

East Coast Environmental Law Association  
6061 University Ave., PO Box 15000  
Halifax, NS B3H 4R2

Department of Lands and Forestry  
1701 Hollis St  
Halifax, NS B3J 3M8

SENT VIA EMAIL  
ecologicalforestry@novascotia.ca

February 19, 2021

To Whom It May Concern,

**Re: Submission on the Draft Nova Scotia Silvicultural Guide for the Ecological Matrix**

Thank you for the opportunity to submit comments on the draft Nova Scotia Silvicultural Guide for the Ecological Matrix (“the draft SGEM”).

East Coast Environmental Law is a regional environmental law charity based in Halifax that delivers public-interest environmental law services throughout Atlantic Canada. We envision a future in which innovative and effective environmental laws and resource management regimes foster flourishing ecosystems and healthy environments in our region for generations to come. We participated in Professor William Lahey’s Independent Review of Forest Practices in Nova Scotia, and—like many concerned individuals, community groups, and environmental organizations throughout the province—we have been eager to see Professor Lahey’s recommendations implemented fully as promised by the Department of Lands and Forestry (“the Department” or “NSDLF”).

Our comments in this submission focus primarily on the draft SGEM’s implications for biodiversity in Nova Scotia and, in particular, its implications for species that are protected under one or more of Nova Scotia’s *Endangered Species Act* (“*ESA*”) and *Wildlife Act* or the international *Migratory Birds Convention Act*. Professor Lahey’s report on the Independent Review of Forest Practices in Nova Scotia (“the Lahey Report”) references a written brief we provided which summarized the failure of the Minister of Lands and Forestry (“the Minister”) to fully implement the *ESA* by fulfilling the Act’s requirements to prepare or adopt recovery plans for endangered and threatened species and consider designating and protecting core habitat areas by regulation.<sup>1</sup> As we wrote in that brief, although the *ESA* recognizes the importance of protecting core habitats for endangered and threatened species, to date, no core habitat areas have been designated formally and protected by regulation. This means that many habitat areas which are crucial for the survival of species at risk are not being protected by the Government of Nova Scotia despite clear and pressing need. Many such habitat areas are forested

---

<sup>1</sup> William Lahey, *An Independent Review of Forest Practices in Nova Scotia: Executive Summary, Conclusions and Recommendations* (August 2018) at page 25 [“The Lahey Report”].

areas that have been subjected to destructive forestry practices for years, and species are suffering as a result.

One significant finding of the Lahey Report was that NSDLF's pre-treatment assessment ("PTA") process, as it existed at the time, was deficient because it did not take wildlife issues into account, and Professor Lahey went on to note that the deficiency "was not counterbalanced" by consideration of wildlife issues elsewhere in the forestry regime.<sup>2</sup> One of Professor Lahey's conclusions, therefore, was that the *ESA* "must be fully and rigorously implemented in respect to forests on both Crown and private land".<sup>3</sup>

We recognize that the draft SGEM is intended to serve as one piece of the larger mosaic of guides, programs, and law reform initiatives that will be required to fully implement the recommendations of the Lahey Report. We also recognize that the SGEM, once finalized, will have limited applicability: among other things, the PTA protocols and harvesting methods it describes are intended for use in Acadian "mixed-use" forest areas on Crown lands and will not apply to Boreal forest areas, Crown lands selected for "intensive" forestry, or privately-owned forested lands. We therefore recognize that the SGEM, on its own, cannot guarantee that biodiversity will be protected and restored throughout Nova Scotia's forests, nor can it ensure that species at risk will be safeguarded against all destructive forestry practices. Notwithstanding its limitations, however, the SGEM will play a critically important role in articulating the Government of Nova Scotia's vision of what "ecological forestry" will look like in many of Nova Scotia's most vulnerable and ecologically significant forests, and, in doing so, it will set a standard from which many private woodlot owners will take direction. Not least for these reasons, we believe that the SGEM's vision of "ecological forestry" should prioritize ecological needs as ambitiously as possible and incorporate robust protections for species at risk, other protected species, and protected homes and habitats.

