



## Municipal Natural Assets Initiative (MNAI)

### Call for Expressions of Interest

*Letter due date: Friday, July 14, 2017*

#### **1. Purpose**

This document is to solicit non-binding expressions of interest in hosting a Municipal Natural Assets Initiative (MNAI) project.

#### **2. Context**

In municipalities across Canada, infrastructure is showing its age, capital and operating costs are rising, and service delivery is strained by growing populations and shifting conditions. Ecosystems are in decline in many communities. Climate change will exacerbate these challenges.

Municipal Natural Asset Management (MNAM) offers a solution to the twin problems of aging infrastructure and ecosystems decline.

In order to provide community services in a cost effective and sustainable manner now and in to the future, local governments are looking for ways to improve management of the critical assets that supply these services.

Asset management -- the process of inventorying a community's existing assets, determining the current state of those assets, and preparing and implementing a plan to maintain or replace those assets--allows municipalities to make informed decisions regarding a community's assets and finances.

Unfortunately, local governments lack policies and methods to measure one class of assets: natural assets. Natural assets are ecosystem features that provide, or could be restored to provide, services just like



the other engineered assets, but historically have not been considered on equal footing or included in asset management plans. This concept is outlined in more detail [here](#).

In this context, the [Municipal Natural Assets Initiative](#) project offers a methodology and support for local governments to integrate these natural assets into core asset management and financial processes. The result is that natural assets are understood, managed and valued by local government in terms of the services that they can provide (e.g. localized or downstream flood management).

At a minimum, this approach can help local governments manage risk by better understanding what services come from natural assets yet are not accounted for. MNAI's real value, however, is in helping local governments to manage natural assets using the same systems as for engineered assets, to secure sustainable service delivery.

The Town of Gibsons, B.C. was the pioneer of municipal natural asset management. Since 2016, MNAI has been working in the pilot communities of City of Nanaimo, City of Grand Forks, District of West Vancouver, Region of Peel and Town of Oakville to refine, replicate and scale-up the original Gibsons' approach.

### 3. Experience to date

The MNAI approach is very closely aligned with standard asset management processes, with which most local governments will already be familiar ([see Figure 1](#)).



Figure 1. Asset Management process. Source: Asset management BC



Therefore, in each of the 5 current pilots, participants are going through a process of:

- Identifying (a) the natural assets of interest (e.g. a wetland); (b) the ecosystem functions of the identified asset(s) (e.g. a wetland may store water) and (c) the municipal services derived from the ecosystem function (e.g. a wetland's water storage function may reduce local or downstream flooding, or have potential to do so);
- Determining the different scenarios to model – for example, finding out what will happen to the natural asset (e.g. a wetland) in various climate change scenarios, or with land use intensification, or different environmental management practices;
- Determining beneficiaries of the services provided by the natural asset;
- Determining the economic value of the municipal functions provided by the natural asset; specifically, what it would cost the local government to provide the same service by an engineered means; and,
- Developing a costed operations and maintenance plan to maintain the identified natural asset(s) in such a manner that they will continue to provide the identified services, ideally in perpetuity.

At present, the MNAI methodology handles stormwater management related municipal services; this will expand for future project rounds.

MNAI is also undertaking various research activities to facilitate and enable management of natural assets by local governments.

Details on each of the current five projects can be found at:

<https://www.dropbox.com/sh/8w010mbxlzzqj7z/AAD94dRCLRFzwjoJ0gJEG4gba?dl=0>



#### **4. What is the objective of the project?**

Overall, the MNAI objective is to ensure that, at the end of the 16-month project period, participating local governments have changed their decision-making such that the natural assets of interest are properly accounted for and have a plan for management, through means including a costed Operations & Maintenance plan.

This, in turn, will provide a basis for managing the asset on an ongoing basis to provide the identified services, following the project period.

