

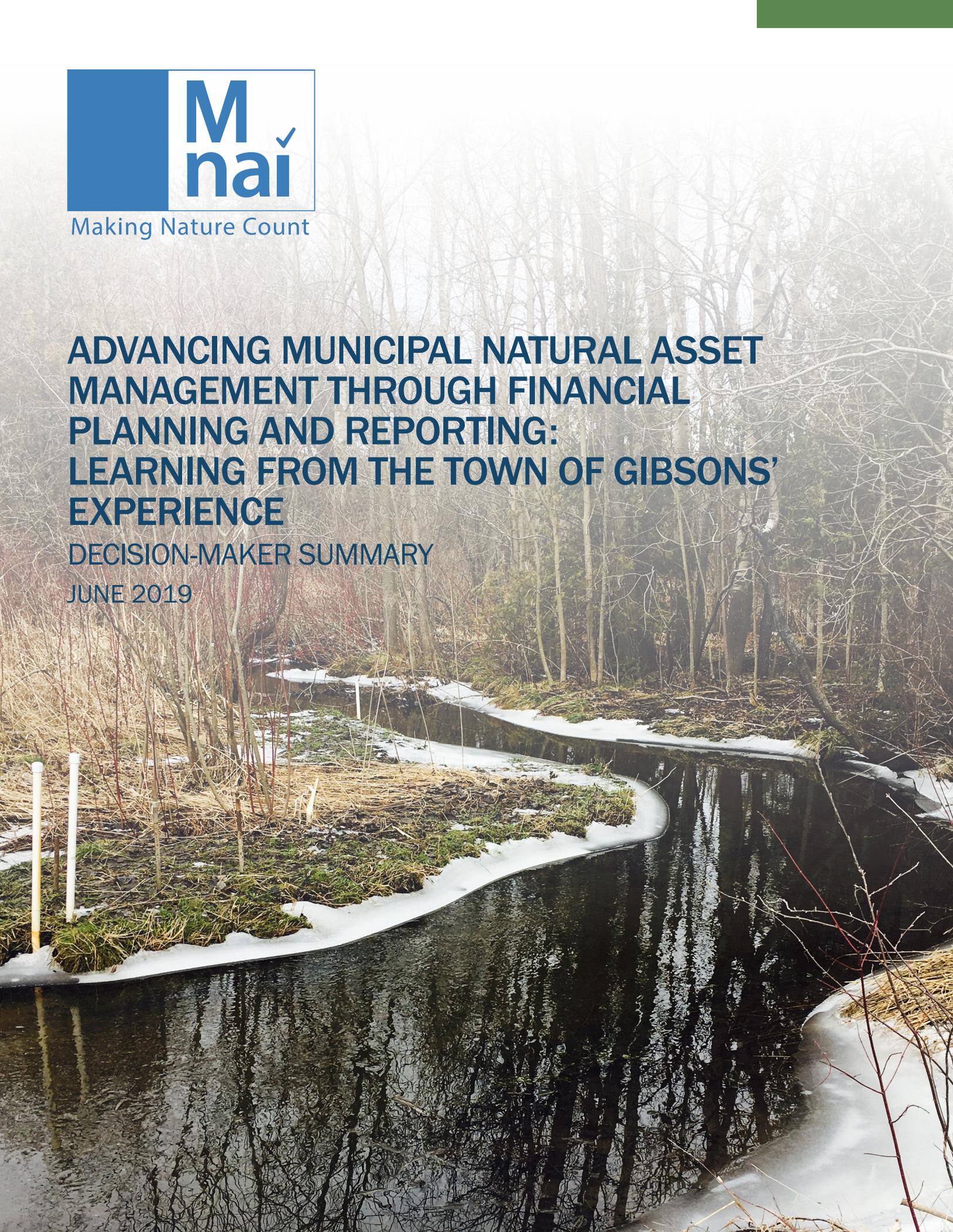


Making Nature Count

# ADVANCING MUNICIPAL NATURAL ASSET MANAGEMENT THROUGH FINANCIAL PLANNING AND REPORTING: LEARNING FROM THE TOWN OF GIBSONS' EXPERIENCE

DECISION-MAKER SUMMARY

JUNE 2019





# THE MUNICIPAL NATURAL ASSETS INITIATIVE: INVESTING IN NATURE

The Municipal Natural Assets Initiative (MNAI) is changing the way Canadian municipalities deliver everyday services, increasing the quality and resilience of infrastructure at often lower costs and reduced risk. The MNAI team provides scientific, economic and municipal expertise to support local governments in identifying, valuing and accounting for natural assets in their financial planning and asset management programs, and in developing leading-edge, sustainable and climate resilient infrastructure.

