



the partnership  
for water sustainability in bc

Watershed Blueprint Case Profile Series

# **A Beacon of Inspiration: Bowker Creek Blueprint and 100-Year Action Plan**

**THE VISION: *Restore a ribbon of blue  
and green the built environment***

**SEPTEMBER 2021**



## Note to Reader:

This publication is the 10th in the Partnership's "Watershed Blueprint Case Profile Series". Because there is no equal to the Bowker Creek Blueprint and the intergenerational 100-Year Action Plan, the intent is that this "story behind the story" will have lasting value as a legacy resource for the Bowker Creek Initiative. The hope is that others will be inspired by the Bowker experience. It is a beacon of hope.

To download a PDF copy of this Watershed Case Profile, as well as any of the others in the series, visit the Rainwater Management community-of-interest on the waterbucket.ca website.<sup>1</sup>

The umbrella for Partnership initiatives and programs is the [Water Sustainability Action Plan for British Columbia](#)<sup>2</sup>. In turn, the Action Plan is nested within [Living Water Smart, British Columbia's Water Plan](#)<sup>3</sup>. Released in 2008, this was the provincial government's call to action, and to this day transcends governments.



Cover Photo Credit: Capital Regional District

<sup>1</sup> <http://waterbucket.ca/rm/category/showcasing-british-columbias-watershed-based-approach/watershed-case-profile-series/>

<sup>2</sup> <https://www.waterbucket.ca/cfa/sites/wbccfa/documents/media/81.pdf>

<sup>3</sup> [https://waterbucket.ca/wcp/wp-content/uploads/sites/6/2017/11/livingwatersmart\\_book.pdf](https://waterbucket.ca/wcp/wp-content/uploads/sites/6/2017/11/livingwatersmart_book.pdf)

## A Beacon of Inspiration: Bowker Creek Blueprint and 100-Year Action Plan: What the Reader Will Learn

The Bowker Creek Blueprint and the intergenerational commitment by so many players to implement the 100-year action plan is remarkable and precedent-setting. Since 2008, the Partnership been an observer of the process and the journey. A thread that weaves through the Bowker storyline is **the right people in the right place at the right time, over time.**

**We describe the Bowker Blueprint as a “beacon of inspiration”.** Why? Because it is a story about people who really care. Their shared story demonstrates why it takes hard work to transform the vision for [Living Water Smart in British Columbia](#) into actions on the ground. For this reason, the Partnership is excited to share the Bowker story through our Watershed Case Profile Series.

The Living Water Smart vision is to build greener communities and adapt to a changing climate: embrace “design with nature” approaches; reconnect people, land, fish, and water in altered landscapes. The intergenerational Bowker vision is nested within this larger vision because:

**The Bowker Creek Blueprint is a 100-year action plan to create “islands of nature” within the urban environment, daylight a creek where it is enclosed in a pipe for two-thirds of its original channel length, and restore a “ribbon of blue”.**

**This Watershed Case Profile is not a report.** No recommendations are made. Rather, it is a short history of building bridges of understanding from the past to the present and future. The focus is on the champions. These dedicated individuals provide leadership and motivate others to strive for the greater good. Without determined champions such as Jody Watson, Ian Graeme, Adriane Pollard, Soren Henrich et al, nothing gets started and nothing happens.

Key words that capture the essence of the Bowker story are perseverance, dedication, and TIME in capitals. Changes do not happen overnight. It is a journey and journeys take decades – which is why success is measured by the distance travelled, not the distance still to go. Continue reading and be inspired!



Kim A. Stephens, MEng, PEng,  
Executive Director  
Partnership for Water Sustainability in BC  
September 2021

# Georgia Basin Inter-Regional Education Initiative (IREI)

## Educational Goal

Build practitioner capacity within the local government context to implement the whole-system, water balance approach known as ***Sustainable Creekshed Systems, through Asset Management.***

**Mandate:** Provide value through collaboration and partnerships.

## Acknowledgments

The Partnership for Water Sustainability gratefully acknowledges the financial support of the Real Estate Foundation of BC, as well as the support provided by the Province of British Columbia through the Ministry of Municipal Affairs.



## About the Partnership for Water Sustainability

*The Partnership for Water Sustainability in British Columbia has its roots in government – local, provincial, federal. Incorporation of the Partnership as a not-for-profit society, on November 19<sup>th</sup> 2010, was a milestone moment.*

*The Partnership had evolved from a technical committee in the 1990s, to a “water roundtable” in the first decade of the 2000s, and then to a legal entity in 2010. Incorporation enhanced the capabilities of the Partnership to develop tools and resources, and facilitate peer-based learning, to sustain implementation of the vision for **Living Water Smart in British Columbia.***

*The Partnership vision is to build **bridges of understanding** and pass the baton from the past to the present and future. To bring the intergeneration vision to fruition, the Partnership is growing a network in the local government setting, which encompasses both government and stream stewardship sectors. This network embraces collaborative leadership and **intergenerational collaboration.***

*The Partnership believes that when each generation is receptive to accepting the inter-generational baton and embracing the wisdom that goes with it, the decisions of successive generations will benefit from and build upon the experience of those who went before them.*

## Five regional districts have endorsed the IREI thru Board Resolutions





**“The health of our waters is  
the most critical measure of  
how we live on the land.”**

Luna Leopold (1915 - 2006)  
geomorphologist & hydrologist

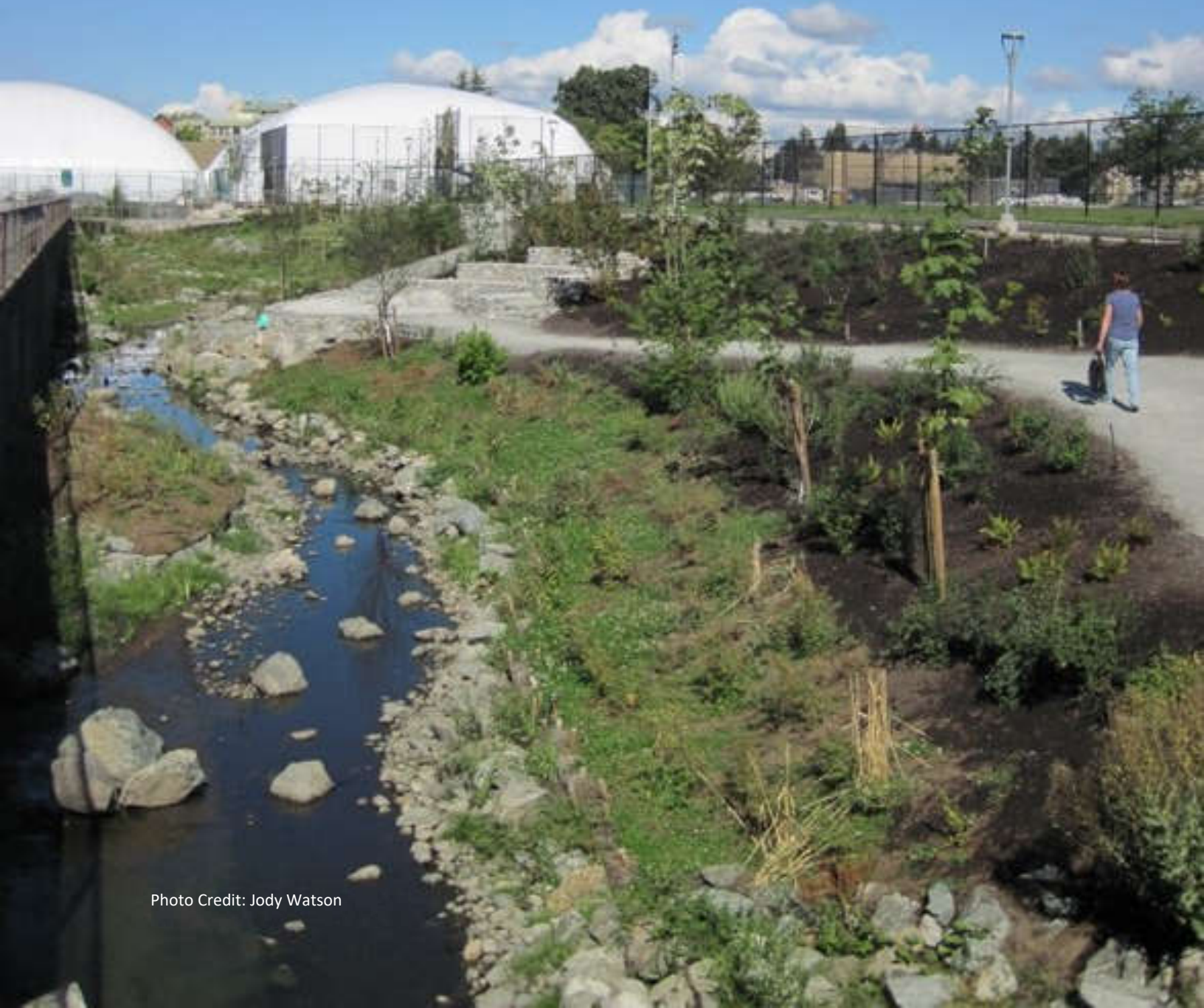


Photo Credit: Jody Watson

# A Guide for the Busy Reader

## Table of Contents / Storyline

In [A Beacon of Inspiration](#), we tell the “story behind the story” to showcase the history and evolution of the Blueprint process over the past two decades. Our storyline is structured in three parts. The first two cover the past two decades. The third part sets the stage for Bowker Blueprint 2.0 and recommitting to a revised set of actions over the next decade of the 100-year journey.

Section Theme	What the Reader will Learn	page
<b>PART A – Creation of the Bowker Blueprint</b>		
<b>Journey from Vision to Blueprint (2002-2010)</b>	The Bowker Blueprint is a game-changer. For the reader to appreciate why this so, an understanding of the early history of the <i>hard work of hope</i> is foundational. The spotlight herein is on seven distinguishing ingredients that culminated in success.	1
<b>Recognition of Four Community Champions</b>	The strength of the initiative in the formative years flowed from the complementary talents and passions of four community leaders. They demonstrated how solutions will follow when a collaborative process is founded on <i>trust and mutual respect</i> .	15
<b>Recognition of Local Government Leaders</b>	The Blueprint brought together three municipalities and their communities. They demonstrated what could be accomplished by a <i>regional team approach</i> when municipal staffs embrace <i>shared responsibility</i> and collaborate to reach a shared goal.	24
<b>PART B – First Decade of Implementation</b>		
<b>Bowker Creek Forum - February 2010</b>	The forum was an occasion for celebration and sharing. It launched the Blueprint within the Capital region. It also began the process for showcasing the Blueprint accomplishment inter-regionally. The Blueprint is synonymous with <i>mission possible</i> .	33
<b>Four Momentum-Builders</b>	Bite-sized pieces, covering a range of situations, have allowed the slow and steady approach to reach a tipping point where the vision for Bowker creekshed restoration is now self-fulfilling. The Oak Bay High School project has made the vision real.	37



## A Guide for the Busy Reader

### Table of Contents / Storyline (continued)

Section Theme	What the Reader will Learn	page
<b>PART C – Bringing Bowker Back to Life</b>		
<b>Reflections on What Comes Next</b>	Interviews with current players in the Blueprint process and journey provide the reader with a look ahead. These individuals are collaborating to set a direction for the second decade of Bowker Blueprint implementation	45
<b>Operationalizing the “Ribbon of Blue” Vision</b>	The idea of the <i>intergenerational baton</i> is a metaphor for passing on experience, knowledge, and wisdom. This idea is the key to operationalizing the 100-Year Action Plan and retrofitting a “ribbon of blue” for the length of the Bowker creekshed.	46
<b>Friends of Bowker Creek Society</b>	Commitment to the Blueprint is enshrined in the constitution for the Friends of Bowker Creek. The Society is an umbrella group for 11 neighbourhood associations. Through its 5 working groups, it brings together citizens from across the generations.	52
<b>Local Government Perspectives</b>	Five local government champions joined the Blueprint journey at different points along the time continuum. Common to all is a shared understanding and belief in the concept of the <i>intergenerational baton</i> as an appropriate metaphor.	60
<b>The Last Word</b>	Over time, two individuals stand out for the leadership roles they have played. Without the determination of Ian Graeme, there is no Bowker Creek Initiative. Without the passion and persistence of Jody Watson to hold it all together, there is no Blueprint.	74
<b>PART D – A Celebration of Achievements</b>		
<b>10 Year Achievements / 2021</b>	Ten years after the publication of the Blueprint, many successes have been achieved through the work of the BCI partners. To celebrate the first decade, the BCI has produced a reader-friendly document that elaborates on notable accomplishments.	

## Blueprint to a Vision / Cathedral Thinking in Action

The Bowker Creek Blueprint is a 100-year action plan to create islands of nature within the urban environment, daylight a creek where it is enclosed in a pipe for two-thirds of its original channel length, and restore a continuous stream corridor.

The Bowker Creek Blueprint thus exemplifies what is meant by “**cathedral thinking in action**”, because implementation depends upon an inter-generational commitment - by the community at large, by successive Regional Boards and Municipal Councils, and by legions of land and water practitioners - to achieve the **design with nature** vision for creekshed restoration.

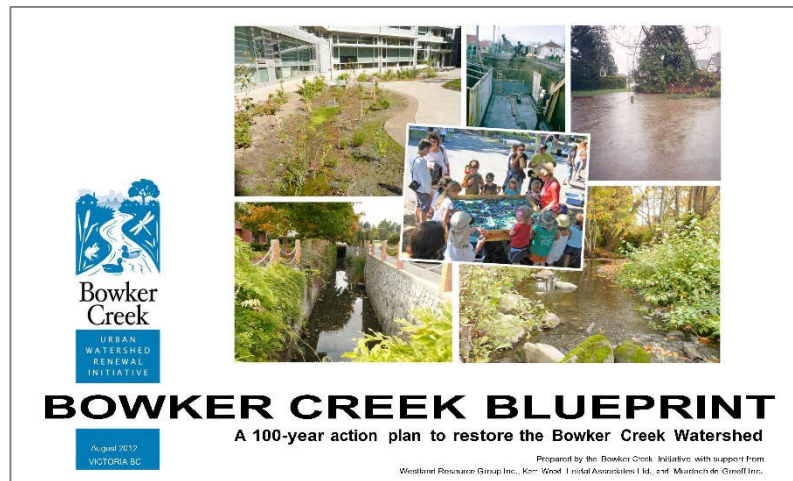


When one thinks of a cathedral, two aspects come to mind: a soaring aspiration; and a grounded structure firmly planted throughout time. The builders of great cathedrals in medieval times thought in terms of multiple generations carrying out their work, to complete a dream that would not be realised until long after the originator's death. So too will it be with the Bowker Creek Blueprint.



## PART A

# Creation of the Bowker Blueprint



*The thread that runs through the Bowker Blueprint storyline is “the right people in the right place at the right time, over time”.*

*Part A introduces a remarkable group of individuals who came together as a team and coalesced around a shared vision.*

*They created the intergenerational 100-Year Action Plan for greening the Bowker creekshed and bringing Bowker Creek back to life.*

**Image 1 – Regional Context for Bowker Creekshed**





## Journey from Vision to Blueprint (2002-2010)

### Bowker Process is Inspirational

*“In a word, the Bowker Blueprint was a game-changer. It is a game-changer. It continues to be a game-changer.”*

*“The Blueprint is provincially significant and precedent-setting. It is also inspirational. In my 40-year career as a professional engineer, there is nothing that equals it. And the reason it is so important is that it gave the rest of us a vision of what can be.”*

*“The experience of what this region has done is informing others, from Metro Vancouver all the way up to the Comox Valley.”*

– Kim Stephens, P.Eng.,  
Partnership for Water  
Sustainability in BC,  
presentation to CRD  
Environmental Services  
Committee, Feb 2014

### Context for Community Action

Historically, Bowker Creek was a meandering, low gradient creek with numerous small tributaries and wetland areas. As shown on **Image 1**, the creek originates at a wetland on the University of Victoria campus. The drainage area is just over 1850 hectares.

Today, the creekshed is completely urbanized. The photos included as **Image 2** illustrate the transformation from rural to urban over the last 120 years. An estimated 56% of the Bowker Creek drainage area is composed of hard surfaces such as roads, parking areas and roofs.

**Consequences of No Streamside Protection:** Transformation of the landscape occurred in an era when there was no streamside protection regulation. Thus, less than one-third of the 8 km long stream remains as an open channel; the other two-thirds is enclosed in pipes and culverts as illustrated by **Image 3**.

The consequences of increased impervious surfaces include flooding, water pollution and habitat loss. All are significant concerns in the Bowker creekshed. Despite the degradation the stream system has suffered, Bowker Creek still offers connections with the natural environment to the 30,000-plus watershed residents.

**Vision for Greening the Bowker Creekshed:** Completed in 2010, the [Bowker Creek Blueprint](#) is a 100-year action plan to restore islands of nature within the urban environment. The map image included as **Image 4** illustrates the desired outcomes of the Blueprint:

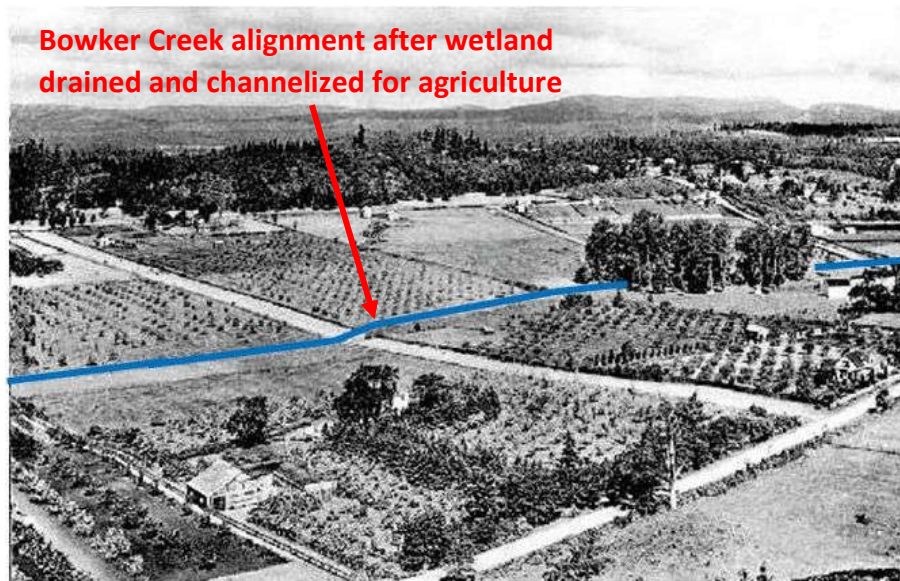
The ribbon of blue running the length of the watershed represents the daylighted creek. The greening of the creekshed is portrayed by a green grid of green streets and greenways.

The Blueprint is the outcome of a unique multi-jurisdictional effort. The [Bowker Creek Urban Watershed Renewal Initiative](#)<sup>1</sup> is a collaboration between local governments, community groups, post-secondary institutions, and private citizens to improve the stream and creekshed.

<sup>1</sup> <https://www.crd.bc.ca/bowker-creek-initiative>

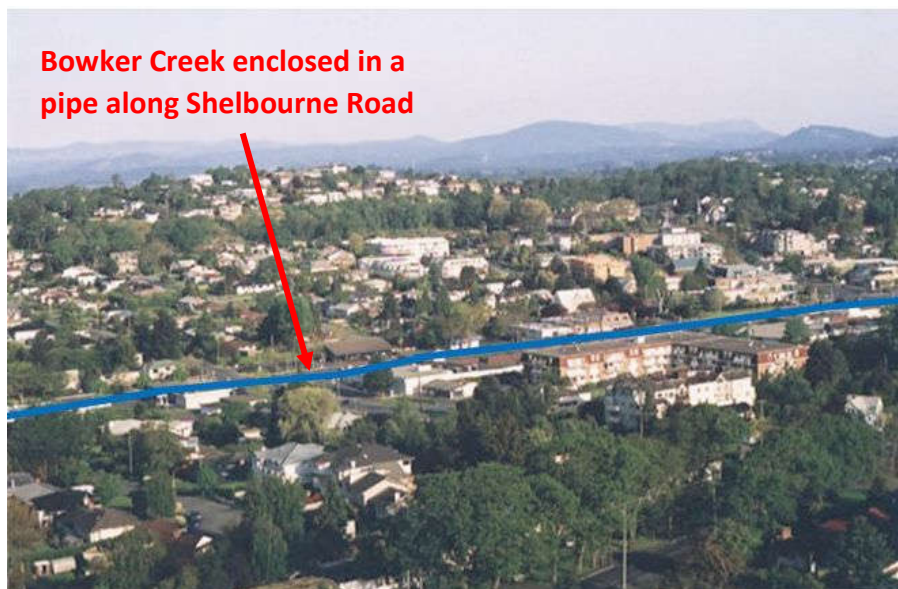
## Image 2 – Development Context

The Bowker creekshed is fully built out. Two-thirds of the original Bowker stream channel is enclosed in buried pipes and road culverts. Bowker only has remnant riparian areas.



**Shelbourne Valley, 1901**

Image Credits: Jody Watson, Capital Regional District, from her presentation at the 2019 Vancouver Island Symposium on Water Stewardship in a Changing Climate.



**Shelbourne Valley, 2003**

### Image 3 – Consequences of No Regulatory Protection

At a culvert under Gordon Head Road, Bowker Creek enters an underground storm drain network and flows parallel to MacKenzie Street, and then along Shelbourne Street. It then flows southeastward through the vicinity of Fort Street, Foul Bay Road and Richmond Avenue before discharging into Oak Bay.



**Enclosure and  
burying of  
Bowker Creek**

Photo Credits: Jody Watson, Capital Regional District, from a presentation in 2010



**Confining and  
channelizing of  
Bowker Creek**





**Jody Watson**

Past-Chair  
Bowker Creek Initiative  
Steering Committee

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*“Bowker Creek will never be restored to its original condition and is not likely to support salmon spawning in the foreseeable future.”*

*“Nevertheless, many people are working to improve the condition of the stream, as it provides public greenspace and educational opportunities for the community, as well as habitat for terrestrial wildlife.*

*“There is also a move toward innovative engineering that tries to mimic the natural hydrological cycle in developed area to improve overall watershed function”*

- January 2010

## Creating the Vision for Restoration

Bowker Creek once meandered through forests, meadows and wetlands, before spilling into the ocean in Oak Bay. Salmon spawned in it and provided food for First Nations. Early European residents dubbed the stream ‘The Thames’ as it was the largest in the area.

In 2002, the CRD was asked to lead a community forum to develop a vision for the creek. This led to development of a strategy level watershed management plan in 2003. A year later (2004), the [Bowker Creek Urban Watershed Renewal Initiative](#) (BCI) was established. By 2010, the [Bowker Creek Blueprint](#) was completed. Within two years (by July 2012), the Councils for Oak Bay, Saanich and Victoria formally endorsed the Blueprint. The branding image is included as **Image 4**.

**Vision for the Future:** In 2002, the [Bowker Creek Watershed Management Forum](#) developed the following Vision Statement for restoration of the creekshed:

*The varied **human uses and natural areas** in the Bowker watershed are **managed to minimize runoff and pollution**, making Bowker Creek a **healthy stream that supports habitat** for native vegetation and wildlife, and **provides a community greenway** to connect neighbourhoods.*

*“This vision statement has guided the collective actions of the BCI since 2004. Our challenge, and our focus, has been on how to give these words real meaning so that we have tangible outcomes,”* stated Jody Watson, BCI Past-Chair, in 2010 upon Blueprint completion.

*“Even with the vision and management plan, municipal staffs were still missing the details of how to achieve that vision particularly when dealing with redevelopment on a lot-by-lot basis. They knew that the plan called for a community greenway, but there was no detail on where that greenway should go, or which parts of the creek need restoration.”*

*“The Bowker Creek Blueprint now provides detailed ‘how to’ and ‘where to’ guidance to assist municipal staff, developers and the community in achieving the long-yerm vision. The Blueprint moves past the motherhood statements contained in most management plans to concrete on the ground actions.”*

Image 4 – Ribbon of Blue / Green Grid



## Bowker Creek Initiative (BCI) - Chronology

*In 2002, a forum of community organizations, municipal representatives, and residents developed the Bowker Creek Watershed Management Plan.*

*In 2003, the municipalities of Saanich, Oak Bay and Victoria, and the CRD Board approved the Plan and established the BCI. The Plan guides all activities undertaken by the BCI.*

*In 2004, the four funded a part-time coordinator.*

*In 2008, the BCI turned an impasse into a defining moment.*

*In 2010, the Bowker Creek Forum showcased the completed Blueprint to an inter-regional audience.*

## The Blueprint Explained

The Blueprint was developed through an interdisciplinary roundtable process. Participants included the BCI steering committee and local government staff representing all three municipalities as well as the planning, environmental and engineering perspectives.

**Collaboration in Action:** The process was successful because community representatives were at the table with municipal staff. This ensured that community values were front and centre.

The collaborative process produced a 100-year action plan. The photo included in **Image 5** captures the hands-on nature of the collaborative process. The graphic below the photo encapsulates the essence of the resulting Blueprint.

The Bowker Creek Blueprint incorporated substantial input from municipal staffs and community members; reflected work undertaken and experience gained after the BCI was established in 2004; built on existing resource materials and studies; and created a plan of action.

**Knowledge-Based Approach:** The process for Blueprint development was built around a pooling of knowledge reach-by-reach. Integrated, location specific actions were developed for each reach. To keep the number of reaches to a manageable number for developing actions, and to include both open and closed sections, the BCI sectioned the creek into 17 reaches for the Blueprint.

The Blueprint integrated environmental, social, engineering and land use factors to provide a more holistic approach to the restoration of creek and the entire watershed.

**Integrated recommendations were provided at two scales:** creekshed management activities and policies; and site-specific actions for each of 17 creek sections (reaches). Recommended actions range from small restoration efforts such as invasive species removal, to large projects such as daylighting sections of the creek. These guide creekshed and stream corridor restoration as the Bowker creekshed redevelops over time.

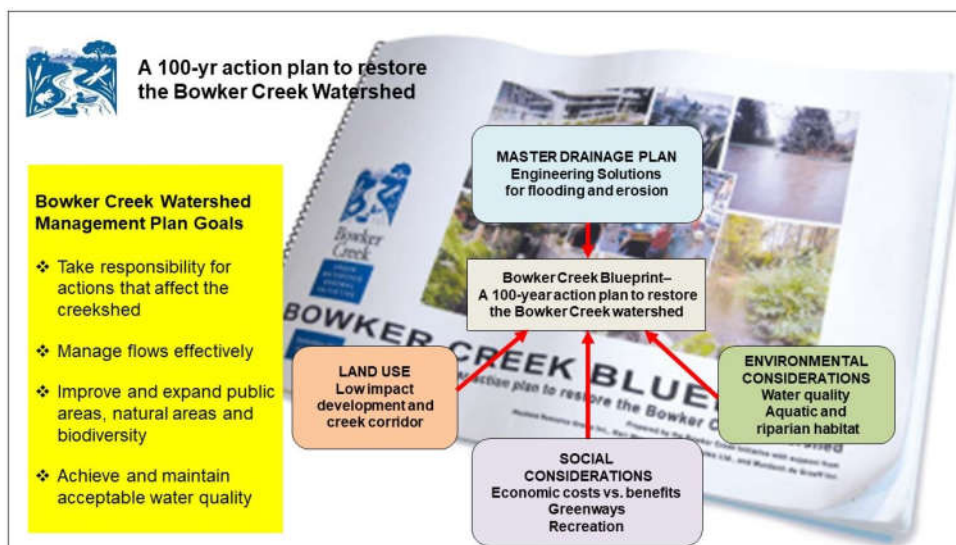


## Image 5 – Collaboration in Action



The defining moment came in 2008 when the players around the steering committee table realized how they could help each other through pooling of collective knowledge.

*“The community and committee said that the plan cannot just be about stormwater. It needs to be habitat. It needs to be about greenways and creating connections. It needs to be about how do we connect these small pieces of remaining habitat. How do we connect all these things? We pulled it all together in the Blueprint which is really about trying to illustrate a potential future for this watershed.” – Jody Watson, April 2019*



Saanich, Victoria and Oak Bay were then able to integrate the Blueprint with their other plans and their operational priorities and commitments.

