March 4, 2019

Public Input Coordinator

Ministry of the Environment, Conservation and Parks

Species Conservation Policy Branch

300 Water Street, Floor 5N

Peterborough ON. K9J 3C7

**Subject : Response to ERO number 013-4143 10th Year Review of Ontario’s Endangered Species Act: Discussion Paper**

To whom it may concern,

**Introduction:**

The opportunity to consider how to better enable the Endangered Species Act in Ontario is very welcomed by us. There is a lot to unpack here and even more going on. Globally, we are moving towards an unprecedented time in humanity. From an endangered species lens, we are assumed to now be in the Anthropocene and in the sixth mass extinction event, in which current extinction rates vastly exceed (conservatively, up to 100 times) natural background rates[[1]](#footnote-1). In mass extinction events, there are serious consequences for ecosystems and ecosystem services, leading in most cases to ecosystem collapse. The rebound of species diversity and ecosystems can take thousands of years[[2]](#footnote-2). No one knows how close we are to the tipping point but one has to assume we are inching (if not running full speed) towards ecosystem collapse that is firmly on the backs of species extinction. There are more indicators of unsustainable practices but our focus here is on species at risk.

In considering the above, there is ample attention, and solutions, to the loss of species occurring around the world. Using this lens, we believe that there are exciting approaches available as we consider the question, “what actions can we consider to both enhance endangered species survival and support a 21st century economic transition?” We believe that the opportunity is ripe to consider emerging approaches for recognizing financing the economics of ecosystems and BioDiversity, the shift in accounting and subsidies. This slow and steady course correction in economic development is resulting in green jobs, green bonds, payment for ecosystem services, financing for protected areas, enforcement options, ecosystem based adaptation, nature based solutions for disaster risk reduction, restoration economy, and, biodiversity finance, to name a few. This shift is underpinned by multiple drivers based on the understanding that there are finite limits to development on our finite planet, and that we are in overshoot[[3]](#footnote-3). In essence we are drawing down our natural capital, dipping into our “principal”, not living off the interest. If we continue, we will eventually bankrupt the planet.

The global response to this has been evolving for 50 years, and continues to evolve. This collective consciousness shift has resulted in a staggering array of frameworks, approaches and agreements, such as the Sustainable Development Goals, Multilateral Environmental Agreements, The Future We Want, changes in food systems, circular economies, the list goes on and on. In the works for approximately two years and declared officially on March 1, 2019, is the United Nations Decade on Ecosystem restoration[[4]](#footnote-4) from 2021- 2030. With the above in mind, our goal in this submission is to give a sense of what actions could be considered to both protect and enhance the endangered species act, while looking at emerging approaches that could foster economy in Ontario.

In this submission, we will use the frameworks and approaches above as we consider the questions posed. While this will not be an exhaustive treatment of the consultation document, we hope to at the least, build a basis for further development of emerging approaches. If the information presented is of interest to the work being undertaken by the Ministry of Environment, Conservation and Parks, we would be happy to assist in any way we can. We firmly believe that the time is now for Ontario (our sub national Government) to consider overshoot as an economic driver sand shift the course to address this wicked problem.

**General Comments: on the discussion paper**

Our overall response to intent of the consultation

“The Ontario government is currently undertaking a review of the Endangered Species Act to improve protections for species at risk, consider modern and innovative approaches to achieve positive outcomes for species at risk, as well as to look for ways to streamline approvals and provide clarity to support economic development.

