
Proposed Old Growth Forest Policy 2021

Ecology Action Centre Responses

December 7, 2021

The proposed Old-Growth Forest Policy (Draft) has provoked 2 responses from Ecology Action Centre. Response 1 comes from to the need to call out provincial government systems and assumptions that are no longer working or welcome, given the emergencies we are in. Response 2 aims to improve the proposed policy should the Department of Natural Resources and Renewables choose to continue with its business-as-usual approach to old growth forests and how it engages the public in policy review.

Response 1

The Old Growth Forest Policy of 2021 does not embody the **transformational change** that is required and desired in 2021. It does not respond to the climate change or biodiversity crises, nor does it state the need for the policy to be co-created with the Mi'kmaq of Nova Scotia (should they wish to engage with this work). It continues to come from an outdated, forestry-dominated lens, apparent in its continued view of a forest as a primarily collection of trees only.

Even the process that led to the updated policy was poor - the policy review seems forced by implementation of the Lahey Report and not stemming from an actual desire to revise the policy. There is no analysis, external or internal, of how effective the policy has been from 2012 to 2021. Insights from all stakeholders and knowledge-holders do not seem to appear in the policy, and the public comment period on what the Department alone has created is woefully short and poorly presented. Even the related online map is riddled with inaccuracies and short-comings.

To address the massive misstep of how this policy update was completed and offered for public review a better process should be put in place to create a truly defensible Old Growth Forest Policy.

Response 2

1. Existing old forest policy (2012 version) – General comments

These comments are offered as a starting point had the Province first examined what is weak about the 2012 version of the policy.

- Everyone would have a better sense of how effective this policy has been if there was an independent evaluation of its effectiveness. This type of analysis should have been conducted and shared with the public before asking for public input. Ideally, evaluation of the policy should have been completed by an external reviewer(s), but even an internal review as was done for the policy between 1999 and 2012 would have been helpful for seeding the conversation in 2021.
- The policy's purpose states that it is to both to conserve and restore old growth forests. However, what is meant by restoration is the conservation of certain forest stands to allow them to naturally progress to old growth forest status. This is not the widely understood meaning of restoration. Please see the [International principles and standards for the practice of ecological restoration](#).
- The 2012 policy seems to apply to “all public forest land owned by the Province,” but in the Province's *inventory* of old growth forest it includes old growth forest (and restoration opportunities?) in federal National Parks and some National Historic Sites. However the Province doesn't have jurisdiction on these lands to conduct the conservation, restoration, monitoring, and educational activities the policy calls for.
- The 2012 policy really blurs definitions, using the term old forest to include both old growth forest and best old forest restoration opportunities which are NOT old growth forests right now. These “opportunity” sites are not old growth forest now (some are as young at 40 years old), and should not count towards the 8% target.
- The 2012 policy seems to have made its too easy to “swap out” parcels without approved criteria or transparency. It would be instructive for the Department to provide data on how often stands were swapped out, and for what reasons.
- The 8% target is arbitrary, and not supported by science. There is research, in Nova Scotia, about the historic abundance of forests at an old growth stage

(e.g., Mosseler *et al*, 2003). This science should be cited and used as a basis for determining a target.

- The 2012 old policy did not call for the provincial Old Forest Old-Growth Forest Coordinator to work on education.
- The Guidelines for assessing which stands “count” under the policy are not appropriate. It makes it possible for a forest stand that is not-so-old to count towards the target if it is in a provincial Protected Area.
- Is there any evidence gathered by the Province that “buffers and modified harvesting for sites adjacent to old forest” are happening, or that the practices are helpful?
- Why didn't the 2012 policy apply to Provincial Parks?

2. Old growth forest policy – Comments on 2021 version

There is much that is lacking in the 2021 version of the policy (including the still-misleading name of the policy). Here are the elements of the 2021 draft policy that could be helpful if kept and improved upon, and elements that should be removed or modified.

Pros:

- The 2012 policy designated old growth forest on Crown land as “C2E” within the department's IRM process, and staff would then give it “priority” during decisions affecting Crown land (no explanation of what prioritizing then entails for staff). The new policy seems to describe going beyond considering a site's priority to now adding the site to a database of stands that will be conserved through no development activities (except stands removed from conservation per the criteria).
- The new policy states that there will now be procedures for adding and removing forest stands from the Old Forest Policy Layer. It does not state which procedures were used before or how effective they were. Stating procedures provides more transparency than what was (presumably) happening through the 2012 policy.
- The new policy states that it would perhaps do more to support old growth forest conservation and restoration on private land. Details and a commitment to resource allocations should be provided.

