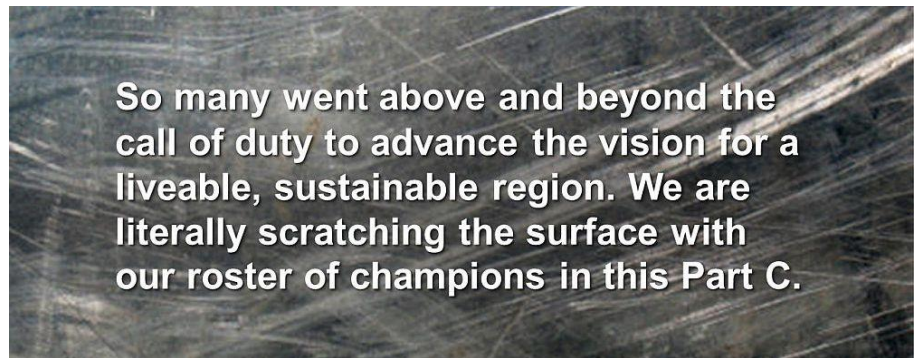


## 2. Tier One Champions for implementing an Ecosystem-Based Approach

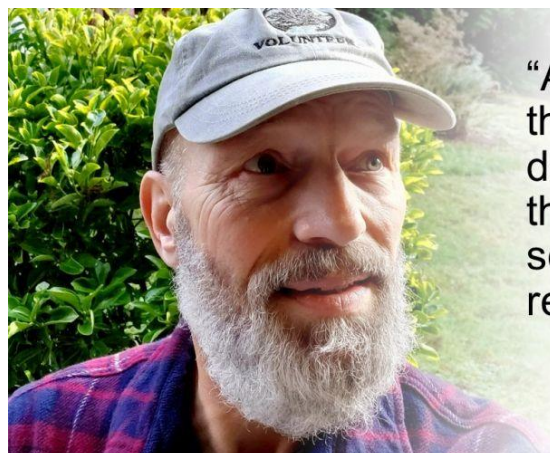
### It Was a Movement

The cast of players during the period 1997 through 2005 was large indeed. There was passion, there was commitment, and most of all there was a *can-do* attitude. It was a movement.



Drawing on my firsthand knowledge and experience in working closely with so many during this period, I hope it is helpful to the reader to view the roster of players in term of three tiers of champions. Keep in mind that my perspective is the “convening for action” lens.

Tier	Description of Role Played
One	Influencers in a profound and public way
Two	Quiet leaders in ongoing roles behind the scenes
Three	Timely contributors at key moments along the way



“A lot of this was off the sides of people’s desks originally. And then we turned it into something real...and real valuable.”

Ed von Euw, former Senior Engineer at Metro Vancouver

## Influencers in a profound and public way

Bill Derry  
Erik Karlsen  
Patrick Condon  
Tim Pringle  
Mayor Barry Janyk  
Michael Geller  
Ted van der Gulik

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In an insightful interview about his reflections on the period 1997 through 2005, Ed von Euw shared a story about his and his wife's master's theses. His perspective provides context for the 7 stories that follow regarding Tier One champions.

*"Her thesis is a story and it gets read. Mine is an engineering report and it hasn't been cracked since the day it was published. Stories carry the day! It is who we are as humans."*

Ed von Euw

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## Who are the Tier One Champions?

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Many individuals have played important roles in the green infrastructure movement. But whose efforts were made or break during the crucible period? The sidebar lists seven individuals who stand out for their ability to change the game. They are my Tier One champions.

The whole is greater than the sum of the parts. That expression captures the collective contribution of the group of seven. Their individual orbits intersected, overlapped and aligned in ways that powered a movement that was inspired by the greater good.

There was a salmon crisis in the 1990s. The consequences of rapid urbanization around the Georgia Basin (as well as Puget Sound) were readily observable. Action was urgently needed to tackle the threats to the liveability and sustainability of the Georgia Basin region.

***Capsule introductions to the group of seven:*** Each rose to the moment in ways that were complementary. They provided leadership within their individual spheres of influence. When the smoke cleared, the collective impact of their contributions was transformational.

**Bill Derry's** vision and leadership within Washington State local government made it possible for Richard Horner and Chris May to lead the seminal research that became the springboard for effective action.

