Making Nature Count

The business case for Town of Gibsons' natural assets financial planning

Presentation to: Great Lakes GI Champions workshop
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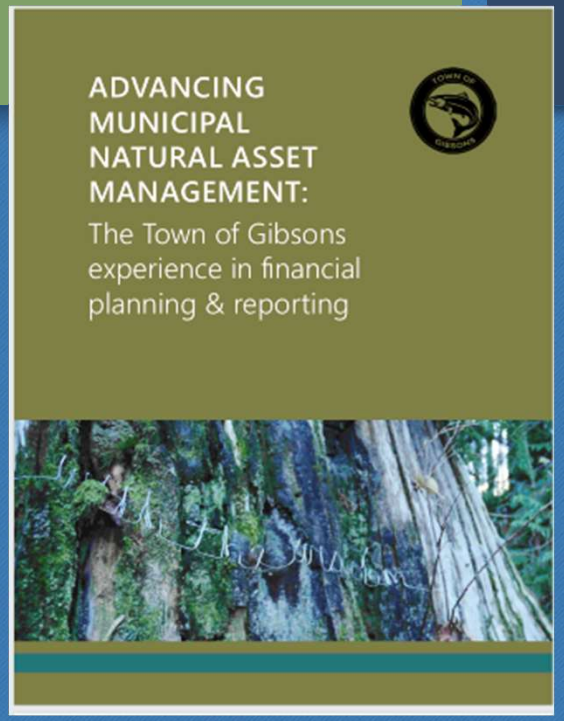
June 25, 2019

Agenda

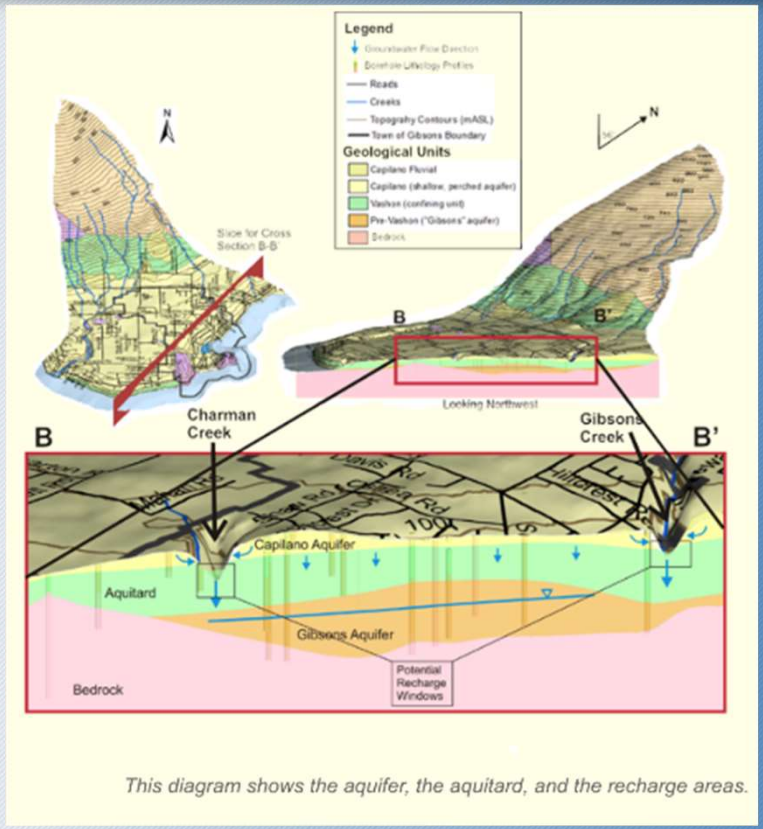
Purpose: To share initial efforts to document the overall impacts, benefits and lessons of municipal natural asset management. Specifically, a subset of issues related to financial planning and reporting.

