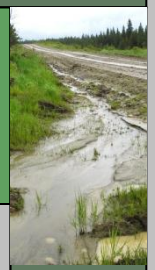
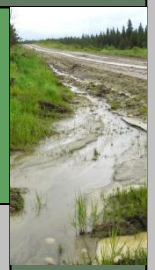
Foothills Stream Crossing Program



May 2011

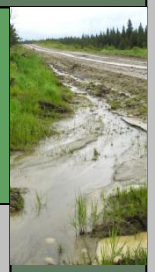
Objectives



- **Develop an industry-driven approach**
- **Establish a standardized stream crossing inspection process and protocol**
- **Establish a system to identify priorities for maintenance and replacement**
- **Coordinate watershed level remediation planning**
- **Monitor results**

Canadian Natural West Fraser devon ConocoPhillips TALISMAN ENERGY

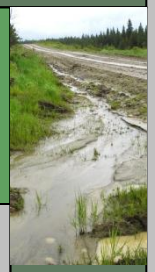
Current membership

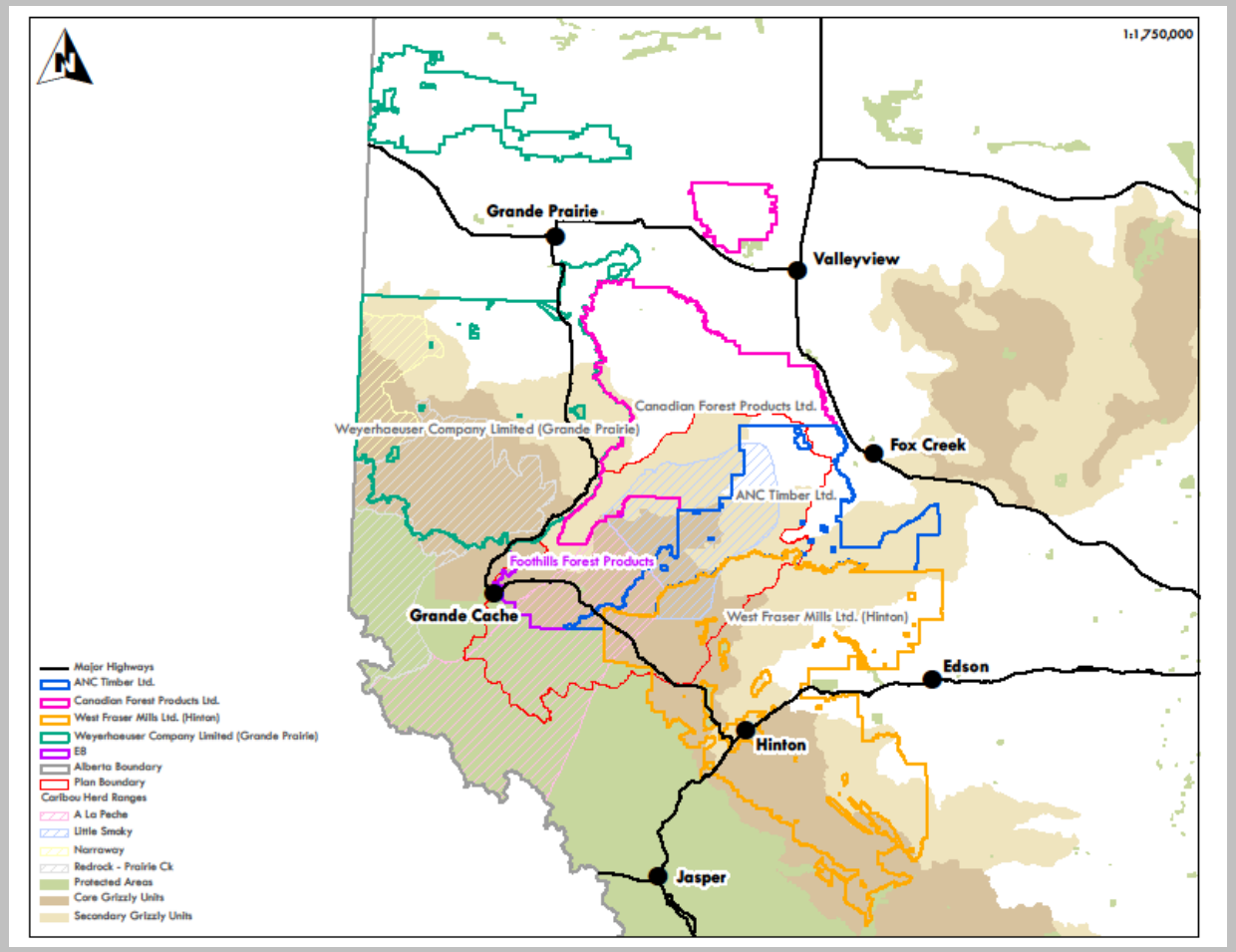


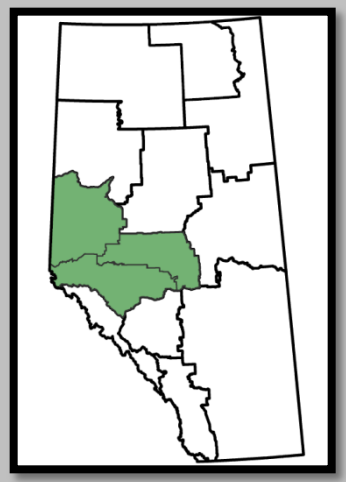
- Apache
- Canfor
- CN (inactive)
- CNRL
- ConocoPhillips
- Devon
- Hinton Wood Products, West Fraser Mills
- Talisman Energy
- Tourmaline
- Shell Canada (including Duvernay)
- Fisheries and Ocean Canada
- ASRD Public Land and Forests
- ASRD Fish and Wildlife
- Alberta Environment

