March 20, 2018

Dear Professor Lahey,

I apologize for the lateness of this letter concerning Old Growth Forests (OGF) with respect to the timing of your review of forest practices in Nova Scotia. However the topic of OGF management particularly on crown land by DNR is currently receiving considerable public attention and I wanted to insure that you received information on some of the critical concerns.

The Interim Old Forest Policy was established by DNR in 1999 and implementation was initiated. A status report of progress was released by DNR in 2008. The final policy document was released to the public in 2012. (See attached). The purpose and intended direction of the Old Forest Policy is clearly stated in the document as:

"The Old Forest Policy will conserve the remaining old growth forests on public land and ensure that a network of the best old forest restoration opportunities is established. This network will support, and be supported by, broader sustainable forest management initiatives that address maturity and community representation across ecological landscapes."

"DNR staff will identify old growth and the best old forest restoration opportunities on at least eight percent of publicly owned forest land in each of the province's 38 forested ecodistricts "

The development of the Old Forests policy is commendable and it has resulted in the identification of important old forests areas some of which have become fully protected through NSE Protected Areas Program.

However, the implementation falls short of conservation requirements because of the approach DNR has developed to implement it. The policy and associated guidelines did not benefit from being developed through a collaborative process with the science and ENGO, community, NSE, and the general public. As a result there are many issues with the policy and the implementation of it.

One of the key issues was made clear in a recent article in the Chronicle Herald http://thechronicleherald.ca/novascotia/1553175-video-province-admits-old-growth-forest-may-have-been-cut-for-fuel concerning harvesting of older forests in Guysborough where a Regional Manager from DNR stated "that because the province has already protected about 16 per cent of the land in that particular ecodistrict as old forest — above the required eight per cent — the department is able to allow some cutting in areas that could qualify as old forest."

So – how has DNR managed to rationalize the harvesting of old forests when we know that they only occupy a very small percent of the forests of the province? The answer lies in the

policy and its application - DNR counts as old forests any stand over 40 years old with a 50 % climax species within protected areas. About 50 % of old forests which DNR counts are 40 -79 year old stands in Protected Areas. As well, most of the remaining old forests counted by DNR are between 80 and 125 years old - again mostly in protected areas. There has only been a small per cent of old forests identified, scored and included outside of protected areas which meets the definition of old forests – (125 yrs 50 % climax species).

I would encourage you and your staff to examine the "old Forests layer" on the Provincial Landscape Viewer and you can see the majority of what is being counted is younger forest in protected areas. I would also encourage you to examine the 2008 DNR report (see attached) which rationalizes the application of the selection process to implement the old forests policy on crown land.

The procedure for selecting old forests is outlined in the Old Forest Policy and includes several steps. DNR is first required by policy (step 1) to apply the Old forests score system to stands in existing protected areas to determine how much and what quality (i.e.> 125 yrs) is available to contribute to protecting 8% in each of DNR's ecodistricts. However DNR decided not to identify and score old forests in protected areas despite the fact that the 1995 paper Old Forests of Nova Scotia (Lynds and Leduc) identified over 38,500 ha of potential old forest in protected areas.

DNR rationalized this by stating in the 2008 report:

"The 1999-2003 provincial forest inventory (NSDNR, 2004) indicates that only 0.3 percent of the province is over 105 years of age. Therefore it was assumed that no ecodistrict had sufficient old growth in protected areas to meet the policy target, and a search of protected lands for old growth was not necessary to verify this"

The policy next required DNR (step 2) to look at crown land outside of protected areas for stands greater than 125 years old for inclusion. DNR included and scored a number of stands but basically did not conduct an extensive inventory and rationalized it by stating in the 2008 report:

"As with step 1, it was assumed that no ecodistrict had sufficient old growth to meet the policy targets, and a full inventory of all lands was not required to verify this."

It is very important to understand that these decisions had the effect of playing down the existence of potential old forests on crown land. At the same the decisions were made by DNR knowing that the NSE Protected Area Branch had a province wide inventory of potential old forests sites on crown and private land known as the SOUF layer (Significant Old and Unique

Forests). The SOUF layer was a GIS layer which was designed as a starting point to look for old forests on crown and private land. The SOUF layer was used in the Colin Stewart Forest Forum process to help identify conservation values and was accepted by both ENGOs and industry participants as a science based tool to aid in that process. It would have been an easy step for DNR to collaborate with NSE and utilize the SOUF layer to select the most promising stands for old forest scoring in step 2. The SOUF layer indicated that about 2% of crown contained forest stands which were potential contributors to the maintenance of old forests on crown land. You can verify this by contacting NSE – Protected areas Branch.

