

Logging, Deregulation and Hydrology in the Wilson Creek Watershed

April 8, 2011

Introduction: On September 1, 2009, an individual with credentials in the field of hydrology was shown a series of locations in the Wilson Creek watershed. A consulting forester working for Sechelt Community Projects Incorporated (SCPI) selected the locations. The resulting paper, “A Hydrological Assessment of the Wilson Creek Watershed”, was released in October, 2010. It concludes that the watershed is functioning normally, riparian (stream-side) areas are intact, additional retention of forest cover is unnecessary, logging has had little impact on the hydrology of the watershed, and there is no hydrological reason to prevent proceeding with 124 hectares of additional harvesting.

In order to understand how such a tiny amount of fieldwork is sufficient to dismiss longstanding concerns and constraints in a watershed recognized for its highly significant fisheries values, we need to consider how forestry regulation has changed over the last 10 years.

The Old Regulatory Regime: British Columbia’s original *Forest Practices Code Act* contained a statement in its preamble that the purpose of the *Act* was to “adequately manage and conserve all forest values”. District managers of the Ministry of Forests had the authority in law to approve Forest Development Plans (logging). The test they were required to apply in their decisions was whether or not the logging plan “adequately managed and conserved”. District managers could also direct licensees to ensure that the test was satisfied. In fact, this is exactly what happened in July 2001 when the Sunshine Coast district manager approved Interfor’s logging plan for the Sechelt and Chapman Landscape Units. In his approval letter he advised Interfor not to propose new logging in the Wilson Creek watershed until a Coastal Watershed Assessment Procedure (CWAP) had been carried out.

The decision maker was concerned that fisheries values could be put at risk because of extensive hydrological disturbance from recent logging, and he acted to ensure that the timing of any future logging activity would be determined by the results of a CWAP. Interfor never carried out the CWAP, and didn’t propose new logging either. The Wilson Creek watershed became part of the community forest land base in 2006.

The New Regulatory Regime: In 2006 government implemented new legislation; the *Forest and Range Practices Act* (FRPA). The broad “adequately manage and conserve” statement did not survive into the new *Act*, and many of the powers of district managers were taken away and given to Registered Professional Foresters (RPFs), most of whom work for the major logging companies. This transfer of authority is referred to as “professional reliance” and it means that RPFs, because they are professionals, are allowed to approve logging without government oversight.

Foresters are required to practice “due diligence”, which means that they must be able to justify

their decisions with regard to current standards of professional practice. Under the new regulatory regime, "due diligence" is accepted as a defence in any case involving a charge of professional incompetence or of liability arising from environmental damage.

Fisheries Sensitive Watersheds: The FRPA regime provides for a new land-use designation: Fisheries Sensitive Watershed (FSW). This designation is intended to establish restrictions on the extent of hydrological disturbance (logging) at any given time such that logging does not adversely impact fisheries resources. There are currently no FSWs designated in British Columbia, meaning that there are no legally binding restrictions on the extent of hydrological disturbance in fish bearing watersheds anywhere in BC unless some other designation is in effect (park, ecological reserve or community watershed). There are nominal protections for forest cover that is immediately adjacent to a fish-bearing stream. As with most non-timber values, FRPA only requires protection to the point that would "unduly restrict the flow of timber".

Wilson Watershed: An Example. Despite comprehensive documentation of a high value fishery in this watershed, there is no FSW designation in place. Consequently, the standards of professional due diligence that apply in this situation are basically the same as would apply in a non-fish bearing situation. The licence holder (SCPI) did not commit in its Forest Stewardship Plan to anything much more than the minimum requirements of law and cannot be held accountable for impacts to fish populations. The forester of record, in approving this logging, has met his "due diligence" requirements. In fact, he exceeded these requirements by bringing in an outside "expert" who has credentials in the field of hydrology. In a regulatory sense, whether this expert is thorough or negligent, right or wrong, etc., is irrelevant because the forester is the statutory decision maker and he has demonstrated "due diligence". Whatever the outcome may be, it is impossible to hold the forester or SCPI accountable for the cumulative impacts of logging on fish in this watershed, under the current regulatory regime.

The Wilson Creek watershed is not, but should be, a Fisheries Sensitive Watershed. SCPI is exploiting this loophole to log timber that was previously constrained for good reason. In effect, SCPI is practicing a lower standard of environmental stewardship than was required of the previous licence holder.

