

# Mt Polley TSF Failure

Williams Lake Indian Band  
Looking Back 2 years

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# Mount Polley Mine

## Tailings Breach 2014.8.8

Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere  
Projection: Mercator Auxiliary Sphere  
Datum: WGS 1984



1:18,000

0 1,000 2,000 4,000 Meters



# Participation Agreement:

- WLIB with MPMC
- MPMC opened in 1997
- Agreement signed in 2011
- Proactive open door approach



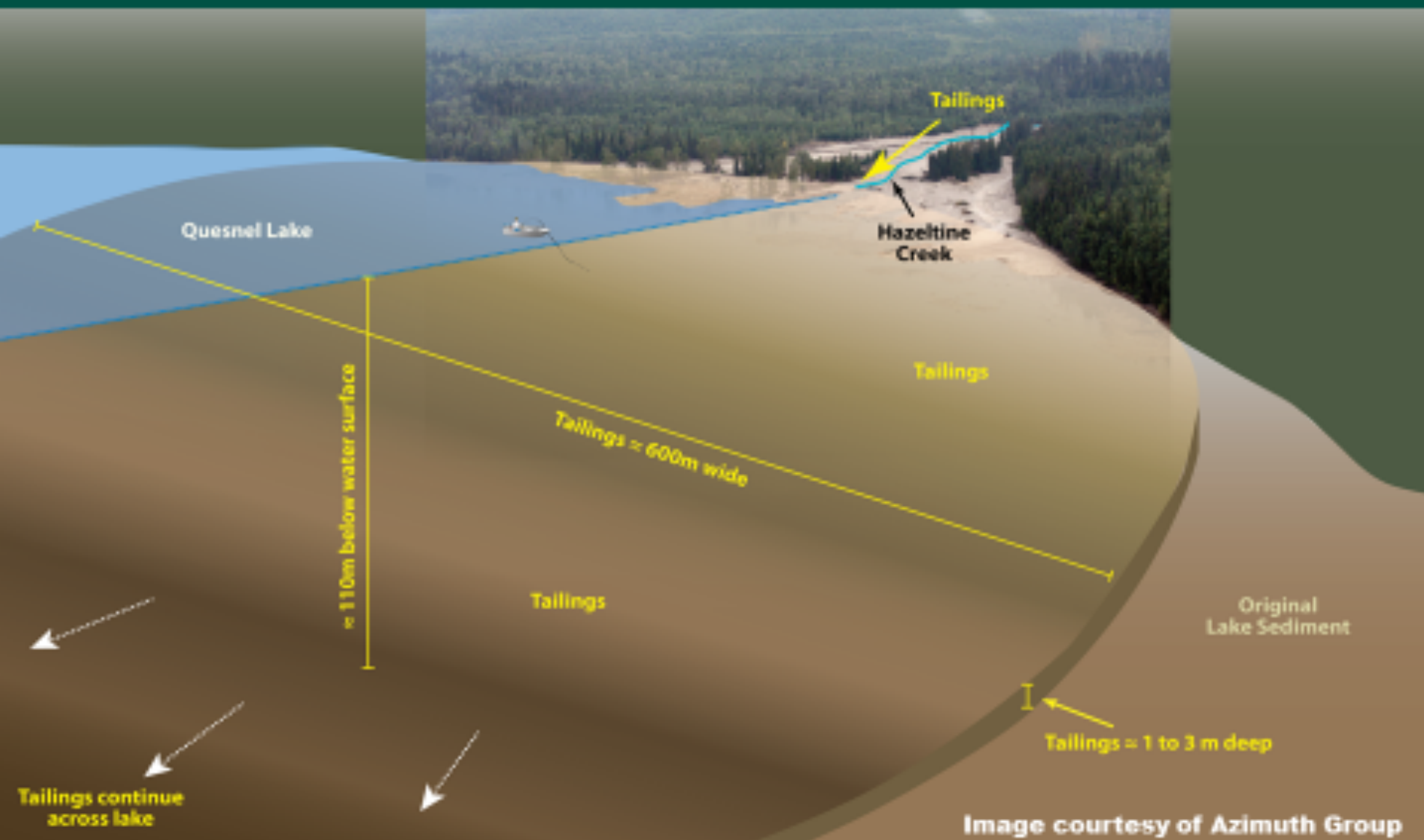
# The Health of Our Fisheries:



# Post Breach WLIB and FN Concerns

- Tailings in Polley Lake, Hazeltine and Quesnel Lake
- Toxicity of the tailings in receiving waters
- Health of our fish
- Impacted Archaeology sites in Lower Hazeltine Creek

# The Hazeltine Deposit



# Quesnel Tailings Deposit

- 600 metres wide and 1-3 metres high
- Extends from mouth of HC across to other side of the lake
- Tailings at bottom of lake
- Quesnel Lake turnover is not yet understood
- West Arm flushing time not yet understood



# Ongoing Concerns

- Are toxic metals tightly bound to sediments?
- Are the sediments bioavailable?
- MPMC's Consultants geochem tests state they "are not bioavailable"
- WLIB and Xatsull have requested more in depth and longer term studies
- We are waiting for results of current round of testing