Image Credit: Jody Watson, Capital Regional District, from her presentation at the 2019 Vancouver Island Symposium on Water Stewardship in a Changing Climate.



**Tanis Gower**

Past-Coordinator  
Bowker Creek Initiative

*“A distinguishing feature of the Bowker Creek Blueprint is the level of planning detail that characterizes each of the 17 creek sections.”*

*“Options for creek restoration and greenway development are provided for each section.”*

*“This includes rating how proposed actions address the Watershed Management Goals; as well as identifying the lead agency, the type of work, and the source of funding.”*

- January 2010

**Why the Bowker Creek Plan is called a Blueprint:** “The process leading to the choice of ‘blueprint’ to describe the detailed action plan for the Bowker Creek watershed is a story unto itself. The participants around the BCI table went through an extended period of spirited discussion and debate before consensus crystallized around the word blueprint,” explained Jody Watson in 2010.

“The plan says very clearly this is how we will achieve the watershed vision. During one committee discussion, there was an Ah-Ha moment when someone referred to the plan as the **blueprint to the vision**. The phrase resonated. The rest is history, as they say.”

“Semantics is everything. Before we settled on ‘blueprint’, we considered calling the final document an Implementation Plan. However, there was discomfort around the financial implications of municipal commitment. Once we combined blueprint with a 100-year timeframe, however, it made it possible for everyone to truly commit to doing their part to make the vision real.”

**“Now that there is a watershed blueprint, the three municipalities can integrate it with their other plans and their operational priorities and commitments.”**

**Visualizing the Future:** “People need pictures to visualize what the future could look like, whether for a stream corridor or a roadway corridor. So we created a series of conceptual images to capture what we had in mind.”

“We believe the use of effective images is one element that may set the Bowker Creek Blueprint apart from other watershed plans. The images have brought the restoration vision to life. This is what lifts the plan beyond a summary table in a technical report about drainage.”

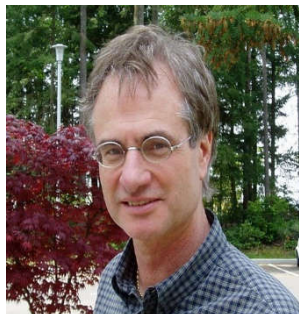
**“The images give people a tangible view of what that future of the watershed could be. We have observed that they help inform and educate people.”**

**Reflections on the Journey:** “Bowker Creek is the pilot for the Capital Region. It shows what can be accomplished through a regional team approach. The CRD and our partner municipalities will not be able to focus on every watershed in the region to the same level of detail as Bowker Creek. The time, effort and cost would be prohibitive. (Instead) we can transfer the Bowker learnings to other creeks.”

**“The process is about respect and building trust, partnerships and collaboration, and aligning efforts to achieve a shared goal.”**

## Lessons Learned and Experience Gained

In 2010, the BCI Steering Committee identified seven essential ingredients that were foundational for success. Seven key messages capture the essence of lessons learned and experience gained:



**John Finnie**

Past-Chair (2006-2011)  
CAVI-Convening for  
Action on Vancouver  
Island Initiative

*“The Bowker Initiative is demonstrating how to move from awareness to action at a watershed scale. It has been a lengthy, intensive, and expensive process. The lessons learned can be transferred and adapted to other settings.”*

*“Other watershed initiatives and other jurisdictions can benefit from the trail-blazing efforts of the Bowker Creek Initiative. Effective sharing of their experience can potentially accelerate the change process elsewhere in the Georgia Basin.”*

- January 2010

1. Community interest and involvement as a trigger for BCI establishment.
2. Hiring a part-time coordinator.
3. The success of outreach efforts.
4. Reconnecting with their vision and agreeing to work more cooperatively together.
5. The reasons behind developing the Blueprint, the shift from a creek to a watershed perspective.
6. The trigger for action for a watershed plan at the CRD (i.e., multi-jurisdictional watersheds).
7. Incorporation of climate change in the plan.

“There is a story behind each ‘learning’, and the BCI Steering Committee is interested in sharing those stories. These stories are central to the founding of the BCI and the development of the Blueprint,” observed Jody Watson.

***Bowker is a Regional Demonstration Initiative:*** “At the beginning of 2008, CAVI learned about the Bowker Creek Initiative and envisioned that [Showcasing Green Infrastructure Innovation: The 2008 Capital Region Series](#)<sup>2</sup> would roll into a [Bowker Creek Forum](#) in early 2009,” recalled John Finnie, CAVI Initiative Past-Chair, and former General Manager of Regional and Community Utilities at the Regional District of Nanaimo.

“The 2008 series featured projects in the Capital Region that set provincial benchmarks for others to measure themselves against. The series was about establishing expectations to truly achieve ‘design with nature’ outcomes at a community scale.”

“In 2008, however, the Bowker Creek Initiative stalled. Because the steering committee was engaged in a reconnecting process, this resulted in a 12-month delay in organizing the Bowker Creek Forum.”

<sup>2</sup> <https://waterbucket.ca/viw/category/convening-for-action-in-2008/2008-showcasing-green-infrastructure-innovation-capital-region/>



## Role of Community

*“The role that community groups have played in Blueprint development is impressive. Community groups have a stake in ensuring that Blueprint outcomes are achieved over time.”*

*“It sends a powerful message when community representatives are motivated by the common good and are in a position to express their commitment in terms such as these: we live here, and we are passionate about the legacy and the quality of life that we leave for our children and grand-children.”*

– Kim Stephens,  
January 2010

**KEY MESSAGE #1 - Community Values Drive the Bowker Creek Initiative and Blueprint:** The Bowker Creek Initiative is a partnership that has enabled community groups and municipal staffs to coalesce around a shared vision: *What do we want this watershed to look like in 100 years, and what steps will we take to get there?* Establishment of the BCI was truly driven by the community. Jody Watson explains:

*“There was strong support in the community to develop a management plan for the Bowker Creek watershed. The CRD was asked to lead a community forum to develop a vision for the creek; and a strategy level watershed management plan was developed.”*

*“The input of the community throughout that process and their direct involvement in the steering committee has ensured that the community values are front and center. Having community representatives at the table with municipal staff has resulted in a much more holistic blueprint.”*

**KEY MESSAGE #2 - Coordinator Role is Crucial:** The four local governments co-funded a dedicated part-time coordinator whose scope of work encompassed four major areas of responsibility:

**Manage projects.**

**Obtain external funding.**

**Coordinate outreach.**

**Work with all partners to facilitate achievement of the plan goals.**

*“The Bowker Creek success is in stark contrast to the Millstream and Craigflower experiences,” explained Jody Watson in 2010.*

In those watersheds, management plans were completed through a community forum process, lead agencies were identified for the key actions and then each agency was left to implement those areas that were their responsibility. Due to staff workloads and competing priorities, those plans quickly became documents that sat on a shelf.”

*“In the first five-year review of the BCI, all partners agreed that having a dedicated part-time coordinator was the most important factor to our successes to date.”*

## Community Buy-In

*“For the first four years, outreach was the BCI focus because the steering committee recognized that community buy-in would ultimately engender political and staff support for watershed restoration. An important example that illustrates the scope of the outreach effort was the oral history project. This was a way to capture the memories of long-term residents.”*

– Tanis Gower,  
January 2010

**KEY MESSAGE #3 - Outreach is a Powerful Tool:** Community groups and individuals took ownership and responsibility for “telling the story” of the Bowker Creek Initiative. Jody Watson explains:

“The community groups have stepped up and manned the displays at community events; and they have taken information back from the Bowker Table to inform their associations and others.”

“This allowed the coordinator to focus her time on the development of the Blueprint, connecting with major developments occurring within the watershed, organizing restoration projects and managing consultants.”

“The BCI also focused on engaging politicians at all three municipalities. Beyond the regular council presentations and updates, local councillors participated in many outreach events, sign unveilings and tours of the watershed. They are informed about what the BCI is doing and they have a clear understanding of what the residents living in the watershed want.”

**KEY MESSAGE #4 - Commit to the Vision:** “The Bowker Creek Forum was conceived as a flagship event to celebrate what the BCI had accomplished. At the end of 2008, however, the steering committee was not yet ready to proceed,” recalled Jody Watson

“Frankly speaking, the BCI was at an impasse. There was community frustration over the disconnect between municipal policies and action on the ground; and there was municipal frustration over the community not understanding the constraints under which municipal staff work. It had almost gotten to a point of the community representatives versus the municipal staff.”

“Looking back, the turning point occurred in November 2008 when the steering committee brought in a third party to facilitate the internal conversation. That allowed us all to take a step back and look at the big picture instead of getting stuck in the details.”

**“Soon everyone opened up, expressed their frustrations and spoke from the heart. Out of this renewal process came a reaffirmation and a recommitment to the Bowker Creek Vision by all the partners.”**

**Reflections on the Reconnecting Process:** Just over one year later, in January 2010, Jody Watson and Tanis Gower distilled their insights from this cathartic process down to four summary statements:

- 1. The process is tough and challenging.**
- 2. It is okay to hit roadblocks.**
- 3. We are all still at the table.**
- 4. Stick to the vision.**

“There has been a huge change in attitude since November 2008,” noted Tanis Gower. “At the same time as the reconnecting process was underway, the partners developed a Members Agreement to work cooperatively. This clearly defines roles and responsibilities for the municipalities, University of Victoria, and the community groups.”

“This agreement created a better understanding of the desires, constraints, and job realities of everyone around the table,” added Jody Watson. “The US versus THEM way-of-thinking changed to the WE paradigm. The players around the table realized that they could help each other.”

“The bottom-line is that the reconnecting process got people thinking about HOW the community and municipal partners could support each other in the achievement of the vision and we were able to get back to the business of creating a blueprint to achieve it.”

**KEY MESSAGE #5 - *Integrate Watershed & Creek Actions:*** The Blueprint is the new way of doing business. Jody Watson explains:

“The plan could easily have been creek-centric and engineering-oriented; in other words, a glorified master drainage plan. Instead, the BCI collaborative approach in tackling watershed restoration holistically has resulted in a Blueprint that is truly integrated in connecting the dots between land use and stream health.”

**“The Blueprint is not a creek corridor plan. Land use is the biggest part of the Blueprint. The BCI evolution from a creek to a watershed perspective happened organically. This underscores the importance of stepping back to look at the big picture and getting the context right.”**



## 100-Year Vision is Exciting

*“Viewed from the outside, the Bowker Creek Blueprint underscores what can be achieved through an outcome-oriented process. This contrasts with a conventional technical approach that would have been output-oriented.”*

*“A picture is worth a thousand words. The 100-Year Vision is exciting. The plan elements literally jump off the page. A ribbon of blue runs the length of the watershed; this represents the daylighted creek. The greening of the watershed is portrayed by a green grid: green streets and greenways.”*

*“The imagery is inviting. It is easy to see why the Blueprint is resonating with the community. The vision is the road map. The desired outcome is clear.”*

— Kim Stephens,  
January 2010

**An Outcome-Oriented Process:** “The watershed vision has to originate with the community; and that vision will only be brought to fruition if those in local government - who are tasked with making it happen - are committed to making it happen. This understanding resulted in the committee re-thinking how to involve consulting professionals in plan development.”

“The steering committee decided not to employ the traditional engineering-led approach. Rather, we hired an experienced facilitator who worked directly with the committee and coordinated the technical inputs from a team of specialist consultants. Tanis Gower then prepared the final version of the Blueprint document.”

**“Our Bowker experience shows that community representatives and municipal staffs must be hands-on in developing a watershed restoration plan. Involvement is what creates the sense of ownership.”**

**The 100-Year Vision:** The branding graphic for the Bowker Creek Blueprint (Image 4) represents the outcome-oriented vision for watershed restoration.

“The big picture is complemented by a set of little pictures in the Blueprint that show how the big picture can be achieved on the ground, Redevelopment of Oak Bay High School is a prime example of having a component Vision Plan ready in order to seize opportunities as they arise for creek restoration,” explained Tanis Gower.



To Build Trust & Respect,  
It Starts with a Conversation.

Listen, Listen, Listen.

Because...

Conversations →  
will lead to Dialogue →  
will lead to Consensus

## Synergistic Efforts

*“Climate change mitigation efforts such as tree planting can be concentrated along creek corridors, while low impact development measures provide a no-regrets strategy to reduce peak flows during smaller storms. Synergistic efforts also include riparian restoration and other measures to provide ecosystems with the resilience required for climate change adaptation.”*

– Tanis Gower,  
January 2010

### KEY MESSAGE #6 - *Regional Alignment Starts with a Regional*

**Team Approach:** The process to develop the Blueprint during the period 2002 through 2009 was a journey. It started with the Watershed Management Plan and concluded with the Bowker Creek Blueprint. Implementation will be a 100-year journey.

“Bowker Creek is the pilot for the Capital Region. It has become a demonstration project that shows what can be accomplished through a regional team approach,” stated Jody Watson.

“The CRD and our partner municipalities will not be able focus on every watershed in the region to the same level of detail as Bowker Creek. The time, effort and cost would be prohibitive. The good news is that we can transfer the Bowker Creek learnings to other watersheds in order to ensure early action elsewhere.”

“Looking back, it is fascinating to reflect on the transformation that has occurred over the past year. It starts with a conversation, and conversation leads to dialogue which leads to consensus. This is not rocket science. It is about respect and building trust. It is about partnerships and collaboration. It is about aligning efforts to achieve a shared goal.”

### KEY MESSAGE #7 - *Blueprint Allows for Climate Change:*

The Bowker Creek Blueprint has nine over-arching watershed management activities and policies that provide a framework for coordinated and integrated action. There are many areas where good urban watershed management overlaps with climate change action:

1. Use creek-friendly management approaches wherever possible.
2. Adopt requirements to reduce effective impervious area for new developments.
3. Construct infiltration and retention features in boulevards.
4. Incorporate Bowker Creek goals into municipal plans.
5. Maintain effective communication of the Bowker Creek vision, goals and actions.
6. Plant trees and shrubs and protect existing trees.
7. Purchase and protect key land in the watershed.
8. Incorporate proposed greenways into land use planning.
9. Include climate change adaptation and mitigation in all activities.

## Recognition of Four Community Champions

### Community Engagement

Viewed from the outside, the strength of the Bowker Creek Initiative in its formative years flowed from the complementary talents and passions of a *de facto* leadership team. Four community champions exemplified how passionate individuals can make a difference when committed to the social and ecological wellbeing of their community.

<b>Ian Graeme</b>	<i>Catalyst</i>	<i>Steering Committee</i>
<b>Chris Jensen</b>	<i>Applied Scientist</i>	<i>Steering Committee</i>
<b>Soren Henrich</b>	<i>Artist</i>	<i>Outreach Subcommittee</i>
<b>Gerald Harris</b>	<i>Teacher</i>	<i>Outreach Subcommittee</i>

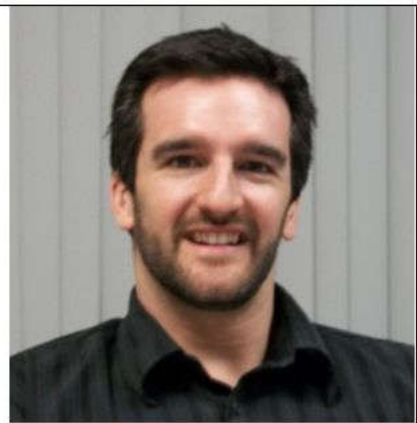
### The Power of One

*“When Ian Graeme told me the story of the genesis of the Bowker Creek Initiative, my Ah-Ha moment was seeing why he epitomizes what can be accomplished through the ‘power of one’. And after further reflection, I saw that each of the four champions demonstrates the ‘power of one’ in what they each brought to the BCI.”*

– Kim Stephens,  
February 2010



Ian Graeme



Chris Jensen



Soren Henrich



Gerald Harris



## Their Stewardship Ethic

Ian Graeme, Chris Jensen, Soren Henrich and Gerald Harris have an affinity for creeks that is rooted in their childhoods. Their actions as adults have been guided by a community stewardship ethic.

### Bottom-Up Leadership

*“Conversations about the Bowker Creek Initiative inevitably seem to focus on the leadership role that Ian Graeme had quietly played since the mid 1990s. As I learned about Ian’s accomplishments over time, it struck me that the word catalyst is the most appropriate descriptor to personify what Ian Graeme means to the enduring success of the BCI.”*

*“Community leadership is founded on trust and mutual respect. It is also about leading by example; being inclusive and collaborative; being patient, positive and staying the course. These are phrases that his colleagues used when describing Ian Graeme’s leadership style.”*

– Kim Stephens,  
February 2010

**A Conversation with Ian Graeme:** “Five generations of my family have lived in Victoria. As a child, Bowker Creek was a place to explore and cultivate my curiosity. Looking back, a defining moment for me was in the early 1970s. Riding my bike to and from school, I recall my disappointment as a section of creek was progressively culverted

“After graduation from university, my forestry career took me to a number of small north coast communities, an experience that connected me with the land and community. That raised my awareness of watershed thinking. When I returned to Victoria in the 1990s, my interest in urban watersheds and planning was a natural progression.”

“In 1995, I got involved in a Local Area Plan that was under development in Saanich; and started advocating for changes in watershed and stream protection policies. To draw attention to the need for action, I organized a series of community walks and developed a ‘watershed tour’ slideshow and took it around the community.”

**A Conversation with Chris Jensen:** “I grew up by Elk Lake on a farm property which had a creek, a pond and a wetland. So, I played in water all the time. The water features connected me to nature.”

“Then the day came that my parents subdivided our property, and all the water features were removed. The land was paved and sterilized, drained and filled. There was no longer a place to play. During this time, I also noticed that as the watershed was developed, the more the water quality in local lakes deteriorated. I wondered if there was a link. I wondered if the land my family developed was part of the problem.”

“This experience directly influenced what I would later go onto study at university. I specialized in hydrology so I could learn how to achieve a balance between development and nature.”

“I wanted to apply this knowledge locally and take it from theory to practice. I did not have to look any further than the watershed I live in for the opportunity to do so. I connected with Ian Graeme and together we have been working to improve watershed health for almost 10 years.”

## Complementary Talents and Passions

*“A theme that emerged from my conversations with the four champions can be summed up this way: at the heart of grass-roots community leadership is a commitment to the common good.”*

*“In a nutshell, the whole is greater than the sum of the parts. The key is that they believe in the mission: This is what we want our watershed to look like in 100 years, and these are the steps we will take to get there.”*

– Kim Stephens,  
February 2010

**A Conversation with Soren Henrich:** “I had been a director of a neighbourhood association. We were always reacting to development requests. We were in the front lines and this was taking a toll on me. It was not fun,” stated Soren Henrich.

“At that point in my life, I was only vaguely aware of Bowker Creek; and as a homeowner who was busy raising a young family, I certainly had no concept of watershed. And then I experienced an Ah-Ha moment when my path intersected with that of Ian Graeme.”

“It was such a wonderful moment. I saw my neighbourhood differently. As I first began to think in terms of ‘*what is a watershed*’ and then ‘*what is an urban watershed*’, I felt connected to the earth. And I felt a responsibility.”

“I realized then that my thing is Bowker Creek. I wanted to be able to answer the question: **where is Bowker Creek?** And I wanted to ask others: do you know that you live in a watershed. After reading the book [Neighbor Power](#) by Seattle’s Jim Diers, I was inspired to make a difference by engaging community through art events and education.”

**A Conversation with Gerald Harris:** “I grew up by a slough in Matsqui. Later I worked as a fisheries tech and writer with DFO. My area of interest was the small Coho streams which are always under pressure from development.”

“My epiphany occurred in the 1970s when I was driving on the highway on the Sunshine Coast. As I crossed stream after stream, it made me think that Vancouver must have had streams too. This led to a project to research history by talking to old-timers. This history is recorded on the map known as [The Lost Streams of Vancouver](#).”

“I have been a resident of the Bowker Creek watershed since 2006. I love the creek, and I was dismayed by its condition. I want it to be wholesome again. It was a brochure for a Bioengineering Workshop that caught my attention. It was an opportunity to become involved in a hands-on way.”

“Working with others in the stream is a vital part for me. That is when we become a community. The experience taps something tribal in us.”

## What Shared Responsibility Looks Like

Community and local government collaboration to develop and implement the Bowker Creek Blueprint exemplifies shared responsibility in action. The Bowker story demonstrates that solutions will follow when players with different perspectives and responsibilities are candid with each other about how they can work together more effectively.

### Alignment of Community with Local Government

*“Another key theme that emerged during the interviews was an appreciation for the importance of community alignment with the job realities of local government staff. It is powerful once both parties realize how supporting each other can make good things happen: for example, community leaders can help staff by bringing forward ideas and approaches that staff otherwise could not.”*

– Kim Stephens,  
February 2010

***The Right People at the Right Time:*** When interviewed in 2010, Ian Graeme and Chris Jensen both emphasized the crucial role played by Rob Miller, former Supervisor of the Capital Regional District Stormwater Quality Program.

“Ian was the key community leader and Rob the key government leader. Through their collaboration, they started the trickle which has led to the flood of momentum,” stated Chris Jensen.

“When I first got involved, I contacted Rob Miller for streamflow data for the purposes of my university studies. But there was none. Because Rob was receptive to my need, he connected me with Peter Fell who was then instrumental in having two stations established. These have proven to be invaluable.”

“Collaboration works both ways. Rob needed community support to be effective in his job and Ian showed that there was a community voice. Together they worked to create the Bowker Creek Forum in 2002. This event was the start of the real coordinated effort.”

“Rob was a bright light and was prepared to take risks,” added Ian Graeme. “Rob was passionate about water and watersheds and was genuinely interested in starting a dialogue with the community. He recognized and built relationships with people who had knowledge. Rob facilitated positive change.”



***The Turning Point:*** “The Bowker Creek Forum in 2002 was THE turning point,” emphasized Chris Jensen. “Use whatever analogy you wish to use to describe the situation, the reality is that there had been a progressive deterioration in creek health, and we were at the bottom of the curve. Since the Forum, there has been a slow progression upwards.”

“During the period 2002 through 2009, it took a sustained effort to get all the players to the point where we now have agreement to proceed with the CURE. We have identified a number of remedies and we are ready to implement the CURE. Others can learn from our experience and avoid the problems and issues that we have had to deal with over the years.”

***Relationships and Commitment:*** “As I reflect on my Bowker Creek involvement over the past decade, relationships have been so key to building a foundation for success; and these relationships have been complemented by long-term personal commitment to the common good,” continued Chris Jensen.

“Other descriptors that come to mind include consistency and dedication. It takes time to bring about change. As much as some of the community wants immediate change now, we recognize that the Bowker Creek Blueprint is a 100-year plan. It will take time to implement.”

“However, our early successes are significant and impressive. Just think where we will be in 95 years!”

***Delivering the Blueprint:*** “The Bowker Creek story is more than about producing a plan,” observed Ian Graeme. “It is about engaging the community. If the community is actively engaged, they will take greater responsibility for delivery.”

“My Ah-Ha moment was when I realized that the three municipalities could not deliver a plan for stream and watershed restoration – unless the community drives and supports delivery.”

**“Effective community engagement depends on involving people in decisions, sharing responsibility, and making them more accountable. This includes engaging generations, old and new. Our connection to the past should inform the future.”**

## Outreach – A Powerful Tool

For the first four years, outreach was the BCI focus. Soren Henrich is a professional graphic artist. Among his many outreach contributions is the BCI logo.



### Pennant Workshops Connect People

*“My personal passion is the Bowker Creek Pennant Printing Workshops. At these family-friendly events, we teach the basic steps of relief printmaking to make colourful cloth pennants. We are stringing the pennants together to create banners. We are connecting people with the watershed. My dream is that there will be so many pennants that the total length of the banners will reach 8 kilometres. This would equal the creek channel length.”*

– Soren Henrich,  
February 2010

“The arts are an effective way to engage the broader community. Community celebration events draw people out and bring them together. Our experience is that the community events are the forums for engagement,” explained Soren Henrich.

“People eagerly embrace the opportunities for engagement and education. They really want to share their thoughts and experiences. Residents have a stake in restoring watershed health. There is so much experience that we can mine. We who live in the watershed are the experts.”

***The Timeless Way of Building:*** “My participation in the BCI has been profoundly influenced by two books written by Christopher Alexander. The first was [The Timeless Way of Building](#), published in 1979. This presents a guiding philosophy. The book’s thesis is that the people who live and use the land and waterways are the best-positioned to design the urban world. The second book, [A Pattern Language](#), is the how-to workbook.”

***Celebrate Where We Are in Time:*** Soren Henrich viewed his mission in terms of introducing the two books as a way of guiding the restoration of the Bowker Creek urban watershed. He explained that:

“The Timeless Way is a gradual process borne from community experience. The design of our cities and neighbourhoods is truly about mining the experience of the community. We must also celebrate the urban watershed the way it is now. Be accepting of it. Enjoy the moment. Avoid becoming frustrated. Then we might see the way to improvement. It is a positive method.”

“This realization resulted from another Ah-Ha moment, this time at a community event, when I learned about a group of cyclists who like to go for a midnight ride through a box culvert that is a piped section of the creek. If we eventually daylight the creek, the midnight ride experience will be history. In the meantime, it is a way for some people to connect with the creek.”

## Restoration of the Stream



### Bowker Creek Watershed Model

*“Angus Stewart, a community volunteer and educator was responsible for building a table-top watershed model. This educational tool was actually built by high school students. The model is a visual way to illustrate how rainwater and pollution move through the watershed.”*

*“Angus uses soya sauce for oil and juice crystals for pesticides. A sponge represents a wetland and shows how colours are absorbed. At the Bowker Creek celebrations Angus and his model are always surrounded by children and adults. It gives them new eyes for seeing the city landscape.”*

– Gerald Harris,  
February 2010

“A role of the Outreach Subcommittee is to focus public support for those who are in local government. We know that there is public support; and we also know that there are critical moments in time when the public must be seen to be clearly interested,” stated Gerald Harris.

“The members of the Outreach Subcommittee have considerable latitude in terms of the kinds of activities we initiate. Each of us leads in some activities and supports the other members in theirs. Physical work along the stream is most motivating for me, restoration and cleanup, particularly involving children and families.”

“Working together along the creek is one kind of social glue for the committee members. It also draws in community members who enjoy physical work with nature.”

**“The stream restoration work is exciting when one recognizes the glorious project one is part of. It is a tremendous bonding experience: *These are my people, and we are of this place.*”**

**Telling the Story:** “For the Bowker Creek Blueprint to achieve what we want to achieve, watershed residents need to understand ourselves as part of the Bowker Creek story,” continued Gerald Harris.

“We belong among many centuries of people who have lived and will live along the creek. This storytelling aspect needs volunteers telling the story and building community celebrations around it.”

“As more people in the community identify ourselves consciously as Bowker Creek watershed people, the Blueprint will have the political support it needs over the decades.”

**Understanding the Water Cycle:** “There have been salmon and trout in Bowker Creek, and there can be again. To me this is what the work is most concretely about.”

“But at another level of awareness, Bowker Creek is part of the water circulation system for the whole world. This means we are responsible for the rain that falls on the Bowker Creek watershed. Ultimately, nobody but us can deliver the rain that falls on our little watershed down to the ocean in good shape, clean and healthy.”



## Restoration of the Watershed

Both Ian Graeme and Chris Jensen have careers in the provincial government within the Ministry of Environment and Ministry of Municipal Affairs, respectively.



### The Power of Community Events

*“Ensuring that the community stays connected with the watershed’s natural features requires celebration. The purpose and importance of Bowker community events is to maintain positive energy; and keep the spotlight on what it means to live in a healthy watershed.”*

— Chris Jensen,  
February 2010

***Making a Contribution:*** “My Master’s program was the interface between what I do at the Ministry and my involvement in the community,” explained Chris Jensen in an interview in 2010.

“My applied research had direct community application because I used Bowker Creek as a case study. My focus is on how we can reduce our hydrologic footprint as the watershed redevelops. The results could have provincial significance.”

“Looking back to when I was an undergraduate student at UVic, I wondered who was doing what in Bowker Creek. As it turned out, Ian Graeme lived a block away. In 2001, I joined a stewardship group that Ian Graeme and Karl Sturmanis had founded.”

