



YOUR LOCAL ASSET MANAGEMENT
COMMUNITY OF PRACTICE IN BC.

Enhancing BC communities through leadership in asset management.

Asset Management BC Conference Program

Radisson Vancouver Airport Hotel – November 6 & 7, 2019

Innovate, Communicate and Celebrate – A Culture of Continuous Improvement



Wednesday Morning Keynote Address

Tom Barnes LL.B., Chief Executive Officer of the Municipal Insurance Association of BC with Samantha Boyce, Legal Council Municipal Insurance Association – gain insights into the MIABC's claims data from the last 10 years and how this data demonstrates the importance to key asset management principles.

Wednesday, November 6th (Morning Plenary Session) – President's Ballroom

- 7:30-8:30** **Registration and Refreshments**
- 8:15-8:30** **Welcome and Conference Opening**
– David Allen, Co-Chair, AMBC Community of Practice Working Group & Conference Chair
- 8:30-9:30** **Keynote Address** – Tom Barnes and Samantha Boyce
- 9:30-10:00** **Legal Considerations of Asset Management**
– Doug Allin, CAO, Town of Spallumcheen
– Sukh Manhas, Partner, Young Anderson LLP
- 10:15-10:30** **Refreshment Break sponsored by WSP**
- 10:30-12:00** **The Risk of Climate Change**
- **Navigating Uncertainty: Selecting a Sea Level Rise Value for Infrastructure Planning and Renewal**
 - Lisa Butler, Manager of Engineering Strategy, City of Courtenay
 - Jody Rechenmacher, P. Eng, Community Infrastructure Consultant, Urban Systems
 - **Building a Climate Change Adaptation Strategy with Asset Management**
 - Duane Nicol, CAO, City of Selkirk, Manitoba
 - **Strategic Climate Change Risk Assessment Framework for BC**
 - Julia Berry, Senior Policy Analyst, Climate Risk Management, Climate Action Secretariat, Ministry of Environment and Climate Change Strategy

Wednesday, November 6th (Afternoon Plenary Session) – President’s Ballroom

- 12:00-12:05** **Creating the Sustainable Service Survival Kit: How Can We Communicate Asset Management Better? (Intro)**
– Jan Enns, Jan Enns Communications
- 12:05-1:00** **Lunch sponsored by Young Anderson**
- 1:00-2:30** **Creating the Sustainable Service Survival Kit: How Can We Communicate Asset Management Better? (Table Talk)**
– Jan Enns, Jan Enns Communications
– Christina Benty, Strategic Leadership Solutions
- 2:30-2:45** **Refreshment Break sponsored by Assetic**

Wednesday, November 6th (Afternoon Concurrent Sessions)

(NOTE: All presentations in the concurrent sessions are scheduled for 25 minutes, with 5 minutes for questions.)

STREAM 1 – Richmond Room

STREAM 2 - President’s Ballroom

2:45-4:45 ***Tools & Resources to Build Asset Management Capacity***

2:45-4:45 ***Climate Change and Sustainability***

- **How to Achieve Continuous Improvement Through Benchmarking: Canada’s First National Transportation Benchmarking Initiative**
– Devin Sauer, AECOM
- **Best Practices Guide for Municipal Engineers**
– Stuart Nash, Engineers & Geoscientists BC
- **Asset Management Guide for First Nations**
– Warren Brown, Manager, Operations and Maintenance, Lytton First Nation
– Amanda Spinks, Economic Development Implementation Manager, Lytton First Nation
- **Asset Management Competency Framework**
– Iain Cranston, Project Manager, Canadian Network for Asset Managers

- **BC Landscape Water Calculator: Online Tool Connects Outdoor Water Use to Sustainable Service Delivery**
– Ted van der Gulik, President, Partnership for Water Sustainability in BC
- **Application of a Climate Risk Assessment Framework to CVRD Water and Sewer Infrastructure**
– Austin Tokerek, Asset Coordinator, Cowichan Valley Regional District
- **The Emergence of Municipal Natural Asset Management: The Evidence to Date**
– Roy Brooke, Executive Director, Municipal Natural Assets Initiative
- **Applying a Climate Lens to Infrastructure Projects**
– Chris Gainham, Manager of Municipal Services, City of Nelson

5:00-7:00 ***Networking Reception – Prefunction Ballroom (Foyer)***
Complementary Food and Beverage – Cash Bar

Sponsored by Public Sector Digest

Thursday, November 7th (Morning Plenary Session) – President’s Ballroom

- 7:15-8:00** **Buffet (Hot) Breakfast**
- 8:00-8:15** **Opening Remarks & Overview of Day 1**
– David Allen, Co-Chair, AMBC Community of Practice Working Group & Conference Chair
- 8:15-9:00** **Keynote Address** - Allen Mapstone, Director, Strategic Asset Management, IPWEA/NAMS Canada



Thursday Morning Keynote Address

In Allen Mapstone’s keynote address, he will take a high level look at the relationship between service levels, both aspirational and realistic, what can we afford and how can this be achieved equitably between generations of users?

The asset management journey has many paths and we may travel them in a slightly different way, and at different speeds! If there are many paths along the asset management journey, affordable and agreed service levels, cost-effective asset maintenance & renewal along with intergenerational equity are, dare I say, some of the “highways!”

- 9:00-9:45** **A Tool for Defining Level of Service: A Primer to an Interactive Workshop**
– Catherine Simpson, Kerr Wood Leidal
– Colwyn Sunderland, Kerr Wood Leidal
- 9:45-10:00** **Refreshment Break sponsored by WSP**

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Thursday, November 7th (Morning Concurrent Sessions)

(NOTE: All presentations in the concurrent sessions are scheduled for 25 minutes, with 5 minutes for questions.)

STREAM 1 – Richmond Room

10:00-12:00 *Case Studies: Thinking Big, Starting Small*

- **Three States of Change on the Asset Management Journey – The New Westminster Experience**
 - Eugene Watt, Manager of Planning, City of New Westminster
 - David Albrice, Asset Insight Management Ltd., *formerly with GHD*
- **Small Assets, Big Problems – Lake Babine First Nations Asset Management Program**
 - Bernard Patrick, Capital & Infrastructure Director, Lake Babine Nation
 - Rick Dobbs, Capital Asset Protection Officer, Lake Babine Nation
 - Freda Leong and Stefanie Wiik, Associated Engineering
- **A BC Regional District’s Asset Management Journey – “This Far”**
 - Nancy Schmeister, Manager of Technical Services, qathet Regional District
 - Mike Wall, Manager of Asset Management and Strategic Initiatives, qathet Regional District
 - Jason Kouwenhoven, Accountant, qathet Regional District
 - Caleb Allen, GIS/Survey Technician, qathet Regional District
- **Dockside Green – Infrastructure Assessment: 18 Years After Achieving LEED Platinum**
 - Kim Fowler, Principal, Sustainability Makes Cents Consulting

