

## Open letter

Honourable Steven Guilbeault, P.C., M.P.  
Minister of Environment and Climate Change Canada

### Re: Feedback on Canada's National Adaptation Strategy

On November 24, 2022, the Government of Canada released its Canada's National Adaptation Strategy: Building Resilient Communities and a Strong Economy for final comment.

Nature, nature-based solutions and biodiversity are pillars of the Strategy and the accompanying Adaptation Action Plan, and central to any efforts to adapt to a rapidly changing climate. The Municipal Natural Assets Initiative (MNAI) is a Canadian NGO that provides scientific, economic and municipal expertise to support and guide local/regional governments, Indigenous Nations, watershed agencies and others in identifying, valuing and accounting for natural assets in their core work.

The Strategy and Plan are of course broader than natural assets and nature-based solutions. However, climate risks are not reduced without increasing nature-based solutions; and, the stronger the Strategy and Plan are with respect to nature and nature-based solutions, the better the outcome for adaptation. Thus, MNAI reviewed the Strategy and Plan to determine *the extent to which they will meaningfully scale up efforts to protect, manage, restore and rehabilitate natural assets.*

The final draft Strategy and Plan provide, in many areas, a very strong and welcome foundation for advancing the role of healthy, connected and biodiverse ecosystems in addressing the multiple risks posed by climate change. Particular strengths include:

- The overall comprehensive nature of the Strategy and Plan
- The emphasis on collective action
- A thoughtful and holistic conceptualization of nature
- The mainstreaming nature and nature-based solutions across all outcome areas
- Several important goals related to nature
- Strong emphasis on the role of Indigenous worldviews, knowledge and perspectives
- Recognition that data gaps exist and that data need to be accessible
- Recognition of the risk of maladaptation
- Topping up the Disaster Mitigation and Adaptation Fund, which provides funding for natural infrastructure
- Planned new approaches to regional coastal climate resilience

As with any strategy and plan of this ambition and complexity, there are areas that can be debated and improved. MNAI's comments and recommendations focus on five main areas: 1) holistic conceptualizations of nature, 2) more ambitious actions at ecosystem and watershed scales, 3) stronger nature and biodiversity indicators, 4) sharper goals and objectives for nature, and 5) more creative funding.

## 1/ Mainstream and support strong and holistic conceptualizations of nature

The Strategy and Plan underscore that humans exist as part of the natural environment, not separate from it; that a thriving natural environment is foundational to our society, economy and the health and well-being of Canadians; that degradation and loss of ecosystems threaten nature's ability to provide us with basic needs, like food, clean water, productive soil, natural pest control, pollination, flood and erosion control, and carbon sequestration; and that once lost, replacing the services that ecosystems provide will be extremely challenging and costly and in many cases impossible.

These may sound like obvious statements but are, in fact, a welcome counterpoint to a dominant Canadian worldview, entrenched in policy and legislation, that considers nature and natural assets primarily something to be used or extracted. The Strategy and Plan also go a long way to make nature mainstream across all program areas rather than relegating it to something to be considered or valued in isolation, or narrowly for aesthetic reasons. However, to ensure impact at scale to protect critical natural assets, natural asset management (NAM)<sup>1</sup> and concepts like nature's contribution to people (NCP)<sup>2</sup> must be adopted by the majority of private and public institutions.

**Recommendation:** The Government of Canada should ensure this holistic understanding of nature forms the basis of all federal financial and programmatic activity.

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1 Brooke, R., O'Neill, S., Cairns, S. et al. Defining and Scoping Municipal Natural Assets. Municipal Natural Assets Initiative (2017). [mnai.ca/resources-intro](https://mnai.ca/resources-intro)  
2 Chaplin-Kramer, R., Neugarten, R.A., Sharp, R.P. et al. Mapping the planet's critical natural assets. *Nat Ecol Evol* (2022). [www.researchsquare.com/article/rs-1102108/v2](https://www.researchsquare.com/article/rs-1102108/v2)

## 2/ Plan more ambitious actions at meaningful ecosystem and watershed scales

It is widely understood that multiple barriers impede protecting and managing natural assets, which prevents the ability to preserve the services they provide. This includes services related to adaptation.

