

November 27 2018

Dear Public Sector Accounting Board:

Please find attached, on behalf of the undersigned organizations, a response to your request for input into the process to update the Statement of Concepts and Statements of Principles.

The purpose of our submission is to increase the recognition of natural assets in Canadian public sector accounting framework. Consistent with this, we make: (a) general recommendations and (b) specific/technical recommendations for the Conceptual Framework and Reporting Model.

We appreciate the opportunity to comment on this very important undertaking and would be pleased to provide any additional information that may be required. We would also appreciate the opportunity to be engaged in the development of standards and guidance materials to support public sector entities incorporate natural assets in their financial statements.

With best wishes,

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Purpose

This document provides context, considerations, conclusions and recommendations to increase the recognition of natural assets in Canadian public sector accounting standards.

Context

Natural assets are more commonly referred to as *natural capital*, though the meaning is the same. Accepted definitions all include the stock of renewable and non-renewable natural resources that includes land, water, atmosphere, minerals, plant and animal species, and all living thingsⁱ.

The Public Sector Accounting (PSA) Handbook currently limits the consideration of natural assets within public sector financial statements. Specifically, the PSA Handbook that guides public sector accountants prohibits from recognition inherited natural resources, arguing that “the costs, benefits and economic value of such items cannot be reasonably and verifiably quantified using existing methods.” Current standards allow only the recognition of purchased natural assets where they meet certain criteria (Public Sector Accounting Discussion Group 2016)ⁱⁱ.

Considerations

Rationale

The PSA Handbook prohibition means that no public sector entity can place natural assets on its balance sheets. By *not* placing natural assets on balance sheets, a *de facto* statement is made that they have no inherent value and make no economic contribution. This runs counter to all accumulated evidence on natural capital generally, and on the growing municipal experience in Canada,ⁱⁱⁱ and means that local governments have limited incentive and no direction to inventory or value their natural areas^{iv}.

This matters, particularly in the context of the financial health of Canadian communities, businesses and households and their resilience to climate change and the risks from extreme weather:

1. *Canadian infrastructure is in trouble.* Canada’s Infrastructure Report Card¹, for example, notes that one-third of our municipal infrastructure is in fair, poor or very poor condition;
2. *The trends are negative.* The Insurance Bureau of Canada reports that insurance losses to Canadian homeowners and communities from climate change and extreme weather events are up over 400% from \$405 million per year between 1983 and 2008 to \$1.8 billion per year between 2009 and 2017^v. This increases the strain on infrastructure and budgets;
3. *There is growing evidence that natural assets protect communities from extreme weather.* Globally, after the 2004 Indian Ocean tsunami, evidence accumulated that

¹ <http://canadianinfrastructure.ca/en/index.html>

where coastal mangrove swamps were least degraded, disaster impacts were often less severe because healthy swamps absorbed the waves' impacts. Researchers made similar findings after Hurricane Sandy in 2012: healthy marshes, beaches, dunes, oyster reefs and flood plains provide important natural barriers against storm surges and flooding risks. The Canadian experience is discussed below;

4. *The status quo strains local budgets.* Local governments cannot continue to allow the loss of natural assets and default to expensive engineered infrastructure to meet all service requirements of taxpayers. They are accountable for 60% of Canada's infrastructure and must find new ways to deliver services in the face of climate change.
5. *Local governments may have a fiduciary responsibility to protect communities from flooding, and natural assets are a part of this protection.*^{vi}

Evolving municipal practice

Increasingly, municipalities realize that natural assets (e.g. wetlands, forests, streams and foreshores) provide equivalent or even better services (e.g. stormwater management, flood protection, provision of drinking water) than many engineered assets. Moreover, if protected and well managed, they can often achieve significant cost savings with respect to engineered or constructed (green infrastructure) solutions, and usually with co-benefits such as increased community resilience.^{vii}

The Town of Gibsons pioneered what has become known as municipal natural asset management. Their work has led to the creation of the Municipal Natural Assets Initiative², which has completed municipal natural asset management projects with: the City of Nanaimo, District of West Vancouver, City of Grand Forks, Region of Peel and the Town of Oakville, and is working now with the City of Courtenay, District of Sparwood, City of Oshawa, Southeast Regional Service Commission of New Brunswick, Regional Service Commission of New Brunswick, and in Ontario's Greenbelt and a BC watershed^{viii}.

