



The Corporation of the District of Saanich

C/W July 8/24

Report

RECEIVED

By Tara Da Silva at 12:21 pm, Jun 28, 2024

To: Mayor and Council

From: Harley Machielse, Director of Engineering

Suzanne Samborski, Director of Parks, Recreation and Community Services

Date: June 24, 2024

Subject: Natural Assets Inventory Report

RECOMMENDATION

That Council receive this report for information.

PURPOSE

The purpose of this report is to provide Council with the results of the *Natural Assets Inventory* project for information. This report follows from the natural asset management (AM) update provided to Council on December 11, 2023.

This report:

- Provides the final report of the *Natural Assets Inventory* project (refer to Attachment 1);
- Describes how Saanich's work on natural AM is integrated with other Saanich initiatives related to natural assets, such as the Biodiversity Conservation Strategy, Urban Forest Strategy, and Integrated Stormwater Management Plans; and
- Identifies the next steps for continuous improvement of Saanich's natural AM practices.

DISCUSSION

Background

Nature is a key component of a municipal infrastructure system, and the scope of Saanich's AM Program includes engineered and natural assets. Saanich's *AM Strategy*, the road map for the continuous improvement of AM practices, includes the development of a natural assets inventory (Strategy 3, Project 3.1) and a natural AM plan (Strategy 4, Project 4.7).

As reported in the *Natural Asset Management Update* report to Committee of the Whole on December 11, 2023, Saanich received approval for grant funding of up to \$50,000 for the *Natural Assets Inventory* project through UBCM under the Canada Community-Building Fund – 2022 Strategic Priorities Fund. In accordance with the grant agreement, the *Natural Assets Inventory* project scope includes the following:

- Basic inventory
- Preliminary condition assessment
- Preliminary services and performance measures identification
- Preliminary risk identification
- Preliminary valuation
- Collaboration with others
- Final report

Staff retained Natural Assets Initiative (NAI), a Canadian not-for-profit specializing in natural asset management, to provide specialized consulting services for the *Natural Assets Inventory* project, along with their sub-consultant Green Analytics. Work began in fall 2023 and NAI has now completed the report, entitled “*Toward natural asset management in the District of Saanich, British Columbia: Summary of enhanced inventory results and recommendations*”. The report is attached for information and a brief summary is provided below.

Natural Assets Inventory Report

Basic Inventory

Natural assets are 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. The natural asset hierarchy is shown in Figure 1.

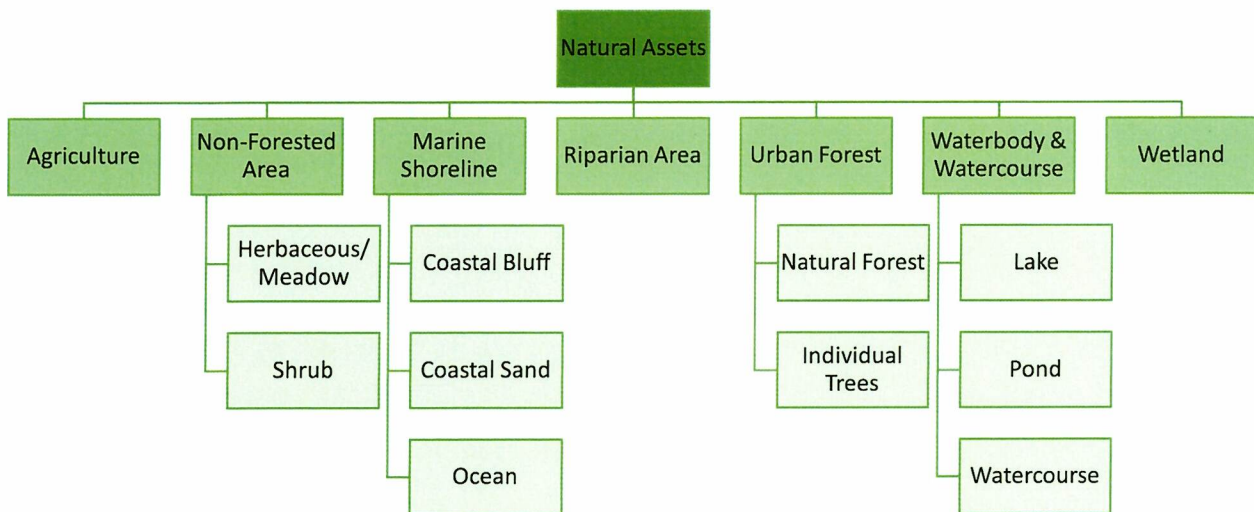


Figure 1 - Natural Assets Hierarchy

Existing data in Saanich's Geographic Information System (GIS) was used to estimate the current quantities of each natural asset located within Saanich's municipal boundary, including areas of public and private ownership. The results indicate that natural asset areas cover 6,375 ha, which is approximately 57% of Saanich's total area, plus 377,712 individual trees and 142 km of watercourses. Details of the inventory are found in an online natural assets dashboard that NAI created as part of the project, which is found here: go.greenanalytics.ca/Saanich

