



YOUR LOCAL ASSET MANAGEMENT COMMUNITY OF PRACTICE IN BC.

Enhancing BC communities through leadership in asset management.

THIRTY FIRST EDITION – WINTER 2021

Asset Management - Service, Asset and Financial Sustainability

Andy Wardell, Chief Financial Officer, District of North Vancouver; Co-Chair Asset Management BC



Financial health and providing for a long-term sustainable future are top priorities for local governments. This paper profiles two key financial indicators that are integral to how the District of North Vancouver measures service, financial and asset sustainability.

From a financial sustainability perspective, major components of our success include long-term financial plans, asset management plans, audited financial statements, key indicators and our ability to adapt our long-term plans following a set of guiding financial principles and financial strategies. From an asset management perspective these are all built on the work of our Asset Management Steering Committee.

Table 1 lists the key components we use to measure financial sustainability.

As municipalities and their assets are the foundation on which our community standards of living are built, planning and reporting on key financial sustainability indicators is critical to our municipality's long-term financial health.

Table 1: Components of Financial Sustainability

Components	Basic	Advanced
Long-term financial plan	<ul style="list-style-type: none"> Funding gap analysis for approved plans and strategies Planning structure separates one-time and ongoing resources 	<ul style="list-style-type: none"> Guiding financial principles Strategic planning framework Set of financial strategies Planning structure includes target levels of service and separates land requirements
Asset management (AM) plans	<ul style="list-style-type: none"> Based on asset type All physical assets 	<ul style="list-style-type: none"> AM strategy AM policy or bylaw Based on services and levels of service Including natural assets
Audited financial statements	<ul style="list-style-type: none"> Tangible capital assets Accumulated surplus AM reporting requirements 	<ul style="list-style-type: none"> Optional AM reporting Surplus and reserves aligned with corporate risks and long-term plan
Key indicators	<ul style="list-style-type: none"> Operating surplus ratio Asset sustainability ratio Asset condition ratings 	<ul style="list-style-type: none"> Gap analysis by goal Growth analysis and accuracy of related charges Adjustment plan to realize vision, be financially resilient Rolling plan to adapt for changes

The two continuous quality improvement ratios that evidence our commitment to excellence are the:

- 1. Operating Surplus Ratio** – The objective is to generate a small operating surplus every year to fund the replacement value (fair value) depreciation of existing assets.

Operating Surplus Ratio										
2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
-11%	-8%	-5%	-3%	0%	6%	6%	5%	6%	7%	4%
				Minimum Benchmark Target	0%					
				Upper Benchmark Target	15%					

To derive an accurate ratio, you must remove all non-recurring revenues from your audited financial statements (that includes any federal and provincial grants, development revenues and land sales to name a few). You also must remove historical cost depreciation and substitute in replacement value depreciation.

The operating surplus ratio is the most important measure of financial sustainability.

We started tracking this ratio in 2009 and you can see the progress we have made since. New major assets also mean higher replacement value depreciation and life cycle maintenance costs must be included and that can drive the ratio lower

- 2. Asset Sustainability Ratio** – This ratio aims at ensuring that you are reinvesting in your assets to cover 90% to 110% of asset consumption based on replacement value.

Asset Sustainability Ratio									
2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
				87%	83%	84%	89%	91%	92%
				Minimum benchmark 5 year moving avg:	90%				
				Upper benchmark 5 year moving avg:	110%				

- Denominator - What do your asset management plans say you need to replace? Update your plans every year! If you don't have a complete set of asset management plans you can use replacement value depreciation until you develop the plans.
- Numerator - What assets did you replace (as evidenced in your audited financial statements)?

The asset sustainability ratio requires tracking every year with the goal of establishing a 3 or 5-year moving average.

Why a moving average? Because the plans change all the time, projects get delayed for any number of reasons. For the District of North Vancouver, the years 2010 to 2013 were tracked but only included the 5-year moving average starting in 2014. Further, you can see that, after a decade, we are just now reaching the minimum benchmark of 90%.

Depending on your local circumstances these ratios can support the discussion on what level of taxation your community is willing to accept in support of aging assets and desired levels of service.

By taking the long-term view we strive to address the renewal, maintenance and replacement needs of our assets while maintaining affordability and reliability for future generations. We believe our approach is sound, proven and, within the Canadian context, helps reduce the infrastructure funding gap which exists nationwide.



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What is REALLY important for Asset Management?

Christina Benty, former Mayor of the Town of Golden, now Strategic Leadership Solutions



Given that this is a publication about asset management, I do not need to espouse the benefits of asset management to you. We all know that it makes good business sense, and no reasonable person would disagree. This is so obvious that it is boring.

But let me ask you this, are you as mystified as I am about the lack of real traction in the asset management movement? Have you noticed that it has garnered lots of attention but not enough real tangible action? Like me, maybe you cannot help but ask:

- » What could possibly get in the way of evidence-based decision making?
- » Why do we ignore the things we should not ignore?
- » Why do we not attend to the things we should attend to?

The obvious, and dare I say lazy, answer is *people*. But what exactly is it about people? What keeps people from making logical, rational decisions in their best interest? According to the science of human systems, people under stress do not make good decisions. Humans in various stages of fight, flight, freeze, and fawn are hijacked by their own brain and become immobilized or irrational or unavailable. In the presence of overwhelm, threat, fear, anxiety, and stress, humans are actually in a state of trauma and the executive functions (logical, sound, decision making) of the brain go offline. As a result, the brain is robbed of its energy, focus, vitality, rationality, and capacity.

What does this mean? What does it look like? And more importantly, what is at stake here?

