



## Cattle Impact Reduction in Duteau Creek Watershed

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Greater Vernon Water- RDNO  
June 11, 2009*

"Imagine our watersheds are places where...  
healthy water is all that runs to the sea."  
Living Water Smart 2008

## Approach

- Grant Application/  
Securing Dollars
- Cattle Impact  
Reduction Plan
- Consultation with  
Stakeholders
- GPS, Inventory and  
Mapping
- Range Improvement  
Opportunities
- Projects
- Maintenance



## Grant Application/ Securing Dollars

- Source water quality and quantity are primary concerns for Greater Vernon Water (GVW) and protecting the source it is the initial barrier for drinking water.
- GVW initiated a watershed assessment for Duteau Creek in July 2007 to comply with the "Operating Permit" issued by the IHA. It was completed December 2008.
- Recommendation – Develop strategies to address two drinking water hazards related to cattle range use 1) anthropogenic (sediment and turbidity) and 2) pathogenic (bacteria, protozoa and virus)



- Application to OBWB – Water Conservation and Quality Improvement Grant

- Grant approval for \$20,000

## Cattle Impact Reduction Plan

Duteau Creek Watershed is a multi- use community watershed. What are the anthropogenic impacts, and the impending impacts of Mountain Pine Beetle and climate change?

**The cattle impact reduction plan included:**

- **Inventory of existing cattle control structures and functionality** - fences, cattle guards, watering site inventory had not been completed for 8 years.
- **Development of a maintenance plan**
- **Installing additional cattle control structures such as off-stream water troughs and retrofits of existing structures – Opportunity to improve**



## Consultation with Stakeholders

### First meeting June 6, 2008 Stakeholder committee:

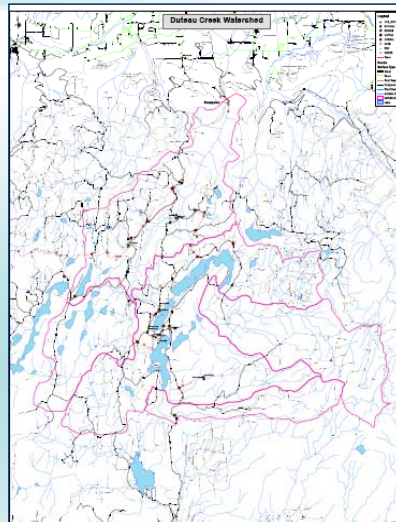
- Coldstream Ranch – Jody McCall, Nick Bapty,
- Gary Andrews
- Vic Wright -MOFR
- Lee Hesketh – BCCA and NOLA
- Rob Kennett – Tolko
- GVW staff – Renee Clark

### Resources:

- GVW – OBWB Grant
- MOFR - funding and in kind help
- MOE - knowledge and resources
- Stakeholders - Ranchers and Foresters – in kind support
- Environmental Farm Plan – funding opportunities
- Farmland Riparian Interface Stewardship Program FRISP – in kind support and funding

## GPS, Inventory and Mapping

- GPS, Inventory works and GIS shape file development was contracted to Jody McCall Coldstream Ranch (2002)Ltd
- Files and reports shared with other stakeholders – Ministry of Forest and Range, Forestry Licensee, Ranchers



## Inventory

- An inventory of the range control structures included field notes of the timber type near the fence line, the condition of the fence and the access for maintenance. Also noted was where drift may be a problem and sites where the fence is redundant.
- Report completed August 10, 2008



## Range Improvement Opportunities

- Field Trip August 25, 2008 with Genevieve Dunbar - OBWB





## Project – Access Reduction

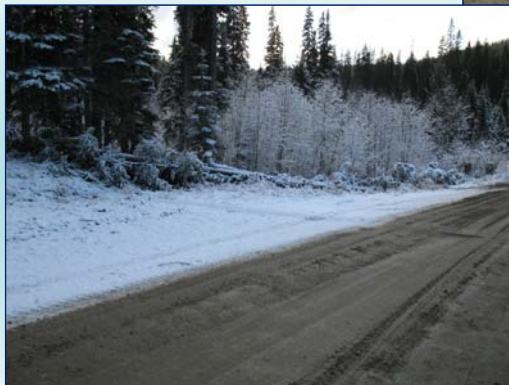
### Duteau Creek Bridge at 12.3 km Haddo Main

- Problem : Access at the Duteau Creek crossing -bank erosion and sediment to creek



## Debris Fencing

Reduce access to creek  
- no maintenance



After

## What Doesn't Work in High visible areas



- Debris Fence became Fire Wood
- Replaced in June 2009

## Project – Water site



Before

- Watering Opportunity at 12 km Haddo Main near Bridge

## Project – Water Site



- Nose Hole Development and wing fence – watering away from main creek



After

## Project – Water Site



- Tributary at 14.5 km on the Aberdeen Main – Crescent
- Problem - Access and impact on creek
- Transfer of Appurtenancy – Water Licence transfer to MOFR at Front Counter

Before

## Project – Water Trough



After

- Debris fencing along road/creek
- Water Trough across road on landing- gather point to round up and move to near by slip fence



## Project – Corral Site



Before

Aberdeen Main 23.5 km

- Problem – no quick gather and remove from area (Grizzly Dam)





## Project – Corral



- Solution: Corral construction and wing fence – gather and load cattle.

After



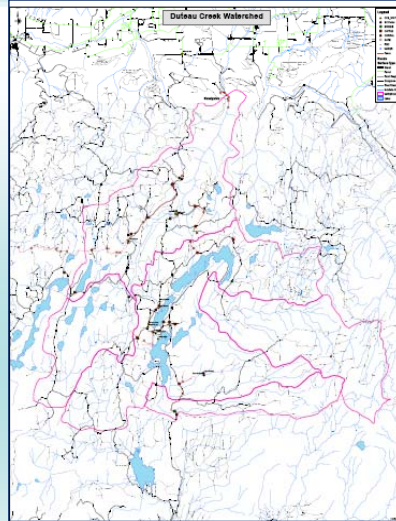
## Water Licensing for off-stream Watering

- Application to Front Counter – Transfer of Appurtenancy
- Ministry of Environment has transferred 1000 gal/day from a RDNO water licence to MOFR – May 2009



## Maintenance

- Review with Ranchers – which fence line is maintained by who
- Colour code fence lines
- GVW (RDNO) maintenance obligation
- Cattle guards and ditch lines
- Tolko moved a cattle guard at 22.8 km on Aberdeen main to line up with the road. – Completed in May 2009



## What is next

- Watershed Protection Plan start up Feb 19, 2009
- Debris fence at 12.5 km – new wing fence and walk through access on east side.
- Other sites on radar – Aberdeen main 23 km channel from Grizzly to Haddo – Nose hole/ reduce impact to creek, new road off Philpot – Nose hole/ reduce access- impact to creek
- JOP Program – remove leaner's ( restore integrity of fences)

## What is next

- Cattle guard at 13 km on Haddo?
- Ditch line at 13.5 km Haddo
- Watering opportunity at 13.5 km Haddo
- Inventory – trees along fence line – access/trail
- Signage – Range Fence Awareness



Questions?