Furthermore, the work undertaken through the project should enable the local government to:

(a) have a rigorous evidence base to seek funding for ecosystem restoration/rehabilitation, if this is determined to be required to provide the municipal services; and,

(b) replicate the work for other natural assets in the city/town/region.

#### **5. What does MNAI provide to the local government?**

The purpose of MNAI is expressly not to simply produce a “study” or research document but to support and enable action and operational change through changes in decision-making. The following MNAI support to local governments is provided within this context:

- a) Support for a detailed project scoping to ensure a clear common understanding of the initiative and its objectives;
- b) Detailed guidance and support documents;
- c) Coordinate and lead an on-site workshop to launch project - these typically are a half-day.
- d) Develop a 2-3 pages project document
- e) Provide ongoing “help desk” technical function to municipalities throughout the pilot. This is tailored to each municipality at approximately 15 hours per month per municipality



for 16 months, and typically involves extensive support at each stage of the Asset Management cycle depicted in Figure 1 ranging from: support for scoping data needs; support in finding data sources to enable modelling; trouble-shooting; training on modelling (e.g. EPA SWMM model); support for developing an Operations and Maintenance plan (or equivalent where private land is involved);

f) Regular webinar check-ins at each project milestone to (a) extract lessons on how work is progressing and (b) provide support for the next project step;

g) Conducting all principal aspects of the economic analysis to determine the value of the natural assets' services;

h) Group / cohort learning webinars to share experience across project;

i) Project evaluation at the end of the pilot (monitoring will be conducted throughout)

j) A final 15-20 page public report.

## 6. The fine print

The initiative is co-developed with extensive support from MNAI. The project is not, however, a consulting initiative in which the local government hands responsibility to the MNAI team to conduct all of the work. For example:

- a. MNAI will support the municipality fully in identifying data sources that will enable effective modelling and scenario building but does not do all of the data gathering itself;
- b. MNAI will support the local government in undertaking the modelling in the sense of ensuring the model is calibrated and executed in an optimal manner, including through on-line support and training webinars. However, the municipality is expected to undertake model execution.

Local governments are expected to share publicly their experiences from their work with MNAI. However, it is also recognized that local



governments want a 'no surprises' approach to communications. Public communication regarding project activities is therefore undertaken according to a communications protocol that has been developed with the current five projects.

In addition to the financial contribution noted in 7(f), municipalities should be able to provide a room and refreshments for 10-20 people for a launch workshop.

## **7. What does the local government provide as part of the project?**

Municipalities are expected to:

- a) Demonstrate explicit support from Council and/or the Chief Administrative Office for the project, including for allocating additional capacity in staff workplans for the project.
- b) Demonstrate clear commitment to a structured asset management approach across the organization;
- c) Commit to explore changes to decision-making as a result of the project, including, for example, costed Operations and Maintenance Plans;
- d) Commit the engagement of a multi-disciplinary staff team representing relevant departments such as Finance, Public Works, Engineering, and Parks and well as a single point-person for the MNAI team.
- e) Commit to gathering all data required to calibrate the model effectively.
- f) Commit \$30,000 for municipalities of less than 50,000 people; \$35,000 for municipalities of between 50,000-100,000 people and \$40,000 for municipalities over 100,000 people.

### *Additional considerations:*

- It is important to underscore that an MNAI project requires incremental staff resources that need to be built into workplanning; the project cannot be effectively managed “from the corner of a



desk”.

- Although it is not imperative, MNAI pilots are most successful when they link to another current municipal priority such as the development of storm water management plans, as this helps with e.g. data availability.
- The local government contribution is a fraction of project costs; MNAI also receives funding from a variety of sources. This means the municipal contributions are extensively leveraged.

## 8. Who is involved in the Municipal Natural Assets Initiative?

Local governments will interact primarily with the Director of MNAI and the Technical Team Leader. The technical team comprises a hydrologist, GIS specialist, modeler, water resources engineer, and economist.