These communities demonstrated that they are able to undertake many aspects of natural asset management irrespective of the PSA Handbook prohibition, including financial planning; and, that natural assets can provide the same level of stormwater management services as their engineered counterparts when properly managed and maintained. Nevertheless, the PSA Handbook restriction on inherited natural resources creates challenges for municipal natural asset management:

- **Reporting.** Local governments must make use of the *Notes* section in annual financial statements, departmental reports, municipal publications and annual public meetings to describe the local government's approach to municipal natural assets. In other words, they can take action to report on natural assets notwithstanding the PSA Handbook restrictions, but must find *ad hoc* solutions to do so, which may hinder natural asset management efforts and/or provide taxpayers an incomplete understanding of community assets, liabilities and risks.
- **Risk.** That natural assets are not considered 'real' assets within accounting frameworks, may lead some communities to underestimate or fail to account for

² See mnai.ca

their dependence on the services they receive and rely on from natural assets, and the inherent risks and exposure if the assets were to fail. These communities would then communicate an incomplete picture of risks in their financial statements.

- **Diminished decision-making potential.** Assets that are not valued are often not protected. This, in turn, means that in many urban areas where there is development pressure, natural assets are destroyed because there is no agreed-upon basis for determining a value that can be compared to those derived from development; and of course once the natural asset is gone, it is hard and costly to get back^{ix}. Again, local governments are innovating to manage their natural assets, but they are having to find ways to do so that do not contravene the PSA Handbook guidance.

Data reliability

Accounting requires reliable and verifiable data. Historically, this has been hard to provide in the context of natural assets.

However, the tools available to quantify the biophysical functions of natural assets and characterize these are continually improving, as is the ability to verify their results. Furthermore, there are a variety of ways to characterise accurately what the biophysical functions mean in terms of service value.

In terms of valuation, MNAI is currently valuing natural assets at the avoided cost of engineered assets that would be required to replace it and still provide services. For example, a wetland might be valued at the cost of the stormwater pond that would be necessary if the wetland did not exist or were degraded to the point where it ceased to provide services such as water storage. These estimates are not as complex as other valuation approaches and give a practical result. This method can continue to be used, and it is also reasonable to expect that other practical methods will be developed to quantify natural assets. For example, over time agreed-upon methods to account for the full value of natural assets may emerge. A variety of efforts are underway already to value a more holistic suite of services provided by natural assets.

It should also be noted that, as the climate continues to change, there may be diminished reliability around the understanding of the value of standard engineered assets to perform given tasks based on past experience. For example, the ability of a culvert to manage storm water reliably, and therefore its service value, may be unpredictable in communities where the effects of climate change are evolving quickly.

Finally, it is important to distinguish between what is fully *verifiable* and what is *relevant* -- and often, municipal natural assets are highly relevant even where data are imperfect^x.

Conclusion

A growing number of local governments are acting notwithstanding the PSA Handbook restriction on accounting for natural assets.

However, given the evidence that natural assets provide cost effective and reliable service even in the face of climate change and extreme weather events, PSAB should prioritise efforts to ensure that Canada's public sector accounting framework allows for their inclusion to the greatest possible extent. Doing so would also align with global trends such as the European Union commitment to integrate the value of ecosystem services into accounting and reporting frameworks at both EU and national levels by 2020³, and the development of the System of Environmental Economic Accounting⁴, in which Canada is a participant.

Recommendations

General

- 1. Prioritise the inclusion of natural assets in Canada's accounting framework.** As an overarching recommendation, PSAB is encouraged to prioritise strategies to ensure that natural assets can be included within Canada's accounting framework. This could include:
 - a. Adopting a *policy position* that including natural assets fully in Canada's accounting framework is the long-term goal of PSAB;
 - b. Establishing the *objective* of full consideration of natural assets within financial statements;
 - c. *Seeking opportunities* to advance the consideration of natural assets in PSAB's surveys, technical agenda and special projects.
- 2. Engage stakeholders.** PSAB is encouraged to work with those entities that are seeking to measure and manage natural assets so that their research, operations, and lessons learned can inform PSAB's deliberations wherever applicable.
- 3. Address valuation issues.** Historical cost valuation does not apply to many natural assets; and, basic market valuations (e.g. the timber value of a forest) exclude many ecosystem service and other non-market values. PSAB is encouraged to:
 - a. Consider use of a proxy valuation method such as the avoided cost of engineered assets required to replace the service provided by a natural asset (the current MNAI approach) either as an allowable method or a stop-gap method until valuation techniques evolve and gain support;
 - b. Work with stakeholders to develop a generally accepted method(s) for calculating the full value of services provided by natural assets. This work should draw on the robust and long-standing body of research and methods for performing natural capital valuations including, for example, full replacement costs (i.e. calculating not just timber value but many of the ecosystem and other values), avoided damage cost, contingent valuation or travel costs.
- 4. Require risk disclosure related to natural assets.** PSAB is encouraged to develop interim guidance and then requirements for disclosure of risks related to (a) reliance of a public sector entity on the services provided by a natural assets and (b) the impact of climate change on these service levels, and corresponding risks. This will

³ See for example <https://www.eea.europa.eu/soer-2015/europe/natural-capital-and-ecosystem-services>

⁴ <https://seea.un.org>

support PSAB to produce more relevant and comparable information for accountability and decision making by users.