12:00-1:00 Lunch sponsored by Urban Systems

STREAM 2 - President’s Ballroom

10:00-12:00 *Finance and Corporate Strategies*

- **Improving the District of Summerland’s Business Casing and Project Prioritization to Develop Better Capital Budgets**
 - Tami Rothery, Sustainability/Alternative Energy Coordinator, District of Summerland
- **Metro Vancouver’s Asset Management Tools: Realizing the Potential to Improve Long-Term Financial Planning**
 - Chris Woo, Senior Project Engineer, Management Systems & Utility Services, Metro Vancouver
 - Alexander Kolesov, Senior Asset Management Consultant, AECOM
- **The Converging of Two Asset Management Journeys by Interlocking Two Frameworks: Risk and Level of Service**
 - Jason Kinch, P. Eng., Engineering Technologist III - Asset Management, District of Mission
 - David Albrice, Asset Insight Management Ltd., *formerly with GHD*
- **Sustainable Infrastructure Replacement Plan**
 - Christopher Paine, Director of Finance, City of Colwood

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Thursday, November 7 (Afternoon Plenary Session) – President’s Ballroom

- 1:00-2:00** **Implementing a Corporate Asset Management System – Looking Under the Hood**
- Joel Shaw, Infrastructure Engineering Manager, City of Kelowna
 - Hamid Butt, Sr. Project Manager, City of Kelowna
- 2:00-3:00** **The Future of Asset Management** (*Panel Discussion*)
- Bogdan Makuc, Director, Municipal Asset Management Program, FCM (*Moderator*)
 - Brian Bedford, Director, Infrastructure and Engineering, Ministry of Municipal Affairs & Housing
 - Jim Martin, Chief Administrative Officer, Fraser-Fort George Regional District
 - Lisa Vass, Chief Financial Officer, Town of Golden
 - Michelle Mahovlich, Director of Engineering, City of Langford
 - Rebecca Mersereau, Saanich Councillor & CRD Director
- 3:00-3:15** **Refreshment Break Sponsored by Kerr Wood Leidal**
- 3:15-3:45** **Municipal Asset Management Program, Federation of Canadian Municipalities**
- Bogdan Makuc, Director, Municipal Asset Management Program, FCM
- 3:45-4:00** **Asset Management BC Update**
- Glen Brown, Chair, Asset Management BC Partnership Committee
- 4:00-4:15** **Conference Closing Remarks and 2020 AMBC Conference Registration Draw**
- David Allen, Co-Chair, AMBC Community of Practice Working Group & Conference Chair

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2019 Asset Management BC Conference

ABSTRACTS

Wednesday AM

Keynote Address - Tom Barnes, with Samantha Boyce

In this session, Tom and Samantha will interpret the MIABC's claims data from the last 10 years. They explore how this data emphasizes key Asset Management principles and will describe a selection of the MIABC's "war stories" that demonstrate the importance of these principles. Participants can expect to come away from this session with practical understanding of the additional reasons why Asset Management is crucial for developing vibrant, healthy communities.

Legal Considerations of Asset Management

Sukh will discuss the importance of asset management from a legal perspective, the legal authority of local governments to undertake asset management initiatives, the structuring of services to ensure that local governments can exercise that authority, and the legal mechanisms available to local governments to finance asset management initiatives.

Navigating Uncertainty: Selecting a Sea Level Rise Value for Infrastructure Planning and Renewal

There are differing projections from credible organizations about how sea levels will change over time - so what assumptions should a coastal local government make about sea level rise (SLR) when making decisions about planning and renewal of expensive and long lasting infrastructure? And how can the local government ensure that the process of making the decision is defensible to impacted stakeholders? The City of Courtenay (the City), Urban Systems Limited (Urban), and the University of Waterloo (UofW) are collaborating to develop and apply a process for making decisions to revise key infrastructure design parameters in response to changing climate, with a specific focus on SLR.

Selecting a SLR value for consistent planning and decision-making at the City will have significant impacts on stakeholders, both internal and external. Planning for different SLR projections provides different levels of protection to the community, but also comes with different costs. Making decisions about which SLR value to use in planning requires understanding risk, trade-offs, navigating uncertainty, and how SLR values may be adapted over time to account for new information. Larger local governments often have resources to conduct extensive modelling and cost-benefit analysis to select these values, but this level of analysis can be out of reach of smaller coastal communities. This project focused on supporting the City of Courtenay to select a SLR value for their infrastructure planning, and developing a process for selecting a SLR value that is systematic and defensible and could be replicated in other small and mid-sized communities to support their decision making about adapting their infrastructure in a way that considers risk and risk perceptions.

Building a Climate Change Adaptation Strategy with Asset Management

City of Selkirk has a strategic partnership with the Prairie Climate Centre out of the University of Winnipeg and is a participant in the FCM CAMN program. We will describe the process we co-developed which brought together local knowledge and climate specialist knowledge. We will describe:

- How we engage staff at all levels in all departments*
- Used a "Service" approach to identifying the consequences of climate change to each of our municipal services*
- Followed a risk based approach to prioritizing these consequences*
- Allowed staff to identify and evaluate response strategies*
- Integrated our AM program into the response selection*

- *Integrated climate change considerations into our AM program's risk policy*

We will explain how Selkirk's strategy has been connected with our multi-year business plan and budgeting processes, identify the work currently being doing to implement the plan, discuss Selkirk's focus on natural assets, adaptation efforts that provide co-benefits, and developing that capacity to adapt better in the future and discuss 'lessons learned'.

A 7-minute micro-documentary will be available for viewing as part of the presentation and a 3-minute clip from the CBC's The National program identifying Selkirk as a community leading the way on climate change adaptation could be used as part of the presentation

Strategic Climate Change Risk Assessment Framework for BC

Coming soon

Wednesday PM

Creating the Sustainable Service Survival Kit: How Can We Communicate Asset Management Better?

Following the membership-endorsed 2018 UBCM Resolution to develop a common message and communications approach for managing assets for sustainable service delivery, we need your input!

Help us create a toolkit to help you better communicate with your Council/Board, staff or community about why and how we need to manage our assets to ensure we can continue to provide the same quality services now and in the future.

Join us for a special communications table talk workshop led by facilitators Jan Enns and Christina Benty. Through a combination of lively presentations and small group discussions, help identify what's working, what's giving you grief and what can help increase awareness and support for ensuring sustainable services.

