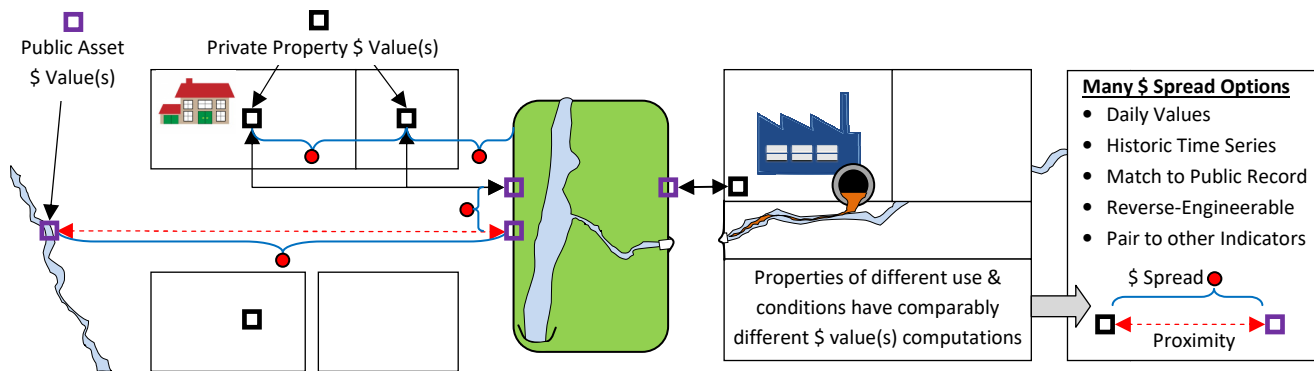


Calculation Structure



In law, an implied social contract exists between government and citizens to maintain and protect "Natural Commons Assets" (NCA) - the natural assets we share: clean water, clean air, parks, fisheries, beaches, etc. Public officials need to validate spending to protect what the public wants. And there is shared desire to share costs to steward these confluent assets. But sometimes there are false choices, such as Pollution or Jobs; or political pressure to spend more in a wealthy neighbourhood vs. a poor neighbourhood. Who decides who to listen to first, *when NCA Value is hard to measure?*

A 'cost accounting' team reporting to Waterbucket.ca has figured out a market-driven measure of value. The method was directed to Government; the report has been [published](#); and is now part of the public record. This personal note is for the private sector.²

We used real estate *tax assessment pricing spreads* to: (a) Test the hypothesis that we can compare market and public properties to build market-based valuations of the Natural Commons Assets' class; (b) Determine whether we can demonstrate that investing in these common assets (delivering cost-superior intrinsic, sociable, environmental, and health benefits) produces net positive \$ROI.

The approach was to use proximity (nearness of real private property to creeks) to measure market value/pricing effects; where time series' changes become a good indicator of the quality of the nearby Natural Commons Assets *and* the influence of that range of proximities *on* the real estate; and vice-versa. My contribution includes much of the deep root logic frameworks.

This comment is to suggest that ESG investor, business, and community users can use the method. The note answers the query of a respondent, who asked: 'When you describe it as "a market-driven approach to grow the value of natural assets," is the implication that a transparent, data-driven valuation of the assets will grow them by making governments/ other public payers more likely to invest in their maintenance, conservation, and stewardship? Or what is the mechanism for translating valuation into growth?'

Comment: In my opinion, it becomes a mechanism for *evaluating valuation practices* (meta-valuation) to grow (non-current long-term) stewardship practices. We were seeking to get a handle on *the dollar measure of "worth"* (intrinsic valuation) that society assigns to natural assets. The NGO we reported to is tasked with helping government develop better ways to manage water supply. In BC, much of our water supply comes from snow and icepack. We are having water shortages in the late summer as the climate changes; very dry ground = water bans and wildfires. The former water management practice was to use heavy engineering to drain water as soon as possible. This is changing to water retention management.³ There is urgent pressure to properly manage NCAs.

After unpacking the problem, we hypothesized that there could be a link between "the enjoyment that people *anticipate* having" if they choose to live near a creek asset, and willingness to reside (buy/rent) in that area; which translates into *willingness to purchase, and/or not move*, which translates to *variations in valuation*. The idea here is we are part of the natural world, desire and may need to be part of that world, and while not necessarily consciously aware of the nearness of a park, we proposed that it is fair to ask: Will nearby NCA quality influence property decision-making? And, will these pricing spreads influence NCA quality stewarding decisions?

I've now formed an opinion that the quality of Natural Commons Asset zones (park, creek, polluted air, etc.) can be a reverse-calculable market indicator of real estate decision-making: the *(formerly-hidden)* multi-dimensional (social, cultural, racial, market, political) Confluent Assets valuations assigned to neighbourhoods. Consider adding the method to the ESG computational toolbox.

¹ "Confluent Assets" – The term coined here expresses the idea that Natural Commons Assets and Inhabited (Human) Assets' zones cannot be disentangled.

² These comments and thoughts are my own. They are not an expression of the work of the Waterbucket team and its sponsors.

³ Additional proposals: (a) a new "worth" calculation; (b) Using *reverse-aboiteaux* to capture/dissipate rainwater. See: "D" at <https://davehuer.com/problem-solving-examples/>