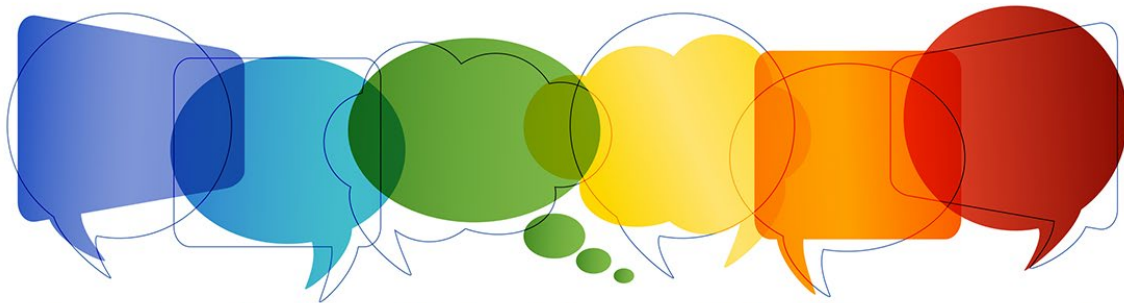




# Virtual Dialogues

Bringing cross-sector perspectives to Canada's water leaders



## Pursuing Co-benefits to Advance Water Management

January 26, 2021 at 1:00 p.m. EST

### Summary of Key Insights

#### Planning Through a Co-Benefits Lens

Across the country, cities are experiencing challenges such as unprecedented population growth, limited space for development, the need for redevelopment and a changing climate. In addition, many water, wastewater and stormwater systems are near or past the capacity for which they were designed. Densification, growing populations and extreme weather events are impacting these systems.

The merits of taking a co-benefits approach have been widely acknowledged across sectors by economic, environmental and utility experts. Planning with co-benefits in mind provides opportunities to increase system and operational resilience and efficiency and financial sustainability both within and across sectors. In 2018, Canadian Water Network (CWN) appointed a [national expert panel](#) to review Canada's challenges and opportunities in addressing contaminants in wastewater. The panel defined co-benefits as follows: Co-benefits arise when actions designed to achieve one objective, such as urban flood mitigation measures, also benefit another objective, such as reducing contaminant loading to receiving waters (CWN, 2018).

Although taking a co-benefits approach to planning can provide opportunities to increase system and operational resilience, efficiency and financial sustainability, it requires collaboration both within and across sectors — a concept that may be counter-intuitive for some. During the Virtual Dialogue on January 26, 2021, invited experts Jimmy Zammar, Robert Newell and Victoria Kramkowski shared their insights on projects undertaken in Vancouver, Squamish and Toronto.

Integrated, participatory planning can yield countless co-benefits that support core essential services, place-making, community buy-in and more. Canadian municipalities are increasingly seeking ways to realize co-benefits as they proactively build resilient cities that are prepared for and can withstand, adapt and rapidly recover from disruptive events and unforeseen disasters.

## Transitioning from Theory to Practice

During his presentation, Jimmy Zammar, Director of Integrated Strategy, Utility Planning Engineering Services at the City of Vancouver noted that there is a growing need to re-think the way we manage water. Cities are a network of connected systems, with spaces and corridors that can act as channels for water capture and treatment, while simultaneously providing buffers to flooding and urban heat island effects. Taking a more integrated approach that explores how benefits can be achieved across systems — from the moment rain lands to when it evapotranspires — can help cities better manage public spaces and adapt to the impacts of climate change.

Typically, municipalities have been structured so that a single department (with staff from a single discipline) determines what is best for the community. Zammar suggests that a corporate paradigm shift to integrated, cross-sectoral, collaborative planning with multiple perspectives can better support creative, cross-cutting solutions. Municipalities need not start from scratch, however. During her presentation, Victoria Kramkowski, Government and Community Relations Specialist at Toronto & Region Conservation Authority (TRCA), noted that globally, there are many examples of water, wastewater and stormwater projects that have used a co-benefits approach, particularly in Europe.

Initially, several initiatives planned at Tommy Thompson Park in Toronto were structured more conventionally, but over time TRCA identified opportunities to work collaboratively with partners to harness co-benefits and improve this unique waterfront park. The City of Vancouver's Rain City Strategy has also taken an exploratory approach that is deeply collaborative, with multidisciplinary participation and community engagement that is backed up by data and modelling. A number of the strategy's overall goals and pilot projects were informed by successful projects in Europe.