***Developing Needed Tools:*** “In 2008, I obtained a research fellowship to do my Master’s Degree. The decision to return to UVic was part of my personal evolution from community advocate to developing needed tools for practitioners.”

“My research focus was on HOW to restore the rainfall capture capacity of the Bowker Creek watershed as we redevelop the urban landscape. Because this is the first climate change adaptation study of its kind, we have a chance to show the world how small changes can make a big difference to our cities.”

***Alignment with Provincial Initiatives:*** The applied research by Chris Jensen aligned with the desired watershed restoration outcomes embodied in [Living Water Smart](#), [BC’s Water Plan](#) and the provincial government’s [Green Communities Initiative](#).

“An enabling policy framework for local government is in place. The Bowker Creek Initiative is positioned to demonstrate what it means to prepare communities for climate change, choose to live water smart, and strive to build greener communities,” concluded Chris Jensen.

**Alignment within the Watershed:** “There is greater alignment now than ever before regarding community goals and the 100-year plan for watershed restoration,” concluded Ian Graeme in the 2010 interview.

“Also, the people around the table want the Blueprint to succeed. In addition, the BCI has been successful in securing political support. While I feel we are only beginning to talk about the possibilities, it is a positive story of relationship-building, collaboration and effective partnerships.”

“There is a strong vision in the community with many committed champions. There are also some tangible on-the-ground results to provide confidence that we are moving along the right track.”

“Developing the Bowker Creek watershed plan and the Blueprint has been a great opportunity to work with some outstanding staff from the regional district and three municipalities. It has been a valuable learning experience and a good model for building community capacity for change.”

**“The Blueprint has achieved what a conventional plan could not: it has effectively distilled community values, provides a compelling vision and sense of place, and issues a challenge to each of us to do business differently.”**



## Recognition of Local Government Leaders

### Regional Team Approach

Integration of the planning and engineering perspectives of four local government representatives on the BCI Steering Committee showed what could be accomplished through a regional team approach.

<b>David Marshall</b>	<i>Oak Bay</i>	<i>Director of Engineering Services</i>
<b>Adrienne Pollard</b>	<i>Saanich</i>	<i>Manager of Environmental Services</i>
<b>Anne Topp</b>	<i>Saanich</i>	<i>Manager of Community Planning</i>
<b>Steven Fifield</b>	<i>Victoria</i>	<i>Manager of Underground Utilities</i>

### Municipal staffs provided leadership

The involvement of Anne Topp and Adrienne Pollard began with the 2002 Watershed Forum. David Marshall and Steven Fifield joined the BCI Steering Committee in 2006 as municipal representatives through until their retirements in 2016 and 2012, respectively. Adrienne Pollard provides long-term continuity as she is the only one of the four still active on the BCI in 2021.



**David Marshall**  
District of Oak Bay



**Steven Fifield**  
City of Victoria



**Adrienne Pollard**  
District of Saanich



**Anne Topp**  
District of Saanich



## Reconnecting with the Vision

Out of the renewal process November 2008 came a reaffirmation and recommitment to the Bowker Creek Vision by all the partners. The Members Agreement clearly defined roles and responsibilities.

### A Conversation with Anne Topp, Planner

*“Having a coordinator was huge; and the decision to designate municipal staff to sit on the BCI committee was equally important. This gave us a mandate to help direct and inform the process.”*

*“It also allowed us to draw on other departments as needed. This meant that we had the right expertise to oversee the right work. Everybody had a place in this initiative, and the community kept us grounded.”*

*“A number of key people have been involved since Day One. This has ensured consistency. Also, the 100-year context for the action plan gives us the ability to work towards the vision.”*

**A Conversation with Adriane Pollard, Planner:** “The Saanich, Victoria and Oak Bay portions of the Bowker Creek watershed are very different. Yet, it is essential that we be supportive of each other and work as a team. When we get together, we talk about what part can we all play in reaching a mutual goal, whether it involves funding, expertise, or facilitation.”

“Implementing the Blueprint is all about shared responsibility. We often need to remind ourselves to move beyond the attitude that we are not involved simply because something is not within our boundaries. The message is that WE all want this done. So, we must help each other in any way that we can.”

**A Conversation with Steven Fifield, Engineer:** “My experience when we day-lighted Cecilia Creek in the late 1990s shaped my thinking about collaboration, partnerships and integration. I have learned that it’s all about relationships. The Cecilia Creek project involved a multitude of agencies and groups. A lot of people had to think differently to make the daylighting come together, and they did. There were no roadblocks, and the project was a success.”

*“Similarly, with the BCI, everyone is committed to the watershed. As people come up with good ideas, we determine how to frame those ideas so that those ideas will be successful.”*

**A Conversation with David Marshall, Engineer:** “The City of Oak Bay is a fully developed municipality, and redevelopment is generally limited to replacement of single-family homes.”

“As the housing stock turns over, this means that Oak Bay’s contribution to watershed restoration will flow from the City’s requirements for stormwater volume reduction on single family lots. This is a long-term commitment. The City is cognizant of the benefits that accrue over time.”

“Onsite rainwater management is new territory for Oak Bay. So, we will be looking to learn from and apply the experience of Saanich, Victoria and other municipalities.”

## 2003 Watershed Plan Guided BCI Process

In 2003, the municipalities of Saanich, Oak Bay and Victoria, and the CRD Board approved the Bowker Creek Watershed Management Plan and the BCI was established. In separate interviews, Adriane Pollard and Anne Topp both emphasized the strategic importance and the enduring value of the 2003 plan in laying the foundation for the Blueprint.

### Less is Better

*“In 1997, the CRD established an order-of-priority for developing watershed plans. Bowker Creek rose to the top in 2000 following completion of the Craigflower and Millstream plans, both of which we had heard quickly became documents that sat on a shelf.”*

*“At the 2002 Watershed Forum, the Craigflower and Millstream experiences were fresh in our minds. One of the lessons learned was that ‘less is better’. Those two plans were overwhelming. So, in commencing the Bowker Creek process, we decided that we had to focus our efforts and stick to what is important and of interest; we had to resist the temptation to try to do everything.”*

– Adriane Pollard,  
February 2010

**Four Goals and Nine Actions:** “The 2003 watershed plan is concise. We kept it relatively simple. It only has four goals and nine actions. Four is a manageable number. We did not want to dilute our focus,” explained Anne Topp.

“Another critical consideration was early acknowledgment that the plan would not be fish-based. There was recognition that Bowker Creek is an urban watershed. This meant that the plan emphasis would be on livability, quality of life, and respect for the environment. We wanted to introduce our children to the environmental qualities that we value.”

**Too Many Unknowns to Make a Decision:** “While limiting the number of goals was a smart decision, years later it became apparent that there were unintended consequences associated with the proposed action statements, even though they too were few in number,” continued Adriane Pollard.

“Once we began looking at specific applications, we found that there were just too many options associated with various action statements; and there were too many unanswered or unanswerable questions. From the municipal perspective, this had a paralyzing effect on the decision process.”

“The generic action statements in the 2003 plan were not sufficiently practical because they did not address the many unknowns. However, we used the plan and the time to raise the profile of the watershed and conduct studies which were identified in the original plan.”

**Knowledge-Sharing to Develop Solutions:** “This problem had a silver lining. It led us along a path to a different approach; it led us into a reach-by-reach discussion and a sharing of knowledge to determine the best use and best solution for each reach. This was a transformational experience and had major implications for the Blueprint development process as a whole.”

## Knowledge-Sharing Resulted in ‘Integration’

Adriane Pollard emphasized that reach-by-reach sharing of knowledge had two unforeseen consequences: first, it enabled the BCI to truly achieve integration; and secondly, it culminated in the decision to step away from an approach that relied on the ‘ISMP Template’ (*where ISMP is the acronym for Integrated Stormwater Management Plan*).

**Inter-Disciplinary Roundtable Process:** “The desired solution for each creek reach was a group decision,” explained Adriane Pollard. “There was considerable information available in previous reports, some of it conflicting. It was a matter of compiling the information in a way that allowed us to have an informed discussion.”

“Then we applied our best judgment reach-by-reach. We integrated the information. The integrating process reflected all the professions and interests around the table. The people may have changed on occasion, but the various perspectives were still represented.”

### This is What We Need to Do

*“Once there was a consensus that the ISMP Template does not help municipal staffs and would not give us an integrated solution, we then focused our attention on ‘this is what we need to do’ and we moved away from an engineering-centric approach.”*

*“We asked ourselves: what tasks do we have to pay someone to do; and what tasks can we do ourselves.”*

– Jody Watson,  
February 2010

**The ISMP Became the Blueprint:** “We had been going down the road to develop the Terms of Reference for an ISMP. But we saw that we were losing integration in the process. We already had all the information that we needed. We just had to get on with integrating it.”

“We left the ISMP idea behind. By going in a different direction, we removed the single focus of stormwater. By then, it had become clear that we could not decide what to do with stormwater unless we dealt with the other issues first.”

“Another reason for stepping away from the ISMP Template is that we did not want to do another study. Also, **it was not about integrating stormwater; it was about integrating EVERYTHING**. Looking back, the failure to get funding was probably the key to stepping away from the ISMP Template and moving forward with the Blueprint.”

“We had considerable discussion about who to hire to help us through an iterative process, especially when we would be the ones making the decisions as to what solution is most appropriate for each reach. This led to the decision to hire an experienced facilitator who worked directly with the committee and coordinated inputs from specialist consultants.”

**“The Blueprint is not a creek corridor plan. Land use is the biggest part of the Blueprint.** The BCI evolution from a creek to a watershed perspective happened organically. This underscores the importance of stepping back to look at the big picture and getting the context right.”

## Blueprint Implementation

*“We all have heard the quote if you don’t know where you are going, it doesn’t matter what road you take. With completion of the Blueprint, the Bowker Initiative knows where it wants to go, and now we need to find the road to get there.”*

*“Integrating with and using other plans to advance the Blueprint will be ongoing. An example is the proposed Shelbourne Corridor Action Plan. Integration of the Blueprint with that plan will strengthen both.”*

– Anne Topp,  
February 2010

## Moving from Planning to Implementation

Anne Topp emphasized that having a designated Coordinator since 2004 was an essential ingredient in Blueprint development. She elaborated as follows:

“I am convinced that the BCI success started with the hiring of a Coordinator. It meant one person was responsible and had dedicated time for setting up meetings, writing up minutes, and getting work done. Also, having a Coordinator helped us obtain grants.”

“The function is cost-shared inter-municipally and in Saanich inter-departmentally. This was a commitment arising from a Council decision to support implementation of the 2003 Watershed Plan. While we may not have expected the core funding to be forever, the question now is this: Going forward, will the decision on whether or not to have a Coordinator make or break implementation of the Blueprint?”

**Embedding the Blueprint:** “The trick will be to take many of the individual actions in the Blueprint and move them into capital budgets over time. It is only through funding that they will be assured of implementation.

“Creek day-lighting is one initiative that could be particularly challenging because it depends on the stars being aligned just right to co-ordinate the many elements needed to achieve day-lighting within a built-up urban area. Implementation requires ‘careful management’. We need to be out in front, but not too far in front. Timing is everything.”

**“Getting the Blueprint to be part of the organizational culture of each municipality is a critical element. This is (the reason) why the experience continuity is so important. Those of us who have been involved from the beginning have the context that we can share with our colleagues.”**

**Visualizing the Future:** “The Shelbourne Plan could help through policy connection to institutionalize and help drive early implementation of the Blueprint. How the story of the Bowker Blueprint and the vision for the Shelbourne Corridor are blended and the story articulated to mayor and council will be important. How the two are linked may be crucial to the ultimate success of both plans,” concluded Anne Topp.



## Political Buy-In

*“The BCI focused on engaging politicians at all three municipalities. Beyond the regular council presentations and updates, local councillors participated in many outreach events, sign unveilings and tours of the watershed.”*

– Jody Watson,  
February 2010

## Municipal Initiatives

*“The Urban Village Centres and the Urban Forestry Stewardship Initiative in Saanich, will definitely help advance the Blueprint vision and goals.”*

– Anne Topp,  
February 2010

## Two Scales

*“A key factor in securing political commitment is the way recommendations were provided at two scales: watershed-wide activities and policies; and specific on-the-ground actions for each of the 17 creek sections.”*

– Jody Watson,  
February 2010

**Engaging Elected Representatives:** “The BCI steering group has always been cognizant of the need to inform the elected representatives at key junctures in the process,” continued Anne Topp.

“The watershed tour for politicians really raised the profile of the BCI. Our approach to securing Council buy-in has been low-key,” added Adriane Pollard.

**Blueprint Sets a Direction:** “The Blueprint is a good tool for bringing the three municipalities and their communities together. The BCI steering committee believes we will see more action now,” continues Adriane Pollard.

“Because there is no price-tag attached to the Blueprint, Councils would not feel that they are committed to spending large sums of public monies. We anticipated that the three Councils would support the Blueprint because it sets a direction without having to make a specific commitment to a particular project. On the other hand, if there is a willingness to invest in watershed restoration, then the Blueprint identifies WHAT can be done, and HOW it can be done.”

**First Steps in the First Five Years:** To generate early momentum, the BCI identified **Ten Key Actions** for municipalities and other land stewards implement in the first three to five years of the Blueprint:

1. Review and revise municipal plans to include Bowker Creek goals and actions.
2. Adopt requirements to reduce effective impervious area for new developments.
3. Remove specific invasive species beginning to colonize the watershed.
4. Complete a pilot project to locate and build a demonstration rainwater infiltration/retention structure in each municipality.
5. Support development of an urban forest strategy in Oak Bay to complement those underway in Saanich and Victoria.
6. Develop a strategy to acquire key properties as they come available.
7. Work with Oak Bay High School to design and implement creek restoration on school district property.
8. Participate in the Shelbourne Corridor Action Plan process, to identify current and future opportunities for creek restoration, rainwater infiltration and/or greenway development.
9. Work with creek-side landowners between Pearl and Trent Streets to achieve the long-term vision.
10. Continue with restoration at Browning Park.

## Rain Gardens on the Road to Creekshed Restoration



### Bowker Creek ‘Greenprint’ in the City of Victoria

*“Within the City of Victoria, we are branding the Bowker Creek Blueprint as the GREENPRINT. We are doing this to emphasize that the road to watershed restoration will be green. In 100 years, Victoria will be much greener.”*

*“When undertaking infrastructure projects, we now ask ourselves: what are the opportunities to do business differently so that there will be long-term benefits for the watershed.”*

– Steven Fifield,  
February 2010



When they discussed the Ten Key Actions, both Steven Fifield and David Marshall were enthusiastic about rain gardens (#4) and how these green features would make a difference in achieving the creekshed restoration vision over time.

**Opportunities in the City of Victoria:** “The City decided to showcase green infrastructure in Victoria by constructing the **Trent Street Rain Gardens**. This is our demonstration project. Rainwater that previously flowed directly into Bowker Creek through the storm drain system is now directed into two gardens. This type of green feature is the future of good watershed management in Bowker Creek and other watersheds in our region.”

**Collaboration, Collaboration, Collaboration:** “In undertaking Trent Street, I had the benefit of the Cecilia Creek day-lighting experience: that is, a successful project where everyone worked together. Over 34 years with the City of Victoria, these two projects are my career highlights. The main difference between the two projects was that Cecilia had a finite goal whereas Trent Street is the first project in a long-term strategy.”

“The commonality is the collaboration that ensured a successful outcome. In both cases, collaboration fostered collegiality among the participants. This good feeling, in turn, released an energy that fed on itself and got people really excited about what we were constructing.”

**Connecting with the Community:** “Over the course of my career, the relationship between the community and municipal staff has been changing. In the old days, we sent a letter and then showed up on-site to do the work. Now we engage the community to get early buy-in.”

“On Trent Street, we recognized the proximity of Bowker Creek and we saw the opportunity to retrofit the rain gardens. We also involved St. Patrick’s School so that the children could learn about the importance of the rain gardens in protecting stream health.”

**“The positive publicity that the rain gardens have generated has been great. Trent Street is a momentum-builder. It is changing the culture in the City in terms of how we look at projects.”**

## What Could Be

Oak Bay resident Taylor Davis provided David Marshall with images to illustrate how Oak Bay streetscapes could be transformed by rain gardens.



**Opportunities in the District of Oak Bay:** “The vision and passion that Taylor Davis, an Oak Bay resident, has demonstrated by constructing a rain garden on his single-family property has certainly had an impact on my thinking,” stated David Marshall.

**Taking the First Incremental Steps:** “As a result, I have introduced the rain garden concept to Oak Bay Mayor and Council, and they have expressed an interest in incorporating such treatments into our day-to-day operations.”

“I would say that Oak Bay will continue to improve day-to-day operational procedures in an environmentally responsible fashion. In doing so, many of the objectives aspired to in the Bowker Creek Blueprint will be addressed. Taylor Davis has provided examples of how we could incorporate rain gardens in our boulevards.”

**Application of LIDAR:** David Marshall also saw the potential to apply LIDAR optical remote sensing technology to drainage planning. LIDAR is a tool for accurately determining flow paths in order to locate rain gardens in optimum locations. Taylor Davis was again the source of inspiration.

**Creek Restoration at Oak Bay High:** “The second tier of the Blueprint involving major capital works, for example - increasing capacity, ‘day-lighting’ the creek, acquiring property - would be further down the road. The Oak Bay High replacement project will no doubt consider Bowker Creek in its design,” continued David Marshall.

Bowker Creek runs along the edge of the property in a narrow, deep ditch with a concrete bottom. Because the school is aging, the school board had decided to construct a new building. This created the opportunity.

## Moments that Shifted Understanding

In 2021, Jody Watson reflected on the BCI journey from vision to Blueprint, and the challenges inherent in venturing into uncharted waters with a bold vision. With the perspective of time, her reflections below provide an informative re-cap of pivotal moments.

**First Turning Point:** “At a critical moment in late 2008, we took a step back during the process for concept plan development. There was a blow-up meeting. People were standing up, pointing, yelling across the table. It got intense! That was when we brought in the external facilitator,” recalled Jody Watson.

“This conflict led to a really honest conversation about constraints - for example, we learned from the engineers that the design guidelines were the critical piece between planning and what went into the ground. We came out of it so much stronger because everybody understood everybody else’s constraints and desires. And there was a better understanding of how the parties could complement each other in achieving the overall goal. It was a turning point.”

**Second Turning Point:** “When we were putting the Blueprint together, there was a big discussion about whether to include costs. That was the moment when we really started talking about time frames. How do we cost something out, we asked ourselves, when we know that creek restoration would not happen in the next 25 years?”

“If we went forward with a document that had a multi-million-dollar price-tag, we realized, it would be game over because the document would not even get before Council for consideration. Then someone said, it took us over 100 years to get it into this state, and it is going to take us another 100 years to get out of it. And then I said, why don’t we just say that this plan will take 100 years to implement?”

“Immediately, everything changed for municipal staff just by acknowledging that – yes, this is a visionary plan; and here are the ways that we can achieve the plan. And that is the reason why the plan speaks to this **guiding principle: as opportunities arise, be ready.**”

“We knew the watershed was ripe for redevelopment. So how do we position ourselves and this plan to be able to take advantage of those redevelopment opportunities when they arise, whenever that is going to be? The timing of those opportunities, we recognized, would be driven by the market and by the development community.”

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*“At the staff level, the municipalities were really strategic regarding their selection of watershed-wide actions, particularly the short-term top 10.”*

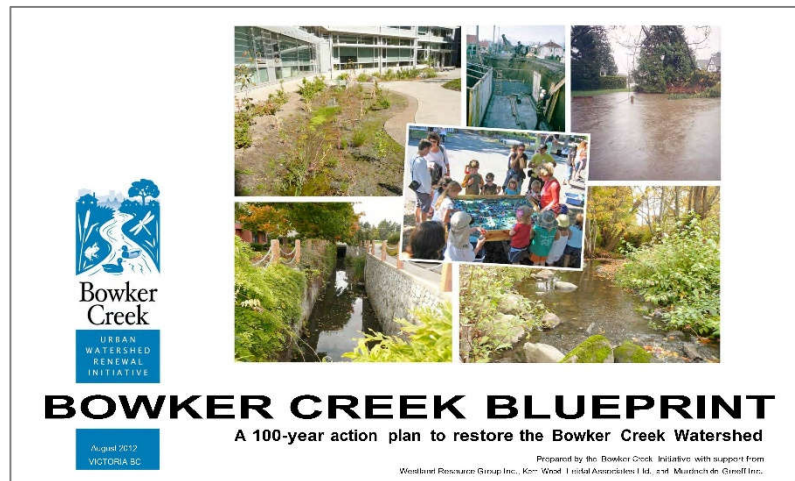
*“What are the big planning items coming forward now, we asked each other, that are critical for us to influence and ensure that language about the Blueprint is embedded within those documents, because they are going to drive change?”*

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## PART B

# First Decade of Implementation



*Part B describes a series of game-changers, starting with the Bowker Creek Forum in 2010, that fueled momentum for putting into play the 100-Year Action Plan.*

*Big and small in scope, these game-changers cover a range of situations. They are foundation pieces for bringing the creekshed restoration vision (“big picture”) to fruition.*

**Image 6 – Bowker Creek Forum**



## Bowker Creek Forum - February 2010

### Design With Nature

*“The Bowker Blueprint is impressive. The BCI is leading the way with their ‘design with nature’ strategy for watershed restoration. By drawing attention to the Bowker Blueprint, the CAVI team believes this will help us advance the regional team approach in other jurisdictions.”*

*“The CAVI vision is that we will build and/or rebuild our communities in a way that achieves water sustainability over time. The Bowker Blueprint provides us with a road map that shows us how to get there.”*

– John Finnie, P.Eng.,  
Chair, CAVI-Convening for  
Action on Vancouver Island,  
February 2010

### An Inter-Regional Event

The Bowker Creek Forum showcased how major breakthroughs happen when decision makers and influencers in government work with visionaries in the community to create desired outcomes. In one sentence, this is the essence of the Bowker Blueprint story.

Held at the University of Victoria in February 2010, the Bowker Creek Forum<sup>3</sup> initiated the process for raising the profile and building inter-regional awareness of the Bowker Creek Blueprint. The forum attracted a diverse audience of 60-plus individuals representing communities and jurisdictions from around the Georgia Basin.

In addition to celebrating the Bowker Blueprint, the Bowker Creek Forum provided a platform for local government champions from 'north of the Malahat' and from Metro Vancouver to tell their stories.

It also served as the *inter-regional event of record* for launching the [Topsoil Primer Set](#), a foundation piece for green infrastructure. This was a synthesis of the pioneering experience of the City of Courtenay, City of Surrey, and District of North Vancouver.

The Bowker Creek Forum was a collaboration of the Bowker Creek Initiative (BCI) and [CAVI-Convening for Action on Vancouver Island](#), a program of the Partnership for Water Sustainability.

**Why the Bowker Creek Forum was Timely:** It was an occasion for celebration. As described in Part A, the BCI members had been stymied by an impasse. But they had successfully worked their way through a reconnecting process. Their breakthrough had happened only a few months before the forum. The process for realigning their efforts culminated in BCI members recommitting to the Bowker vision.

The forum was also a moment for the BCI to welcome those from outside the Bowker world and share the BCI lessons learned. The event helped generate widespread external attention and recognition, such that the ripple effects had a profound and lasting influence on internal perceptions of the BCI accomplishment.

<sup>3</sup> <https://waterbucket.ca/viw/category/convening-for-action-in-2010/2010-bowker-creek-forum/>

## An Overview of the Forum Program

A rousing opening address by Eric Bonham, a former Director in two provincial Ministries, set the tone for the Bowker Creek Forum. Inspirational in tone, Eric Bonham's framed his 'call to courage' around this theme: *Mission Possible*. He was passionate when he explained how a 'top-down and bottom-up strategy' leads to action.

### Mission Possible



**Blueprint Development:** Jody Watson followed Eric with an equally passionate and inspiring storytelling segment about the collaborative and hands-on process that culminated in the Bowker Creek Blueprint. She was candid when she described key success factors, challenges that the BCI faced along the way, and how they navigated through rough waters.

### Navigating Rough Waters



**Blueprint Actions:** To complete the morning session, Jody Watson focused audience attention on the Bowker Blueprint, and emphasized that the document was easy to read. She explained the knowledge-based approach, how it was applied, and why it was successful. She first walked the audience through the watershed-wide management actions; and then through the creek corridor actions. She concluded with a review of Ten Key Actions that would generate early momentum.

**Blueprint Implementation:** Adriane Pollard and Anne Topp (District of Saanich) opened the afternoon session. In their joint presentation, they structured their mind-map in five parts:

- What Should Be Simple
- What Might Be Difficult
- What Are the Issues
- What Are the Opportunities
- Key Factors for Success

### Bowker Forum on YouTube

Visit the Forum dropdown on [waterbucket.ca](http://waterbucket.ca) website and find a video record at:

<https://waterbucket.ca/video/category/convening-for-action-in-2010/2010-bowker-creek-forum/youtube-powerpoint-record/>

Steven Fifield (City of Victoria) followed with his story of the Trent Street Rain Gardens, the City's first. His enthusiasm shone through.

**The Topsoil Primer Set:** The team of Rémi Dubé (City of Surrey) and Susan Rutherford (Green Infrastructure Partnership) then unveiled the Topsoil Law & Policy and Technical Primer Set.

**Georgia Basin Initiatives:** An interactive segment ensured a high-energy finish. The spotlight was on connecting the dots between five watershed-based initiatives in five regional districts. All five are keyed to integration of water and land planning.



## Bowker Creek Forum on February 23, 2010 - Agenda Overview

The Forum was an opportunity to learn about urban watershed management successes and challenges from the Bowker Creek Initiative – a multi-jurisdictional pilot project in the Capital Regional District. A desired outcome in holding the Bowker Creek Forum was to share information about successful approaches, so that they could be replicated in other jurisdictions. In addition, this was a chance for regional organizations, businesses, and community members to learn more about and celebrate the accomplishments of the Bowker Creek Initiative.

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

#### **Mission Possible: Convening for Action on Vancouver Island**

Opening Address

#### **Bowker Creek Blueprint Development**

Members of the Bowker Creek Initiative shared the unique approach taken to develop the Bowker Creek Blueprint. They discussed the key factors to their success, some of the challenges they faced and how they navigated through rough waters to complete the development of the Bowker Creek Blueprint.

#### **Blueprint Actions**

The BCI Coordinator unveiled the Bowker Creek Blueprint – a 100-year action plan to restore the Bowker Creek watershed. The watershed-wide management actions, site-specific creek corridor actions, incorporation of greenways and the watershed health monitoring plan were discussed.

**DESIRED OUTCOME:** Participants would understand the context for the Bowker Creek Blueprint, and what the Blueprint entails

#### **Blueprint Implementation**

Looking ahead, BCI members will share ideas on key factors for success, expected challenges of competing priorities and multiple jurisdictions, keeping the plan alive and updated and creating synergies with other initiatives. Success stories of incremental on-the-ground actions, such as the creation of the Trent Street raingarden will also be shared.

**DESIRED OUTCOME:** Sharing challenges to encourage discussion of solutions

### Implementing Watershed Practices – Conversations with Other Jurisdictions

#### **Just How Do You Obtain a Topsoil Layer for Rainwater Infiltration?**

Elaborated on how the Green Infrastructure Partnership collaborated with the City of Courtenay, City of Surrey and District of North Vancouver to produce a *Topsoil Law and Policy and Technical Primer Set* that has BC-wide relevance, utility and applicability.

**DESIRED OUTCOME:** Participants would understand how other local governments are implementing a watershed-friendly practice, and how this might apply to their area

#### **Group discussion about implementing a new culture for watershed restoration and management**

Participants had a group discussion to share stories about implementing a new culture for watershed restoration and management across other jurisdictions on Vancouver Island and in the Lower Mainland.

**DESIRED OUTCOME:** Participants would be inspired to move from awareness to action

## Mission Possible

Eric Bonham drew on a lifetime of experience, both as a Director of Engineering in the provincial government and as a community advocate, to establish a frame of reference for truly appreciating the significance of the Bowker Creek Blueprint as a landmark accomplishment.



