoist structure is in position at Gate 5 and stop log installation will begin in early September.
- Wet Tailrace Channel: The drilling subcontractor continued the drilling of blast holes through the marine pad for the excavation of the downstream end of the wet tailrace channel. Phase 2 blast 1 was completed on August 15th and the blasted rock was hauled to the crushing plant. Phase 2 blast 2 is scheduled for September 1st.



Figure 4: Smoky Falls Site Overview

Monthly Summary – August 2012

SPILLS			
No. of Spills:		16; Spill Reports 263-278 (see Figure 6 for LMRP spills breakdown).	
Classification of Spills:		<u>Project Classification</u> Minor – 13 Moderate – 1 Major –2 To Water - 0 <u>MOE Classification</u> Non-reportable - 12 Reportable to MOE <ul style="list-style-type: none">- Class C – 4- Class B – 0- Class A – 0	
Reportable Spills			
No.	Quantity /Product Spilled	Spill Site	Reason for being Reportable
1	Oil, grease/Unknown	Kipling Cofferdam	Reported by KAP to MOE Spill Action Centre, but later determined that the spill was did not meet the definition of a spill under the EPA “from or out of ... container, abnormal in quality and quantity”. Also does not apply to s.30 of OWRA, as the discharge did not reach ‘waters’, per the report.
2	Sediment/Unknown	Smoky Falls - Tailrace	A thunderstorm with hail and heavy rain caused the road and ditches prior to the temporary bridge to be washed out . The water then in turn made its way to the Smoky Falls switchyard, as well as Structure 2, which then seeped out of the area, through the bush, into the tailrace. The ditches as well as the sediment and erosion control methods in this area were looked at and improved in order to better contain the water should a storm of this magnitude occur again.
3	Raw sewage/35m ³	Wastewater treatment plant	Reportable due to quantity. While inspecting the wastewater treatment plant, it came to a worker’s attention that there was sewage leaking from the raw sewage pump. He immediately went to look at the pump, and found that the lift station had become stuck due to the large accumulation of grease. As the lift station was stuck, the alarm did not go off and the pump malfunctioned which caused the tank to overflow. Inspections will now be increased to from a monthly basis to a weekly basis to prevent

			this kind of malfunction from occurring.
4	Hydraulic Oil/116 L	Smoky Falls Transmission – Maintenance Shop	Reportable due to quantity. After completing the visual inspection of the crane, the crane was moved to the maintenance shop to replace the steering metering valve. The crane was moved 5ft when the crane lost all hydraulics. The operator immediately stopped the crane and observed oil leaking onto the ground from a broken hose underneath the crane. The maintenance department repaired the hose.
Project Classification (KAP) Minor: $\leq 10L$ Moderate: Between 10L and 100L Major: $\geq 100L$ 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	
10 (Aug 1-7, 17, 19, and 25)	Kipling	The increase in turbidity was due to excavations in the Kipling cofferdam area, moving of the water pump in the cofferdam area in order to create the sump and rock washing activities. KAP added Alum as a corrective measure, in addition to the use of a filtration system which filters the water before it is pumped to the sediment pond.	