The Old Forest Policy was designed so that If DNR did not find the 8% old forest target in steps 1 and 2 they were then directed (step 3) to include any stand greater than 40 yrs of age with 50% climax species in protected areas. This is where more than 80 % of the old forest target was achieved –by counting forest over 40 years old in protected areas. As well the younger forests in protected areas were never scored or field evaluated but simply identified and counted through a desk top GIS program.

If the 8% target per ecodistrict could not be met with step 3 (>40 yrs in protected areas) then DNR staff were directed to step 4 –identify the best old forest restoration opportunities on crown land focused on stands 80-125 yrs with 50 % climax species. A variety of these stands were identified but with most of the targets reached by including younger stands in protected areas the pressure was off DNR to include many sites in the 80-125 yr category as potential old forests thus keeping them available for wood supply.

Not conducting a credible inventory and scoring system in step 2 for stands greater than 125 yrs on crown land effectively provided DNR with the rationale or cover to meet the 8% policy directive by counting younger forest in protected areas. Those in the science community, ENGO's and staff at NSE are aware that a credible and principled process for step 2 would have identified many stands which would have qualified. As well, if patches of stands in the 80-124 age class were identified back in 1999 when the interim policy was first implemented they would be 20 yrs older now with some either beyond or approaching 125 yrs. The result is that many of the old forest on crown land have been lost. Remaining old Forests stands on crown are continuing to be at risk as the example from Guysborough County currently receiving media coverage attests.

Below is a chart from the 2008 DNR report summarizing the age class distribution of stands which they counted as contributing to the 8% old forest target.

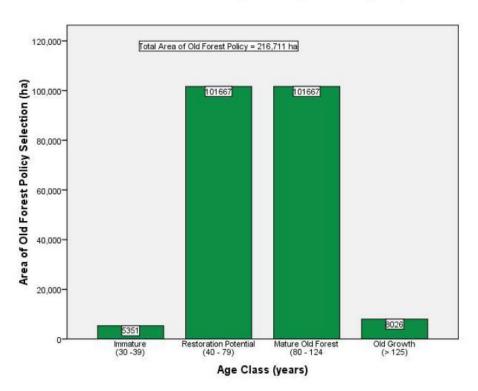


Figure 3. Age class distribution of forests selected under NSDNR Interim Old Forest Policy as determined from 162 randomly established Permanent Sample Plots measured between 1999-2003 (NSDNR, 2004).

Another issue relates to the 8 Ecodistricts where the 8% target hasn't been reached. This is problematic – for example the Valley Slope Ecodistrict (on the south side of the Annapolis Valley) which runs from Bear River to Hantsport) has just two small areas of old forest.

Remembering that the Interim Old Forest Policy was initiated in 1999 and seven year ago the Natural Resources Strategy, with respect to Ecodistricts where the target was not reached, stated on page 36 "Work continues in those Ecodistricts to identify and select the best sites."

The problem is that DNR continues to allocate many harvest blocks on crown land in this Ecodistrict without first meeting the 8 % old forest target. Some of these blocks would have had trees over 100 years old and would qualify as old forests or old forest restoration sites.

In summary, the DNR Old Forest Policy, with its good intentions, has become another example of "the fox guarding the hen house". As you are most aware - forest practices in Nova Scotia have become a major governance issue. Many of their polices and instruments of forest governance such as the Old Forest Policy, Natural Disturbance Regime approach, PTA, definition of clearcut etc. do not stand up to the test of third party scrutiny. Despite having many resources DNR has difficulties effectively managing for both wood production and forest conservation and other values. Building trust through principled decision making and solving complex problems for the government in resource management requires changes in how the province governs our forests. With respect to old forests specific recommendations include:

- The Old Forest Policy should be the responsibility of NSE –Protected Areas the lead conservation agency for the province.
- The Old Forest Policy should be reviewed and improved through a collaborative process with the science community, ENGO's and Industry.
- There should be an immediate moratorium on all remaining forest stands on crown land that have indications they have old growth characteristics until they can be field evaluated under a new governance model.

Thank you and all the best,

John LeDuc

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2240 hwy 201

Bridgetown NS