From: John Petrofsky [mailto:jpetrofsky@googlemail.com]
Sent: Tuesday, July 26, 2016 11:41 PM
To: Pelletier, Rene
Cc: Monroe, Pamela; Drew, Tim
Subject: Re: Northern Pass Wetlands Impacts

Hi Rene,

I wanted to follow up with you on a couple of additional points, having looked further into Northern Pass's analysis of wetlands impacts.

I previously brought to your attention the lack of analysis of named wetlands in Stewartstown. I took a closer look at NP's analysis last week, and made note of additional errors/omissions. I have attached several maps for reference, with my annotations. There are also historical resources noted, which you can of course ignore. These reflect problems in the analysis on just two frames of what must be over one hundred similar maps.

First, I was surprised to see 100 year flood zones listed in the key to the NP maps, indicating that the analysis made note of them. However, this is not the case. The NP map shows no flood zone in the attached frames, but you will see my notation of where there is in fact a flood zone. In fact most of the field where I've noted the flood zone is essentially a wetland for much of the year. You can see ducks and muskrat swimming in it, for example. The analysis seems to indicate that this area isn't expected to flood in a 100-year storm. I've seen water crest the road several times in my life, and I'm only 30.

Additionally, there is a massive spring (Bear Rock Spring) that emerges downhill from Bear Rock, on the downhill side of Bear Rock Road. Bear Rock Spring produces somewhere between 100,000 - 200,000 gallons of water per day, based on accounts that I've read. A spring of this size is also economic resource, and has been commercialized in the past by Colon Chappel, a former owner of the spring in question. It's hard to argue that burying the transmission line through the hillside above the spring (under the existing dirt road), wouldn't have an extreme adverse impact, particularly since extensive blasting of ledge would be required for both the line and the transition station. Particularly at a time when drinking water in the state is a matter of increasing concern, we should be very mindful of impacts to such resources.

If there are such material errors and omissions in Northern Pass's analysis of wetland impacts in these few frames, consider what is lacking in the rest of the application. What we currently are working with does not represent a complete and thorough analysis of the impacts from this proposal.

Additionally, and related to wetlands, the impact analysis on fisheries seems equally superficial. For example the analysis contained within the **"Fisheries and Aquatic Invertebrates Resource Report and Impact Analysis"** report does find that the underground portion of the line would have significant increase in temperature for at least one stream impacted by the right of way in the area in question (Bear Rock vicinity), but this analysis only took into account the impact of clearing near streams. It did not take into account radiant heat from the burial of the line directly under several streams. **See pg. 54.** The applicant's analysis does not approach what a reasonable

observer would view as thorough/non-arbitrary. As expected, this report contains no reference to the native brook trout fishery in the West Branch of the Mohawk River. It only states, "Surveys in these streams [north of the White Mountains] will only be conducted if verification of a coldwater fish community would influence the design or permitting of the project". How can we know if they haven't done the analysis? We do know that the West Branch of the Mohawk is a native brook trout stream, however. Again, much more work is needed.

Apologies for the additional email, but this is important as you know. Thank you again.

Best,
John Petrofsky