

# Foothills Stream Crossing Program



April 2011





# Foothills Stream Crossing Program

1. Objectives
2. Current Membership
3. Progress with regulators
4. 2011 Field Season
5. Watershed Priorities



# Current membership (crossing owners)

- Apache
- Canfor
- CN (inactive)
- CNRL
- ConocoPhillips
- Devon
- Hinton Wood Products, West Fraser Mills
- Talisman Energy
- Tourmaline
- Shell Canada (including Duvernay)



West Fraser

devon



ConocoPhillips



# Current membership (support)

- ❑ Fisheries and Ocean Canada
- ❑ ASRD Public Land and Forests
- ❑ ASRD Fish and Wildlife
- ❑ Alberta Environment
- ❑ Foothills Research Institute
- ❑ Alberta Conservation Association





# Summary of Progress with Local SRD

- Meetings and workshops between SRD, Environment, DFO, industry and the FSCP to resolve outstanding issues and to try to move the process ahead regarding the inspection of crossings and remediation
- Attempts to align the work of the FSCP and SRD's Foothills Watershed Remediation Pilot Project while keeping in mind the Enhanced Approval Process and avoiding duplication



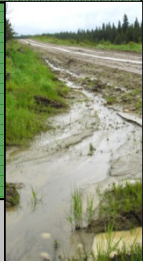
# Outstanding Issues

Submitting actual inspection data upon request from SRD (only for the purpose of conducting audits of the actual inspections).

The differences in the two manuals (our inspection manual and protocols are more detailed and thorough than SRD and more suited for what we are trying to do).

Remediation plan format

Still need to come up with common watershed boundaries





## Outstanding Issues (con't)

Establishing priorities for watershed remediation (agreed to work on this jointly at the last meeting, but regulators made it clear this is mostly their responsibility).

Approval process (times lines for submitting remediation plans and getting feedback and “approval” from the regulators)

Audit process (SRD agreed to come up with some protocols around their audits as opposed to the ad hoc way they have been conducted previously).

How to handle erosion and sedimentation (and really ongoing road maintenance) issues (we need to submit a proposal).



# Differences Between Inspection Protocol

- Ultimately very similar outcomes

## Gov't Protocols

### Stream Classification

- Colluvial Fluvial

### Erosion

- Yes/No/Potential

- Extent – Low/High  
(Based on inspector's judgment)

### Fish Classification

- Salmonids vs. Non salmonids

### Structure Data

- Limited to crossing type and culvert diameter

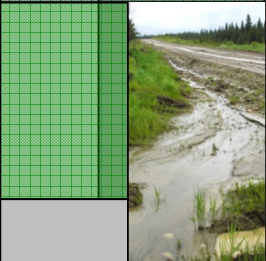
## FSCP Protocols

Added to FSCP protocols

Rated high, medium, low  
(Based on measurements and inspector's judgment)

Ratings high or low based on non salmonids

Assessments conducted on structural problems at site





# Remediation Plan Updates

## Remediation Plan

Disposition No.	Crossing	Owner	Legal Location					UTM Coordinates		Colluvial or Fluvial	Fish Prob. Rating	Fish Species	Fish Passage Risk Rating	Erosion Risk Rating	Year Inspected	Crossing	
			Twp	Rge	Mer	Sec	QS	Easting	Northing							Type	Size (m)

Stream Class (as per COP)	Timing Restrictions	Summary of Current Problems (Recommendations)	Proposed Remediation	Timing	In Stream Activity (Y or N)
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- Removed
  - Work completed (moved to separate update form)
  - Removed sedimentation remediation
  
- Added
  - Colluvial/Fluvial
  - Risk Ratings

## Remediation Plan Update

Disposition No.	Crossing	Owner	Legal Location					Colluvial or Fluvial	Fish Prob. Rating	Fish Species	Fish Passage Risk Rating	Erosion Risk Rating	Year Inspected	Crossing	
			Twp	Rge	Mer	Sec	QS							Type	Size (m)