Let's take a closer look at what happens when the people in our organizations are under stress and see if anything resonates.

- One of the most palpable signs that people are under stress is the ubiquitous culture of shame – blame – finger-pointing – assumptions – storytelling. This plays out when narratives are

fondled about the 'other', assigning them with evil intent: the other department, the council, the administration, those idiotic 'others'.

- Long-term thinking goes out the window under stress. The system chooses expediency over effectiveness. Without long-term thinking, we observe actions such as Council resorting to using reserves to offset taxes without full consideration of the consequences.
- It is unsafe to tell the truth. People get defensive. Suspicion is projected outward leading to a lack of trust in difficult to digest information.
- There is a pendulum between rigidity and chaos. Organizations hide behind policy and then ignore policy; whatever happens to be convenient at the time.
- The organizational culture becomes passive and milquetoast. There is no healthy conflict or passionate grappling with various philosophical ideologies. As a result, the right questions are not asked, and difficult things are glossed over.
- Then there is the most insidious of all: FEAR – fear of being wrong – fear of being second-guessed – the fear of looking bad. This shows up throughout the entire system.
- Staff must have perfect data before they go to Council or they will be humiliated. Or they overprepare for every possible question and yet they are still shocked by what comes up out of left field.
- Council fails to make a decision because they don't want to make a mistake. They freeze into a state of inertia. Or they do not dig in and adequately wrestle with the complex information; they barely give a cursory review of the reports that, at times, represent months and even years of research and preparation. This can happen when a Council is scared to disappoint the public and they give too much weight to opinions on the street. Often with minimal debate skills and no forum for grappling with polarizing information is compounded by a fear of the wrath of the press.
- Ah yes the press. The press who should be your partner in getting out sound unbiased information, are instead motivated by drama. They want Boards and Council to look bad. It solidifies the closely held beliefs that politicians are wasteful crooks fettering away the public purse.

- Lastly, the angry public who feels both entitled and terrified. They feel like they cannot bear a greater financial load because they have no idea that the services, they rely on day-to-day, are at risk. Who can blame them? The cost of living has grown astronomically, and they have so little recourse. Their local politician is a clear target.

We are talking about a system that is vulnerable and overwhelmed with feelings of helplessness due to competing priorities, a bombardment of mounting new regulations, a demand for more services with inadequate tax increases, and years of the narrative 'do more with less'.

Is it any wonder that the whole system is living in reactive mode and moving about the world as if it is under attack and everything is a threat? Because it is.

What brought us here will not take us where we need to go.

We need a new way forward and a healthier narrative. We have been so focused on the right information that we are not cultivating the right conditions. We must create environments where the brain can make rational, logical, evidence-based decisions. Here is what I believe to be true. **Investing in psychological safety will do more for asset management than any data, software, policy, plan or roadmap.** This is no longer an ideological argument; this is an economic one.

Dr. Amy Edmondson defined psychological safety as a shared belief that the environment is conducive to interpersonal risks. People can be honest, ask for help, admit mistakes, and challenge assumptions in the presence of others. She so brilliantly reminds her audience that psychological safety is not being nice or soft or weak. It is not permission to whine. It is a brave and bold stance against a pervasive culture of anger, shame, blame, and fear.

So, what are the right conditions? Imagine an environment where:

- Healthy conflict is welcomed, and the group can hold the tension of discomfort
- Clear, candid, and curious dialogue takes place, and the right things are talked about
- Conversations and debate take place in an atmosphere of relaxed alertness and open awareness
- Relational currency is prioritized, and others are humanized and not demonized

- Fearless advice is given, and the collective intelligence thrives
- There is the ability to manage complexity and full ownership of decisions are taken and communicated with courage
- The group is optimistic and has the capacity to imagine the future

Where did your imagination take you? Did you feel your shoulders drop, your jaw relax, your heart rate slow down? If that is the case, you just found yourself in a more rational, logical, and strategic frame of mind. Big promise? Maybe ... maybe not! There is plenty of research that says it's true, but I really want to hear from you. What are your thoughts? Does this make sense to you or are you skeptical? What has your experience led you to believe?

Here is what I believe: **If you want your asset management efforts to be successful, consider investing in creating the right conditions.** Your organizational brain of the future will thank you.

Case Study:

There are Alternatives to Concrete and Asphalt - Integrating a Natural Asset into a Capital Project

Gracelyn Shannon, ASCT, CAMA, CAMP and Mike Wall, RFT, Manager of Asset Management and Strategic Initiatives, qathet Regional District.



Overview

Innovation in asset management is most likely to occur when the focus is on the end goal of Sustainable Service Delivery. Finding the best solutions sometimes requires stepping back to ask: "What is the service we are trying to provide, and what is the most sustainable way to provide it?"

qathet Regional District, in collaboration with the City of Powell River, has undertaken a capital project which uses forested Natural Assets to support storm water management services. Rather than fixating on the details of the original proposed engineered design, the project team was able to step back and recognize the opportunity to use a Natural Asset solution which saves forest and taxpayer money.



Proposed engineered solution to storm water runoff

Status Quo: The Engineered Solution

The new Marine Avenue landfill closure mound has storm water run-off which needs to be received, flow-reduced, and filtered before being distributed back into the surrounding natural water courses with downstream fish connectivity. The infrastructure would need to handle the 100-year event runoff established 13 litres per second per side of the closed landfill.

The engineered design included a sediment bay to receive and settle storm water runoff from the closed landfill, as well as storm water pipe and lined ditch infrastructure to distribute the storm water downslope to a highways ditch prior to entering a salmon stream.

