

Putting a Value on Nature's Services

The Town of Gibsons' Municipal Natural Capital Initiative



There is a revolution sweeping through the municipal asset management world, and it's shaking the very foundations of conventional thinking.

It was sparked by residents of Gibsons, a small, quiet town on B.C.'s Sunshine Coast. In no uncertain terms, they told their municipal leaders and administrators to ensure adequate protection and maintenance of the aquifer upon which everyone in the community depended. In responding, the mayor and council along with

White Tower Park, described as the backbone of the community's stormwater management system, has undergone significant revitalization as part of Gibsons' initiative.

staff soon found themselves embarking on a truly pioneering journey into largely uncharted territory. In 2014, Gibsons became the first municipality in North America (and possibly the world) to commit to full system integration of valuing the services provided by the local and regional natural ecosystems into the very DNA of their asset management planning,



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Emanuel Machado, CAO for the Town of Gibsons, notes, “We’re now investing in the natural capital we have. And, we’re expanding and enhancing our forests, wetlands, and creeks to deliver more and better services to people like flood reduction and clean water.”

as well as their Official Community Plan (OCP) and annual financial statements.

“Water became the entry point for a much bigger conversation when we released a mapping survey of Gibsons’ aquifer,” says Emanuel Machado, CAO for the municipality. “From this work, it was clear that we were only accounting from the pump-house forward and we were leaving the rest to nature.”

“We’re now investing in the natural capital we have,” he adds with obvious delight, “and, we’re expanding and enhancing our forests, wetlands,

and creeks to deliver more and better services to people like flood reduction and clean water.”

Plans are now afoot to take the best practices emerging from the Town of Gibsons’ “paradigm-shifting” journey and to scale them up through a number of pilot case studies to take what is called the Municipal Natural Capital Initiative national.

There are good reasons to believe that the initiative will be very successful. As Victor Hugo, the French author and poet once observed: “There is nothing more powerful than an idea whose time has come.”

Although the concepts of natural capital and ecosystem services have been around for at least couple of decades, they are suddenly catching the attention of municipalities keen on reducing the pain of having to replace aging and failing infrastructure. As many as 30 municipalities have stepped forward to volunteer to be pilots in the initiative. Meanwhile, there are a growing number of very interested observers among the rest.

Darrell Mussato, who is serving his fourth term as mayor of the City of North Vancouver, is one of them. “I really think we need to look at the



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leadership that the Town of Gibsons has been doing," he maintains, while adding: "We need to be asking how can we emulate them and how else can we show support for what they are doing."

For its part, the City of North Vancouver is planning to follow Gibsons' lead. At present, the city is completing its inventory and assessment of its engineered assets; however, this work has not stopped them from proceeding with several initiatives to protect the forests, creeks, and estuaries within their boundaries. The engineered component of the asset management strategy is expected to be finished very soon and the plan is to next turn to integrating these natural ecosystems as natural capital into their OCP and accounting procedures as well.

Lest the reader think that this revolution in asset management is spreading unchallenged, it is instructive to listen to what Duane Nicol, CAO for the City of Selkirk, B.C. has to say on the issue.

"Is what the Town of Gibsons is doing with incorporating natural capital into its asset management plans revolutionary? Absolutely!" he quickly asserts. "Emanuel is a thought-leader in this paradigm shift in asset management."

While he would like to see his city join the revolution, Nicol also recognizes that the time isn't right. Selkirk is still in the early stages of tackling their asset inventory and assessment. Like many municipalities, it has some deeply-entrenched ways of doing things that are heavily reliant on engineers and regulations. So, instead of tackling this convention head on, Nicol and his staff have developed a different strategy.

"What we're doing is slowly building a robust asset management plan that incrementally lays the groundwork for eventually incorporating natural capital, along the lines of what the Town of Gibsons has done," Nicol reveals.

Entrenched ways of doing things and a resistance to change certainly pose significant challenges to the

fledgling revolution; but, ultimately, it will prevail simply because it just makes good economic sense.