1. How Gibsons started their road to natural asset management.
2. Natural asset management methodology
3. 10 lessons learned



For more information see MNAI website: https://mnai.ca/media/2018/01/GibsonsFinancialPlanningReport-WEB.pdf

Gibsons' road to natural asset management



This diagram shows the aquifer, the aquitard, and the recharge areas.

It all started with the Aquifer Mapping Study:

- Aquifer mapping study released in 2013
- At this time no natural assets were included in their financial statements
- Passed a 25% increase in water rates, which was publicly supported

Then came the realization of undocumented liabilities

After releasing Aquifer mapping study (2013), the town was focused on financial reporting for asset management and couldn't determine how to complete reporting for natural assets. After a discussion with their financial auditors, they decided to switch the discussion to a focus on risks & liabilities.

WhiteTower Park study: the Town determined that the stormwater services provided by ponds in White Tower Park have a value of $3.5-$4.0 million if they had to be replaced by an engineered asset, a cost that can be avoided through regular maintenance in the Park.

Figure 1. Gibsons' findings on linkages between asset management and financial planning and reporting.
(Figure adapted from Asset Management BC)

Figure 1. The Town of Gibsons' findings on linkages between asset management and municipal finance cover a wide spectrum of planning and reporting issues (Figure adapted from Asset Management BC 2013)

Defining natural assets

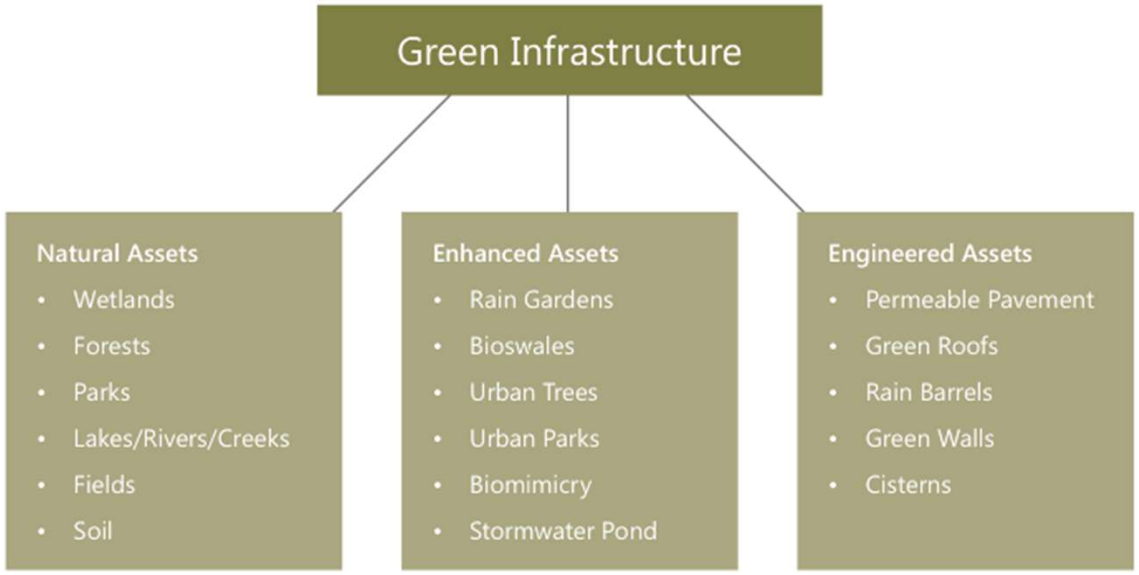


Figure 2. The terms natural asset and green infrastructure are often used interchangeably, but have different meanings. "Natural assets" refers to the stock of natural resources and ecosystems that yield a flow of benefits to people. "Green infrastructure" also includes designed and engineered elements that have been created to mimic natural functions and processes in the service of human interests (text and figure from Municipal Natural Assets Initiative 2017).

