
Chilliwack River Valley Forestry Tour

On Thursday, April 13th, more than 20 individuals toured the Chilliwack River Watershed to look at how forest practices are conducted to protect and enhance social and ecological values in the watershed. The tour was organized through the Chilliwack River Watershed Strategy in partnership with the Ministry of Forests. Participants included representatives from provincial, federal and local government agencies, First Nations and the community.



Participants: David Lamson, Mark Johnson, Krista Englund, Bob Stanton, Andrew Upper, Gene MacInnes, Graham Daneluz, Brian Radke, Andrew Dong, Matt Wealick, Sylvia Letay, Brad Mason, Jerry Kennah, Marion Robinson, Otis Jasper, David Barnes, Kevin Walker, and, missing from the photo, Tom Cadieux, Matt Foy, Jan Jonker and Clair Cameron.

Stop #1: Tamihi Forestry Recreation Site

The first stop of the tour was Tamihi Forest Recreation Site. Forestry Rec sites are now being managed by the Ministry of Tourism, Sports and the Arts (MoTSA). For seven years, Clair Cameron, an independent contractor, has been managing the forestry rec sites in the valley. Over this time, a number of changes have been made at the sites to address issues associated with recreation, such as installing gates that lock at night, having full time camp hosts, making sites 'nicer', etc. In addition, the MoTSA contracts RCMP and Ministry of Forests staff to conduct patrols, especially on long weekends, holidays and school breaks. The number of complaints has decreased over time because of these efforts, but this approach is quite costly. In addition, there are still problems outside of recreation sites, especially across the river from Bell Acres.

Tamihi Rec site was expanded significantly 3 years ago, along with several other sites in the valley. Currently, the campsite is only full on long weekends. A reservation system may be implemented in the near future.



Discussing recreation management and forestry at Tamihi Recreation Site.

In addition to discussing recreation management in the valley, the group discussed forestry activities in general. Gene MacInnes, Operations Manager for the Ministry of Forests, noted that there are a number of constraints on forestry activities in the valley,

including visual, owl, ungulate, riparian, species at risk, cultural, etc. These constraints from other forest resources limit the number of cutblocks allowed in a single drainage basin. Typically, the timber clearcut equivalency in a single drainage basin is very low with all of the constraints (e.g. less than 10%), so this is not usually an issue.

To address concerns about the potential impacts of forestry on steep slopes, licensees proposing to harvest on slopes greater than 60% need to conduct a geotechnical report to assess the potential for slides and mitigative actions that may be required.



David Lamson discusses river bank stability.

When asked about the prevalence of pests and disease in the forests of the watershed, Gene MacInnes informed the group that there are no real insect problems. Probably the most prevalent forest health issue is root rot, which affects approximately 10-15% of the timber in the valley.

There was a comment about the role of large woody debris in systems like the Chilliwack River. It was noted that large woody debris can help stabilize river banks and reduce erosion, especially in areas of glacial till. A question was asked about whether the Ministry of Forests is concerned about timber harvest increasing the rate of channel migration across alluvial fans (i.e. because channel migration can be slowed by

standing trees). Gene noted that licensees may be required to bring in a specialist to determine whether removing trees from an alluvial fan would cause rapid movement of the channel. It was noted that the science surrounding this process is insufficient.



Gene MacInnes points out various constraints to forest harvesting on a map.

The riparian reserve on the Chilliwack River is 50 m. No harvesting is allowed within the riparian reserve. In addition, a management zone, in which only selective harvest can occur, extends beyond the reserve zone. Reserves for tributaries are typically smaller and depend on the width and structure of the tributary.

It was noted that the Ministry of Forests does not typically get many complaints about visual impacts of forestry in the watershed. There is a significant process that licensees must undertake to assess the potential visual impact of cutblocks prior to harvest.

Stop #2: Non-designated camping sites across from Bell Acres

While driving to our next planned stop, we pulled over at Deer Creek across from the Bell Acres subdivision. Recreation at undesignated sites like this can have significant impacts on the environment (e.g. damage to riparian zone features and function) and the community (e.g. noise, visual impacts). One suggestion for dealing with this concern was to eliminate easy vehicle access to these sites using barriers.



Proximity of undesignated recreation sites to Bell Acres Subdivision.



Photos showing damage to trees and broken glass at the site.



Stop #3: Tamihi Creek Rehabilitation Site

This site is located upslope of the Tamihi Recreation Site on Liumchen Forest Service Road. The large trees on this site were harvested back in the 1940s and 1950s, and subsequent harvests have removed more trees since. This resulted in a stand largely dominated by “small-tree-sized” salmonberry bushes and deciduous trees. According to Carl Klinka, an ecologist at UBC, this site is one of the better growing sites for conifers in B.C. In order to take advantage of these optimal growing conditions, the salmonberry and deciduous trees were felled and treated with herbicides and the site was burned in the early 1980s. Following this treatment, the site was replanted with Western red cedar, Douglas fir and Grand fir, which approximates the natural composition of sites with similar characteristics. As it matured, the stand was juvenile spaced and pruned. These intensive silviculture practices have produced a diverse, productive and healthy stand. This type of intensive silviculture can reduce the rotation length on a single site and potentially reduce the need to move further uphill to meet the demand for timber. However, there are no longer funds for this type of intensive silviculture (rehabilitation of sites), which were formally provided through Section 88 of the Forest Act initiative and Forest Renewal Development Agreement (FRDA). Note that these programs pre-dated Forest Renewal BC.