Institutional and governance barriers are a central impediment to the widespread uptake of nature-based solutions. Nature does not follow ownership and jurisdictional boundaries. It can best be understood, protected, managed, restored and protected at the level of entire watersheds and ecosystems. However, governance and decision-making is typically fragmented at watershed and ecosystem levels. In addition, there are few drivers in any level of Canadian legislation to integrate nature into decision-making. There are no instruments to cause local governments, watershed agencies, public entities and others, to preserve and protect the services that it provides, or to pursue natural assets infrastructure solutions.

The Government of Canada's plan to launch new approaches to *regional* coastal climate resilience are welcome, although must explicitly include the role of nature.

Beyond this, however, the Strategy and Plan are confined to generalities with respect to intuitions and governance for nature, with action focused on discrete areas of Departmental programming. The latter reinforce, not challenge, fragmented institutions and governance.

There are evident Constitutional divisions of power with respect to nature. However, precedents exist where the Government of Canada plays a strong role in challenging areas like health care and carbon mitigation because of their importance to all Canadians and the need to avoid inequitable patchworks.

Finally, it is paramount that as the Government of Canada contemplates their role in resolving Constitutional divisions of power with respect to nature Indigenous Rights, the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and the Truth and Reconciliation Calls to Action, which must be at the heart of any approach, policy or cross-jurisdictional resolution over rights to nature.

**Recommendation:** The Government of Canada must play a leadership role in overcoming well-documented institutional and governance barriers to maintaining ecosystem health at meaningful scales (e.g., watershed level versus dividing the resource along ownership boundaries) to achieve a system-wide increase in nature-based solutions.

**Recommendation:** Indigenous Nations must be included in leadership roles at the table with the Government of Canada and any other Provincial/Territorial governments, to resolve cross-jurisdictional conflicts about nature and collaboratively build innovative, well-funded structures and Indigenous-led nature-based solutions.

### 3/ Strengthen nature and biodiversity indicators

Proposed indicators for nature and biodiversity primarily reflect existing commitments and are not aligned fully with the scale of the challenge. Following the adage that *what gets measured gets managed*, nature related indicators must be expanded and integrated into any policy and management approach.

**Recommendation:** The following additional nature and biodiversity indicators are recommended:

- A whole-of-society collaboration and governance indicator, similar to the one for disaster risk, but focused on protecting nature at meaningful scales
- Inclusion of biocultural indicators
- Requirements to consult and include Indigenous Nations in ecosystem and watershed level decision making
- Changes in the amount of public funding nationally in nature-based solutions, including changes in allocation between engineered and natural assets
- Changes in the amount of private sector / capital markets financing for nature-based solutions
- Changes in the stocks of nature and the flows of its services
- The number of federal departments meaningfully integrating protection of nature and its services into their financial and asset management practices
- An indicator related to the objective of “accelerating” nature-based solutions
- An indicator that tracks trade-offs

### 4/ Sharpen goals and objectives with respect to nature

Overall, the Strategy goals are coherent and appropriately connected. However, a few observations and recommendations may be made.

#### Nature objective

**Recommendation:** The nature objective is that “the use of nature-based solutions is accelerated.” This should be associated with clearer and quantifiable definitions, goals and timeframes so that the term “accelerate” is meaningful. As noted below, better indicators, beyond the urban parks committed to in 2021, need to be added.

#### Health and Wellbeing objective

**Recommendation:** The health-nature connection is far more robust than “access to green space” and this objective should be expanded accordingly. A corresponding indicator should be established.

### Infrastructure objective

**Recommendation:** Most readers will understand the term “infrastructure” in this objective to mean “engineered infrastructure.” If the intent is to include nature in this conceptualization, then this should be explicit.

**Recommendation:** The rehabilitation and restoration of nature is implicitly prioritized in this section. This is important, of course. However, it is better to prevent nature from becoming degraded in the first place through protection and acquisition. The Strategy and Plan should thus elevate the importance of protection alongside rehabilitation and rehabilitation.