**Erik Karlsen** was our *éminence grise* throughout this period. He radiated knowledge, credibility and wisdom. He was a master at identifying talent, connecting people, and orchestrating outcomes.

**Patrick Condon** was the region's original "Mr. Sustainability" par excellence. And he had a platform as the *James Taylor Chair in Landscape and Liveable Environments* at the University of BC.

**Tim Pringle** was the co-funder who provided the workaround that made it possible for Patrick Condon, Erik Karlsen and the City of Surrey to get the [East Clayton Sustainable Community](#) off the ground in 1998.

**Barry Janyk**, who was then mayor of Gibsons, was the political champion who infused the [SmartStorm Forum Series](#) with his passion. He carried the green infrastructure torch to UBCM.

**Michael Geller**, through sheer force of personality, took the vision for a sustainable community at Simon Fraser University atop Burnaby Mountain and created [UniverCity](#).

**Ted van der Gulik** is a member of the *British Columbia Public Service Hall of Excellence* for his multiple career accomplishments, including his leadership of the [Water Balance Model Partnership](#).

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## Bill Derry, Washington State

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In the 1980s, Bill Derry was the inaugural manager of the Snohomish County Stormwater Utility, one of the first in the USA. For 20 years, he chaired the Washington State stormwater committee. He convinced his local government colleagues to co-fund creation of the Center for Urban Water Resources Management at the University of Washington. Bill Derry was a founding director in 1990.

### Road Map for Protecting Stream System Integrity

So many studies manipulate a single variable out of context with the whole. This was not the case with Horner, May et al. They applied a systems approach and investigated whole systems in place. Thus, they demonstrated this order-of-priority for factors limiting ecological values of urban streams:

LIMITING FACTOR 1:

Changes in Watershed Hydrology

LIMITING FACTOR 2:

Disturbance and/or Loss of Integrity of Riparian Corridor

LIMITING FACTOR 3:

Degradation and/or Loss of Aquatic Habitat within the Stream

LIMITING FACTOR 4:

Deterioration of Water Quality

The consequences of the first two play out as the latter two factors.



‘Working with local governments in British Columbia in the late 1990s, I came up with the phrase *‘a shared vision of science-based watershed management’* to guide our work.’

Bill Derry

### Land use impacts on stream condition

Bill Derry and his committee colleagues framed eight key questions. These defined areas of research by graduate students under the guidance of Dr. Richard Horner. Chris May then pulled together this original research in his seminal PhD dissertation.

When the Horner and May findings were published in 1996, they shook conventional stormwater management wisdom to its foundation. Around this time, Bill and my cross-border collaboration began. By 2001, we had tag-teamed to deliver 20-plus workshops and forums around British Columbia. In so doing, we facilitated a paradigm-shift.

The moment that changed everything occurred at Vancouver International after Bill and I had flown back from a meeting in Kelowna. Bill had a couple of hours before his flight to Seattle. We had time to think. Bill told me about the Horner and May paper that was about to be published and reflected on the implications for drainage practice.

Before we knew it, we were busy brainstorming and sketching out a way to present the information visually. That is the moment when the idea for the first of the **fish pictures** came into focus!