The financial, environmental, and public relations costs of the engineered solution were significant. The engineered solution would cost the removal of approximately 0.5 hectares of advanced second growth forest and an engineering-estimate price tag of \$850,000.

qathet Regional District staff and a senior planner at the City of Powell River walked the site to understand the field fit of the engineered infrastructure design. They all agreed there had to be a better way.

Both qathet Regional District and the City of Powell River were fortunate enough to have forestry professionals on staff to begin discussing what the surrounding forest may be able to provide with regard to storm water management.

Innovation: The Natural Asset Solution

qathet Regional District’s Strategic Plan and Board-adopted Asset Management Policy and Strategy set the stage for considering Natural Asset solutions.



East receiving apron post construction showing even distribution to forest

A new team was developed, including a Professional Engineer/Hydrogeologist and forestry professionals with extensive coastal BC experience, to consider:

1. Can the service be provided with this natural forest asset at the level it needs to be provided?
2. What will it cost financially to provide the service using the Natural Asset?
3. What will be the long-term impacts to the Natural Asset?

Designing the Natural Asset Solution

The team of professionals drafted an apron design which receives, filters, and disperses the storm water runoff to the

surrounding advanced second growth forest.

The design was finalized, working with the landfill closure design engineer and the landfill closure environmental contractor to ensure the transition of storm water from the landfill closure material layers to the apron would be seamless.



Overview of project site on December 17, 2020

Natural Asset at Work

As the eastern apron project was under construction, the site experienced heavy rainfalls, sedimentation, and runoff challenges. As an interim solution, the turbid water was pumped from the catchment areas into the surrounding receiving forest with wildland fire pumps and hoses through 35 sprinklers at a rate estimated to be similar to the calculated 13 litres per second 100-year peak flow per side of landfill closure. The forest filtered and absorbed the flow without any pooling or surface movement, a success and initial proof of what the forest could manage.

The apron construction is now complete and is currently distributing clean storm water run-off to the surrounding forest. Further heavy rains have provided a great visual real-time experience of how the apron receives, reduces velocity, filters, and disperses the storm water runoff to the forest. Promising initial signs of success.

Savings of a Natural Asset Solution

The solution preserved green space and resulted in immediate savings to the taxpayers. The Natural Asset solution saved an estimated 0.4 hectares of second growth forest from removal and cost the Regional District approximately \$150,000, which is an estimated \$700,000 less than the engineered solution.

Furthermore, Natural Assets typically require less maintenance, have the ability to adapt to changing conditions, and do not have the same asset replacement requirements as engineered infrastructure. Therefore, although it is still to be confirmed, the team is confident that long-term costs of the Natural Asset storm water solution will also be significantly less than the engineered solution.

There are valuable co-benefits to be considered in addition to the environmental and financial savings of the project. Co-benefits beyond the forest providing storm water management service includes

shade, sound and wind barrier, air filter, erosion control, sustain biodiversity and genetic resources, and provide opportunities for recreation, education and cultural enrichment.

Continuing the Journey

The project establishes that the forest is an effective storm water management tool. Further professional monitoring is necessary to maximize the forest's ecological health and understand its abilities to provide reliable and cost-effective services over the long-term. Additionally, quantifying and qualifying a value per hectare for a natural asset forest in providing a local government service would support future business cases for similar solutions, in qathet Regional District and in other local governments in BC and North America.

The project advances the natural asset management maturity of qathet Regional District, but further effort will also be needed for full integration into the Asset Management Program moving forward.

qathet Regional District is working to find willing participants and organizations to secure funding to design permanent research plots, carry out the monitoring and data collection schedule, analyze and report out on the findings, as well as to fully understand the asset management implications of the work done through this project. The information gathered will provide significant value to local governments, planners, engineering agencies, and more, particularly in the coastal BC region.

qathet Regional District would ultimately like to share with and support other local governments on their Natural Asset journey.

For More Information:

qathet Regional District, in collaboration with the City of Powell River, found a cost-effective and environmentally responsible solution to manage their storm water runoff at their landfill closure by using the surrounding natural environment. The team at qathet Regional District looks forward to providing updates on the project as more information becomes available.

Visit qathet.ca/current_project/resource-recovery-centre for more information on the Marine Avenue Landfill Closure Project.

Contact Mike Wall at mwall@qathet.ca or Gracelyn Shannon at gracelynshannon@gmail.com.

David Allen, Co-chair of Asset Management BC, receives Award from LGMA



David Allen received the LGMA Professional Award for Volunteer Service at a virtual recognition ceremony held October 16, 2020. David is a founding member and champion of Asset Management BC and served tirelessly to bring asset management concepts and strategies to colleagues across B.C. He has been the co-chair of the Asset Management Community of Practice for a decade and a frequent speaker at CAO Forums and Annual

Conferences, willingly providing training and technical advice to local governments whenever needed.

Note: Congratulations David. We all thank you for your important work with Asset Management BC and with the City of Courtenay. David recently retired from the Chief Administrative Officer position at the City of Courtenay and remains co-chair of Asset Management BC with Andy Wardell, Chief Financial Officer of the District of North Vancouver.

Gas Tax Funding Supports ASSET MANAGEMENT

Glen Brown, General Manager, Victoria Operations, UBCM

During the term of the Gas Tax Agreement, local governments in B.C. are required to work to strengthen their asset management practices and capacity. This work is to be guided by the **'Asset Management for Sustainable Service Delivery: A B.C. Framework'**.

