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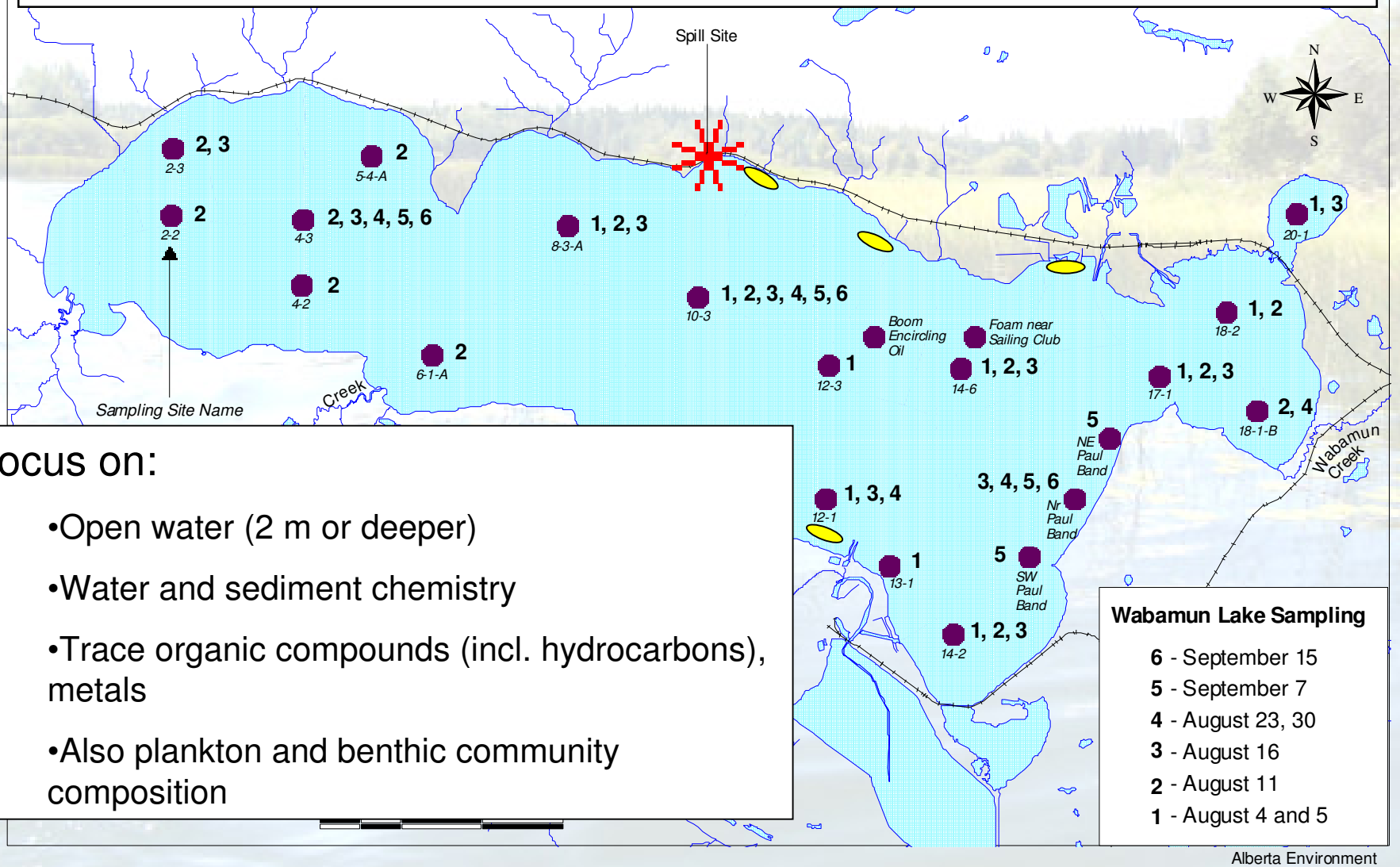
CN Train Derailment – Wabamun Progress Update

May 28, 2006

Presentation Topics

- Open Water Sampling
- Shoreline Cleanup Assessment Team
  - Overview
  - 2006 Program
- Soil and Groundwater Monitoring
- Summary

