



PERRY RIDGE WATER USERS ASSOCIATION
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Winlaw, BC
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Ministry of Forests
Arrow Forest District
Nelson, BC

January 9, 2017

Attention: George Edney

Re: Perry Ridge – Slocan Valley

Our Association continues to monitor activity on Perry Ridge. Our observations this fall has shown that the creeks are running to the river, which is unusual at this time of year, an example of climate change and its affect on precipitation. We note that the soil is saturated on unstable areas above and around our homes in the headwater areas and the east face of Perry Ridge.

Your reports on the ridge continue to use the ECA (Equivalent Clearcut Model). The utilization of the ECA (Equivalent Clear-cut Area) model to give a threshold of activities that could be allowed in each of the units or small watersheds on the east side of Perry Ridge situation is not appropriate as identified in the attached report by Hydrologist Allen Isaacson. The originators of ECA modelling were Allen Isaacson and Lee Wilvey of Idaho where this model is no longer used. Report Attached.

In addition with regard to Allen Isaacson`s work, the setting aside of the Injunction on Perry Ridge by Judge Parrett, wherein Judge Parrett refers to the inclusion of Mr. Isaacson`s reports as:

"Amongst the studies listed as having been "conducted by the Ministry and having been undertaken to ensure that the road building and timber harvesting are as environmentally sensitive as possible" are the February 1994 and April 1996 Hydrology reports of J. Allen Isaacson.

[36] Neither of these reports was undertaken by the Ministry

nor, by any stretch of the imagination is it accurate to

suggest that they were undertaken to make sure road building

[37]and timber harvesting was as environmentally sensitive as possible.

With reference to the reports by Mr. Isaacson before Judge Parrett in his decision states:

"In his February 1994 report Mr. Isaacson writes:

In my opinion, logging the Perry Ridge mountain system would result in irreparable damage to the valley below and to the water users' systems. There may be some sites in the upper basins that are stable or flat enough to be logged. However, to get access to these areas would mean crossing some very unstable slopes that are at the headwaters of very steep entrenched streams. The mid and lower slope elevations of the streams draining from Perry Ridge are very unstable. and would be subject to mass failure with the increased stress of cutting in the headwaters."

In reference to Mr. Isaacson's April 1996 report Judge Parrett further states:

[43] I will set out here only one additional quote from this report. His final recommendation reads:

[44] RECOMMENDATION: Do not enter Perry Ridge with road construction, especially the area above an elevation of 4400 feet. Any wetland, bog area, active stream course, and high elevation steep headwater landtypes should be avoided.

We also note in other reports done for the cuts already on the west side that you reference Dr. June Ryder's work and other expert reports, when in fact these reports actually warn against logging and road building.

The creeks do not need any more sediment and debris entering them from logging slash and disturbed soils. Mr. Austin Greengrass's landslide is also referred to in Judge Parrett's decision

“Mr. Greengrass in his affidavits speaks eloquently of his concerns for the effect road construction and logging on Perry Ridge will have on the many people living below the ridge both as to the quality and quantity of their water supply and the stability and safety of their property. I don't consider it either fair or accurate to characterize Mr. Greengrass as a person concerned with "water quality". While that is certainly one of his concerns it is far from his only or even his major concern.

The residents on Perry Ridge have a right to enjoyment of their homes without the worry of landslides causing property devaluation and increased risk to our lives. Dr. June Ryder states in her report to the Minister of Environment after meeting with her in Victoria “In yesterday's meeting you pointed out that it is not unusual for people to have to live with risk, and so this point alone is not of unusual concern. This is true, but the degree of risk at Perry Ridge is already unusually high...The perception of high risk by the local people is based, quite legitimately, on their awareness of the damage already done to nearby homes and property.”

The landslide on Van Tuyl, which took the life of a resident, was assessed by the Ministry and the report Assessment of the Middle Van Tuyl Landslide Event of May 2008 Report, Slokan Valley states:

“Several non-weather related factors have been identified that may have contributed to the increase in stream flows and thus can be considered as contributing to the cause of the landslide event. These include, *in order of estimated contribution* to the stream flows: (my italics)

1. An increase in the effective drainage area of Middle Van Tuyl Creek, resulting from the construction of a drainage ditch, during or after 1990 across a landing, which diverted the stream flow from the upper North Van Tuyl drainage into the Middle Van Tuyl drainage.
2. Increased snow accumulation, snowmelt rate, and runoff as a result of the effects of the 2007 Springer Creek wildfire;
3. Increased snow accumulation, snowmelt rate, and runoff as a result of historic logging (and to a lesser extent, the recent logging in 2006).

The Johnson's Landing slide resulted in 4 deaths showing that the natural terrain is already unstable. The landslide in Oso Washington took the lives of 43 residents. It occurred where the state allowed logging on plateau above slope the case was recently settled out of court for \$60 Million Dollars. Dr. Lee Benda, a geologist with the University of Washington, wrote a report that said harvesting can increase soil water “on the order of 20 – 35%”- with that impact lasting 16 – 27 years, until new trees matured. Article attached

These are a few examples of why the residents of Perry Ridge do not accept the increased risk to their properties and lives.