How to Achieve Continuous Improvement Through Benchmarking: Canada's First National Transportation Benchmarking Initiative

Managing infrastructure is becoming increasingly challenging as demands increase and resources remain limited. Municipalities are constantly under pressure to cut costs and provide more services – a feat that can only be achieved through continuous improvement. For years, municipal water, wastewater, storm water, and solid waste departments throughout Canada have been using benchmarking as a means, among others, to effectively communicate performance to stakeholders, establish norms and standards, and identify improvement opportunities. Learn how the methodology developed by these initiatives is currently being adapted to the transportation sector through the creation of Canada's first National Transportation Benchmarking Initiative (NTBI). Key outcomes of the NTBI will be discussed including the philosophies, practices, and measures developed to facilitate knowledge sharing and enable "apples-to-apples" comparisons between transportation agencies of different sizes, characteristics, and geographic locations.

Best Practices Guide for Municipal Engineers

Our municipal engineers are an important part of the Asset Management process. I will provide an introduction of the role of the Association, our Professional Practice department, and, most important to asset management, our Professional Practice Guidelines program. As the Municipal Engineers Division through the Association intends to develop a "Best Practices" Guideline for Asset Management, I will outline the goals and processes for developing our professional practice guidelines. I will conclude with a discussion about the proposed Asset Management Guideline: suggested topics for the guideline and some issues that we have heard of in the industry that the guideline may be able to address.

Asset Management Guide for First Nations

With financial assistance from BC Region of Indigenous Services Canada (ISC), a committee of 11 First Nation communities was struck to create “Asset Management Guide for BC First Nations”. Newly published guide and workbook prepared for first nations but process is applicable to all. The Guide is very easy to read and follow.

Asset Management Competency Framework

People do asset management. The staff in your organization are critical to progressing asset management. Staff need to work together in cross-functional groups, and organizations need to develop any of the necessary skills, behaviors and knowledge they might be missing. For some, this can be a big change and a different way of working. For some organizations, this can require staff training and/or new hires. To support this, the Canadian Network of Asset Managers (CNAM) have developed an Asset Management Competency Framework for Communities. The framework will help formally capture the AM skills, behaviors and knowledge you need across your organization, and enable you to put training plans in place to help staff fill the gaps.

BC Landscape Water Calculator: Online Tool Connects Outdoor Water Use to Sustainable Service Delivery

Have you ever thought of changing your landscape to more efficient plants in order to save water? How about adding additional topsoil or converting to an efficient irrigation system?

The calculator allows a user to develop a number of hydrozones for the property, and the calculator will determine annual water use for each hydrozone and total them. This value can then be compared to an appropriate annual demand for the property calculated by using a 10-year average of climate data.

The calculator can also compare three scenarios to determine different hydrozones to determine the most efficient layout. To try out the calculator, visit: <http://test.bcwatercalculator.ca/landscape>

Application of a Climate Risk Assessment Framework to CVRD Water and Sewer Infrastructure

The Cowichan Valley Regional District (CVRD), with the assistance of Urban Systems, has developed a Climate Risk Assessment framework to identify vulnerable infrastructure systems and assess identified climate risks. The CVRD has used regional climate projections that include drier summers, wetter winters, sea level rise and longer more intense storms, to develop the framework. The model was then applied to vulnerable water and sewer utility systems in an effort to identify future costs associated with mitigating identified climate risks. The framework and the results of the analysis will be shared in this presentation.

The Emergence of Municipal Natural Asset Management: The Evidence to Date

Local governments need to rethink how they deliver services reliably and cost-effectively. For a growing number of Canadian municipalities this means looking around them at existing natural assets such as forests, riparian areas and coastal ecosystems for answers. Their experience in municipal natural asset management suggest that natural assets can provide some of the same services as engineered assets but with lower capital and operating costs and greater resilience to a changing climate. This presentation will describe:

- the rationale for and evolution of municipal natural asset management, including the development of the Municipal Natural Assets Initiative
- the key role of modern, structured asset management this work
- the latest projects and research
- future directions, and
- areas of enhanced collaboration across professional disciplines

Applying a Climate Lens to Infrastructure Projects

The concept of infrastructure resilience is receiving increasing attention as communities begin to face risks and opportunities associated with environmental, societal, and technological change. Using recent project examples for water and wastewater infrastructure, we will outline the process for completing both the Greenhouse Gas Mitigation Assessment and Climate Change Resilience Assessment plus lessons learned from the first federally approved Climate Lens Assessment. Following these session participants will be able to:

- Understand the future trends affecting municipal infrastructure*
- Learn about accepted practices and processes to identify resilience to climate risks and assess their significance*
- Understand how to evaluate, mitigate, and adapt for resilience, and*
- Identify ways to improve resilience decision making through new tools and analysis such as the Climate Lens Assessment*

Thursday AM

Keynote Address – Alan Mapstone

The asset management journey has many paths and we may travel them in a slightly different way, and at different speeds!

Don't fall into the trap of thinking there is only one right way to make the journey but do beware of complacency. There are boundaries that we need to stay within and we should have some common objectives.

There are various aspects to consider within the asset management discussion, some are highly technical and or driven by operations and engineering, others are financial and there is also an important role for community engagement and we must keep sight of the underlying purpose which is informed decision making.

We can generally find consensus between asset managers with the statement, “the infrastructure we provide is there to deliver services for our customers and communities”, but even so we can find that each of our technical areas still have an underlying thought that others should “see it my way”.

A Tool for Defining Level of Service: A Primer to an Interactive Workshop

In conjunction with the annual conference, Asset Management BC will be hosting its first full-day workshop on Friday, November 8 at this location.

This presentation is an introduction to level of service and the L of S tool. This tool was developed in 2018 through a partnership with AMBC/UBCM, the Atlantic Infrastructure Management Network and the Northwest Territories Association of Communities, and is in use throughout Atlantic Canada. It is applicable for all communities but specifically developed for learning how to document and assess community levels of service in small communities.

Three States of Change on the Asset Management Journey – The New Westminster Experience

The City of New Westminster, situated along the Fraser River Estuary, is the oldest municipality in Western Canada. As a waterfront community facing increasing densification and gentrification drivers, the City has a number of stewardship and growth management challenges, including an aging infrastructure; cultural preservation; transportation gridlock; and financial and resource constraints.

The recent formation of an empowered AM steering committee has enabled the City to gain significant momentum on its AM journey and the City is one of 19 communities across Canada to receive FCM's most recent Climate and Asset Management Network (CAMN) grant.

Recognizing that change occurs as a process and not as an event, the City's Strategic Asset Management Plan (SAMP) was developed on the "three states of change" model. The change model was integrated into the AM roadmap and underpinned each of the City's AM improvement initiatives by breaking down the journey into distinct phases.

Small Assets, Big Problems – Lake Babine First Nations Asset Management Program

The presentation will detail the journey from concept to inception of an Asset Management Plan for a First Nation community with over 440 assets spread over 3 communities. We will discuss how funding impacts the ability to manage and maintain assets and how to deal with the funding gap. We will also demonstrate a visual representation of where assets are allocated and how it is effective in communicating need.