AENV Open-Water Sampling: 2005



Focus on:

- Open water (2 m or deeper)
- Water and sediment chemistry
- Trace organic compounds (incl. hydrocarbons), metals
- Also plankton and benthic community composition

Wabamun Lake Sampling

6 - September 15
5 - September 7
4 - August 23, 30
3 - August 16
2 - August 11
1 - August 4 and 5

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Results of Open-Water Sampling: 2005

- **Overall, the open water has not been seriously contaminated.**
- **Water**
  - Very low levels of some compounds (BTEX, PAH) detected at some sites.
  - All detected compounds related to the spill were within available guidelines for protection of aquatic life and drinking water. No indication of metal contamination.
- **Sediment – No indication of hydrocarbon or metal contamination.**

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Shoreline Cleanup Overview

- **As part of an oil spill response, Shoreline Cleanup Assessment Technique (SCAT) team systematically surveys and documents affected shorelines.**
- **Real-time data on oiling conditions at a shoreline are needed to:**
  - provide a rapid and accurate geographic picture of oiling conditions;
  - appreciate the nature and scale of the oiling problem; and,
  - facilitate spill-response planning and decision-making.
- **SCAT team helps to define limitations on application of cleanup techniques, so that operations do not result in additional damage.**

SCAT: The Lake Wabamun Team

- **The team includes representatives from:**
  - Alberta Environment
  - Alberta Sustainable Resource Development
  - Environment Canada
  - Indian & Northern Affairs Canada
  - Paul First Nation
  - Nichols Environmental (on behalf of Wabamun Residents' Committee)
  - Eastern Canada Response Corporation (on behalf of CN).

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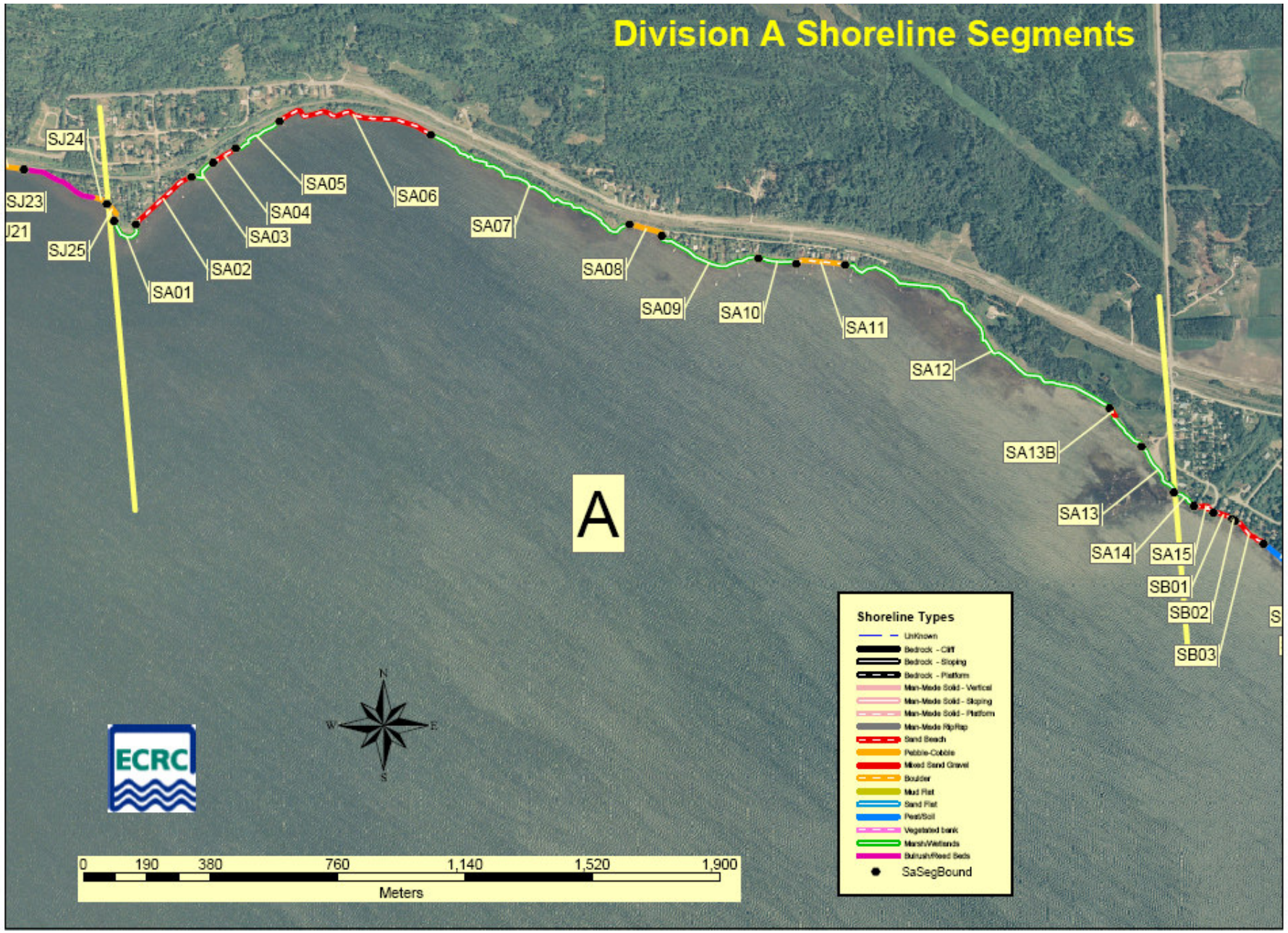

