

To BMF FMP 2021-2031 Planning Team
c/o Ernie Demuth ernie.demuth@ontario.ca

From: Catchacoma Forest Stewardship Committee

Submitted by email, May 6, 2021

Re: Submission to draft Forest Management Plan 2021-2031

1. Introduction

The Catchacoma Forest Stewardship Committee (CFSC) has provided information and comments through all stages of the Bancroft Minden Forest (BMF) Forest Management Plan (FMP) 2021-2031 process. The CFSC has advocated for recognition of the unique conservation values identified in the approximately 660 ha (1,650 ac) Catchacoma Forest (part of the FMU of BMFC) based on the results of field studies conducted in 2019/2020 by Ancient Forest Exploration & Research (AFER).

The AFER research reveals:

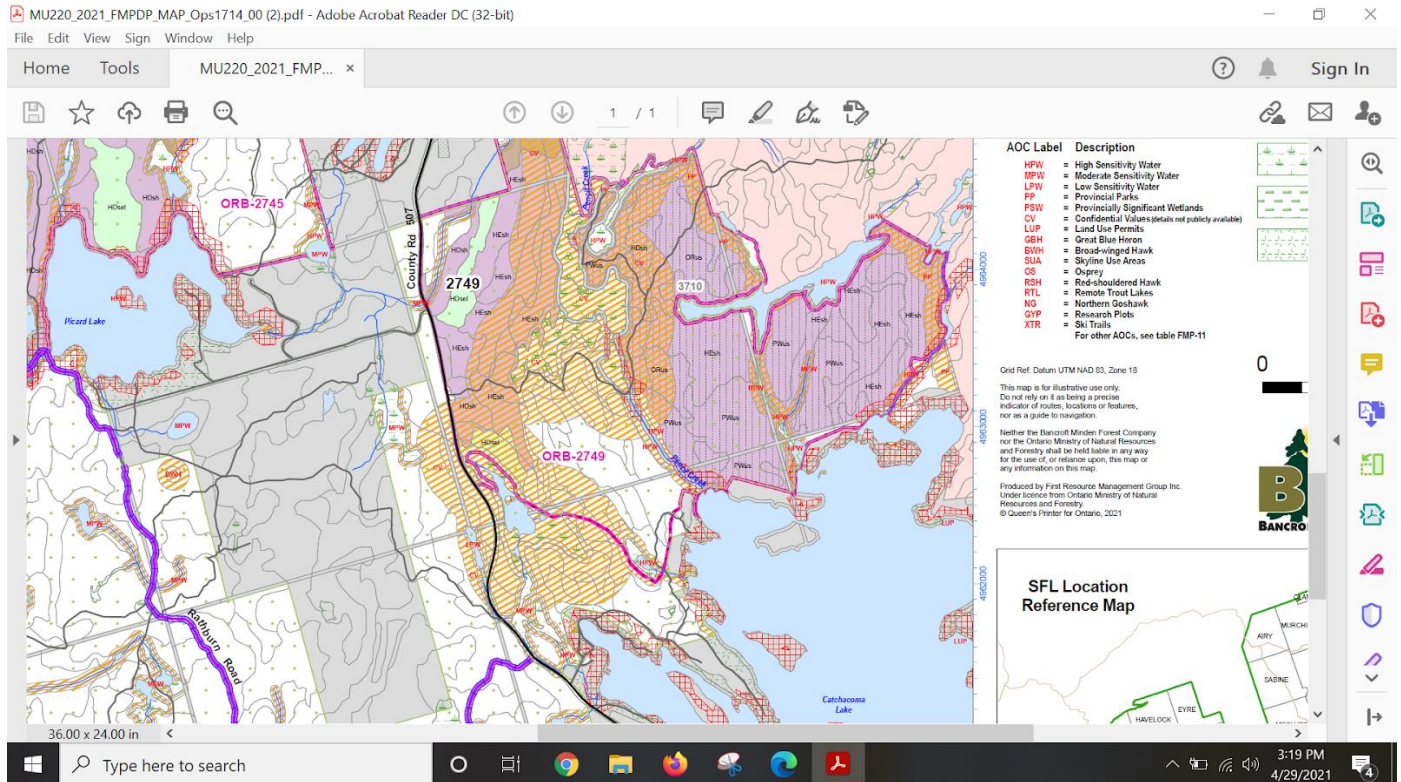
- (1) Catchacoma Forest is home to a provincially significant mature and old-growth eastern hemlock forest at roughly 660 ha (1,650 ac),
- (2) old-growth eastern hemlock forests are among the rarest forest ecosystems in Canada,
- (3) Catchacoma Forest is financially more valuable to society left in its natural state versus logged
- (4) mature tree ages based on tree core samples were on average *58 years older* than stand ages indicated by the 2007 FRI inventory used by MNRF and BMFC.
- (5) documentation for at least ten different species-at-risk within the Forest

The CFSC is pursuing the goal of conservation of the Catchacoma Forest through:

- a) conducting field research to explore and document habitat and ecosystem values,
- b) conducting public education events
- c) seeking a land-use permit for ongoing and future old-growth research, and
- d) applying for a land-use amendment through the Crown Land Use Planning process.