- From the updated policy: *“Examine the feasibility of including old-growth forest as a priority criterion in its private-land purchase and conservation-easement programs”*
 - This could be is a good thing. Land trusts likely have sites in mind already that are on private land and host old growth forests.
- From the updated policy: *“Will account for the conservation of known old-growth forest areas on private land in the reporting of old-growth forest conditions by ecodistrict across the province.”*
 - This should only include forest areas that are protected through legally-binding instruments, such as conservation easements held with a conservation-focused land trust.
- It is encouraging to finally see a commitment to monitoring, both of the policy implementation and the development of older forest areas.

Cons:

- The policy does not even mention Mi'kmaw values or knowledge of old forests, or what a two-eyed seeing approach can show the Province about managing for old growth forests. This absence is massive mistake.
- The rationale for the policy is incomplete. There is value in improving the old-growth forest policy because of: climate change, biodiversity loss, recreational value, cultural value, and intrinsic value. The policy fails to define and conceptualize old-growth forests based on these values.
- The policy declares that the 8% minimum target was reached in 2020. Ecology Action Centre disagrees with this. It seems that much of the target was met through counting decidedly NOT old growth forests that happen to be in Protected Areas (and then assuming the forest would become old growth one day). Without an analysis shared with the public we don't have reason to believe that the target was genuinely reached. For example, how much of the 8% is true old growth forest, and how much are each of the other classifications of forest that counted towards 8% (Steps 3 – 5 in the 2012 policy)? The 2008 policy analysis (done by the Department) indicates that the 8% target was reached in some ecodistricts by primarily selecting stands that are not old growth forest.

- The policy inappropriately uses the term “protection” and “policy-protection.” Old growth forests in legally designed Protected Areas are protected. Stands conserved under the policy are only that – temporarily conserved. Because the conservation is not permanent, nor legally-binding, it is not viewed as protected under any widely-accepted definition of area-based protection measures. Please see the [IUCN Protected Area categories](#) and Nova Scotia’s application of these categories.
- Fernow (1912) is a very outdated reference for how much old growth forest has been lost in the last 300 years.
- There should not be patches that are “too small” to fall under the policy. The 2008 policy analysis described that some of the most under-represented climax forest types occur in “interval ecosections along rivers.” Although these bands of forest along rivers can be narrow, perhaps under 1 hectare, they should still be conserved.
- Climax forest types that are underrepresented in the policy and present few opportunities to conserve on Crown land should be selected as priorities forest types for conservation through other means (e.g., private land conservation). The Department should work with partners and provide incentives to conserve these almost extinct forest types.
- It may be helpful that the Old-Growth Forest Coordinator now has more direction to engage in communicating and providing educational opportunities about old growth forests for Nova Scotia. Educational work should align with curriculum and come from a two-eyed seeing perspective.
- It is good that the Old-Growth Forest Coordinator will now be responsible for periodically reviewing the progress in implementing the policy. The last review was done in 2008. It would have benefited the Department and the public if the Department, or an external source, has completed a review of the policy’s implementation before consulting on the current policy draft.
- The conceptual definition of “old-growth forest” in the policy is archaic and myopic. It only describes the tree community, and leaves out description of: other species found in old growth forests, old growth forest characteristics other than stand-level features (e.g., pit and mount topography), and other ways of valuing old growth forests (e.g., exceptionally biodiverse, store exceptional amounts of carbon, exceptionally important to certain groups in

society such as outdoor recreational users).

3. Recommended changes to specific clauses in 2021 version (quotes from the updated policy are in italics):

“2.1 Purpose

To provide for the conservation and restoration of old-growth forests in Nova Scotia.”

- The Purpose should be changed to make clear that it only applies to provincial Crown land. It should also only include the word “restoration” if restoration principles and work will be implemented through this policy.

“3.0 Authority, Application, Responsibility, and Accountability”

“The accounting provisions apply to all public forest land in the Province, which means that the old-growth forest areas and old-growth restoration opportunities in the federal Parks (i.e., Kejimikujik, Cape Breton Highlands and Louisbourg) and provincially recognized protected lands (i.e., wilderness areas, nature reserves, and parks) were accounted for before protection designations were established on the remaining Crown forest land.”

