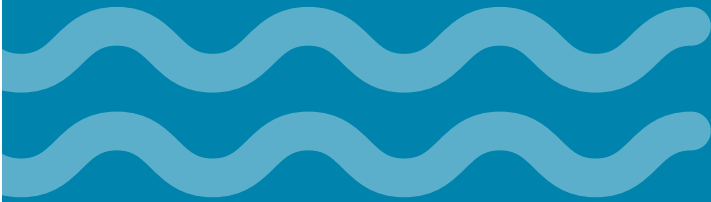


# NATURAL ASSET MANAGEMENT FOR LOCAL GOVERNMENTS: RELIABLE, SUSTAINABLE, COST-EFFECTIVE SERVICE DELIVERY



# LOCAL GOVERNMENT CHALLENGES

Severe weather events are happening more often and **climate change** will keep them coming. Communities are facing more risks from hazards such as flash floods, atmospheric rivers, heat domes, forest fires, rising sea levels. At the same time, the Federation of Canadian Municipalities indicates that **1/3 of infrastructure is already in very poor to fair condition**. We don't have the resources to simply build our way out of this urgent, crumbling infrastructure crisis in the face of a changing climate.



# LOCAL GOVERNMENT OPPORTUNITIES



Local governments can fulfill their responsibility to provide core services such as water filtration, stormwater management and protection from flooding in more sustainable, climate-resilient, and cost-effective ways. They can do so by understanding, protecting and managing **natural assets**, which provide these core services as well as many health, recreation and cultural benefits that make communities desirable to live in.



# WHAT ARE NATURAL ASSETS?



**Natural assets** can include forests, streams, meadows, wetlands, green spaces, coastal dunes, eelgrass beds, and much more.

# WHY NATURAL ASSET MANAGEMENT?

## THE BUSINESS CASE

Local governments are under-resourced. Healthy natural assets help deliver sustainable services on a limited tax base.

Ignoring natural assets can escalate risks and costs to local governments.

Well-managed natural assets can increase climate resilience.

## POPULAR APPEAL

People want to see practical, tangible action to address the climate crisis.

People want a healthy economy and a healthy environment.

Natural assets enhance the sustainable liveability and beauty of our communities.

## EXAMPLE

# CITY OF GRAND FORKS, BC

### **CHALLENGE**

Massive river floods in 2017 and 2018

### **OPPORTUNITY**

MNAI worked with the City of Grand Forks and demonstrated that the Kettle River floodplain provides \$500 - \$3,500/hectare in flood damage reduction for downtown buildings during high flow events. In January 2019, the City of Grand Forks received confirmation of \$51.6 million for floodplain-related efforts including property buy-back and restoration.

## EXAMPLE

# TOWN OF RIVERVIEW IN SOUTH- EASTERN NEW BRUNSWICK

### CHALLENGE

The Town of Riverview wanted to identify key natural areas within the Mill Creek watershed to be retained as natural assets to minimize engineered stormwater management infrastructure costs associated with a new, large development.

### OPPORTUNITY

MNAI worked with the Town of Riverview and showed that for a 1-in-100-year storm event, the wetlands provide a stormwater service value of roughly \$1.40 million under the current climate. Factoring in future development and future climate conditions increases the value to \$2.73 million. The regional government and Riverview are reviewing options for the Mill Creek area's protection in their community plan and bylaw in 2022.



## EXAMPLE

# GRINDSTONE CREEK ONTARIO GREENBELT PROJECT

City of Hamilton,  
City of Burlington,  
Conservation  
Halton,  
Royal Botanical  
Gardens



### CHALLENGE

Flooding and surface water quality problems.

### OPPORTUNITY

MNAI worked with local governments and agencies to develop an integrated approach to maintain and protect Grindstone Creek, part of Ontario's Greenbelt, which drains a watershed area of 91 km<sup>2</sup>. Next steps include enhancing collaborative monitoring, incorporating natural assets into asset management policies and a watershed plan, and expanding modelling to identify priority areas for restoration and management activities to reduce downstream flooding.



# HOW TO START?



Canadian local governments are responsible for providing sustainable, reliable and cost-effective service delivery by using modern, structured asset management processes. Incorporating natural assets into their asset management processes is therefore an extension of the work they already do. Every community can develop and implement approaches adapted to their unique, local conditions. This is something that can start today.

## ...IF YOU ONLY HAVE 3 HOURS

### Organize a facilitated staff or council meeting to discuss:

- What natural assets you rely on and for what services.
- What you know about those natural assets ... and what you don't.
- What risks the natural assets face.
- What webinars or trainings are available.

## ...IF YOU HAVE 3 WEEKS

### Find resources and current opportunities to work with MNAI [here](#)

- Explore open projects or workshops to start your progress in natural asset management
- Build awareness of your own natural assets with decision makers across departments.

## ...IF YOU HAVE 3 MONTHS

### Start an inventory of your natural assets:

- A natural asset inventory determines the type of **natural assets** a local government relies upon, their condition, and the risks they face. It is an essential first step in the full natural asset management project, which the completed inventory will inform.

Contact [info.MNAI@gmail.com](mailto:info.MNAI@gmail.com) for more details.

# ABOUT MNAI:



The Municipal Natural Assets Initiative (MNAI) is a Canadian not-for-profit that is changing the way municipalities deliver everyday services - increasing the quality and resilience of infrastructure at lower costs and reduced risk.

MNAI uses methodologies and tools rooted in standard asset management and provides a range of advisory services to help local governments implement them. MNAI has developed the methods and tools with significant investments, piloting, refinement, peer review, and documentation of lessons in multiple Canadian provinces.

MNAI's mission is to make natural asset management a mainstream practice across Canada and, in support of this, for local governments to accept and use the methodologies and tools in standard ways across the country.

MNAI has worked with approximately 100 local governments on natural asset management projects.

[mnai.ca](http://mnai.ca)

[@municipal-natural-assets-initiative](https://www.linkedin.com/company/municipal-natural-assets-initiative)

[@natural\\_assets](https://twitter.com/natural_assets)

[@municipal-natural-assets](https://www.facebook.com/municipal-natural-assets)

[@natural\\_assets](https://www.youtube.com/channel/UC...)