The CFSC is asking the planning team for a moratorium on 2021-31 logging in the Catchacoma Forest (blocks 2749, 1711 and 3710 from MU220_2021_FMPDP_Map_Ops1714 see map below).

Specifically, a moratorium will involve removing block 2749 from “regular harvest” and block 3710 from “contingency area”. This will allow for research on the conservation values and the impacts of logging on these values to continue, and for the CFSC’s forthcoming land-use amendment application to be considered.



2. Comments specific to draft FMP:

The CFSC is encouraged to see that several blocks of the Catchacoma Forest have been designated outside of regular harvest, as either contingency or non-harvest areas (block 3710 and 1711). We trust that these designations are at least in part a recognition of the conservation values of the Forest.

We believe that this change supports **our request that the full Catchacoma Forest should be removed from regular harvest, specifically area 2749 which is currently designated for regular harvest under the Hemlock Shelterwood Silviculture System**

a) Ongoing issues with age designation of the Catchacoma Forest

The FMP Planning Team (PT) has responded to the CFSC's past submissions by insisting Catchacoma does not represent an old growth forest according to the 2007 Forest Resource Inventory (FRI) data relied on by MNR and BMFC to age the forest. However, as previously submitted, the most recent field data collected by AFER found that the 2007 FRI underestimates the age of the forest by an average of 58 years. While the FRI ages block 2749 as approximately 100 yrs, the AFER survey, using core samples of mature trees puts it within old growth status (140-150 years). This discrepancy in forest stand age is concerning as it is likely significantly impairing predictions made by silvicultural and long-term planning models. It also indicates the need for further field research to understand the age-class distribution of the Catchacoma Forest. The CFSC had plans to continue the core sampling surveys prior to this submission, but have been delayed due to Covid-19 restrictions

The response from the Planning Team to our previous submission asserts that the Catchacoma Forest is “difficult” to assess for age because it is multi-aged. But indeed being multi-aged is one of the defining features of old growth according to the [Old Growth Definitions for Ontario](#).

CFSC also does not agree with the PT response that having a history of minor logging is automatically an excuse for continued logging, especially when documentation of the extent and type of harvest in 1988-89 has not been provided nor apparently has informed current logging plans. Given the relative lack of mature and old-growth forests in the Great Lakes/St. Lawrence Forest Region, and the extent of human disturbance in this region, the Catchacoma Forest is an example of a minimally disturbed old-growth forest, based on its numerous and multi-faceted old-growth forest characteristics and values, such as those outlined in [Larson et al. \(1999\)](#).

b) Logging’s “emulation of natural disturbance” does not apply to Catchacoma

The PT has also responded to the CFSC’s requests for a moratorium on logging in Catchacoma by claiming that logging emulates natural forest disturbances of forest fire and tree defoliating insect outbreaks. However, forests dominated by hemlock and other shade tolerant species are relatively stable ecosystems that are not prone to frequent catastrophic disturbance, particularly by fire (Ziegler 2002; Frelich & Lorimer 1991; Bormann & Likens 1979). Wind is a far more important agent of disturbance in hemlock forests. Wind events, unlike fire, are not subject to human intervention and presumably are operating at natural levels. However, logging does reduce the average stand age, including selection and shelterwood treatments. Logging also exposes remaining mature trees to increased threat of wind damage.

Finally, while the PT insists that stand and site guide protocols for tree-marking allow for the maintenance of “old growth features” the CFSC submits that the most fundamental features of an old-growth eastern hemlock forest--namely the presence of old-growth aged trees--cannot be retained by logging trees at the age of onset of old growth. Again, CFSC efforts to age the trees that were logged in 2020-21 have been hampered by Covid-19 restrictions, but from preliminary observations many of the cut stumps represent tree at the onset of or within old growth age.

c) Mature and old-growth eastern hemlock forests are rare and threatened

Both the Long Term Management Plan (LTMD) and the draft FMP for the Bancroft Minden Forest (BMF) support AFERs findings that mature and old-growth eastern hemlock forest type is currently well below the desirable natural level over the management unit at 752 ha (Table FMP-11 in LTMD and Draft FMP). The Catchacoma Forest represents potentially 88% of this total (660ha) making it the largest mature and old-growth eastern hemlock forest in the management unit.