- Fortress of Louisbourg is a National Historic Site, not a National Park.
- An earlier part of the policy says that the **protection provisions** will not apply to provincial parks, but this section seems to say that Provincial Parks will be used in **accounting provisions**. Why the difference?

“4.0 Old-Growth Forest Definition

“Old-growth forest areas are herein defined according to the vegetation types, and the old-growth ages in the table below, as well as the history of past human interventions that have affected ecological continuity.”

- We do not support the move in this policy to do away with the 125-year “cut-off” for the early old growth stage across all species. The new, FEC- and age-based system is overly cumbersome, and the rationale for it does not seem strong. For example, this new system would require someone to classify a forest stand using the FEC protocol, in addition to using the old forest evaluation protocol. Also, the “NS Old Growth Age-of-Onset” seem arbitrarily placed at half of the maximum age found in the literature for each tree species. Why half? Additionally, the “Age-of-Onset” for some species, including tolerant hardwoods like Sugar Maple, and for Red Spruce and

Eastern Hemlock, has been increased from 125 years to 140 years. It was already a rarity to find these species at 125 years old! We cannot support a shift to not include these old-for-Nova-Scotia trees (125 years to 139 years).

We feel the minimum age to be considered early old growth should be 100 years, across all tree species. This is realistic, given that even trees aged at least 100 years are exceptionally rare in Nova Scotia now (0.3% of stands are at least 100 years, estimated by [Linda Pannazo, 2020](#) based on Department of Lands & Forests data, and also by [Owen et al., 2009](#)). This more conservative cut off has just as much, or more, rationale than as the species- and FEC-specific approach. It would also help bring in more stands, with is sorely needed, given that the 2012 old forest policy likely let many 125+ year stands be lost to cutting on Crown Land. Keep in mind that old is now a relatively term, and a province that has lost even more of their old growth forest has a lower minimum cut-off (e.g., Prince Edward Island).

“No forest areas that have received a silvicultural treatment or timber harvest within 30 years of the date of approval of this Policy will be designated to be protected, provided there is documentation of the treatment.”

- Remove this statement. There is no need for this if using the old forest scoring procedure, since a stand might have been harvested in a way that allowed its old forest characteristics to persist.

“A forest area is considered to be old growth if it is larger than 1.0 hectare in area and 20% or more of the basal area is greater than or equal to the reference age for that forest type.”

- Remove the 1.0 hectare area requirement. Some patches of old growth forest are smaller than 1 hectare and should still be conserved under this policy.

“5.2 Additions to the Old Forest Policy Layer

5.2.1 Old-Growth Forest Areas

The Department will ensure that all Crown forest areas considered for operational harvest approvals will first be evaluated for old-growth forest attributes through field-based assessments including pre-treatment assessment (PTA) that includes old-growth evaluation and/or the old-forest scoring procedure (Stewart et al., 2003) and through aerial photography and spatial analysis of previous forest management treatments.”

- What are the details of the “old-growth evaluation” procedure? Include those in the policy.

“Under circumstances where an ecodistrict falls significantly short of forest-type-specific targets for representation of old-growth forest, the Regional Resource Manager, working with the Regional IRM Team and the Old-Growth Forest Old-Growth Forest Coordinator, will seek opportunities to designate protection to forest areas that are not now legally protected nor protected under the 2012 Policy but are excellent candidates as old-growth restoration opportunities. Consideration shall be given also to the cultural and educational significance of candidate areas.”

- This perpetuates the earlier element of the 2012 policy of including younger and younger forests to reach the target % for certain ecodistricts. Although there should be policy objectives to conserve forests that will become old growth forests in time, these areas need a clearer name. The 2012 policy and current policy are still written in a way that blurs old growth forest and “old-growth restoration opportunities,” which are NOT old growth forests currently. True old growth forest should count under the policy, and up-and-coming old growth forests should be nurtured towards old growth, but not count towards the target yet.