**Eric Bonham**

Founding Member  
Partnership for Water  
Sustainability in BC

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*“Engagement of community through stewardship is a credible formula to be encouraged and mainstreamed at every opportunity.”*

*“Collaboration, teamwork and a recognition that the whole is greater than the sum of its parts is the energy that stokes creativity and determination.”*

*“When this combination of citizen talent is aligned with a local government that is both visionary and focused, outstanding achievements are not only possible, but realistic.”*

***If We Had Known Better Then:*** “Bowker Creek was a healthy system until urbanization paved over half the watershed and enclosed some 60% of the channel length. We did not do this intentionally. We did it because we did not understand what we were doing,” stated Eric Bonham.

*“When I was a young engineer in the 1960s, we simply did not consider the values of urban streams to be important. We thought only about piping drainage runoff away as fast as we could. In retrospect, this can best be described as our collective indifference.”*

***Reversing the Trend:*** “In the 1990s, I was the manager of the Province’s Urban Salmon Habitat Enhancement initiative. The principles of that grass-roots program are very germane to what is happening today in Bowker. The Bowker Blueprint is about reclaiming what was lost due to our past indifference. We are now talking about how to reverse the trend and bring settlement back into balance with ecology.”

***Creating a Legacy:*** “What I like about the BCI is the temerity, the audacity, to have a 100-year vision. We need to have a 100-year vision because it takes time to turn things around when one is talking about watershed health. If we do not implant the long-term vision, we will end up with the usual death by a thousand cuts.”

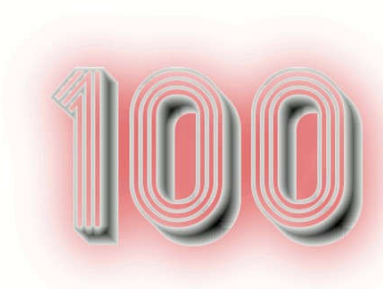
*“The fact that you have asked three municipalities to step outside their jurisdictions, and to see themselves in the larger watershed context, is a real step in the right direction.”*

***A New Form of Governance:*** “The Bowker Creek Blueprint is all about what I call a new form of governance. It is top-down and bottom-up, and it is effective. It starts with a vision. It is about turning the whole game plan around to a new way of doing business,” concluded Eric Bonham.

## Implementation Outcomes

### Four Momentum-Builders

At the Bowker Creek Forum, Anne Topp provided this context for the BCI strategy for implementing the Blueprint as a 100-year action plan:



*“The elephant in the room is always money. Local government have lots of competing interests for spending money; lots of projects to keep staff busy; and finite financial resources. Keeping the pieces small and creating bite sized pieces should allow the slow and steady approach.”*

*“The reach-by-reach approach is **marketing friendly** for citizen and council. They can focus on the piece they know best and relate to the picture. The actions are **descriptive and understandable** without the overkill of the background technical work that supports the plan.”*

The foregoing statement provides a frame of reference for a series of notable accomplishments. These cover a range of situations and have been momentum-building. Four are described in this section. Viewed together, they define what really stands out – from the perspective of the Partnership for Water Sustainability as a long-time observer of the BCI journey - in the first decade of Blueprint implementation:

### A Shared Vision

*“Local governments, institutional partners, and community champions have embraced the vision of a restored creek and the potential it offers to improve ecological health, hydrology and community stewardship throughout our region.”*

- Bowker Creek Blueprint 10 Year Achievements /2021 (note: a copy is included herein as Part D)

**A Flagship Project** – Reconstructed and naturalized the creek in conjunction with construction of a replacement Oak Bay High School.

**Community Redevelopment and Enhancement** – Reimagined the Shelbourne Road Corridor as “the Shelbourne Valley”.

**Infrastructure and Public Works Planning** – Operationalized Bowker Blueprint within departmental work plans and budgets.

**Land Development Expectations** – Produced the *Bowker Creek Developer’s Guide* to provide guidance for water-wise development.

## A Flagship Project

A flagship project can be a change-maker. It makes a visionary plan real to the community. This can spur plan implementation. It does this by showcasing what is achievable when there is a will to implement.

When done right, a flagship project builds momentum. It does by creating a feeling of excitement and thus a reason to celebrate. The release of energy then engenders long-term support and commitment to follow through with implementation of other projects. This leads to a tipping point where vision implementation becomes self-fulfilling.



**Nils Jensen**

Mayor (2011-2018),  
District of Oak Bay

*“The Oak Bay High creek restoration project is an excellent example of how collaboration between local governments, senior levels of government and the school district can produce such positive results for the entire community.”*

- Project Announcement  
February 2012

**Watershed Moment:** The decision by School Board #61 to replace the aging Oak Bay High School created a once-in-a-generation opportunity to jump-start implementation of the restoration vision for the Bowker creekshed. School replacement enabled replacement of an open concrete channel with a naturalized stream through the school property. The impact was dramatic and visible. The project created a healthier riparian environment and community-accessible greenspace.

“Moving forward with the Oak Bay High School project in 2012 was a true ‘watershed moment’ for the creek and the community. It is a wonderful example of how a long term coordinated plan to restore function to a degraded watershed can happen, piece by piece, and when opportunities arise, when we work together towards a common vision,” stated Jody Watson, Past-Chair of the BCI.

“It is a watershed moment, because it connects the future to all the work that was done in the past,” added Soren Henrich, the Friends of Bowker Creek representative on the BCI Steering Committee. “Since the creek runs through the community school property, there were partnership opportunities to involve the students in all aspects of creek restoration, from channel design and planting to monitoring, and to the creation of curriculum where the naturalized creek becomes an outdoor classroom and a community amenity.”

**Community Engagement:** In 2014, the project partners, students and community members participated in a design charrette to identify the desired restoration and community objectives for this section of Bowker Creek. This input guided the detailed design of the restored creek and the associated community amenities. Constructed during summer of 2015, the project demonstrates collaboration, partnerships, long-term visionary thinking and development of innovative green rainwater infrastructure.



**Image 7 - Oak Bay High School property – Reconstruction and naturalizing of the stream channel, and improving the riparian qualities of the Natural Commons Asset.**



**Outdoor Classroom**



*Oak Bay Secondary staff and students were involved in many aspects of creek design and restoration including the design charrette, development of curriculum and planting the riparian streambank.*



## Community Redevelopment & Enhancement

Approved by Council in 2017, the [Shelbourne Valley Action Plan](#)<sup>4</sup> lays out a comprehensive 30-year vision and implementation plan for urban revitalization in the District of Saanich. The primary focus of the plan is to deliver land use and mobility enhancements.

The influence of the Bowker Creek Blueprint is reflected in re-imagining of the Shelbourne Road corridor as “the Shelbourne Valley”. This branding embedded a transformational change in mind-set. It is a foundation piece for reconnecting people, land, water, and fish.

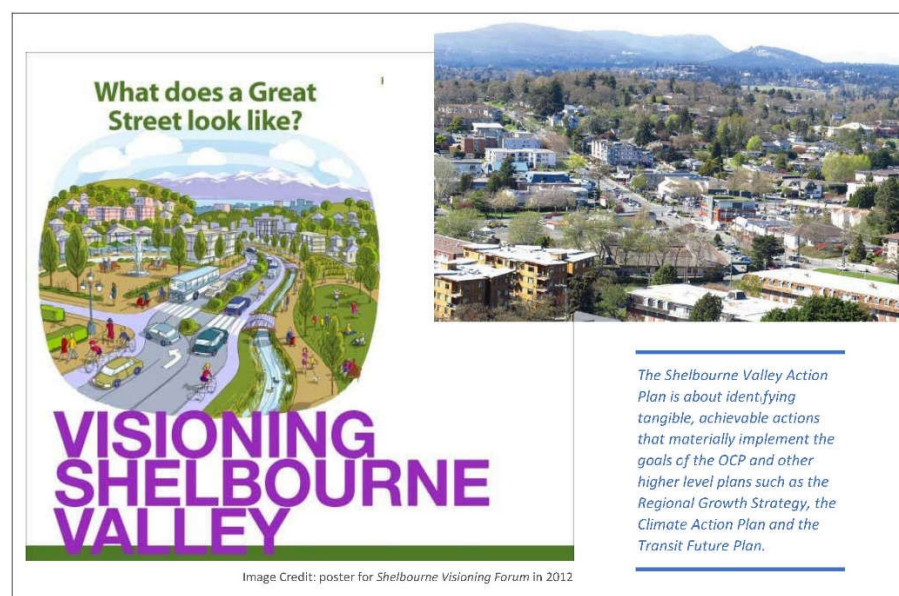
### Bowker Blueprint Influenced the Shelbourne Action Plan

*“The Action Plan lays the pathway for future daylighting with important benefits for the watershed, including increased hydrological function, improved biodiversity and habitat, and aesthetic enhancements. Most importantly, the Action Plan operationalizes Saanich’s commitment to restoring the creek in this urban setting, making future improvements to the creek more probable and achievable.”*

- Bowker Creek Blueprint 10 Year Achievements /2021 (note: a copy is included herein as Part D)

**Living Water Smart in Saanich:** The Shelbourne Valley Action Plan exemplifies what is envisioned by [Living Water Smart in British Columbia](#)<sup>5</sup>, the provincial government’s call to action in June 2008 to embrace ‘*design with nature*’ approaches, build greener communities, and adapt to a changing climate.

A year later, in August 2009, Saanich Council authorized staff to undertake development of the Shelbourne Corridor Action Plan. Anne Topp, a former Manager of Community Planning, merits credit for stickhandling the change in concept from road “corridor” to “valley”. The journey to take an idea and mainstream it within an action plan took a decade. This underscores the important element of time. Change does not happen overnight. It requires a process.



<sup>4</sup> <https://www.saanich.ca/assets/Community/Documents/Planning/Full%20SVAP%20April,%202017%20small.pdf>

<sup>5</sup> [https://waterbucket.ca/wcp/wp-content/uploads/sites/6/2017/11/livingwatersmart\\_book.pdf](https://waterbucket.ca/wcp/wp-content/uploads/sites/6/2017/11/livingwatersmart_book.pdf)

***Shelbourne Valley Plan was Game-Changing:*** In an interview in 2021, Jody Watson stated that “those around the BCI table knew that we had to influence the Shelbourne plan because it is the 25-year plan for what happens to the road where the vast majority of Bowker is buried underneath.”

“When the District of Saanich planning team started the Shelbourne process in 2009, they did not even show Bowker Creek on any map, anywhere. The planners said, it is in a pipe, it is just infrastructure. It took a really serious effort by our coordinator, by the staff champions at the municipalities, and by the community to open minds.”

“The Shelbourne plan was game-changing. If we had not convinced the planners to acknowledge the creek as part of the plan, it would have resulted in a missed opportunity, and it would have been 50 years before the next redevelopment cycle created another opportunity.”

“We talked about that in the context of being ready because the whole watershed would be developed over the next 50 years. That is what was at stake. Development happens on a site-by-site basis. If people do not know how the greenway would fit onto a particular piece of property, and how the property fits into a larger perspective of a greenway, then they miss that opportunity.”

***Combination of the Flagship Project plus Top 10 Actions:*** Jody Watson also talked about what it means to have a flagship project and the ‘little actions’ take place concurrently. The little actions underpin the long game for operationalizing the Blueprint.

“Anne Topp and Adriane Pollard were very, very astute about giving Saanich Council comfort with the 100-year plan. But, they said, we need early wins if we are to move the Blueprint forward. This is why the BCI was so strategic with our choice of top 10 early actions. All three municipal OCPs were also being updated around the same time. The BCI was really active, we were vocal, and we were heard.”

“The short-term actions, especially influencing the Shelbourne plan, were crucial. Oak Bay High is a flagship project and was a critically important project. But think of it as the photo-op. Planning actions are not photo-ops. But they are crucial. If the Blueprint had not been embedded all through the Shelbourne Valley Plan, we would have lost the opportunity to restore much of the buried length of creek.”

“The impact of the Oak Bay High School flagship project is that it engaged the school and the community. It is a walking route for the community. People stop and talk to those doing work in the creek.”



## Infrastructure and Public Works Planning

Early on, the BCI recognized that embedding the Bowker Creek Blueprint within the organizational culture of each participating local government would be a lynchpin element in the strategy for implementing the 100-Year Action Plan.



**Colin Doyle**

former Director of  
Engineering,  
District of Saanich

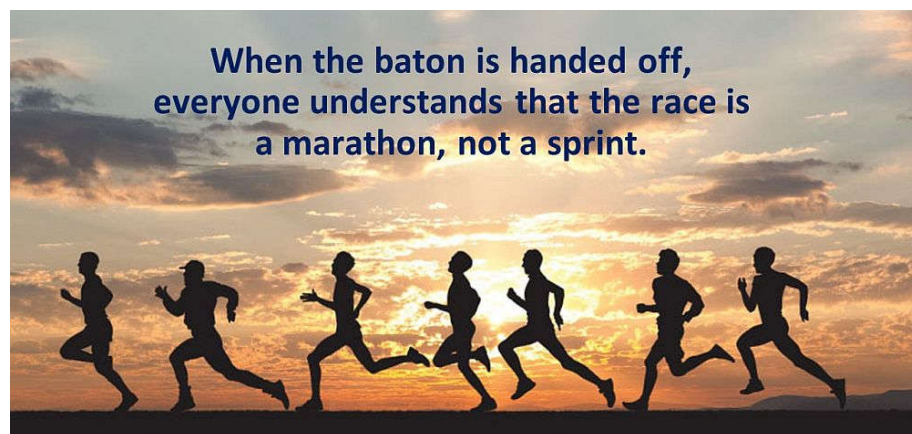
*“Implementation of the Bowker Blueprint has begun. The District of Saanich and our partners have set out on a new path towards sustainable planning for infrastructure and public works within a multi-jurisdictional watershed boundary. We have all started to internalize the watershed management mandate.”*

- an article in the  
APWA Reporter,  
May 2012

The BCI also recognized that long-term success would depend on the Bowker restoration vision being embraced with enthusiasm and commitment by successive generations of local government staffs, as the baton is handed off by each generation to the next. The process of *intergenerational collaboration* requires ongoing work to build and maintain bridges of understanding from the past the present and future.

***Operationalizing the Bowker Vision:*** “It took 100 years to put Bowker Creek in pipes and concrete channels. It will take another 100 years to daylight and bring life back to the creek. Acknowledging the 100-year timeframe of the Plan in the title of the document gave municipalities much more comfort, and reassurance that they don’t have to act immediately on everything in the Blueprint,” wrote Colin Doyle in an article published by the American Public Works Association in May 2012.

**“An innovative, sustainable adventure has begun in the communities of Saanich, Victoria and Oak Bay to restore Bowker through redevelopment.”** Within Saanich, this means that the Planning, Engineering, and Parks and Recreation Departments have been directed to consider the principles and actions for watershed management, the 10-key actions for short-term implementation, and stream reach actions laid out in the Bowker Creek Blueprint when developing Departmental work plans and budgets.”





## UDI Testimonial

*“Revitalizing Bowker Creek creates an opportunity for businesses and developers. New developments that incorporate rain gardens and other natural features will be more popular with the public. This will translate into more business as the community will be more inclined to visit business centres that reflect the values of the community.”*

## Sharing among Governments

*“Our work in the Comox Valley was inspired by the way the Bowker Creek Initiative was breaking new ground. Because they were leading by example, it made it easy for the four local governments in the Comox Valley to learn from the Bowker experience and adapt their guide to our needs.”*

– Derek Richmond,  
Past-Chair, CAVI-Comox  
Valley Regional Team

## Land Development Expectations

In 2012, the BCI developed the [Bowker Creek Developer's Guide](#)<sup>6</sup>. It is noteworthy for several reasons. As awareness and recognition grew, for example, the Guide influenced perceptions and expectations within and beyond the Bowker creekshed. Its reach extended up the east coast of Vancouver Island to the Comox Valley and across the Salish Sea to Metro Vancouver.

Conceived as a companion to the [BCI Homeowners Guide](#), the BCI saw the potential for the Guide as a tool for greater outreach. In parallel, the CRD created a regional version titled [A Developer's Guide: Watershed-Wise Development](#). The Urban Development Institute (UDI) endorsed the BCI version through the addition of a testimonial. A UDI luncheon in May 2012 was the launch event for both Guides.

**Inter-Regional Collaboration:** The Bowker Creek Developer's Guide served as the template for [A Guide for Water-Wise Land Development in the Comox Valley](#), an initiative of four local governments. This was an exemplary demonstration of the power and benefits of sharing under the inter-regional umbrella provided by the *Georgia Basin Inter-Regional Education Initiative*, an outcome of the CAVI program.

**Bowker Creek Developer's Guide**

**Bowker Creek Urban Watershed Renewal Initiative**

**Bowker Creek Watershed Vision**

The varied human and natural areas in the Bowker Creek watershed are managed to minimize runoff and pollution, making Bowker Creek a healthy stream that supports habitat for native vegetation and wildlife, and provides a community greenway to connect neighbourhoods.

**Watershed-Wise Development in the Bowker Creek Watershed**

**Why Should Developers Care?**

The choices developers make can contribute to significant improvements in watershed health. Here are some steps developers can take:

- ☒ Talk to the right people early on to

<sup>6</sup> <https://waterbucket.ca/viw/wp-content/uploads/sites/10/2021/05/bci-developers-guide.pdf>

## Reflecting on the First Decade

“We talk a lot about shifting paradigms and creating a new land ethic. It feels like a new land ethic is now starting to go into play. The climate emergency is advancing that more quickly. I have lots of conversations about re-engineering nature back into the Bowker watershed. I notice that term resonates more and more with the engineering community,” stated Jody Watson when she reflected on BCI accomplishments after the first decade of Blueprint implementation.

**Common Vision:** “Blueprint implementation success is flowing from the common vision. It makes it easier for politicians to make decisions when they can say, okay here is the vision for this area and here are two proposals, which one helps us achieve that vision better. We go with the one that does it.”

“A common thread is the common vision and achievable milestones, those 10 short-term actions. We had the vision in the Watershed Management Plan. The Blueprint then reinforced, amplified, and better thought out the vision in terms of the greenways piece. We have gone beyond motherhood statements. We can be specific in saying here is what the vision means in this reach.”

**“If we are committed to the vision, then we cannot keep the creek in this pipe.”** That is the response, Jody Watson says, whenever someone makes an excuse for not being able to do something.

**Role of Champions:** “Success in the first decade resulted from having champions at every level: staff, Council and community. New staff have bought in and believe in the vision. The rebirth of the Friends of Bowker Creek, and how active they are, is brilliant.”

“Bowker Creek has always been so fortunate in having strong political champions. We took the politicians on tours. They saw it on the ground, and we were able to talk to them about the vision of what we hoped to be able to do. They saw that vision and they then helped make sure that the vision comes to fruition. Having elected champions has been consistent at all three municipalities.”

**Collaboration and Commitment:** “The collaboration that is happening now is so organic. It is all those community players and champions, both inside and outside municipal government, who are creating more and more collaboration. Over the past ten years, our focus has been on how to operationalize the Blueprint so that it just becomes the way we do business. It is happening!”

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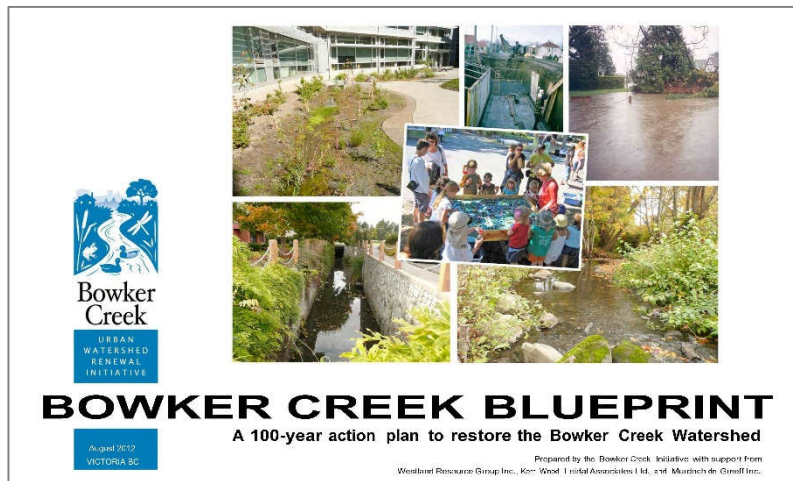
*“The BCI has its own life. It is just getting stronger and stronger and stronger. It is organic. It is happening! It is shared responsibility, truly, in action.”*

*“The Blueprint identifies roles for the community, but inter-municipal coordination will always be needed. Without a coordinating mechanism to bring together the three municipalities, the BCI would not be as effective and as collaborative.”*

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## PART C

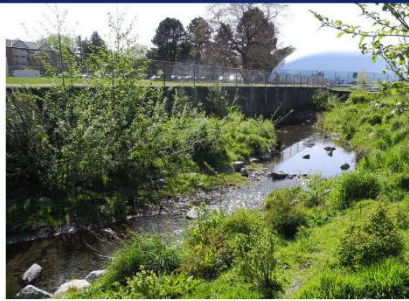
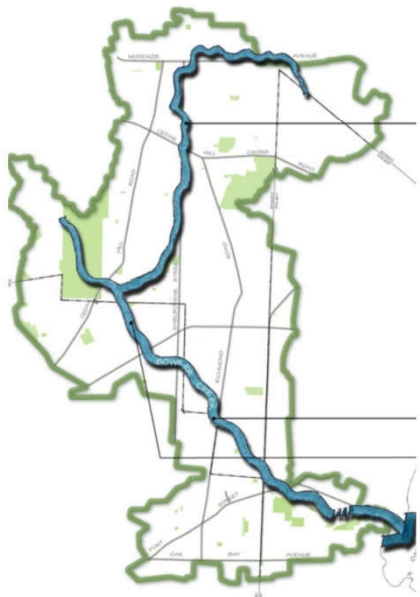
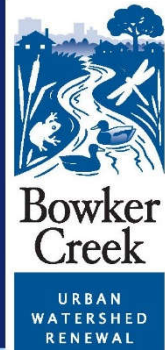
# Bringing Bowker Back to Life



*Part C introduces current players, representing community and government, who are standard bearers for intergenerational collaboration because they understand that it will take sustaining commitment to achieve the Bowker vision.*

*Just as the Blueprint process was a game-changer in 2010, so too is the Daylighting Feasibility Study in 2020. This will power actions in the second decade. Everything now revolves around the creek rather than the other way around.*

# Bowker Creek Blueprint 10 Year Achievements | 2021



## Image 8 – Celebration of First Decade

*(Go to Part D to read the 16-page brochure)*



## Reflections on What Comes Next

### Context

The Bowker Creek Blueprint and the intergenerational commitment by so many players to implement the 100-year action plan is remarkable and precedent-setting. Simply put, nobody has done what the BCI has done. Success begets success. The process to operationalize the Blueprint is becoming self-fulfilling.



### Shared Responsibility

*“All of us have an impact on the land, on the water, and on the way things look. Each party in a process has a 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. All of us need to understand and care about the goal if we are to know our role in relation to it and to create the future that we all want.”*

- Susan Rutherford,  
Green Infrastructure  
Partnership, at Bowker  
Forum, February 2010

***Right People, Right Place, Right Time, Over Time:*** Players may change, but the mission continues without loss of momentum. A foundational piece is enduring commitment to the Bowker vision for a continuous riparian corridor. A thread that weaves through the Bowker storyline is the right people in the right place at the right time, over time.

Key words that capture the essence of the Bowker story are perseverance, dedication, and time. It is a journey and journeys take decades – which is why success is measured by the distance travelled, not the distance still to go.

In this concluding section, we present what we learned during a set of interviews with current players who are collaborating to set a direction for the second decade of Bowker Blueprint implementation.

***Shared Responsibility Aligns Community Champions and Local Government Staff:*** Beginning with the collaboration on the part of Ian Graeme (Friends of Bowker Creek) and Rob Miller (CRD) two decades ago, another foundational piece is the mutual support that community champions and local government provide each other. **The BCI showcases “shared responsibility in action”.**

One cannot make someone embrace shared responsibility. It is that intangible something that must come from within the individual. Based on the interviews summarized in the following pages, the motivation for those involved in the BCI is clear: it is the “Blueprint mission”.

Michael Lewis, a best-selling American author, provides a perspective which helps to explain why the Blueprint is a mission for Ian Graeme et al: *“It is a ‘calling’. They do not need other motivations when what they do is the right thing to do. We need to honour these people. We would tease more out of the population if we created a culture of recognition around what it means to embrace shared responsibility.”*

# Operationalizing the Vision for a “Ribbon of Blue”

## The Way Forward

The series of game-changers described in Part B are foundation pieces for operationalizing the 100-Year Action Plan and retrofitting a “ribbon of blue” for the length of the Bowker creekshed. Early successes, highlighted by the flagship Oak Bay High School project, created the prerequisite momentum for undertaking yet another game-changer, namely the [Bowker Creek Daylighting Feasibility Study](#).

The concept plan for stream daylighting has provided Saanich, Oak Bay and Victoria with confidential lists of key properties for acquisition. Municipalities would then have a starting point for operationalizing the property purchases, according to their internal systems and priorities.

## The Way Forward

*“Ten years into Blueprint implementation, the BCI partners are in a good position to commit to a new set of priority actions. The successes of the past ten years coupled with the newly completed Daylighting Feasibility Study mean that the time is right to update the Blueprint and recommit to a revised set of actions for watershed renewal.”*

- Bowker Creek Blueprint 10 Year Achievements /2021 (note: a copy is included herein as Part D)

### ***Intergenerational Thread that Binds the 100-Yr Action Plan:***

In the years and decades ahead, the ongoing operationalization process to “make real the ribbon of blue” vision through property acquisition would result in a succession of min-flagship projects along the lines of channel reconstruction and naturalizing through the Oak Bay High School property.

Coupled with other programs and community-based initiatives that also contribute tangibly to “building a sense of community”, such projects would go a long way towards cementing intergenerational commitment to implementation of the 100-Year Action Plan.

**A Time to Recommit:** In Part A, the focus was on key players who did so much to create the Bowker Blueprint and inspire others to take the intergenerational baton. Part C builds on the intergenerational theme. The current generation of key players reflect on the journey to date and what comes next.

**The idea of the *intergenerational baton* is a metaphor for passing on experience, knowledge, and wisdom.** This holds the key to building bridges of understanding from the past to the present and future. As highlighted by the sidebar, this perspective is relevant to updating of the Blueprint and recommitting to a revised set of actions.

Intergenerational collaboration is a two-way street. It is one thing to hand off the baton. Minds must also be open to receiving and accepting the baton and embracing the wisdom that goes along with it.

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## Stream Daylighting & Corridor Restoration

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Finalized in 2020, the [Bowker Creek Daylighting Feasibility Study](#) defines a route for future channel and corridor restoration. This is a critical milestone in the 100-year journey because:

**One of the key objectives for the 100-year Action Plan is to “develop a continuous riparian corridor along Bowker Creek.”**

### Acquire key properties as they become available

*“Property acquisition is an incremental, opportunistic process. As properties age and become available for redevelopment or as major infrastructure renewal work is undertaken, the property acquisition list enables the purchase of key properties in a coordinated, forward-thinking manner that could ultimately support creek daylighting and restoration.”*

- Bowker Creek Blueprint 10 Year Achievements /2021 (note: a copy is included herein as Part D)

Achieving this desired outcome has inherent challenges because the Bowker creekshed is a built-out, urban landscape. Other than a 400m headwater reach at the University of Victoria, the stream has no riparian ecosystem. Elsewhere, there are only remnant riparian areas on a mix of public and private lands. Both are now protected by streamside setback regulations.