# Water Treatment Plan



# Water Treatment Plant

- MOE has granted permit release of 0.33 m<sup>3</sup>/S
- WTP can treat max. of 0.3m<sup>3</sup>/s
- WTP currently treats 0.3m<sup>3</sup>/s



# Water Treatment Plant

- Requires ongoing monitoring to ensure treatment quality
- As Springer Pit levels drop, requires monitoring
- Monitoring is occurring at output of pipe and at Quesnel Lake discharge

# Quesnel Lake Diffuser Lines:

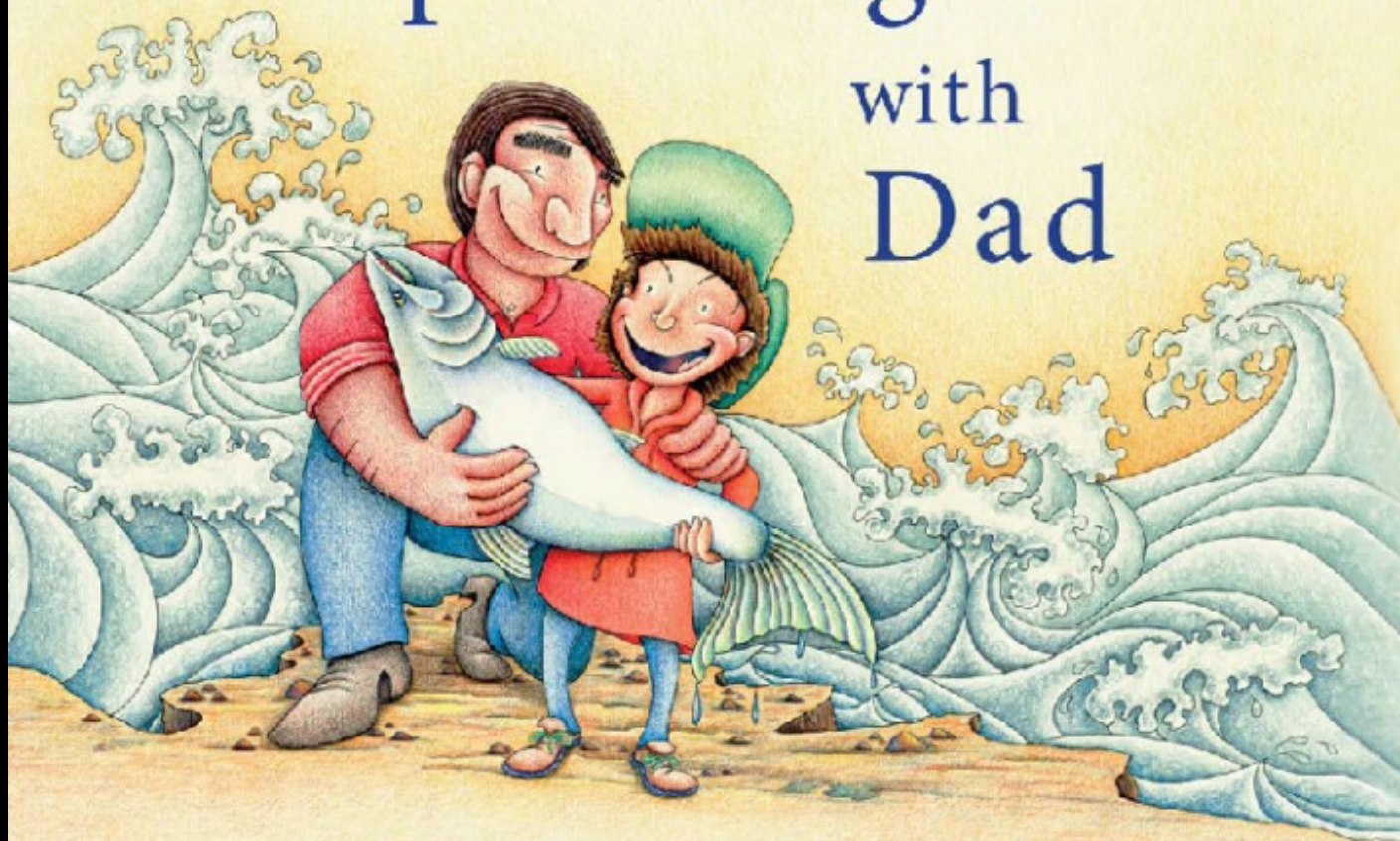


# Current Band Member Concerns:

- Members are concerned of cumulative impacts inside Quesnel Lake
- Statements such as “the solution to pollution is dilution”
- What will be the quality of the lake and the fish for future generations?



# Dipnetting with Dad



WILLIE SELLARS

ILLUSTRATED BY KEVIN EASTHOPE

# Restoration of fish habitat in Hazeltine Creek

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Presented to Xosha First Nation by Brian Olding  
Brian Olding & Assoc., Ltd.