The desired outcomes of any proposed changes to the Endangered Species Act are to:

• Enable positive outcomes for species at risk

• Ensure species assessments are based on up-to-date science

• Address multiple objectives for ecosystem management through stewardship and protection activities

• Increase efficiencies in service delivery for authorization clients

• Streamline processes and provide clarity for those who need to implement the Act

• Maintain an effective government oversight role” (pg 2 complete para 2 and 3)

We believe that the primary goal must be to ensure threats and drivers to species are decreased, meaning that we move towards delisting of species and that no species are added to the species at risk list in Ontario. This must be the primary outcome. The duty to all life in Ontario should not be taken lightly. While it is hard to hear, the threat of “genocide” of species is occurring in Ontario as is evidenced by the some 243 species currently listed. If we are to address this, we have to stop, in some instances, sitting idly by, or maybe turning a blind eye, as we try to squeeze all the “value” out of the landscape. The thing we should recall is that we are all species and cannot separate ourselves from the web of life. All life depends on ecosystems for air, water, food, shelter, range, security and prosperity. What we are striving to introduce in this submission is that there are alternate equally important values that can be considered and can lead to economic development in Ontario, while protecting spaces for species and ecosystem function.

We would also like to note that species habitat (pg 1 paragraph 2) is also found within urban and peri-urban areas, not only “in the wild”, and that the urban ecosystem[[5]](#footnote-5) [[6]](#footnote-6) be included in the ecosystem description.

Finally we note that much of what we are putting forward underscores, and we believe invited, the statement on page 2 paragraph 1 (complete), line 5 “to improve its effectiveness, and modernizing the program based on best practices in other jurisdictions”.

**Area of Focus 1 – Landscape Approaches:**

“The Endangered Species Act sets requirements that must be met for each species that is listed as endangered or threatened. Landscape approaches may provide new tools for managing species at risk within specific geographic areas or ecosystems where the needs of multiple species at risk can be addressed” (pg 5 consultation document). Before we address the questions and challenges noted in consultation document, we would like to make two general comments:

1) We would like to see the ministry consider gathering all the information pertinent to endangered species in Ontario, including the recovery strategies, offenses, regulation, act, etc, be organized into a single one stop website. The current platform is neither complete nor clear.

2) It was our understanding that based on the work done by both the Canadian ( in conjunction with the Provinces) and Ontario[[7]](#footnote-7) (Ministry of Natural resources and Forest [MNRF]) Governments are moving towards a landscape approach through the BioDiversity lens. As such, we are somewhat confused in the introductory comment (above in quotations) as it appears that this direction is that of both the Canadian and Ontario Government. In particular, we believe that the “Pan-Canadian Approach to transforming Species at Risk Conservation in Canada”[[8]](#footnote-8) (Canadian government, Ministry of Environment and Climate Change), through the consideration of the principles, priorities, results and benefits[[9]](#footnote-9) begins to address much of the preamble to this area of focus. We would appreciate clarity on this please, especially as to how the Pan Canadian approach is being brought to bear on the Endangered Species Act Ontario review.

Challenges outlined in consultation document:

1) The case-by-case and species-specific policy approach to implementing the Endangered Species Act can sometimes limit the ability to achieve positive outcomes for species at risk. More broadly, protection and recovery approaches for individual species can limit or conflict with one another. For certain species or habitats, the ability to take a more strategic approach maybe preferred.

Comments: While we concur that case by case may not be sufficient, it is an underpinning of conservation and can’t be abandoned. The basic tenant of ecological science deals with abundance and distributions of the particular species. Further the trio of units studied through ecological sciences are individuals, populations and communities. To explain distribution and abundance of a single species, science studies what happens to the individuals.

To understand population changes you must consider the individuals, within the community matrix. If you consider that all species (humans too) live within communities with other biotic and abiotic factors, to explain community change the analysis of how populations have altered has to be in the mix. Finally, it is important to remember that a) for all species good and poor places exist for every species and all species and individuals in the population are affected by environmental factors of weather, nutrients, other species and shelter; b) over exploited or pressured populations can collapse; c) communities can rebound from disturbances; d) keystone species may be essential to a community. In any approach, the above core principles of ecology must be enshrined in any work done on endangered species. Moving too quickly to “seeing the forest and not the trees” can be damaging to single species futures.

2) For species that depend on habitat across wide ranges, a landscape approach that enables planning and authorizing activities at a broad scale may be preferred.