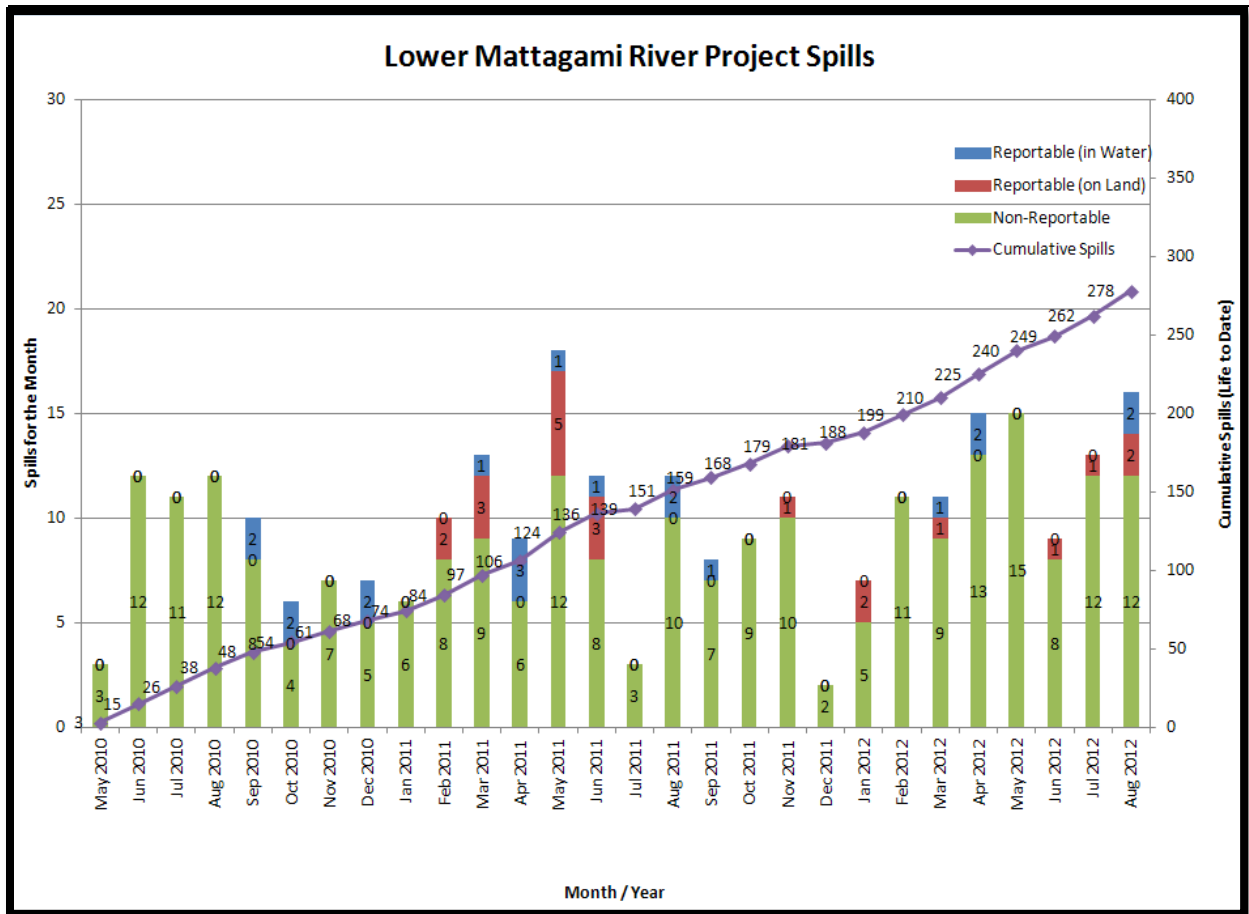


Figure 6: Lower Mattagami River Project spills

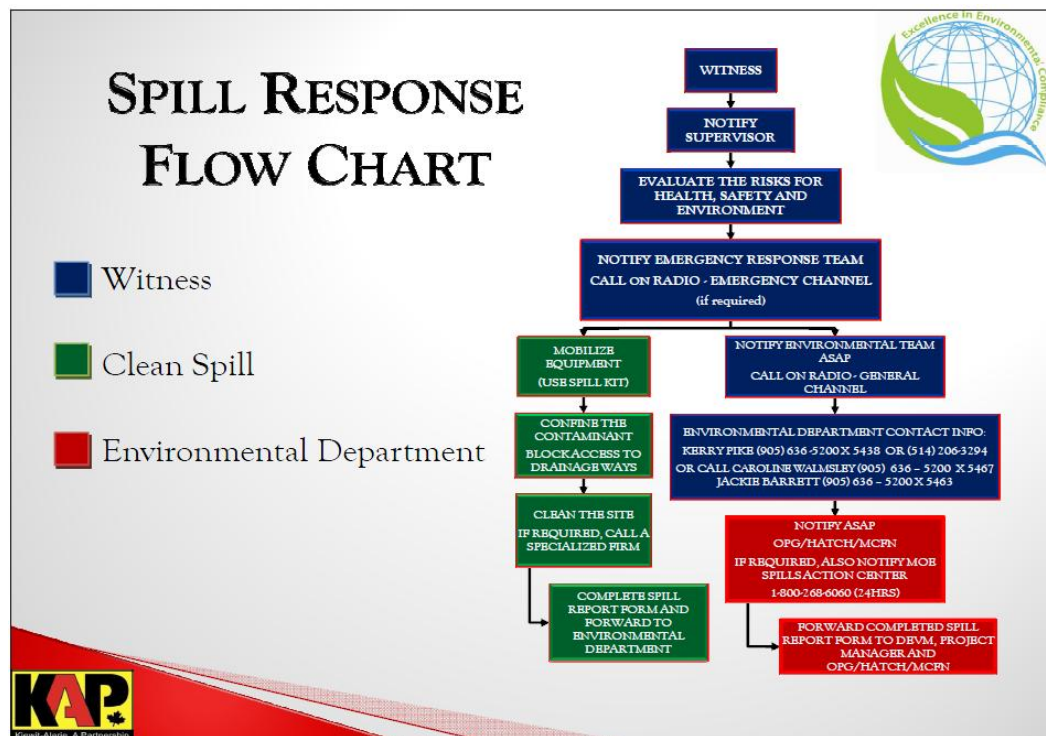


Figure 7: KAP Spills Response Flowchart

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	3	List:	<ul style="list-style-type: none"> • Operation Overview Report. • Waste Management Plan • Noise Control Plan
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.			

