

September 29, 2017

Ms. Sherri Young  
Secretary of the Board  
National Energy Board  
Suite 210 – [517 10th Avenue SW](#)  
[Calgary, AB T2R 0A8](#)

Dear Ms. Young,

Re: Your file no. OF-Fac-Oil-T260-2013-03 03  
Trans Mountain Pipeline Expansion and the use of spawning deterrent mats

We understand that Trans Mountain (hereinafter, "TMEP") has placed spawning deterrent mats in a number of streams in the Valemount area, including Swift Creek, in the absence of final approvals for the pipeline route. We have reviewed your correspondence directing the activity to cease and appreciate that the Board is taking steps to ensure compliance with the conditions of approval.

It is apparent from the correspondence on file that the Department of Fisheries and Oceans has not permitted the spawning deterrent measures that have been installed by TMEP. It is completely unclear to us how, or at what point, the NEB intends to assess the efficacy of measures to protect wild salmon that will be adopted by TMEP. The situation in Swift Creek, outlined below, illustrates our concern regarding the process and the substance of decisions made or to be made about watercourse crossings.

Swift Creek is one of a number of Chinook salmon spawning streams in the Valemount area that host early-timed runs to the Upper Fraser River. These populations are of considerable importance to the overall health of early-timed Fraser Chinook the stock. As you know, Fraser Chinook numbers are severely depressed relative to their historical abundance, and early-timed spring and summer runs have become even further depressed in the last decade. This year's early-timed Chinook returns were some of the worst on record and spawning returns in the Valemount area are reported to have been very low.

The Conservation Units of Spring and Summer (52) Chinook returning to the Fraser River are ranked as Red by Fisheries and Oceans Canada under Canada's Wild Salmon Policy. The Raincoast Conservation Foundation has been calling for marine closures on fisheries that intercept these salmon for the last two years.

The scarcity of Chinook, especially early-timed runs that are in the Salish Sea in the spring, is one of the key factors limiting the recovery of Southern Resident Killer Whales.

In summary, in Swift Creek we see a red-ranked fish population, the recovery of which is clearly linked to the recovery of a second endangered population, namely the Southern Resident Killer Whale, and yet the Creek is proposed by TMEP for either trenched or "isolated" crossing, with the work being done outside the least-risk biological window. No reasons appear to be provided for this.

We would appreciate hearing from you on the following points:

1. Why is TMEP apparently contemplating construction in streams outside of the 'least risk biological window' for depressed spawning salmon? Has the NEB approved this already and if so, please provide us with your reasons for accepting that the work cannot be accomplished at other times of the year.

2. Why is TMEP not required to drill under streams bearing depressed stocks of salmon? Has the NEB simply accepted all of TMEP's proposed stream crossing methods, set out in its filing in response to Condition 43? We have set out below the decision pathway used by the B.C. Oil and Gas Commission for determining stream crossing methodologies, which would require directional drilling or boring for a crossing such as Swift Creek. Does the NEB have any similar guidelines and if so, please provide a copy.
3. Spawning grounds are selected by salmon for site-specific conditions that include aspects of temperature, gravel and flows. Have you had the benefit of any assessment of the spawning deterrent method adopted by TMEP? We want to know if potential impacts on the spawning success rate of Chinook in the streams that have been, or are to be subject to, spawning deterrent measures have been independently assessed. Kinder Morgan has publicly stated that the deterrent measure is "new" and "innovative"; and we can find no evidence that its impacts, beyond successfully preventing natural spawning, have been credibly assessed. Please provide a copy of the assessment, if there is one.
4. If there has been no assessment of the spawning deterrent method being used by TMEP, please advise as to the particulars of the monitoring regime TMEP will be required to use to assess impacts from this innovative application.
5. If salmon-bearing streams are to be trenched for the pipeline crossing, what measures will be in place to protect downstream redds or juvenile salmon from siltation when coffer dams are removed after trenching?
6. Under the Memorandum of Understanding between DFO and the NEB, the Board is required to notify DFO of any works where the Board determines an authorization under the Fisheries Act may likely be required. For what streams, if any, has the NEB determined that an authorization would be required? Please provide a copy of any correspondence with DFO indicating approvals may be required.

The protection of salmon and their habitat during construction of this pipeline is a matter of utmost concern to our organizations, First Nations, and British Columbians. With returns of so many Fraser River Chinook salmon runs at critically low levels, we look forward to your advice as to the measures you are taking to protect them.

Sincerely,

Karen G. Wristen  
Executive Director  
Living Oceans Society

Chris Genovali  
Executive Director  
Raincoast Conservation Foundation