Preliminary Condition Assessment

The report summarizes the results of a preliminary desktop condition assessment, that used various criteria to estimate the physical condition of each natural asset on the same five-level scale as Saanich's engineered assets (i.e. range from Very Good to Very Poor). The criteria were based on industry best practice, and examples include natural area patch size, proximity to other natural assets, extent of complimentary land uses, and biodiversity condition. Overall, the preliminary condition assessment shows that most of Saanich's natural assets are in Very Good or Good physical condition. The report recommends that future improvement actions include site inspections to refine condition ratings.

Preliminary Services and Performance Measures Identification

The report identifies Saanich's municipal services that are supported by natural assets, and the many co-benefits that enhance the liveability and resilience of the community. It also includes preliminary identification of performance measures, including example community and technical levels of service for further consideration as part of the *Natural AM Plan* project.

Preliminary Risk Identification

The preliminary risk identification includes nineteen hazards facing Saanich's natural assets, which are grouped under three primary drivers: Climate Change, Development Pressure, and Lack of Capacity. The preliminary risk associated with each hazard was developed based on the likelihood of it occurring multiplied by the impact if it occurs. Ten hazards were identified as being a high risk to Saanich's natural assets, and the report describes potential opportunities for managing these risks.

Preliminary Valuation

Natural assets have intrinsic value that is inherently irreplaceable, and therefore difficult to express in economic terms. However, as NAI outlines in the report, understanding the value of natural assets is essential for municipalities to be able to properly account for their worth in strategic asset management decision-making, and to ensure that natural assets are appropriately managed for sustainable service delivery. Therefore, this project included a high-level, preliminary valuation of Saanich's natural assets.

The report describes the approach used, which involved using costs derived from other locations (i.e. "benefit-transfer method"), in order to estimate order-of-magnitude values, from two perspectives:

- Annual Service Value (\$/year) - The annual economic value that the community gains from natural assets as measured by changes in human well-being (i.e. the benefit outcome of services supported by natural assets). Note that this valuation is typically an underestimate because it is not possible to determine the value of all services provided by a natural asset.
- Replacement Value (\$) - The economic value of natural assets that represents the cost of replacing the levels of service provided by natural assets with engineered assets or the cost of rehabilitating (restoring) natural assets to their optimal natural functioning. Note that for the purposes of this report, replacement value estimates are based solely on restoration costs because detailed modelling would be required to determine the capacity needs of replacement engineered assets.

The preliminary valuation results provide a large range of estimated values, which is common using the “benefit-transfer method” because the primary sources of data are from a range of locations and climates, and because this is an emerging area of research and asset management practice. Saanich is one of the first municipalities in Canada to start the process of valuing natural assets, and this work will be refined over time through continuous improvement.

Collaboration With Others

Collaboration with others is an important part of natural asset management because, in some cases, municipal service delivery relies on natural assets that are not owned by the municipality.

Information about this project was shared with First Nations, including the WSÁNEĆ Leadership Council Society, Songhees Nation, Esquimalt Nation, BO’KEĆEN (Pauquachin First Nation), SṪÁUTW (Tsawout First Nation), WJOLEŁP (Tsartlip First Nation), and WSIKEM (Tseycum First Nation). Saanich looks forward to ongoing conversations and collaboration with First Nations regarding natural asset management.

As part of this project, Saanich hosted a collaboration workshop with its neighbouring municipalities and the CRD to identify natural areas of shared interest. For example, shared watersheds that overlap municipal boundaries were identified as being of shared interest, and there is existing collaboration through the CRD’s Integrated Watershed Management (IWM) Committee.

In addition, community engagement was initiated as follows:

- The draft report was presented to the Natural Areas, Parks & Trails Advisory Committee and the Sustainability & Climate Action Advisory Committee in May 2024, and feedback was incorporated into the final report.
- Information about the project was provided at the public open house for the Biodiversity Conservation Strategy/Urban Forest Strategy on May 14, 2024.
- Saanich’s external website includes a webpage with information on natural asset management (www.saanich.ca/assetmanagement). The webpage will be updated to include this report.