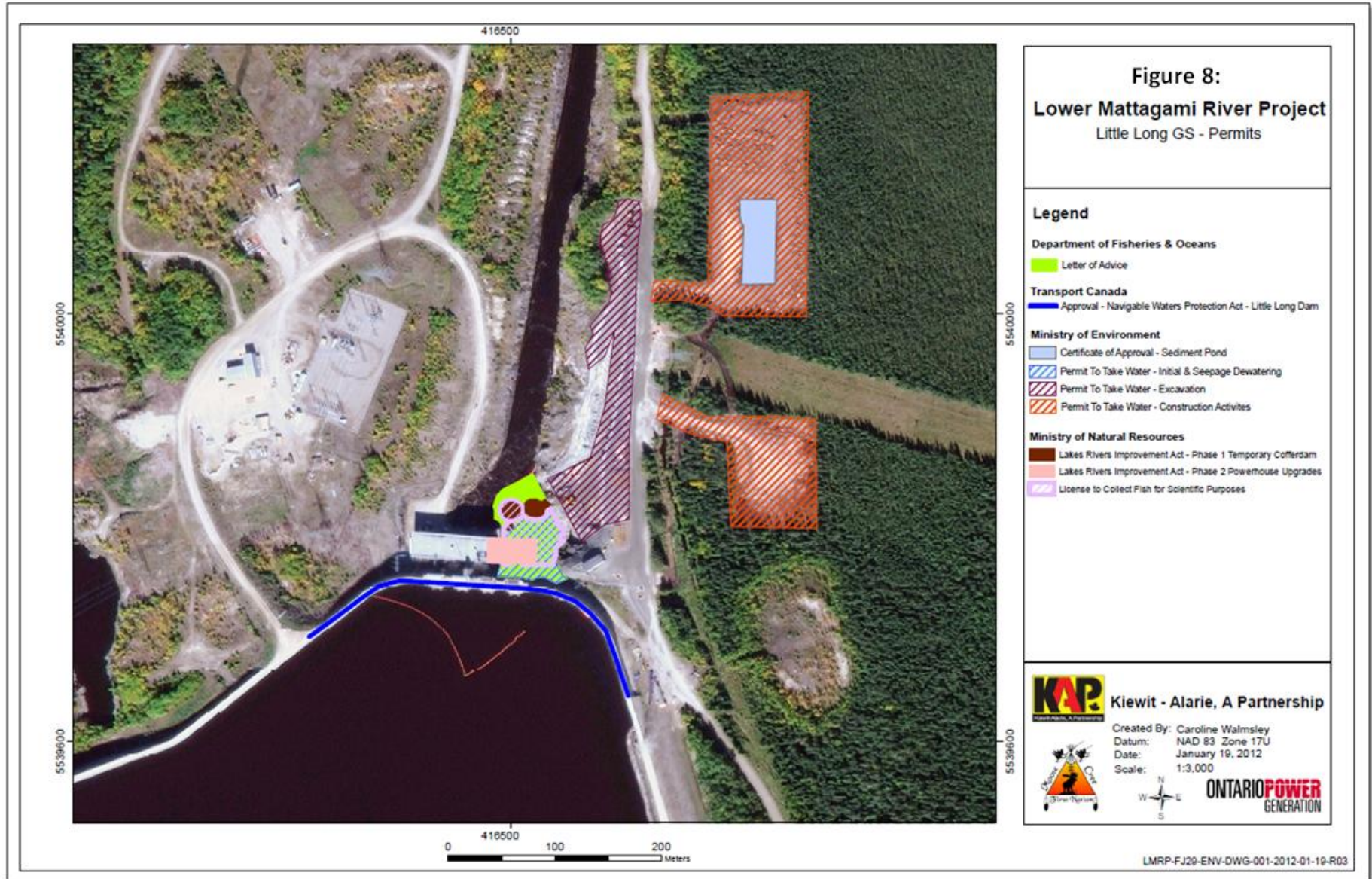



Figure 9:
Lower Mattagami River Project
Harmon GS - Permits

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



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Meters



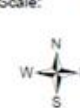
Kiewit - Alarie, A Partnership

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
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