Summary of Current Problems from Last Inspections (Recommendations)	Work Completed	Date	Next Inspection
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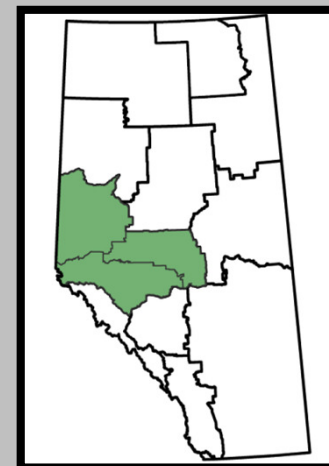
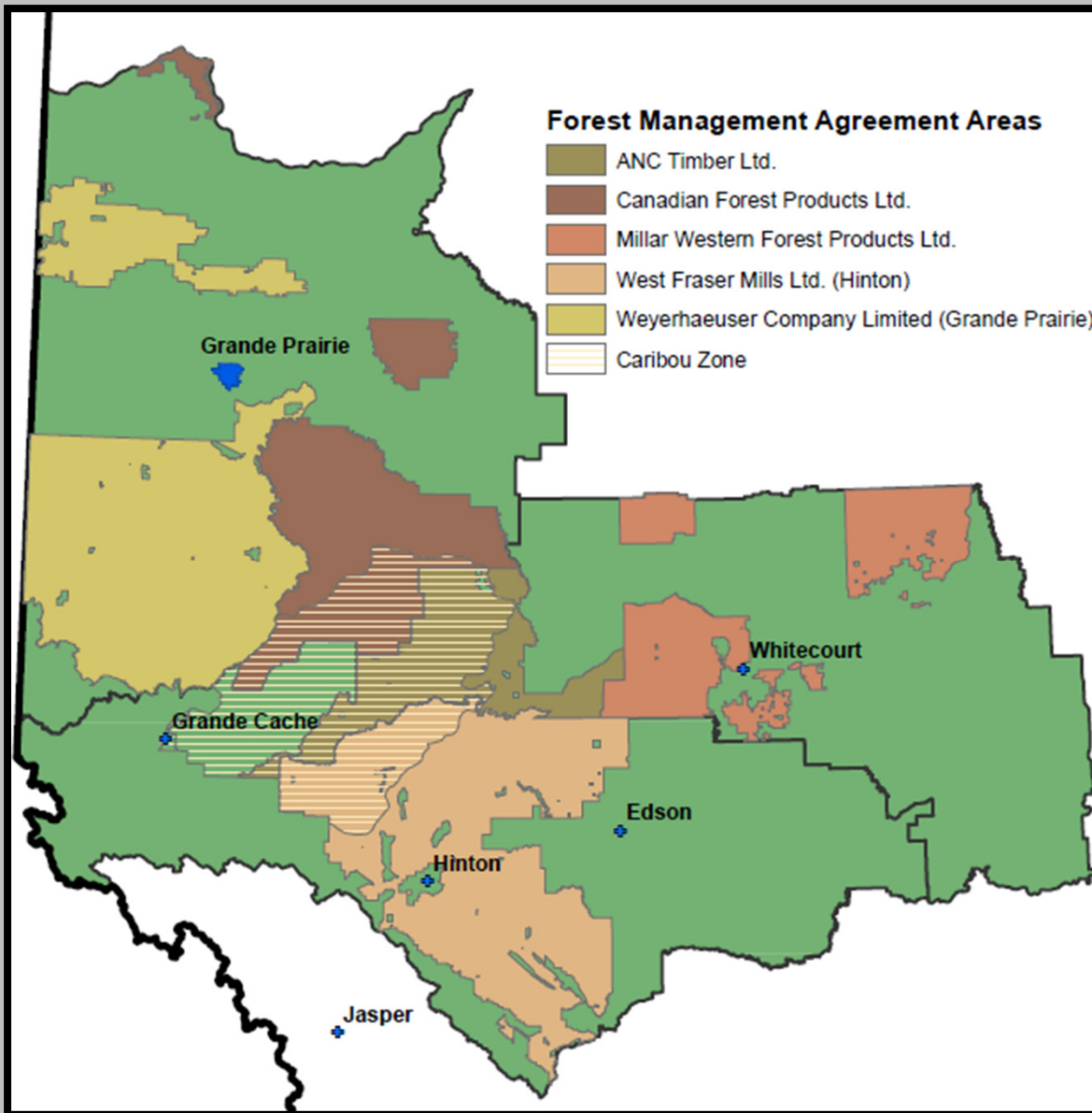
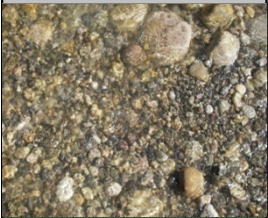
## 2011 Field Season