Comments: Species dependence across wide ranges is, in our minds, similar to considering the criteria outlined in the Pan Canadian Framework, and could also be considered in an approach in which landscape/ecosystems are the more appropriate level of organizing that could result in multiple benefits for multiple species. However if the intent is to facilitate authorizing activities at the expense of BioDiversity, this is not acceptable.

Questions outlined in consultation document: Focus Landscape Approaches

1) In what circumstances would a more strategic approach support a proposed activity while also ensuring or improving outcomes for species at risk? (e.g., by using a landscape approach instead of a case-by-case approach, which tends to be species and/or site-specific.)

Comments: The case for supporting proposed activities needs to turn from resource extraction and landscape changes (current economic approaches) to ones that are considering the 21st century possibilities that can shift the economic model in Ontario. This is particularly germane in specific industries such as mining, forestry, agriculture, infrastructure development, and land use change from rural to urban, even more relevant when dealing with Crown Land in Ontario. As noted in the introduction in an effort to unpack evolving shifts in direction, we want to bring forward, the below. Please recognize that there are numerous other resources that could be added to this list. We will review the three outlined below separately with some suggestion as how they are relevant within the question outlined.

a) Taking a Broader Landscape Approach - A Policy Framework for Modernizing Ontario’s Approach to Natural Resource Management (OMNR, 2013),[[10]](#footnote-10) [[11]](#footnote-11)

b) IUCN Red List of Ecosystems [[12]](#footnote-12) , and , Guidelines for the application of IUCN Red List of Ecosystems Categories and Criteria (v1.1)[[13]](#footnote-13)

c) CBD Guidelines – The Ecosystem Approach[[14]](#footnote-14)

a) Taking a Broader Landscape Approach is a framework for a strategic approach in which outcomes for species at risk could be considered at a landscape level. This Ontario government document has a good solid basis, and response, to the question under consideration. The document is well developed in several areas, and can be considered a flexible framework within which case by case consideration of endangered species, within a landscape lens, could be considered. The basic elements to be considered are, i) Manage at appropriate scales; ii) Integrate and coordinate; iii) Assess, manage, and mitigate risk; iv) Focus science and information resources; v)Manage adaptively. This basis which is currently used within MNRF, which also has responsibility for SAR in Ontario, should be included in developing landscape approaches to endangered species.

b) IUCN Red List of Ecosystems and Guidelines for the application of IUCN Red List of Ecosystems Categories and Criteria (v1.1). This new approach to considering species within ecosystems, is underpinning the current real trajectory of ecosystem collapse globally. The intent of the IUCN Red List of Ecosystems is to give us a tool to consider how to assess ecosystems/landscapes health. From the criteria document , Particularly section 5. Criteria and thresholds, should be investigated as a robust approach, that is globally vetted, in the pursuit of considering landscape approaches for species at risk. If, and as you review this tool, perhaps one of the questions we should be considering, is designating not only species but ecosystems entirely. At the least, the criteria can act as a framework within which to consider landscape approach.

c) CBD Guidance – The Ecosystem Approach, again has an array and multitude of things that can be brought into the mix in a landscape approach. Particular to crown Forest Land in our Province, I would like to draw your attention to Annex II on the relationship between sustainable forest management and the ecosystem approach, which we fell is particularly relevant in the Ontario context.

Before moving on to question two, we would like to pause and begin to introduce the opportunities to shift toward sustainable emerging economic drivers and possible methods of financing that moves beyond resource extraction and permanent land use change. The treatment of each will be at a general level. In this section, we will touch upon the economic drivers of the restoration economy, the Sustainable Development Goals, ecosystem based adaptation, and ecosystem based disaster risk reduction. From a financing lens, we will briefly look at Business Model Innovation for Sustainable Landscape Restoration, directions from insurance companies and others, green bonds, the work of the Katomba group (specifically proactive investment in natural capital), financing for protected areas, and BioDiversity Financing.