As part of this requirement under the Gas Tax Agreement, local governments commit to asset management practices, and report on those activities, to remain eligible to receive Gas Tax Community Works Funds. The first phase of meeting the asset management reporting requirements was launched in 2016 with the collection of asset management baseline data from all B.C. local governments. With 100% participation, a report on the aggregate results was released in early 2017 – **Status of Asset Management in British Columbia – Results from the 2016 Gas Tax Fund Asset Management Baseline Survey**. In 2017, to meet the Phase 2 Gas Tax Agreement requirements, local governments completed an 'Asset Management Commitment Questionnaire' as part of their Annual Expenditure Report. The purpose of this questionnaire was for local governments to identify commitments and/or describe planned improvements that will move them forward with strengthening asset management practices and capacity. The completion of this questionnaire required local governments to revisit the asset management baseline data they provided for the 2016 survey and identify a path forward in making incremental improvements in asset management over the 10-year Gas Tax Agreement. Phase 3, the final phase, will involve the launching and participation in a final survey – anticipated to be launched sometime in 2022. This survey will be used to develop an asset management outcome report, comparing the aggregate asset management improvements achieved over the course of the Gas Tax Agreement. Individual local governments will also be able to identify their respective improvements made, as well as determine where additional work is needed.

To support local governments in their efforts to improve asset management practices and capacity, UBCM has continued to work with, and support, the activities of **Asset Management BC** (AM BC). AM BC has been providing B.C. local governments with tools, training and other resources. This includes, but is not limited to the following:

- Development of the Asset Management for Sustainable Service Delivery: A B.C. Framework;
- Development of four complementary Primers to support the Framework: **“Climate Change and Asset Management”**, **“Integrating Natural Assets into Asset Management”**, **“The Role of Operations & Maintenance in Asset Management”**, and **“Land Use Planning and Asset Management”**;
- A resource rich website (assetmanagementbc.ca);
- Quarterly newsletters with case studies;
- Education and training through conferences, webinars and workshops; and
- Direct outreach to local governments.

Recently, AM BC has secured funding through the Federation of Canadian Municipalities ‘Municipal Asset Management Program’ (MAMP) and is delivering free workshops on:

- Building Awareness for Elected Officials - Presentations to your Council or Board to increase awareness and support for your asset management practices, and how this is key to sustainable service delivery.
- Working with Levels of Service - A series of custom webinars to help you identify your levels of service including processes, tool kits, and coaching to develop and implement a plan for your community.
- Operationalizing Asset Management - A unique cohort-based learning experience to help you identify and overcome the barriers to asset management in the areas of organizational culture, structure, and capacity.

More information can be found on the Asset Management BC website: assetmanagementbc.ca

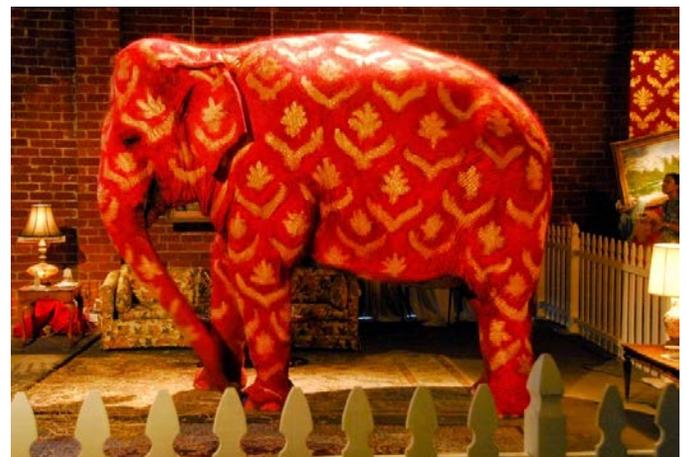
In addition, UBCM is supporting asset management planning funding through strategic partnerships with the BC Ministry of Municipal Affairs and the Federation of Canadian Municipalities. Additional information on current funding opportunities can be found at:

- UBCM’s Asset Management Planning Program: www.ubcm.ca/EN/main/funding/lgps/asset-management-planning.html
- BC Ministry of Municipal Affairs’ Infrastructure Planning Grant Program: www2.gov.bc.ca/gov/content/governments/local-governments/grants-transfers/grants/infrastructure-planning-grant-program
- Federation of Canadian Municipalities Municipal Asset Management Program: www.fcm.ca/en/funding/mamp/asset-management-grants-municipalities
- Gas Tax Fund – Community Works Program: www.ubcm.ca/EN/main/funding/renewed-gas-tax-agreement/community-works-fund.html

Through the work of **Asset Management BC** and the financial support of the various funding programs, B.C. local governments have been very active in strengthening their respective asset management practices and capacity. While UBCM will wait for the asset management outcome report anticipated in 2022/23 to confirm, it is clear that B.C. local governments are showing leadership in asset management within their own communities, as well within the province and nationally.

Elephant in the Room: Drainage and the Unfunded Infrastructure Liability

Kim A Stephens, P.Eng., Executive Director, Partnership for Water Sustainability in BC, and Tim Pringle, Chair, Ecological Accounting Process Initiative



It is All About the Service!

Over the past five years, the Partnership for Water Sustainability in BC has contributed a series of articles to the Asset Management BC Newsletter. We do this to keep the readership informed about our ongoing initiative for

testing, refining and mainstreaming the Ecological Accounting Process (EAP). Implementation is in collaboration with our local government and community partners in five regions of BC.

For those who are learning about EAP for the first time, the program context is **Asset Management for Sustainable Service Delivery: A BC Framework**. The program driver is the “unfunded infrastructure liability” typically associated with drainage, in particular the financial consequences over time when stream channels are degraded, and riparian integrity is compromised.