The LTMD projection for the mature eastern hemlock forest type is that it will not hit natural levels within the BMF for a minimum of 100 years (with the number of ha projected to decrease in the next 10 years). The CFSC finds this highly problematic and we continue to insist that given the rarity of old-growth forests in Southern Ontario, the Catchacoma Forest has substantially more public value left unlogged and intact for carbon storage and biodiversity (both species and genetic) as well as unique opportunities for research, formal and informal education and recreation.

d) Old growth forests’ value for carbon storage and sequestration

Successful carbon storage and sequestration to mitigate climate change over the next two decades are essential according to the IPCC, the federal government and the provincial government. The current scientific literature clearly shows that leaving old-growth forests unlogged is the best way to maximize carbon sequestration and storage in the short term--above and beyond young and planted forests. Numerous scientific studies have made it clear that old growth forests store a large bank of carbon, and that aging forests continue to fix significant quantities of carbon for centuries, well after entering the old-growth stage (Luysaert et al. 2008; Lichstein et al. 2009; Gough et al. 2016; Curtis & Gough 2018). [Stephenson et al.](#) (2014) noted that "large, old trees do not act simply as senescent carbon reservoirs but actively fix large amounts of carbon compared to smaller trees; at the extreme, a single big tree can add the same amount of carbon to the forest within a year as is contained in an entire mid-sized tree.

As eastern hemlock is one of the longest living tree species in Ontario (600+ years), they have significant potential for carbon storage and sequestration in both the short and long term, but only if unlogged.

The BMFC FMP goal of attaining natural levels of old-growth hemlock by 2100 is an arbitrary and unreasonable target within the context of climate change mitigation targets. Indeed, cutting even one old tree, especially for pulp or short term use, represents a carbon deficit. It is disturbing to see that none of the climate change issues pertaining to old-growth forest carbon storage are specifically addressed in the current draft FMP. At the very least, the old-growth hemlock in Catchacoma should be assessed for carbon storage and sequestration values before any further logging is approved.

e) Effect of silviculture needs monitoring

The supplementary documents for the draft FMP outline the importance of a full monitoring program to assess regeneration success on uneven-aged management units and to assess the efficacy of the Irregular Shelterwood Silviculture System in the regeneration of eastern hemlock (Supp Doc G, p. 156). Block 1711 of the Catchacoma Forest was harvested in 2020 and 2021 and regeneration success will need to be monitored and assessed in the 5 year term of the 2021-2031 FMP. The CFSC submits that no further harvest of the Catchacoma Forest should take place until the impacts of recent harvesting in 1711 on regeneration are assessed. Catchacoma provides a once-in-a-generation opportunity for monitoring silviculture impacts side by side with a relatively intact old-growth forest, but only if Block 2749 is left unharvested to act as a baseline for comparison using permanent plots and long-term studies.

f) Further surveys for species at risk required

Mature and old-growth forests provide unique habitat for plant, lichen, moss and wildlife species. AFER's research found documentation for various species-at-risk and potential species-at-risk habitat in the Catchacoma Forest, including Blanding's turtles, hognose snake, eastern wood thrush, cerulean warbler and Algonquin wolf, however from our research no in-depth studies of biodiversity in Catchacoma have been performed. Our most recent communication with MNRF biologist for the BMF stated that field studies planned for the Catchacoma Forest this summer have been cancelled due to the ongoing pandemic crisis. The CFSC is planning field surveys of our own for this summer and fall--when and if covid

restrictions allow. The absence of in-depth knowledge regarding the biodiversity present in the Catchacoma Forest is an additional reason for a moratorium on logging

g) An application for a land-use amendment is forthcoming

The CFSC was advised by the MNRF that our pursuit of protection status for Catchacoma Forest may be best advanced by a land-use policy amendment. The committee is currently putting together such an application for a land-use change from “General Use” to “Recommended Conservation Reserve”, and are reaching out to potential partners. Our outreach up until now, although hampered by Covid-19 restrictions, suggests there is substantial public support for conservation status for Catchacoma Forest. We were also advised that the MNRF would only consider an application if supported by the Ministry of Environment, Conservation and Parks (MECP). Unfortunately our efforts to make the case to MECP to support this application have been hampered by difficulty in identifying and communicating with the relevant MECP staff--potentially also due to Covid-19. We therefore ask for a moratorium on logging in Catchacoma Forest while we proceed through the process for a land-use policy amendment.

h) Covid-19 restrictions have hampered public consultation.

The regular townhalls associated with the FMP public consultation process have been cancelled due to pandemic restrictions. This means the accessibility for public opportunities to inspect the FMP documents, ask questions and express concerns in dialogue with the Planning Team has been severely curtailed. The CFSC believes that, given the high level of public interest in the Catchacoma Forest and related conservation values, this is another reason to remove these blocks from harvest until the next round of FMP consultation.

To conclude, the CFSC requests that, in light of the conservation values (both studied and potential), the value for education, research and recreation, and to allow us time to build partnerships for and advance an application for land-use amendment, that all blocks within the Catchacoma Forest be removed from harvest in the 2021-2031 FMP.

Specifically we request that:

Block 2749 be removed from regular harvest in the 2021-2031 FMP

Block 3710 be removed from contingency area in the 2021-2031 FMP

We look forward to discussing this matter further with the Planning Team and are open to meetings upon request.

Sincerely,

Catchacoma Forest Stewardship Committee

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Peter Currier
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Marie Windover
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Cameron Douglas
Katie Krelove

Ron Waters
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