- Regional Access Development Plan
- FSCP study area





# Study Area

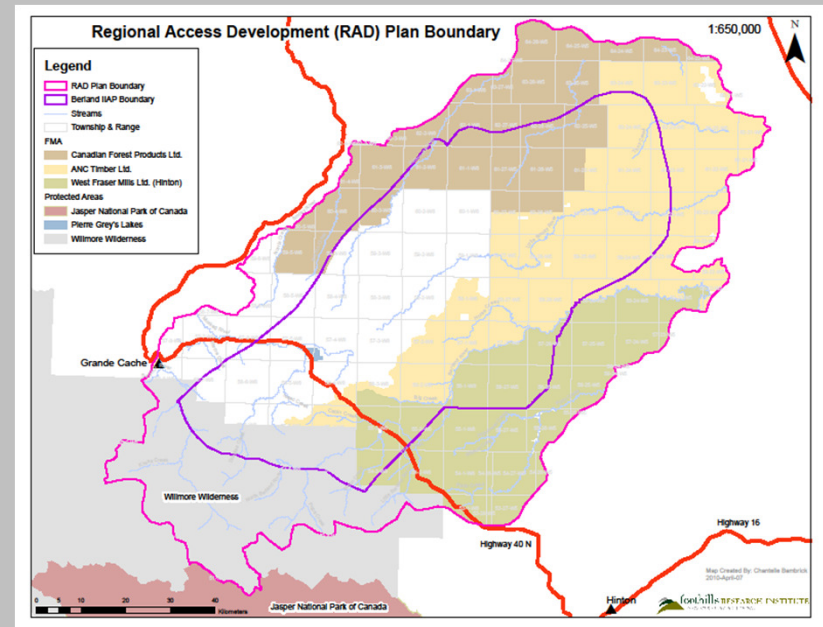


# RAD Plan

Company	2011 Inspections
ANC	17
Aseniwuche	0
<b>CNRL</b>	124
<b>Canfor</b>	87
<b>Conoco</b>	104
<b>Devon</b>	49
EnCana*	34
FFP	102
Husky*	7
Paramount	12
<b>Shell</b>	33
Suncor	12
<b>Talisman</b>	53
<b>Tourmaline</b>	26
TransCanada Pipeline	0
Weyerhaeuser	0
<b>West Fraser</b>	122
<b>TOTALS</b>	<b>777</b>

- 2 crews operating out of Grande Cache

- 1000 crossings total





# FSCP Study Area

Company	ReInspections	Initial
Apache	32	13
CNRL	21	25
ConocoPhillips	33	6
Devon	0	4
EnCana*	4	4
Husky*	1	23
Paramount*	0	3
Shell	17	23
Talisman	23	5
Tourmaline	5	20
West Fraser	29	0
Total	165	126