A central idea of the EAP methodology is that a stream system has a “package of ecological services”. This concept refers to the combined range of uses desired by the community. Three key words capture the essence of what the phrase “range of uses” means, namely: **drainage, recreation** and **habitat**. This is plain language that elected councils and boards understand.

Maintenance and Management (M&M) of Natural Assets

EAP supports local governments to operationalize ‘maintenance and management’ (M&M) of stream corridor systems under the umbrella of their Asset Management Plans. EAP provides the methodology and metrics necessary to achieve this goal.

Maintenance is defined as actions that prevent or avoid degradation of ecological assets that constitute the stream corridor system. **Management** is defined as actions that improve the condition of the ecological system and the services it provides.

A critical consideration in moving EAP forward is an understanding of how local government make decisions. The EAP methodology has evolved as we have learned from, and adapted, each successive case study application. Each situation is unique, but the approach is universally applicable.

The EAP program is now entering year two of Stage 3 mainstreaming, comprised of six demonstration applications. These cover a range of land use situations. Five spots have been filled. The Partnership is considering expressions of interest for the sixth spot.

If you the reader are intrigued by what you may have heard about EAP, especially if you viewed the recent Watershed Moments video (<https://youtu.be/WdDOBSt9Kjk>) on YouTube, featuring Tim Pringle and Emanuel Machado, then is this the moment you have been waiting for to reach out to kstephens@watersustainabilitybc.ca to learn more?

Sustainable Creekshed Systems and the Asset Management Continuum

EAP focuses on drainage and the condition and/or integrity of stream corridors. Both natural and constructed assets need to be addressed in the drainage context. Both are systems and therefore require similar M&M strategies. Drainage infrastructure, or lack thereof, is typically an unfunded liability that grows over time. It is the elephant in the room.

EAP supports local governments intending to adopt a life-cycle approach to M&M of natural assets much as it would apply to constructed assets. Effective M&M of natural assets requires commitment backed up by line items in an annual report.

The Partnership’s desired outcome is that local governments would apply the EAP methodology and metrics to determine real numbers for budget planning purposes. Then inter-departmental conversations would have a starting point for operationalizing M&M of natural assets within Asset Management Plans.

Figure A conceptualizes the asset management context for EAP under the BC Framework. It uses BC Assessment Authority data (parcel values) to value the land (that is, the setback zone occupied by a stream channel and corridor).

Figure A

Sustainable Creekshed Systems and the Asset Management Continuum



Branding logo for Asset Management for Sustainable Service Delivery: A BC Framework, 2014

- GROUND ZERO:** There is no **Asset Management Plan**. There is an ‘unfunded infrastructure liability’.
- STEP ONE:** Embrace **BC Framework**. Focus first on constructed assets (pipes & buildings). Implement Asset Management Strategy / Plan / Program.
- STEP TWO:** Life-cycle approach and **Sustainable Service Delivery** is standard practice for maintenance and management of constructed assets.
- STEP THREE:** Apply the **Ecological Accounting Process** to determine Natural Commons Asset values and establish budgets for stream corridor maintenance and management. Account for Water Balance services. Integrate climate adaptation.

As understanding grows, local governments progress incrementally along the **Continuum**.

Glen Brown of UBCM, receives Award from BC Water & Waste Association

AWWA George Warren Fuller Award

Recognizing sound engineering and leadership skills, and distinguished service to the water industry



Glen Brown has played many influential roles through his numerous years of local government leadership and support with the Union of BC Municipalities (UBCM), the Province, Asset Management BC, the Partnership for Water Sustainability, and several BCWWA committees.

Since 2014, Glen has served as UBCM's General Manager, Victoria Operations, with a portfolio that includes provincial relations and administration of the federal-provincial Gas Tax funding programs. Previously, Glen's 15-year journey with the BC Public Service began as an Environmental Health Officer with the Ministry of Health, and culminated in Municipal Affairs and Housing as Executive Director and Deputy Inspector of Municipalities, where he led the team responsible for financial viability of local governments and administration of infrastructure grant programs.

Glen's pioneering leadership in the fields of municipal asset management and water sustainability has profoundly shaped how local governments in BC make decisions about infrastructure and water resources. As a member of BCWWA's Water Sustainability Committee – which ultimately grew into the independent Partnership for Water Sustainability – Glen has played a key role in dozens of initiatives that have transformed urban rainwater management and demand management practices over the past two decades. Sometime around 2008, Glen adapted the Water Sustainability Committee's "Community of Practice" model to the problem of municipal infrastructure sustainability, when he invited a group of interested local government and association staff to pioneer the practice of local government asset management in BC. This group, which included BCWWA, quickly developed into what is now Asset Management BC (AMBC), which continues to thrive with Glen's ongoing hands-on leadership and participation. Through AMBC,

Glen's initiative has profoundly influenced how local governments manage and fund their infrastructure needs, and how we think about the services that rely on community-owned infrastructure.

Glen has been previously honored with several awards for his achievements by BCWWA, PWABC and the Ministry of Community Services. Despite his much broader recent roles, Glen has never strayed far from his roots in the water sector. In his spare time, you might find Glen literally in the water, chasing fish with his fly rod.



Atlantic Infrastructure Management (AIM) Network

Our sister network in Atlantic Canada has worked closely with [Asset Management BC](#) and has several resources available for our communities. The similarities of the two networks are coastal communities and a large number of small communities. AIM just released their Winter 2021 NEWSLETTER, an excellent document. The Managing Director of AIM is Daisy Foster, a name familiar to many as a prior Executive Director of the BC Water and Waste Association before 'retiring' to Atlantic Canada.

We encourage you to go to the AIM Network website aimnetwork.ca and review the resources available to you. We particularly encourage you to read the AIM newsletters. There are always excellent asset management stories, many dealing with our smaller communities.