A BC Regional District's Asset Management Journey – "This Far"

*Our story as a small BC Regional District (**qathet Regional District**) and the related "Service Based" Financial Planning, Budgeting and Reporting has driven us to think a little outside of the municipal box regarding how we have begun to develop our AM Program and how Asset Finda has worked / partnered with us to do so. We intend to relate to other Regional Districts at the Conference as well as convey to others interested how stringent and transparent Regional District Finances are required to be and how this impacts Asset Management Planning. How we established a very successful working group of coastal local governments. The group shares successes, trials and errors and provides mentorship to each other. The group meets annually with ever more interesting agendas and new membership. The success of this working group is largely contributed to one common theme which we will share in the presentation.*

Dockside Green – Infrastructure Assessment: 18 Years After Achieving LEED Platinum

Dockside Green is a 15-acre urban infill redevelopment site located adjacent to the Upper Harbour in Victoria. Used for over 100 years for various industrial uses, the site was listed in the top 10 contaminated sites in BC. The City of Victoria acquired the land from the provincial government in 1989 in exchange for site development servicing and land remediation costs. City staff nicknamed the site Darkside due to numerous failed redevelopment approaches. Metamorphosing "Darkside" into a world leader in sustainability changed conventional planning, procurement and community consultation practices that discourage innovation to more sustainable and integrated processes by using sustainability practices that reward innovation.

In 2008 and again in 2009, the successful land sale proponent achieved the highest sustainability rating in the world under the Leadership in Environmental and Energy Design (LEED) green building rating system for the first two development phases. A primary reason Dockside Green achieved world record LEED Platinum certification is due to sustainable and renewable infrastructure, including: a wastewater treatment plant that treats water almost to Canadian drinking water standards and then reuses 80% of it through an on-site waterway, irrigation system, and grey water toilets, and; a district energy system to generate all heat and hot water that reduces over 50% of energy costs for occupants.

Sustainable Infrastructure Replacement Plan

The City of Colwood has infrastructure valued at \$375 million. The infrastructure supports essential services that the public rely on every minute of every day. The operation, maintenance and replacement of these services don't always come to mind when the public considers the role of local government. But considering the scope and financial impact of these services, it is the most crucial responsibility discharged by local governments. The presentation will outline the core and innovative approaches taken by the City in preparing our asset management plan and developing an implementation short and long-term strategy. Our plan;

- *Provides exceptional stewardship of public assets – this plan ensures the assets can be sustainably funded for generations*
- *Provides a clear picture of capital service levels – citizens should be aware of the services that taxes fund in the community. The plan provides service-level transparency related to capital serves. The community can therefore be engaged with Council to set appropriate service levels and corresponding funding levels.*
- *Governance – The plan sets the City apart from many of its neighbours. Council has endorsed a long-term vision that will outlive this Council term.*

In BC, long-term sustainable funding for asset replacement is commonly overlooked. This plan measures 1) annual sustainable funding already established, and 2) annual sustainable funding needed for infrastructure replacement. If projections are correct, taxpayers will be contributing sustainable funding by 2029.

Colwood was awarded the 2019 UBCM Community Excellence Award for Asset Management for their Sustainable Infrastructure Replacement Plan.

Metro Vancouver's Asset Management Tools: Realizing the Potential to Improve Long-Term Financial Planning

In recent decades the Greater Vancouver area has experienced significant population growth and economic development. Metro Vancouver (MV) responded to these challenges by adding considerable infrastructure to its asset inventory over this period. MV is starting to experience the increasing need to reinvest in its aging infrastructure to maintain a state of good repair and levels of service.

To understand the level of funding required to sustain the asset base over the long-term and to make meaningful and complex financial planning decisions, MV has developed an Infrastructure Maintenance Allowance (IMA) tool and pilot Decision Support System (DSS) tool using Microsoft Excel.

Development of these tools is based on a methodology that follows a series of logical steps for answering questions related to asset inventory, replacement value, condition and estimated service life to create a long-term capital reinvestment profile.

As the implementation of an asset hierarchy is underway, the analysis was carried out at the facility level (e.g. treatment plants, pump stations, sewers, etc.) to review facility lists, replacement costs, available inspection-based or age-inferred condition information and expected remaining service life.

The IMA tool allows comparison of the average required expenditures for the next 30-year period with the current and planned capital reinvestment expenditure levels. The DSS tool forecasts the future asset condition distribution for each year over the same period of time depending on the selected target condition score.

Improving the District of Summerland's Business Casing and Project Prioritization to Develop Better Capital Budgets

As part of the District of Summerland's asset management journey, and aligned with our AM Policy and Strategy, we have worked to improve our decision making process. This has involved reviewing and improving our Business Case process and template for the way we capture project needs and options analysis, and developing a Project Prioritization model that included developing weighted criteria which helps up to produce scores on each project, enabling us to have a much more structured and robust investment planning process and capital budget.

The Converging of Two Asset Management Journeys by Interlocking Two Frameworks: Risk and Level of Service

In 2018, the District of Mission developed its level of service framework and in 2019 undertook a similar journey on its asset risk framework. This presentation will share the District's plans to eventually interlock the two frameworks and the challenges in generating the right kind of data to support the two frameworks.

Thursday PM

Implementing a Corporate Asset Management System – Looking Under the Hood

An interactive workshop that outlines Kelowna's experience implementing a Corporate Asset Management System. The workshop will detail the steps that Kelowna followed and provide attendees opportunity to ask questions and share their experience. The workshop will conclude with a demo of the AMS (Cityworks) by City Operations staff. The workshop facilitator will take notes and provide a summary of the implementation process and tricks and tips for successful implementation of an AMS.

The Future of Asset Management – Panel Discussion

Panelists will share their insights and perspectives on 'what is working well', 'what is not working well' and 'what is needed' to support the development and implementation of asset management practices in BC. The panel will bring their personal experiences and include their perspectives as decision makers, senior staff, financial management, land-use planning and senior government policy & funding. After short presentations from each panellist, a Q & A session will be led by the moderator, engaging the delegates.

Municipal Asset Management Program, Federation of Canadian Municipalities

The Municipal Asset Management Program offers funding, training and resources to help you strengthen your asset management practices. The government of Canada has topped up funding and extended the program for another 3 years. To date there has been \$20.0 million expended on 506 asset management projects, \$8.8 million to 27 partner organizations and 283 education and training events. Bogdan will outline work to date, resources available, and the extended project including the upcoming RFP process.

Asset Management BC Update

Asset Management BC (AMBC) was created as a community of practice, to enhance BC communities through leadership in BC. In the past year, AMBC has been active with a number of activities designed to provide support to BC local governments, First Nations, and other stakeholders through the development and delivery of various tools and resources. This session will provide the delegates with an update on those activities, as well as identify the new tools and resources available.