**Concept Plan for Bowker Creek Daylighting:** Included for illustrative purposes as **Image 9**, the daylighting plan will inform **how** Saanich, Oak Bay and Victoria integrate creek daylighting options into land redevelopment plans. The vision for application of the concept plan is that it would be used as a tool in future development decisions:

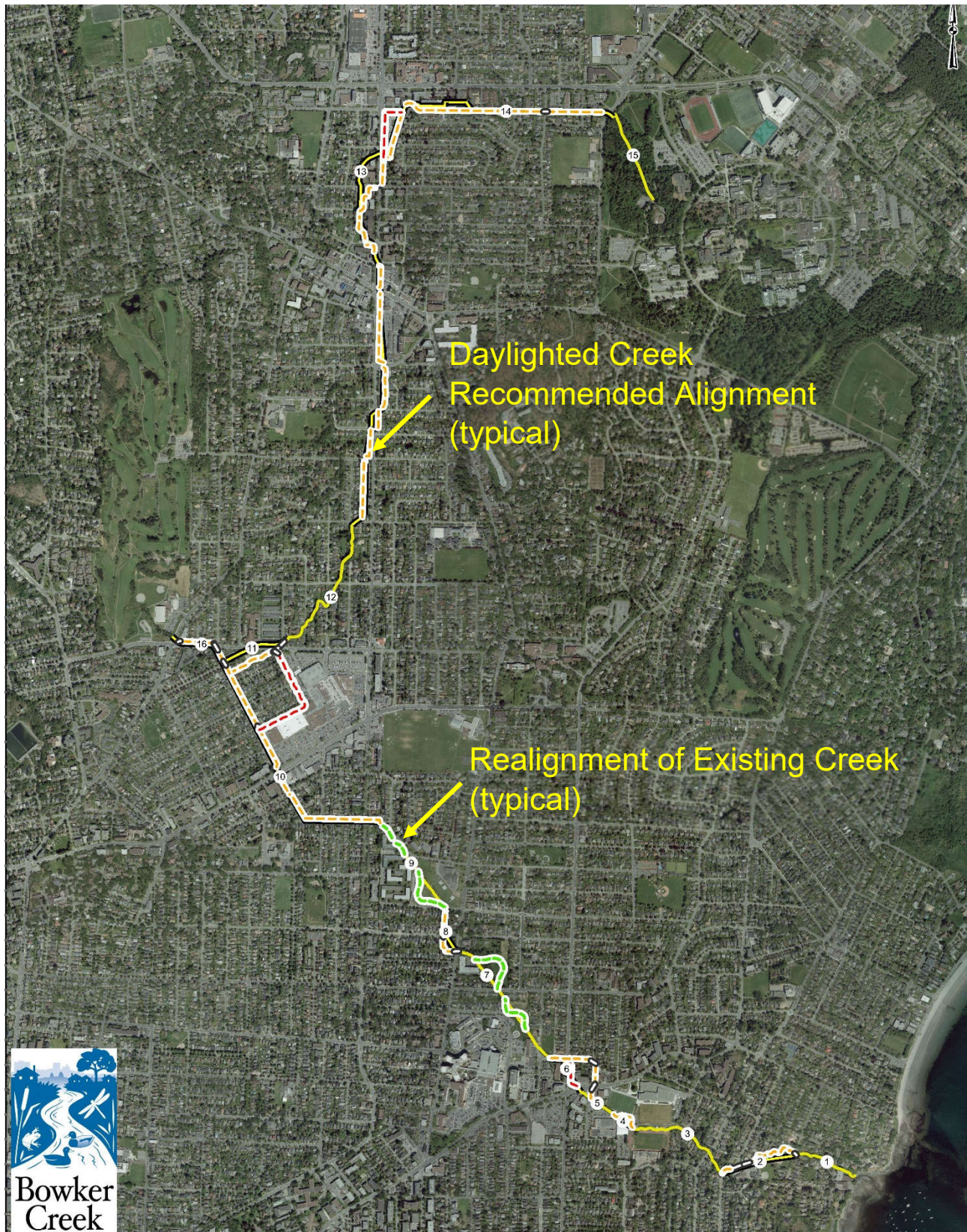
*“Over time, as lands are re-developed and major infrastructure approaches renewed, daylighting factors can be considered in the planning stages, eventually working to bring light and life back to Bowker Creek.”* – ISL Engineering report

**Springboard to the Ecological Accounting Process (EAP) Project:** The daylighting strategy is the point of departure for the [Bowker EAP Project](#) which is described next. EAP findings can similarly be used as a decision support tool. EAP would inform the 100-year funding strategy for future maintenance and management (M&M) of a restored **Natural Commons Asset (NCA)** – that is, the “ribbon of blue” on **Image 4**, introduced in Part A.

The daylighting study has broad-brush recommendations for parcel acquisition. The value-added component that EAP provides is a financial methodology to approximately value the land within either an existing or potentially recreated stream corridor. EAP helps to frame the right question(s) that would then guide another level of financial analysis by a land economist.



**Image 9 – Proposed Daylighting Corridors**





## Daylighting Feasibility Study

The process for developing the daylighting options was much like the one for Blueprint development in that it involved bringing together those who have on-the-ground knowledge. Jody Watson explains:

***From Concept to Implementation:*** “When we did the daylighting feasibility study, we had representatives from parks, planning and engineering from the three municipalities together in the same room. They looked at the drawings, listened to the consulting engineers explain the constraints, and then they were off and running.”

“The process of generating ideas led to practical solutions – for example, they would say, why don’t we just move the creek over here and do this park, because then we only have to do this and this and this, and it enhances this park and we want to get that piece of property for parkland in the future, etc. So much useful information came out of this collaborative and hands-on process!”

“At the end of the day, it truly was the municipalities who defined the daylighting route after reflecting on the recommendations and engineering considerations that were presented to them. The departmental representatives sat in the room, and for each reach they made the judgment calls: yes; no; this could work; if we did that, we would need that property as well; and so on.”

“The municipalities did all that work, and now that input is in those plans. And so, that becomes the way business will be done. Before the daylighting feasibility study was even finalized, it was already being implemented. Because the watershed is redevelopment is happening, developers are looking for answers. Multi-block redevelopment is on the horizon.”

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*“We know the climate is changing and the daylighting feasibility study allows for it. To reduce the volume of flow to Bowker, a new land ethic means we would re-engineer natural hydrological function back into our watersheds.”*

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***Bring a Proportion of the Flow Volume to the Surface:*** “We are learning from City of Seattle daylighting and rain garden experience. That was the first time I heard anyone say, why must you take the entire flow? Why not just daylight a partial volume? That concept is a major element of the Bowker daylighting feasibility study.”

“In a constrained urban environment, it makes so much sense to leave the existing pipes in the ground and limit the volume that we bring to the surface. So, let’s do that. The goal is to bring some water to the surface all over the place. If pipe is structurally sound, leave it. In Bowker, we could not build an open channel big enough to handle winter flows. We would need so much land,” concluded Jody Watson.

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## Bowker Creek EAP Project

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Over the past decade, community support has grown for restoration of the Bowker Creek stream corridor as a natural commons or ecological system. Applying EAP, the [Ecological Accounting Process](#), adds to the conceptual framework for stream daylighting by providing new insights and metrics for annual maintenance and management (M&M) of a functioning stream corridor system.

The EAP findings for Bowker Creek also add intriguing insights that would potentially inform the long-term strategy for property acquisition, in conjunction with land redevelopment, for stream daylighting.

***Bowker Creek is a Natural Commons Asset:*** The concept of the Natural Commons underpins EAP. Thus, **Image 10** is a key visual. It depicts three categories of ‘commons’: natural, constructed and institutional.

The portion of the existing (and proposed future) stream corridor that lies within the regulatory setback zone is the Natural Commons Asset (NCA). The ‘package of ecological services’ provided by the NCA is the range of uses desired by the community: **drainage, recreation, habitat, and property enjoyment.**

**NCA Value:** EAP satisfies a local government need for a financial methodology and metrics for valuation of ecological assets within a stream corridor. Most importantly, EAP interweaves the financial, social, and ecological perspectives within a single number:

**This aggregate number is defined as the NCA value. The end goal is an annual budget for ‘maintenance and management’ (M&M) of stream systems.**

The NCA value puts the discussion of natural assets (stream systems) on an equal footing with constructed assets (physical infrastructure). This is a game-changer. The NCA value strengthens BCI conversations with planners, engineers and accountants about the ‘[package of ecological services](#)’ that the community expects both natural and constructed assets to provide in the Bowker creekshed.

**Guideline for an Annual M&M Budget:** The EAP methodology recognizes the importance of the stream system in the landscape. A benchmark guideline for annual M&M investment in Bowker is \$110 per lineal metre of stream, which is about 50% of current investment.

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### **Significance of Bowker Creek EAP Project:**

*Pulls the thread of  
collaboration,  
community outreach  
and stream stewardship  
from the Bowker Creek  
Blueprint’s first decade  
through to its second.*

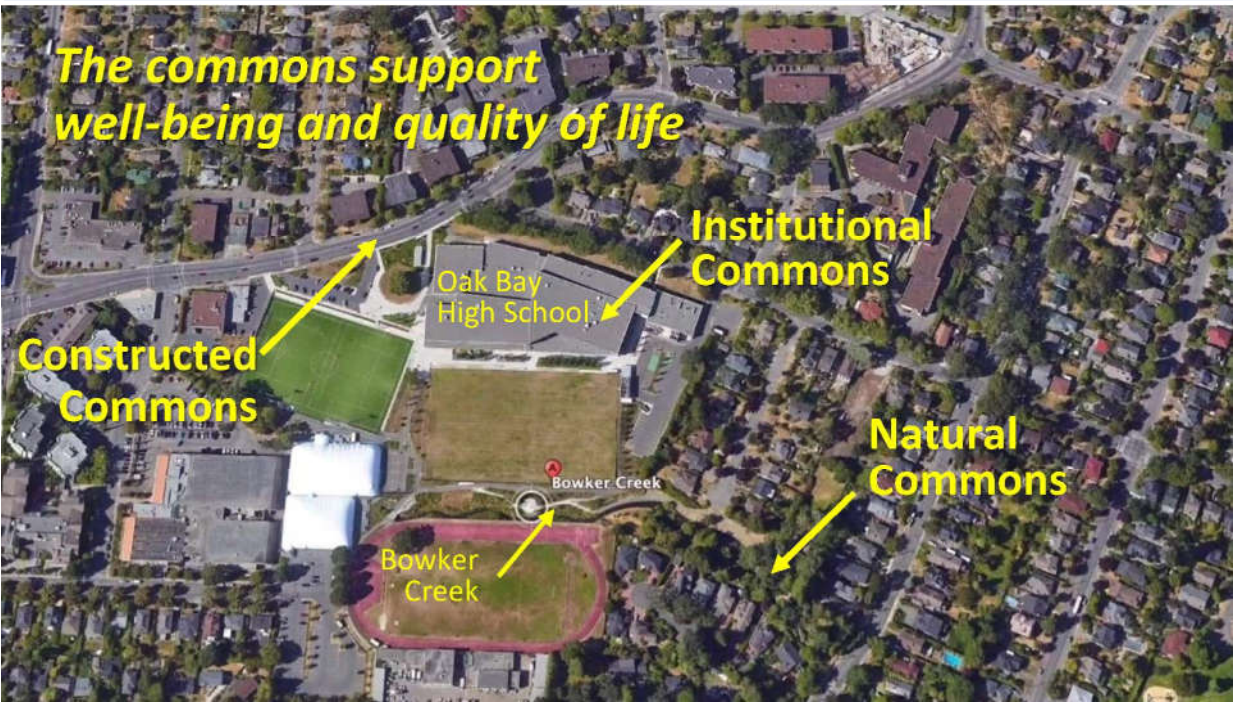
*Adds the new lens of  
accounting for natural  
(ecological) assets and  
ecosystem valuation.*

*The provincial umbrella  
for EAP is **Asset  
Management for  
Sustainable Service  
Delivery: A BC  
Framework**. Bowker is a  
demonstration (case  
study) application.*

---

Image 10

The concept of the Natural Commons underpins EAP. The image below is a key visual. It depicts three categories of ‘commons’: natural, constructed and institutional.



Foundational concepts that underpin EAP, the Ecological Accounting Process		
Natural Commons	Constructed Commons	Institutional Commons
<p>As defined by the EAP, a <b>Natural Commons</b> is an ecological system that provides ecological services used by nature and the community.</p> <p>A stream is a land use and provides a “package of ecological services”. Drainage, recreation, habitat, and enjoyment of property. This is plain language that Councils and Boards understand.</p>	<p>Communities rely on a range of services such as roads, underground utilities, and parks to support lifestyle and property enjoyment. These are <b>Constructed Commons</b>.</p> <p>Through taxation, they are maintained and managed to ensure the availability of desired services.</p>	<p>Services such as fire protection and schools are a related kind of constructed commons.</p>

## Friends of Bowker Creek Society

### Commitment to Blueprint is Enshrined



**Soren Henrich**

Director, Friends of  
Bowker Creek Society

*"My involvement in the Bowker Creek Initiative began as a representative of a neighbourhood association. With re-incorporation of the Friends of Bowker, our structure includes five working groups, and we are connected to 11 neighbourhood groups."*

*"The broad nature of this representation raises an obvious question: Who is the community voice on the steering committee? The FoBC is already the de facto representative. A reasonable and logical next step would be to formalize this role."*

In the latter part of the first decade of Blueprint, the Friends of Bowker Creek (FoBC) society re-emerged as a catalyst for community-based action. Founded by Ian Graeme who we introduced in [Part A](#), the FoBC generated the early energy that resulted in the 2002 Bowker Creek Forum, which was literally a watershed moment.

In 2018, Ian Graeme was delighted when Soren Henrich and Gerald Harris re-incorporated, restructured, and revitalized FoBC. Soren and Gerald were introduced in Part A. All three are proud that the FoBC constitution explicitly **"supports the restoration and enhancement of Bowker Creek and its watershed to a healthy state, guided by the vision and goals of the Bowker Creek Blueprint."**

Viewed in the intergenerational context, Soren Henrich and Gerald Harris represent continuity through three stages of Blueprint evolution: genesis (pre-2010), the first decade of implementation, and now the second decade. FoBC is an important legacy piece in terms of how the intergenerational baton is handed off, now and in future.

#### **Friends of Bowker Creek is a Voice for the Community:**

"There is this undercurrent of human desire to be near water, and to connect with water in the city. In the last ten years, we have seen more and more recognition that the creek is there. Whereas before people would ask 'where is Bowker Creek?', now there is more signage, and many more community connections," reports Soren Henrich.

"Being effective is very much about people connections. We are getting better connected over time – for example, FoBC functions as an umbrella for 11 neighbourhood associations. Along with organizing around our five working groups, this connector role allows FoBC to present ourselves as a voice for the community."

"My interest is community organizing, taking care of volunteers, and empowering working groups. You trust people because their hearts are in the right place. Find out who can work together. Let them do it their own way and develop their own roots. My current source of inspiration is a book titled [The Troublemaker's Teaparty: A Manual for Effective Citizen Action](#) by Charles Dobson. Published in 2003, the principles in it are very good."



## Community Outreach and Engagement

“The arts help keep the Bowker Blueprint fresh when you ally that with the basic goals,” emphasizes Soren Henrich. “Consider, for example, the [Bike-Powered Creekside Concert Series](#). This began in 2019 in partnership with [James Davis of Tune Your Ride](#). The concert series is one way we make use of the arts to engage people.”

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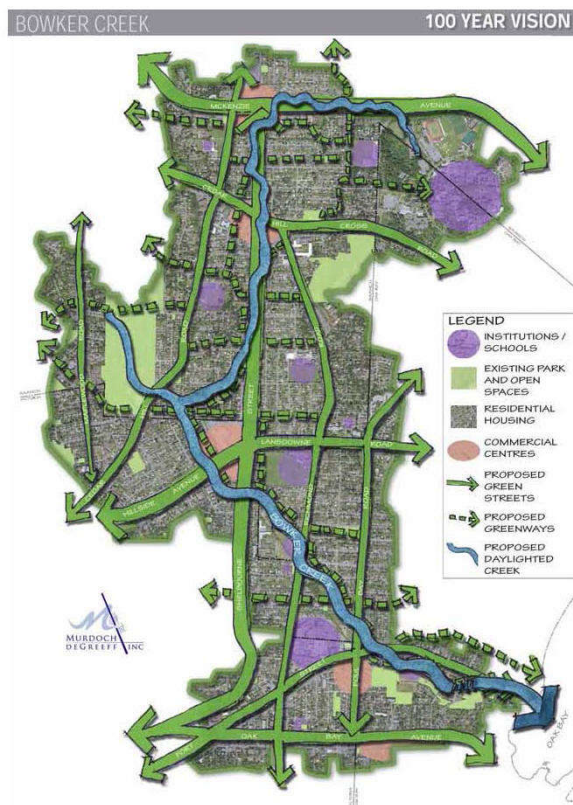
*“Council requests the Mayor write to the CRD, the District of Saanich, and District of Oak Bay expressing our continued and renewed commitment to Bowker Creek and our excitement to continue to work together to steward and rehabilitate the watershed.”*

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“You never know who will be in the audience; nor where and how their participation may lead. In 2020, City of Victoria Councillor Jeremy Loveday participated in the creekside concert series as a spoken word performer.”

“Afterwards, he asked about the 10-year review of the Blueprint. He offered to help at the Council level and then followed through on his commitment. Months later, in February 2021, he and Councillor Ben Isitt put forward a 12-clause motion of support that Council passed unanimously.” (Clause #11 is in the sidebar.)

“It was a real shot in the arm to have such active political leadership at the start of the 10-year review of the Blueprint. It gave us a timely lift. Going forward ten years, the FoBC is committed to bringing to life the ‘green corridors’ conceptualized on the BCI branding image (below).”



## Vision for a Green Grid of Green Streets and Greenways

“We have a greenways working group. In the urban core, our intention is to raise the profile of Bowker Creek as a regional trail that connects to the existing regional trail system in Victoria. Currently, Oak Bay is not connected. Bowker is the way to link Oak Bay with a multi-use trail that is close to the city, and close to nature under a tree canopy, without having to be on a major road.”

“In the second decade of Blueprint implementation, FoBC has the confidence to advocate for the infrastructure necessary to achieve the greenways part of the Bowker vision. Yes, projects would be large-scale and involve considerable engineering to retrofit. We are comfortable pushing hard for real change, while also recognizing the need to secure recommitment every 5 to 10 years. It will take some time. But FoBC is committed to the long view.”

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## Call for Action: “The Bowker Creek Valley”

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**Gerald Harris**

Director, Friends of  
Bowker Creek Society

*“So much has to do with what people see with their perception. We must create a mind-set, with many minds, such that people say themselves:*

*I am living on the hillside in the Bowker Valley, and this is the ecosystem to which I belong. It is my home.”*

*“That is the mind-set that will get us to where we are going with restoration of the Bowker creekshed.”*

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Oak Bay High School students and community volunteers doing habitat restoration together.

Photo Credit: Gerald Harris

“Whenever I talk to people, I use the term Bowker Creek Valley because a valley is a place where there is a stream. It is also a place where people live and there is an ecosystem,” states Gerald Harris, Chair of the FoBC Streamkeepers Working Group. He is involved because working with others in the creek is his passion.

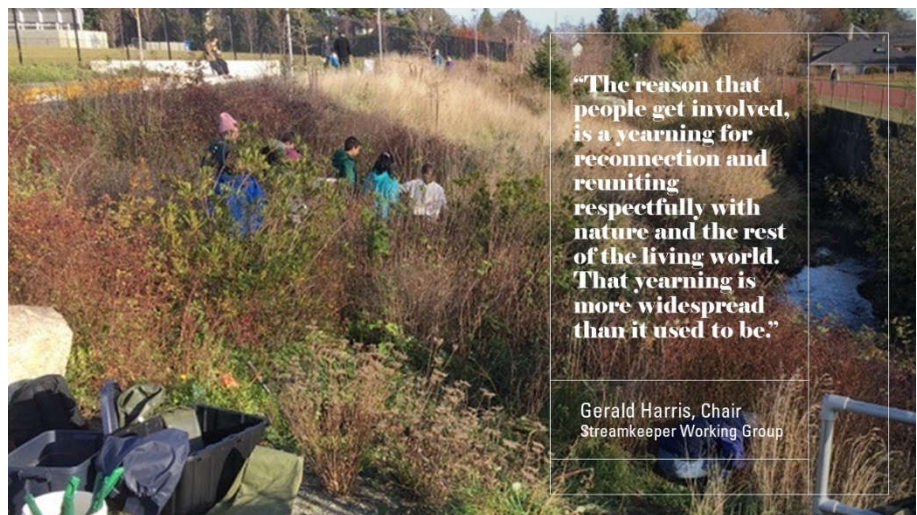
“It was great to see ‘valley’ used in rebranding the Shelbourne Corridor as the Shelbourne Valley. Credit goes to Anne Topp for that accomplishment. But calling it the Shelbourne Valley misses the point that Bowker Creek is in a pipe below the ground surface!”

“In my mind, an appropriate action as part of the 10-year review for the Blueprint implementation process would be to **reimagine the Shellbourne Valley as the Bowker Creek Valley**. I truly believe that renaming the catchment as the Bowker Valley is important to do.”

**What it Means to Work in Bowker for Bowker:** “When people fall in love with their local creek, it becomes a longer-term commitment. This happens naturally when people work together physically to do creek restoration.”

“The greatest benefit of the habitat assessment that we completed over the past year is the opportunity it created for a lot of Bowker valley residents to spend time together doing some work on Bowker Creek for Bowker Creek. As a result, there are people who now have a feeling for the creek that they likely did not have 18 months ago.”

“The five current Friends of Bowker Directors met in the creek years ago when we were doing rehabilitation projects. The recent assessment project has given the opportunity for another intake!”



**“The reason that people get involved, is a yearning for reconnection and reuniting respectfully with nature and the rest of the living world. That yearning is more widespread than it used to be.”**

Gerald Harris, Chair  
Streamkeeper Working Group



## Bringing Salmon Back to Bowker

“Derek Shrubsole, a science teacher at Oak Bay High School, is part of the working group leadership team. He is actively using the outdoor classroom on the banks of Bowker Creek for teaching; has an important role in facilitating cooperation among school, school district and community; and is an integral part of the intergenerational collaboration process,” states Gerald Harris.

“My conversations with Derek about bringing salmon back to Bowker led the two of us to recognize that only chum salmon are suited to Bowker water quality in its present condition. But it was Ian Bruce of Peninsula Streams who took our thinking a step further when he suggested going beyond a passive habitat assessment. When we were on a walkabout, Ian posed this question which changed everything:

*Why not plant chum eggs and make it a dynamic process where having the fish in the stream creates more public interest, commitment, and motivation for improving the stream?”*

“The possibility of restoring chum salmon has attracted a lot of volunteers, many of whom are young people. This is how we pass on the baton. It has to be.”

**Inter-Generational Baton:** “Within the streamkeepers working group, half the members are under age 40 and several are in their 20s. I am quite certain that these individuals will continue to be involved well into the future. Within a year or so, I will step away from being chair and hand-off to younger people to co-chair the working group. Our succession planning is happening naturally.”



Photo Credit: Gerald Harris



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## Bring Nature into the City

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Brandon Williamson is a 2019 graduate of the University of Victoria. COVID created the opportunity for him to spend 2020 volunteering with the Friends of Bowker Creek. In the process, he discovered his passion and his mission. Gerald Harris is mentoring Brandon so that he will be well-prepared in taking on a leadership role on the Streamkeepers Working Group and eventually within the society at the Directors level.

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*"I grew up in Port Alberni, a small town and am a nature lover. But I have come to realize that I am a city person. And being both a city person and a nature person, well those two things are not irreconcilable."*

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**An Intergenerational Mission:** "Over the past year, I have gained a passion for Bowker Creek and its restoration. I do understand that the work that needs to be done is a very long-term thing. I am committed and excited to volunteer over the long term to see out the vision," states Brandon Williamson.

"I got involved to get hands-on experience in my field of interest. Also, I am somebody who looks around when I am out for a walk and thinks about how things could be better. I like to see that change happen."

"A lot of people complain about things, but they do not do anything about it. For this reason, I was determined to do something. It gives me a feeling of purpose by having one thing that I can attach myself to and feel like I am making a positive addition to my community and to the world."

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"ONE OF MY PASSIONS IS TO BRING NATURE INTO THE CITY SO THAT WE DO NOT HAVE THESE TWO DISTINCTIVE ZONES – THIS IS WHERE HUMANS LIVE AND THIS IS WHERE NATURE LIVES. THOSE TWO THINGS CAN COME TOGETHER. THAT IS MY VISION FOR BOWKER CREEK AND WHY I ENJOY VOLUNTEERING."

BRANDON WILLIAMSON  
FRIENDS OF BOWKER CREEK



Photo Credit: Gerald Harris



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## Teach Science to the Community

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Jessica Hartum is a self-described passionate volunteer and mature student who has applied her passion for the science of water quality monitoring to help bring Bowker Creek back to life.

“When we are down at the creek, everyone stops and talks to us. Everybody! The community loves Bowker Creek and wants to see something so much better. It is hard not to be touched,” says Jessica.

In the grand scheme of creeks, Bowker Creek has been so degraded. Yet that love for Bowker comes through? “Absolutely,” exclaims Jessica, “one of the most stunning things for me was the response to my post on Facebook asking for donation of a backpack so that we could put all of our water quality gear in it.”

“Within one day, there were 75 replies from Oak Bay residents saying: *I want to get involved; how do I get involved; how do I donate money; we want to see success; we love to see you working in the creek.* It was pretty phenomenal.”

**Action through Community Involvement:** “It is really neat getting out there with the volunteers. I was trained to teach communities to do water quality testing. It is great to have government do studies and tell us what the problem with the water is. But nothing will happen until and unless you can get the community behind you.”

“It is about teaching people in the local community. Once they understand the science, their eyes light up. They want to be there, they want to learn, they want to do what is needed. Who better to pass on the intergenerational batons than the people who are right there!”

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*“After completing my studies, and with COVID, I just found myself with all this time and kept on getting more and more involved. Any walk that Gerald Harris did on the creek, I said: yep, I will be there! And now I am a Director of the Friends of Bowker Creek.”*

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## Passion for Water Quality Explained

"I am a water quality person and I believe that it is a steppingstone to everything else," continues Jessica Moorhead. "Water quality is close to my heart. But I understand where we are in this world and that nobody is buying in for water quality alone."

"In my view, water quality is a lot bigger than just the salmon. But I do recognize that water quality and fish habitat are a package. Neither one is complete without the other one. We have to do both together, and that is what Brandon Williamson and I do. We work closely. We collaborate to support each other's program!"

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### Stepping It Up:

*"We are taking a new direction. We are saying that we can improve the health of Bowker. But there is still more pollution happening. We can see it happening. And so, we the Friends of Bowker Creek, are stepping it up. Now I am in talks with two university students and two professors about doing a couple of different studies that they want to undertake to assess nutrients from yards. We will also be studying what is in the pipes that discharge into Bowker, because there is something else going on in those pipes. We are stepping it up!"*

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"When I show community volunteers the insects that are in the water and what they mean, everyone has an Ah-Ha Moment. The next time they see me, they will tell me whatever it is that they have seen in the water. I believe that I am infecting them with my passion! That is what I do."

**Salmon as a Motivator for Action:** "It was Gerald Harris who opened my eyes to using the salmon as the way to get people excited. He is 100% right. And I love Derek Shrubsole's perspective about using the salmon to get the school generation to buy in and understand and believe. Those young kids are our future."

"For me, however, it goes deeper because I see the water quality as the area that is super important yet has been forgotten about. Without good water quality, there will be no salmon. So, it is important that we get the younger generations excited and show them and teach them."

## Inter-Generational Collaboration

"Community volunteers that are coming forward are intergenerational. Within our teams of 3 or 4 people, I like to mix and match the different generations: some young, some old."

"We have the full range from university students to semi-retired to fully retired. And from different walks of life and cultures and belief systems. They get down in the creek and roll up their sleeves. It is pretty fascinating."

"I have never seen people come together like they have on this water quality monitoring project. Volunteers come from everywhere to get involved. I like to team the young with the old. They have different things to give. It works," concludes Jessica Hartum.

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## Outdoor Classroom Creates Authenticity for Students

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“What I have now is an actual outdoor, naturalized learning space. I do not have to show a video or read a book to teach a lesson. We can go out and see it in person. The students can experience it,” states Derek Shrubsole. He has been teaching science at Oak Bay High School since 2003.

