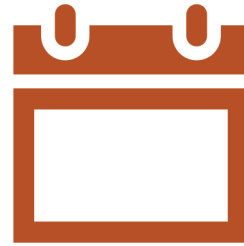


What do we mean when we say an area is “effective” at conserving biodiversity?



Defined, agreed upon, and publicly recorded **boundaries**



Incompatible activities are prevented **year-round**



Ability to prevent incompatible activities

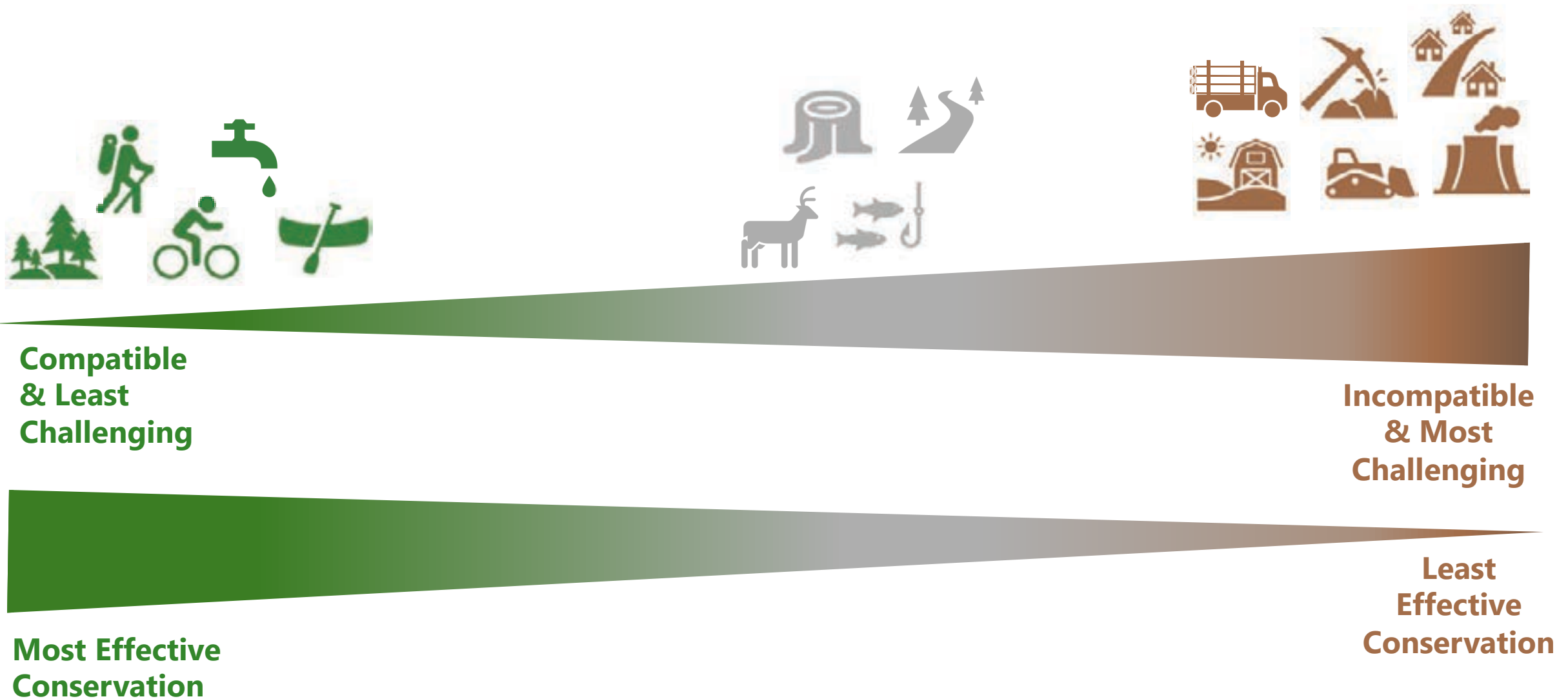


Incompatible activities are prevented for the **long term and not easily reversed.**



Compelled to prevent incompatible activities

Different land uses can challenge conservation of biodiversity across a spectrum.