A Note on BioDiversity Offsetting[[15]](#footnote-15) [[16]](#footnote-16). Within the bucket of potential directions for economics and financing, BioDiversity offsetting is included. However, BioDiversity Offsetting, as articulated at the international level is not a trading scheme, it is an effort to address the residual efforts of a project/change in land use, any consideration of BioDiversity Offsetting must pay and heed the mitigation hierarchy. In Ontario, the efforts to enable BioDiversity offsetting have led to a lack of understanding in what theses market mechanisms are. It is our belief that if offsetting is to be considered within an endangered species tool kit, it has to be well understood by those who will be responsible for oversite, and not applied as a trading scheme.

A note on Natural Capital:

In our minds, at the basis of much of what we have and will present, if based on the idea that Natural Capital[[17]](#footnote-17) is as significant a contributor to human well-being and prosperity as is financial capital. We believe that bringing Natural Capital into the discussion on landscape approaches for endangered species is critical to move the bar towards sustainability. Agreeing on what the definition is of natural capital and how to use the direction is underscored and developed in footnote 17, which reflects the international Natural Capital’s work.

Economic Drivers:

The development and possible size of a restoration economy[[18]](#footnote-18) [[19]](#footnote-19) [[20]](#footnote-20) [[21]](#footnote-21)is a response to the decreasing capacity of the natural world to supply the goods, and ecosystem services we depend on. Directly linked to the global direction from numerous multilateral environmental agreements, with multiple agencies organizing around the lens, the trickledown effect to Ontario is getting closer. The United Nations Sustainable Development Goals and associated targets[[22]](#footnote-22) , which are being taken up around the world form individual to national governments, and civil society actors. They are considered part of the way forward for a sustainable future. Aspirational and agreed to by a multitude of countries, including Canada, they are a system against which many are exploring as a way to align ourselves globally.

Across a multitude of goals and targets, the investigation into the global land assessment and ways towards the economic driver of the restoration economy has evolved. To give support and underscoring this critical need to stop continued degradation of the earth, the United Nations, after several years of negotiations, has pronounced 2021 -2030 as the United Nations Decade on Ecosystem Restoration[[23]](#footnote-23), this has the potential to set in motion a growing change to counterbalance extractive and destructive business practices that continue to push species and ecosystems over the brink of recovery. This, coupled with Ecosystem Based Adaptation to Climate Change[[24]](#footnote-24) [[25]](#footnote-25), and Nature Based Disaster Risk Reduction[[26]](#footnote-26) [[27]](#footnote-27) [[28]](#footnote-28) the global economy appears to be setting the stage for real dollars to flow to benefit the planet and species, which will help secure the future for people.

Methods of Financing:

Business Model Innovation for Sustainable Landscape Restoration is a course based “exercise to explore the potential for a positive role of business model innovation for landscape restoration is an emerging area where all sized businesses are beginning to assess project opportunities within the restoration economy”. Lead by ENABLE [[29]](#footnote-29)out of the University of Rotterdam, the business model creation taps into creative business approaches in support of the restoration economy. While not a specific method of financing, it is clear from the work through the course that there is a real potential to develop and deliver services that will help restore the planetary ecosystems. One of the collaborators in the consortium, Commonland[[30]](#footnote-30), uses an innovative model in which 4 returns (inspiration, social capital, natural capital and financial capital) connects 3 landscape zones (natural zone, combined zone, economic zone) to create market based solutions for landscape restoration. The approach being take through Commonland is something that could be developed in Ontario for a landscape approach for endangered species security.

Directions and voice from insurance companies and banks, among others are also lending support to restoration economy activities [[31]](#footnote-31) [[32]](#footnote-32) [[33]](#footnote-33). Banks too are beginning to consider natural capital and risk to natural capital in their investment and lending practices [[34]](#footnote-34). Green bonds, already on the table in Ontario[[35]](#footnote-35) , increasing in Canada [[36]](#footnote-36) [[37]](#footnote-37)and around the world[[38]](#footnote-38), are growing in availability and momentum. With the green bond system in place, the thought of shifting parts of the bonds to land restoration is poised to help address the decade on ecosystem restoration, which in turn will assist in species protection in a landscape lens.

