

NATURAL ASSETS

Preserving, valuing and managing the natural environment is an increasing focus of local governments and will be made easier with new national standardization.

BY CARLA SORRELL

As the quest for greener and more liveable cities brings nature into the scope of urban planning, there is much more to “going green” than meets the eye.

Until recently, for local governments, asset management has generally referred to infrastructure in the built environment.

Natural assets are an essential part of a city, providing important and valuable services beyond recreational benefits. These natural resources and ecosystems can include forests, wetlands, rivers, lakes, fields, intertidal zones, parks, green spaces, soils and coastal marshes.

“We’ve neglected natural assets that provide services to the communities as built infrastructure would,” says Nikita Bhalla, asset management consultant at the infrastructure consulting firm AECOM. “Even as engineers, people are coming up with these ideas and hybrid infrastructures, like with biosphere rain gardens, which are mimicking natural infrastructure — why not just

preserve what’s already there?”

The new process is in tune with global initiatives that speak to the need to plan infrastructure.

There are multiple benefits to maintaining and looking after natural assets: it is far cheaper in the short, medium and long term than pulling out those assets and replacing them with built infrastructure; in contrast to man-made assets, they appreciate over time; and projected updates from Canada’s Public Sector Accounting Board, in line with international standards, will enable municipalities to report on and value their natural assets within financial reports.

“The reality in this country is that most of our existing engineered stock is aging, maintenance has been deferred and needs replacing and climate change isn’t doing us a whole lot of favours,” says Roy

Brooke, executive director of the Municipal Natural Assets Initiative (MNAI). “We can’t build our way out of this — where we have natural assets that can or do provide core services. We have to take it seriously.”

Until now, accounting, valuing and managing those natural resources has been patchy. For years, MNAI has supported municipalities across Canada to change the way they deliver everyday services. The starting point is a natural asset inventory, which contains information about what natural assets exist, the condition they are in and what risks they face. It is the first step toward a full natural asset management process.

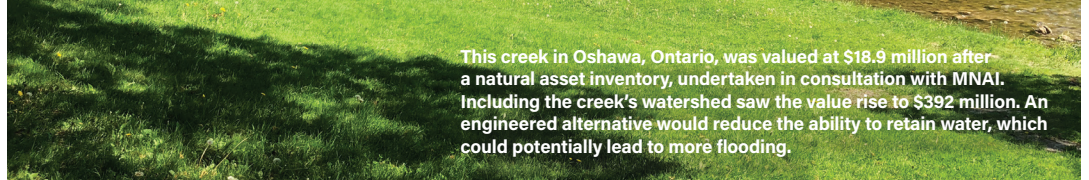
“It’s a great way of promoting the responsible management of natural resources,” says Rachel Buskie, economic recovery program coordinator for the City of Colwood’s community planning department. “If they

can place an economic value on them, can help people get interested in caring about them.”

Examples of natural asset management can be seen from Gibsons, B.C., where five years of assessment led to the expansion of lands beyond government-owned property, to Grand Forks, B.C., where the inventory meant the municipality was able to secure approximately \$54-million from the federal government to rebuild their flood plain back to its natural state, as a means to reduce flood risk.

Announced in February, a new National Standard of Canada will ensure that natural asset inventories are comparable and replicable across Canada.

“This is a huge step on the road to making natural asset management a broadly based practice across Canada,” says Brooke.



This creek in Oshawa, Ontario, was valued at \$18.9 million after a natural asset inventory, undertaken in consultation with MNAI. Including the creek’s watershed saw the value rise to \$392 million. An engineered alternative would reduce the ability to retain water, which could potentially lead to more flooding.

COLWOOD CASE STUDY



Leading Vancouver Island in this field, the City of Colwood has been investing in its natural assets for several years.

Responding to the values of its population, Colwood recognized that its natural features — like parks, waterfront and trails — could also bring financial benefit to residents and deserved adequate attention.

“The public drives this with their passion for the environment, and we are implementing it through our asset management framework,” says Rachel Buskie, economic recovery program coordinator for the City of Colwood’s community planning department.

The 2018 Stormwater Master Plan was the catalyst, with its inclusion of natural assets. The city relies on creeks, ponds, ditches and wetlands as an efficient and cost effective alternative to volume-limited piped assets.

Mature trees have played a significant role in managing heat domes.

In 2019, the Sustainable Infrastructure Replacement Plan saw natural assets included as part of Colwood’s asset infrastructure. Following that, an application to MNAI to be one of 31 municipal organizations across Canada participating in their accelerate program resulted in a full inventory of natural assets.

The inventory has paved the way for Colwood’s next two significant initiatives: a low-carbon resilience project, which will result in a climate action plan, and the urban forest strategy that will look at the city’s current resources and their desired species mix for the future. With these initiatives, Colwood will be narrowing its focus and deepening its level of detail around plans for sustaining, enhancing and increasing natural resources.