Although the harvesting methods described in the draft SGEM appear to represent a meaningful improvement over the expansive clearcutting practices that have been allowed up to this point, the new harvesting prescriptions remain capable of causing significant ecological destruction. This is apparent from the figures demonstrating that gap irregular shelterwood harvests, gap shelterwoods with reserves, and strip shelterwoods with reserves will all result in significant patches or strips of land being denuded almost entirely, save for a few trees chosen as "permanent reserves".

With all of this in view, we urge the Department to ensure that the PTA process and the harvesting methods described in the SGEM are designed effectively to:

- recognize the presence of species at risk, other protected species, and protected homes and habitats in prospective harvest sites, and
- prevent their destruction or disturbance.

### **(1) Pre-Treatment Assessments Cannot Protect Biodiversity on Their Own**

The draft SGEM reflects NSDLF's commitment to revise its former Forest Management Guide and

---

<sup>2</sup> The Lahey Report at page 25.

<sup>3</sup> *Ibid* at pages iii, 32-33.

PTA process in order to “place more emphasis on ecological values”.<sup>4</sup> Supplemental commentary on the Guide indicates that PTA protocols are being updated to better address biodiversity concerns<sup>5</sup> and that certification training for PTA practitioners will, correspondingly, “be revised to match new standards within the guide and include biodiversity-focused field and classroom components”.<sup>6</sup>

Our review of the draft SGEM indicates that the sections of the Guide which address legal protections for species at risk, other protected species, and species homes and habitats appear primarily in Appendix I of the draft SGEM, which discusses PTAs and the responsibilities of PTA practitioners specifically.

On the whole, our review of the draft SGEM and corresponding commentary indicates that NSDLF intends to rely primarily on enhanced PTA protocols to protect diversity in “ecologically forested” lands. This raises concerns, as it is not clear that enhanced PTA protocols will protect vulnerable species and species habitats when harvesting processes are actually carried out. Our review of the draft SGEM leaves us with several unanswered questions in this regard.

- If a PTA practitioner identifies the presence of a species at risk, other protected species, or protected home or habitat on a prospective harvest site, how will that inform the site prescription? Will the PTA protocols prescribe harvests despite the presence of identified biodiversity interests like these?
- If a site is prescribed for harvest despite the presence of a species at risk, other protected species, or protected home or habitat, what measures are in place to ensure that the species / home / habitat in question is not destroyed or disturbed during the harvest?
- How will enhanced biodiversity training for PTA practitioners ensure that the harvesters who actually carry out harvests are capable of recognizing and preserving species at risk, other protected species, and protected homes or habitats on harvest sites?

As we discuss in more detail below in our subsection on “Concerns for Individual Species at Risk”, the draft SGEM fails to consistently identify and emphasize applicable laws that exist to protect species at risk, migratory birds, and other protected species that inhabit Nova Scotia. In one striking case, the draft SGEM even implies that individuals of an endangered tree species should be retained as a “diversity tree” “when possible” during harvests—an instruction that fails utterly to recognize the significance of the species and the fact that it is actually *illegal* to kill or disturb individual trees of that kind. This leaves us with serious concerns that harvesters who look to the SGEM for guidance will not be adequately prepared to recognize and preserve species at risk, other protected species, and protected homes and habitats on harvest sites.

Although we support the Department’s commitments to improving the PTA process and enhancing certification training for PTA practitioners, we are not convinced that such measures will suffice to protect biodiversity in forested areas where “mixed use” forestry will be carried out. We therefore request that the Department prepare and circulate additional information which responds to the questions raised above.

---

<sup>4</sup> Government of Nova Scotia, Department of Lands and Forestry, *Silviculture Guide to Ecological Forestry: Consultation Companion Document* (18 February 2020) at page 1 [“Draft SGEM”].

<sup>5</sup> *Ibid* at page 6.

<sup>6</sup> *Ibid* at pages 6, 12.