Created By: Caroline Walmsley

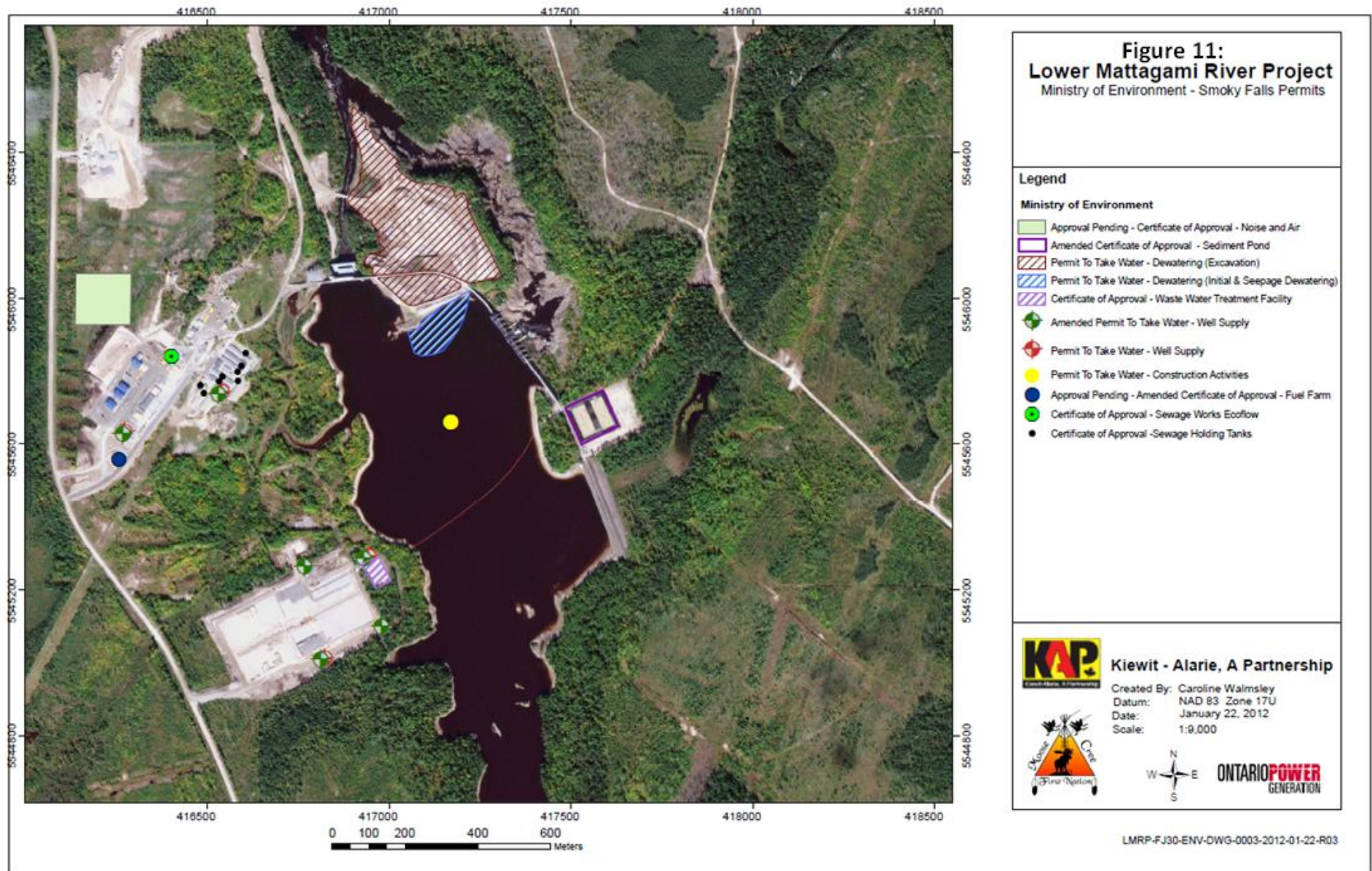
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