Scope of the Hydrological Assessment: In seeking to evaluate the significance of this assessment, it is important to look at the scope of the fieldwork and the assumptions that underlie the analysis. The actual fieldwork supporting this assessment was entirely carried out in one day. The hydrologist was guided to various points of access. There was no effort to gain permission to traverse private land. As a consequence, the hydrologist did not view many of the stream reaches that illustrate impacts to spawning, rearing and over-wintering habitat. Many of the impacted low-elevation stream banks and collapsed riparian zones were not inspected either. The report contains numerous statements, which are basically disclaimers, that in total state that the validity of the report is limited by the extent of fieldwork and the accuracy of data provided by the client.

Assessment Assumptions: As with any study, we can gain perspective by looking at the assumptions that underlie the work. The major underlying assumptions in this report are that:

- removal of forest cover, by itself, does not significantly alter watershed function;
- retention of riparian vegetation alone is sufficient to maintain watershed function;
- retention of riparian vegetation alone is sufficient to maintain stream bank and channel integrity;
- retention of riparian vegetation along small streams need not include the trees;
- a riparian area along a small fish-bearing stream may be as simple as a five-meter buffer that is off limits for machine traffic;
- stream bank integrity is the most important indicator of hydrological stability.

Given these assumptions, it is doubtful that any watershed in British Columbia would ever have enough logging related hydrological disturbance to justify an interruption in timber harvesting. With regard to the key indicator of stream bank and channel impacts, by the time these impacts appear, irremediable damage has occurred and further impacts to fish populations are unstoppable. Basically, the assumptions of the study guarantee that “hydrological considerations” will not delay logging in the Wilson watershed.

Are the assumptions ‘scientifically’ based? Empirical science clearly shows that the cumulative impacts of forest cover removal parallels the decline of fisheries in all our region’s major salmon and trout rivers. Science recognizes that the biggest plants in the landscape, and in riparian areas, are trees and that these trees play a major role in moderating flows and maintaining stream temperatures.

What we see in the assumptions and in this superficial assessment is the forest industry’s *position* that trees don’t have a significant hydrological function, and government’s position that near-term social and economic considerations take precedence over ecological problems. Basically the Provincial Government’s position is defined by the use of the phrase “unless unduly restricting the flow of timber...” and by its refusal to actually designate Fisheries Sensitive Watersheds.

Assessment Findings: The Dobson Engineering, Limited report correctly identifies, on the basis of a map exercise, the condition of this watershed as equivalent to more than 30% clear-cut area. This is a very compelling fact showing that far too much logging has occurred in a very short period of time. The general "rule of thumb" is that when watersheds have between 20% and 30% Equivalent to Clear-cut Area (ECA) peak flows become observably more violent and low flows are typically depressed. These exaggerated flow patterns increase risks to fisheries and impact water quality and timing of flows. The extent of disturbance in the Wilson Creek watershed is scientifically verifiable grounds for extreme caution at this point in time.

The report correctly establishes that *all* creek banks in this watershed are sensitive and vulnerable to disturbance. As well, the report correctly recognizes that maintaining riparian areas is of critical importance for hydrology stability. There is no fieldwork indicating that trees are unnecessary in a riparian zone. The bulk of the study is a superficial offering of opinions that are

not substantiated by actual fieldwork in the Wilson Creek watershed. As well, the conclusion that riparian areas are “intact” is only true for the part of the watershed that is in SCPI’s operating area. The conclusion that there is no evidence of stream bank or channel instability reflects the observer’s failure to examine the watershed in its entirety.

Discussion: Sechelt Community Projects Incorporated is not to blame for the degraded condition of the Wilson Creek Watershed. The blame rests with government for allowing a variety of licensees and private managed forest land owners to operate in an uncoordinated manner without regard to cumulative impacts.

From the very beginning of the community forest application process, the District of Sechelt was insistent that its primary purposes were to engage in “watershed restoration” and “environmental protection”. Over the last five years, at least \$100,000 has been spent on publicity promoting the company’s environmental stewardship role. However, in the Wilson Creek watershed, we see that Sechelt Community Projects Incorporated intends to log without regard for the overall condition of the watershed or its highly significant environmental assets.

Sechelt Community Projects Incorporated has enjoyed four profitable years during which time it did not undertake a genuine Coastal Watershed Assessment Procedure for Wilson Creek, did not invest in habitat restoration, and did not use its status as a “community” licensee to foster cooperation among the various vested interests.

Given SCPI’s self-proclaimed capacity for stewardship, we believe the public has a legitimate expectation that the company will practice what it promotes, and not merely add to existing environmental problems. We certainly hope that SCPI directors and councilors of the District of Sechelt (the sole share holder) view the situation as an opportunity to pursue meaningful consultation and undertake a new standard of genuine stewardship.

Daniel Bouman, Executive Director

Sunshine Coast Conservation Association