Next Steps

In accordance with Saanich's *AM Strategy*, the next step in Saanich's natural asset management journey is to develop a *Natural AM Plan* (Strategy 4, Project 4.7). This project is planned to start in mid-2025 and to be completed by mid-2027. Similar to the AM Plans that will be developed for Saanich's engineered assets, the *Natural AM Plan* will tell the story of how Saanich's natural assets will be managed in order to deliver services to the community at a defined, sustainable level by balancing levels of service, risks and costs, and with consideration for climate change. Saanich's natural asset management planning work will continue to be aligned and informed by other strategic initiatives and plans, as shown in Figure 2.

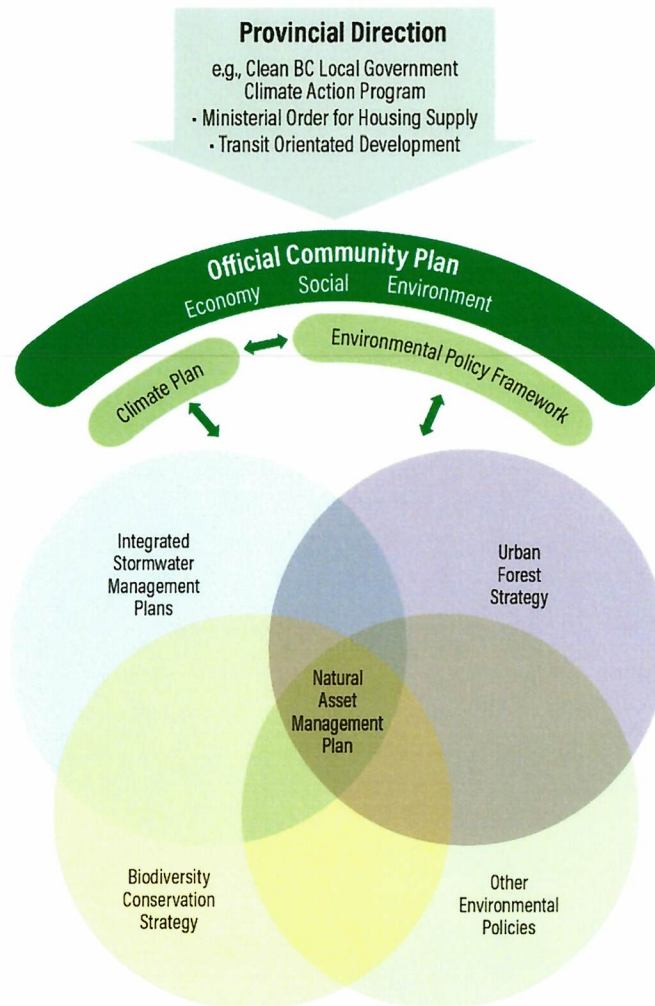


Figure 2 - Conceptual Diagram: Environmental Policy Framework (EPF)¹

¹ District of Saanich, *Saanich Environmental Policy Framework Final Draft* (June 2024)

ALTERNATIVES

1. **Recommended:** That Council receive this report for information.
2. That Council provide alternate direction to Staff.

FINANCIAL IMPLICATIONS

There are no financial implications to this report.

Saanich has been approved for grant funding for the *Natural Assets Inventory* project of up to \$50,000 through UBCM under the Canada Community-Building Fund – 2022 Strategic Priorities Fund. Staff will continue to assess and apply for future grant opportunities related to asset management.

If additional resources are required for the *Natural Asset Management Plan* project, a one-time resource request will be submitted for consideration through the 2025 Financial Plan process.

STRATEGIC PLAN IMPLICATIONS

The work outlined in this report supports Council's 2023-2027 Strategic Plan, which includes the following under the theme of Organizational Excellence, Objective 6.5: "We practice asset management to support the sustainability of our services", Initiative 6.5.3: "Develop asset management plans for engineered and natural assets, with consideration for climate change impacts."

CONCLUSION

The *Natural Assets Inventory* project is now complete, and will support the development of Saanich's first-generation *Natural AM Plan*. Planning for the management of Saanich's natural assets will include development of lifecycle activities and costs, and a funding strategy that balances levels of service, risks and costs for sustainable service delivery. Continuous improvement of Saanich's natural AM practices will support decision-making and improve overall resilience to climate change.

Prepared by



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Approved by



Harley Machielse

Director of Engineering

Approved by



Suzanne Samborski

Director of Parks, Recreation and
Community Services

JMW/jmw

Attachment: Natural Assets Initiative (NAI). (2024). *Toward natural asset management in the District of Saanich, British Columbia: Summary of inventory results and recommendations.* NaturalAssetsInitiative.ca

cc: Paul Arslan, Director of Finance
Trevor Hurst, Chief Information Officer

CHIEF ADMINISTRATIVE OFFICER'S COMMENTS:

I endorse the recommendation from the Director of Engineering and the Director of Parks, Recreation and Community Services.



Brent Reems
Chief Administrative Officer