# Additional Concerns:

- Quesnel River Discharge Option
  - Economic analysis is required
  - Ecological analysis is required
- Potential impact on Bootjack Lake from Springer Pit

# Springer Pit



# How we work with BC and MPMC

**Principals Table**

**Senior Officials Committee**

**G2G Technical Working Group**

**Environmental Working Group**

**Mine Development Review Committee**

**Mine Implementation Committee**



# G2G TWG:

Maximize consensus on all issues

Decision Makers: BC SDM and both Chiefs

# G2G TWG Work Plan:

- Long Term Water Discharge Permit
- Human Health Risk Assessment
- Ecological Risk Assessment

# Mount Polley Pollution Abatement Order:

**Post-Event Environmental Impact Assessment  
Report (PEEIAR)**  
Report Jun 2015

**Detailed Site Investigation & Draft Problem Formulation**  
Report Due: Jan/16

**PEEIAR Update**  
Report Due: Apr/16

**Human Health and Ecological Risk Assessment**  
Report Due: Jan/17

**Restoration Plan**  
Report Due: Mar/17

**Comprehensive Environmental Monitoring Program**  
Report Due: Mar/17

**Implement RP & CEMP**  
Report Due: Mar/18



# EMA Permit PE11678 Amendments

## Permitting with our active participation:

Permit	Date	Status
STWTD: Alternative Discharge Design and Construction	Feb03 2016	✓
STWTD: Approval of Monitoring Plan	Nov30 2015	✓
STWTD: Application Form	Dec01 2015	✓
STWTD: Technical Assessment Report	Dec11 2015	✓
Restart Tailings Disposal	Jul09 2015	✓
Restart Tailings Disposal – Reasons for Decision	Jul09 2015	✓

# First Nations Energy Mining Council:

We also work with FNEMC at the SOC and Principals Tables  
They are currently focused on working directly with BC  
FNEMC key issues include province – wide policy work on:

- Renewal of First Nation role in EA legislation
- Free Entry staking on First Nation's Territories
- Regulation of placer mining in First Nation's Territories

# Potentially contaminated riparian soils:

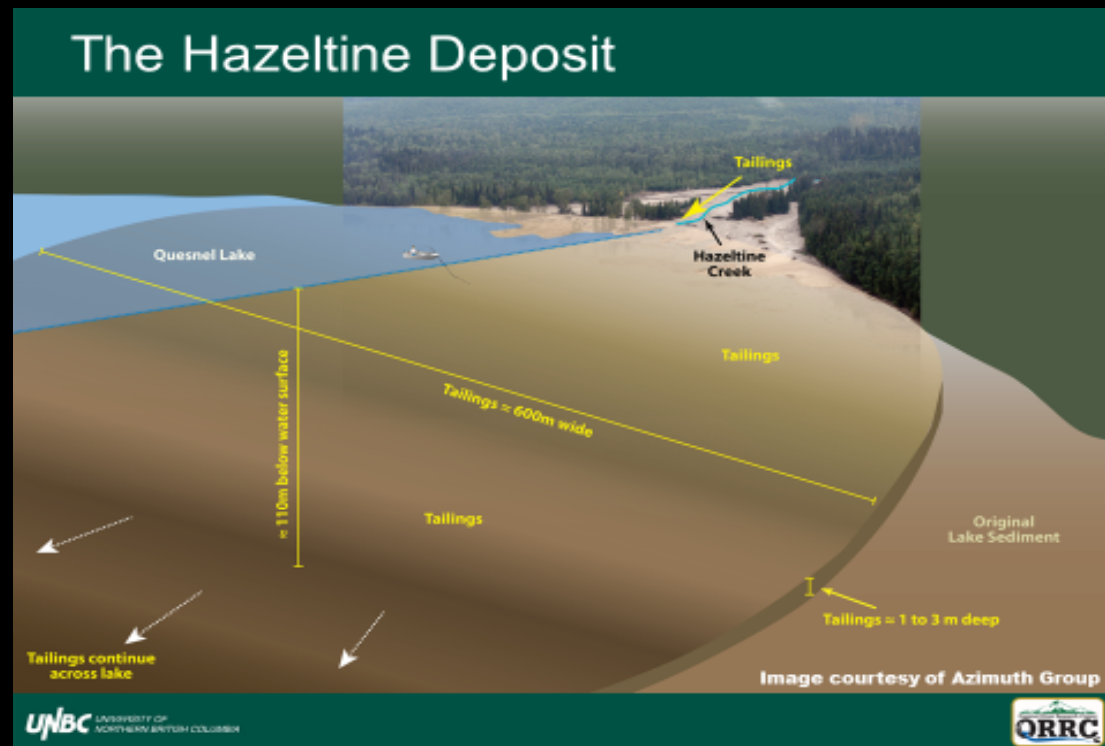
In spite of MPMC assertions that GeoChem shows toxic metals released from the Breach are biologically unavailable ...





# Potentially contaminated lake sediments:

- And tailings lying at the bottom of the West Arm are said by MPMC to be biologically unavailable ....



# And we are still working on ....

- The review of Quesnel River as an option for long term discharge
- The restoration work required for Hazeltine Creek
- Security and Bonding Reclamation

Thank you for listening:

- Questions?