

From: Henderson, Carol [Carol.Henderson@wildlife.nh.gov]
Sent: Tuesday, December 07, 2010 3:33 PM
To: Sarah Barnum
Subject: RE: Northern Pass

Hi Sarah:

As you know, a number of staff members met at HQ for a meeting on the Northern Pass project, including the biologists from the Region 1 office. Both Will and Jill have been hearing a lot about this project in the North country, more specifically the development of the new transmission line from Canada into NH, where there presently is not an existing line. Obviously, they are very concerned about the impacts this new line will have in the North Country. In addition, fisheries staff are concerned about the cutting of the trees for the lines over streams, as well as the potential impacts of stream crossings. I have included their recommendations, as well. Discussion at the meeting involved a number of questions regarding the project, which should probably be addressed by the planners of the project rather than yourself. It may be beneficial to have a presentation of the project sometime in the near future for Department staff, so some of the questions regarding the corridor could be answered.

Thank you, Carol Henderson

The following are wildlife study recommendations:

General Wildlife Issues:

Identify:

- Osprey (locations and habitat)
- Harrier (locations and habitat)
- Marten (locations and habitat)
- Lynx (locations and habitat)
- Deer yards

Utilize existing deeryard maps for Coos County
(deer yard model for the rest of the state, or where no GIS layer is available?)

Moose concentration areas

Important mast areas (beech and oak)

Low elevation spruce/fir (other than deer yards) – tracking for marten and lynx

Utilize USFS and Maine protocols

Important travel corridors—use to help inform decision making for wildlife crossings

Potential Survey Needs:

Directed surveys for marten lynx moose concentration areas and deer yards

Methods: track transects

Potential expanded work on marten locations and densities to

supplement

current research

Ground truth/verify mast areas and deer yards

General Stream Issues:

Reduce impacts to streams by:

1) Riparian vegetation

a. water temperature: Provide conditions that completely shade the stream

b. water quality: don't use herbicides

2) Stream crossings

a. Minimize the number of new crossings, where possible utilize existing crossings.

b. Of all types of crossings, bridges have the least impacts to sediment transport and fish

passage. Ensure that runoff from the road (both water and sediment) do not flow

directly into the stream. There must be adequate 'treatment' (i.e., flow through

vegetation) before flow enters a stream.

Additional information that would be helpful to inform Stakeholders relative to streams that may be impacted:

3) The drainage area at each crossing. This can be estimated various ways, including by StreamStats (USGS)

4) Determination of the nature of flow (whether perennial or intermittent) and a description of the information used in this conclusion.

5) Determination of the type of stream at each crossing (Rosgen classification, thermal regime [this

can only be done in summer], and existing riparian vegetation condition [species, whether upland or wetland, DBH, general stand characteristics such as stems/acre])

6) Fish surveys at each proposed stream crossing.

Appendix A - NHFG Dec 7 2010 e-mail.txt

From: Sarah Barnum [mailto:sbarnum@normandeau.com]
Sent: Monday, December 06, 2010 1:54 PM
To: Henderson, Carol
Cc: Adele Fiorillo
Subject: Northern Pass

Hi Carol,

Just checking to see when the summary of tasks to support wildlife-related permitting for Northern pass project will be available. The client would like to start the decision making process for some the alternatives. The feasibility of, and amount of effort required to, permitting wildlife impacts is one of the prime considerations, so there is a lot of interest in NHFG's recommendations. So I get the task of pestering you.

Sarah

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