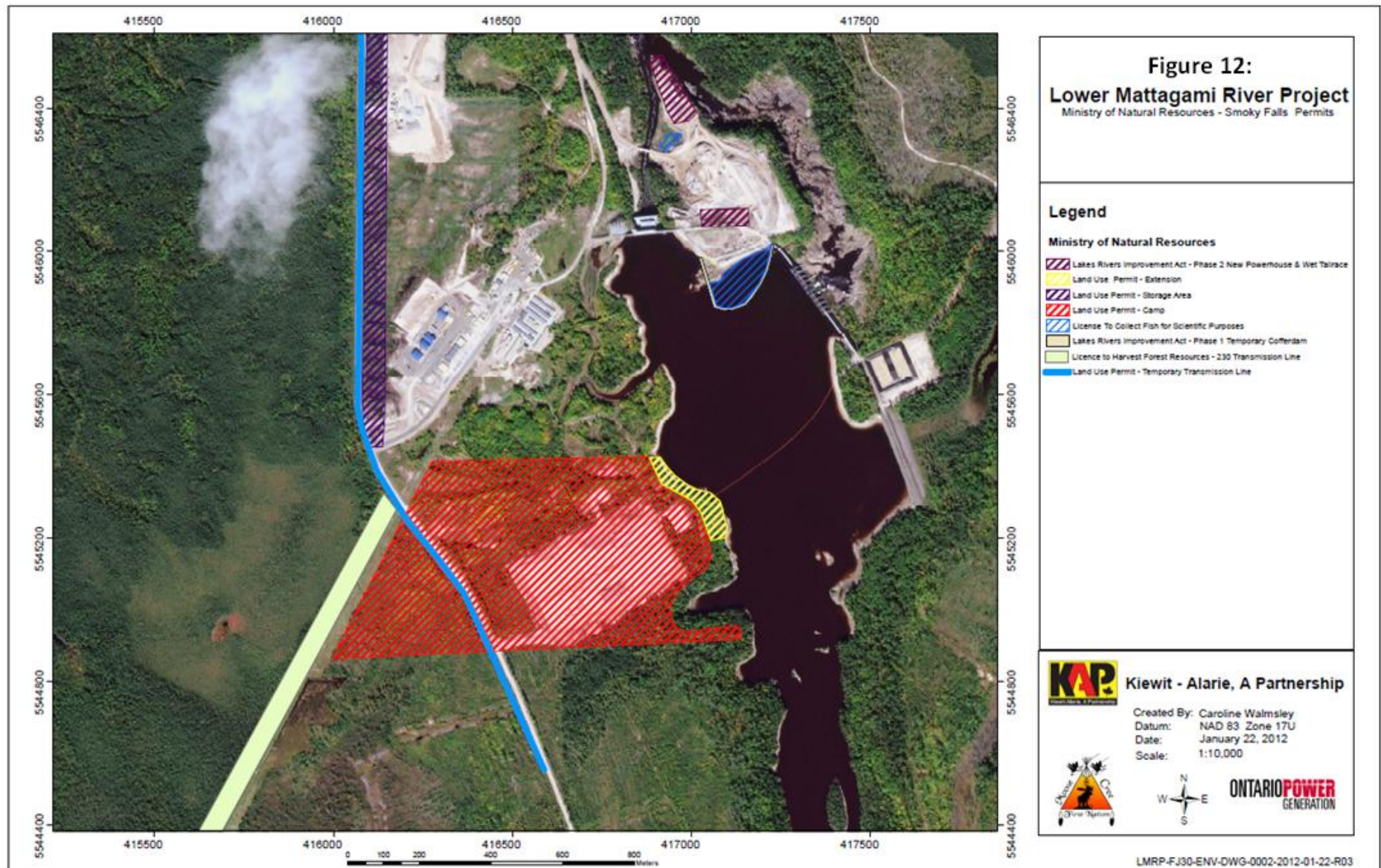
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