2019 Asset Management BC Conference

BIOGRAPHIES (in alphabetical order)

David Albrice

David is an Asset Management Professional with 25+ years' experience, who draws upon his background in Urban and Regional Planning. His asset management credentials include: Certified ISO 55001 Assessor under the IAM and AMC; Certified NAMS Asset Planner under IPWEA; Certified Change Manager under Prosci; and Certified Reliability Leader under the Association of Management Professionals. His passion for asset management has been captured over the years in a visual library of educational slides under the title "Visualize asset management to vision-ize the term"

Doug Allin

Doug has worked in Local Government for 29 years for several local governments in varying capacities from entry level positions in parks to Chief Administrative Officer. He is a firm believer in Asset Management practices and the significant community benefits that a sound program can offer a community. He is currently the CAO for the Township of Spallumcheen BC and prior to that The CAO for the City of Grand Forks for 5 years, prior to that he was Director of Operations for the Corporation of Peachland for 8 years. In my spare time you will find me at the ball park as an Assistant Coach for the Canadian Men's National Softball Team and coaching youth softball in the Okanagan.

Tom Barnes

Tom Barnes has been the Chief Executive Officer and General Counsel of the Municipal Insurance Association of British Columbia since 2005. Mr. Barnes is a B.C. native, who was educated at the College of New Caledonia in Prince George as well as the University of British Columbia, from where he graduated with a law degree in 1978. He then spent more than ten years at one of British Columbia's leading insurance law firms. His practice focused on the field of civil litigation concentrating primarily in the defence of municipalities and construction design consultants.

In 1991 he founded Barnes Craig & Associates, a liability adjusting, claims management and litigation management consulting firm. In that role, he provided many local governments with advice on litigation services. In 1997 he sold his interest in the firm to the minority shareholders in its Vancouver and Toronto offices and returned to the practice of law. From that point until his appointment with the MIABC, Mr. Barnes practiced as a partner in the Vancouver firm of Barnes, Twining & Short. The firm's practice concentrated on the field of insurance litigation. Areas of expertise included construction disputes, municipal liability, professional negligence, environmental law, and insurance coverage advice.

In 2012 Mr. Barnes became the first international representative to be elected to the Board of the U.S.-based Association of Governmental Risk Pools and in 2014 was appointed AGRiP's Vice President. He also sits on the Board of the Canadian Association of Insurance Reciprocals.

Brian Bedford

Brian is the Director of Infrastructure and Engineering, Local Government Infrastructure and Finance Branch, Ministry of Municipal Affairs and Housing. Brian has been a strong advocate for asset management, as well as other best practices, in his role overseeing the development and administration of senior government funding programs such as the Investing in Canada Infrastructure Program. Brian is the Secretary for the Asset Management BC Partnership Committee, and has supported the efforts of Asset Management BC since its early beginnings.

Christina Benty

Christina Benty, MA, is an author, a speaker, a leadership coach and the former Mayor for the Town of Golden with 12 years' experience in local government. She has over 16 years' experience on numerous policy governance boards spanning from health care, government, information technology, and community planning. She was a director on the Columbia Shuswap Regional District. She served as a Director, Vice-President and President of the Association of Kootenay Boundary Local Governments.

She is the owner of Strategic Leadership Solutions, a consulting firm designed to assist teams in building a culture of excellence in leadership and governance. She prides herself on being exceptionally creative and dynamic in her approach to functional governance and differentiated leadership. By facilitating conversations that encourage meaningful dialogue and challenge assumptions, she helps governing bodies transition from strategic vision to practical action.

In addition to her lived experience in the political arena, she studied political science for her undergrad and completed her Masters of Arts in Leadership at Royal Roads University with an organizational leadership project on community engagement and asset management for the Town of Golden. Christina considers herself an asset management evangelist. She is a regular conference presenter who is desperately trying to inspire local governments to take their stewardship responsibilities seriously and to inject some passion and enthusiasm into this complex topic.

Christina is also a Power and Systems Organizational Workshop Trainer, certified to lead experiential training about why partnership is critical to success. Participants are dropped into roles as top leaders, middle managers, front line workers and customers interacting in a chaotic, fast-paced environment. They come away with powerful new perspectives and specific ideas on how they can help create a stronger organization and attain a greater sense of accomplishment and purpose.

Julia Berry

Julia Berry is a Senior Policy Analyst with the Climate Risk Management team at B.C.'s Climate Action Secretariat. Her work focuses on developing climate risk and resilience policies for B.C.'s public sector organizations and has recently led a project piloting a software that conducts infrastructure climate vulnerability and cross-dependency assessments in Nanaimo B.C. She holds a MRM Planning from Simon Fraser University.

Samantha M. Boyce

Samantha is one of the MIABC's in house legal counsel. She has an undergraduate degree from Queen's University and is a graduate of the University of Calgary Faculty of Law. She was called to the BC bar in 2015 after completing her articles at Alexander Holburn Beaudin + Lang LLP. Samantha represents MIABC members in a variety of cases including personal injury, property damage, occupiers' liability, police civil liability and negligent bylaw enforcement claims. Samantha has experience in the BC Supreme Court, the BC Provincial Court and the Civil Resolution Tribunal.

Roy Brooke

Roy is Executive Director of the Municipal Natural Assets Initiative (MNAI) and Principal of Brooke & Associates. He served as Director of Sustainability for the City of Victoria between 2011-2013. Between 2003-2011 he worked for the United Nations, including the World Health Organization, United Nations Environment Programme and UN Office for the Coordination of Humanitarian Affairs, based in Geneva, Switzerland, and later in Rwanda, where he was UNEP's Environment Programme Coordinator. Prior to this he served as a political advisor to Canada's environment minister.

Glen Brown

Glen Brown has been a 'sustainability' advocate for the past 20 years, working with the Province and now with the Union of BC Municipalities as General Manager, Victoria Operations. With UBCM, Glen oversees the delivery of various funding programs, including the Gas Tax Fund and the Asset Management Planning Grant Program. His focus has been on supporting local government in their efforts to deliver services and manage infrastructure sustainably by building awareness, educating and developing tools and resources. With Wally Wells, Glen facilitated the establishment of Asset Management BC and led the development of the Asset Management for Sustainable Service Delivery: A BC Framework. Glen serves as the Chair of the Asset Management BC Partnership Committee.