PEOPLE: Managing Assets of Infinite Value

Diane Kalen-Sukra, MA, CMC. Founder of Kalen Consulting & Civic Academy. Former Chief Administrative Officer of Salmo



It is ironic that we began breathing life, meaning and more serious resources into the long-term management of our **physical assets** as soon as they began reaching "end-of-life". We evaluated their condition, began taking a hard look at the effects of years of neglect, the costs of renewal and contemplated life cycles like never before. Our public municipal assets were measured and ascribed a value --

\$1.1 trillion or \$80,000 per household, on average. Clearly, we are all heavily invested.

We had the same late awakening with **natural assets** – overlooking them until our physical infrastructure was exposed as vulnerable to climate change and tight budgets highlighted the cost effectiveness and resilience of natural assets like aquifers and wetlands. These natural gifts we had unconsciously relied upon are now being evaluated and ascribed a dollar value. Perhaps once this work is done, we will realize again, that we are all heavily invested.

If this is the approach we are adopting towards our physical and natural assets, how much attention should we be paying to our **human assets** – the employees, contractors and volunteers who manage these assets and deliver civic services, the elected officials who allocate associated public resources and set service levels, and the public who own the assets and receive these services? While we are all heavily invested, we will never arrive at a dollar value for this, because human assets are of infinite value.

Surely our appreciation for the infinite should be greater than the finite?

It is for this reason that PEOPLE are central in the AMBC Framework for Sustainable Service Delivery.

It is for this reason that behind every successful asset management initiative there are **people** -- asset management champions of the cause, such as the founders of Asset Management BC and the many trailblazers across Canada.

It is for this reason that in 2017 the local government for which I was Chief Administrative Officer became the first to enshrine **human assets** as vital to sustainable service delivery in the Official Community Plan and was subsequently awarded the Federation of Canadian Municipalities Sustainable Communities Awards for Asset Management.

It is for this reason that at the 2018 Australian Asset Management Council's conference the government sector asset management practitioners identified "culture" as the greatest obstacle to advancing asset management practices.

It is for this reason that my keynote addresses to both the AMBC conference and the Canadian Network of Asset Managers in 2018 and 2019 were on "fostering culture" for good governance and asset management, even going as far to write a book on the topic that is now published by Municipal World.

It is for this reason that the Regional of Peel, whose incredible work in embedding an asset management culture spearheaded by Leanne Brannigan and Sam Sidawi, has made it a leader today in Canada with their 2020 Infrastructure Status & Outlook Report showing 86 percent of their \$30 billion in infrastructure at the Region's service target level of Good or Very Good, with no infrastructure in Poor or Very Poor condition. Contrast that with over a third of Canada's municipal infrastructure in poor or very poor condition.

In the Fall 2020 edition of this newsletter, former Courtney CAO and AM champion David Allen describes the process by which asset management practitioners concluded that "operationalizing asset management would involve four separate, interconnected initiatives" – namely Collaboration, Capacity, Culture and Council. All of them involve "people".

And from these four C's, I draw out Community, which is inherent in the others but worthy of separate mention here. Without public understanding and engagement, the most integrated asset management processes with the best evidence-based political decision making can be derailed by public pushback.

Community building is, after all, a human-centred project. And it starts with civic leadership committed to building **resilient cities** – places where public assets are well stewarded, services are sustainably delivered, and people thrive.

Questions Resilient Civic Leaders Ask

Success in Asset Management requires persistence and can only be achieved by fostering a culture that supports **interdependent collaboration** and **evidence-based decision making** at all levels – from the Council or Board table to the front-line water operator. Resilient civic leaders ask:

- How do we shift our culture from Reactive to Proactive decision-making and operation?
- How do we align our local government behind a shared purpose and sustainable service delivery?
- How do we manage and address public apathy, or worse, public attack?
- How do we engage in complex systems to transform ideas and practices around good governance, asset management and service delivery?

Are you a Mayor, Councillor, CAO or Senior Staff person and/or Asset Manager wanting to join a national cohort of resilient civic leaders who are fostering this culture at

the Council/Board table, in their organizations and in their community?

Learn from civic leaders from across the country including AM BC executive director Wally Wells, natural assets leader CAO Emanuel Machado of the Town of Gibsons to servant leader champion CAO Steve Kanellakos of the City of Ottawa, and experts like Mary W. Rowe, CEO of the Canadian Urban Institute. It is my pleasure to host and deliver this spring civic academy program.

Cultivate the values and leadership skills required to increase empirical and ethical decision-making and personal, social and environmental wellbeing. A range of skills are covered that strengthen your ability to lead in accordance with your values, fostering trust and social cohesion – the keys to resilient workplaces and communities.

The program is based on cutting-edge developments in the fields of neuroscience, psychology, trauma-informed care, peace and conflict studies and contemplative science. It builds off work done by emotional intelligence gurus Daniel Goleman and Peter Senge, while drawing on the ancient wisdom of political philosophers, sages, and civic leaders through the ages. After all, the ancients knew something we didn't, as they built their infrastructure to last a thousand years so-to-speak, and much of it survives to this day.

To learn more, e-mail Diane Kalen-Sukra at info@kalenconsulting.com.

Tom Barnes, CEO of MIABC, receives Leadership Award from AGRiP



Tom Barnes, CEO of the [Municipal Insurance Association of British Columbia \(MIABC\)](#), has been selected for a prestigious Award for Excellence in Leadership by the [Association of Governmental Risk Pools \(AGRiP\)](#).

