

NATURAL ASSETS: GIVING A DOLLAR VALUE TO FORESTS, GREEN SPACES AND WETLANDS ON GOVERNMENT FINANCE REPORTS

ISSUE

Reliable measurement of natural assets has, in the past, proved a challenge. Since 2016, data measurement, some of which has emerged from the Insurance Bureau of Canada; the International Institute for Sustainable Development; and the Intact Centre on Climate Adaptation – giving us ways to estimate total economic value of natural assets. One example is southern Ontario wetlands could reduce building damage costs related to hurricanes and severe weather by \$50 million. Other examples are as robust.¹ Additionally, work done by Canada’s Ecofiscal Commission² [Practical Solutions for Growing Prosperity] helped pave the way to better understand our impact on our planet, and what the value of assets is which we are damaging. A dollar value would garner respect: money talks.

Investing in green infrastructure creates jobs. A European study recently concluded sustainable infrastructure projects create five jobs more per \$1 million invested than traditional projects.³

If Canada is to take all responsible paths to recovering from the pandemic in 2021-2025, taking this opportunity to lead and create new accounting standards would help measure hidden wealth and entrench sustainability. More attention needs to be given to Bioeconomics - Modelling the relationship between biological and economic systems.

Dr John Janmaat, of the University of British Columbia Okanagan has studied environmental and resource economics, particularly the economics of water resources; factors that determine water use in the Okanagan and other regions; policy options to encourage ways of using water - and other resources - to more effectively serve the needs and wants of local communities and society at large.⁴

His multidisciplinary work includes the Economics of Water Resources: Managing water to maximize its value to society⁵ as well as the use of economic incentives in water management; incentives and motivators that drive water use; and Identifying those water uses that generate the greatest value to society.

In this area of Applied Environmental Economics, we are now able to measure the value of environmental assets which are not traded.⁶ One important goal is designing policy instruments that

¹ Across the country, natural assets provide substantial economic benefits in their ability to mitigate the growing costs of extreme-weather disasters, and in particular, flooding. Naturally occurring ponds in Gibsons, B.C., provide up to \$4-million in storm-water storage benefits; a restored wetland in Manitoba provides a \$3.7-million value in reducing floods, improving water quality and sequestering carbon; protecting four wetlands in New Brunswick delivers \$1.4-million in reduced flood-damage benefits for Moncton; and wetlands provide a \$49.8-million benefit to Quebec City for their ability to manage rainwater and reduce flooding. If these natural powerhouses didn’t exist, we would have to build grey infrastructure at considerable cost to contain the damage they mitigate for free. <https://www.theglobeandmail.com/business/commentary/article-its-time-to-reveal-the-hidden-value-of-canadas-natural-assets/>

² <https://ecofiscal.ca/the-commission/about-canadas-ecofiscal-commission/>

³ Mark Carney, UN Special Envoy Climate Action & Finance

⁴ [Drought Impacts, Irrigator Attitudes, and the Potential for Water Trading in the Okanagan](#). Janmaat, J.

⁵ Geleta, S., Janmaat, J., Loomis, J., and Davies, S. “Valuing Environmental Public Goods: Deliberative Citizen Juries as a Non-Rational Persuasion Method.” *Journal of Sustainable*

⁶ *Commodification of water: Okanagan Basin Water Board seeks answers on commodification of resource*: February 27, 2021, <https://www.castanet.net/news/Vernon/326353/Okanagan-Basin-Water-Board-seeks-answers-on-commodification-of-resource>

reward environmental stewardship, while balancing the costs and benefits of alternative policies that impact the environment.

BACKGROUND

Infrastructure valuation is big business in Canada. The federal cabinet enshrines its importance with a cabinet minister. But, where do wetlands, green spaces and forests fit on those balance sheets? Currently, over in the tourism column, as attractants for visitors.

The federal debt as the pandemic begins to show signs of weakening, has caused economists to question how the red ink of \$500 billion (and growing) can be managed. If we were to add the natural assets of Canada to the plus column, their value would be higher than the COVID-19 debt. The econometrics of this challenge are becoming better known, and a few examples would include carbon sequestration – the ability of nature to capture carbon dioxide in the atmosphere – which slows down the rate of climate change. Some call this smoke and mirrors. Perhaps a bit of an old-fashioned comment; in fact, Canada has an opportunity to lead in the creation of new, pertinent accounting standards – standards that can, in fact, help us measure our hidden wealth and reap real economic benefits of green recovery. These all equate to long term sustainability and viable economic goals.

Coastal regions boast dunes, reefs and marshes, helping reduce storm surges, flooding and erosion. Other water-based solutions include wetlands, ponds and green spaces, which retard flooding, provide cleaner water, enhancing habitats and providing recreation space. Forests and minerals offer millions, and likely billions more to the balance column.

Ecological habitat and water by definition have serious implications to business, industry, commercial, residential and personal property and welfare. Who is entitled to use water and at what proportions and how land is valued and accounted does need work. That said, there are many regulations federally and provincially that protect and identify those values. While the ask on the surface is simple (appreciate and evaluate the wealth of natural assets), the practicality of this ask is very complex.

But, when was moving the dial on how we view our natural world in its frame of fitting into an industrial world easy? Three years ago, we were told hydrogen wasn't a viable fuel source. "Suddenly" in 2020, all anyone could see on the front pages was 'green hydrogen new fuel source for the world.' It's time for us to address the true wealth of Canada now. Investing in sustainable management of our green infrastructure does create jobs.⁷ Looking in the rear-view mirror doesn't embrace the future.

If it's difficult to reliably measure natural assets, wait five minutes for the data crunching programs to catch up. The Insurance Bureau of Canada is now estimating the total economic value of natural assets, highlighting for example, the value that wetlands offer in disaster-cost reduction for flood-prone communities.⁸ We were asked to provide certainty in process and accountability on issues: caution – change doesn't behave that way.

⁷ Mark Carney, *op. cit.*

⁸ Intact Centre on Climate Adaptation: study on Southern Ontario wetlands, reducing damage to the Grand River watershed by \$50 million in severe weather events. *Op. cit.*

THE CHAMBER RECOMMENDS

That the Provincial Government/the Federal Government:

1. Recognize Bioeconomics as a key area which Canada should focus on for economic sustainability, financial growth, job security and green-based solutions to pandemic-induced budget shortfalls.
2. Include the valuation of natural assets in future budgets in order to focus attention on this hidden wealth.

Submitted by the Kelowna Chamber of Commerce
The South Okanagan Chamber of Commerce
The Penticton & Wine Country Chamber of Commerce
The Peachland Chamber of Commerce
The Summerland Chamber of Commerce
The Greater Westside Board of Trade
The Lake Country Chamber of Commerce