Your Ministry held a Terrain Stability and Forest Management in the Interior of BC Workshop in Nelson where our Association accompanied Dr. June Ryder. The Field trip included visits to the many landslides in the front valleys of the District. The landslides in the back country add to the thousands of slides documented in the report Regional Incidences of Landslides by Peter Jordan that indicate Gentle over Steep terrain is one area where many slides have occurred. Perry Ridge logging presents this scenario of Gentle over Steep terrain especially if water is intercepted and brought to the surface – a small amount of water will and has started mass failures in the region.

Water diversion and plugged culverts can cause irreparable harm. Dr. June Ryder's "Geological Hazards of the Perry Ridge Benchlands" note her grave concerns about several aspects of the potential effects of logging the Perry Ridge. "Even the most careful planning of roads and cutblocks cannot guarantee that accidents (slides, debris flows, floods) will not occur. A single such even on Perry Ridge, where steep slopes and steep creeks descend to highly sensitive terrain with dense rural settlement, could have disastrous effects."

"Deforestation in snow regions causes more floods." Kim Green (article attached). Flooding of the Slokan River is another risk that would affect the residents who live along the river.

The increase in intensity of rainstorms in the Kootenays due to climate change requires further updated precipitation data for the ridge. It is our understanding that your Ministry does not have even outdated precipitation data and certainly no snow accumulation data as pointed out to your Ministry by Dr. Tony Salway in the Perry Ridge Workshop, held March 20, 2001 and his recommendation that this data be collected.

The Perry Ridge Water Users Association position remains that `development` - Logging, mining and roads will increase the risk to the residents below. Since it is the community that bears the risk, it is our decision that we do not accept an increase in the already high risk and oppose any further removal of trees and road building on the ridge.

Forest systems provide multiple opportunities to offset or stabilize greenhouse emissions through a reduction in deforestation (C sources) and expansion of existing forests (CO₂ sinks). We are interested to know if you have done any calculations regarding carbon sequestration of the remaining forests on the ridge. Red Cedar sequesters 5-50 times more C than spruce or fir or tropical Rainforests per ha. As you know Red Cedar is a species found throughout Perry Ridge.

Please advise if you have done this work and send it to us. If it has not been done please advise when you expect to include this in your planning.

Without proper updated precipitation data and the calculation of the carbon sequestration of the forests, the true natural capital of the forests is not addressed or calculated into a true cost benefit analysis. The work on Perry Ridge needs to be updated and the added data included. Without this data our Association submits that to proceed with any further logging on Perry Ridge is negligent.

We are also attaching a letter written by our Association to MP Richard Cannings, with copies to Ministry of Environment, Ministry of Forests, Sinixt Nation, Walter Popoff, RDCK Director, Federal Ministry of Environment – Climate Change, Lilina Lysenko, Counsel, Katrine Conroy, MLA, Minister of Public Safety. As you will see from the letter the impacts of logging Perry Ridge extend beyond the landform itself and valley bottom impacts need to be included as do the impacts to wildlife and fisheries. Letter attached

Please advise what your plans are for the remaining portions of Perry Ridge and the reports done for these areas as well as when you expect to correct the misuse of the ECA and how you intend

to include new precipitation data, snow accumulation data and the calculation of the carbon sequestration of the remaining forests on Perry Ridge in order to show due diligence when planning above the densely settled area at the base of the ridge.

We look forward to receiving new reports that reflect the changing climate in the West Kootenays and the realization that logging and road building on Perry Ridge is not economical, safe or the most appropriate use of the landscape and that conservation of nature is the best way to mitigate and adapt to climate change.

Yours truly,

PERRY RIDGE WATER USERS ASSOCIATION

Marilyn Burgoon
President

Attachments

Cc: Ministry of Environment
Ministry of Forests
Sinixt Nation
Walter Popoff, RDCK Director
Federal Ministry of Environment – Climate Change
Lilina Lysenko, Counsel
Katrine Conroy, MLA
Minister of Public Safety
Minister of Tourism

The creeks do not need any more sediment and debris entering them from logging slash and disturbed soils. Mr. Austin Greengrass's home. The slide in Slocan Park and the death of the realtor due to the landslide on Van Tuyl, the deaths at Johnson's Landing and deaths at Oso Washington are examples of why we do not accept an increased risk to the properties and the lives of residents living on Perry Ridge. (See attached article that shows a \$60 million dollar settlement in the Oso slide)

Water diversion and plugged culverts can cause irreparable harm. Dr. June Ryder's "Geological Hazards of the Perry Ridge Benchlands" note her grave concerns about several aspects of the potential effects of logging the Perry Ridge. "Deforestation in n snow regions causes more floods." (Article attached). Flooding of the Slocan River is another risk that would affect the residents who live along the river.

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Please advise if you have done this work and send it to us. If it has not been done please advise when you expect to include this in your planning.

Without proper updated precipitation data and the calculation of the carbon sequestration of the forests, the true natural capital of the forests is not addressed or calculated into a true cost benefit analysis. The work on Perry Ridge needs to be updated and the added data included. Without this data our Association submits that to proceed with any further logging on Perry Ridge is negligent.

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Please advise what your plans are for the remaining portions of Perry Ridge and when you expect to correct the misuse of the ECA and how you intend to include new precipitation data, snow accumulation data and the calculation of the carbon sequestration of these remaining forests. We look forward to receiving new reports that reflect the changing climate in the West Kootenays and the realization that logging and road building on Perry Ridge is not economical, safe or the most appropriate use of the landscape and that conservation of nature is the best way to mitigate and adapt to climate change.

Yours truly,

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