The Katomba Group [[39]](#footnote-39) realized in 1999 was the first collaborative exercise of its kind that brought together multiple contributors to consider the complex idea of payment for ecosystem services. Over the years much of the basis for natural capital, natural accounting and payment for ecosystem services, has evolved form this group. There are many threads to investigate through the Katoomba Group work, we have elected to only bring forward the work on proactive investment in natural capital[[40]](#footnote-40), an approach that is at the core of the restoration economy. Financing for protected areas,[[41]](#footnote-41) [[42]](#footnote-42) is a concept that could be customized to suit conditions in Ontario for both parks and protected areas and for open landscapes in need of protection. Finally, BioDiversity Financing[[43]](#footnote-43) a project of the Biodiversity and Ecosystem Services Network, is a relatively new approach, which appears to be in favour with sub national governments as they strive to conserve landscapes and species in their jurisdiction. If you do go to the link provided as reference in the foot note, many more tools and frameworks can be accessed.

Conclusion:

The comments on question one are the most developed in our submission. We believe we have given you some practical examples of tools, approaches, frameworks and directions that could help create the conditions by which a landscape approach to endangered species could be considered. We do note, however, there are many more real world examples we could of suggested – the trick is to do an assessment of what is available, and create the approaches that will work in Ontario. To do this assessment properly, a more developed table of contents, or questions to be considered is needed. We would be happy to explore a more detailed investigation with you.

While we have treated focus are 1 question 1 in some detail, we cannot give the same treatment to the balance of the focus areas, even though we would have liked to. If you feel it is justified and warranted, we would take a bit of a deeper dive into the focus areas. As such, The balance of our comments for the focus areas are not as in depth and are more in the form of recommendation with benefits and solutions. We have elected not to answer all questions as we just did not have the time needed to do so.

2) Are there existing tools or processes that support managing for species risk at a landscape scale that could be recognized under the Endangered Species Act? We are not prepared to make any firm comment on this question for several reasons including that the time is not sufficient to review the plethora of approaches. We feel the above, and numerous other directions under way, could upon closer review for whether a pick up and use approach, or a combining several elements of different approaches could work. To do this question the justice it deserves would benefit greatly from review through multiple lenses, including a sector specific consideration (i.e. mining, infrastructure, urban development, etc), land ownership perspective (crown, private, treaty), and a species and ecosystem lens. Again we would be willing to develop a more salient response if given more direction and is welcomed by the Ministry and Minister.

**AREA OF FOCUS 2 – LISTING PROCESS AND PROTECTIONS FOR SPECIES AT RISK**

Question #2:

There should be a different approach in automatic species and habitat protections. There should be a creation of a larger team of people in the field and shorter timeline to assess all the areas that are protected.

Why is this beneficial?

By creating a larger team, it will create more jobs for those in the environmental science field or those who have extensive knowledge of endangered species in Ontario. In other words, this will create more “green” jobs. Those who can be involved include:

- Environmental scientists

- Indigenous peoples

- Citizens with knowledge of endangered species

Proposed solution

The creation of a Rapid Response for the Assessment of Protected Areas (RRAPA) would allow for large teams across the province to assess whether areas that are automatically protected need this protection lifted. Areas should be assessed from the highest to the lowest human-species or business-species interaction in order to minimize any impact on businesses, citizens and species. The most beneficial way to organize these priority areas is through categorization.

Sample categorization

Category #1: High human-species and/or business-species interaction

Category #2: Moderate human-species and/or business-species interaction

Category #3: Low human-species and/or business-species interaction

Question #3:

As mentioned in question #2, a rapid response team could be considered in order to create a different approach to automatic species and habitat protections, under certain conditions. However at all times the first line of defense for the species would be immediate protection.