5. **Develop a process to tackle long-term issues.** Some issues may take considerable time to address, for example, how to attribute ownership to assets that span multiple jurisdictions, and how to address the value of services provided by natural assets on private property within the boundaries of municipalities. PSAB is encouraged to create a standing mechanism to address longer-term issues.
6. **Ensure adequate tools and training.** The inclusion of natural assets in Canada's accounting framework will require tools and training for local government. PSAB is encouraged to develop the tools required by local governments.

Technical / specific

7. **Prohibition in paragraph PS 1000.57 and prohibition in PS 1000.58.** PSAB is encouraged to begin technical work leading to full removal of natural asset-related exclusions from both the framework and standards. In the interim, PSAB has suggested moving the exclusions text from the conceptual framework to the asset standards section (ASSETS, Section PS 3210) as the latter is easier to change. This shift is strongly supported as a key first step.
8. **Paragraph 2.36 of the Conceptual Framework:** PSAB could consider providing a natural asset example for "capital infrastructure" within this paragraph or as a footnote.
9. **Paragraph 2.58 of the Conceptual Framework:** PSAB could consider clearly stating and including natural assets in the definition of public resources to ensure that public sector entities are aware of the scope of their stewardship and potential reporting responsibilities. For example:
 - 2.60(a) - include natural assets as part of "Crown lands and related natural resources"
 - 2.60(b)- include natural heritage items, such as natural features, mountains, lands, lakes, waterfalls, and parks etc. as part of "Heritage and cultural resources"
 - 2.60(c)- include ecosystem services as part of "complex infrastructure systems" and;
 - 2.60(d)- include recreational benefits or social health benefits of natural assets as part of "intangible resources".
10. **Principle 14 of the Reporting Model and Objective 6 and supported by Paragraphs 6.10, 6.46(c) of the Revised Conceptual Framework:** PSAB could consider amending the financial statement presentation standards to include natural capital risks for disclosure requirements, following due process.
11. **Statement of Recommended Practice (SORP).** PSAB could develop a SORP to provide guidance on natural assets including:
 - a. **Financial statement disclosures** - To support entities that have identified natural assets as material for disclosure, specifically natural capital risks;
 - b. **Asset recognition** - To support the first step in removing the exclusion statements related to natural resources from the asset standards.

- c. **Measurement** - To determine a possible method for historical cost measurement or alternatively another measurement attribute if appropriate for natural assets.
- d. **Reporting non-financial resource performance components** - To support entities in developing sections within the “Other Performance or Accountability Reporting” reports noted in paragraph 3.26 of the revised Conceptual Framework which may include reporting on sustainability, on natural assets, climate change risks etc.
- e. **Reporting impacts and changes related to economic resources and obligations specific to natural assets** - to support entities in reporting aspects of service capacity not currently captured in the financial statements including natural assets.
- f. **Application of control** - To support entities in understanding how control can be assessed for natural assets for potential financial statement reporting or disclosure.

Endnotes

ⁱ Municipal Natural Assets Initiative (2017). Defining and Scoping Municipal Natural Assets. <https://www.assetmanagementbc.ca/wp-content/uploads/definingscopingmunicipalnaturalcapital-final-15mar2017.pdf>

ⁱⁱ Public Sector Accounting Discussion Group (2016). Public Sector Accounting Discussion Group: Report on the Public Meeting November 18, 2016. <http://www.frascanada.ca/standards-for-public-sector-entities/public-sector-accounting-discussion-group/search-past-meeting-topics/item84146.pdf>

ⁱⁱⁱ Town of Gibsons (2017). Advancing Municipal Natural Asset Management: The Town of Gibsons Experience in Financial Planning and Reporting. <https://mnai.ca/media/2018/01/GibsonsFinancialPlanningReport-WEB.pdf>

^{iv} Interview with Isabel Gordon (2018). Available at <https://mnai.ca/an-interview-with-isabel-gordon/>

^v Insurance Bureau of Canada (2018). Combatting Canada's Rising Flood Costs: Natural infrastructure is an underutilized option.

^{vi} Insurance Bureau of Canada (2018).

^{vii} Town of Gibsons (2017).

^{viii} Project details can be found at, for example, <https://mnai.ca/and-then-there-were-11/>

^{ix} Interview with Isabel Gordon (2018).

^x Michelle Molnar quoted in Gibsons (2017).