Since 2005, Tom has grown the MIABC from a simple claims-handling reciprocal into a sophisticated organization delivering comprehensive member services and solutions to local governments in British Columbia.

When the MIABC was faced with rising claims costs early in Tom's tenure, he formed an in-house legal department that now handles more than half of the reciprocal's

litigated claims. In addition to providing continuity of service in claims handling, this department has saved members over \$1 million annually since its creation in 2006.

In response to increasing reinsurance costs, Tom established an in-house reinsurance brokerage to negotiate the MIABC's property reinsurance quota share arrangement. This has resulted in another MIABC revenue source for the benefit of its membership.

Tom has achieved these notable outcomes, in part, by encouraging strategic planning at all levels. For example, he coordinates regular strategic planning retreats for board and staff members and facilitates multi-day meetings for advisory group members to provide feedback on the MIABC's effectiveness in meeting its strategic goals.

"Tom is an excellent leader capable of motivating, leading and challenging association membership and staff," said industry colleague Shawn Bubb, director of insurance services at the Montana Schools Group Insurance Authority (MSGIA). "His core values are pure, as is his drive to continue to create and achieve."

Tom also has a commitment to mentorship that extends beyond the MIABC. He regularly invites representatives from other public entity pools and organizations to attend the MIABC's Risk Management Conference in order to connect public entity pooling professionals and promote commitment to public entity needs. Tom is always willing to share ideas and opportunities with others and has traveled to other public entity pools to share successful MIABC programs. He is also a member of the [AGRiP](#) and [Canadian Association of Insurance Reciprocals \(CAIR\)](#) boards of directors.

"Tom's ambitious vision, communications skills, spirited work ethic and emphasis on relationship-building have transformed the MIABC," said Brett Davis, AGRiP's board president. "His remarkable accomplishments offer a model for leadership in pooling."

AGRiP's Award for Excellence in Leadership is given to an outstanding leader and/or mentor in the public entity pooling community who has made strong contributions to the industry and inspires others. Tom will receive his award at AGRiP's Governance Conference on March 2, 2021 in Orlando, Florida.

ABOUT MIABC:

Founded in 1987, the MIABC is a public entity reciprocal providing stable and broad liability and property insurance coverage, outreach programs and expert advice to its members across British Columbia.

MIABC is an [Asset Management BC](#) Partner. For more information about the MIABC, visit [MIABC.org](#).

ABOUT AGRiP:

The Association of Governmental Risk Pools is a multinational organization for public entity risk pools with over 200 members from the United States, Canada and Australia. By providing support in the fields of education, intelligence, advocacy, networking and best practices, AGRiP energizes the power of pooling, making member organizations more effective, collaborative and informed. For more information about AGRiP and the public entity pooling industry, visit [agrip.org](#).

A Municipal Politician's View of Asset Management

Joe McGowan, Director of Public Works, City of Cranbrook (retired); previous municipal employment with District of Powell River, BC; Cariboo Regional District, B.C; City of Whitehorse, Yukon

The manner in which Asset Management (AM) information is presented to municipally elected politicians is contributing to the absence of support for AM options at the Council level.

Municipal councillors in BC are elected for a four-year term. Many tend to be transitory, with involvement in their elected role for a period between four and twelve years, with very few exceeding eight years. The majority are largely elected on the basis of 'name recognition' within their community. They enter their roles without any knowledge of infrastructure matters or even what their duties will be. During and post-election, most councillors tend to champion social and other issues that are somewhat removed from the four core responsibilities identified at Section 7 (Municipal purposes) of Part 2, Division 1 of the BC [Community Charter](#) which states:

The purposes of a municipality include:

- (a) providing for good government of its community,*
- (b) providing for services, laws and other matters for community benefit,*
- (c) providing for stewardship of the public assets of its community, and*
- (d) fostering the economic, social and environmental well-being of its community.*

Observation suggests that the number one goal of many, not all, elected municipal politicians is to get re-elected. This, the politicians feel, can best be accomplished by

offending as few of the electorate as possible while being seen to champion social, transportation, housing, recreation, and other issues they feel will garner them support at the polling booth. Fundamental to any re-election bid is to be seen as someone who works to keep municipal property taxes below the annual rate of inflation.

AM information presented to municipal councils tends to largely be through formal receipt of Asset Management Plan reports prepared by consultants and advanced to Council by municipal staff. The report and Plan tend to identify massive infrastructure deficits that in the opinion of the consultant require immediate replacement at staggering costs. These costs are usually well in excess of the community's annual capital budget and are often multiples of the annual capital budgets identified in the community's 'Five Year Financial Plan'. Further, the reports usually indicate that once the immediate infrastructure deficit is addressed, which will take several years, there will be even more costs to deal with the assets that have been identified by the consultant as coming due for replacement.

From the elected official's standpoint, this is scary. The monies needed to address the reported infrastructure deficit will divert scarce tax revenue away from pet projects that they have been seen to champion. More importantly, the councillors are aware that if they adopt the consultant's recommended Asset Management Plan, the extraordinarily high costs will result in significant increases to property taxes over many years. The politicians know that such property tax increases will not get them re-elected.

The shock value and high costs described in the consultant reports advanced by staff usually results in councils quietly receiving the consultant reports and immediately moving on to 'more pressing matters'.

End of story!!

Asset Management BC offers Training opportunities

AM BC, through UBCM applied to the Federation of Canadian Municipalities for funding under the Municipal Asset Management Program and was successful. In October we called for Expressions of Interest for three streams.

- 1. Awareness training for Asset Management** – This is aimed at senior staff and Councils / Boards to

bring awareness of the merits of carrying through the asset management process.

