



***Cattle Impact Reduction Plan for
Duteau Creek Community Watershed***

Final Progress Report March 1, 2009



Submitted to OBWB
Water Conservation and Quality Improvement Grant

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Greater Vernon Water (GVW), a function of the Regional District of North Okanagan, develops and implements policies and strategies to manage the supply and demand of its water sources for the purpose of maintaining and improving the quality of drinking water. To protect the integrity of the water sources it is important to understand factors and situations taking place within watershed areas which may impact water quality and therefore strategies can be implemented to mitigate risks.

The Duteau Creek Community Watershed is one of GVW's main water sources. The area of the community watershed is 182 km² and resides on Crown land. Crown Land in British Columbia is multi-use asset and therefore provides lands for range, forestry, mining plus recreation opportunities throughout the watershed. GVW initiated a Watershed Assessment and Protection Plan for the Duteau Creek in 2007 which also considered short term to medium term potential risks associated with the effects of the Mountain Pine Beetle and climate change. One observation from the assessment was the impact by cattle around some streams. This observation spurred the application to the Okanagan Basin Water Board –Water Conservation and Quality Improvement Grant Program for the Cattle Impact Reduction Plan.

GVW considers that consultation with licensees, stakeholders and other land users in the watershed is a critical part of the Cattle Impact Reduction plan's success. A steering committee was formed: Jody McCall and Nick Bapty – Coldstream Ranch, Gary Andrews – Andrew Ranch, Vic Wright – MOFR, Lee Hesketh – BCCA/ NOLA, Rob Kennett – Tolko Industries, Tricia Brett and Renee Clark – GVW.

The first meeting of the steering committee was held June 6, 2008. The committee's objective was to review existing maps provided by Tolko and MOFR and identify where fences, cattle guards and watering features were located. It was agreed that there were some deficiencies and ground truthing was needed. There was a discussion as to who would be best suited to complete the inventory. It was agreed that during the inventory of the range control structures that the contractor should take field notes of the timber type near the fence line, the condition of the fence and note the access for

maintenance. Also note where drift may be a problem. The intent was to GPS all known structures and produce a shape file that can be used by MOFR, Tolko, Ranchers and GVW. Jody McCall of Balcaen Consolidated Contracting Ltd (Coldstream Ranch) put forward a proposal for the cattle (Range) feature inventory and mapping.

The field work (GPS and Mapping) was completed by mid August and the steering committee met again August 19, 2008. Jody McCall reviewed the cattle control structure inventory for the Duteau Watershed with the committee. The group also received a copy of the written report for review. The range inventory results were divided into 26 Features. At each feature there is a description of Location, Condition, Maintenance requirements, Timber type and Forests health concerns. It was asked if there had been any assessment as to which feature was high or low priority. Jody McCall felt her work was to identify the sites but not to extend her work to Risk analysis. This was discussed by the committee and agreed upon that it should be a collaborative effort, Example: water quality concerns would be identified by GVW, cattle drift by Ranchers etc. It was pointed out there are some roads that show up on Tolko's mapping that were not found and visa versa. In some areas the dominate tree types that line the fence are 70 to 80 % lodge pole pine, in some cases 50% red attacked and 20% green attacked. The inventory was completed after a major wind event so blow downs were common. It was suggested that other funding may be accessed through the Mountain Pine Beetle Action Plan for a larger right a ways along fences so less blow downs would occur across the fence line, plus opportunities to make debris fencing in riparian or in high snow accumulation areas where removal is not possible.

The responsibility for maintaining each fence line, cattle guard and slip fences was reviewed. The Ranchers have 10 year tenure licenses with MOFR in which there is a maintenance component. Ranchers are required to maintain all cattle control structures in their tenure area. All cattle structures maintenance needs to be completed when cattle are in the pasture being used (rotation). If pasture rotation is completed then all structures need to be ready by the next spring turnout. Cattle guards are the responsibility of those who hold the road permit. Determining if there are cattle guards on non-status and wilderness roads in the Duteau Watershed is important and to link maintenance to those responsible.

On August 25th the steering committee spent a day in the Duteau Creek Watershed looking at opportunities for range improvements i.e. watering troughs/structures, off stream watering, riparian rehabilitation and corral structures. There are four locations that are likely candidates for improvements. The next step was to look at structure design and cost estimate for each improvement. A work plan and estimate was submitted by Chris Wellman of C&A Contracting and works were completed by November

30, 2008. The works included a nose hole and debris fencing at 12.5 km on the Haddo main, debris fencing and a water trough at 14 km on the Aberdeen main and a corral at the Grizzly Reservoir.

A water licence transfer from RDNO/GVW to the Ministry of Forests has been submitted to Front Counter BC as a "Transfer of Appurtenancy" for the water trough installed at 14 km on the Aberdeen main. The request at this time is still pending.

A range meeting held at the Ministry of Forests office February 5, 2009 gave GVW an opportunity to present the works completed in 2008. It was agreed that debris fencing at the bridge at Haddo main (12.5 km) would need to be replaced with barbed wire fencing. An estimate of \$3,250.00 has been slated for the work by June 2009. A cattle guard re-alignment at 22.8 km on the Aberdeen Main is also a critical control structure that will be completed by Tolko Industries by June 2009 with an estimated cost of \$400.00. Cattle structure improvement signs will also be developed and installed as soon as possible. (Attached: Cattle Impact Reduction in Duteau Creek)

The GPS and Mapping initiative has lead to a better understanding of where the structures are and who will be responsible for maintenance. The shared GIS mapping will be a useful tool for Tolko industry during forestry development and silver culture works. It also helps the Ministry of Forest and Range and the Range Tenures. The GPS and Mapping will be used to look into Job Opportunity Program (JOP) grants for displaced forestry in 2009.

A watershed tour for all elected officials in the Greater Vernon Water service area was held on October 1st. There was an opportunity to show case some of the works that were to be completed for the Cattle Impact Reduction plan.

A media release will also be developed to show how cooperation with provincial ministries, stakeholders and other land users in the Duteau Creek Watershed can help in protecting this important resource- Water.