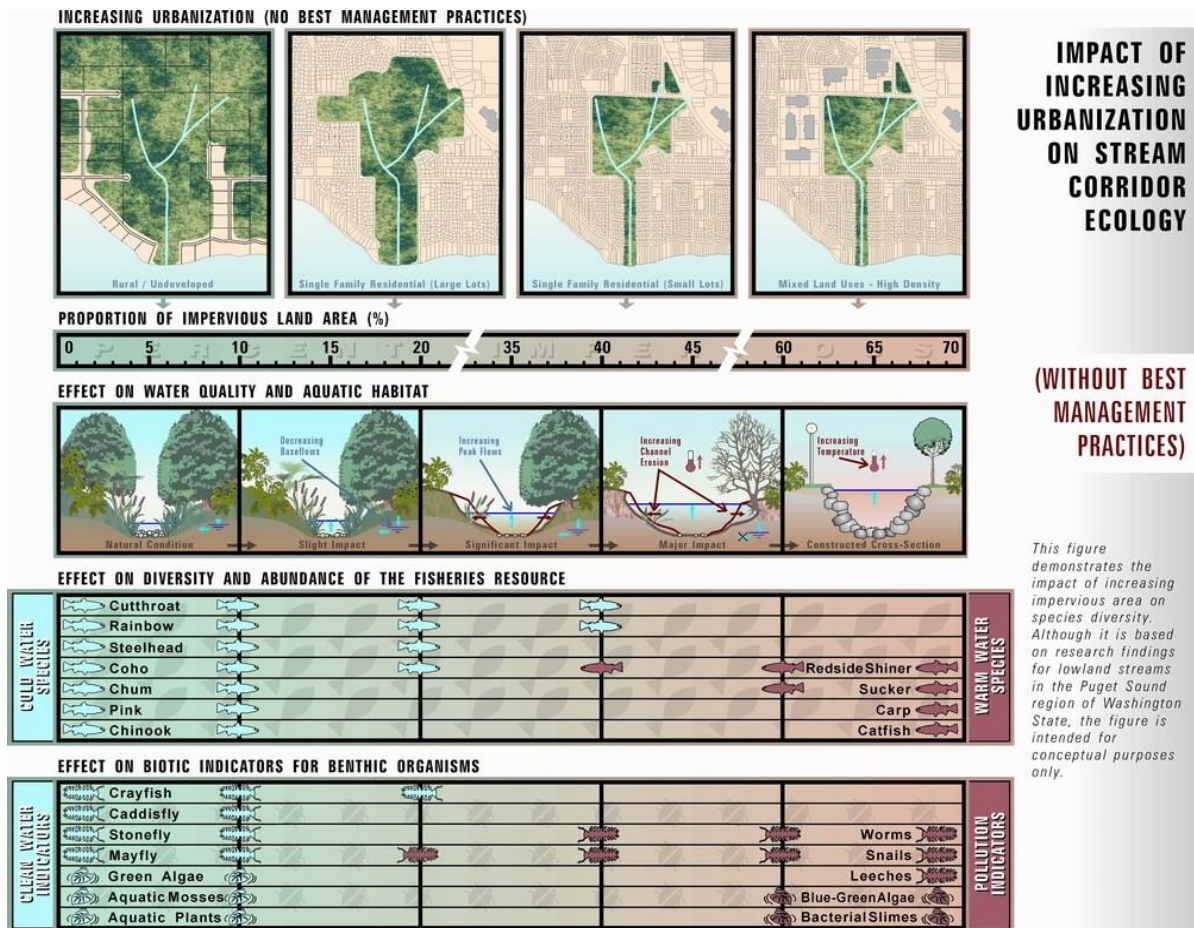


## The fish pictures explained the science

Bill Derry and I translated the science into a set of visual tools. We demystified the science in a way that a range of audiences could share a common understanding of cause and effect. All of a sudden, Bill and I were in demand to explain the science. And that is how our paths crossed with Erik Karlsen on October 10, 1997. It was at a focus group consultation workshop hosted by UBCM.

The Fish Protection Act had passed a mere three months earlier and it was early days in the development of the streamside protection regulation. Opposition was building because developers were unhappy and they were lobbying municipal councils. That was the context when Glen Carlson and Erin Stoddard of BC Environment came to me and said we need your help. Please bring the fish pictures to the workshop.

The UBCM workshop was the springboard to the [SmartStorm Forum Series](#) (1999-2001). This led to [Stormwater Planning: A Guidebook for British Columbia](#) in 2002 and ultimately to [Living Water Smart](#) in 2008.



Source: Figure 1-8 in *Stormwater Planning: A Guidebook for BC*

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## Erik Karlsen, Ministry of Municipal Affairs

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When I reflect on the history of ‘green infrastructure’ in BC, much of what has transpired over the past three decades can be traced back to who was in the room on October 10, 1997 at the UBCM workshop in Richmond. When I look back, I see that as the genesis moment for the vision to reconnect hydrology and stream ecology.

Erik Karlsen and Peter Law. And Dipak Basu of the City of Chilliwack. Three change agents. They are the ones who stand out in my memory. To this day, I remember where each was sitting and what they said.