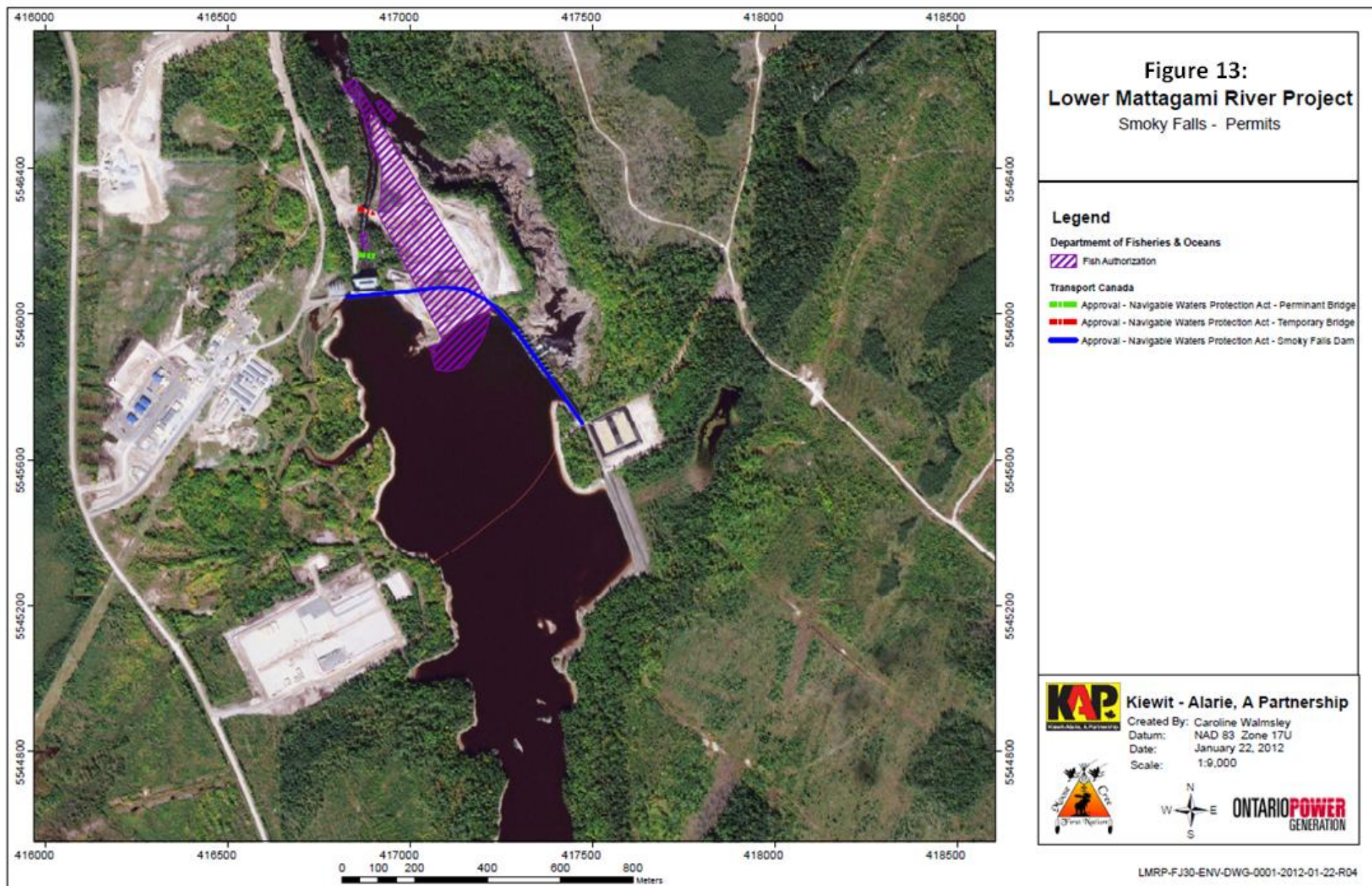
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Issues and Concerns