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SCAT: 2006 Program

- Aerial and shoreline spot-surveys during April to monitor break-up of ice and any shoreline oil.
- SCAT training course held early-April for agency, Paul First Nation, and Wabamun Residents' Committee.
- SCAT calibration and safety training May 8, followed by approximately two weeks to complete spring survey.
- SCAT information will help guide plan development for remaining clean-up (e.g., 'Sunken Oil Treatment Plan').
- In late-June, a long-term plan will be developed to address periodic shoreline surveys and spot-cleaning where required.

April 19 ice conditions near Ascot Beach

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SCAT: 2005 Program

- SCAT teams surveyed shoreline and reed beds Aug. 11-25 to provide a 'picture' of initial oiling conditions.
- An 'Overall Shoreline Treatment Plan' was developed and detailed cleanup requirements for various shoreline types.
- Post-treatment shoreline evaluations were conducted late-Sept. to mid-Oct.
- SCAT survey planned for spring, 2006 to re-assess shoreline conditions. Where treatment endpoints not met, shoreline treatment would resume.

SCAT team fall 2005

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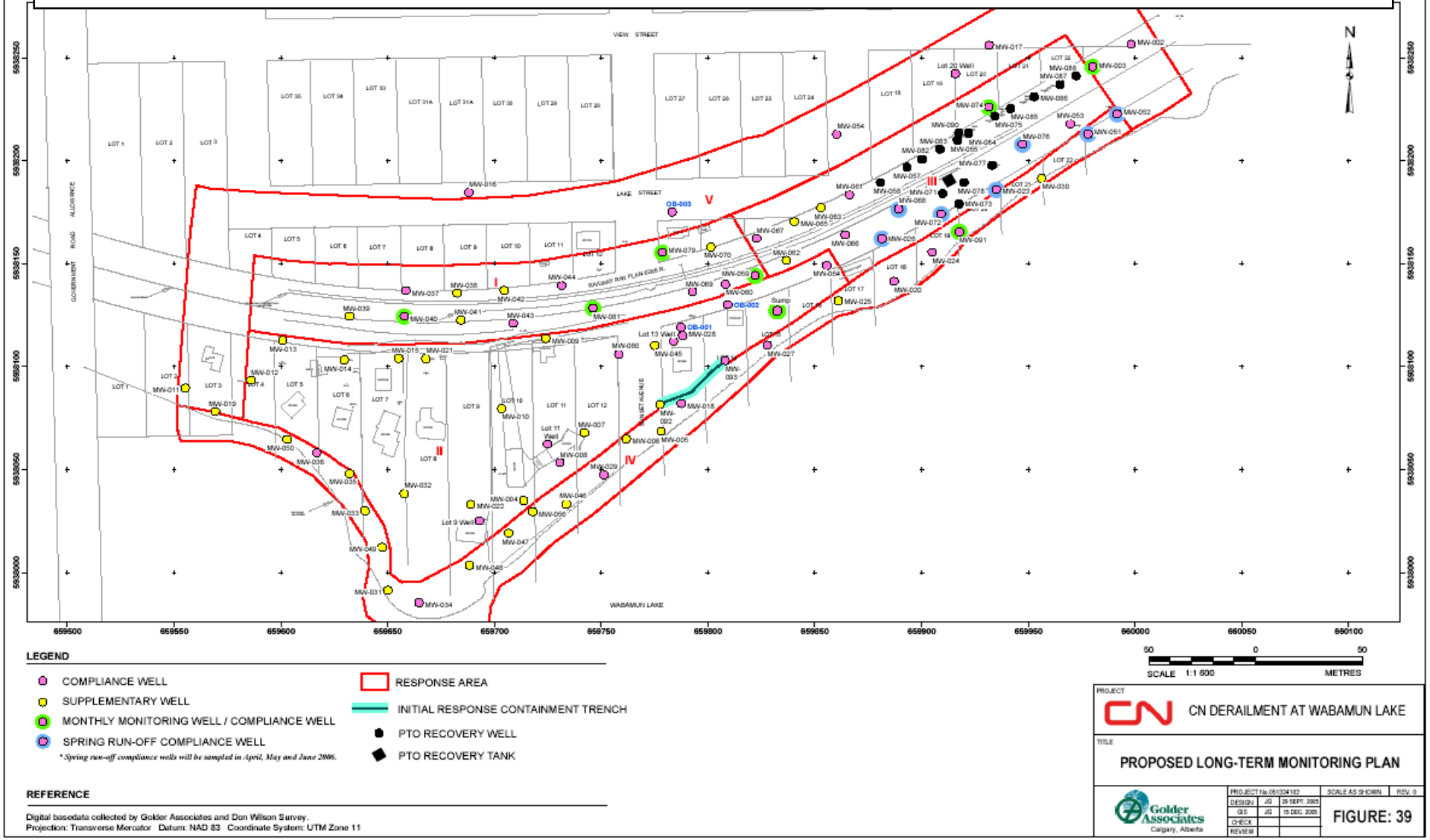
Groundwater Monitoring Locations



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Derailment Site: Soil & Groundwater

- Majority of Bunker C impacted soil has been removed from site: approximately 17,500 tonnes.
- 5000 tonnes Pole Treating Oil (PTO) impacted soil removed from site & taken to approved facilities.