"Assets" are the physical infrastructure owned by local governments to enable service delivery including, but not limited to: water and wastewater systems, drainage and flood protection systems, transportation systems, civic facilities, parks and fleets. It also includes natural resources (or natural assets) and the essential ecological functioning that nature provides (based on Asset Management BC 2013).

The term "municipal natural assets" refers to the stock of natural resources or ecosystems that is relied upon, managed, or could be managed by a municipality, regional district, or other form of local government for the sustainable provision of one or more municipal services

Lesson #1: It is not necessary to wait for a natural asset financial reporting requirement before incorporating natural assets into overall asset management.

*Bottom line: In the immediate term, local governments can 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, and focus on financial **planning** aspects of municipal natural asset management.*

Strategic, policy, financial and operational decisions now increasingly reflect the importance of natural assets in providing vital services to citizens.

The PSAB Handbook limits what can be reported within public sector financial statements by excluding natural assets from recognition as Tangible Capital Assets in the accounting standards.

As a first step to recognition, the Town has added a statement to the Significant Accounting Policies - Tangible Capital Asset Note in their financial statements to acknowledge the importance of natural assets and the need to manage them in conjunction with engineered assets.

Lesson #2: *Natural asset registers add value but are not an essential first step*

***Bottom line**: When local governments are starting municipal natural asset management efforts and considering only a few natural assets, including them in asset registers is not essential. As work progresses, natural assets can be readily included, can be integrated into existing local government asset registers – whatever form these take - and it can be helpful to do so.*

Gibsons has two registers: one is high level for financial reporting, the other detailed for asset management purposes. To date, the Town's natural assets are not included in either. This has not inhibited improved management of the natural assets. Nevertheless, efforts are underway to determine how best to integrate them in registers in future years. Challenges arising for the Town as it does so include how to classify natural assets that perform many functions – for example, an area that is used for a park as well as stormwater management; and, how to record assets that are used by the Town but under the jurisdiction of others

Lesson #3: Gathering natural asset risk information supports more informed and integrated decision-making

***Bottom line**: Understanding community reliance on natural assets and conducting a basic risk analysis that includes information on asset quality does not need to be difficult, and may reduce risk and the chance of unpleasant surprises.*

Natural asset	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

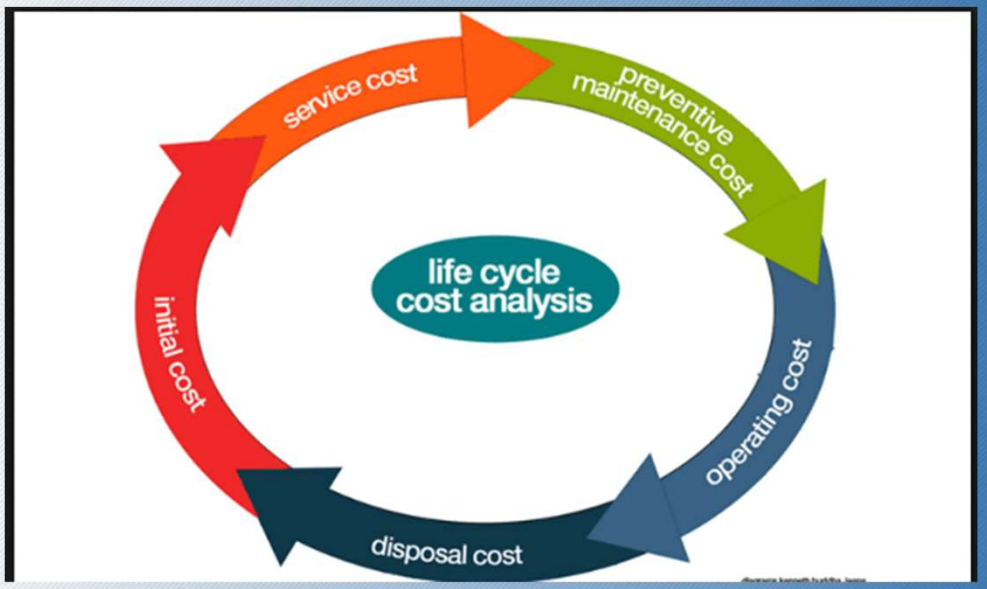
Figure 3. A basic yet indicative risk assessment of natural assets can help with prioritization

