

Nova Scotia Department of Environment,

I am writing in relation to the focus report on Northern Pulp's proposed Replacement Effluent Treatment Facility Project. I am a resident of Central Caribou where the pipe will be constructed, I own a cottage on the Northumberland Strait near the outfall and we are a commercial fishing family. Concerns in my original submission about pulp effluent and TSS in the water and on beaches, public engagement and effluent meeting regulations but still causing harm have not been answered or mitigated by this focus report.

In relation to my concerns that the effluent will enter Caribou Harbour the focus report Appendix 4.2 Receiving Water Study Caribou Harbour Figure 38 and Figure 45 show where the effluent is predicted to be during the month of May and February. Why are they only putting modeling calculations in for one month periods? Why don't they put it in for 20 year period, I would like to see what that would look like if in one month it looks like this. What would the accumulated effects be in Caribou Harbour and on the beaches.

NORTHERN PULP EFFLUENT TREATMENT FACILITY REPLACEMENT PROJECT: UPDATED RECEIVING WATER STUDY, CARIBOU, NOVA SCOTIA

FAR-FIELD MODELLING
September 27, 2019

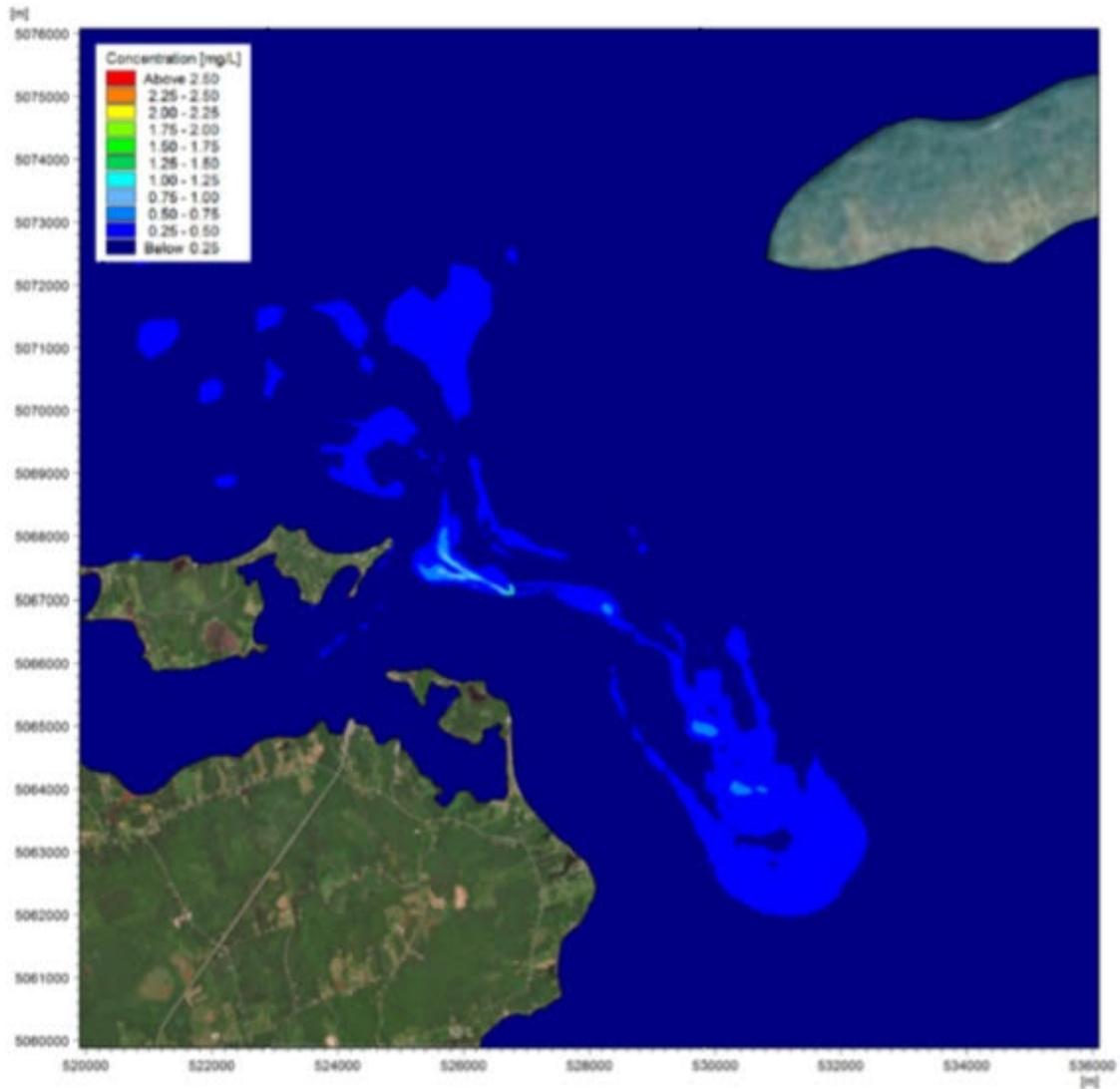


Figure 38 Simulated Effluent Concentration by End of One-month Simulation Period in July (concentration in effluent arbitrarily set at 100 mg/L and assuming no particle degradation over the simulation period; lower concentration of 2.5 mg/L for the upper bound in the figure legend is used)



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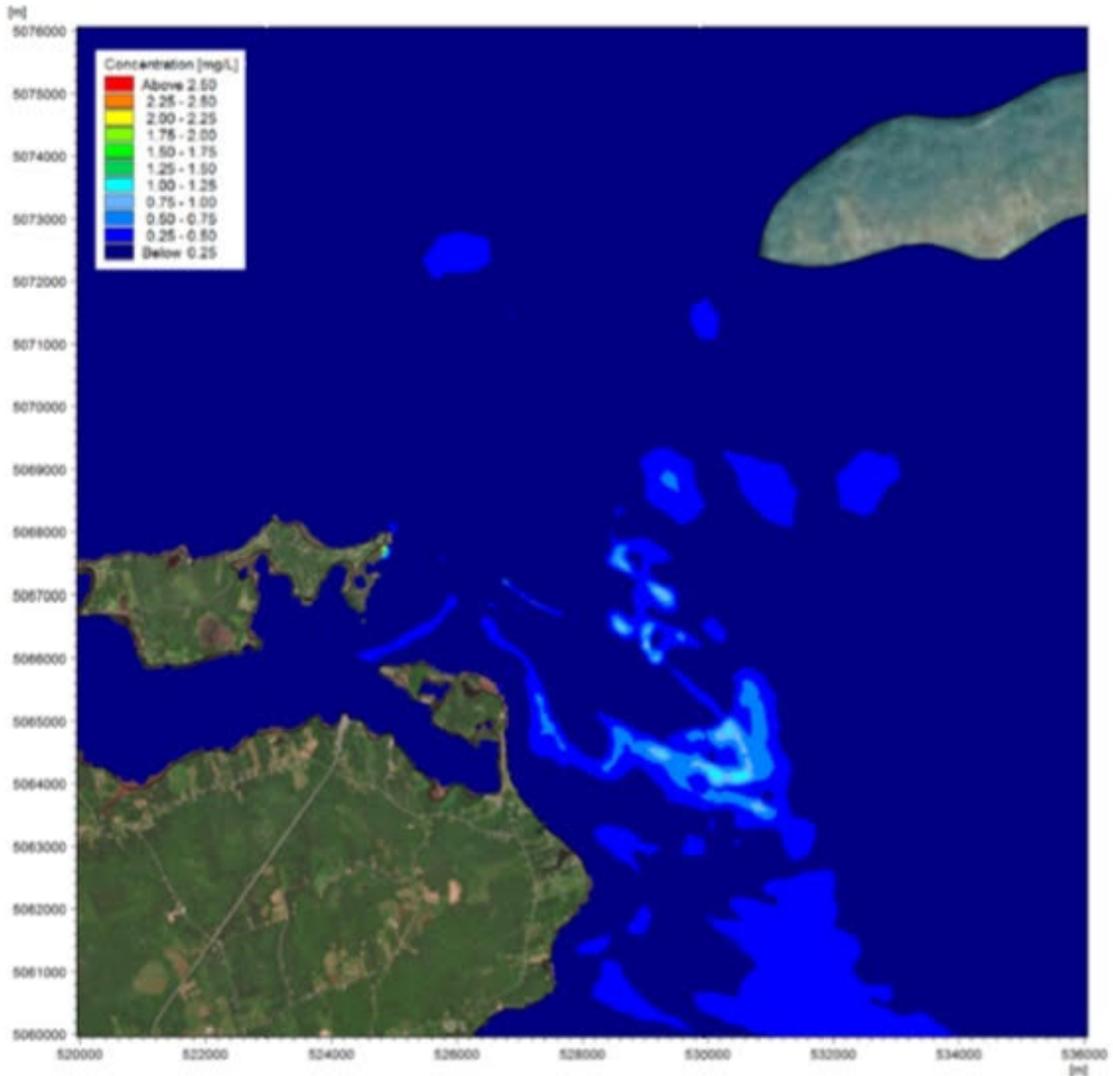