## Decision-Makers Summary Series

This summary is part of a series designed to provide local governments with easy-to-access information to help with adoption of municipal natural asset management. These summaries have been drawn from five reports published by the MNAI in 2017-2019. Copies of these reports and complete lists of sources are available at: [www.mnai.ca](http://www.mnai.ca). Municipal decision-makers, staff with responsibility for managing municipal assets, and financial and accounting staff will find the information helpful in building and scaling up their own municipal natural asset management efforts. Further, it may be of interest to asset managers in provincial and federal governments, natural resource companies, and universities as early evidence suggests municipal natural asset management approaches can be adapted in other decision-making contexts<sup>1</sup>.

This summary outlines lessons learned from the Town of Gibsons, located in British Columbia, Canada. The findings are based on the Town's pioneering work to include natural assets in financial planning and reporting for municipal asset management.<sup>2</sup> The summary also outlines needs for future research and policy development.

# MNAI Summary Report Series

1. *What are Municipal Natural Assets? – Defining and Scoping Municipal Natural Assets*
2. *Advancing Municipal Natural Asset Management Through Financial Planning and Reporting: Learning from the Town of Gibsons' Experience*
3. *Advancing Municipal Natural Asset Management Through Collaborative Strategies for Private Lands*
4. *Advancing Municipal Natural Asset Management Through Professional Planning: Twelve Action Steps*
5. *Advancing Municipal Natural Asset Management Through Infrastructure Funding Opportunities*

Copies of these reports, complete with sources and many other resources are available at [www.mnai.ca](http://www.mnai.ca).

## Acknowledgements

This is a summary of *Advancing Municipal Natural Asset Management: The Town of Gibsons' experience in financial planning & reporting* prepared by the Town of Gibsons in collaboration with the MNAI technical team.

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# Introduction

Canadian local governments are seeking new strategies to deliver their core services in more financially and environmentally sustainable ways, including implementing municipal asset management as a key tool to manage infrastructure. Municipalities are increasingly recognizing that natural assets<sup>3</sup> such as aquifers, forests, streams and foreshores can provide equivalent or better services than many engineered assets. Municipal natural asset management offers a sustainable solution to the multifaceted problems of supplying municipal services in the face of aging infrastructure, urban growth, and declining budgets. As this approach is being implemented in a growing number of Canadian municipalities, it is important to support the development of best practices and an understanding of how to facilitate widespread adoption of municipal natural asset management.

The Town of Gibsons, British Columbia (B.C.)<sup>4</sup> is North America's first community to experiment with strategies to integrate natural assets into municipal asset management - including financial planning and reporting. While the Town encountered initial challenges to integrating natural assets into financial planning and reporting,<sup>5</sup> Gibsons has found practical solutions that could be applicable to other local governments. These solutions are provided in this summary based on the underlying report.

## What is Municipal Natural Asset Management?

Modern asset management focuses on sustainable service delivery, rather than the individual assets that deliver services like stormwater management, flood management and provision of drinking water. For example, if a service is delivered reliably and cost effectively, it does not matter if that service is provided by an engineered or natural asset (Box 1). Municipalities are increasingly recognizing that natural assets,<sup>6</sup> such as aquifers, forests, streams and foreshores, can provide services equal or better to many engineered assets. Moreover, they can often do so at a fraction of the cost of engineered assets, and usually with other benefits such as increased community resilience to extreme weather events. Deliberate management of natural assets to provide sustainable services to municipalities – or municipal natural asset management – harnesses this potential, while offering a solution to the problems of aging infrastructure, urban growth, declining budgets, and funding requirements for ecosystem management.<sup>7</sup>

### Box 1: Defining assets and municipal natural assets

“Assets” are the physical infrastructure managed or operated by local governments to provide service delivery including, but not limited to water and wastewater systems, drainage and flood protection systems, transportation systems, civic facilities, parks and fleets. Asset Management BC also includes natural resources (or natural assets) and the essential ecological functioning that nature provides in their definition, however, these are not included under Generally Accepted Accounting Principles.<sup>8</sup>