Lesson #4: Municipal natural asset management can encourage integrated approaches

***Bottom line**: Municipal natural asset management can lead to integrated approaches within local governments and this can support effective service delivery.*

Lesson #5: Think in terms of lifecycle costing and investment returns

***Bottom line**: Considering only immediate costs hides expenses that occur over the life of the asset. Also, engineered assets must be disposed of (and replaced) at the end of their life, whereas natural assets may well grow in value and have no end of life.*

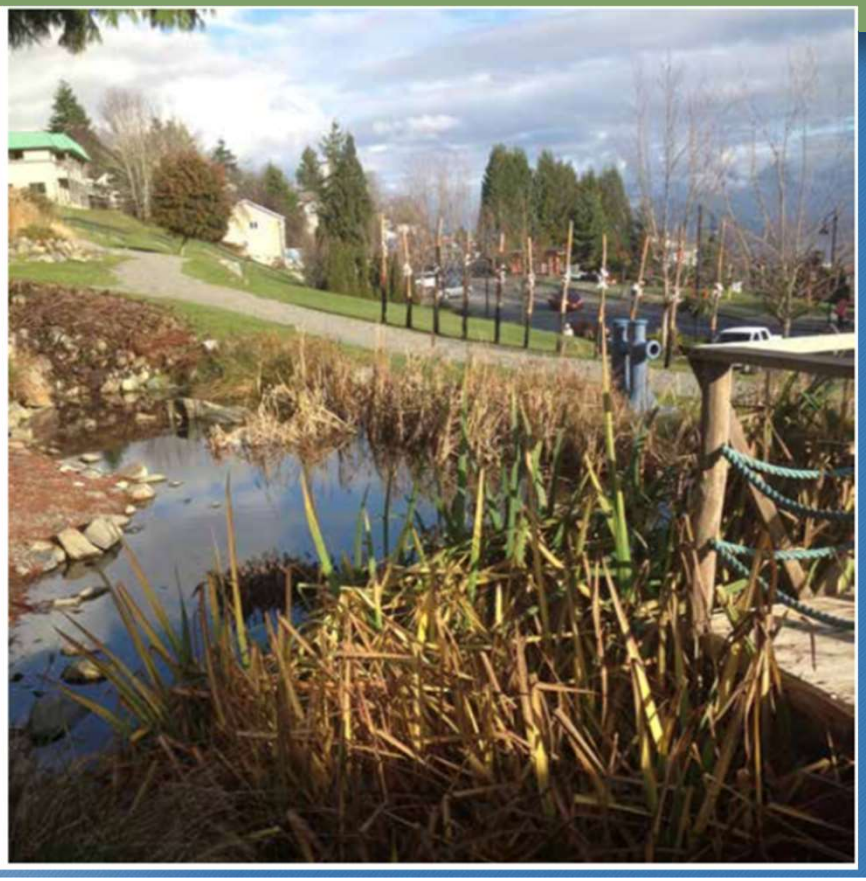


As part of its more integrated decision-making, the Town, where relevant, now compares the lifecycle of natural and engineered assets before making capital decisions, including:

- **Start-up costs and financial flexibility.**
- **Operating and maintenance costs .**
- **End-of-life**

Lesson #6: A park is not always just a park

Assets such as the Town's parks are now being managed for a broad set of service objectives and outcomes.