Figure 45 Simulated Effluent Concentration by End of One-month Simulation Period in February (concentration in effluent arbitrarily set at 100 mg/L and assuming no particle degradation over the simulation period; lower concentration of 2.5 mg/L for the upper bound in the figure legend is used)



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2.57

As I stated in my original letter, I attended all the open houses. There have never been anymore information sessions or public engagements or response to questions since changing the route to Caribou Harbour and no studies or reports were made public as required in the Terms of Reference 1.1 and 1.2.

36 (1) No one shall

(a) throw overboard ballast, coal ashes, stones or other prejudicial or deleterious substances in any river, harbour or roadstead, or in any water where fishing is carried on;

In relation my point that the quality of effluent leaving the pipe (same as point C) vs BHETF will be worse, there is no mitigation measures for replacing Boat Harbour lagoon. The new system is still only replacing the settling basins and aeration basins. This is what is coming out at point C, this is meeting regulations. This will still cause harm to fish and fish habitat, even with the Boat Harbour lagoon cooling and removing most of the TSS they are still causing harm to fish and fish habitat as stated by PPER in PEI Legislative Assembly. In the focus report levels are predicted to be higher than point C as shown in table 2.4-3: Effluent Loading Act

2.0 PROJECT DESCRIPTION 39

It is noted that actual operating parameters in the new replacement ETF are expected to be below the maximum performance run values from Veolia.

Table 2.4-3: Effluent Loadings Comparison

	2018 Point C Treated Effluent Loading (kg/day) ¹	Veolia Expected Loading (kg/day) ²	RWS Loading (kg/day)
BOD	1,526	≤ 1,875	4,080
TSS	1,717	≤ 1,875	4,080
COD	39,521	≤ 37,500	61,625
AOX	87	≤ 225	663
Nitrogen	299	≤ 450	510
Phosphorus	95	95	128

Notes:

1. Based on annual average production rate of 777 ADt/d.
2. Based on Reference Production Rate (RPR) of 938.5 ADt/d.

Minister, the Focus Report was supposed provided additional information so that your office could make an educated decision on this project. Northern Pulp has not mitigated concerns or met the requirements of the terms of reference and for this reason I ask that you reject the proposal, if you feel you can not reject it than I ask that you require a full Environmental Assessment Report.

Respectfully,

Nicole MacKenzie

Central Caribou, Nova Scotia

Original submission:

4 Mar 2019

Nova Scotia Department of Environment,

I am writing in regards to Northern Pulp's new effluent treatment facility and 15.5 km pipe proposed to discharge up to 85 million litres of treated effluent and four tonnes of suspended solids daily into the Northumberland Strait. I am a resident of Central Caribou, where this pipe is proposed to run through, I have walked the coast of Caribou Harbour almost daily with my children for 12 years. I have several concerns about effluent and suspended solids where my children, dog and I swim. What will happen to the clam and oyster beds that live in the mud of Caribou Harbour, Northern Pulp's open house information is not matching what is in the EA, the treated effluent leaving the aeration basins of Boat Harbour is meeting Pulp and Paper Effluent Regulations and causing harm but nothing can be done to remediate this other than some recommendations.