“Municipal natural assets” refer to the stocks of natural resources or ecosystems that contribute to the provision of one or more services required for the health, well-being and long-term sustainability of a community and its residents.<sup>9</sup>



Overall, decision-making in the Town of Gibsons, B.C., has changed significantly as a result of municipal natural asset management (Box 2). The Town has reduced capital and operating costs, reduced risks, and improved decision-making, and has encouraged a systems approach in their local government. Municipal natural asset management has helped the Town to close the gaps between what is required for services in new developments, and what it can afford to maintain.

### Box 2: How municipal natural asset management has changed decision-making in the Town of Gibsons, B.C.

Before municipal natural asset management	After municipal natural asset management
Gibsons did not fully recognize or understand services provided by natural assets	Gibsons' strategic policy, and financial and operational decisions increasingly reflect importance of natural assets
Inventories did not include natural assets	Inventories are beginning to include natural assets
Gibsons had incomplete view of which assets provided vital services	Gibsons understands value of key assets – including natural ones – in terms of municipal service delivery
Bylaws did not reflect role of natural assets	Several bylaws now recognize role of natural assets
Development permitting focused on clearing land, and designing and building new engineered assets	Development permitting focuses on prioritizing and making better use of existing assets and building nature-like assets
Departments worked in silos according to their specific mandate	Departments work together to maintain asset service levels
Gibsons did not apply for, nor receive external funding for municipal service functions that natural assets perform	Gibsons has received external funding for municipal service functions that natural assets perform
Financial reporting made no mention of natural assets	Natural assets are noted in financial plans and in notes section of annual financial reports
Town of Gibsons applied development charges to engineered assets only	Town of Gibsons now uses development charges to support rehabilitation of natural assets

# Advancing Municipal Natural Asset Management through Financial Planning and Reporting

The Public Sector Accounting Board (PSAB) Handbook that currently provides guidance for public sector accountants limits the consideration of natural assets within public sector financial statements. Specifically, the PSAB Handbook prohibits ‘inherited’ natural resources from being recognized, arguing that “the costs, benefits and economic value of such items cannot be reasonably and verifiably quantified using existing methods.” Current standards only allow the recognition of ‘purchased’ natural assets where they meet certain criteria.<sup>10</sup> However, most recently, Infrastructure Canada has begun to broaden the way it defines eligibility as tangible capital assets to include natural assets and green infrastructure (See Report #5 *Advancing Municipal Natural Asset Management Through Infrastructure Funding Opportunities*).

The Town determined an important distinction can be made between financial planning and financial reporting, wherein most aspects of financial planning are not affected by the PSAB Handbook’s restrictions. As a result, Gibsons now integrates natural asset management into its municipal finance planning (Figure 1).



Figure 1: Linkages between asset management and financial planning and reporting (adapted from Asset Management BC 2013)

# Key Findings for Local Governments

Based on the experience of the Town of Gibsons, MNAI has compiled ten key findings for local governments to consider when scaling up and integrating natural asset management into municipal financial planning and reporting:

## **1. Recognize natural assets in the notes section of annual financial statements & other documents**

PSAB's current Handbook excludes natural assets from being recognized as Tangible Capital Assets within public sector financial statements. As mentioned above, this is in part because they judge that "the costs, benefits and economic value of such items cannot be reasonably and verifiably quantified using existing standards."<sup>11</sup> Local governments can, however, immediately use Notes sections in annual financial statements, departmental reports, municipal publications and annual public meetings to describe their approach to municipal natural asset management and financial planning aspects. Gibsons added a statement to its Significant Accounting Policies – Tangible Capital Asset Note in its financial statements to acknowledge the importance of natural assets and the need to manage them in conjunction with engineered assets.<sup>12</sup>

Further, an important distinction can be drawn between financial reporting and financial planning. Notwithstanding the PSAB guidance, there are many opportunities to incorporate natural assets into financial planning throughout the year.

## **2. Remember: natural asset registers can come later**

When local governments are starting municipal natural asset management efforts and considering only a few natural assets, they need not include them in asset registers. As work progresses, they can integrate natural assets into existing local government asset registers—whatever form these take—and use them as a good starting point to consolidate and track information like quality and levels of service of the asset. However, asset registers are not a codified requirement of asset management, nor are they essential to getting started.