## (2) Sensitive Forest Groups and Other Significant Habitats for Species at Risk

We are encouraged by the NSDLF's decision not to prescribe harvesting in the following forest groups that are found in sensitive ecosites: Cedar, Karst, Flood Plain, Open Woodlands, Wet Coniferous, and Wet Deciduous.<sup>7</sup> The Department's decision to prioritize the ecological integrity of these sites because they are "known for their high biodiversity value" and "presence of species-at-risk" and/or because they "have fragile habitats" is commendable.<sup>8</sup> It is also encouraging to see the Department identifying the significance of specific species at risk when explaining why harvesting should not occur in these forest groups, and we note the following passages in particular:

Cedar forest types should not be harvested primarily because Eastern White Cedar itself is listed as "vulnerable" under the *Nova Scotia Endangered Species Act 1998* due to the limited and highly fragmented population size. Any harvest of cedar trees increases the likelihood that the at-risk status of this species would need to be elevated to threatened or endangered.<sup>9</sup>

WD [Wet Deciduous] forest types (i.e., WD1, WD2, WD3, WD4 and WD6) support the endangered Black Ash, which is legally protected under the *Nova Scotia Endangered Species Act 1998*. Black Ash also has significant importance to the Mi'kmaq of NS as a cultural keystone species [...]. Black Ash is widespread in NS, but rare, with few seed-bearing individuals (only 12 documented) and few total individuals (1000 trees [...]). The species is threatened by habitat loss and alteration, forestry practices, invasive species, and disease [...]. Alterations to wetland hydrology due to damage to inflows or outflows and increases in water levels due to tree removal and soil disturbance pose a significant threat to Black Ash.<sup>10</sup>  
[citations omitted]

The Department's decision not to prescribe harvesting in Cedar, Karst, Flood Plain, Open Woodlands, Wet Coniferous, and Wet Deciduous forest groups is a positive change to the provincial forestry regime, and we acknowledge the precautionary approach being taken with respect to these sites.

That being said, we urge the Department to continue mobilizing data to identify other important habitat areas for species at risk so that habitat areas outside of the forest groups listed above will be safeguarded as well.

We have noticed that since the decision of the Nova Scotia Supreme Court in *Bancroft v Nova Scotia (Lands and Forests)*, 2020 NSSC 175, the Minister has formally adopted a number of federal recovery strategies for species at risk that are cross-listed under the federal *Species at Risk Act* ("SARA") and Nova Scotia's *ESA*. As per the legal requirements of *SARA* and the *ESA*, those recovery strategies identify habitat areas that the Minister should consider for designation as core habitat and protect through regulation. If the Department has not already done so, it would be valuable to superimpose maps of relevant core habitat areas over maps of known Cedar, Karst, Flood Plain, Open Woodlands, Wet Coniferous, and Wet Deciduous forest group sites in Nova Scotia to determine the extent to which discontinuing harvesting in those areas will protect crucial habitat areas for species at risk. Additionally, making such information available to the public would make it easier for

---

<sup>7</sup> Draft SGEM at pages 61, 63, 67, 83, 109, 149-50, 151-52.

<sup>8</sup> *Ibid* at page 61.

<sup>9</sup> *Ibid* at page 61.

<sup>10</sup> *Ibid* at page 151.

concerned individuals, community groups, and environmental organizations to assess how well the new SGEM regime is protecting biodiversity in practice.

### (3) Concerns for Individual Species at Risk

The draft SGEM's characterization of Black Ash as one among several other "uncommon species" that should be retained as "diversity trees" "when possible" is deeply concerning.<sup>11</sup> Black Ash is an endangered species listed under the *ESA*, and it is illegal to kill or disturb an individual of the species. Early passages in the draft SGEM fail to reflect this reality and fail to clearly express the legal requirement to preserve individuals of this species. Black Ash trees should not be retained "when possible": Nova Scotian law expressly prohibits their destruction.

We recognize that another portion of the draft SGEM describes Black Ash more appropriately. As we noted above, the decision key for the Wet Deciduous forest group correctly describes Black Ash as an endangered species that is legally protected under the *ESA*. That description is better than those which describe Black Ash as an "uncommon" "diversity tree" that should be retained "when possible"; however, it would be further improved by additional information making it clear that legal protections under the *ESA* make it unlawful to destroy or disturb individuals of this species.