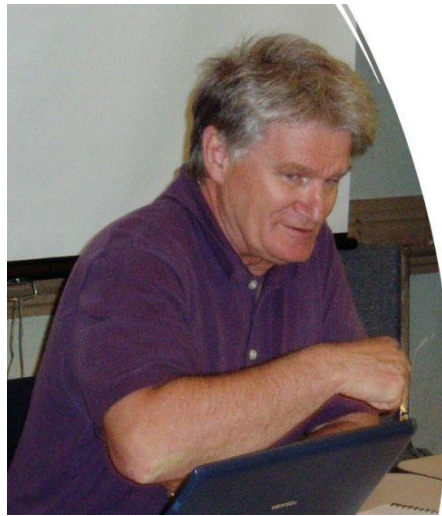
Dipak was not shy. He asked Erik, Bill and me whether we would organize a workshop to inform and educate developers in Chilliwack. So, we did. It was a team effort with BC Environment and Federal Fisheries. And that started all of us down a pathway of collaboration.

### October 10, 1997 at UBCM in Richmond

*Streamside Protection Under the Fish Protection Act: Application of Washington State Research and Experience to Establish Achievable Stream Stewardship Goals in BC.*

### November 12, 1997 in Chilliwack

*The Fish Protection Act: What Does it Mean for Master Drainage Planning and Stream Corridor Management?*



My subsequent collaboration with Erik Karlsen was career-defining.

We worked to move green infrastructure and water-centric planning ideas from “so what” to “now what”.

## Convening for action in the Georgia Basin

My collaboration with Erik Karlsen played out in multiple ways during the period 1997 through 2005. High profile among these was Patrick Condon’s vision for the [Headwaters Project](#) in East Clayton.

Patrick wanted to demonstrate a more sustainable way to build new communities. In the summer of 1998, Erik brought the three of us together for a meeting at the Simon Fraser University campus in downtown Vancouver. Headwaters was still very much at the idea stage. I left the meeting committed to help Patrick bring the idea to life.

That’s the kind of magic spell that Erik Karlsen cast when he brought people together. When Erik asked you to get involved in an initiative, of course you said yes!

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## Patrick Condon, University of BC

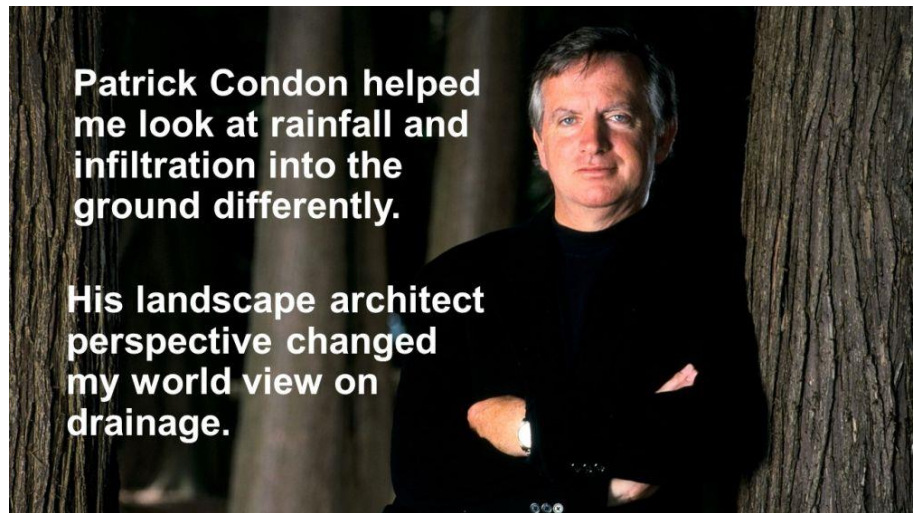
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Patrick Condon is a larger than life character. A compelling speaker, he is master of the soundbite. Consider, for example, his immortal **“curbs are evil”**. He moved to BC from the USA in 1992. So, it was early days in Patrick’s tenure at UBC when Erik Karlsen connected us.

For more than a decade, Patrick and my paths were closely intertwined and our collaboration was mutually beneficial. He is also influenced my thinking in profound ways, He helped inspire me to develop the [Water Balance Methodology](#) to reconnect hydrology and stream ecology.

The core content for the [SmartStorm Forum Series](#) was built around Bill Derry, Patrick Condon, Erik Karlsen and me. Our messaging was powerful and we complemented each other’s skilsets seamlessly.

*What the cell is to the body, the site is to the region...* a quarter-century ago, that Patrick Condon quotable quote was the call to action to fundamentally change drainage engineering practice in British Columbia from Stormwater Management to interdisciplinary Rainwater Management.