Warren Brown

Warren Brown is a member of the Lytton First Nation. He started his service for the Lytton First Nation in July 2002 as a water and wastewater Operator and he has worked his way up to the Manager of Operations and Maintenance. He holds Level 2 certifications in Water Treatment and Water Distribution as well as a Small Wastewater System certification through the Environmental Operators Certification Program. He has also earned a diploma in Water Treatment Technology from Thompson Rivers University. Warren manages a workforce that is tasked to ensure that their community's infrastructure assets such as their water and wastewater systems and roads are operated and maintained with the goal of providing their membership with a high level of service as well as ensuring that their infrastructure assets meet or exceed their expected useful serviceable lives. Warren's experience with managing infrastructure and the journey that his community has taken in the development of their Asset Management Program has allowed him to be a key contributor in the production of the Asset Management Guide for BC First Nations. Prior to serving his community, Warren served as a BC Emergency Ambulance Paramedic for 16 years.

Lisa Butler

Lisa Butler is a Professional Engineer with expertise in environmental reclamation and remediation, capital project development and implementation, and project management. She has a focus on stakeholder consultation and engagement, and has facilitated engagement processes on topics ranging from groundwater mapping for oil sands planning in Alberta to reclamation of US EPA superfund mine sites in the United States. Lisa is the Manager of Engineering Strategy for the City of Courtenay, where she is responsible for long-term master planning for the City and its infrastructure, integrating community and development needs with environmental resiliency, climate change, and asset management.

Hamid Butt

Hamid is a Senior Project Manager with the City of Kelowna responsible for implementing the City's corporate asset management system. Prior to joining the City, Hamid spent 30 years implementing IT solutions for Syncrude.

Iain Cranston

Iain has worked with public and private sector clients in the UK and North America over the last 10 years to help them improve business practices. Since moving to Canada in 2012, Iain has been focused on the discipline of Infrastructure Asset Management, supporting organizations to deliver improved value to their stakeholders by better managing their infrastructure investments. This position leverages Iain's experience as a business and process professional with his ability to communicate with senior management, financial experts, engineers, operators and customers. He has proven himself as a valuable delivery resource capable of leading work on the various pillars of Infrastructure Asset Management, including writing Asset Management Plans (AMPs), Capital Investment Planning & Decision-Making, IT Systems Implementations, AM Policy, Customer Level of Service Frameworks and Public Consultation. He also has experience leading

organizations through the cultural change elements of implementation programs through change management and communication efforts – relationship building, stakeholder management, and designing and facilitating complex workshops.

Jan Enns

Jan Enns is well-known in BC's local government circles as a communications consultant, trainer and conference speaker. Her 25-year career in the public sector includes strategic project management and communications positions at ICBC, the Regional District of Central Okanagan and Interior Health, prior to starting her consulting and training firm in 2004. Jan is best known for helping BC's local governments facilitate conversations both internally with their Councils, Boards and staff, and externally with key stakeholders and communities.

In her consulting practice, Jan specializes in assisting local governments with implementing new programs and managing issues, particularly in the media and on social media. As a sought-after trainer and speaker, Jan works with local governments to provide customized training. Topics include media relations, social media, public engagement and communications.

She is a co-founder of BC's Local Government Management Association's e-learning program and teaches on a variety of workshops including media relations and consultation planning for the Municipal Administrative Training Institute. She has taught citizen engagement for the University of Alberta and is a mentor for Dalhousie University's local government program. She was recently the recipient of the LGMA's Distinguished Partner Award for her work with BC's local governments.

Jan has a Masters degree in Applied Communications, a certificate in Local Government Administration and certificates for public participation and public information. She is a proud member of the Canadian Public Relations Society, the Canadian Association of Professional Speakers and International Association of Public Participation. Based in Kelowna, British Columbia, Jan loves to connect with fellow communicators whenever she can. She's the co-founder and facilitator of the Okanagan Communicators Network as well as CivicInfo BC's private LinkedIn group for Local Government Communications Professionals.

Kim Fowler

Kim Fowler has over 25 years experience as a professional planner and sustainability expert with local government in BC and Alberta. She has a proven record of successfully implementing planning and sustainability projects, including the land sale and development of the Victoria Docks lands, which were awarded the highest LEED™ Platinum point total in the world for the first two development phases. Her design of the Sustainability Initiative for the City of Port Coquitlam integrated 12 land development activities, including the first Triple Bottom Line assessment for development applications in North America and the first green roof regulation in Canada. Kim also project managed the purchase and repurposing of two bankrupted hotels into first stage and integrated housing for the City of Victoria. Most recently, she project managed the implementation of the Waterfront Area Plan for the Town of Ladysmith in collaboration with the Stz'uminus First Nation.

Chris Gainham

Chris Gainham is currently Manager of Municipal Services at the City of Nelson. Chris is a graduate of the University of Waterloo's Environmental Studies and Earth Science programs with a specialization in water resources planning. Past roles include senior positions at the City of Hamilton, Halton Region, where he led engineering teams responsible for water/wastewater and waterfront master plans, hydraulic modeling, urban flooding, real time control, I&I, and CSO control programs. He recently sat on the Canadian Standards Association's technical committee responsible for publishing CSA's Basement Flood Protection Guideline as part of their Climate Change Adaptation series.

Jason Kinch

Jason is a professional engineer with a variety of experience working in both the private and public sectors, with over two decades of experience ranging from building inspection/condition assessment to structural and building science engineering design/investigation, and now municipal asset management. As the District of Mission's Asset Manager, Jason performs a variety of tasks related to the development, implementation and administration of lifecycle management plans and maintenance of District infrastructure assets. Being responsible for asset tracking and assessment, along with data analysis and reporting, Jason managed both the Level of Service Assessment and Asset Risk Assessment projects that GHD recently assisted the District in undertaking.

Jason's past Local Government employment includes Manager of Building Inspections for the City of Nanaimo as well as Chief Building Official for the District of Squamish.

Jason volunteers in numerous capacities and lends his time to mentoring engineering minds. He has a degree in Civil Engineering, with a speciality in Structural Engineering, has completed the IPWEA Asset Management Planning certificate program, and is currently completing the Asset Management Professional Certificate program, working towards the Certified Asset Management Professional designation through PEMAC.

Alexander Kolesov

Alexander Kolesov is a senior asset management consultant at the AECOM Burnaby office. He has extensive experience in conducting analysis of water, sewer, drainage, transportation and other municipal infrastructure including condition, risk and performance assessment projects. He has successfully developed criticality evaluation models and dynamic asset inventories to simulate asset condition depreciation, anticipate future capital spending patterns and estimate funding gaps. These analytical tools have been used by various municipalities to support their investment decision-making process as well as to educate the public on the issues of levels of service and insufficient infrastructure funding. For the past few years, Alex has been seconded to Metro Vancouver, assisting its Liquid Waste and Water Services departments with asset management and capital planning projects.

Freda Leong

Freda Leong and Stefanie Wiik are professional engineers with the consulting firm, Associated Engineering. Freda is the Manager of First Nations Infrastructure and Stefanie is a Civil Engineer who works closely with Freda on their First Nations projects across British Columbia. They work closely with the Lake Babine Nation on a variety of projects including feasibility studies, designs, construction, tendering and construction management. They have worked on a variety of Lake Babine Nation projects including roads and drainage and sewage collection and treatment.

