

**RESORT MUNICIPALITY OF WHISTLER**

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STAFF REPORT TO COUNCIL

PRESENTED: July 19, 2022
REPORT: 22-105
FROM: Environmental Stewardship
FILE: 8365
SUBJECT: MUNICIPAL NATURAL ASSET MANAGEMENT

RECOMMENDATION FROM THE CHIEF ADMINISTRATIVE OFFICER

That the recommendation of the General Manager of Resort Experience be endorsed.

RECOMMENDATION(S)

That Council direct staff to advance the implementation of the Municipal Natural Asset Management initiative.

PURPOSE OF REPORT

Staff are seeking Council support to continue with initiatives related to the Natural Asset Management including future steps to incorporate municipal natural assets into the overall municipal asset management plan.

☐ Information Report ☒ Administrative Report (Decision or Direction)

DISCUSSION

Background

The term *municipal natural assets* refers to the stock of natural resources or ecosystems that a community could rely upon or manage for the sustainable provision of one or more local government core services such as drinking water supply, storm water management, and/or protection from flooding and erosion. A growing number of local governments recognize that it is as important to understand, measure, manage and account for natural assets as it is for engineered assets. Doing so can enable local governments to more cost-effectively provide core services and manage risk in the face of climate change. Outcomes of what is becoming known as municipal natural asset management can include cost-effective and reliable delivery of services, improved risk management, support for climate change adaptation and mitigation, and enhanced biodiversity.

The RMOW's goals in undertaking natural asset management are to manage, monitor and budget in ways that ensure that natural assets continue functioning properly, continue providing vital services to the community and avoid as much as possible the need to invest in expensive engineered assets to deliver the same services that nature currently provides. Understanding the locations and condition of key municipal natural assets also aid in land-use planning and decision making.

More specifically, this initiative will allow the RMOW to develop a holistic approach in which natural assets are an integrated component of asset management and there is an effective monitoring and financial management system in place. This will help manage increasing risks from development pressure, recreation/tourism and/or climate change.

The federal Office of the Superintendent of Financial Institutions (OSFI) recently released updated guidelines advising organizations to minimize climate-related risks for long-term financial stability (see Appendix B). Building resilience against climate-related risks requires organizations to address potential vulnerabilities in their business model and operations. These efforts entail forward-looking approaches that are holistic, integrated, and built on reliable empirical data and sound analyses. Incorporating municipal natural assets into the asset management plan is a significant step in achieving this goal.

The RMOW engaged the Municipal Natural Assets Initiative ([MNAI](#)) in 2020-21 to complete a natural asset inventory and assessment that provides details on the types of natural assets the RMOW relies upon, their condition, and the risks they face as a first step to understanding what such a project would involve and what outcomes could be reasonably expected. MNAI has worked with nearly 100 communities to explore nature's ability to provide municipal services as a long-term, cost-effective and climate-resilient solution to aging infrastructure.

The assessment phase was led by the RMOW Environmental Stewardship department as part of a funding co-application with the Finance team to the FCM and UBCM for asset management planning. A staff team with representatives from Finance, Utilities, Planning, Parks Planning and Infrastructure Services met regularly with the MNAI staff to discuss and develop the natural asset management approach and inventory.

Analysis

There are three phases of a full natural asset management project: assess, plan and implement. In this first step of the assessment phase, the RMOW and MNAI completed the natural asset inventory including a desktop-based condition assessment using RMOW GIS data, and a risk assessment. Next steps are to determine long-term goals and service delivery requirements. The planning phase includes developing a Natural Asset Operation and Maintenance Plan that is integrated into departmental work plans, the municipal Asset Management Plan and long term financial plan. The final phase is Implementation.

The inventory identified surface and groundwater drinking water supplies, flood attenuation and storm water management as top priority services provided by local natural assets.

The risk assessment revealed a variety of risks:

- two high-level risks (forest fire and drought; overuse of trails/dumping was noted as a high risk in 21 Mile Watershed);
- two moderate-high level risks (flooding and development pressure);
- two moderate-level risks (invasive species and construction activity);
- two low-moderate level risks (pollutant loading and political policy change); and
- five low-level risks (overuse of trails/dumping, erosion, absence of flood hazard mapping, absence of land management plans, and absence of monitoring reports).

The identified risks affect natural assets across the RMOW, particularly those in urban areas and the 21 Mile Creek Watershed. The risks identified have the potential to negatively impact natural areas, engineered assets (both those the RMOW owns and does not own), municipal budgets, personal health and safety, and the local economy.

MNAI identified a number of steps that the RMOW could take to further develop the inventory and move to a full natural asset management project. If the RMOW wishes to proceed with a full natural asset management project, including implementation, it will need to consider the following steps:

1. **Confirm scope, roles and responsibilities.**
2. **Fill essential knowledge and data gaps.**
3. **Model the levels of service** that natural assets currently provide and the levels of service under different potential management scenarios, local climate change projections, and rehabilitation or restoration scenarios. Modelling is central to natural asset management as it gives communities the ability to explore how different actions will affect the health and corresponding performance of natural assets.
4. **Economic assessment** to provide a market based indication of (a) the current value of the services from natural assets if they had to be provided by an engineered means, and (b) the costs and values of different interventions in terms of service delivery.
5. **Develop plans** to explore different scenarios. Using modelling, various changes in service levels can be understood and quantified. Corresponding values can also be determined through continued economic assessment. Based on the foregoing, local governments can begin to consider and prioritize actions ranging from status quo to planning, regulatory, financial planning (e.g., incorporating maintenance costs into annual budgets), maintenance, acquisition, and monitoring interventions.
6. **Implementation.**
7. **Monitor program results.** MNAI could stay involved with the community for three years through a monitoring arrangement.