### What the cell is the body, the site is to the region

Patrick thinks on a grand scale. Just consider the title of his classic book, *Seven Rules for Sustainable Communities: Design Strategies for the Post Carbon World*. Recognizing the need for collaboration on the ground as a fundamental part of designing sustainable communities, however, Patrick has pioneered public engagement methods.

One of his many claims to fame is his skilful use of charrettes. They were the foundation for Headwaters Project success in East Clayton.

In my mind. Patrick’s all-time compelling soundbite is...*“what the cell is to the body, the site is to region”*. That was the paradigm-shift; and that view of the world got me thinking about how we can and must turn problems into opportunities, one property at a time, over time.



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## Tim Pringle, Real Estate Foundation of BC

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The Real Estate Foundation (REF) is a creation of the Province under the Real Estate Services Act. The source of its grant funding is interest earned on real estate deposits at the time of property purchases. Creation of the REF established a North American precedent.

In 1988, the inaugural REF Board of Governors appointed Tim Pringle as their first Executive Director, a position he held until 2008. In 1991, the Governors adopted his recommendation to adopt a philosophy that “*use and conservation of land are equal values*”.

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*“So, how did I get on this path? It was 1990 when I pondered the language in the Real Estate Services Act and reflected on what it did and did not say.”*

*“The Act stated very narrowly that the REFBC would support non-profit endeavours related to land use and real estate.*

*“The Act defined land as ground and whatever improvements are on the ground. This led me to ask: why are we not talking about the land and whatever natural assets are on the land?”*

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“That was a transformational moment,” says Tim Pringle. “Adoption provided me with the mandate and authority to leverage REF grant funding to effect positive land use change. That is the context for REF leadership as a co-funder of the Headwaters Project in East Clayton.”

“Process issues could have derailed the Headwaters Project. But the Real Estate Foundation provided the workaround and Erik Karlsen made the workaround work.”

Tim Pringle



“Turf issues seemed insurmountable. And there was fear and doubt. The REF granted multi-year monies for those expenditures that other agencies lacked the mandate to cover. Our ability to be flexible allowed Erik Karlsen, Patrick Condon and the Headwaters advisory committee to get on with the job of planning for a sustainable community.”

### Convening for action in British Columbia

My collaboration with Tim Pringle started with a grant request for the [Water Balance Model](#) at the end of 2002. It grew from there. “Very quickly I saw the potential of where collaboration could lead,” Tim says, “because Kim represented an interagency group of change agents who supported each other to question the status quo and get beyond it.”

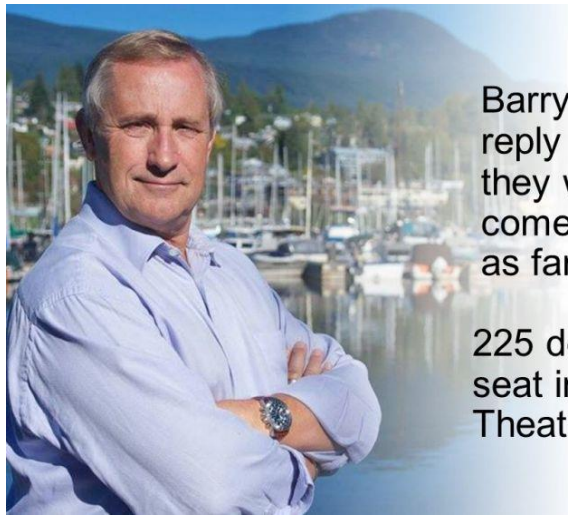
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## Barry Janyk, former Mayor of Gibsons

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Co-hosted by the City of Nanaimo and the provincial and federal governments in January 1999, the wildly successful first event in the [SmartStorm Forum Series](#) might well have been a one-off, footnote in history. And then, Gibsons Councillor Barry Janyk stepped forward.

He called me out of the blue and said, “we would like to host a similar event on the Sunshine Coast.” Because we had to turn people away when attendance reached the 250-person capacity of the Coast Bastion, I asked Barry how could his community build on that kind of success and who would travel to the Sunshine Coast.



Barry Janyk’s confident reply was, “trust me, Kim, they will come.” And come they did, and from as far away as Ontario.

225 delegates filled every seat in the Ravens Cry Theatre in Sechelt.