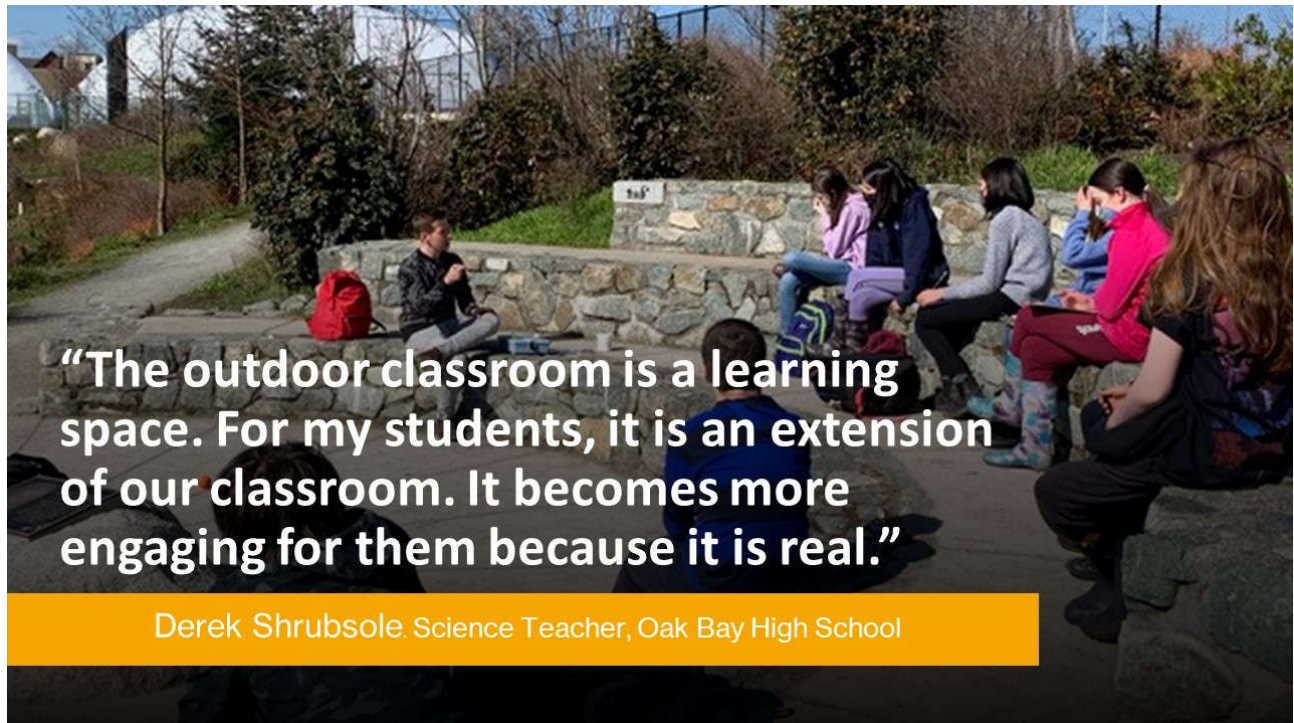


Photo Credit: Gerald Harris

“When you can take kids outside and engage them in that space, it becomes more engaging for them because it’s real. Before this project was done, there was really nothing around other than grass fields. We are really fortunate. We can do real science with them.”

“Students want authenticity to what they are studying. Too often in assignments they are told to research something which has no real meaning to them. To make it meaningful to them, I could see them buying into the idea of bringing Chum salmon back to Bowker Creek.”

“The idea resulted from an international student exchange with the Netherlands. We involved them in the habitat and water quality assessment for Bowker. We did a comparison with natural conditions in Goldstream Creek. When contrasting the two, the question was asked: *would it be possible to bring salmon back to Bowker?* This question always draws people in.”



Derek Shrubsole, Science Teacher, Oak Bay High School

Photo Credit: Gerald Harris



## Local Government Perspectives

In this section, we present five local government perspectives – four staff and one elected representative. They provide a range of insights because each joined the Blueprint journey at different points along the time continuum – from Day One to the past 12 months. Common to all, however, is their shared understanding and belief in the concept of the *intergenerational baton* as an appropriate metaphor...for what is necessary to sustain community commitment...to the vision for “bringing Bowker back to life” through the 100-Year Action Plan.

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### ***There is no equal, anywhere, to the Bowker Blueprint:***

*“When Saanich was one of eight cities involved in the European Cities Exchange, I was asked to make a presentation to the delegation from Almada, a small municipality in Portugal. Because their interest was environmental, I explained the Bowker Blueprint. They were so excited that they invited me to go to Portugal to tell the Bowker story to an inter-departmental group. Our experience inspired them to want to daylight a creek through their town as part of their proposed green infrastructure network.”*

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### **District of Saanich**

Adriane Pollard, Manager of Environmental Services with the District of Saanich, has been involved since the beginning. Along with Jody Watson, this history provides her with the full picture of the journey over two decades and counting. Adriane was at the 2003 Forum and is the longest serving municipal representative on the BCI Steering Committee. She has observed, and continues to observe, what the intergenerational baton looks like in practice – and through both her inter and intra-municipal lenses.

### ***How Bowker Creek Emerged as an Inter-Municipal Priority:***

When asked ‘*Why do people get so excited about Bowker when two-thirds of the creek is enclosed in a pipe?*’, Adriane provides this context:

“The Capital Region has a dry environment, and we have few streams. And so, when you have a stream that could support fish life and you can see the creek flowing through the neighbourhood, people get excited about nature in the city.”

“Some two decades ago, the CRD developed evaluation criteria for deciding where to expend their energies on inter-municipal watersheds. At the top of the list is the criterion that the community has already rallied and is ready for action. In other words, there is energy and support, because this is what primes the way forward for success. In the case of Bowker, the efforts of Ian Graeme and the Friends of Bowker Creek Society had raised community and political awareness to the level necessary to move Bowker to the head of the line.”



## Role of the Municipal Champion as the Interpreter

Adriane Pollard's tenure at Saanich began in 1998. She is one of a handful of remaining long-term employees; and the only person in the planning, engineering and environmental departments who has been part of the Bowker journey from Day One.

"With the turnover in municipal staff, I have become the municipal champion for Bowker Creek," she continues. "I remind colleagues of the municipal policies and that the Blueprint is a Council-endorsed document. Every time I review a development for environmental impacts, we identify that it is in the Bowker watershed, and we state what the Blueprint says about the subject reach. Also, whenever the municipality undertakes capital and maintenance projects, we make sure to refer to the Blueprint and state what it says."

"The good thing about this role is that the more that I do it, the more other people in the organization get the picture and say '*this is the document that we are going to use for this and that purpose*'. And when it comes to interpreting the document, other staff come to me."

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*"Our community planner also had to dive deep into the Blueprint for the **Shelbourne Valley Action Plan**. As a result, all the relevant policies from the Blueprint are in the Action Plan. That helps translate the Blueprint into what a potential developer needs to know - where they can develop and what the expectations are for rainwater management, tree canopy coverage, and especially stream daylighting."*

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**Role of the BCI Steering Committee as the Interpreter:** "There is a role of the committee as well as '*the interpreter*'. When one of the partners at the table retires or changes jobs, then the committee draws in their replacement. The new person gets to see all the people around the table, that the Blueprint is endorsed by their municipality, and here is how we use it. This keeps it alive. At one point, we had a big turnover in municipal staff, and we had to bring the new people up to speed very quickly. Otherwise, they may not have known."

*"Work. See the barrier. Knock it down. As long as people continue doing that....the 2003 Watershed Management Plan, the 2010 Blueprint, the 2020 Daylighting Feasibility Study and so on will be kept alive that way."*

Adriane Pollard  
Manager of Environmental Services  
District of Saanich



## Knock Down Barriers

“You need layers of champions. You need a champion in the community. You need a champion in the municipality. You need a champion to keep everybody aware and moving forward – and that is the role of the CRD Watershed Coordinator,” says Adriane Pollard.

“It is easy to hide behind your bylaws and manuals of practice and say that this is the way it has to be. It is not until you start working with people in the other disciplines that you realize well, we can all have wins here. A little bit of tweaking and we can all have wins.”

“Work. See the barrier. Knock it down. As long as people continue doing that...the [2003 Watershed Management Plan](#), the [2010 Blueprint](#), the [2020 Daylighting Feasibility Study](#) and so on will be kept alive that way. Maybe there will be another limitation that comes up. Maybe it is money. Maybe it is a lack of coordination between municipalities. But that is how you get recharged to work, see the barrier, and knock it down.”

**Stream Daylighting is the Latest Game-Changer:** “In terms of knocking down barriers, you really just have to look at what is the barrier and ask *What is holding us back and how do we address it?* Be very focused and break the mold if you need to. Because that is what we did with the Blueprint, and that is what we have now done with the [Daylighting Feasibility Study](#).”

“Stream daylighting is another game-changer. What it does is that it says here is where the stream is going to go, and everything revolves around that – building setbacks and heights, the greenways, and the pipes under the road. **Everything now revolves around the creek rather than the other way around.**”

**From Coaxing to Doing:** “In 2009, things were stagnating, and we needed to find a way to go forward. Again, 10 years after the Blueprint was completed, things were stagnating. How would we go forward? We did the [Daylighting Feasibility Study](#)! Knock those barriers down. As a result of the feasibility process, there is a lot more confidence and self-assurance within the steering committee. And now we are moving from the coaxing phase into the doing phase.”

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*“The **intergenerational baton** is being accepted. I believe the Daylighting Feasibility Study is the Bowker Blueprint for this next generation of municipal employees and community people.”*

*“It is a ground-breaking document. It is meaningful. It causes us to focus and act. It gives us the knowledge to go forward.”*

*“At the time, the Blueprint felt like that. After ten years, we realize this is great, but it has its limitations.”*

*“Now that we have the Daylighting Feasibility Study, that limitation has been erased. Now we have to catch up on that and start implementing.”*

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## Nature in the City

Adriane Pollard exudes passion for Bowker Creek and what it could be. Bringing Bowker back to life is an essential part of her mission as a professional biologist and environmental planner. What is the source of her passion?

**Creeks Need Riparian Areas:** “I am an army brat and lived in military bases in different parts of Canada. It is interesting to reflect on how military bases have become fortresses of biodiversity. The military owns large swaths of land. Because no one is allowed onto the land, it remains in a natural state. This context has influenced my awareness and my thinking,” explains Adriane Pollard.

“I began my professional career doing wetlands work in Ontario before joining the District of Saanich in 1998. With my wetlands background, this meant that I recognized how confined urban creeks are, especially Bowker. It only has remnant riparian pockets.”

“Creeks need to have some wetlands and riparian areas. What a huge difference that would make for Bowker Creek and for habitat and for people’s enjoyment and connection with nature.”

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*“The tributary through the Cedar Hills Golf Course has remnants of both the Bowker Creek and Garry Oak ecosystems together.”*

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### **An Opportunity and a Vision for Ecosystem Restoration:**

“Several years ago, the Garry Oak Ecosystem Recovery Team held its annual conference at the Cedar Hills Golf Course which has a major tributary of Bowker Creek. We were doing field trips and I volunteered to lead one on the Bowker tributary because it connects to Garry Oak ecosystems.”

“There are some biologists that get very excited when you have an aquatic ecosystem interfacing with a Garry Oak ecosystem because they are not very common, and sometimes you get unusual species. Hardly anyone gets to see the stream through the golf course. When we got permission to walk the tributary, it was amazing to see the creek running through rocks beside Garry Oak trees.”

“This tributary has remnants of both the Bowker Creek and Garry Oak ecosystems together. It is a unique experience to see these two together. In the future, I hope that might be a focus for a different type of restoration where it is not all about the creek and planting the usual riparian vegetation. It would be about restoring the Garry Oak ecosystem and restoring the interface that it had with the creek, and which is not dense vegetation,” concludes Adriane Pollard.

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## District of Oak Bay

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The Oak Bay experience illustrates the transformational influence of the Blueprint vision on local government processes, from the Official Community Plan to Council Strategic Objectives to departmental work plans and budgets.



**Dan Horan**

Director of Engineering  
& Public Works,  
District of Oak Bay

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*“Ever since I arrived in Oak Bay in 2016, I have found that we have so much on the go that it is difficult to devote as much time on Bowker Creek as I would like.”*

*“When I was coming up to speed for my first BCI meeting, I realized WOW - with incremental hard work we could create something spectacular by daylighting Bowker. It is exciting to be part of the group that is shepherding the Bowker Blueprint.”*

*“I really enjoy the inter-municipal nature. When you are aligned and share a vision, you can get a lot done.”*

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## Operationalizing A Regional Team Approach

In 2016, Dan Horan joined the District of Oak Bay. “When I arrived, the direction was clear. Completed in 2016, the [Official Community Plan \(OCP\) Update](#) has everything in it that one would want in the way of policy guidance for implementation of the Blueprint. There is no doubt in my mind that the work of the [Bowker Creek Initiative](#) is very much part of the Oak Bay OCP story.”

“Inclusion of the Blueprint was the culmination of many years of effort by all the folks involved in the BCI. They raised awareness that Bowker Creek is important, promoted inter-governmental collaboration, and facilitated cooperation among community groups. It was the BCI’s hard work, I believe, that mobilized the community to ask for it in the OCP.”

“The OCP engagement process shows that the community wants to see it happen. This desire is embedded in the OCP, reflected in the Strategic Objectives for Council, and solidified by commitments by Council to follow through with good asset management and fund infrastructure renewal. This direction allows me to focus the efforts of my department on figuring out the key actions that need to be taken.”

**Framing of the Infrastructure Servicing Challenge:** “In my five years with Oak Bay, one of the things that has been happening is a renewal in the desires of Council and the community to start managing assets in a way that is sustainable in the long term. If we are going to have a sustainable Oak Bay community for 50 years, 100 years or longer in terms of the services that matter, then how we will achieve that? That question defines the infrastructure servicing challenge.”

“It is interesting how the Bowker watershed and the creek channel itself fits into that bigger picture of [sustainable service delivery](#). It is all coming together at the same time. There is a consensus in Oak Bay that Bowker Creek is a valuable asset; and it is necessary for the community to steward and manage it going forward. Therefore, the municipality must plan for, and have aspirations and desires and a vision for, what Bowker could look like 50 years from now.”



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### ***Integrating Natural Assets into Municipal Infrastructure:***

*“The Bowker Blueprint is not something that the community groups could do by themselves. One needs each municipality to be part of it; one needs the institutions to be part of it. The Blueprint needs to be a vision shared by all going forward.”*

*“This is an interesting time to be part of the Blueprint process and consider what the future holds for natural assets in Bowker Creek and in the region. There are many aspects coming together at the same time.”*

*“Executable, actionable things are on the agenda for us to do now. Whereas 20 years ago, it was all about convincing folks that this is important.”*

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## **Bowker Blueprint: Cathedral Thinking in Action**

“I like to use the expression ‘cathedral thinking’ because people either already know and understand what it means, or you can use it as a conversation starter about a bigger picture. Cathedral thinking is a way of explaining that you can design, or plan, or think things through, so that your short-term goals all build to something longer term. In this way, the cathedral thinking idea is a helpful model of how to think about things. This idea is now in my toolbox,” continues Dan Horan.

“The idea is that any one planner, designer, constructor or owner does not get to be there for the full process because it is a 100 or 200-year build. But this does not matter. Those involved in the process have a bigger picture in mind. The fact that one does not get to benefit from the end-product does not mean that one is not going to do it.”

***Reflections about the Intergenerational Baton:*** “When it comes to municipal infrastructure renewal in general, I think of it in terms of cathedral thinking that leads to 100-year outcomes for communities. And when we talk about the Bowker Blueprint being a 100-year plan, it means that those of us who are new to the process are picking up the baton and running for a while to move things along - so that 50 or 70 years from now there is a cumulative impact of many decades of positive change. And hopefully this will have a really great impact on the folks that come after us.”

“We are ramping up in Oak Bay to do more and more infrastructure renewal and planning for the future. We are creating capacity to get the job done as well. What I am trying to do is build it so that folks who come after me will not have to recreate how to do it. A program will be in place where team members can come and go. And when new members join, they will already know where we are headed and how to make things better from their very first day on our team.”

“It would be the same with future Councils and community members. They would see that we have a coherent plan of what we are trying to achieve in the short-term, and in the long term. If we articulate that well, and lay out what the rationale is, then even new folks would say: *oh, I get it and that makes sense, and I am glad that we are heading in that direction.*”

“We can always tweak and do course corrections if there is a vision of where we are headed. Then it is easier for people to join and pick up and run in that direction too.”

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## City of Victoria

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Brianne Czypyha, Stormwater Management Specialist with the City of Victoria, offers unique insights because of her sense of history combined with the significant role that she plays as both a champion and interpreter for the Bowker Creek Blueprint. She began her career in local government with the CRD and then joined the City of Victoria in 2013.

***Intergenerational Baton:*** In Part A, we introduced Steven Fifield, the City's original representative on the BCI Steering Committee. When he retired in 2013, he handed the intergenerational baton to Brianne to carry forward. Brianne has done this with passion and enthusiasm.

"I sat at some tables with him over the years and was always impressed at how he made that shift from being the underground utilities engineer to being passionate about watersheds. I have a great memory of Steven at about the time that I started with the City and right before he retired," recalls Brianne Czypyha.

"He asked me to help take a visiting delegation from China on a tour of green infrastructure. It was a lovely way for Steven and me to connect. We put together the watershed protection component and the City of Victoria projects piece. This was his handing off the baton to me."

"During development of the Blueprint, I was an observer. In reality, however, it too was a passing of the baton to me. Now that I am working at the City of Victoria, I can apply my knowledge of the inter-municipal watershed management approach. Watersheds do not typically follow jurisdictional boundaries. We cannot work in a vacuum."

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### ***From Awareness to Implementation:***

*"At CRD, I was an observer of the process of putting the Blueprint together. I remember the blood, sweat and tears that went into the Blueprint. It was so inspiring to see it happen. For me, it was interesting being a party to the conversation because I was a member of the CRD watershed team. Now I am taking the next step at the City of Victoria where I am on the implementation side of the Blueprint. This is what really pulls it all together for me."*

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"The fact that we have been given direction by City Council to move the Bowker Blueprint forward and look for opportunities to daylight the creek means everything. Unless you have the high level 'this is what we want to do' permission, pushing it up from the bottom really does not work."

**Brianne Czypyha**  
Stormwater Management Specialist  
City of Victoria

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### **The Change in Awareness:**

*“The conversation has moved forward so much since I started in 2008. There was so much work to be done then to get the concept that we all live in a watershed upfront in minds.”*

*“In those days, it felt like we were all saying the same thing, but we were not always using the same words. And the average person had little idea of what we were talking about.”*

*“Today, we do not have to explain that green infrastructure has value and co-benefits. Now it is about looking for opportunities, with the question being how do we get it done rather than why should we do it? This a big step forward in thinking.”*

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## **We All Live in a Watershed**

“We need to work collaboratively and cooperatively to put the Bowker Blueprint vision into action. The watershed does look different depending on which municipality you are standing in. But, at the end of the day, what happens in Saanich does have an effect on the creek as it flows through Victoria, and then as it flows through Oak Bay,” continues Brianne Czipyha.

“And now in Victoria when we are looking at development projects, we think about the watershed context. When we ask developers to use green stormwater infrastructure, we consider how it would affect the creek, the flows, the water quality, and downstream neighbours.”

**Daylighting Feasibility Study:** “There is no open stream flowing through the City of Victoria. This makes it hard to tie the idea of a watershed to what is happening on the ground in the city. In February 2021, we presented an update report to Council on both the Bowker Blueprint and the [Daylighting Feasibility Study](#). We asked Council to receive the report for information. They took it a step further.”

“Council passed motions recognizing the ten-year anniversary of endorsement of the Bowker Creek Blueprint, and recommitted to its implementation. They also directed staff to report back on scope and resources needed to daylight certain reaches of the creek identified in the Daylighting Feasibility Study. This is an important step in moving us closer to having open reaches of the creek in Victoria.”

“In addition, they passed partner motions to direct staff to look for opportunities to restore or daylight other historic creeks in the City.”

**Implementation is Next:** “Daylighting is a huge long-term project. With the completion of the feasibility study, which included input from other departments, we now have options for where the creek could go and what it could look like.”

“Because we know where stream daylighting overlaps with other City plans and policies, we can take the next step to look at what we could do on the ground and what it could cost. We are well-placed for grant applications or emerging opportunities for partnerships.”

## Green Infrastructure and the Liveable City

The essence of the Bowker Blueprint is a ribbon of blue and corridors of green in an urban environment that reconnects people with nature.

“Green infrastructure can not only give us opportunities to better use our grey infrastructure, it also provides benefits for urban heat island effects and for access to nature and for all those other pieces that are important to making a city liveable and better for residents. And so, when you can put those things together, it is really easy to see that so many of these things are no-regrets actions,” states Brianne Czypyha.

“A big linkage is climate adaptation and the fact that water is such a huge piece of climate change that we are going to have to manage.”

**Re-Inventing Rainwater Management:** “There are many little steps that we have made in the city that support the Bowker Blueprint, and are applied city-wide – for example, through the Stormwater Utility. Two documents - the Bowker Blueprint and [Re-Inventing Rainwater Management](#) which was also published in 2010 – helped to shape the steps that we are taking.”

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### **Integrating Natural Assets into Municipal Infrastructure:**

*“The Bowker Creek EAP Project will help us put a value on natural assets. When we can see the longer-range benefits, it is easier for us to look at how we best invest now to adapt to the climate changes that we are seeing.”*

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“Victoria is a fully developed city. Because most of the work happening within the city is redevelopment which is increasing density, it is so important for us to be looking for opportunities to integrate rainwater management with landscaping features, and maximize the use of space for multiple benefits. The idea of multi-functional landscaping is key because we don’t have as much room for wetlands and riparian areas.”

**An Incremental Approach, Over Time:** “Victoria implemented the stormwater utility because of the need to manage the stormwater system similarly to how we manage our other utilities. But we are also able to look at what impact a property has on the drainage system, and what impacts it has on the creek and receiving environment. We are looking at impervious area on a property, the land use itself, and what kind of activities happen on a property.”

“This approach is allowing us to move forward slowly and incrementally as the city redevelops. And that really aligns with the idea of the Bowker Blueprint and the 100-year action plan. The City of Victoria did not develop overnight, and we will not redevelop overnight. We need to take a small-scale, distributed approach to how we do things so that eventually green infrastructure is commonplace across the city and we can say *this is how we do business.*”



## Cathedral Thinking Applied on the Ground

“When I joined the City of Victoria in 2013 to work on the new Stormwater Utility, there was a pretty steep learning curve,” explains Brianne Czypyha.

“Once we had a common understanding, we reached a place where colleagues now come to me and say ‘*hey, Brianne, I have this idea*’ or ‘*there is this development is happening and I think you should take a look at this*’.”

“Green infrastructure is getting into the City’s DNA such that we collectively look for and at all those opportunities. And that really fits hand in hand with the Council motion to recognize, and look for opportunities to daylight historic creeks.”

“We will be looking for opportunities related to how our public works department does business, how we do property redevelopment, and how we do municipal infrastructure projects.”

### ***Intergenerational Implementation of the 100-Year Action***

***Plan:*** “It really feels like there is momentum right now. Even if it takes another 50 or 100 years for us to get the creek daylight, the fact is we are in place where we are moving steps closer.”

“The daylighting feasibility study is the big catalyst for that. The City of Victoria has a plan which can now be implemented. That is big because the hardest thing is to get everyone in the room together to first have the conversation; and then to have somebody actually draw on a map that this is the location to daylight the creek, and this is why we think it will work. This is key.”

“The second decade of Bowker Blueprint implementation speaks to intergenerational thinking. We are taking cathedral thinking, which is the 100-Year Action Plan for the Blueprint, to do something that is actually on the ground – daylight Bowker and restore historic creeks in the City of Victoria,” concludes Brianne Czypyha.

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## Moments that Shift Understanding

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Jeremy Loveday, City of Victoria Councillor, has recently emerged as a champion for the Bowker Creek Blueprint among elected representatives in the three partner municipalities. In effect, Jeremy Loveday has taken the intergenerational baton from the late Vic Derman, long time Saanich Councillor, who was a passionate and visionary advocate for an approach that he called [The Natural City](#).

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*"It was my discussion with Soren Henrich and looking at the maps that spurred me to read the Bowker Creek Blueprint from cover to cover and dive in. Obviously, it aligned with a passion that I already had. But what it ignited in me was a curiosity."*

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**Confluence of People, Place and Time:** "You never quite know what is going to create a moment for someone that will shift their understanding forever," states Jeremy Loveday. "But we must do our best to make sure that we are presenting the opportunities for those moments to be created. The moment that shifted my understanding was seeing the maps for the Bowker Blueprint at the table setup by the Friends of Bowker Creek."

"If we can inspire those moments so that more and more people ask, 'what more can I do for the natural environment', we will make a lot more progress on protecting ecosystems and protecting against biodiversity loss, as well as taking collective effort to combat climate change. It is those moments of shifting understanding that we need."

"Bowker Creek is enough in everyone's mind that there is a seed there that something special is happening and is possible. Growing that understanding is what comes next. And that is what I was hoping to do with the motion that I brought before Council in February 2021."



"SEEING THAT BOWKER BLUEPRINT MAP AT THE CREEKSIDE CONCERT SERIES EVENT IN 2020 WAS THE MOMENT THAT SHIFTED MY UNDERSTANDING THAT OUR CITY IS OVERLAID UPON WATERSHEDS. THAT WAS THE MOMENT WHEN I ASKED: WHAT MORE CAN I DO?"

Councillor Jeremy Loveday, City of Victoria

## Inspired by the Bowker Blueprint

“I had been on Council for six years and had never seen the Bowker Blueprint,” continues Jeremy Loveday.

“Through my discussion with Soren Henrich at the Creekside Concert event held in 2020, I gained a deeper appreciation of the Bowker watershed and the role that the three municipalities could play in protecting and restoring it. And, I realized the importance of bringing the Blueprint to the forefront of people’s imagination of what can be.”

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*“The Bowker Creek Blueprint is too special to sit on a shelf. The potential embedded in that document deserves to be looked at, updated, and honoured with the work that it takes to restore the creek.”*

*“When residents imagine that creek filled with salmon, that is something that you can wrap your head around and say: okay, this is something that is possible in the near future **IF** we take care of this watershed.”*

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“I came to see celebration of the 10th anniversary as an opportunity for the City of Victoria to recommit to the Blueprint plus bring awareness of it to the forefront of people’s understanding of the city that they live in, and the difference that their actions can have on the watershed.”

“As a City Councillor, I thought, if I do not have as deep an understanding of how our city overlays different watersheds and the impacts that policies and every day actions have on those watersheds, then what is the chance that someone who is just going about their daily business is going to have that understanding?”

“I started posting information on my social media. So many people had never seen these maps and had not realized that rainwater runoff from their house ends up in Bowker. One time I posted on Twitter about the 100-year plan, and people thought it was a typo. But that is what it will take to reverse 100 years of culverting and paving over the creek.”

**Whole-System Approach:** “I worked with the Friends of Bowker Creek as well as neighbourhood associations to understand what is the most helpful thing that we can do now, and to make sure that my recommendations to Council were right. My objective in presenting the 12-clause motion was to use the 10th anniversary as momentum to expedite the process for implementing this plan.”

“When I brought forward the Council Resolution, I was not just thinking just about Bowker Creek. The long-term vision that has brought about a decade of success can be recreated for other urban waterways. That is one of the things that came out of the motion passed by Council. Can we start looking at other creeks for daylighting opportunities in the long-term? We need to start thinking of all of them as systems.”

“We need a long-term vision for land use and transportation planning; and how we can piggy-back little upgrades with other projects. The Blueprint is a very visionary document, and I am really inspired by it.”



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## CRD Coordinator

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The CRD has the coordinating role for the Bowker Creek Initiative. The three municipalities co-fund a part-time coordinator. In Part A, we highlighted that “all partners agreed that having a dedicated part-time coordinator was the most important factor” in consistently moving the Bowker process forward over time.

### Carrying the Intergenerational Baton Forward

In 2020, Lindsey McCrank joined the CRD and assumed the BCI Coordinator responsibilities just as the BCI is about to embark on the next phase of the Blueprint journey. Hence, her perspective takes on relevance when viewed through the intergenerational lens.

“As I reflect on my first year in the BCI Coordinator role, I feel very much like I am a student of the creek. I am looking to lots of teachers who are so knowledgeable and with so much history. The community members are incredibly inspiring with the energy that they bring to the group. Some people might volunteer as a hobby. With the BCI group, however, their volunteering seems key to their values and is such a deep part of their lives. I find that really inspiring.”