- Some PTO remains in the soil and shallow groundwater at east end of site.
- Remaining PTO is contained and being actively extracted through PTO recovery system.

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Derailment Site: Soil & Groundwater

- Monitoring of groundwater is designed to protect properties around the spill site and the lake.
- Approximately half of the 90+ monitoring wells installed are currently being monitored by CN in both Bunker C and PTO spill areas.
- Based on current monitoring results, spill remediation and management has proven to be effective.

Soil and Groundwater at the Derailment Site

- **Monitoring and remediation activity is outlined in the following documents:**
  - Delineation Report
  - Detailed Remediation Plan
  - Long Term Soil and Groundwater Monitoring Plan

Summary

- **Environmental Protection Order**
  - CN has met the requirements of the EPO to date, which include a long-term monitoring plan and a detailed remediation plan.

- **Investigation**
  - Alberta Environment's investigation of the response to the spill is still underway.

- **Reporting**
  - Copies of all reports mentioned are posted on the Alberta Environment site, along with other relevant info: www.environment.gov.ab.ca.
  - Copies can also be picked up from our Village of Wabamun office at 5124 – 53 Avenue.

Thank-you for your continued participation:

Paul First Nation
Village of Wabamun
Lake Wabamun Residents' Committee
Permanent Residents/Cottage Owners
Local Authorities
TransAlta Utilities

Alberta Environment is committed to the restoration of Lake Wabamun