Whitbourne Case Study

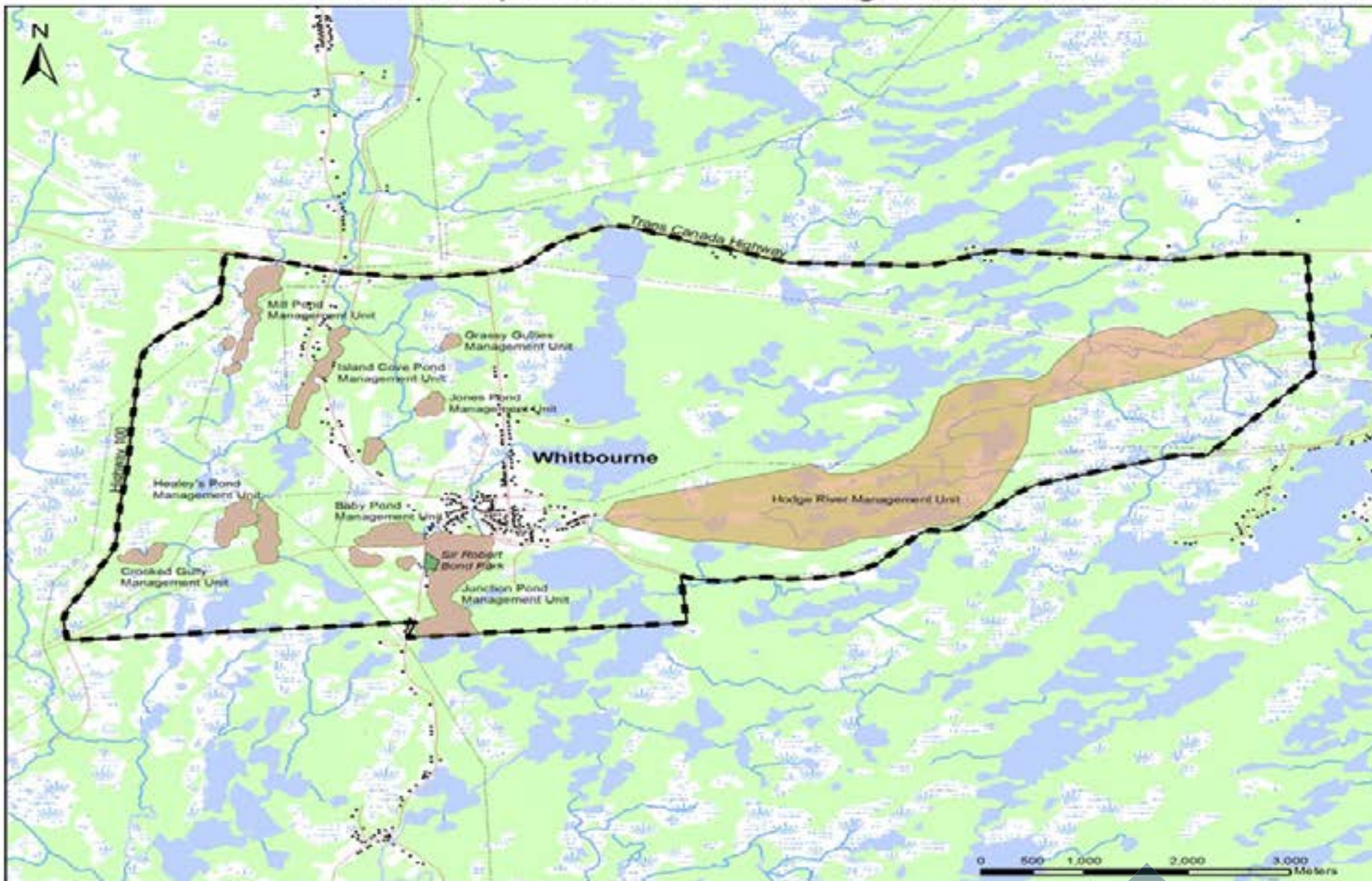
- Stewardship agreement signed in 1993. 744 ha total of conservation area which provides protection for biodiversity, opportunities for recreation, and attracts tourism.

Stewardship Zone and Management Units for Whitbourne



Legend

- Municipal Planning Boundary
- Stewardship Zone
- Management Units
- Sir Robert Pond Park
- Buildings
- Powerline
- Roads/ Trails
- River/ Streams
- Bogs
- Waterbodies
- Vegetation



Projection Information:
TM NAD 83 CNT
April 2013

Is Hodge River effective at conserving Biodiversity?

Meets Criteria?



