Atlantic Infrastructure Management Network

Integration of Natural Capital Assets in Asset Management Planning

Atlantic Infrastructure Management Network (AIM) is interested in creating awareness among municipalities in Atlantic Canada of the services that natural capital assets can provide as an alternative or supplement to engineered infrastructure.

AIM Network expects to implement **a pilot project** to explore benefits which could be derived from including natural capital assets utilization in the related asset management planning of municipalities. Where natural capital can replace, supplement or enhance built infrastructure, not only can this result in cost savings but through appropriate land use planning, it can enable municipalities to achieve their climate change adaptation goals, build resilience, enhance the effectiveness of services and provide economic benefits to the community.

If your municipality is interested in participating in this pilot project, please contact us at info@aimnetwork.ca.

Asset Management Planning:

The implementation of Public Service Account Board regulation, PSAB 3150, in 2009 required municipalities in Canada to account for their capital assets in their financial reporting. Since then, there has been growing awareness of the value to municipalities in preparing comprehensive asset management plans.

Asset Management Planning considers current and future infrastructure needs of a municipality, manages risks, and identifies opportunities to support informed decision-making about the best use of community resources. These plans cover the whole life cycle of assets enabling long term financial planning for capital, maintenance, operations, renewal and replacement of infrastructure.

Most municipalities in Atlantic Canada are in the very early states of developing asset management plans. As such, now is a good time to consider how natural assets can be factored into long term planning for municipal infrastructure.

Municipal Natural Assets Initiative:

There is a growing recognition that nature can provide services equal to or better than those from engineered infrastructure.

The Town of Gibsons, British Columbia, recently integrated natural capital into asset management planning.

> The Town of Gibsons is one of the first Canadian municipalities to explore managing the natural capital in our community, such as green space, aquifers, foreshore area and creeks, using infrastructure and financial management concepts that are systemically applied to managing engineered assets. Our rationale is that the natural services provided by these systems, in the form of rainwater management, flood control and water purification, have tangible value to the community as, or more, effective as engineered infrastructure.
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> Bringing these natural assets into the same asset management system as engineered infrastructure recognizes the quantifiable value they provide to the community and integrates them into the municipal framework for operating budgets, maintenance and regular support. (Source: http://www.gibsons.ca/eco-assets)

Following is a description of a pilot project, The Municipal Natural Capital Initiative (MNCI) currently being undertaken by a group in British Columbia, managed by Roy Brooke, Brooke and Associates, Victoria, BC.

> Municipalities play a vital role both in protecting and preserving natural capital and ecosystem services and in providing citizens with core services. A small number of pioneering municipalities are linking these imperatives by: (a) developing a quantifiable financial and operational understanding of the core municipal services (e.g. storm water management, water purification, disaster risk reduction) provided by natural capital (e.g. forests, foreshores, wetlands, riparian areas); and, (b) integrating this tangible economic information into core municipal asset management and financial planning processes. This approach in effect values the services provided by nature and brings the information into the heart of mainstream decision-making, which in turn can result in better management of natural assets and reduced municipal costs and risks.
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> The Municipal Natural Capital Initiative (MNCI) seeks to refine, replicate and scale-up the approach of these leading municipalities initially in 2 Ontario and 3 British Columbia pilot municipalities. This will be achieved by: building the tools to enable pilot municipalities and many others beyond the pilots to adopt the approach; conducting research to address barriers to uptake; and undertaking communications and outreach to build awareness of this approach. (Project description provided by Roy Brooke)

Click here for more information on the Municipal Natural Capital Initiative

Municipal Climate Change Action Plans:

In 2012, Nova Scotia Municipalities prepared Municipal Climate Change Action Plans (MCCAPS). Preparation of these MCCAPS have required municipalities to identify impacts of climate change on their municipality and its infrastructure. Many municipalities in Atlantic Canada are acutely aware of the potential impacts of climate change on their communities and municipal infrastructure.

Where risks to critical infrastructure have been identified, mitigating or adaptive strategies are required to preserve, upgrade, renew or replace assets. As municipalities develop asset management plans, the analysis and resulting information included in the climate change action plans is an excellent resource to inform future infrastructure needs. Where relocation of infrastructure is required, it will necessitate the integration of land use planning with asset management planning.

Project Outcomes:

- Municipalities become aware of their natural assets and those that have potential to provide services to their community.
- Municipalities understand that efficiencies and benefits can be derived by incorporating natural capital asset utilization into asset management planning.
- Municipalities recognize natural assets as a means to mitigating and adapting to the impacts of climate change or building resilience while simultaneously enhancing services that are normally provided solely or primarily by engineered infrastructure.
- Municipalities will recognize the important link between infrastructure planning and land use planning.
- Through case studies included in the pilot project, provide examples of approaches to be shared with other municipalities.

For more information on natural capital assets, check out these links:

http://www.sustainableprosperity.ca/sites/default/files/publications/files/Importance%20of%20Natual%20Capital%20March%202014.pdf

http://www.davidsuzuki.org/issues/wildlife-habitat/projects/natural-capital/what-is-natural-capital

http://waterbucket.ca/rm/files/2016/08/Primer-on-Application-of-Ecosystem-based-Understanding_Sept-2016.pdf