Caribou Harbour is not a large body of water, the tide will bring effluent and suspended solids into the harbour. The EA and receiving water study state that the effluent will not come into Caribou Harbour, I fail to see how this is possible as the end of the pipe is right outside the mouth. Figure 8.12-1 page 363 of the EA is a still photo of the bottom of Caribou Harbour and states that it is devoid of microflora and microfauna. I can tell you that it is most certainly not void of life; perhaps, because one still shot of a sand bar cannot show the huge oyster and clam beds present in Caribou Harbour, we have to wear swim shoes in the water there are so many you cannot walk without them. Oysters and clams are filter feeders and will be the first affected by this pipe. The mitigation measures for socio-economic issues is to take our concerns to the NSE Dept in Granton and Northern Pulp Community Liaison Committee will continue to facilitate two-way communication and advise to Northern Pulp. It is well known that the Community Liaison Committee meets in secret and the membership is hidden from the public. It also states that a communications and compensation plan will be available for the commercial fishermen, this is the first mention that there will be any effect of the effluent 2-5 meters past the outfall. If there needs to be a compensation package due to regular operation of the ETF how can the significance of the residual effects be: not significant or averse as stated in Table 8.14-2 pages 444-445.

I attended all of Northern Pulp's open houses, these were held for the Pictou Harbour outfall, they did not have any information sessions on the Caribou outfall. The information I received stated that there would be one tonne of suspended solids being pumped out daily, after reading the EA and calculating 48 mg/L by 85 million litres that would mean there are 4 tonnes of suspended solids daily going through the pipe. The ferry channel already needs to be dredged due to sand build up in the channel, how often would it need to be dredged if four tonnes of solids would be pumped into it daily, also I have not seen anywhere in the EA how routine dredging would affect the pipe. At the information open houses they had pictures of treated effluent from 1970, 1990, 2017 and finally a predicted photo of 2020. The last picture showed that the effluent was clear and this is how it would look in the new system (History Effluent Quality picture Open House Panel 14, link below). This is not how it will look coming out of the pipe. There are pictures and video of what the effluent looks like leaving Boat Harbour now it is dark brown, however that is better than what it will look like coming out of the pipe because the new system does not replace the Boat Harbour Lagoon. It is only replacing the settling basins and aeration basins, what the water will look like leaving the pipe is what the water looks like now leaving the aeration basins. This is meeting regulations, and will continue to meet regulations in

the new system. That does not mean it will not cause harm to fish, shellfish, marine plants, marine animals, birds as well as their habitat.

When Environment and Climate Change Canada Pulp and Paper Effluent Regulations (PPER) came to meet with the PEI Legislative assembly Feb 1st, 2019 (see link below for transcripts) they stated that Northern Pulp is one of the 70% of pulp mills that are causing harm even though they are meeting regulations. The Environmental Effects Monitoring (EEM) shows they are harming fish habitat while meeting regulations. The only corrective action taken after harmful effects are found by the effluent is Pulp and Paper regulators make recommendations for them to implement for the next three years, whether or not these changes are made or work isn't checked until the next three year period of the EEM, and if they are still harming fish habitat there would just be more recommendations to them. So just like when Pictou Landing First Nation told Environment Canada that the mill was killing all the fish 50 years ago, there is still nothing living in Boat Harbour and the mill is meeting regulations. Would the same not happen to the Northumberland Strait? Everyone could complain that there is nothing living around Caribou but the mill is meeting regulations so the only thing that can be done is recommend changes every three years.

The Strait is a unique ecosystem that must be protected. We are known for our swimmable beautiful beaches, our pristine waters that produce a sustainable seafood industry renowned around the world.

If this is approved there will be no turning back, the Pulp and Paper regulations do not protect us or the Strait, if this decision is based on whether or not the EA can pass PPER then the Strait will become the next Boat Harbour, because it is the same regulations that they are passing now. Northern Pulp has made no effort to meet with the communities of Pictou and Central Caribou before and after the pipe location changed and the information that was provided by the meetings in New Glasgow are not even close to the information that is now in the EA. For these reasons I ask you Minister to reject this proposal.

Thank you

Nicole MacKenzie

Central Caribou, Nova Scotia

http://www.assembly.pe.ca/sittings/2018fall/transcripts/17_2019-01-02-transcript.pdf

<http://www.paperexcellence.com/copy-of-faq>

click on tab for project launch open house materials if link below does not work

<https://drive.google.com/file/d/14OWv3oA8C1E1ys4hxFCBCq4lcRkpkJq5/view>