Municipal Stewardship Agreement between the Town of Whitbourne and the Government of Newfoundland and Labrador



Town Council has the ability to control and manage activities within their planning area through the Municipalities Act & Urban Rural Planning Act .



Town Council uses their authority to restrict incompatible uses with their Development Regulations.



Municipal Plan & Development Regulations are in place 365 days/year.



The mechanism is intended to be in effect long term, and year-round. Hodge River has been a stewardship area for 30 years



What happens if the gold-star conservation mold doesn't fit right now?

MP & DR via Urban Rural Planning Act



Asset Management Plan





Break!
Come find us for a chat

Welcome back...

Takeaways (Pt. 1)

- Natural Assets – they're unsung heroes.
- If you've not been planning for them, now's the time.
- There are great partners here, ready and waiting to help you assess and conserve them.
- There are tools to suit you, wherever you're starting from...and more to come!



Table 1: Example of water specific municipal services that can be provided by natural assets and ecosystem services

| Municipal Water Services | Ecosystem Service | Natural Asset | Engineered Replacement |
|---------------------------------|--------------------------|-------------------------------|--|
| Drinking Water Supply | Aquifer Recharge | Aquifer & Source Water Area | Pipes for bringing in water supply |
| | Lake Recharge | Lake Watershed | Water Treatment Plant |
| | River Headwaters | Headwater lands | |
| Drinking Water Treatment | Water purification | Wetlands, forests, vegetation | Water Treatment Plant |
| | Water Filtration | Wetlands, forests, vegetation | |
| Stormwater Management | Rainwater Absorption | Wetlands, forests, vegetation | Stormwater pipes, culverts, storm drains, stormwater ponds |
| | Rainwater Filtration | Wetlands, forests, vegetation | |
| Flood Mitigation | Rainwater Absorption | Wetlands, forests, vegetation | Dams, retaining walls, embankments |

Scenario 1: Community of 500

1 part-time clerk

Provincially
Protected Water
Supply (PPWS)

Drinking water
infrastructure

No Municipal Plan
or Development
Regulations



Which tool could this town use first to manage this key natural asset?



Maintenance
Assurance
Manual

Climate
Hazards &
Risk
Assessment

Asset
Management
Plan

SAM
Agreement



Scenario 2: Community of 1,000

2 full-time & 1 part-time staff

Provincially Protected Water Supply (PPWS)

Drinking water quality issues

Walking trail around drinking water pond and wetland

Municipal Plan and Development Regulations (up for renewal)

Current Permitted Uses: Conservation;
Discretionary Uses: Forestry, Agriculture, Open Space Recreation



What use(s) can be kept from the current development regulations for the area meeting the criteria of a conservation area?



Forestry

Open Space
Recreation

Agriculture



Join at [menti.com](https://www.menti.com) | use code 2624 4515

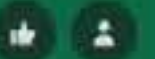


Describe some threats or problematic activities you see putting pressure on your water supply area(s).

All responses to your question will be shown here

Each response can be up to 200 characters long

Turn on voting in Interactivity to let participants vote for their favorites



GREEN INFRASTRUCTURE (GI)

Nature-based Solutions (NbS)/Nature-based Climate Solutions

Natural Infrastructure (NI)

Low Impact Development (LID)

NATURAL ASSETS:*

- Wetlands
- Forests
- Parks
- Meadows
- Lawns and gardens
- Soil

ENHANCED ASSETS:*

- Rain gardens
- Green roofs and walls
- Bioswales
- Urban trees
- Naturalized stormwater ponds

ENGINEERED ASSETS:*

- Permeable pavement
- Rain barrels
- Cisterns
- Perforated pipes
- Infiltration trenches