We note that Appendix I of the draft SGEM includes a section on "PTA Assessment and Biodiversity" which identifies several legal prohibitions that are relevant to forestry practices:

(i) the descriptions of raptor nest trees and goshawk nest trees each state that it is a violation of the *Wildlife Act* to disturb raptor nests;<sup>12</sup>

(ii) the description of "dens" state that it is a violation of the *Wildlife Act* to destroy, disturb, or damage a den site;<sup>13</sup>

(iii) the description of "hibernacula" states that it is a violation of the *ESA* to destroy or damage the hibernaculum of an endangered or threatened species, "which includes the three species of bats that overwinter in NS and three species of turtle";<sup>14</sup>

(iv) the description of Great Blue Heron colonies states that it is a violation of the *Wildlife Act* to disturb Great Blue Heron nests, and it also notes that Great Blue Herons are protected under the *Migratory Birds Convention Act* as well;<sup>15</sup>

(v) the description of beaver ponds states that it is a violation of the *Wildlife Act* to disturb or damage the den or dam of a beaver;<sup>16</sup> and,

(vi) a subsection on species at risk states that it is a violation of the *ESA* to kill or disturb an endangered or threatened plant or animal or to disturb or destroy the nest, den, or hibernaculum of an endangered or threatened animal; the same subsection also notes that

---

<sup>11</sup> Draft SGEM at pages 19-20.

<sup>12</sup> *Ibid* at pages 168, 170.

<sup>13</sup> *Ibid* at page 170.

<sup>14</sup> *Ibid* at page 170.

<sup>15</sup> *Ibid* at page 170.

<sup>16</sup> *Ibid* at page 171.

several of the species listed under the *ESA* are also protected under the federal *SARA* or the *Migratory Birds Convention Act*; the subsection also states that it is a violation of the *Wildlife Act* to destroy, disturb, or damage the den of a furbearer or the nest of a bird or turtle.<sup>17</sup>

These warnings will no doubt be useful for PTA practitioners; however, unless the SGEM consistently identifies and emphasizes applicable laws that exist to protect species at risk, migratory birds, and other protected species that inhabit Nova Scotia, the Guide will fail to provide *all* forestry practitioners the information they need to understand their legal obligations to preserve such species in peril.

As we discussed above, it is not clear that enhanced PTA protocols and better biodiversity training for PTA practitioners will protect vulnerable species and species habitats when harvesting processes are actually carried out. The legal prohibitions listed above should be explained clearly in other relevant sections of the SGEM so that all forestry practitioners are aware of their legal obligations to preserve species at risk, other protected species, and protected homes and habitats when working in the forests.

Finally, we note that in comparison to the acute threat that forestry practices pose to migratory birds and their nests, the draft SGEM's comments on the *Migratory Birds Convention Act* are minimal. Enhanced education for PTA practitioners and harvesters carrying out operations onsite may help to ensure that migratory birds and their nests are not disturbed by forestry practices; however, given the fact that many migratory bird species conceal themselves and their nests to escape detection, the reality is that greater education for forestry practitioners may not be enough to preserve them.

NSDLF has chosen to take a precautionary approach to sensitive forest ecosites in order to protect areas of "high biodiversity value", "fragile habitats", and the interests of species at risk, and it should take a precautionary approach with respect to migratory birds as well. Harvests and tending should not be prescribed during nesting and breeding seasons in areas frequented by migratory birds, and special management practices should be developed to protect birds and nests of concern.

#### **(4) Special Management Practices**

Paragraph 2(1)(g) of the *ESA*, which appears in the Act's purpose section, describes

the importance of promoting the purposes of this Act primarily through non-regulatory means such as cooperation, stewardship, education and partnerships instead of punitive measures, including such preventative actions as education, incentives, sustainable management practices and integrated resource management[.]

In our view, the *ESA* contemplates preventative actions such as education, incentives, sustainable management practices, and integrated resource management because it recognizes that protecting species at risk requires the cultivation of conscientious practices on a broad scale. After all, if the *ESA* focused solely on creating punishments for harms done to individual birds, lichens, trees, fish, or mammals, the Act would fail to promote the cultural shifts required to recognize and protect ecological sites more holistically as webs of interconnected and interdependent species.

