

**Why was this audit done?**

The Board routinely audits forest and range practices to determine whether they comply with legal requirements and are achieving the objectives for resource management set out by government. Protection of water is one of those objectives.

**When was the audit done?**

The field work took place in October 2010.

**What did the auditors look at?**

The auditors examined forest and range practices that took place between September 2008 and October 2010 in the Oyama and Vernon Creek community watersheds. In particular, auditors looked for compliance with measures required to protect water quality, and whether those measures were effective.

The Board only examined forest and range practices regulated under the *Forest and Range Practices Act*. These community watersheds, like many others in BC, are also subject to a wide variety of other uses, such as mineral exploration and development, settlement and recreation, which also have the potential to impact water quality.

**What did the audit find?**

Forest practices that took place during the period audited generally complied with legislative requirements and were effectively protecting water quality and fish habitat. However the auditors found some range practices either did not comply or were not effective.

Specifically, the auditors found a number of situations where range practices did not adequately protect riparian areas, fish habitat or water quality. The frequency of these findings was sufficient for the auditors to consider it a significant non-compliance with the requirements.

**Are the findings indicative of other watersheds in the Okanagan or elsewhere in BC?**

The audit only looked at the Oyama Creek and Vernon Creek community watersheds. As a result, the findings are specific to those watersheds.

**Did the Board find problems with the drinking water?**

No. The Board did not test the drinking water. The audit reported non-compliance with certain practice requirements but did not conclude that range practices materially affected water quality at the intake. Non-compliance does not mean that people's drinking water is unhealthy, since the water is treated before it is distributed to consumers.

## *Q&A Continued ...*

Government has taken a multi-barrier approach to protecting drinking water, one aspect of which is protecting source water. However, even if cattle were not present in these watersheds, the raw water quality would probably not meet health standards without treatment. This is mainly because of bacteria and parasites introduced by wildlife and human use of the areas. Therefore the water will continue to need treatment before it is delivered to the public for consumption.

### **What factors contributed to the non-compliance of some range practices?**

The audit did not identify why the non-compliances occurred. However, auditors observed that pre-1995 logging and most road crossings seemed to provide cattle with easier access to streams and wetlands. Cutblocks harvested since that time tended to have more debris on the ground and retained live trees, making access to streams and wetlands by cattle more difficult. Generally, when cattle have difficulty accessing streams and wetlands, it is less likely impacts will occur.

### **What is being done to address the concerns?**

The forestry and ranching industries and the provincial and municipal governments have told us that they are working to identify and implement best practices for management in watersheds. For example, in the Vernon Creek community watershed, the province, in partnership with a rancher, a timber company, and the District of Lake Country, has initiated a silvopasture pilot project. This project will examine, among other things, the potential for seeded forage and off stream watering to draw livestock away from streams and wetlands.

In addition, industry and government are working to improve riparian function in the Oyama and Vernon Creek community watersheds through the installation of fencing and off-site watering, while reducing stocking rates, changing grazing schedules and implementing best management practices.

### **What recommendations does the Board have to address the findings?**

Government and range tenure holders in the two watersheds are aware of the risks to water quality and have devoted considerable effort to reducing the impacts of cattle on water - significant improvements were already underway at the time of the audit. However, the Board believes full compliance with the range-use plans and practice requirements would go a long way to alleviating the concerns it identified.

In its report, the Board has identified two recommendations for government which are: provide guidance to range agreement holders for implementation of the practice requirement related to depositing harmful substances in streams used for drinking water; and, ensure all water courses and areas with riparian function are protected to the extent that range use does not materially impair their function.