**A Shared Commitment:** “It is almost like you get goose bumps at the BCI meetings because people are so committed to the creek. It is the focus of all their efforts. At the BCI table, the municipal representatives set aside their other inter-municipal differences. They want to work together. This is a big reason why we are successful. There is a shared commitment to the creek that is very strong.”

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*“After retiring from government, Ian Graeme has returned to the BCI table as a valued member. As a result of his return to active duty, I have realized that Ian has a huge amount of expertise. His approach is thoughtful, respectful, and diplomatic with his suggestions. It has been great to have him as part of the group again.”*

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“All these people are my teachers, and I am learning from all of them. Is this the intergenerational baton in action? Absolutely! You cannot just pick up the baton and not know where you are coming from. You need all that history.”

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Lindsey McCrank,  
Coordinator, Bowker Creek Initiative

## Moving Towards “Bowker Blueprint 2.0”

“Along with the community members, the commitment of all three municipal partners is also inspiring to observe and experience. Municipal staff are so supportive of the Blueprint vision, and all three Councils are in the process of recommitting to the Blueprint and the implementation strategy for stream daylighting,” continues Lindsey McCrank.

“Now, as the BCI prepares to embark on the second decade of implementation, the partners are excited when they contemplate what a fresh set of actions comprising Blueprint 2.0 would look like. In particular, there is lot of talk and considerable interest around the greenways aspect of the Blueprint. And, of course, daylighting continues to be a big focus for our current efforts.”

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### **Looking to the future through the intergenerational lens**

*“When new members get involved in the BCI, they will be in the position to accept the intergenerational baton just as I did. I believe the Partnership document about the Blueprint history will be useful, as a legacy resource, in helping new members get up to speed.”*

*“One has to keep moving forward, transfer the knowledge to new people, and blend their experience and thoughts. Every person who is involved will alter the course of our future actions. I am excited to see where the Blueprint will lead us in the next little while.”*

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**Community Volunteers are Sharing the Workload:** “There is so much momentum. It is just a matter of harnessing the energy and being able to keep things moving when the time allocation for my Coordinator role is limited to one day per week. Community members are really stepping up to take on additional responsibilities and fill gaps – for example, a community volunteer (Susan Haddon) is helping to develop and assist with implementation of the vitally important BCI Communications Strategy. This is the type of volunteer commitment that makes such a difference to the success of the BCI over time.”

“I am hoping that as we move forward with the new pieces – the greenways and Blueprint 2.0 - the momentum will just keep building. Built into those processes is communication with everyone. I anticipate the knowledge transfer process will just keep going and I will be absorbing it as best that I can. Eventually I hope that I am the person that others will come to with their questions about the Bowker history, where we have come from, and where we are going.”

“If we just stopped here, I could see our energy fading. We have accomplished the majority of the 10 key actions from the first Blueprint. To keep us energized moving forward, the focus will shift because the world is in a different place - for example, there is more emphasis on greenways and climate adaptation. These will have more of a focus, as will stream daylighting.”

“These new pieces of interest and information will go into Blueprint 2.0 and shift our course a little bit for the better.”

## The Last Word

Over time, two individuals stand out for the leadership roles they have played. Without the dogged determination of Ian Graeme in the early days, there is no [Bowker Creek Initiative](#). Without the passion and persistence of Jody Watson to hold it all together during a very difficult and challenging period, there is no [Bowker Creek Blueprint](#).

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### Historical Context is Important

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In this, the concluding section of **A Beacon of Hope**, Ian Graeme and Jody Watson have the last word. They provide historical context and perspective as they reflect on the BCI journey. Along with Adriane Pollard of Saanich, Ian Graeme and Jody Watson represent continuity of involvement and steadfast leadership.

They are catalysts in the process that is rippling through time: create the shared vision for Bowker Creek restoration; defy and beat the odds to influence decision-making in three communities; and inspire others to bring the vision to fruition through the [100-Year Action Plan](#).

Jody Watson is widely recognized as the “the face of the BCI” because she served as BCI Chair for many years. Her tireless efforts in sharing the Bowker story in forums around British Columbia are a source of inspiration for others in local government. Jody’s core message is that bringing a degraded creek back to life is mission possible.

### Bowker Creek Champions

From left to right: Soren Henrich, Natalie Bandringa, Jody Watson, and Ian Graeme.

In April 2012, a celebration of the 10<sup>th</sup> anniversary of the first Bowker Forum.





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## Ian Graeme

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“When we incorporated the Friends of Bowker Creek Society, the mid 1990s was a time of a greenways movement in BC,” says Ian Graeme. “This became one of our four goals: create a Bowker greenway to increase access to the creek. If more people became familiar with the creek, we believed, public interest would drive creek restoration.”

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*“It is important to acknowledge the major contribution by Adriane Pollard. Her commitment to sharing her experience and enthusiasm for 20-plus years is truly remarkable and speaks to her character and her commitment to Saanich. It is not easy for Adriane. Her role is challenging. She is a real bright light.”*

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## UN Decade on Ecosystem Restoration

“Oak Bay, Saanich and Victoria have all issued proclamations supporting the [UN Decade on Ecosystem Restoration](#). This is a rallying cry to prevent, halt and reverse the degradation of ecosystems caused by current and past generations. The [Bowker Blueprint](#) is a great example of something that is tangible and aligns with the overarching policy commitment in the municipal proclamations.”

**Reconnecting Kids with the Creek:** “Municipal parks tend to be manicured settings. However, there is an increasing recognition of the value of nature within cities as well. Bowker is an example of where, over time, communities can create an ‘emerald necklace’ running through the urban Greater Victoria region. Imagine if kids could once again touch the creek and walk through it in their bare feet. And all within walking distance! The daylighting feasibility study shows what is technically possible in creating the emerald necklace.”



Ian Graeme on his legendary canoe portage

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“I USED TO RIDE MY BICYCLE TO SCHOOL AND CROSS BOWKER CREEK TWICE A DAY ON RICHMOND ROAD. IN 1971 OR 1972, THE CITY OF VICTORIA CULVERTED THAT SECTION OF THE CREEK. HERE WE ARE 50 YEARS LATER, AND WE HAVE THIS GAME-CHANGING DAYLIGHTING FEASIBILITY STUDY. WITHIN THE NEXT DECADE, I AM HOPING TO SEE THAT SAME CULVERT REMOVED. IT IS NOW MISSION POSSIBLE.”

IAN GRAEME, FOUNDER  
FRIENDS OF BOWKER CREEK SOCIETY



## Daylighting Feasibility Study

"I used to ride my bicycle to school and cross Bowker Creek twice a day on Richmond Road. In 1971 or 1972, the City of Victoria culverted that section of the creek. I remember thinking why are they doing that? Something is not right about this. We are burying an opportunity and part of Victoria's waterfront. Here we are 50 years later, and we have this game-changing daylighting feasibility study. I am hoping to see that culvert removed. It is now mission possible," Ian Graeme says.

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### **Why Relationships Matter Most:**

*"Technical knowledge is not enough. You learn that technical competence alone is not going to get you there. That is what I want to pass on to people. If you have a technical problem, it is relationships that matter most. Strong relationships help make the BCI agile."*

*"We need agility because we do not have the time and resources. At one level, all of us are too busy. At another level, and given the challenges posed by the issues of the day, we need to move on opportunities very quickly."*

*"Over a career, you do learn that it is all about understanding people. Technical knowledge is incidental sometimes."*

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**Game-Changing Action by the City of Victoria:** Ian Graeme provided this perspective on the Council Meeting in February when councillors passed the 12-clause motion that committed Victoria to look for opportunities to daylight Bowker and other historic creeks:

"Two decades ago, as a citizen, I might have felt compelled to say 'well, I'd like to add A, B, C and D.' When I saw the staff presentation to Council by Jas Paul and Brianne Czipyha, I thought 'there is little I could add'. They covered it all and they communicated it with professionalism, with commitment, and they came across as the voice of the BCI. They nailed it."

**Watershed Thinking Led to Kings Park Collaboration:** "The land that is known as Kings Park had been owned by BC Hydro since the late 1950s. Saanich, with the active encouragement of local residents, recently bought the land with the proviso that the community help contribute to the purchase price. In July 2021, the Saanich Mayor asked Victoria and Oak Bay to contribute financially because the park would serve residents in all three municipalities."

"It was interesting to observe that the Bowker Blueprint was a central argument about why the three municipalities should collaborate on the purchase. This was done outside the BCI. But it was another example of collaboration which I think has been reinforced by watershed thinking. The acquisition serves all our municipalities; it is integral to the health of the creek; and what we do upstream will have benefits downstream in Oak Bay. Mayor Haynes' request promoted some great conversations between Councils."

**Friends of Bowker Creek:** "Soren Henrich has done an awesome job in re-energizing the Friends of Bowker Creek Society. He has learned, through his years of experience, how to attract talent and get residents working on projects that mobilize their passion," concludes Ian Graeme.

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## **Flashback to April 12, 2012:**

*"I was reviewing my calendar this morning and the date - April 5, 2002 - jumped out – does anyone know the significance of that date? Well, 10 years ago last Thursday was the date of the first day of the Bowker Creek Watershed Forum (in April 2002)," stated Ian Graeme.*

*"The Forum was the process that led to the Watershed Plan, the formal establishment of the Bowker Creek Initiative and the creation of this Steering Committee. Ten years later we've just achieved some very significant milestones: the \$738,000 federal gas tax grant – which of itself is a tremendous achievement; completion of the Blueprint, of course; and now, the video project that tells our story."*

*"So, it is an opportune time to recognize a couple of people on the committee – namely our Chair, Jody Watson; and our Coordinator, Natalie Bandringa."*

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## **Jody Watson**

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The Capital Regional District (CRD) has the coordinating role and chairs the Bowker Creek Initiative (BCI). After the BCI was created in 2004, Jody Watson was appointed as Chair in 2005 and served in that capacity until 2018. Her tenure was a remarkable period of 13 years of notable accomplishments. In her current role at CRD, Jody Watson continues to provide oversight for the coordinator function.

When the BCI Steering Committee met on the 10<sup>th</sup> anniversary of the first Bowker Creek Forum, they surprised Jody Watson with a special award to recognize her sustained commitment and leadership over many years. They also recognized the contributions made by Natalie Bandringa, who was then the Bowker Creek Coordinator. Ian Graeme made the presentation.

## **A Tribute to Remarkable Leadership**

"As we all know collaboration can be really hard work; and it usually doesn't just happen. It takes genuine and committed leadership to cultivate those relationships, build trust and a community. I believe you will all agree that Jody and Natalie have provided us with some remarkable leadership, and we'd like to recognize that leadership here today," stated Ian Graeme.

"Jody, here a just a few of your leadership qualities that impress me: You excel at communicating the vision and instilling a sense of mission that is true to the watershed plan. You have put a lot of emphasis on developing relationships and trust. You are a great communicator and are always looking for opportunities and focusing us on results."

"Natalie, we are very fortunate to have you. You are one of those exceptional people that brings strong technical knowledge and understanding with superior people skills. That combination has really inspired many in the community and is helping cultivate a sense of ownership. It is that sense of ownership that is so essential if we are to move from ideas to action."

"So, on behalf of the steering committee, I again want to thank both of you and express how valuable you are to the success of the BCI. Yes, it took a group effort to conclude the Grant and the Blueprint, but these two individuals did most of the 'heavy lifting'," concluded Ian Graeme.

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### ***“We Have Done Good”***

*“Look at all that has been accomplished,” says Jody Watson. “Now, the next step is that the City of Victoria is asking how do we daylight all our historic creeks. That is huge!”*

*“The BCI is more than the people sitting around the BCI table. They are representatives of an extensive network that includes three Councils, every department, 11 community associations, and the CRD too.”*

*“This network is a true community-driven collaboration made up of people with a lot of heart, grit, commitment, and dedication. They are dedicated to achieving the Bowker Blueprint vision.”*

*“That is what makes it the best. We are watching it implement organically and operationally, unlike how it was 10 years ago when we were always banging at doors and saying don’t forget about the creek.”*

*“It is very gratifying and a real feather in the cap for all BCI members.”*

*“We can be proud of our accomplishments. We have done good. (long pause) We have done good.”*

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## **Vision + Conversations = Collaboration + Action**

“It is exciting. Who gets to have a job where part of your job is to try and figure out how to get a creek out of pipes? Who gets to do that?” asks Jody Watson rhetorically and with a shrug of her shoulders.

“Not too many! I feel so fortunate, and to be able to play a leadership role. I am super-proud of what we have done, and it is because of the people at the table. It is because of the conversations we have. We always have the conversations. We do not shy away from the hard conversations. Sometimes they are really hard, and sometimes we have to had bring in external people to have those conversations.”

**“But nobody has ever thrown up their hands, said I am not having this conversation, and walked away.”** We have always managed to be able to have the conversation and been able to go back to the Blueprint vision. If the vision says this, we ask, can we do that if the creek is in a pipe. No, we cannot? Okay, then what do we need to do?”

“We have spent 20 years of trust-building, of credibility-building. All that is part of collaboration, and that is what makes collaboration work. We had little successes and we had big successes. And we had more than one setback. But we did not walk away when we had a setback. We came at it from a different angle. We said where did we go wrong? What do we need to do? What is the barrier that we are not seeing and that is stopping us? Then we would figure out what that (barrier) is and how to get around it.”

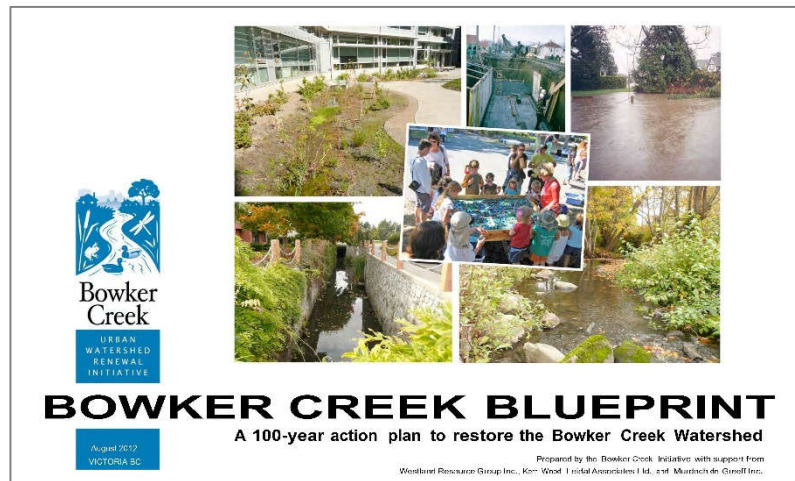
**“How do we re-think things? It takes tons of conversations.”** Getting out on the land is the other thing. We can sit in a room and talk all we want. But going out to the site - with a developer, with the community, with the politicians, with the engineers – looking at the site and saying: here are the problems, this is what we need to fix, how do we work together to do that?”

“That is about commitment and about people believing in that vision. People really believe in that vision! And they are a really great group of folks too. I have so much respect for all of them. Everybody has their role. They all know what their role is, and they are actively engaged in fulfilling that role. That is across the board now.”

**“Now it just happens organically.”** We get to reflect, smile, and say look at what we did. We did this together. And now it is happening. Now the Councillors are talking about it. Look at what is happening in the City of Victoria with the work that Councillor Loveday and Soren Henrich are doing. It is going to be brilliant!” concludes Jody Watson.

## PART D

# A Celebration of Achievements



*To celebrate the first decade, the BCI has produced a reader-friendly document that elaborates on notable accomplishments. It is presented next because of its historical value in documenting the “story of the Bowker Creek Blueprint”.*



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# Bowker Creek Blueprint

## 10 Year Achievements | 2021



Bowker  
Creek

URBAN  
WATERSHED  
RENEWAL



## Introduction

The *Bowker Creek Blueprint* is a 100 year action plan to restore Bowker Creek, which runs through Greater Victoria's most urbanized watershed. Bowker Creek flows from its headwaters at the University of Victoria to its outlet near Willows Beach, through the municipalities of Saanich, Victoria, and Oak Bay. Much of the creek is buried in pipes and culverts, and poor water quality, flooding and invasive species are major issues. Local governments, institutional partners and community champions have embraced the vision of a restored creek and the potential it offers to improve ecological health, hydrology and community stewardship throughout our region.

The *Blueprint* was written in 2010 and subsequently endorsed by City of Victoria (2011), District of Saanich (2011) and District of Oak Bay (2012). These three municipalities, along with community and institutional partners, implement the *Blueprint* through the CRD's Bowker Creek Initiative (BCI). The *Blueprint* provides these municipalities, community and other land steward organizations with information and guidance to manage and restore the watershed and creek corridor.

Considerable progress has been achieved as the *Blueprint* reaches its ten year anniversary. This document has been prepared to review the ten key actions for short-term implementation identified in the *Blueprint* as important first steps for municipalities and land stewards to achieve. This milestone also provides an opportunity to document and









## BCI Blueprint 10 Year Achievements

celebrate the important work accomplished to date by BCI partners and the many community members and partner organizations who are vital to its success. This document serves as a launching point for the next phase of restoration and renewal of Bowker Creek.







Table 1 provides a summary of successes in achieving the 10 short terms actions outlined in the *Blueprint*, as well as achievements in a selection of other important areas to be celebrated. The Bowker Creek Watershed map, following Table 1, highlights a selection of accomplishments throughout the watershed.

**Table 1: Snapshot of Success:  
Blueprint Short Term Actions and Other Key Achievements**

 Action largely completed       Action underway

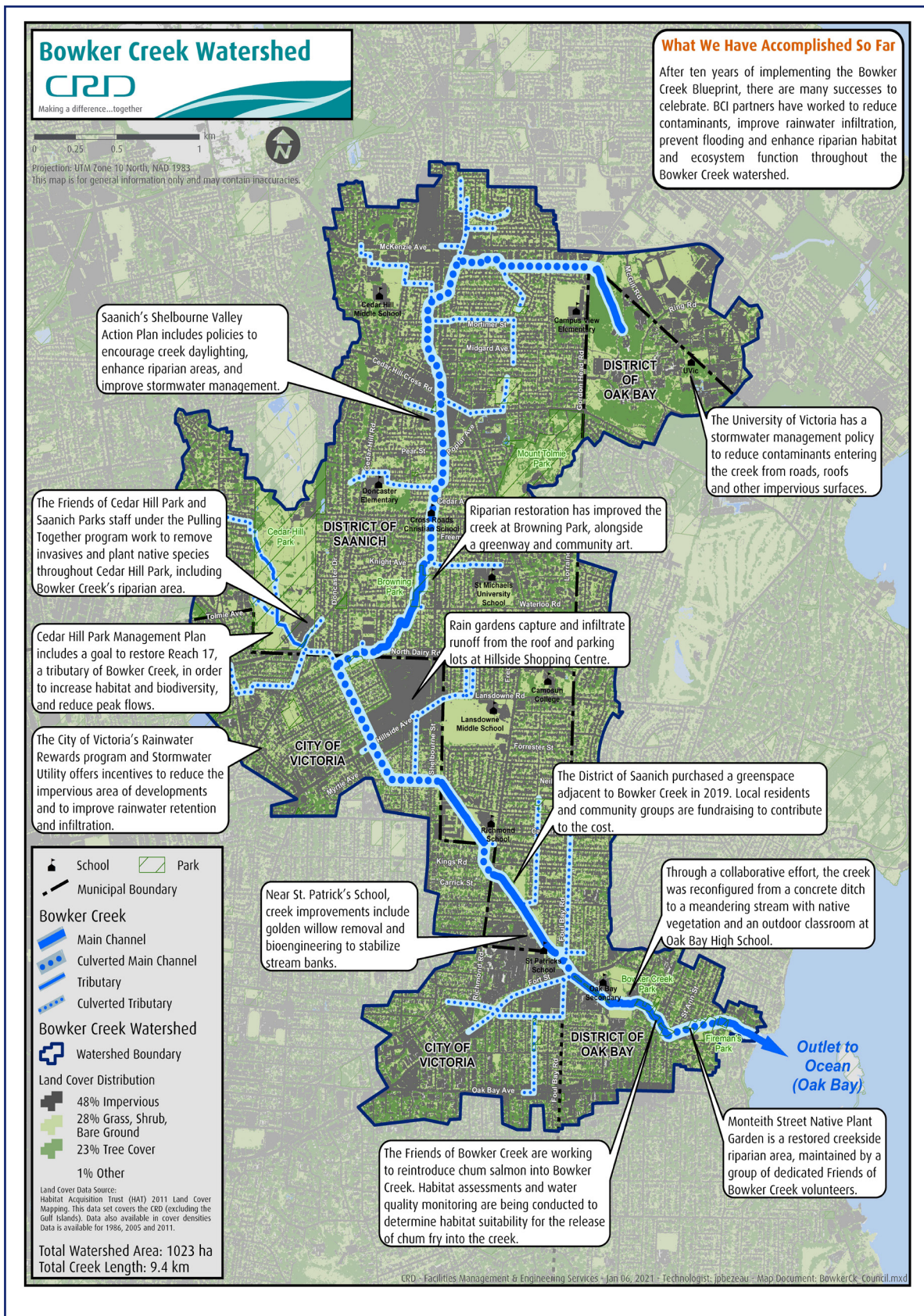
Short Term Blueprint Actions			
<b>Municipal plans should include Bowker Creek goals and actions</b> <ul style="list-style-type: none"> <li>Bowker Creek is referenced in plans in all three municipalities.</li> </ul>		<b>Reduce effective impervious area for new developments</b> <ul style="list-style-type: none"> <li>City of Victoria is leading the way in mitigating impervious surfaces through Rainwater Rewards program and Stormwater Utility.</li> </ul>	
<b>Remove target invasive species</b> <ul style="list-style-type: none"> <li>High priority species have been reduced/eradicated.</li> <li>Volunteer efforts help to control invasive plants throughout the watershed.</li> </ul>		<b>Rainwater management demonstration site in each municipality</b> <ul style="list-style-type: none"> <li>All three municipalities have at least one site.</li> </ul>	
<b>Oak Bay development of Urban Forest Strategy</b> <ul style="list-style-type: none"> <li>All three municipalities now have strategies.</li> </ul>		<b>Develop a strategy to acquire key properties</b> <ul style="list-style-type: none"> <li>The <i>Blueprint</i> and the 2020 Daylighting Feasibility Study provided the municipalities with lists of key properties for acquisition, which municipalities are operationalizing.</li> </ul>	
<b>Oak Bay High School creek restoration</b> <ul style="list-style-type: none"> <li>The creek was restored through a collaboration between SD61, Oak Bay, and the BCI/CRD.</li> <li>Students, staff and community volunteers remain actively involved in maintaining the site.</li> </ul>		<b>Shelbourne Valley Action Plan input</b> <ul style="list-style-type: none"> <li>Opportunities to daylight and restore Bowker Creek are featured prominently throughout the action plan and will help to facilitate future creek daylighting.</li> </ul>	

## BCI Blueprint 10 Year Achievements

Other Key Achievements			
<b>Work with landowners between Pearl and Trent Streets to achieve long-term vision</b> <ul style="list-style-type: none"> <li>The Daylighting Feasibility Study provided a plan for restoring the creek through Richmond School and King's Park. The District of Saanich put funds towards the purchase of community green space in 2019, with community members working to fundraise a matching amount.</li> </ul>		<b>Restoration work at Browning Park</b> <ul style="list-style-type: none"> <li>Browning Park boasts a natural creek channel, with a greenway and community art.</li> <li>Work to remove invasive plants and reduce erosion is ongoing.</li> </ul>	
<b>Daylighting Feasibility Study completed</b> <ul style="list-style-type: none"> <li>This study lays the groundwork for coordinated and operationalized daylighting of the creek and development of a new greenways network</li> </ul>		<b>Community engagement and stewardship</b> <ul style="list-style-type: none"> <li>Through outreach events, presentations and work bees, community members have learned about Bowker Creek and their role in its protection</li> <li>Community members are taking ownership of the creek and its stewardship through invasive species removal, water quality monitoring and fish habitat restoration</li> </ul>	
<b>Partnership building and collaboration</b> <ul style="list-style-type: none"> <li>Key partnerships include SD61, University of Victoria, Community Associations, and the Friends of Bowker Creek. SD61 officially endorsed the <i>Blueprint</i> in 2018.</li> </ul>		<b>Water Quality Monitoring</b> <ul style="list-style-type: none"> <li>CRD staff carry out invertebrate sampling and regular water quality testing including temperature, pH, oxygen, metals, and E.coli. Friends of Bowker Creek have begun additional water and invertebrate sampling as part of their Chum Salmon Recovery Project, and will share this data with the CRD.</li> </ul>	



## BCI Blueprint 10 Year Achievements



## Key Actions for Short-term Implementation

This section examines progress made in achieving the ten key actions that were identified in the *Blueprint* as high priority actions. These actions were deemed to be relatively achievable with significant positive benefits for Bowker Creek.



### ✔ Action #1: Review and revise municipal plans to include Bowker Creek goals and actions

All three municipalities have successfully included *Blueprint* goals and actions into their municipal plan. This action is important because it helps to ensure that the aims of the *Blueprint* are integrated into municipal plans and on-the-ground operations. This section summarizes the various ways the three BCI municipalities have incorporated the *Blueprint* into their plans and policies.

#### District of Saanich

The District of Saanich's Official Community Plan (OCP) predates the *Blueprint* (2008) but since the *Blueprint*'s publication, Saanich Council has committed to enhancing the Bowker Creek watershed through various motions and plans. Concurrent with its endorsement of the *Blueprint* in 2011, Saanich Council passed a motion that the "Planning, Engineering, and Parks and Recreation Departments be directed to consider the principles and actions for watershed management, the ten key actions for short-term implementation, and stream reach actions of the Bowker Creek *Blueprint* when developing Departmental work plans and budgets." This motion supports numerous noteworthy policies and plans:

#### Shelbourne Valley

Bowker Creek runs roughly parallel to Shelbourne Street in Saanich's highly urbanized Shelbourne Valley, which holds important daylighting and restoration potential. The Shelbourne Local Area Plan was adopted in 2008 and includes two key policies that relate to Bowker Creek:

- Policy 5.4: Seek opportunities to restore and daylight Bowker Creek
- Policy 5.5: Support community initiatives by a variety of institutions to create a stream stewardship and Environmental Education Program related to Bowker Creek.

In 2017, Saanich Council adopted the Shelbourne Valley Action Plan. This plan is described in more detail in Action #8, later in this document, and contains important commitments to restoring the ecological health of Bowker Creek.

#### Cedar Hill Park Management Plan

A tributary of Bowker Creek (Reach 17) runs through Saanich's Cedar Hill Park, flowing through an open channel near the Cedar Hill Recreation Centre and ball diamonds. Saanich Council endorsed the Cedar Hill Park Management Plan in 2020, which prioritizes the restoration of Reach 17 as an environmental management and restoration goal. In particular, the plan's Goal 1.0: Move the Bowker Creek *Blueprint* forward lists the following actions:

- Based on modeling completed by Kerr Wood Leidal (KWL) in 2018, develop a detailed plan for improvements to sections of Reach 17 which will include some public interaction with the creek (viewing, etc.)
- Seek funding opportunities (grants and community partnerships) to complete the restoration as planned
- Implementation of improvements to Reach 17 which includes public amenity improvements such as viewing opportunities, interpretive/educational signage and seating.



### Spotlight: Community Associations

Numerous Community Associations have been important partners in implementing the *Blueprint* at the local level. Members of Community Associations representing Oak Bay, Camosun, Quadra Cedar Hill, and North Jubilee have all been involved in the coalition since its inception. Community Association members play a key role in sharing a neighbourhood perspective about Bowker Creek with local government staff.