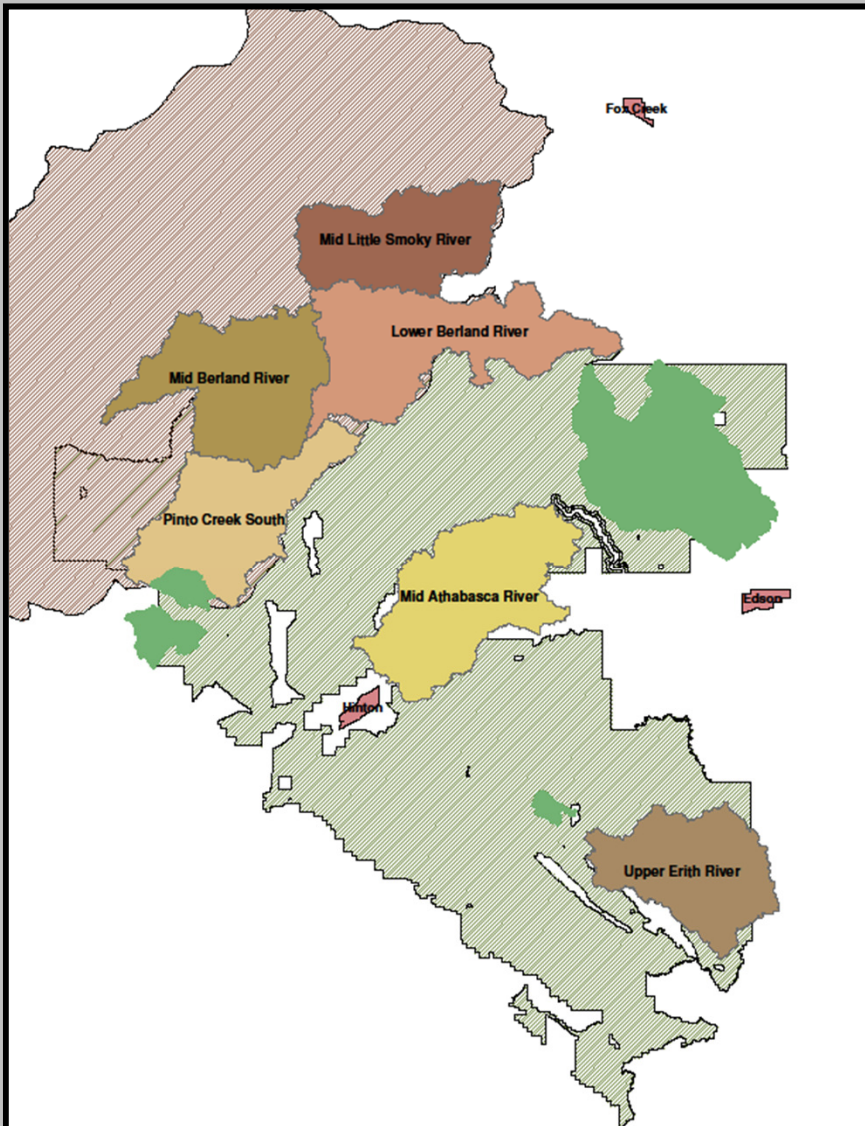
Total = 291

\* *Potential members*

- 1 crew based in Hinton



# Watershed Priorities



## SRD Priorities

1. Lower Berland
2. Pinto Creek South
3. Mid Berland
4. Mid Athabasca
5. Mid Little Smoky

## Ranked by Blocked Habitat

1. Lower Berland
2. Mid Athabasca
3. Mid Little Smoky
4. Pinto Creek South
5. Mid Berland



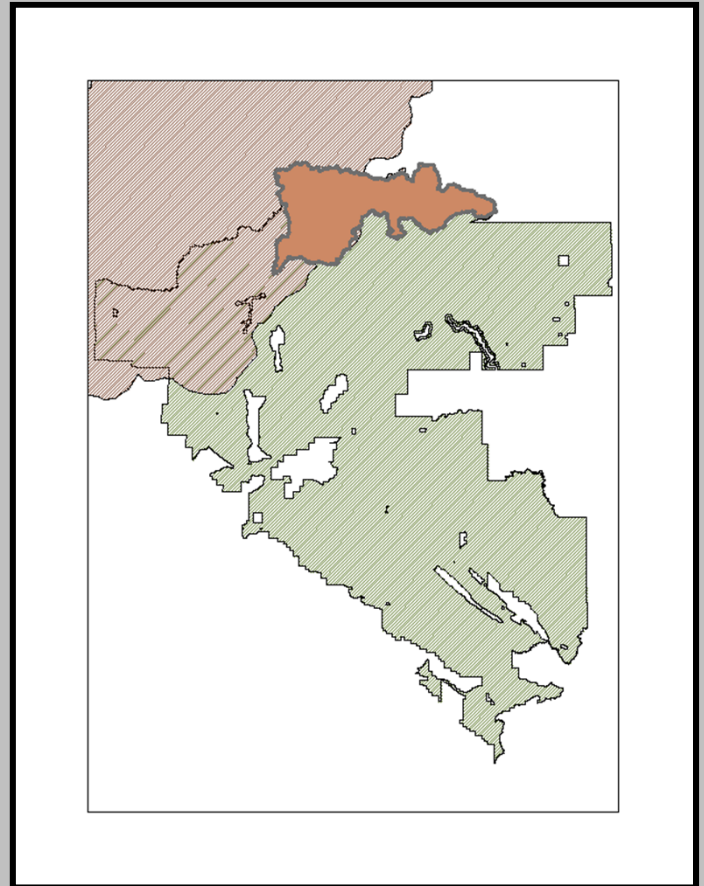
# Lower Berland



- **34 km** of blocked habitat
- FSCP has inspected 66 crossings
- West Fraser has a total of 58 crossings
- 17 companies in watershed