At this time, the staff team continues to work with MNAI to more fully understand the implications of adopting such an approach. To that end, a team workshop facilitated by MNAI is proposed for late August to determine levels of service for the priority ecosystem services in order to obtain a clearer picture on how the initiative may affect work plans and budgets.

POLICY CONSIDERATIONS

Relevant Council Authority/Previous Decisions

Council recognizes and supports the development of the municipal Asset Management Plan led by the Finance department. The 2019 update to the [BC Framework](#), Asset Management for Sustainable Service Delivery, reflects advancements in asset management over the past five years and better integrates land use planning, operations and maintenance, natural assets, and climate change. The work described in this report is well aligned with the BC Framework.

In addition, the RMOW Climate Action Implementation Plan being brought to Council for adoption on August 2, 2022 identifies three Adaptation Goals. Effective adaptation means increasing the resilience of our natural and built environments in order to avoid, prevent or moderate potential harm related to projected local climate changes and related impacts. Adopting a natural assets management program

that aims to maintain optimal ecosystem functioning and resilience of natural areas providing core municipal services will serve all three goals:

- Minimize wildfire threats to human health and safety, private property, infrastructure, wildlife and natural areas;
- Increase the resilience of built assets, infrastructure and services to endure extreme weather and environmental events;
- Protect, support and increase the resilience of local ecosystems, natural assets and biodiversity.

Corporate Plan

The RMOW Corporate Plan is updated annually and articulates strategic direction for the organization. This section identifies how this report links to the plan.

Council Focus Areas

☒ Community Balance

*Effectively **balance resort and community needs** through deliberate planning, partnerships and investment*

☒ Climate Action

*Provide leadership to **accelerate climate action and environmental performance** across the community*

☐ Housing

*Advance strategic and innovative initiatives to enable and **deliver additional employee housing***

☐ Pandemic Recovery

*Leadership and support for **community and tourism recovery and sustainability** – priority focuses are where recovery needs intersect with other Council focus areas*

☐ Not Applicable

Corporate Goals

☐ Community character and mountain culture is reflected in municipal initiatives

☒ Municipal decision-making supports the effective stewardship of natural assets and ecological function

☒ Corporate policies and operations ensure continuous excellence in infrastructure, facility and program management

☐ A high level of accountability, transparency and community engagement is maintained

☐ Corporate financial health is optimized to ensure long-term community success

☐ A vibrant local economy and safe, resilient resort community is effectively reinforced by organizational activities

Community Vision and Official Community Plan

The Official Community Plan (OCP) is the RMOW's most important guiding document that sets the community vision and long-term community direction. This section identifies how this report applies to the OCP.

The OCP contains goals and policy in at least two chapters that support the natural assets management initiative. Economic Viability, Chapter 6, Goal 6.1 speaks to the need to provide infrastructure that minimizes taxpayer costs. Incorporating natural assets and ensuring they continue to provide essential municipal services is a cost-effective way to deliver those services. An example is the delivery of the [Twenty-One Mile Creek Watershed: Source Water Protection Plan](#). The plan identifies the risks and strategies to address those risks to ensure that 21 Mile Creek continues to deliver high quality drinking water without the need to build additional expensive engineered water treatment infrastructure.

Natural Areas, Chapter 7, Policy 7.1.2.5 speaks directly to this project:

Investigate the application and integration of natural capital and municipal natural assets into the municipality's asset management program to recognize and assign value to the role of ecosystem services in the functioning of Whistler's infrastructure.

BUDGET CONSIDERATIONS

If the RMOW decides to develop a full natural asset management program, there may be a need for additional monitoring and potentially restoration projects to ensure the determined level of service can be maintained. The priority services identified (drinking water, flood management and storm water management) already have significant planning, monitoring and budgeting associated. It will be determined what amount of additional budget may be needed as the project planning progresses and that information will be vetted through senior management and through applicable budgetary approvals by Council prior to advancing.

LIL'WAT NATION & SQUAMISH NATION CONSIDERATIONS

The RMOW is committed to working with the Lil'wat People, known in their language as *L'il'wat7úl* and the Squamish People, known in their language as the *Skwxwú7mesh Úxwumixw* to: create an enduring relationship; establish collaborative processes for Crown land planning; achieve mutual objectives; and enable participation in Whistler's resort economy.

There are no specific considerations to include in this report.

COMMUNITY ENGAGEMENT

Level of community engagement commitment for this project:

☒ Inform ☐ Consult ☐ Involve ☐ Collaborate ☐ Empower

REFERENCES

Appendix A – Toward Natural Asset Management in the Resort Municipality of Whistler
Appendix B – OSFI Climate Risk Management Guideline – May 2022

SUMMARY

Municipal natural assets management is changing the way municipalities deliver core services - increasing the quality and resilience of natural areas that provide core services such as drinking water, flood attenuation and stormwater management at lower costs and reduced risk. The approach developed by MNAI and being followed by the RMOW guides staff in identifying, valuing and accounting for natural assets in municipal financial planning and asset management programs and developing sustainable and climate-resilient core service delivery for our community. Staff are seeking Council support to continue the Natural Asset Management initiative and integrating the outcomes into the overall municipal asset management plan.

SIGN-OFFS

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