Lesson #7: Including natural assets in financial planning can be straightforward

***Bottom line**: Integrating natural assets into financial planning is not much different from dealing with any other asset.*

The Town produces an overall 5-year financial plan supported by detailed plans divided by asset classes such as water or sanitary sewers. Detailed plans may cover periods from 20 to 100 years. In this context, the Town's approach to including natural assets is straightforward. For example:

- Budgeted costs relating to the Gibsons Aquifer are operational and reflected as "Aquifer Monitoring = $30,000 / year" and "Cross Connection Control Testing = $25,000 / year" in the 2017 Water Fund Operating Budget, and inflated by 2% each year in the Long-Term Financial Plan. The only capital project planned for the aquifer at this time is the installation of an additional monitoring well.
- Capital improvements related to the White Tower Park Pond design and construction appear in the Town's 5-year general capital budget.

Lesson #8: Development Cost Charges can fund natural asset restoration & enhancement

***Bottom line**: In British Columbia, Development Cost Charges (DCCs) can support the rehabilitation of natural assets in situations where the project meets the requirements of an eligible capital cost that supports a DCC-eligible service, and the restoration and enhancement project will service, directly or indirectly, the development in which the charge is imposed.*

In British Columbia, Division 10 Part 26 of the *Local Government Act* sets out how local government can apply DCCs, which are intended to pay for common services incurred as a direct result of a new development. DCCs can offset costs to the local government by ensuring that one or more users or beneficiaries pay part or all of new costs associated with a development. The *Local Government Act* permits DCCs to be established for providing, constructing, altering, or expanding facilities related to:

- Roads, other than off-street parking;
- Sewage;
- Water;
- Drainage; and,
- Parkland acquisition and improvement.

Lesson #9: Know and use the available funding sources for natural asset management, rehabilitation and enhancement

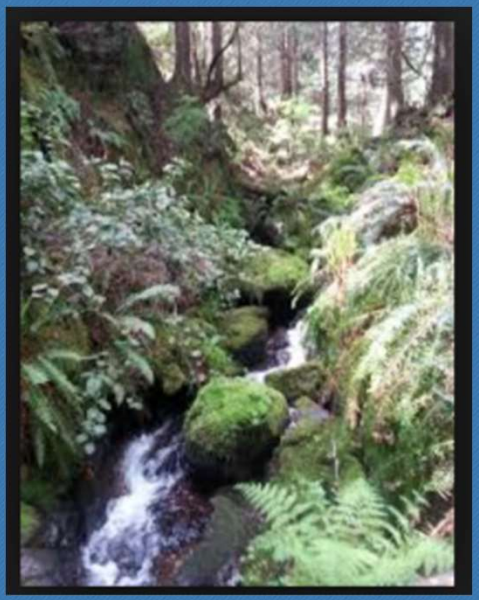
***Bottom line**: There are several funding sources for natural assets management, rehabilitation and enhancement. By developing an evidence base around natural assets, local governments can be well-positioned to take advantage of these.*

The Town received approximately $249,000 through federal-provincial ***Clean Water and Wastewater Fund*** to update their Integrated Stowmwater Management Plan (ISMP), which will have a focus on the role of natural assets that underpin the Town's stormwater management system.

Other funding sources are on the horizon across Canada. The ***Investing in Canada Plan*** announced by the Federal government in 2017 provides for Integrated Bilateral Agreements with Provinces. These Agreements include a national $9.2 billion *Green Infrastructure Stream* enabling the use of natural infrastructure such as natural shorelines and wetlands for adaptation, resilience and disaster mitigation. If appropriate definitions, direction, guidance and targets are put in place by provinces, then this will result in a substantial boost for the health of natural assets

Lesson #10: Service can be more important than jurisdiction

***Bottom line**: Asset ownership should not be a barrier to considering the services they provide.*



Charman Creek runs through the municipal boundaries of the Town and provides stormwater services. The Town manages Charman Creek as a natural asset even though it is under the jurisdiction of the Province of BC. Practically, this means that the Town seeks permission to enter riparian areas and maintain, rehabilitate and/or enhance the asset.