## **3. Understand community reliance on natural assets & associated risks**

Local governments must disclose legal cases giving rise to liabilities but are not required to document risks associated with changes or damages to natural assets. Gibsons has established the importance of documenting and communicating risks to their natural assets as part of their asset management. The Town uses a basic, indicative risk assessment of natural assets to prioritize assets that require more detailed assessments (Box 3).

### Box 3: Example of basic risk assessment of natural assets

Natural asset (and related services)	Hazards	Impact	Likelihood	Risk*
Aquifer (Water provision)	Leak from gas storage tank	High	Medium	High
	Spill from transport truck	High	Low	High
Foreshore (Protection of business and residential districts from storms)	Storms, development	High	Low	Medium-high
Healthy creek distant from developments (Stormwater absorption, conveyance, and flood protection)	Development and overuse	Low	Low	Low
Degraded creek near area with land intensification (Stormwater absorption, conveyance, and flood protection)	Development and overuse	Medium	High	High

\* Risk = Likelihood of Event \* Impact of Event

#### 4. Encourage integrated approaches for more effective service delivery

Prior to the Town of Gibsons' decision to define nature as an asset, decisions regarding new developments missed the opportunities to recognize the services provided by natural assets. This typically led to higher than required service levels for new developments. It also resulted in focusing on engineered or bio-mimicry solutions, overlooking the services provided by existing natural assets.

Recognizing the role of nature in municipal service delivery has resulted in a smaller, lower-cost asset inventory. The Town now considers developments more holistically by initially assessing options to preserve, maintain, or enhance existing natural assets and the services they provide, before proposing new built assets. As a result, municipal departments are working closely together to enable more effective, lower-cost service delivery. For example, the review of Gibsons' Integrated Stormwater Management Plan (ISMP), evaluated the role that natural assets can play to reduce the need for built assets to accommodate the Town's growth; and, recent changes to subdivision bylaws will reflect the importance of natural assets and the services that they provide for new developments.

#### 5. Think in terms of lifecycle costing & investment returns

A life-cycle approach, in regard to costing and assessment of the environmental impacts, is important for sound financial investments. Taking into consideration only the immediate capital

costs hides the expenses that will occur over the life-span of an asset. The Town of Gibsons' now compares the life-cycle costs of natural and engineered assets before making capital investment decisions. Existing natural assets require zero or low-cost upfront capital costs compared with engineered alternatives. For example, Gibsons avoided a \$4 million capital investment in a stormwater pipe by investing in a natural asset-based alternative expected to cost only \$900,000. The nature-based option will be paid in instalments over time, whereas the engineered asset required up-front capital investment. Furthermore, the operational and maintenance costs for the natural asset are expected to cost \$15,000 every four to five years in dredging costs, a lower cost compared to the on-going costs of the engineered assets.

## **6. Consider broader park management objectives**

The Town of Gibsons traditionally managed municipal parks solely for recreational purposes. However, municipal natural asset management encourages broader park management objectives. In this case, parks can be managed and maintained for broader objectives and outcomes such as stormwater management services.

## **7. Include natural assets in long term financial plans**

Integrating natural assets into municipal financial planning has proven to be a similar process to any other asset. Costs associated with the ongoing operations and maintenance of natural assets have been integrated into Gibsons' annual operating budget. Whereas, capital improvements related to natural assets, such as the White Tower Park Pond design and construction, now appear in the Town's five-year general capital budget. This allows these costs to be considered when determining the *Annual Cost for Asset Replacement*, which informs the recommended development rate increases.

## **8. Consider Development Cost Charges to fund natural asset restoration & enhancement**

In British Columbia, Development Cost Charges (DCCs), can support natural asset rehabilitation in situations where the project meets the requirements of a capital cost supporting an eligible service, and where the restoration and enhancement will directly or indirectly service the development in which the charge is imposed. The Town of Gibsons amended its DCC bylaw and now collects development charges for improvements to natural areas. Other local governments could do the same to direct more resources to natural asset regeneration and maintenance.<sup>13</sup> Ontario does not collect development charges for improvements to natural areas.