Stop #4: Ford Mountain Spotted Owl Selective Harvest (Tamihi Logging)

The next stops of the tour were several blocks being harvested by Tamihi Logging near Ford Mountain. These blocks are unique because they are located within Special Resource Management Zones defined by the Spotted Owl Management Plan (Ministry of Forests, 1999). Within this zone, Tamihi Logging is utilizing four different harvest strategies:

- commercial thin to 220 stems/ha
- commercial thin to 270 stems/ha
- commercial thin to 320 stems/ha
- selective harvest of 30% of the timber on site

The commercial thin approach attempts to create future habitat for spotted owl by focusing on several attributes:

- species composition (e.g. maintain a representative distribution by species)
- diameter distribution (e.g. maintain a mix of sizes)
- forest structure (e.g. maintain canopy layers)
- coarse woody debris (e.g. retain specific volumes for prey species)

The selective harvest approach is similar in that it attempts to create attributes that produce good owl habitat. However, this approach was used in an older stand where fewer stems were removed.



Jan Jonker of Tamihi Logging discusses the strategy used on the commercial thin block (e.g. 270 stems/ha).



The site on which a commercial thin at 270 ha stems/ha was conducted. The site is about 13 ha in size and was burned in the 1938 fire.



The selective harvest site. This forest is around 130-140 years old and approximately 30% of the stand was harvested.



A view of the stand after completion of selective harvesting. The roads will be completely deactivated (i.e. they will no longer be drivable) as this site will not be harvested again for a long time.



The site on which a commercial thin at 320 stems/ha was conducted. The blue markings on the trees at this site indicate the trees that should be left.



Stop #5: Centre Creek BC Timber Sales Block

The next stop was a site harvested by BC Timber Sales, which is an independent organization within the B.C. Ministry of Forests established to develop Crown timber for auction. By undertaking forest harvesting similar to licensees, BC Timber Sales can use the costs associated with their operations to establish market price and determine the appropriate stumpage fee. The operations are intended to be competitive and return revenue to the Crown (i.e. the public).

BC Timber Sales manages approximately 20% of the timber in the Chilliwack Forest District. BC Timber Sales staff do all planning and layout activities. The timber is then sold through a competitive auction method to ensure that fair market value is achieved, and harvested by the successful contractor. BC Timber Sales staff return to reforest the site and manage the stand until it is “free to grow.”

The BC Timber Sales site at Centre Creek was harvested using a variable retention method. This means that 50% of the block must be within two tree lengths of standing timber. Because this site is also within the Spotted Owl Management zone, other requirements were met.



Jerry Kennah describes the BC Timber Sales operation at Centre Creek.



BC Timber Sales variable retention harvest at Centre Creek.



The edge of the riparian zone at the BC Timber Sales Centre Creek block.
Note the new trail that has been created to bypass a physical barrier to an undesiganted campsite.

Stop #6: Cattermole Thurston-Main Cutblock

One of the purposes of the Thurston-Main stop was to discuss forestry roads and their impact on the watershed and road deactivation. Gene informed the group that because licensees are liable for damage that occurs from roads, it is in their interest to build and maintain roads properly. If a licensee is not actively utilizing a road to access a current cutblock, the road is typically deactivated to a 'wilderness standard', which means that all structures that would have an environmental impact if they failed are deactivated (e.g. culverts may be pulled out). Gene also noted that road construction in recent years far exceeds earlier construction. Therefore, most of the problems caused by roads are from older logging roads. Many of the old roads in the Chilliwack River Watershed were deactivated in the late 1990s through a program funded by Forestry Renewal BC (EBA Engineering Consultants Ltd, 2001). However, there are still a number of roads in the watershed that remain a high priority for deactivation, and there is no longer funding available to do the work.

Stop #7: Boulder Hole – Deactivated Recreation Site

The final stop of the tour was a site immediately west of the Tamihi Bridge that was deactivated by the Ministry of Forests and replanted by Evergreen Foundation. An excavator was used to make the ground uneven (and therefore unsuitable for camping), and shrubs and trees were planted by volunteers. Interpretive signs were placed to inform visitors of the importance of healthy riparian zones and habitat for salmon. This site demonstrates a technique that can be used to rehabilitate damaged sites.



Boulder hole – an undesignated recreation site that was deactivated by the Ministry of Forests and replanted by the Evergreen Foundation.