Canadian Natural West Fraser devon ConocoPhillips TALISMAN ENERGY

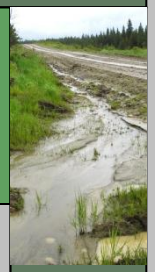
Study Area




1:1,750,000
Grande Prairie
Valleyview
Fox Creek
Grande Cache
Hinton
Edson
Jasper
Canadian Forest Products Ltd.
Weyerhaeuser Company Limited (Grande Prairie)
ANC Timber Ltd.
Foothills Forest Products
West Fraser Mills Ltd. (Hinton)
Major Highways
ANC Timber Ltd.
Canadian Forest Products Ltd.
West Fraser Mills Ltd. (Hinton)
Weyerhaeuser Company Limited (Grande Prairie)
EB
Alberta Boundary
Plan Boundary
Caribou Herd Ranges
A La Peche
Little Smoky
Narraway
Redrock - Prairie Ck
Protected Areas
Core Grizzly Units
Secondary Grizzly Units



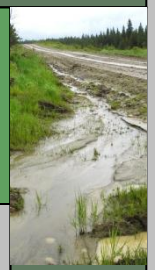
Inspection Progress



- 2006 to 2010 – Inspected 700 crossings
- 2010 – Re inspected 185 high priority crossings

	Initial Inspections 2006 to 2009	Re-Inspections 2010
High Fish Risks	56	39
High Sedimentation Risk	89	48
High Safety Risk	3	0