“5.3 Removals from the Old Forest Policy Layer

5.3.1 Old-Growth Forest Areas

Old-growth forest area that is protected under this Policy may be removed from such protection only if:

- a) The Minister has declared the removal to be in the public interest, such as on account of a development project, or a large natural disturbance has killed most or all of the trees;*
- b) The proponent of the development project:

 - a. undertakes a detailed old-forest scoring assessment of the old-growth forest area and a description of the representation and ecological integrity of the old-growth forest in the ecodistrict; privately acquires, at their own expense, old-growth forest area elsewhere in the province and offers it to the Crown at an area rate of at least five times the removed old-growth forest area if the acquired land has old-growth attributes, as deemed by the Old-Growth Forest Old-Growth Forest Coordinator, of comparable or better ecological quality than that removed, or up to ten times the removed area if the acquired land has old-growth attributes of lesser ecological quality.”**

- Section (a) (the “Minister removal” clause) – This policy should not enable the Minister to remove forest area under the policy. **This demonstrates why this policy is not an actual form of protection for old growth forests.**
- Section (b) – This “compensation” clause should be removed in conjunction with clause (a). If retained, clause (b) should state that the land to be acquired by the proponent be:
 - Offered to the Crown **for free**
 - Be from an ecodistrict that is under-represent in this policy, as determined by the Old-Growth Forest Coordinator

“In the event the Minister deems that salvage logging is in the public interest following a large natural disturbance, the Regional Resource Manager, in consultation with the IRM Team and the Old-Growth Forest Old-Growth Forest Coordinator, will search for and put under policy protection appropriate old-growth restoration opportunities in the ecodistrict should these not already be protected under this Policy.”

- There is no ecological basis for “salvage logging.” There is a financial basis for it in forestry. The policy should make this clear. There is no need to salvage log an old growth forest that has just been subject to a large natural disturbance. In fact, we need to learn from these sites to better understand how old growth forests have adapted to natural disturbance.

“5.3.2 Old-Growth Restoration Opportunities

In recognition of the fact that old-growth forest areas are rare on Crown forest land outside of legally protected areas, this Policy acknowledges the importance of recruiting younger forest areas of appropriate vegetation types into old-growth forest areas. There are three circumstances under which areas in the Old Forest Policy Layer, outside of legally protected areas, that are designated as old-growth restoration opportunities may legitimately be removed from the Layer and thus from policy protection:

- *the Government has approved a development project on such lands and therefore the areas can no longer serve as old-growth restoration opportunities;”*
- It should be made clear that “old-growth restoration opportunities” are NOT currently old growth forest. Past versions of the policy failed to make this clear. The policy target should be 8% of forest stands are currently at an old growth

state, AND that there is a policy objective to cultivate more old growth forests through the conservation of “restoration opportunity” stands (but those stands should have a different, clearer name).

- Government should not approve a development project through the provincial environmental assessment process without first working with IRM staff to identify old growth forest stands and restoration opportunities at the proposed project site. Site design modification could be explored or even required at an earlier stage in the project in order to avoid impacts to old growth forests or “restoration opportunity” stands. However, if government waits until it has approved a project there are limited opportunities left for site design modifications.

“5.5 Private Land Considerations

Private ownership of forest land in Nova Scotia, at about 63% of the total, far exceeds the amount of public forest land held by the Crown. The Department does not have authority to apply this Policy on privately owned land. However, it is recognized that old-growth forests on private land in Nova Scotia provide important social, ecological, and economic values beyond those provided by old-growth forest areas on Crown lands. In addition, private land may contain ecological values not available on Crown lands. Private landowners can contribute to old-growth forest conservation by voluntarily protecting portions of their forest property that meet the new definition of old-growth forest areas in Nova Scotia.

- The Department **does** have the authority to apply policies like this on privately-owned land, but in the case of this policy is choosing not to do so at this time.
- The policy should clarify whether old growth forests on private land can count towards the conservation target, and if so under which mechanisms old growth forests on private land must be protected to count.

“Work with land owners about the opportunities to set aside Old Growth Forest areas in their 3rd-party forest certification management plans;”

- If forest stands within 3rd-party forest certification management plans are stands that will have forestry activities on them, those stands should not count under this policy.

“5.6 Recreational and Learning Opportunities

The Old-Growth Forest Old-Growth Forest Coordinator will develop educational learning materials for the public on old-growth forests and the diverse values and services they provide for Nova Scotians.”

- The Old-Growth Forest Coordinator should also work with the Department of Education and Early Childhood Development to develop educational resources about old growth forests that are curriculum-linked, and to develop training for teachers to enable teachers to lead activities about Nova Scotia's old growth forests. Resources and training should include both teaching indoors and outside the classroom. Resources should explain and be based on *Netukulimk*, and be based in a two-eyed seeing approach.