



Convening for Action in the Georgia Basin: Bowker Creek Forum promotes inter-regional sharing and collaboration

Bowker Creek Forum celebrates 100-Year Action Plan for Watershed Restoration



Bowker Creek Blueprint: A 100-Year Action Plan to Restore Watershed

Water Bucket Web Story #2 posted February 2010

5. Convening for Action in Metro Vancouver

The Metro Vancouver Regional Board is currently finalizing an **Integrated Liquid Waste & Resource Management Plan**. Comprehensive in scope, the Plan is aligned with Living Water Smart and other provincial initiatives. It also provides a framework for developing and implementing outcome-oriented watershed plans that have clear linkages with land use planning and development approval processes.

The City of Surrey and North Vancouver District are two outcome-oriented municipalities: Surrey is moving beyond pilot projects to a watershed objectives approach; and North Vancouver is in the process of developing implementation tools for an 'urban landscape restoration strategy'.

Moving Beyond Pilot Projects

In March 2009, the Surrey Water Balance Model Forum introduced the notion of shared responsibility, and started a dialogue between policy-makers and project implementers about rainwater management and green infrastructure. The Forum provided the City with a platform to announce that it has moved beyond pilot projects to get green infrastructure built right.

"We are moving to a broader watershed objectives approach to capturing rain where it falls. Then we can better protect our streams," states **Rémi Dubé**, Acting Development Services Manager with the City of Surrey.



Shared Responsibility: "Once we know what we want our watersheds and neighbourhoods to look like, the next step is to decide *what the tools are that will get us there*. The March 2009 Forum provided an opportunity to publicly explore how policy and legal tools can help developers, regulators and designers collaborate to ensure responsible outcomes. The Bowker Creek Blueprint is clearly about shared responsibility. Metro Vancouver municipalities can learn from the Bowker Creek experience."

Restoring the Urban Landscape

The District of North Vancouver has a bold vision to systematically retrofit individual properties as they come up for redevelopment. The catalyst for pending action is the current incremental impact of property redevelopment on stream health.

"Our cased study analysis clearly shows that our watersheds have been experiencing death by a thousand cuts as the house footprint has grown



larger and larger over the decades," states **Richard Boase, Environmental Protection Officer** (and Co-Chair of the Inter-Governmental Partnership that developed the Water Balance Model).

"The message for local governments is clear: single family properties hold the key to watershed health; we have to do a better job of educating residents about the link between their back yards and stream health; and we need to work directly with homeowners if we are to restore the rainfall capture capacity of the urban landscape."

"North Van District does not have a Bowker-type blueprint yet, but we are developing a landscape restoration strategy that we hope will be integrated into our Official Community Plan Update. The Bowker Creek Blueprint is timely because it demonstrates that we are not alone."

MacKay Creek Watershed Case Study: "To demonstrate the need for action on residential properties, we analyzed redevelopment trends in MacKay Creek. Within 20 years, 10 percent of the existing lots could be redeveloped, with a consequent **25% increase** in impervious area and **10% increase** in annual runoff volume."

"By improving soil depth to 400mm and collecting roof runoff in a simple rain garden at the time of redevelopment, the effective impervious area per lot would be **10% less** than existing, and the runoff per lot would be **5% less** than existing. This is why the **Topsoil Law and Policy and Technical Primer Set** is a potentially powerful tool to achieve a watershed restoration vision."

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Metro Vancouver's Integrated Liquid Waste & Resource Management Plan

In November 2009, Ed von Euw of Metro Vancouver was part of the inter-regional faculty for the second seminar in the **2009 Comox Valley Learning Lunch Series**. Representatives from four regional district governments contributed to the curriculum.

A Senior Engineer in the Policy and Planning Division, Ed von Euw has been responsible for development of Metro Vancouver's *Integrated Liquid Waste & Resource Management Plan*.

Stormwater to RAINwater: "For the past decade, in Metro Vancouver we have been considering *rainfall management* rather than *stormwater management*. Rainwater falls on the site. If you manage it on site, then you don't have stormwater runoff," Ed von Euw told the Comox Valley audience.



"As soon as the rainwater is concentrated as runoff and leaves a site, it can be carrying pollutants and it can also cause channel degradation. Now you have stormwater that needs to be managed. That's part of our Liquid Waste Management Plan; and so is RAINwater management."

"Rainwater is so all-encompassing that it is actually included under all three of our goals...and several strategies."

A presentation slide titled "Stormwater to Rainwater" with a blue background and white text. It lists three main points: 1. Traditionally react to stormwater (flood control, drainage and erosion control). 2. Stormwater is (rainfall and snowmelt runoff, a 'degraded' resource). 3. Manage rainwater as a resource before it becomes stormwater (needs collaboration and integration). The slide includes the Metro Vancouver logo at the bottom left and a background image of rain on water.

SUSTAINABLE REGION INITIATIVE . . . TURNING IDEAS INTO ACTION

Stormwater to Rainwater

- Traditionally react to stormwater
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- Stormwater is
 - rainfall and snowmelt runoff
 - a 'degraded' resource
- Manage rainwater as a resource before it becomes stormwater
 - needs collaboration and integration

metro vancouver

Vancouver Island Influence: "Through the advisory Reference Panel process, Vancouver Island experience has informed and influenced elements of Metro Vancouver's updated plan, in particular those actions that will advance a *regional team approach*. The Reference Panel cited the Comox Valley Series as an example that reinforces the approach to integration embraced by Metro Vancouver," reports Ed von Euw.

Appointed by the Board, the Reference Panel reports directly to the elected representatives. The Panel recommended that municipalities re-focus *Integrated Stormwater Management Plans* (ISMPs) on watershed targets and outcomes so that there are clear linkages with the land use planning and development approval process.

The Reference Panel also recommended a **regional team approach** to develop policy, legal and technical tools that will enable 'integrated solutions' for rainwater management, green infrastructure and integrated resource recovery.

Focus Plans on Outcomes: "To do an ISMP right, one has to start with the desired outcome – which is protect or improve stream health – and then determine what actions in the watershed will green the urban landscape," stated **Kim Stephens, Reference Panel Chair**, when the Panel presented its report in July 2009.



"Unfortunately, ISMPs completed to date have tended to be engineering-centric, and in general can be described as 'glorified' master drainage plans. ISMPs that do not integrate land use and drainage planning are resulting in unaffordable multi-million dollar infrastructure budget items that become municipal liabilities, without providing offsetting stream health benefits."

"The Metro Vancouver region now has seven years of ISMP experience to reflect upon. The message is clear – the Reference Panel believes the ISMP process has gone off track from what was originally intended. It is therefore time to re-focus ISMPs on watershed targets and outcomes – what will our neighbourhoods look like, and how will we change the built-form."