It was simply amazing. Barry Janyk mobilized his community. Our first interagency planning meeting was hosted by the Sechelt Nation. Barry brought everyone to the table. After that there was no looking back.

### A political champion for smart development

Barry Janyk emerged as a political champion for what he called smart development. He ran for mayor, was elected, and then brought other mayors into the fold to host forums in the Fraser Valley. In total, Barry Janyk was the moderator for three of four forums in the series.

He infused the series with his energy and enthusiasm. He coined the term **Smart Development** to clearly differentiate the BC approach from the Low Impact Development terminology used in the United States.

The legacy of Barry Janyk is that his efforts elevated our profile and credibility with local government elected representatives. He got us onto their radar screen and that enhanced our ability to influence them.



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## Michael Geller, SFU Community Trust

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Michael Geller is another outsized personality. He put his stamp on the [UniverCity sustainable community atop Burnaby Mountain](#). More so than East Clayton, this is the project that had the profile to put the Metro Vancouver region on the international map as a leader in implementing an ecosystem-based approach to drainage practice.

Simon Fraser University hired Michael to be President of the SFU Community Trust. His world view was downtown Vancouver which is not greenfield. He could be abrasive! And that combo resulted in tense moments with the environmental agencies about safeguarding the hydrologic integrity of Stoney Creek. This caused delays.

Is Michael Geller a double-edged sword?

Without him, UniverCity at SFU might not have happened in the 2000s.

But with Michael at the helm, the consensus process required additional time!



“The Pacific Northwest is a part of North America acutely sensitive to environmental issues. And with the ‘salmon crisis’ being such a dominant issue, people want action rather than more talk. There is a commitment by all those involved in the Burnaby Mountain project to leave a legacy for the next generation.”

– Kim Stephens

from p. 217 of the book *Dancing with the Tiger*, by Brian Nattrass and Mary Altomare, published 2002

### Overcoming fear and doubt atop Burnaby Mountain

In the early stages of UniverCity, everything hinged on the drainage plan. Nothing could proceed until it was resolved. That is why Michael chose me to lead his green team. We had to overcome fear and doubt. It had to work. Failure was not an option. We had to build trust.

The weight of that responsibility was my motivation to re-invent urban hydrology and my source of inspiration to develop the [Water Balance Methodology](#). Subsequently, it became the technical foundation for British Columbia’s Stormwater Guidebook.

Because of my UniverCity experience, I was invited to speak at events in Canada, the USA, and Australia to tell my part of the UniverCity story. It took me about six weeks to figure out the methodology, I would tell audiences, and another two years to defend it. Through it all, Michael Geller did have my back. And that is what mattered most.

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## Ted van der Gulik, Ministry of Agriculture

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As long as I have known Ted van der Gulik, and that goes back to 1988, he has consistently translated vision into action. So, it is not surprising that in his career he has been honoured with two Premier's Awards of Excellence; and is one of only 22 individuals tapped for membership in the *British Columbia Public Service Hall of Excellence*.

Two game-changing provincial water tools for use in different settings are part of Ted van der Gulik's incredible legacy.

One is the *Agricultural Water Demand Model* suite of tools; the other is the urban-centric *Water Balance Model for BC*.



Ted van der Gulik is a *make it so* individual. When he sets his mind on an outcome, he delivers. "What exactly is it that we want to do," he will ask, "with that clear in our minds, we can work backwards and figure out the steps in a plan to make it happen."

That bold way of thinking and doing is the context for Ted's actions in bringing together an inter-governmental partnership in July 2002 to operationalize the [Water Balance Methodology](#) via an online tool.

Ted has often been asked why the Ministry of Agriculture chaired the inter-governmental Water Balance Model Partnership. He would always reply by stating...because the ***water balance consequences*** of urbanization in the uplands are felt in the agricultural lowlands!

### Provincial champion for the Water Balance Model

In parallel with my work at UniverCity in the early 2000s, I led development of both the Stormwater Planning Guidebook and the first version of the [Water Balance Model](#). We needed the tool to evaluate the potential effectiveness of nature-based solutions for rainwater capture. Ted van der Gulik was on the steering committees for both.

The evaluation tool was a massive Excell spreadsheet. Because we could promptly generate answers to *what if* questions, however, it was powerful in opening minds as to what could be. Ted had an epiphany and said we must transform this tool so that it is seamless and can be easily used by others for scenario comparisons. The rest is history.