<b>Non Inspected Crossings</b>	
Member Crossings	72
Potential Members*	31
Non Members	36
<b>Total</b>	<b>139</b>

\* *Encana, Apache, and Husky*



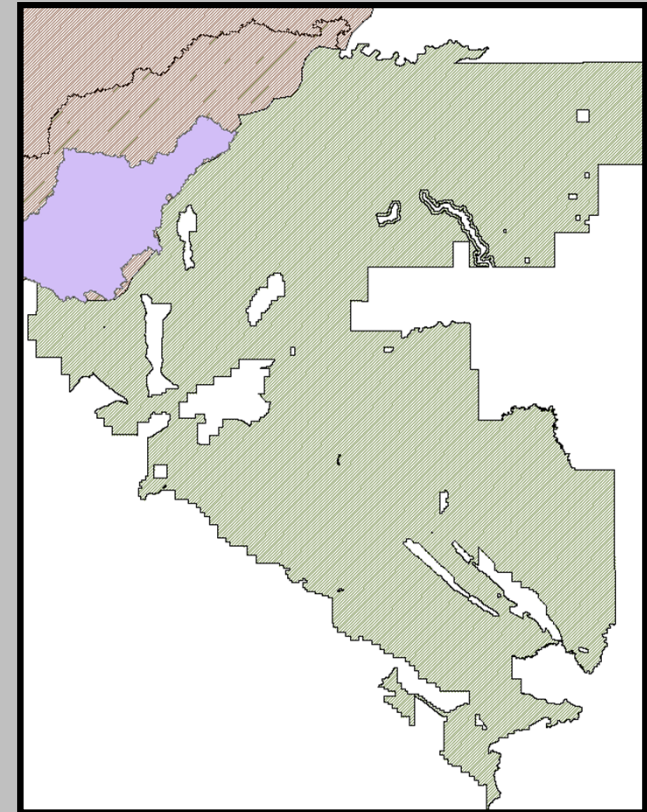


# Pinto Creek South

- **22 km** of blocked habitat
- FSCP has inspected 31 crossings
- West Fraser has a total of 107 crossings
- 9 companies in watershed

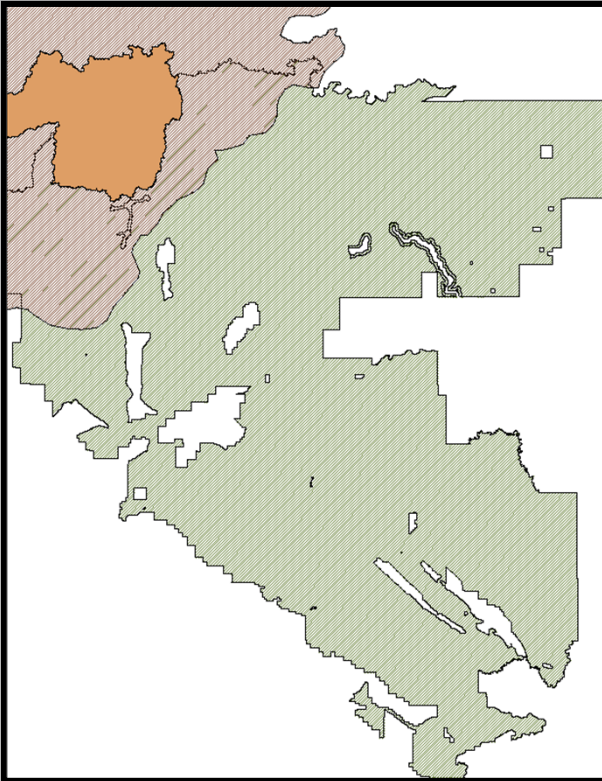
## Non Inspected Crossings

Member Crossings	13
Potential Members*	0
Non Members	15
<b>Total</b>	<b>28</b>



# Mid Berland

- 15 km of blocked habitat
- FSCP has inspected 17 crossings
- West Fraser has a total of 53 crossings
- 13 companies in watershed