Back in Gibsons, Machado makes a compelling business case for natural capital. "What we're finding is that for roughly the same cost of building engineered infrastructure, we can protect and maintain something that could last in perpetuity, with a relatively low cost of maintenance and it provides many more benefits to the community, such as recreation and wildlife habitat."

"What we especially interested in right now," he adds, "is understanding the value of the services we get from nature so we can integrate that information and make better decisions about where to invest public funds."

While Machado didn't mention it, he likely could have underscored the political leverage that would result from having this ability. After all, a great many Canadian municipalities are experiencing significant financial pain because of infrastructure repair and replacement needs. If it can be shown quantitatively that natural capital can help reduce the costs of certain services, then its business case becomes even more compelling, and its wide-spread adoption could be unleashed across the country.

With this larger vision in view, Gibsons has partnered with the David Suzuki Foundation, Sustainable Prosperity, and Roy Brooke and Associates to launch the Municipal Natural Capital Initiative (MNCI). Its goal is to "support municipalities in recognizing, measuring, and managing the contribution natural systems make to people and municipal service delivery, using asset management business processes."

The initiative has three phases. The first phase focused on assessing the scope of the challenge and potential solutions, as well as developing key partnerships; it concluded in August 2015. Phase two kicked off in early April 2016 and will be completed in December 2017. During this time, an approach based on Gibsons' model will be developed, tested, and refined through pilot studies with

Derrick Thomson CAO, City of Guelph



The City of Guelph is pleased to announce the recent appointment of Derrick Thomson as its Chief Administrative Officer.

Derrick has built a decades-long career in senior management roles with the City of Brampton, as CAO of the Township of West Lincoln, and most recently as Deputy CAO of Public Services at the City of Guelph.

He has served in senior management roles with the Ontario Municipal Administrators' Association, the Municipal Internal Auditors Association of Ontario and supported the YMCA-YWCA Board of Guelph.

As CAO of the City of Guelph, Derrick is leading a passionate public service continually driving municipal innovation and providing exceptional public service.



several municipalities. The third phase would then entail the scale-up of the approach throughout 2018 and beyond, to hopefully encompass many more municipalities across the country.

Michelle Molnar is an ecological economist with the David Suzuki Foundation. She and her team are tasked with developing and formalizing the approach for deriving a value for nature's services. They are specifically focusing on surface water management, since it is a common challenge to many communities across Canada.

As she explains, "What we're trying to do is to capture those services of interest to municipal stakeholders. We're doing this by seeking answers to a couple of questions. How much are they saving by maintaining natural systems, and how much is it going to cost if they're going to have to be replaced?"

"The nice thing about working with the Town of Gibsons is that they

recognize this," she adds, "and so we're working with them to develop the measures so they can track, maintain, and, where required, restore nature so that all those benefits that flow from them can continue."

Machado emphasizes the importance of Molnar's questions by noting that, on paper, Gibsons has a net worth of \$47 million dollars; but, he hastens to point out that the town could not buy another aquifer of some size and quality, let alone all the forests, creeks, wetlands, and foreshore for that price.

In south-central B.C., the City of Grand Forks has expressed interest in being one of the pilot communities and is anxiously waiting to hear whether or not it will be selected.

"One of our regional directors brought the Municipal Natural Capital Initiative to our council," Doug Allin, the city's CAO, explains. "The City of Grand Forks aspires to become the greenest city in B.C. So, it fits really well with our strategic goals."

"We see a great opportunity to be a pilot with the initiative," adds Graham Watt, the city's engineering technologist. "To be a part of the collaboration with other leading-edge municipalities is like being a part of a dream green team."

Should municipalities be attempting to put a value on nature's services? Couldn't this become the beginning of a slippery slope leading to the commodification of nature itself? Machado has an answer to this.

"It's critical to distinguish between putting a price on nature's services and not on nature. One cannot put a price on nature; it is priceless," he contends. "But, not putting a value on nature's services hasn't been terribly helpful to nature. We're burning through 50 percent of the natural capital of this world and faster than nature can reproduce. We're burning through our savings very fast, so it's imperative that we develop the tools to value nature services so we can make better decisions." MW

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