## **9. Get to know available & potential funding sources for natural asset management, rehabilitation & enhancement**

As local governments establish an inventory for their natural assets, they will be well positioned to take advantage of increasing funding sources for natural assets management, rehabilitation and enhancement. Gibsons received almost \$250,000 through the former federal-provincial Clean Water and Wastewater Fund to update its Integrated Stormwater Management Plan, which included integrating the role and value of natural assets that underpin the Town's stormwater management system. Current federal funding sources that offer opportunities for funding natural asset management include programs under the Government of Canada's 2017 Investing in Canada Plan, and funds managed by the Federation of Canadian Municipalities (FCM).<sup>14</sup> (see Report #5 for more information on funding programs; Advancing Municipal Natural Asset Management Through Infrastructure Funding Opportunities).

## 10. Don't let jurisdiction get in the way of service

Asset ownership should not be a limitation or barrier to considering the services they provide. The Town of Gibsons manages Charman Creek – running through its boundaries and providing stormwater services – even though it falls under provincial jurisdiction. It may seem counter-intuitive to dedicate resources to maintaining a natural resource under another jurisdiction, but Gibsons understands both the long-term and potentially perpetual benefits of stormwater services from the Creek and the alternative requirement of an engineered asset. Watershed integrity and the maintenance of services may require more inter-jurisdictional governance and land ownership using collaborative approaches with other entities and/or levels of government.

## Looking Forward

The MNAI recently made a submission of general and technical recommendations (with 33 other organizations), to PSAB, in response to the proposed changes to the PSAB Conceptual Framework and Reporting Model, which advocate for an increase in the recognition of natural assets in Canadian public sector accounting.<sup>15</sup> The submission also recommended future research and policy development needs.



# Endnotes

1. A description of broader tools and lessons related to municipal asset management are documented in Brooke et al, 2017 and Town of Gibsons, 2014.
2. “Advancing Municipal Natural Asset Management: The Town of Gibsons experience in financial planning and reporting” (Town of Gibsons, 2017) is based on Town staff observations and findings since 2013, interviews with Town staff, Town documents, and analyses completed with Town partners e.g. Sahl et al. 2016. Terms used are drawn from “Defining and Scoping Municipal Natural Assets” (MNAI, 2017). Because municipal natural asset management is an emerging practice, lessons are not yet fully-refined or corroborated by experiences in other contexts, so their applicability may vary by provincial jurisdiction.
3. Natural assets refer to natural resources and ecosystems that contribute to provision of one more services required for the health, economic performance and long-term sustainability of a community and its residents.
4. The Town of Gibsons – a founding member of the MNAI - is a community of 4,600 residents located on BC’s Sunshine Coast.
5. Town of Gibsons, 2017. See footnote 3 for full reference.
6. Natural assets refer to natural resources and ecosystems that contribute to provision of one more services required for the health, economic performance and long-term sustainability of a community and its residents.
7. See Brooke et al., 2017 and MNAI, 2017 for further details.
8. This definition of asset management is based on Asset Management for Sustainable Service Delivery: BC Asset Management BC, 2013 (abbreviated above as Asset Management BC 2013). However, it should be noted it is not accepted under Generally Accepted Accounting Principles.
9. Municipal Natural Assets Initiative, 2017.
10. Public Sector Accounting Board, 2009.
11. See for example the Municipal Finance Officers Association of Ontario newsletter at: [http://www.mfoa.on.ca/MFOA/webdocs/PSAB\\_Newsletter\\_No\\_23.pdf](http://www.mfoa.on.ca/MFOA/webdocs/PSAB_Newsletter_No_23.pdf)
12. See Annex 1 in Town of Gibsons, 2017.
13. Eligible drainage projects are discussed in Chapter 2 of the *Development Cost Charge Best Practice Guide* provided by the BC Ministry of Municipal Affairs and Housing. Local governments considering inclusion of drainage capital project costs related to natural assets in a DCC bylaw should consult with staff in the relevant Ministry to determine project eligibility.
14. MNAI. 2019. *Opportunities to Fund Municipal Natural Asset Management Projects: An Overview of Six Federal Infrastructure Funding Programs*. [www.mnai.ca](http://www.mnai.ca)
15. For further details, see <https://mnai.ca/opening-the-public-sector-accounting-door-for-natural-assets/>.



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