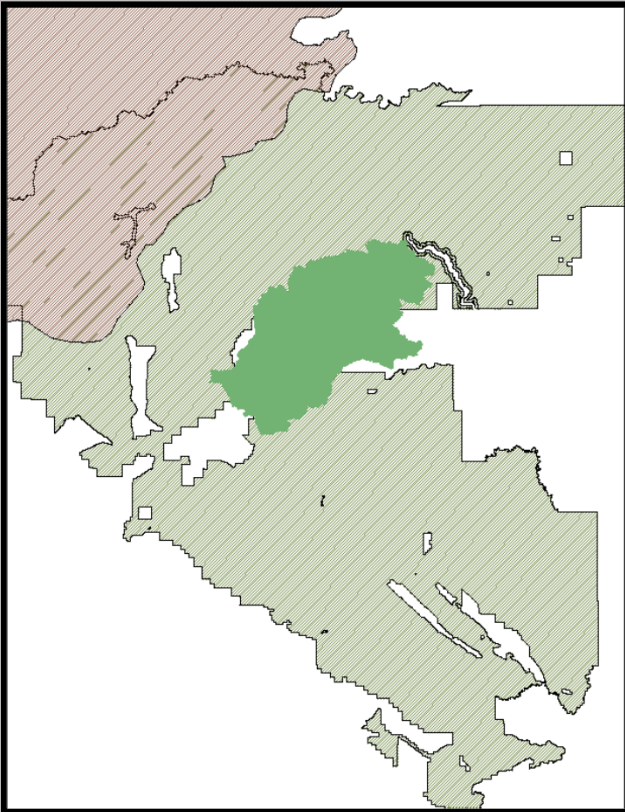


Non Inspected Crossings	
Member Crossings	47
Potential Members*	2
Non Members	26
<b>Total</b>	<b>75</b>

\* Husky

# Mid Athabasca

- 23 km of blocked habitat
- FSCP has inspected 18 crossings
- West Fraser has a total of 104 crossings
- 19 companies in watershed



<b>Non Inspected Crossings</b>	
Member Crossings	25
Potential Members*	6
Non Members	79
<b>Total</b>	<b>110</b>

\* Husky





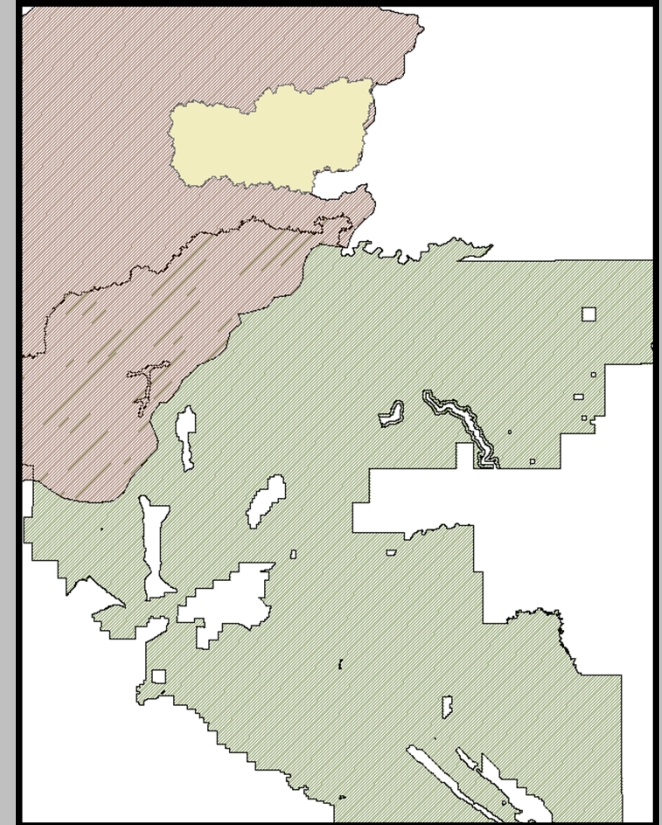
# Mid Little Smoky

- 22 km of blocked habitat
- FSCP has inspected 25 crossings
- 11 companies in watershed

## Non Inspected Crossings

Member Crossings	25
Potential Members*	6
Non Members	79
<b>Total</b>	<b>110</b>

\* *EnCana, Apache, Husky*





# Moving the process forward.....

- **Dealing with non-members crossings**
  - do we continue to inspect?
- **Establishing priorities for remediation**
  - need to maximize benefits for dollars spent
- **Relationship with regulators**
  - a cooperative approach is desirable
  - Foothills Watershed Remediation Pilot Project
  - Enhanced Approval Process
- **Handling sedimentation/erosion problems**
  - to be decoupled from fish passage issues?





Thank you