"Doing nothing at the creek, or the bare minimum, would be very short-term thinking from a financial perspective. We are prepared to pay a little more now, for a long-term or potentially perpetual benefit of stormwater services from the Creek for which we would otherwise require an engineered asset." (Emanuel Machado, CAO, Town of Gibsons)

Box 3: Decision-making in the Town: Then and Now

Before Municipal Natural Asset Management	After Municipal Natural Asset Management
Services provided by natural assets were not fully recognized or understood.	Strategic, policy, financial and operational decisions increasingly reflect the importance of natural assets.
Inventories did not include natural assets.	Town is beginning to include natural assets in inventories.
Town had a very incomplete view of which assets provided vital services.	Town understands value of key assets – including natural ones – in terms of service delivery.
Bylaws did not reflect the role of natural assets.	Several bylaws now recognize the role of natural assets.
Development permitting focussed on clearing land and then designing and building new engineered assets.	Development permitting focussed more on making better use of existing assets as a priority, and building nature-like assets (e.g. the enhanced assets referred to in Figure 2).
Departments worked in silos according to their specific mandate.	Departments work together to maintain asset service levels.
External funding was not received (or applied for) for the municipal service function that natural assets perform.	External funding has been received for natural assets for the municipal service function they perform.
Financial reporting made no mention of natural assets.	Natural assets are noted in financial plans and in the Notes section of annual financial reports.
Development charges were applied only to engineered assets.	Development charges support rehabilitation of natural assets.

Conclusions reached by the Town of Gibsons

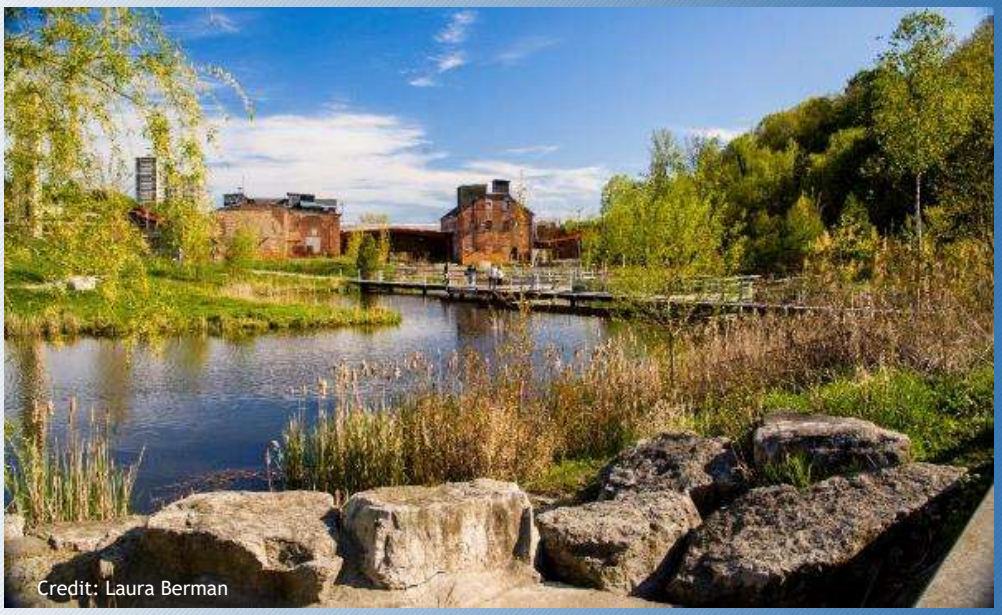
Our Experience

Shows that it pays to invest in nature…

Goal is to have infrastructure assets that are the:

- Most natural
- Most energy efficient
- Most reliable
- Costs the least to operate over long-term…
- Incorporating NC into operations -- a good fit.

How can I get involved?


Credit: Laura Berman

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