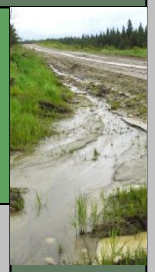
Remediation and Prioritization

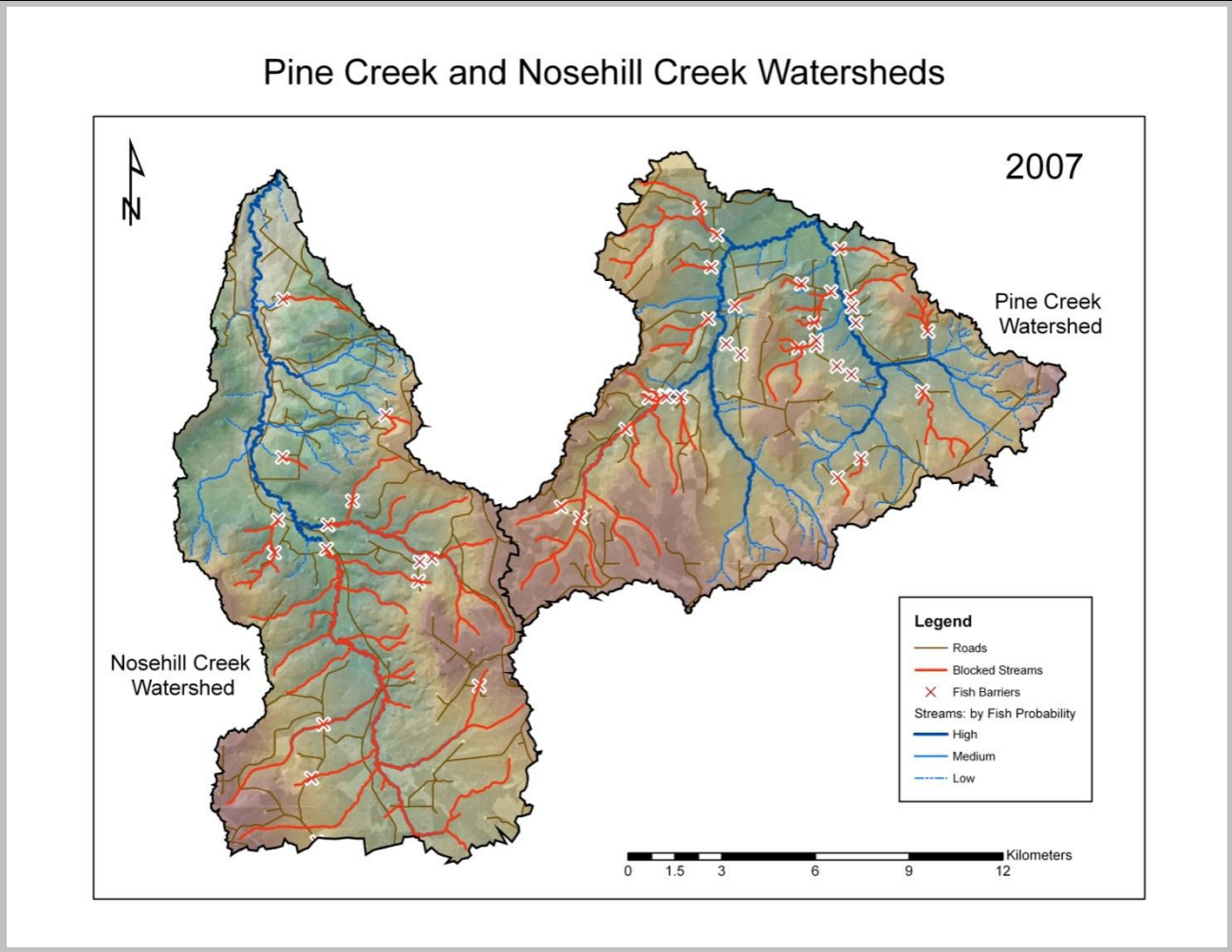


- Stream crossings present a large scale problem due to various factors
  - Changing construction standards
  - Older crossings which have changed owners many times
  - Lack of crossing inventories and data.