- MCFN members of the EWG were concerned with the regulators, such as the Ministry of Natural Resources (MNR), getting permit applications related to the LMRP at the same time as the EWG. The concern was that the EWG comments were not being considered before permits were being issued.

Actions Required: MCFN members of the EWG contacted KAP and were reassured that the parallel submissions to both the regulators and EWG were to allow the regulators extra review time. KAP confirmed that no permits were being issued before EWG comments were considered and addressed.

- MCFN members of the EWG concerned with MECC communication to EWG on EA Terms and Conditions.

Action Required: MCFN members of the EWG have prepared a formal notice memo that will be put forward as a recommendation for the MECC to use in communication to the EWG.

- The Smoky Falls permanent camp raw sewage treatment plant had issues with a broken pump that resulted in the release of sewage to the ground. The EWG and KAP were informed. MCFN members of the EWG were concerned and stated that once per month monitoring was inadequate and that weekly frequent monitoring should be implemented.

Action Required: KAP to continue to monitor the sewage pump and discuss with subcontractor inspection/monitoring of sewage equipment on a more frequent basis other than once per month.

- MCFN environmental monitor of EWG observed that a flooded bush area, at Kipling sediment pond, wasn't draining and the water had become stagnant. The concern was that this may have possible impacts to vegetation and trees. MOE was brought to the area and confirmed flooding/stagnant water was a negative impact.

Action required: KAP was directed to re-direct the sediment pond release hose to a better spot for drainage of the water.