Question #4:

COSSARO should be a more transparent body where making information more accessible will help in creating trust with the general public. The Endangered Species Act should also be written in simpler text so average citizens can understand it. There should also be more communication with the board. COSSARO should also have fixed dates to meet and evaluate the progress of species currently on the list and determine whether there should additions or removals from the list. Finally, COSSARO should communicate with other entities such as the federal government.

**AREA OF FOCUS 3 – SPECIES RECOVERY POLICIES AND HABITAT REGULATIONS**

We will submit comments on this section. Unfortunately it will be after you prescribed deadline for the comments. As such we will develop the response in anticipation of the next consultation.

**AREA OF FOCUS 4 – AUTHORIZATION PROCESSES**

Question #1:

Stop making the Endangered Species Act prioritize businesses! That is NOT the point of the Act. The Act is intended to help species not make it on this list to begin with and reverse the effects on those who are already on it. Businesses should be made aware of the species around them and of the consequences that come with endangering them. Businesses should also be charged where an offense is committed. In the event that a particular practice has triggered an addition of a species to the Endangered Species Act, serious consequences should result by way of offenses.

Question #3:

In order to enhance revenues for enforcement of the Act, stricter enforcement and possibly enhance penalties should be considered. Section 40(1) of the act outlines the monetary benefit for the provincial government if they were to fine more culpable individuals. This money can be used to pay individuals who are working in the assessment of protected areas, again creating more jobs for Ontarian’s while securing our Province’s future for all.

We are jointly submitting these comments. While we are both active with matters pertaining to a sustainability, firmly believe that we have a duty to all life and the planet itself, we believe that there are opportunities to foster increased awareness and collaboration. The duty to all life in Ontario should not be taken lightly. It is our belief that this consultation could help foster conditions to shift towards a more just and equitable future for those who call Ontario home today, and for those that will call it home in the future.