Michelle Mahovlich

Michelle Mahovlich, P.Geo., P.Eng., is Director of Engineering/City Engineer for the City of Langford. In her role as City Engineer Michelle oversees new subdivision construction, the City's own capital projects and the public works area. Langford does not have their own Public Works department, rather the City operates with a contractor in place to manage their assets. This creates a somewhat unique situation from an asset management perspective and for tracking ongoing maintenance. Michelle has worked for the City for 11 years. Prior to that she worked in the private sector for 18 years in the fields of environmental (contaminated sites) and geotechnical engineering.

Bogdan Makuc

Bogdan Makuc is currently the Project Director of the Municipal Asset Management Program (MAMP) at the Federation of Canadian Municipalities. MAMP is a \$110 million, eight-year program funded by the Government of Canada aimed at improved municipal capacity in asset management planning practices. Prior to joining FCM, Bogdan spent close to 20 years working in various departments within the federal government, including 15 years with Infrastructure Canada, where he led the design of several major infrastructure programs. Bogdan lives in Ottawa with his wife and two children.

Sukhbir 'Sukh' Manhas

Sukhbir moved to the lower mainland after graduating from a Vancouver Island high school in 1990 to attend the Faculty of Science at Simon Fraser University. After completing three years of undergraduate studies in chemistry, Sukhbir attended the Faculty of Law at the University of British Columbia, where he attained his Bachelors of Laws degree in 1996.

Sukhbir articulated with Young, Anderson. After being called to the bar in May 1997, he practiced with the firm as an associate lawyer until January 1, 2005, when he joined the firm's partnership. Sukhbir's law practice at the firm involves advising the firm's clients on general local government law issues as well as representing them in civil and quasi-criminal proceedings before arbitrators, administrative tribunals, and the courts of this province and the nation. In his practice, Sukhbir frequently draws on his experience in working as a legal research assistant to the clerk of a Vancouver Island district municipality. Sukhbir is currently a member of the Municipal Law and Civil Litigation subsections of the B.C. Branch of the Canadian Bar Association and frequently speaks, as a guest lecturer, at seminars and courses on local government law and civil litigation issues put on by the Continuing Legal Education Society, the Local Government Management Association, and the Justice Institute of British Columbia.

Sukhbir is an Adjunct Professor at the UBC Faculty of Law, teaching municipal law.

Jim Martin

Jim Martin has been a resident of Prince George since 1993. Jim started working with the Regional District of Fraser-Fort George in 1994 when the new regional solid waste management service was introduced. Early in his career with the Regional District Jim was involved in a number of environmental programs and services in the areas of solid waste management, utility services, regional parks and air quality. He has progressively advanced in the Regional District and became the CAO in 2007.

Jim graduated with a Bachelor of Science from Simon Fraser University in 1990. Over the years he has enhanced his academic education with additional studies in the fields of leadership, executive management and local government administration. Prior to working with the Regional District Jim worked with the Federal Government, Provincial Government and the private sector on environmental management related projects.

Jim has also been very active in participating on the Boards of a number of organizations ranging from small non-profits where the board is operationally oriented to large boards where the focus is policy and governance. Jim was a founding director and Chair of the International Bioenergy Conference and Exhibition Society and was Vice-Chair of the Prince George Canada Winter Games Host Society. Currently Jim is a director for the North Sports Centre Inc, Vice-Chair of the Northern BC Community Sport Development Society and a director and Finance Committee Chair for the BC Games Society.

On weekends and depending on the season Jim can be found skiing on the local mountains or cycling the local network of trails with his family.

Rebecca Mersereau

Rebecca Mersereau is a Councillor for the District of Saanich and a Director for the Capital Regional District in BC. In her elected roles, she also chairs the Saanich Environmental & Natural Areas Committee and the CRD Regional Water Supply Commission, which oversees the management of 20,550 hectares of forested water supply lands and water services for approximately 370,000 people across the greater Victoria area.

Outside of elected office, Rebecca is the Director of Consulting for Victoria-based Econics, a boutique firm that supports local and provincial governments with policies and practices to improve the sustainable management of water – financially, environmentally, and organizationally. This role and water management generally appeal to her multi-disciplinary nature and love of challenges and complexity. Rebecca particularly enjoys the interfaces between science, policy, and communication. She is still trying to understand how politics fits into the mix!

Rebecca is a Registered Professional Biologist, has undergraduate degrees in biology and education, a graduate degree in Water Resources Management, and will graduate from the University of Victoria's Master's of Public Administration program in the fall of 2019. She enjoys escaping the busy-ness of her multiple jobs by cycling, hiking and camping in the great outdoors on Vancouver Island, as well as sampling new craft beers along the way.

Duane Nicol

Duane Nicol is Chief Administrative Officer for the City of Selkirk. He has an honours degree in Political Science from the University of Manitoba, an honours certificate in business analysis from Red River College, a Professional Certificate in Asset Management Planning from the IPWEA and a Master's in Public Administration from the University of Victoria. Prior to his hiring, he served three terms on Selkirk Council. Duane has a passion for modernizing municipal government through building the skills and capacity of municipal employees, engineering citizen-focused and lean processes, and the judicious introduction of life-simplifying technology. He is the Chair of the Association of Manitoba Municipalities Asset Management Leadership Committee and is a District Director for the Manitoba Municipal Administrators Association.

Christopher Paine

Christopher Paine is the Director of Finance and CFO for the City of Colwood. He is a Chartered Professional Accountant with over 10 years' experience in local government. Christopher has worked in a variety of roles including the Manager of Revenue for the City of Victoria and Manager of Finance for the District of Central Saanich. Christopher does not consider himself an expert in Asset Management but he has worked hard to curate and effectively communicate asset management information for use in strategic financial planning. He has helped establish long-term, sustainable funding for a number of communities thereby empowering operating departments to deliver high quality, sustainable community services. Christopher believes local government financial professionals have a unique opportunity to learn from each other and share experience.

Bernard Patrick

Bernard Patrick is responsible for Capital & Infrastructure budgets, supervising, link programs to chief and council. Rick Dobbs, The Capital Asset Protection Officer is responsible for the direct management and handling of physical asset and distribution functions for the Nation. This includes accountability for supplies, equipment, machinery, trucks as well as adherence to legislative, Health & Safety and organizational policies and procedures. And will accomplish effective logistical oversight through strong leadership and decision-making skills. Together, Bernard and Rick have been working together to implement an effective Asset

Management Plan so that the Lake Babine Nation can meet a desired level of service for present and future residents in an optimized way.