2. **Level of Service Training** – Based on a program and tool developed in concert with the NWT and AIM (Atlantic Infrastructure Management – the Atlantic Canada Community of Practice and a pilot workshop held one year ago, the on-line workshop is being offered to focus on identifying and evaluating level of service for use of assets.
3. **Operationalizing Asset Management** – What is the process to develop your asset management program and move to using your asset management program in decision making for Councils and Boards. The program incorporates the ‘4 Cs’ (see prior newsletter article by David Allen, fall 2020), which are Council, Capacity, Culture and Collaboration. The result of the workshop series will be each cohort will develop their business plans and provide a case study based on the artifact they identified.

Over 30 expressions of interest were received from BC communities, some asking for two or all three programs. As funding is limited, we are ensuring that each community receives at least one program. All three programs are now underway. For the awareness stream, it appears we will have additional capacity. Watch for a call for additional submissions if you are interested.

For more information contact Wally Wells, Executive Director AM BC via e-mail: info@assetmanagementbc.ca

Tips & Tactics: Connecting Service Risks to Level of Service

Bernadette O’Connor, Principal Consultant, Asset Management, WSP



Many organizations have defined levels of service (LOS) and quantified service delivery risks, or they have started doing this.

Often, I notice these assessments are completed independent of each other. Yet we know LOS and risk are interrelated.

So why is this?

I think the challenge is getting our heads around how the relationship works.

If we think of the relationship at a technical level it is indeed highly complex with lots of variables. But if we step up from the detail to look at service delivery outcomes, the relationship is less complex.

Figure 1 shows an example of how LOS and Service Delivery Risk can connect through the Service Commitment (or Service Criteria) that would be defined in your LOS framework.

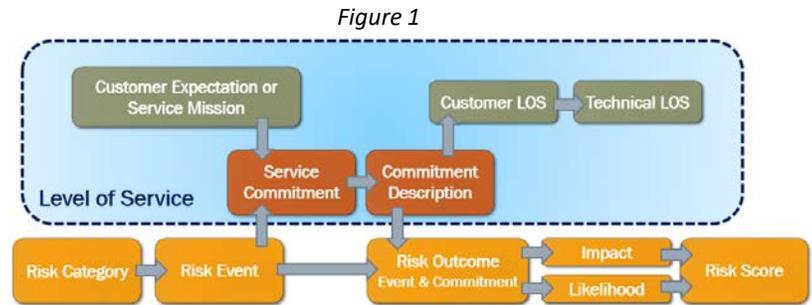
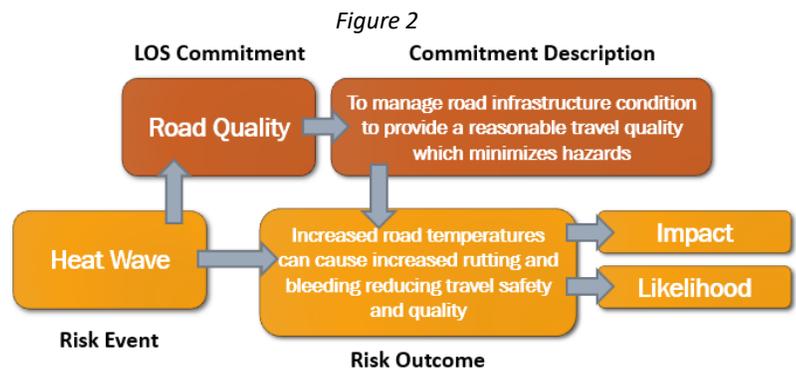


Figure 2 (below) is part of a risk assessment for road service and demonstrates the practical way that LOS and risk can be connected. When you make this connection, the risk assessment becomes more meaningful to decision-making and management of service delivery. The rating of impact and likelihood are measuring how the risk event would affect your service commitment.



Understanding and measuring risk through the lens of service delivery commitment, provides guidance for what activities are appropriate to mitigate or manage the risk. These mitigation or management measures (such as inspections, preventative maintenance, testing, standby equipment, emergency plans, and improvement activities) can then link back into your LOS planning and budget forecasts to complete the active relationship.

Making the connection helps to understand what we need to do, why, and what the risk are if its not done. We are then able to communicate the situation more clearly and confidently to others, and we can make better decisions.

Upcoming Events



Government Finance Officer Association of BC (GFOABC)

May 26 - 28, 2021
Annual Conference and AGM
Victoria, BC
gfoabc.ca

BC Water & Waste Association (BCWWA)

June 1-2, 2021
49th Annual Conference and Trade Show (virtual)
bcwwa.org

Federation of Canadian Municipalities (FCM)

June 3 - 6, 2021
Annual Conference and Trade Show
Montreal, QC
fcm.ca

Local Government Management Association (LGMA)

June 15 - 17, 2021
Annual Conference and Showcase
Kelowna, BC
lgma.ca

Union of British Columbia Municipalities (UBCM)

September 13 - 17, 2021
Annual Conference and Trade Show (virtual)
ubcm.ca

Public Works Association of BC (PWABC)

September 19 - 22, 2021
Annual joint Conference and Trade Show with BCMSA
Richmond, BC
pwabc.ca

Asset Management BC (AM BC)

November 2021
5th Annual Asset Management Conference
Richmond, BC
assetmanagementbc.ca

COVID-19

Due to the Covid-19 virus and the requirements for Social Distancing, most conferences in person have been cancelled for at least the first half 2021. Most are moving to a 'virtual' conference. Check the Association website for details.

Editor: Bernadette O'Connor



Victoria, BC
Ph. 250 896 4136

Email: berndette.oconnor@wsp.com

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