- Designed to coordinate collaboration between companies and regulators

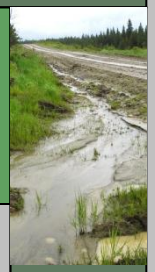
Remediation Watersheds

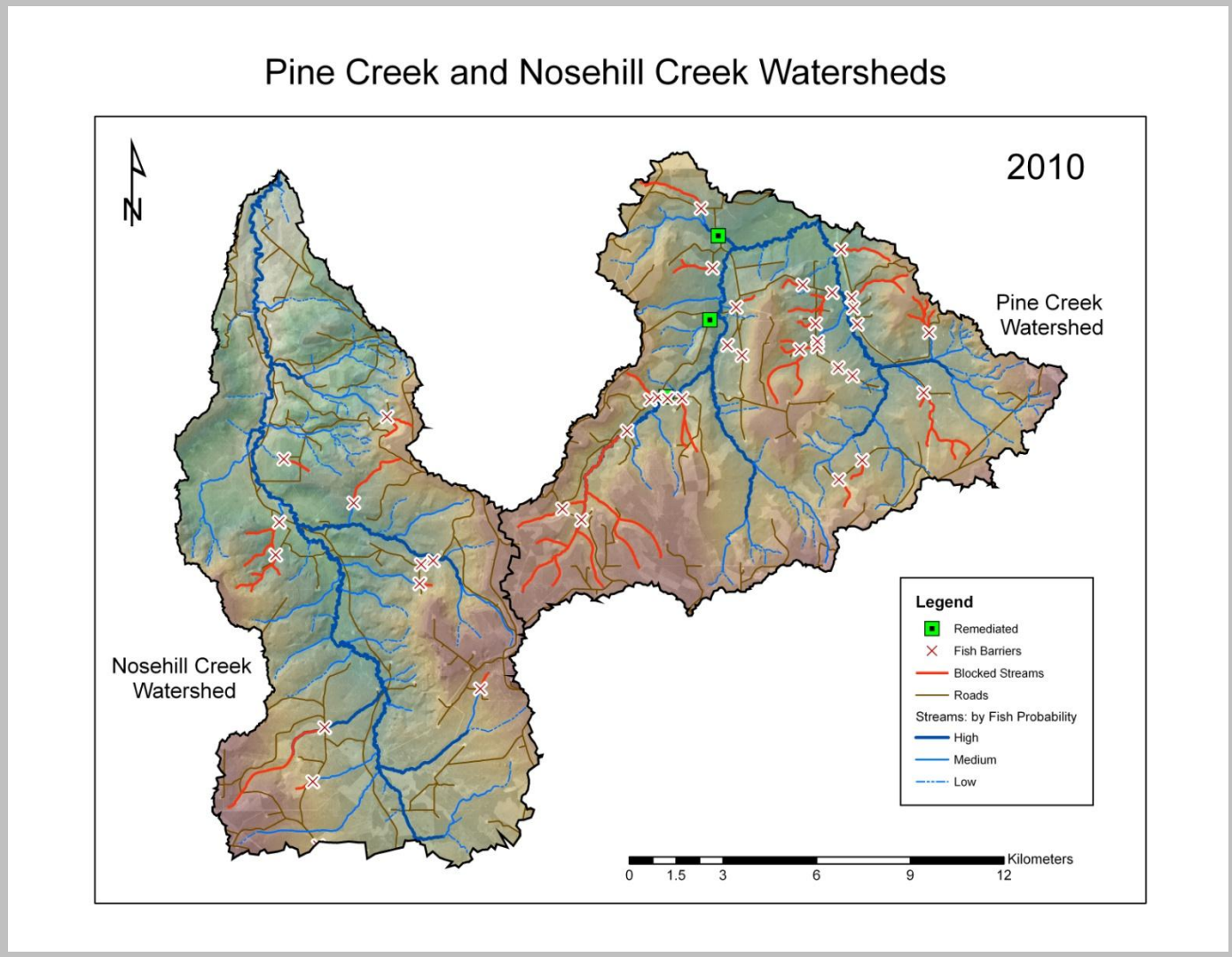




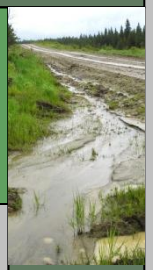
In 2007 Pine Creek and Nosehill Creek had significant portions of fish habitat blocked due to faulty crossings indicated by the red lines.

Remediation Watersheds





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



Thank you