MNAI has 4 convening partners:

- **The Town of Gibsons**, which is a leader in the integration of natural assets into asset management strategies. It brings extensive applied experience to the project that can be shared with other municipalities;
- **Smart Prosperity Institute**, a national research network and policy think tank based at the University of Ottawa, advancing practical policies and market solutions for a stronger, cleaner economy. SP brings to the project individuals with extensive research and applied experience in municipal policies and expertise in environmental pricing options at the municipal level;
- **The David Suzuki Foundation**, which works to conserve the environment and find solutions that create a sustainable Canada through science-based research, education and policy work. DSF brings to the project specific experience with the tools and methods required to measure natural assets and integrate the data into asset management strategies; and,
- **Brooke and Associates**, a BCorp-certified consulting practice that works with domestic and international clients with a focus on



organizational and community sustainability and resilience. Roy Brooke acts as Director of the MNAI.

MNAI also has a Core and Technical partners including:

- a) **Asset Management BC**, a technical partner. They will work with the convening partners to share project lessons and guidance with communities; provide ongoing advice to ensure the effective integration of natural asset considerations in asset management; and help to maximize the synergies between relevant communities and disciplines;
- b) **The Natural Capital Lab**, a core partner. They support MNAI through access to professional networks and communications.
- c) **The Partnership for Water Sustainability BC** is a partner and has strong experience and experience in watershed management. MNAI and the Partnership provide each other support on issues including communications and methodology development.

MNAI funders of MNAI, all of whom are gratefully acknowledged, are:

- The Real Estate Foundation of BC
- The Green Belt Foundation of Ontario
- The Salamander Foundation
- The Province of British Columbia Ministry of Community, Sport and Cultural Development
- Vancity Credit Union
- Tides Foundation
- The Sitka Foundation
- The Bullitt Foundation

## 9. What should go in my expression of interest?

Interested local governments should send a detailed letter signed or explicitly authorized by the CAO or equivalent that outlines:

- a) The rationale for wishing to host an MNAI project;



- b) The specific natural assets, services and scenarios of greatest interest;
- c) The ability and decision to contribute sufficient capacity to the project, as outlined in Section 7, above;
- d) In detail, how an MNAI project would link to other municipal priorities;
- e) A willingness to contribute \$30,000 for municipalities of less than 50,000 people; \$35,000 for municipalities of between 50,000-100,000 people and \$40,000 for municipalities over 100,000 people, if selected to as an MNAI project.

## **10. What happens after I send the expression of interest?**

The Convening Partners are applying for funding between June-September 2017. They expect to learn the results of the funding application in October-November 2017, depending on the funder's timelines and process. Feedback from this call for expressions of interest will be provided to the prospective funders.

Local government applicants will be contacted during the funding application process and following notification of funding decisions.

The pilot launch date will be in the final quarter of 2017 or the start of 2018, as a function of funding process and timing.

## **11. Evaluation criteria**

Applications will be evaluated on criteria including the degree to which applicants demonstrate:

- A commitment to asset management;
- A clear initial understanding of the natural assets on which it wishes to base the project and of the objectives it hopes to achieve;
- Capacity commitment sufficient to successfully manage the



- project; and,
- A commitment to implementing / acting on the results of the project to the greatest extent possible.
  - Applications may also be assessed to ensure any of: complementarity between MNAI projects, project diversity across the country; and project diversity according to municipality size/type

## 12. Additional information

The MNAI Facebook page is at this link:

<https://www.facebook.com/municipalnaturalassets/>

A flyer for MNAI is at this link:

<https://www.dropbox.com/sh/b068xewguklskzu/AACLIEdEhknvVCQIEzJqS2RNa?dl=0>

A draft paper to scope and define municipal natural assets is here:

<http://institute.smartprosperity.ca/request-comments-defining-scoping-municipal-natural-assets>

**Please submit expressions of interest to: [info.mnai@gmail.com](mailto:info.mnai@gmail.com)**

**by 17h00 Pacific Daylight Time on July 14, 2017.**