1. Accelerated modern human–induced species losses: Entering the sixth mass extinction <http://advances.sciencemag.org/content/1/5/e1400253> [↑](#footnote-ref-1)
2. ibid [↑](#footnote-ref-2)
3. <http://donellameadows.org/archives/a-synopsis-limits-to-growth-the-30-year-update/> [↑](#footnote-ref-3)
4. <https://www.unenvironment.org/news-and-stories/press-release/new-un-decade-ecosystem-restoration-offers-unparalleled-opportunity?fbclid=IwAR37bmIDL5QD9ZU5nux55n_J3kF7C04Xa9pq2VkP35izJPXCXVM9l1IGK24> [↑](#footnote-ref-4)
5. <https://www.britannica.com/science/urban-ecosystem> [↑](#footnote-ref-5)
6. <https://www.iucn.org/commissions/commission-ecosystem-management/our-work/cems-specialist-groups/urban-ecosystems> [↑](#footnote-ref-6)
7. <https://www.ontario.ca/page/moving-biodiversity-conservation-landscape-approach> [↑](#footnote-ref-7)
8. <https://www.canada.ca/en/services/environment/wildlife-plants-species/species-risk/pan-canadian-approach/species-at-risk-conservation.html> [↑](#footnote-ref-8)
9. Pan-Canadian Approach to transforming Species at Risk conservation in Canada, figure 1. [↑](#footnote-ref-9)
10. <https://dr6j45jk9xcmk.cloudfront.net/documents/2583/stdprod-101043.pdf> [↑](#footnote-ref-10)
11. <https://www.ontario.ca/page/moving-biodiversity-conservation-landscape-approach> [↑](#footnote-ref-11)
12. <https://www.iucn.org/theme/ecosystem-management/our-work/red-list-ecosystems> [↑](#footnote-ref-12)
13. <https://portals.iucn.org/library/sites/library/files/documents/2016-010-v1.1.pdf> [↑](#footnote-ref-13)
14. <https://www.cbd.int/doc/publications/ea-text-en.pdf> [↑](#footnote-ref-14)
15. Business and Biodiversity Offset Programme (BBOP), which defines biodiversity offsets as: [M]easurable conservation outcomes resulting from actions designed to compensate for significant residual adverse biodiversity impacts arising from project development after appropriate prevention and mitigation measures have been taken. (from below page5 para 2) [↑](#footnote-ref-15)
16. <https://institute.smartprosperity.ca/sites/default/files/publications/files/Agenda%20for%20Biodiversity%20Offsets%20Oct%202014.pdf> [↑](#footnote-ref-16)
17. <https://naturalcapitalcoalition.org/natural-capital-2/> [↑](#footnote-ref-17)
18. <https://www.greenbiz.com/article/10-things-you-need-know-about-restoration-economy> [↑](#footnote-ref-18)
19. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0181686> [↑](#footnote-ref-19)
20. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4470920/> [↑](#footnote-ref-20)
21. <https://curs.unc.edu/files/2013/05/BenDor-and-Lester-Exploring-and-Understanding-the-Restoration-Economy.pdf> [↑](#footnote-ref-21)
22. <https://sustainabledevelopment.un.org/topics/sustainabledevelopmentgoals> [↑](#footnote-ref-22)
23. <https://www.unenvironment.org/news-and-stories/press-release/new-un-decade-ecosystem-restoration-offers-unparalleled-opportunity> [↑](#footnote-ref-23)
24. <https://www.unenvironment.org/explore-topics/climate-change/what-we-do/climate-adaptation/ecosystem-based-adaptation> [↑](#footnote-ref-24)
25. <https://www.iucn.org/resources/issues-briefs/ecosystem-based-adaptation> [↑](#footnote-ref-25)
26. <http://pedrr.org/> [↑](#footnote-ref-26)
27. <https://www.preventionweb.net/publications/view/59324> [↑](#footnote-ref-27)
28. <https://www.cbd.int/doc/publications/cbd-ts-85-en.pdf> [↑](#footnote-ref-28)
29. <https://www.rsm.nl/enable/partners/> [↑](#footnote-ref-29)
30. <https://commonland.com/en/> [↑](#footnote-ref-30)
31. <https://naturalcapitalcoalition.org/sustainable-insurance-the-emerging-agenda-for-supervisors-and-regulators/> [↑](#footnote-ref-31)
32. <https://www.insurancebusinessmag.com/ca/news/risk/taking-on-the-risk-of-natural-resource-depletion-104871.aspx> [↑](#footnote-ref-32)
33. <https://reliefweb.int/report/world/united-nations-and-worlds-insurers-launch-global-insurance-principles-rio20-propel> [↑](#footnote-ref-33)
34. <https://www.environmentalleader.com/2018/10/financial-institutions-natural-capital/>. [↑](#footnote-ref-34)
35. <https://www.ofina.on.ca/greenbonds/> [↑](#footnote-ref-35)
36. <https://institute.smartprosperity.ca/content/green-bonds-2018-continued-growth-and-new-players> [↑](#footnote-ref-36)
37. <https://iiac.ca/wp-content/uploads/CanadianGreenBondMarket-Todd-April2018.pdf> [↑](#footnote-ref-37)
38. <http://treasury.worldbank.org/en/about/unit/treasury/ibrd/ibrd-green-bonds> [↑](#footnote-ref-38)
39. <http://www.katoombagroup.org/index.php> [↑](#footnote-ref-39)
40. <https://www.cbd.int/financial/hlp/doc/literature/LittleBiodiversityFinanceBook_3rd%20edition.pdf> [↑](#footnote-ref-40)
41. <file:///C:/Users/hp/Downloads/Guidelines+for+the+preparation+of+protected+areas+business+plan+.pdf> [↑](#footnote-ref-41)
42. <https://portals.iucn.org/library/node/8800> [↑](#footnote-ref-42)
43. <https://www.besnet.world/thematic-area-library/1194> [↑](#footnote-ref-43)