**Recommendation:** The section should note that natural infrastructure is not merely “seen” as providing infrastructure services, but that there is a strong and growing evidence base on this point.

### Economy and worker objectives

This section is muted on the extent to which nature underpins economic activity and supply chains, particularly in the face of recent, comprehensive reports such as the *Final Report of the Independent Review on the Economics of Biodiversity* prepared for the UK Treasury.

**Recommendation:** The importance of healthy, intact ecosystems in supporting economies should be more explicit.

## 5/ More creative funding and financing

The Strategy and Plan note important funding areas, which is encouraging. However, funding sources such as the \$200 million Natural Infrastructure Fund (NIF), and even the topped-up Disaster Mitigation and Adaptation Fund are, at best, down payments on the collective Canadian investment required in nature.

To put the \$200 million NIF into context, one MNAI-associated project required \$54 million — or more than ¼ of the entire national federal program budget — for activities in a single floodplain. The Climate Policy Initiative has recently determined that there must be “a 26-fold increase in annual funding i.e. USD 423 billion annually by 2030 (compared with annual average of 16.2 billion in 2019/2020)”<sup>3</sup> in nature-based investment in order to meet Paris Agreement goals and shift to a low-carbon economy.

The Government of Canada — and, of course, many others — will need to think broadly to generate the kind of multi-billion-dollar investments required in the acquisition, protection and rehabilitation of nature. Some examples follow.

3 D. Chiriac, H. Vishnumolakala, P. Rosane Landscape of Climate Finance for Agriculture, Forestry, Other Land Uses, and Fisheries, November 4, 2022. [www.climatepolicyinitiative.org/publication/landscape-of-climate-finance-for-agriculture-forestry-other-land-uses-and-fisheries](http://www.climatepolicyinitiative.org/publication/landscape-of-climate-finance-for-agriculture-forestry-other-land-uses-and-fisheries)

### Existing infrastructure programming

Engineered solutions are the default option for most infrastructure spending in Canada. To address economic realities and adaptation, this must change.

**Recommendation:** As a pre-condition for funding, new infrastructure programming that the Government of Canada supports should, at a minimum, require analysis for certain asset classes (e.g., water, waste water, resilience-related) to determine whether natural assets could provide the required services in whole or part, as opposed to relying solely on engineered assets.

If the question is not asked in funding program criteria, nature is unlikely to be considered and put forward in proposals, and will not get funded as a result.

### Federal leadership by example

**Recommendation:** The Strategy and Plan should be more expansive and prescriptive with respect to the importance of building adaptation into federal assets.

To illustrate, Parks Canada is responsible for multiple national parks, the Trent-Severn waterway, the Rideau Canal system, and hundreds of kilometers of roads. Some towns such as Banff are entirely within Parks Canada boundaries. These and all lands held by Parks Canada, National Defence, Public Works and other Departments should be conceptualized and managed holistically to ensure healthy, connected ecosystems and protect and enhance the full range of infrastructure and non-infrastructure services they provide.

### Financing for nature

There is general agreement that significantly more private sector financing, in addition to public funding, is required to reach 2050 net zero goals, including funds for nature.

**Recommendation:** Current accounting practices form barriers to funding nature-based solutions. The Government of Canada should test, implement and disseminate accounting practices that recognize not simply historical cost but the actual significance and value of nature and its services, as described recently in *Getting Nature on the Balance Sheet*<sup>4</sup>.

**Recommendation:** Engage in and support nature-based financing innovations such as those led by MNAI and Indigenous Nations through Indigenous Protected and Conserved Areas (IPCAs) to create practical mechanisms to finance natural asset acquisition and restoration.

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<sup>4</sup> [www.intactcentreclimateadaptation.ca/getting-nature-on-the-balance-sheet/](http://www.intactcentreclimateadaptation.ca/getting-nature-on-the-balance-sheet/)

### Keeping healthy ecosystems healthy

**Recommendation:** Increase emphasis in the Strategy and Plan on protecting ecosystems that are healthy today from becoming degraded, rather than solely on the more costly task of rehabilitating those that are already degraded and vulnerable.

#### For further information:

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