During his presentation, Robert Newell, Associate Director of the Food & Agriculture Institute at the University of the Fraser Valley, noted that projects with co-benefits are not always win-win. Integrated planning is a process that requires understanding of the complex relationships that span social, environmental and economic factors. For example, development projects in communities with rapidly increasing populations can involve co-benefits such as affordable housing and accessibility, but the trade-off can be a sense of loss of place and community. The importance of being inclusive and engaging stakeholders from various backgrounds is essential to success — not just across sectors, but also across the public and private realm. Effective integrated planning requires the identification of goals, benefits, co-benefits, trade-offs and challenges between different municipal and sectoral strategies .

Planning with people in mind is critical for building resilient cities. The City of Vancouver recognized that planning an upgraded rain management system also requires the simultaneous advancement of equity and reconciliation with Indigenous communities. Designing with people in mind was also a priority for TRCA in for projects at Tommy Thompson Park. The Spaces, Places, and Possibilities project in the Town of Squamish underscored the value of public participation, engagement and lived experiences in acquiring critical perspectives. The identification of co-benefits can begin to paint a picture of the larger impacts at scale, making it easier to identify gaps and pull in the necessary collaborators from across silos to resolve challenges.

## Starting with Co-Benefits

Co-benefits can be optimized through a systems-based approach to **integrated and adaptive planning**. This requires deep **cross-sectoral and cross-departmental collaboration**. Although challenging, input and feedback from across several different city departments (from transportation to parks to public works) can yield the most effective results. Newell's research has explored how the use of visuals such as process diagrams or virtual reality experience can show relationships between co-benefits, challenges, trade-offs and strategies. These tools can guide integrated planning not just in the context of climate action, but as they fit within broader municipal, provincial and federal sustainability objectives.

Zammar observed that an integrated approach to planning requires humility to be successful. He suggested that we need to move away from the tenet of 'burden of proof' and cited green infrastructure as an example, particularly given our understanding that previous approaches may not be the most suitable going forward. This does not mean that new and disruptive innovative approaches are a panacea for the many infrastructure and climate change issues plaguing cities across Canada, though. Kramkowski encourages organizations to begin **crossing silos and adopt a culture of learning and innovation**. She noted that comprehensive monitoring of the performance of low-impact development and green infrastructure under different seasonal circumstances has been done in the City of Mississauga, as well as elsewhere around the world. This knowledge can inform planning and approvals within a Canadian context.

The three speakers concurred that we need to change the narrative of how we approach water management. Instead of asking the same questions or waiting for the perfect data, they suggested that we embrace an **adaptive approach of continuous improvement** by piloting projects, tracking co-benefits and continually adapting to local needs. **Participatory planning and public engagement** are integral to this approach. There is a need to invite other departments and sectors to the conversation earlier in the process, as well as to understand what is important to the community and why. Early conversations can help build relationships and create a culture of inclusivity to advance buy-in and commitment. They are also useful in collectively developing

collaborative approaches and highlighting challenges and concerns such as seasonal considerations, maintenance and staff roles and responsibilities.

Other takeaways that were generated during the dialogue included:

- **Generating buy-in** from the community is critical to moving co-benefits approaches forward. Providing elected officials and other decision makers with the evidence needed to make informed decisions is essential. Connecting actions to a specific pain point or issue that resonates with the community councillors represent may lead to greater acceptance and adoption of projects with co-benefits.
- **Partnering with researchers and academic institutions** provides value in connecting the dots and bringing credibility to co-benefits planning, and also provides opportunities to bridge the gap between research and practice. Understanding how initiatives perform in real life remains an important consideration.
- The concept of **continuous improvement** is reflected in the City of Vancouver's 'ask-try-do' approach for advancing the [Rain City Strategy](#).
- [Tommy Thompson Park's](#) 'accidental wilderness' demonstrates how partnerships, **designing with people in mind**, political support and a **culture of learning** can harness co-benefits that align others' goals and interests.

Kramkowski summarized, "By nature, so many of our organizations are siloed both within and across. There are many functional reasons why this is the case, which is why talking and collaborating are important to have meaningful conversations. Sometimes it takes you into uncharted territory."