GREY INFRASTRUCTURE:*

- Bridges
- Roads
- Parking lots
- Culverts
- Pipes



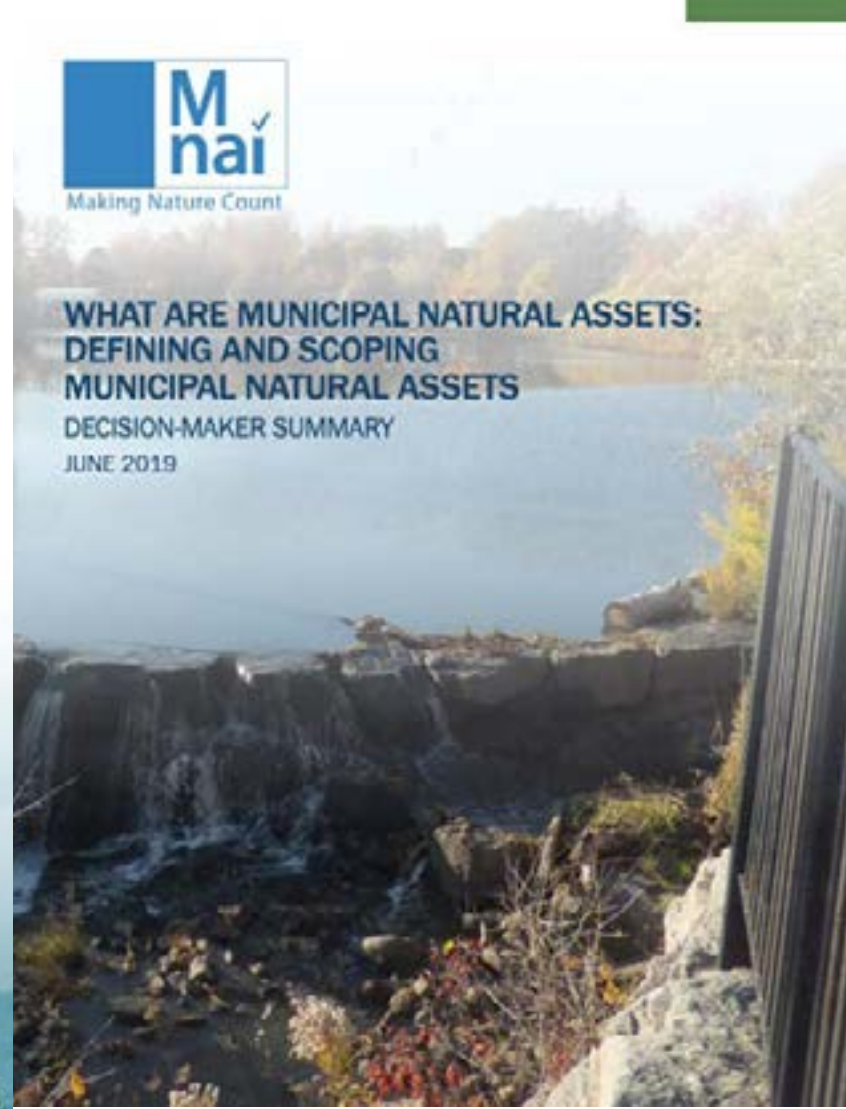
PRIMER ON NATURAL ASSET MANAGEMENT for FCM's 2018 Sustainable Communities Conference

This primer will:

- Introduce you to Municipal Natural Asset Management
- Explain why it is important to consider natural assets as part of your overall asset management strategy
- Help you chart your community's course towards implementing Municipal Natural Asset Management



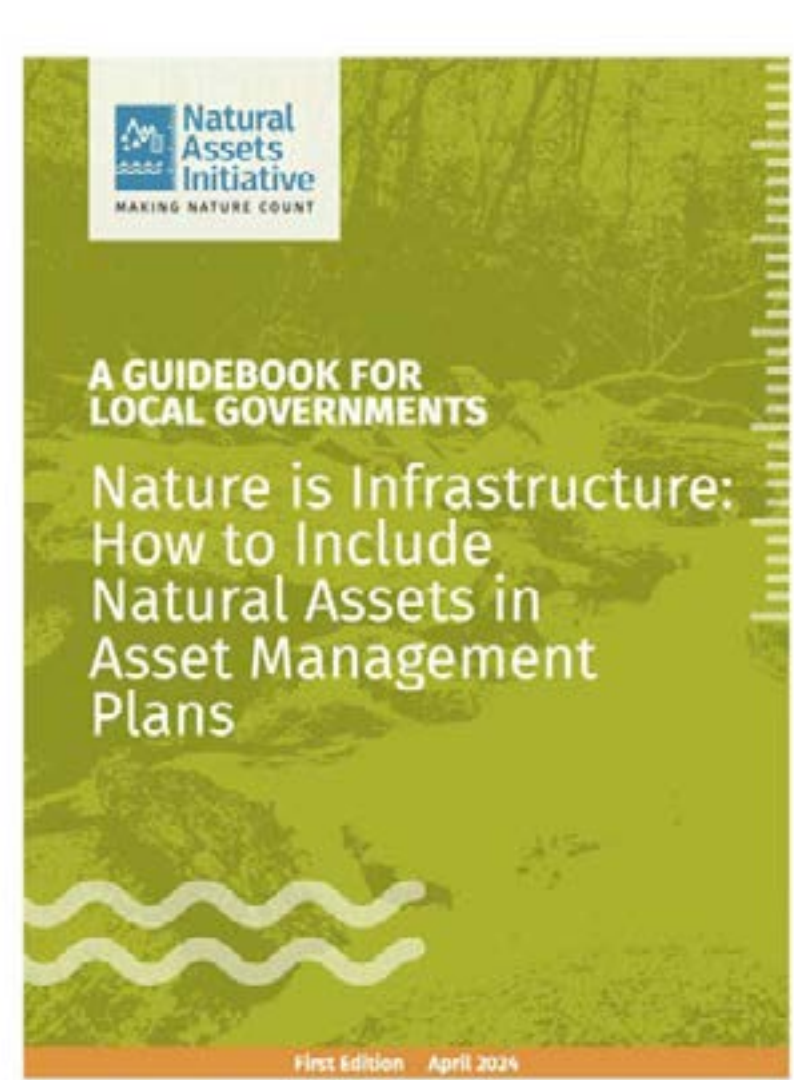
**WHAT ARE MUNICIPAL NATURAL ASSETS:
DEFINING AND SCOPING
MUNICIPAL NATURAL ASSETS**
DECISION-MAKER SUMMARY
JUNE 2019