### District of Oak Bay

Oak Bay's OCP (2014) references Bowker Creek numerous times:

- Community-wide guidance is provided related to the reduction of impervious surfaces, and support for Bowker and Hobbs Creeks watershed improvement plans. (Pages 52-54)
- A Rainwater Management Bylaw is proposed that would require low impact development practices to increase onsite retention and absorption of rainwater, reducing the effective impervious area in the watershed (Page 59).
- A commitment is made to explore opportunities to acquire the Bowker Creek bed and adjacent slopes as options arise through changing ownership (Page 59)
- Any improvements to the tennis bubble at Oak Bay Recreation Centre should include the potential for daylighting portions of the creek (Page 115)
- The District will explore opportunities for a multi-use greenway corridor along Bowker Creek, in accordance with the proposed regional greenway system, ideally outside of the riparian setback area (Page 122).
- Watercourses Development Permit Area requirements specifically reference Riparian Area Regulations, including guidance related to Bowker and Hobbs Creeks (Pages 169-173). Special guidelines for Bowker Creek include:
  - For any major development projects on sites where Bowker Creek is buried, consider 'daylighting' the creek if possible.
  - Increase the width of the undisturbed riparian area along the creek, ideally to 30 metres from the top of bank, and restore and enhance riparian vegetation in this area.
  - Design the creek and the riparian corridor to provide native habitats, biodiversity, and passage for fish and wildlife. Replace any hard structures such as walls along the creek with landscape solutions such as planting or bioengineering, subject to bank stability and erosion control considerations.

### Spotlight: Friends of Cedar Hill Park

Cedar Hill Park is home to a tributary of Bowker Creek (Reach 17) along the western edge of the Bowker Creek watershed. This section of the creek is significant because it is on public land and is accessible to the public. The Friends of Cedar Hill Park (FoCHP) came together in 2006 to protect the natural areas of Cedar Hill Park, including Reach 17. Between 2012-14 the Friends worked alongside other community members to successfully oppose a proposal to build eight clay tennis courts between Bowker Creek and the recreation centre. Members currently meet on a weekly basis to remove invasive plants throughout the park, and sit on the BCI steering committee.

## BCI Blueprint 10 Year Achievements



### City of Victoria

The City of Victoria's Official Community Plan (2012) references Bowker Creek watershed protection, creek daylighting, the development of greenways and riparian protection numerous times:

- **10.13:** Collaborate with the Capital Regional District, neighbouring municipalities, community organizations, property owners and other partners to protect and enhance streams and watercourses, including the potential daylighting of streams and improvement of riparian habitat, by:

- **10.13.1:** Implementing management plans for the Bowker Creek watershed
- **10.13.2:** Exploring the acquisition and designation of creek side ecosystems through a Parks Acquisition Strategy or major redevelopment proposals
- **10.13.3:** Integrating the acquisition of natural creek side features into the development of greenways, where appropriate.
- Bowker Creek Greenways are outlined on the Greenways Network map (Map 6).
- Additionally, a commitment to "integrate Bowker Creek watershed protection and daylighting opportunities into land use planning" is listed as on Map 27, Jubilee Village Strategic Directions and Map 29, Oaklands Strategic Directions.

The City of Victoria's 2017 Parks and Open Spaces Master Plan incorporates the priority of daylighting or celebrating culverted streams, and specifically references Bowker Creek. The following is identified as a short term, high priority planning action:

- **1.2.3** Identify opportunities to daylight or celebrate culverted streams

### Spotlight: Friends of Bowker Creek

The Friends of Bowker Creek (FoBC) is a community-based group that works to "support the restoration and enhancement of Bowker Creek and its watershed to a healthy state, guided by the vision and goals of the Bowker Creek *Blueprint*." The FoBC have been instrumental in organizing educational and stewardship work that make an important on-the-ground difference in the watershed. Members of FoBC were a key part of the early production of the *Blueprint* and over the years have been closely involved in the restoration of the creek at Oak Bay High, the development of Bowker Creek signage and artwork, and organizing various community events including Communi-Tea celebrations and pendant printing

workshops. The FoBC have hosted the BCI educational display at many community events, including the interactive watershed model. They also hold regular work parties at Oak Bay High and Monteith gardens that give community members the opportunity to remove invasive species and plant native species along the creek.

In 2020, FoBC expanded its focus to include the Bowker Creek Chum Salmon Recovery Project, a multi-year project with the aim of restoring chum salmon back to the lower reaches of Bowker Creek. Volunteer streamkeepers are measuring water and habitat quality, with the goal of releasing chum salmon at Oak Bay High and Monteith Gardens over the next few years.



### **Action #2: Adopt requirements to reduce effective impervious area for new developments.**

Approximately 50% of the Bowker Creek watershed is covered by impervious surfaces, including roofs, roads and other hard, impenetrable surfaces. These impervious surfaces impact creek health by contributing to flooding, erosion, and poor water quality. The “effective” impervious area of the watershed can be lowered using green infrastructure features such as raingardens, permeable pavement and green roofs. In an urbanized watershed like Bowker Creek, new developments present an important opportunity to use low impact technologies to improve rainwater retention and infiltration.

#### **District of Saanich**

Saanich has a policy that new developments must detain stormwater run-off onsite, and is working to adopt new standards that will include infiltration.

#### **City of Victoria**

The City of Victoria has implemented two important programs to reduce the impervious area of new and existing developments:

#### **Hillside Centre stormwater management**

Hillside Centre is the single largest impervious surface in the Bowker Creek watershed. Through a partnership between the City of Victoria and the owners of Hillside Centre, numerous features have been installed to reduce run-off and improve stormwater quality. Parking lot improvements in recent years include tree wells and rain gardens to help slow and filter rain runoff. BCI interpretive signs provide public education about these green infrastructure features, and flagstone artwork reflects the water movement in the creek flowing underground.



### Rainwater Rewards program (2015)

The City of Victoria's Rainwater Rewards program is an incentive program for properties that manage rainwater sustainably through technologies like rain barrels and cisterns, infiltration chambers, permeable paving, rain gardens, bioswales, and green roofs. Low density residential properties can apply for rebates to help with up-front costs, and properties over four units may be eligible for an ongoing credit. Multi-family, business and institutional partners may be eligible for up to 50% off of stormwater utility bills, depending on the type of rainwater management method used. The City of Victoria has Rainwater Management Standards for both do-it-yourself and professional uses to guide the implementation of rainwater management technologies.

### Stormwater Utility (2016)

The City of Victoria's Stormwater Utility charge is based on property-specific information including the amount of impervious area on site, street cleaning requirements, intensity code (e.g. low density vs multi-family), and participation in the Codes of Practice Program (program designed to clean stormwater before it leaves a property).

### District of Oak Bay

In its OCP, Oak Bay proposes a Rainwater Management Bylaw that would require low impact development practices to increase onsite retention and absorption of rainwater, reducing the effective impervious area in the watershed.

## ✔ Action #3: Remove specific invasive species beginning to colonize the watershed.

Invasive plants grow throughout the Bowker Creek watershed, and are a concern because they displace native species that provide important ecosystem functions. The *Blueprint* highlighted two invasive plant species, policeman's helmet and invasive knotweed, as priorities for control in the watershed. Other more pervasive invasives like blackberry, ivy, and golden willow grow throughout the watershed and require long-term collective efforts for their effective management and control.

Invasive species control and removal in the watershed is supported by all three municipalities' involvement in the CRD-led CRISP program (Capital Regional Invasive Species Partnership) and numerous volunteer groups.

**The District of Saanich** is working on golden willow removal in riparian areas and eradication of high priority species. Successes include a 62% reduction of knotweed sites throughout the municipality, and eradication of Policeman's helmet. Several of Saanich's large parks lie within the Bowker Creek watershed, and have teams of volunteers helping to control invasive plants. Within Cedar Hill Park, the Friends of Cedar Hill Park and Saanich's Pulling Together volunteers regularly participate in invasive plant removal and stewardship activities in the Bowker Creek riparian zone (Reach 17). At the highest point of the watershed in Mount Tolmie Park, community volunteers have been actively removing invasive species and participating in stewardship activities for at least 20 years. Further downstream in Browning Park, students and teachers from St. Michael's University School have participated in Pulling Together stewardship activities to remove invasive plants along the creek over the last several years.

In **Oak Bay**, invasive plant removal has a strong volunteer backing. Oak Bay volunteers meet weekly to remove invasive plants and plant indigenous species in the Monteith Street native plant garden (see sidebar), and regular work parties at Oak Bay High School focus on invasive removal and restoration of the creek. These work bees are attended by the Friends of Bowker Creek, Oak Bay high school students and teachers, and members of the general community. Boy Scout groups in Oak Bay also regularly volunteer with invasive plant removal along Bowker Creek.



### Spotlight: Monteith Street Native Plant Garden

In 2008, the BCI was awarded funding from the TD Friends of the Environment Foundation to restore the creekside riparian area near Monteith Street in Oak Bay. As part of the site rehabilitation, this neglected city property has become a community amenity with a demonstration native riparian restoration site and native plant garden, highlighting many edible native plants. Since its establishment, restoration work has continued through volunteers with the Friends of Bowker Creek, who meet twice every month to remove invasives from the steambank environment and plant indigenous species. Their ongoing work has made the garden a valuable community gathering place.

## ✔ Action #4: Complete a pilot project to locate and build a demonstration rainwater infiltration/retention structure in each municipality.

Rainwater management demonstration sites have been established in several locations throughout the Bowker Creek watershed as a way of showcasing infiltration and retention options to the broader community. These demonstration sites are an important way of raising awareness among developers and community members about alternative ways of managing rainwater. Each BCI municipality has at least one demonstration site:

### District of Saanich, McKenzie Avenue rain garden and retention pond

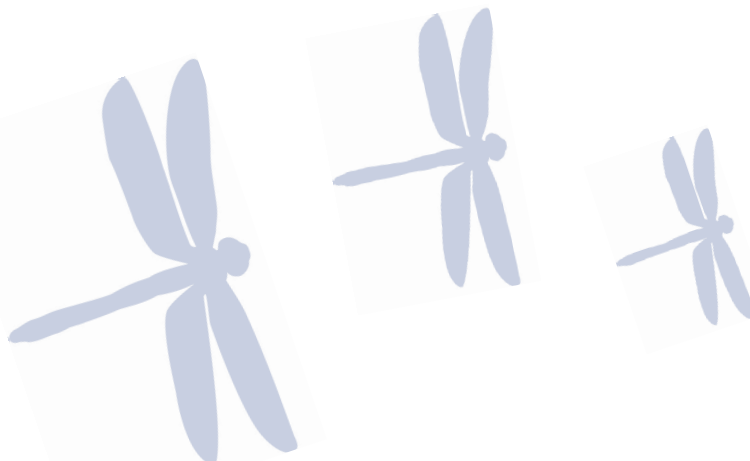
The District of Saanich completed the McKenzie Avenue Rain Garden in 2013 adjacent to the University of Victoria. The site includes a wet pond with inline vegetation for water treatment, and graduated vegetation from top of the slope to the basin, using plants adapted to varying water tolerances. A “Raingarden at Work” sign educates the public about the important role of the site.

### District of Oak Bay, Monterey Recreation Centre rain garden

In 2012, Oak Bay created a rain garden in the southeast corner of Monterey Centre’s parking lot. It is designed to collect rainwater and naturally filter out pollutants, such as oils and grease, before water enters the storm drain. Native plants adapted to wetter winters and drier summers are used in the rain garden. Its location at a busy community centre gives this rain garden great exposure and provides an excellent learning opportunity for the public.

### City of Victoria, Trent Street rain garden

The Trent Street rain garden treats surface runoff from the majority of Trent Street and is designed to handle a two year rain event. Besides managing stormwater and pollution, the gardens also narrow the road, calm traffic, separate pedestrian from vehicular traffic, and create wildlife habitat.





✓ **Action #5: Support development of an urban forest strategy in Oak Bay to complement those underway in Saanich and Victoria.**

All three municipalities in the Bowker Creek watershed have adopted urban forest strategies or plans since the creation of the *Blueprint*:

- District of Saanich Urban Forest Strategy, 2010
- City of Victoria Urban Forest Master Plan, 2013
- District of Oak Bay, Urban Forest Management Strategy, 2017

These strategies and plans help to protect the trees that grow throughout the Bowker Creek watershed. They emphasize the benefits provided by the urban forest, including enhancing the natural environment, mitigating climate change, and improving stormwater management, and will help to ensure healthy tree populations into the future.

**Spotlight: Outreach and Events**

Public outreach and engagement has always been an important focus of the BCI and its partners. Outreach keeps Bowker Creek in the public eye, develops and nurtures community connections, and builds momentum for watershed renewal. Outreach and engagement activities have taken numerous forms, with help from many dedicated volunteers and community groups, particularly the Friends of Bowker Creek and Peninsula Streams Society:

- Watershed tours for citizens, local government staff, and politicians
- Watershed model and interpretive display at community events
- Interpretive signage and channel markers
- Creekside concert series, Communi-Tea celebrations, and Creekside art workshops
- Printed materials, including Developer's Guide and Home Owner's Guide



### ✓ Action #6: Develop a strategy to acquire key properties as they come available.

A confidential property acquisition list was created and shared with municipal partners after the *Blueprint* was finalized, in order to support creek daylighting and greenway development. 2020's Daylighting Feasibility Study resulted in a revised list of properties for acquisition, which will be

shared with municipal partners and remain confidential. Municipalities will then operationalize the purchase of these properties, according to their internal systems and priorities for property acquisition. It should be noted that property acquisition within the *Blueprint* or Daylighting Feasibility Study is an incremental, opportunistic process. As properties age and become available for redevelopment or as major infrastructure renewal work is undertaken, the property acquisition list enables the purchase of key properties in a coordinated, forward-thinking manner that could ultimately support creek daylighting and restoration.

#### Spotlight: Daylighting Feasibility Study

BCI's Daylighting Feasibility Study (DFS) was completed in March 2020. The purpose of the DFS was to develop a tool to facilitate the establishment of a daylighting corridor for Bowker Creek to ensure future daylighting can occur as properties are redeveloped or major infrastructure renewal work is undertaken. The report summarizes current and future land use and redevelopment plans adjacent to the creek corridor, provides plan and profile views of existing closed sections, proposes daylighting options, identifies properties that may need to be obtained to daylight the creek, and assesses options for incorporating multi-use and pedestrian greenways corridors adjacent to the creek. The DFS represents a milestone in efforts to improve the Bowker Creek watershed. By outlining all opportunities for daylighting Bowker Creek, it builds upon the *Blueprint* and specifically defines how creek daylighting could contribute to the overall watershed vision.



### ✓ Action #7: Work with Oak Bay High School to design and implement creek restoration on school district property.

Between 2013 and 2018, the Bowker Creek Initiative, District of Oak Bay, School District 61 and Oak Bay High School staff and students worked together to design and create a beautiful and functional meandering creek reach adjacent to the school. The restoration project was officially handed to School District 61 in April 2019. It features a well-used outdoor classroom, community greenway and gently sloped vegetated creek bank. Previously, Bowker Creek flowed through a straight blackberry-choked concrete channel that contributed to downstream flooding during heavy rain events.

Oak Bay High students, teachers, and community volunteers including the Friends of Bowker Creek are involved in continued restoration of the site, including invasives removal and planting native species. The restoration effort has led to important ecological, hydrological, educational, and community-building benefits.

### Spotlight: School District 61 and Oak Bay High School

School District 61 officially endorsed the Bowker Creek *Blueprint* in 2018. SD61's support for the creek's revitalization was essential to the restoration of the creek alongside Oak Bay High School. Students and staff at the high school were involved in the design of the restoration project through a 'Creeks and Careers' workshop and a design charrette. They contributed to the final design, including a well-used outdoor classroom alongside the creek.

The restored section of the creek provides a real-life laboratory for science classes, as students learn about native plants, creek ecology, and salmon restoration. Science teacher Derek Shrubsole says "the outdoor classroom provides the students at Oak Bay with a learning resource unique among schools in the area. It allows us to bring students outside for authentic, place-based learning. I also believe it helps to create a connection between our students and Bowker Creek, something they know and care about."

The school has partnered with the Friends of Bowker Creek to maintain the restored creek and keep on top of invasive plants through monthly work sessions. Another exciting partnership has paired Oak Bay students with Dutch students through an exchange program that focuses on local biology and creek ecology.

### ✔ Action #8: Participate in the Shelbourne Corridor Action Plan process to identify current and future opportunities for creek restoration, rainwater infiltration and/or greenway development.

The District of Saanich's Shelbourne Valley Action Plan was adopted by Saanich council in May 2017 as Appendix O of the Official Community Plan Bylaw. Representatives from the Bowker Creek Initiative provided input into the development of the plan through a lengthy consultative planning process. Multiple commitments to improve and restore Bowker Creek are found throughout plan, including the following key policies:

- 4.2.1 Adopt a District-wide Stormwater Management Bylaw, to reduce stormwater impacts on the Bowker Creek watershed.
- 4.2.3 Integrate the principles and actions identified in the Bowker Creek *Blueprint* as part of redevelopment proposals and infrastructure replacement.
- 4.2.4 Acquire key properties to facilitate the restoration of Bowker Creek, including for the purposes of daylighting sections, enhancing riparian areas, and improving stormwater management.

- 4.2.5 Employ a flexible approach to achieve the daylighting of Bowker Creek, including re-routing or partially daylighting the Creek in stretches where technical constraints exist.
- 4.2.6 Work cooperatively with the City of Victoria and the District of Oak Bay to develop common Development Permit guidelines or other tools to help implement the Bowker Creek *Blueprint* on private lands within the Bowker Creek Watershed.
- ✔ 4.2.7 Support the Bowker Creek Initiative in the development of a study to assess the technical opportunities and constraints of daylighting Bowker Creek in the Shelbourne Valley.
- 4.2.8 Promote daylighting or enhanced stormwater management on greenways that align with the Bowker Creek channel to reinforce the location of the Creek and create a community asset.
- 4.2.9 Consider reducing streamside setbacks and removing other barriers to daylighting to acknowledge urban conditions and land use constraints in the Valley.
- 4.2.10 Encourage the daylighting of Bowker Creek, by considering additional building height allowances, including up to six storeys on sites designated for apartments.

Together, these policies provide a pivotal opportunity to advance plans to daylight and restore Bowker Creek along the Shelbourne corridor. Alongside the Daylighting Feasibility

Study, the Shelbourne Valley Action Plan lays the pathway for future daylighting with important benefits for the watershed, including increased hydrological function, improved biodiversity and habitat, and aesthetic enhancements. Most importantly, the Action Plan operationalizes Saanich's commitment to restoring the creek in this urban setting, making future improvements to the creek more probable and achievable.

### **Action #9: Work with creek-side landowners between Pearl and Trent Streets to achieve the long-term vision.**

This action refers to two important properties along Bowker Creek, both within the District of Saanich. The first property lies between Pearl Street and Newton Street, on the property of SD61's Richmond School. Bowker Creek runs directly through the middle of the schoolyard, and for safety reasons is fenced on both sides due to extreme erosion and entrenchment of the steep banks. Golden Willow and other invasive plants clog the length of this section of the creek.

Part of the Daylighting Feasibility Study explored options for restoring this section of the creek by shifting the creek bed to the side of the school yard. This design includes a meandering creek profile with naturalized vegetation, expands the playing field, and includes a greenway for active transportation and connectivity. During extreme rainfalls, a portion of the site beside the creek would be designed to flood to help alleviate downstream flooding. Creek restoration at this site offers important benefits in terms of improved creek ecology and hydrological function, active transportation, and learning and recreational benefits for Richmond school.

#### **Spotlight: University of Victoria**

As home to the headwaters of Bowker Creek, the University of Victoria plays an important role in protecting downstream reaches of the creek. UVic is a long-term member of the BCI steering committee, and has contributed to the creek's health through several initiatives:

- In 2019, UVic installed a new Bowker Creek interpretative sign to explain UVic's partnership in the Bowker Creek Initiative and the importance of the watershed within Greater Victoria. In addition, the signage includes a stormwater management map highlighting the locations of curb cuts, green roofs, permeable pavement, and water detention or bioswales.
- Guided by a Stormwater Management Plan, the university continues to reduce the amount of impervious surfaces on campus and minimizes runoff using permeable paving and green building design.
- In 2020, UVic installed a stormwater detention pond by Parking Lot 10 on the West Campus Greenway to manage campus stormwater entering Bowker Creek.



## BCI Blueprint 10 Year Achievements

Action #9 also refers to a nearby riparian area of Bowker Creek, also known as the BC Hydro lands or 2661 Richmond Road. Lying in the Saanich panhandle between Kings Road and Haultain Streets, Bowker Creek flows through a 2.2 ha greenspace at 1843 Kings Road. The space is valued as a natural oasis in an urban setting, where people come to walk, bike, relax, and appreciate nature. In addition to its biodiversity benefits, the site also provides active transportation linkages to the Royal Jubilee Hospital and beyond. A long history of community advocacy led to the District of Saanich's 2019 purchase of the site from BC Hydro for \$2.75 million. Community fundraising efforts through the

Saanich Legacy Fund and the Save Kings Community Nature Space group aim to raise an additional \$2.75 million by March 31, 2021 through grants, personal donations, and requests for contributions from government agencies.

The Daylighting Feasibility Study also explored options for restoring this section of the creek. The restoration plan includes a low lying naturalized area along the creek that could flood during storm events, turf grass that might occasionally flood, park space, and maintenance of the existing greenway path.



### Spotlight: Water Quality Monitoring:

The CRD monitors water quality in Bowker Creek at least twice a year, and every 5 years conducts more in-depth analysis. The latest detailed assessment was completed in 2019. In addition to the standard physical measurements of temperature, pH and dissolved oxygen, staff measured metals, E.coli, hardness, suspended solids, organic carbon, ammonia, nitrate, nitrite and caffeine. Water samples were collected five times in 30 days in the summer and fall at four locations in the creek.

Relative to the previous in-depth sampling effort in 2014, 2019's data indicate that sewage inputs and urban development in the watershed continue to degrade water quality in Bowker Creek. Copper, zinc, dissolved oxygen, phosphorus, turbidity and suspended solids are at levels that are potentially harmful to aquatic life. Fecal coliform and E.coli levels indicate significant sewage contamination is still present and recreational activities, such as swimming, are likely unsafe.

One indicator did show minor improvement between 2014 and 2019. Sampling of benthic invertebrates (those living in the creek's sediment) suggests a slight improvement in water quality since 2014. The invertebrates found in 2019 indicate less organic pollution overall, although organic pollution still is a concern throughout the creek, particularly in lower reaches.

The CRD will continue to monitor water quality in Bowker Creek and will work with its partners to improve water quality throughout the watershed. Recently, the Friends of Bowker Creek have begun additional water and invertebrate sampling as part of their Coho recovery project, and will share this data with the CRD in order to build a more complete picture of water quality issues in the creek.





### **Action #10: Continue with restoration at Browning Park.**

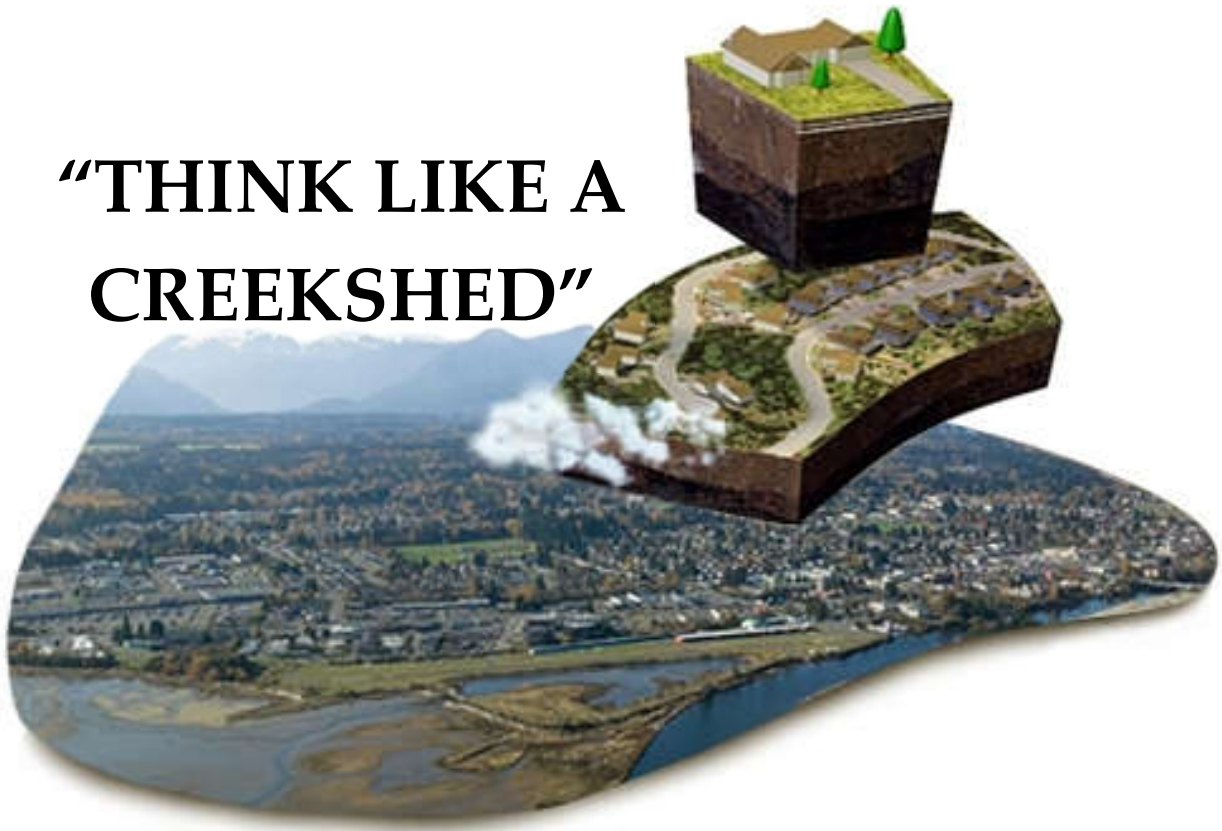
Saanich's Browning Park contains one of the most natural stretches of Bowker Creek, with an open channel, treed banks, and a meandering creek profile. A greenway runs alongside the riparian zone, and community art celebrating the creek has been incorporated in various locations around the park. Still, invasive species are an issue in this stretch of the creek, in addition to channelization, conveyance, flooding and erosion. Recent restoration activities have largely focused on invasives removal through the Saanich Pulling Together volunteer program, with most stewardship help coming from St. Michaels University School students and teachers.

### **The Way Forward**

As the *Bowker Creek Blueprint* reaches the milestone of its ten year anniversary, there are many achievements throughout the watershed that should be celebrated. The BCI and its partners have succeeded in completing 6 out of 10 of the *Blueprint's* short term actions, with implementation of the remaining four well underway. Additionally, numerous other key achievements should be noted and celebrated. Some of them are concrete, like the completion of the Daylighting Feasibility Study and ongoing water quality monitoring, while others are less tangible but undoubtedly important, like the building of community, the creation of a network of stewards, and the development of partnerships across municipal and institutional boundaries. Ten years into *Blueprint* implementation, the BCI partners are in a good position to commit to a new set of priority actions. The successes of the past ten years coupled with the newly completed Daylighting Feasibility Study mean that the time is right to update the *Blueprint* and recommit to a revised set of actions for watershed renewal.

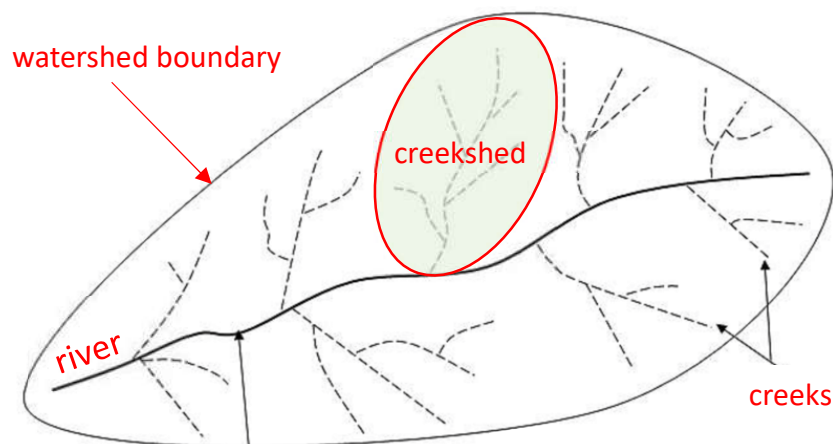


# “THINK LIKE A CREEKSHED”



## A creekshed is an integrated system:

The need to protect headwater streams and groundwater resources in BC requires that communities expand their view - from one that looks at a site in isolation - to one that considers HOW all sites, the creekshed landscape, streams and foreshores, groundwater aquifers...and PEOPLE....function as a **whole system**.





**the partnership**  
for water sustainability in bc