NSDLF has produced several "special management practices" ("SMPs") that mandate protective and precautionary practices that forestry practitioners are expected to follow when planning and

---

<sup>17</sup> Draft SGEM at page 172.

conducting harvest operations. These guides appear to reflect the spirit of paragraph 2(1)(g) of the *ESA*, although not all of them apply to species that are listed as endangered, threatened, or vulnerable under the Act. SMPs for the following species are listed on the NSDLF website:

- American Marten
- At-Risk Lichens
- Bald Eagle
- Canada Lynx
- Herons
- Mainland Moose
- White-Tailed Deer
- Wood Turtles

The draft SGEM states that “SMPs should be strictly adhered to during harvest planning and operations”,<sup>18</sup> and supplemental commentary by NSDLF makes it clear that the Department considers SMPs to be key components of its forestry regime. In response to a question asking whether the SGEM will include special consideration for species at risk, the *Silviculture Guide to Ecological Forestry: Consultation Companion Document* states:

Special management practices (SMP) for species at risk are not part of the guide but are required on Crown lands and are incorporated within the department’s harvest approval process. SMPs are required practices and must be followed. The regional wildlife biologist may recommend modified applications at the local site level to achieve the intent of the SMP. A variety of factors could impact the application of the SMP, including the season, topography, hydrology, forest cover, past management practices, land ownership patterns, and other local considerations. New SMPs will be developed and existing ones revised, as required, and will be considered when new species are listed, or when their status and/or recovery plans are revised.<sup>19</sup> [emphasis added]

Because NSDLF appears to be relying on SMPs to extend species protections that will not be described within the SGEM, it is imperative to ensure that existing SMPs are amended as soon as possible to reflect the new ecological practices that the SGEM prescribes.

In particular, we note that the existing SMP for at-risk lichens appears to contemplate harvesting—indeed, clearcutting—in forested wetlands, a practice that the draft SGEM does not prescribe because forested wetlands are vital ecological areas.<sup>20</sup> The draft SGEM recognizes that the Wet Coniferous forest group supports the endangered Vole Ears lichen and Boreal Felt lichen,<sup>21</sup> and it states that the Wet Deciduous forest group supports rare or at-risk lichen species as well.<sup>22</sup> With this in view, the SMP for at-risk lichens should be updated timeously to state clearly that harvesting in forested wetlands on Crown lands is not allowed and that harvesting in privately-owned forested wetlands should not occur.

---

<sup>18</sup> Draft SGEM at page 172.

<sup>19</sup> Government of Nova Scotia, Department of Lands and Forestry, *Silviculture Guide to Ecological Forestry: Consultation Companion Document* (18 February 2020) at page 6.

<sup>20</sup> Government of Nova Scotia, Department of Natural Resources, *At-Risk Lichens – Special Management Practices* (23 May 2018); Draft SGEM at pages 149-52.

<sup>21</sup> Draft SGEM at page 149.

<sup>22</sup> *Ibid* at page 151.

## Conclusion

The draft SGEM offers a tentative vision of forestry in “mixed-use” sites—i.e., sites in which the critical objectives of ecological preservation and restoration are balanced against commercial interests. As the Lahey Report made clear, when it is not possible to achieve a perfect balance between maintaining or restoring the ecological integrity of the forests and exploiting the forests for human needs, the ecological interests *must* be allowed to weigh more heavily. The continued existence of the forests and the countless species that inhabit them and support their regeneration and growth depends on our collective determination to set the right priorities.

The draft SGEM appears to represent a meaningful improvement over the forestry practices that NSDLF has approved to date; however, the new harvesting prescriptions remain capable of causing significant ecological destruction. The precautionary approach taken by the Department to prohibit harvesting in Cedar, Karst, Flood Plain, Open Woodlands, Wet Coniferous, and Wet Deciduous forest groups is a positive change to the provincial forestry regime. Nevertheless, the draft SGEM leaves us with several concerns and unanswered questions concerning the adequacy of the new regime’s protections for species at risk, other protected species, and protected homes and habitats.

We request that the Department address the concerns and questions discussed in this submission by amending the draft SGEM as necessary and making additional information available to the public in order to clarify how this piece of the new forestry regime will succeed in protecting the biodiversity of Nova Scotia’s forests for generations to come.

Sincerely,

A handwritten signature in cursive script, appearing to read "Kostantina Northrup".

Kostantina Northrup  
Staff Lawyer