**A GUIDEBOOK FOR
LOCAL GOVERNMENTS**

**Nature is Infrastructure:
How to Include
Natural Assets in
Asset Management
Plans**

First Edition April 2024



<https://mnai.ca/resources-for-local-governments>

Local Leadership for Climate Adaptation (LLCA)

FCM's Green Municipal Fund's new community-based climate adaptation initiative



Climate-Ready Plans and Processes

Climate risk assessments and integration of climate considerations in plans, processes and management systems



Adaptation in Action

Municipal adaptation projects reducing risks of climate change impacts



Financing Adaptation

Testing new resilient infrastructure financing models

A program of

FCM



\$530 million

Funding for

1400+ initiatives

by

2032-2033

Have an adaptation project?

Contact us at gmfinfo@fcm.ca or
at 1-877-417-0550

Funding for structural/non-structural projects coming this spring

- For communities with projects ready to go
- Have assessed climate risks, and what to do about them
- Only the first opportunity to access



Climate-Ready Plans and Processes

The image shows a risk assessment matrix with the following structure:

| | RARE (A) | UNLIKELY (B) | POSSIBLE (C) |
|--------|----------|--------------|--------------|
| MEDIUM | MEDIUM | MEDIUM | HIGH |
| MEDIUM | MEDIUM | MEDIUM | MEDIUM |
| MEDIUM | MEDIUM | MEDIUM | MEDIUM |

Funding for:

- Hazard, vulnerability and climate risk assessments
- Climate adaptation planning
- Integrating climate risk into municipal systems (asset management, land use planning)

Coming soon! (Fall 2024)

Homework

- Tell Council and staff about what you learned here
- Go to the **e-copy of this hand-out** on the Symposium webpage www.municipalnl.ca > 2024 Symposium > "Session materials" (*in the sidebar*)
- Check out the **resources hyperlinks** there
- Start compiling your own **natural assets inventory** for your town
- Watch for the **Local Leadership for Climate Adaptation** launch!

Get in touch!



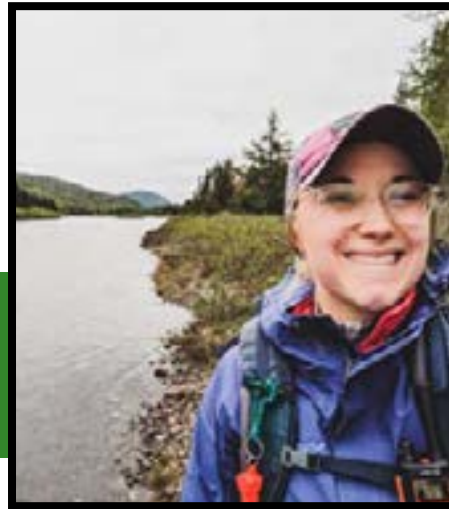
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Question & Answer Period