Comments on the proposed Nova Scotia Biodiversity Act (Bill 4)

Included below are my personal comments on the proposed draft Nova Scotia Biodiversity Act.

My interest in encouraging adoption of a refined "Nova Scotia Biodiversity Act" is based on my career as a professional ecologist/science manager in Kejimkujik National Park and National Historic Site (1975-2004), my work with the Smithsonian Institution as an associate researcher/instructor for the international "Biodiversity Monitoring and Adaptive Management" programme (over 13 years), and as a co-author of the "Biodiversity" chapter in the 2010 expert panel report "A Natural Balance; Working Toward Nova Scotia's Natural Resources Strategy".

Currently I serve as Chair of the Science Committee of the UNESCO Southwest Nova Biosphere Reserve Association (SNBRA). I also operate as a consultant registered with NS Joint Stocks under the title "Sustainable Ecological Management Systems of Nova Scotia" (SEMSNS).

In this context and associated with the comments below, if I can be of assistance in developing refinements or amendments to the Act, I would be pleased to serve.

- General theme: The Biodiversity Act should be positive, not negative piece of legislation to advance science, education, and collaboration among communities of interest to address biodiversity protection and sustainable management challenges.
- 2. There is a requirement to strengthen discussion about invasive/exotic species in the definition section, and the requirement for mitigation needs in body of text. In the context with climate change, industrial and recreational transportation, the risk, and fact of invasive species arriving in Nova Scotia and subsequently impacting natural biodiversity and associated ecological characteristics is a serious concern. Invasive species response planning and public education/awareness should be priorities for action that should be discussed more prominently in the Act.
- 3. The native biodiversity of Nova Scotia will likely be impacted because of climate change, human activities and other related stressors. Migratory species status in Nova Scotia can also be negatively impacted by various stressors including habitat loss far away, or along migratory routes. Thus, Nova Scotia ecosystems could lose species or be infected by invasives regardless of our scientist's and resource manager's ability to implement recovery actions locally. This phenomenon should be acknowledged in the Act and addressed in species at risk recovery strategies.
- 4. The threat of punishment is far too prominent in the draft act. This will cause alarm among landowners who perceive the Act as being a threat to their economic well- being. If the concerns of illegal harm to species at risk, critical habitat, illegal possession of game etc. are already covered in other enforcement/punishment legislation, those legal documents and potential punishments for contraventions should be referenced, not replicated.
- 5. If for example species at risk critical nesting habitat is found on private land, and to protect that site some revenue-generating land use must stop, the landowner should be able to be compensated for loss of income.

- 6. There should be provision for describing and encouraging best practices on private lands, and recognition when these best practices are applied. This approach could be similar and/or incorporated within existing small woodlot management best practices recognition initiatives.
- 7. Regarding designation of 'special biodiversity areas' this should legally apply to all crown lands. The concept could be better explained with examples.
- 8. In cases on private lands where COSEWIC designated species at risk occurrence or other conservation issues become a concern, dialogue to encourage collaborative positive outcomes should be highest priority.
- 9. The potential perception that a landowner could be heavily fined or imprisoned for contravention of the Act because of that landowners' lack of understanding or action in error can stand in the way of advancing positive biodiversity protection legislation and outcomes across Nova Scotia.

Yours sincerely Cliff Drysdale SEMSNS