Jody Rechenmacher

Jody is a Professional Engineer and a principal at Urban Systems. Her work bridges the worlds of technical analysis and strategic decision-making for infrastructure and sustainable service delivery. Jody's asset management expertise is built upon a base of diverse civil infrastructure project experience in design, project management, contract administration, and site inspection. Jody is a certified Envision Sustainability Professional and is also a director on the board of Urban Matters CCC.

Tami Rothery

Tami Rothery is the Sustainability / Alternative Energy Coordinator for the District of Summerland. She has worked for over a decade in public, post-secondary, not-for-profit, and private organizations to advance the balance between profit, planet, and people, and is proud to contribute to realizing Summerland's vision of environmental stewardship and leadership. As a passionate community leader, Tami is a firm believer in working collaboratively to find opportunities to create resilient, net-positive systems that improve quality of life for all peoples and that empower staff and community members to create the changes they wish to see in the world.

Devin Sauer

Dr. Sauer is a senior asset management consultant with a background in bridge engineering. He has experience in water, wastewater, stormwater, and transportation system management. In addition, he has research and consulting experience analysing various types of short, medium, and long span bridges to improve their design, construction, and cost efficiency. Dr. Sauer's specialties include project management, value engineering, data analysis, engineering optimization, and financial analysis.

Nancy Schmeister

Nancy has been with the qRD for 16 years working in multiple roles and capacities ranging from planning, communications, GIS and Technical Services. Nancy also enjoys collaborating with colleagues in the coastal working group.

Joel Shaw

Originally from Saskatoon, Joel is a Civil Engineering graduate from the University of Saskatchewan. Since graduating with his masters degree, he has worked as professional engineer for 25-years and has extensive experience in planning, design and construction of municipal infrastructure. For the last fifteen years he has worked with the City of Kelowna where he is responsible for managing the Infrastructure Engineering Department. Joel's team oversees annual and long-term infrastructure planning including asset management and the DCC program.

Catherine Simpson

Catherine is a planner and project manager with expertise in infrastructure management, community finance and climate adaptation. She is the head planner at KWL and leads the asset management skills centre. Catherine also sits on the Federation of Canadian Municipalities' Technical Working Group for the Municipal Asset Management Program as well as the Asset Management BC Community of Practice. She works with municipalities, indigenous communities, government, and non-government agencies across Canada to ensure results-driven solutions. Catherine excels at seeing the big picture of a project while still being able to understand the details.

Amanada Spinks

Amanda Spinks is the Implementation Manager for Lytton First Nation in Economic Development and has extensive education in Project Management and is planning to go for her Certified Associate in Project Management within the next year.

Before working in Economic Development Amanda worked in Operations & Maintenance for Lytton First Nation as the Assets Coordinator and assisted with budgeting and scheduling. Even with her promotion to another office she continues to work closely with O&M in regards to assets management.

Colwyn Sunderland

Colwyn is an infrastructure planning engineer with 23 years of experience in water treatment system construction and operation, local government, and consulting. An integration specialist, Colwyn excels at supporting local government management teams in multidisciplinary decision making and development of systems, policies and programs. He is a past President of the BC Water and Waste Association and the Canadian Water and Wastewater Association.

Austin Tokarek

Austin completed B.Sc in Environmental Science from Royal Roads University in 2008, and a MBA - Renewables from the Beuth Institute of Applied Science in 2016. He has been with the Cowichan Valley Regional District since 2014, where his work initially focused on climate adaptation through the implementation of the Corporate Strategic Energy Management Plan and preparation of annual greenhouse gas emissions reporting requirements. This role has evolved into an Asset Coordinator position where he continues to work across all departments to break down the silos and build asset management capacity throughout the organization.

Ted van der Gulik

Prior to his retirement in 2014, Ted worked for the Ministry of Agriculture for 35 years specializing in irrigation, water management and water resources planning. During his career Ted built an international reputation for his leading edge work in agricultural water management. He has been the lead author on many irrigation and water management papers and manuals and has taken the lead on the development of the Agriculture Water Demand Model and BC Agriculture Water Calculator. This was demonstrated as a recipient of the International Irrigation Association's 2000 Crawford Reid Memorial Award. Ted was awarded the Premiers Legacy award in 2014 for the many initiatives and models that he spearheaded while with the province. He currently is president of the Partnership for Water Sustainability in BC, a not for profit society established to help implement a Water Sustainability plan for the province.

Lisa Vass

Lisa has a degree in Applied Health Sciences from the University of Waterloo and is a Chartered Professional Accountant. Over the course of her career, she has worked in municipal and First Nation government, supporting responsible fiscal management and planning. In 2011, Lisa moved to Golden, BC to assume the role of Chief Financial Officer for the Town of Golden. Lisa's role as CFO goes well beyond regular budget and reporting cycles. From the very beginning of her tenure, her focus has been on achieving Golden's strategic goals, including asset management and long term financial plans. As a result of her focus on asset management, in 2015, she achieved her Professional Certificate in Asset Management Planning from the IWPEA.

Mike Wall

Mike's primary work career was spent as a forestry professional in Canada and Internationally with a most recent 2008-09 consulting contract in Australia. He has worked in local government at the qathet Regional District, formally Powell River Regional District, for the past five years and is now focused on Capital Project Delivery, Asset Management and collaborating with colleagues in the coastal working group.

Eugene Watt

Eugene is the Manager of Infrastructure Planning with the City of New Westminster overseeing asset management, utility planning, environment services and land development. The focus of his current work involves supporting community growth in a mature, urban setting. He is a graduate of UBC with over 30 years municipal engineering experiences and held diverse engineering responsibilities with the Township of Langley and the City of Port Moody. Eugene has served on EGBC Branch and a Past Chair of the Municipal Engineers Division

Stefanie Wiik

Freda Leong and Stefanie Wiik are professional engineers with the consulting firm, Associated Engineering. Freda is the Manager of First Nations Infrastructure and Stefanie is a Civil Engineer who works closely with Freda on their First Nations projects across British Columbia. They work closely with the Lake Babine Nation on a variety of projects including feasibility studies, designs, construction, tendering and construction management. They have worked on a variety of Lake Babine Nation projects including roads and drainage and sewage collection and treatment.

Chris Woo

Chris Woo is the asset management lead for the Liquid Waste department of Metro Vancouver and manages the asset management, capital planning and performance management programs. Chris is a professional engineer and holds an MBA degree. Chris has extensive experience in strategic planning, business process analysis and improvement, project management and capital planning. Chris led the development of the department's asset management policy, facility-level asset management plans, asset assessment framework and plans, asset hierarchy and asset levels of service at Metro Vancouver. Prior to joining Metro Vancouver, Chris was a maintenance engineer at BC Hydro where he designed and implemented engineering solutions to address equipment failure and improve the long-term reliability of the system.