Foothills Stream Crossing Program









January 2011

Foothills Stream Crossing Program

- 1. Objectives
- 2. Current Membership
- 3. Progress to Date
- 4. Environmental Priorities
- 5. Watershed Scale Remediation



Current membership (crossing owners)

- □ Apache
- **CN** (inactive)
- **CNRL**
- ConocoPhillips
 - Devon
- Hinton Wood Products, West Fraser Mills
- Imperial Resources (Esso)
- Suncor Energy (including Petro Canada)

devon

- Talisman Energy
- **Tourmaline**
- Shell Canada (including Duvernay)



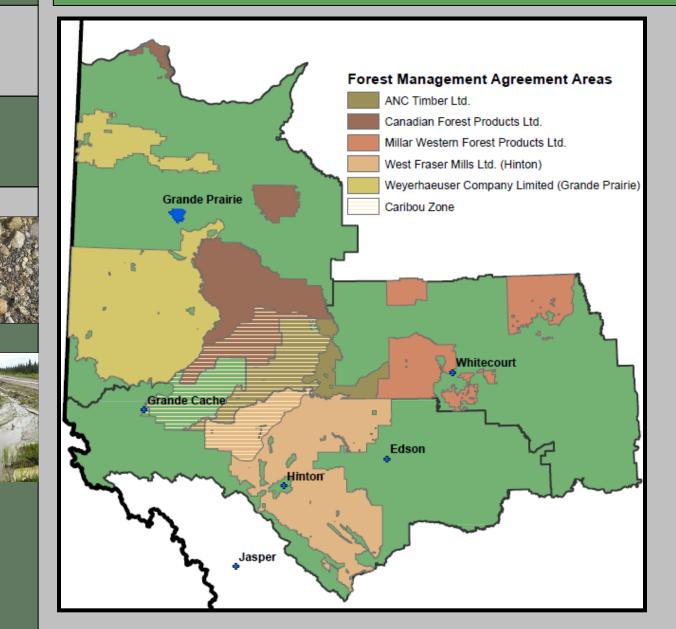




Overall Progress to Date

- 2005/2006– Developed Stream Crossing Manual and completed just over 300 field inspections
- 2007– Developed a collaborative watershed management strategy for two basins to test cooperative remediation process
- 2008– Inspected all crossings and collected baseline fisheries data in test basins
- 2009- Remediated 52 crossings and completed all member crossing inspections
- 2010 Developed 6 priority watershed plans and expanded to the Caribou Zone.

Study Area





Inspection Priorities







Water quality



Fish passage



Safety







Prioritization

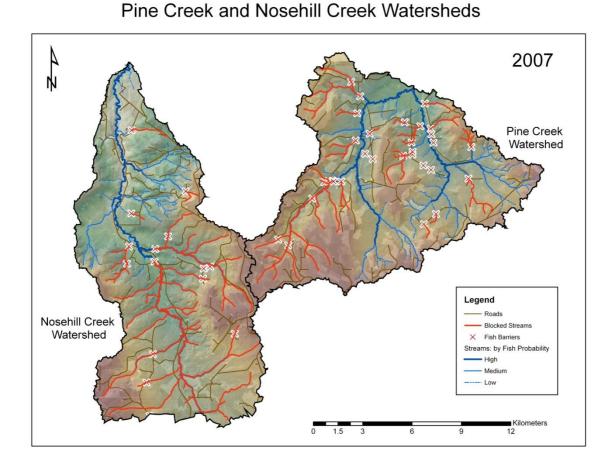
Stream crossings present a large scale problem due to various factors

- Changing construction standards
 Older crossings which have changed owners many times
- •Lack of crossing inventories and data.



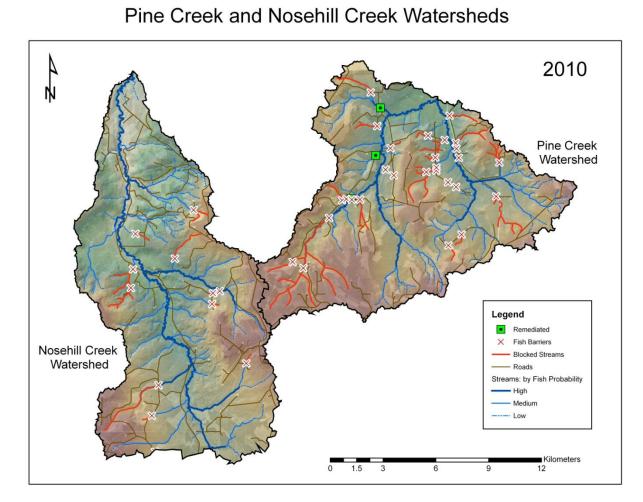
Designed to coordinate collaboration between companies and regulators

Remediation Watersheds



In 2007 Pine Creek and Nosehill Creek had significant portions of fish habitat blocked due to faulty crossings indicated by the red lines.

Remediation Watersheds



By the 2010 construction season 40km of previously blocked fish habitat was opened through remediation.

Footprint Reduction

<u>2009</u>

- 47 (of 51) crossings had sedimentation issues addressed
- 5 crossings were mitigated for fish passage opening 29 km of fish habitat opened (63% of recommended fish passage repairs)



<u>2010</u>

- Remaining 4 crossings at risk for sedimentation will be repaired
- Planned repair to remaining fish barriers will open 15 km of fish habitat

Why do we prioritize?

• Large landscape scale problem



- Maximize environmental benefits with available funds
- Allows for collaboration between companies and the regulators
- Allows for planning over time

Problems/Concerns?

- How to get non-members on board, both industry and government?
- The magnitude of the problems including the number of crossings and the cost of remediation.



• The balance between industry driven solutions and being in compliance.

Summary

- Good example of "integration"
- Adaptive



- Strong support and cooperation from industry, FRI, ASRD and DFO
- Results oriented and continuous improvement

• Potential to expand across Alberta





