Stream Crossing Partnership

An Overview, March 5th, 2015
**Background**

- Initial concept was developed by West Fraser and Foothills Research Institute in 2004
- First official meeting on April 5, 2005 in Calgary
- Goal, Objectives of program established
- MOU approved by members in June of 2005
- Stream Crossing Inspection Manual finalized in spring of 2006 (currently being updated)
- First inspections completed in summer of 2006
- Hired a full time fishery biologist in 2008
- Submitted first remediation plans in 2009
- Developed a new data base collection and storage system in 2011 and 2012
- Working with ESRD to establish the working relationship between the regulators and SCP that will add value to membership and the watershed approach to stream crossing remediation.
Goal of the SCP

“......... to help companies and crossing owners to manage stream crossings in the long term........ “
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
<table>
<thead>
<tr>
<th>What we do</th>
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<tbody>
<tr>
<td>Inspect crossings</td>
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<td>Work with regulators to set watershed priorities for remediation</td>
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<td>Coordinate watershed remediation plans</td>
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<td>Maintain the data base</td>
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<td>Monitor results (re-inspections; electrofishing)</td>
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<td>Liaison with the regulators</td>
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Main Area of Operation

SCP Current Operational Area and Potential Phase 1 of Stream Crossing Roll Out

Legend
- Hydrologic Unit Code 8 Watersheds of Alberta
- New_Duvelmay_PilotArea_April2014.shp
- Major Highways
- SCP Inspected Crossings
- ARTR_Distribution_Area
- Phase 1
- ESRD Operational Regions

Map prepared by Ngaio Baril
For Jan 20-21, 2014
Watered Prioritization Workshop
Current membership

Voting Membership
- Apache
- Canfor
- Coal Valley Resources
- ConocoPhillips
- Hinton Wood Products, West Fraser Mills
- Talisman Energy
- Tourmaline
- Shell Canada

Advisory Membership
- Fisheries and Oceans Canada
- ESRD – Public Lands
- ESRD – Fish and Wildlife
- Foothills Research Institute
Inspections

- Safety
- Water quality (Erosion, sedimentation)
- Fish passage
Data Collection Approach

Data Collection
- Google Android OS data collection application on a Samsung Tablet
New Data Management Approach

- **Data Collection Benefits**
  - Application is designed according to most recent data requirements
  - Extensive data validation
  - Camera, GPS and datalogger all in one
  - Easy transfer to outside groups conducting inspections
  - Immediate upload of data to online tool
New Data Management Approach

Data Interaction

• 13,000 inspections of 8000 individual crossings
Data Management

- **Data Interaction**
  - Companies can access data at anytime
  - Search data by attributes of the crossings
  - Can download spatial data and PDF reports and photos
  - Watershed views of connectivity and sedimentation (over time)
  - Multi level passwords available per company
Stream and Watershed Health

Watershed Metrics (5yrs)

Stream & Watershed Health

- Single layer (streams & watershed)
- User set year of interest control
- Streams
  - Blocked: Red
  - Not Blocked: Blue
- Watersheds (% total len blocked)
  - >= 20: Red
  - >= 5 & < 20: Yellow
  - < 5: Green
In Summary

The Stream Crossing Partnership provides:

- An inspection protocol
- Data management and storage
- GIS support
- Fish biologist
- Remediation and improved habitat over the long term
- A managed approach to a broad problem