

# BOWKER CREEK BLUEPRINT

## EXECUTIVE SUMMARY



The Bowker Creek Initiative (BCI) has developed this *Bowker Creek Blueprint: A 100-year action plan to restore the Bowker Creek Watershed* to provide member municipalities, the Capital Regional District, the community and other land stewards with information and guidance to manage and restore the watershed and creek corridor over the long term (e.g., 50 to 100 years). This blueprint is to be implemented over a period of decades in recognition that change can be slow in the urban environment. Having a plan in place will ensure that positive changes can happen incrementally, and that opportunities for major improvements can be achieved as they arise. The recommendations in this blueprint support the vision and the four goals described in the Bowker Creek Watershed Management Plan, adopted by BCI members in 2003:

### BOWKER CREEK WATERSHED MANAGEMENT PLAN (2003) VISION

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

### 2003 WATERSHED MANAGEMENT PLAN GOALS

1. **Individuals, community and special interest groups, institutions, governments, and businesses take responsibility for actions that affect the watershed.**
2. **Manage flows effectively.**
3. **Improve and expand public areas, natural areas, and biodiversity in the watershed.**
4. **Achieve and maintain acceptable water quality in the watershed.**

Flooding, water pollution and habitat loss are significant concerns for Bowker Creek. Despite the degradation it has suffered, Bowker Creek offers connections with the natural environment to the 30,000 residents in the watershed, and provides an opportunity to restore islands of nature within the urban environment. It also offers a focus for a greenway corridor through the urban core of Greater Victoria, and the potential to create more vibrant communities and neighbourhoods while reducing greenhouse gas emissions and adapting to climate change. Bowker Creek is important to the community and has become a pilot project for urban watershed management in the Capital Region.

This blueprint was developed with significant input from municipal staff and community members, and is based on work undertaken since the BCI was established in 2004. This document builds on the Bowker Creek Master Drainage Plan (Kerr Wood Leidal, 2007), greenways mapping, creek habitat assessments, water quality data and other information to create a plan of action.

Recommendations are provided at two scales:

- watershed management activities and policies, and
- site-specific actions for each of the 17 creek sections.

As the blueprint was developed, all recommendations were rated on how well they addressed environmental, social and economic considerations, and the committee assigned a priority to each recommendation. This approach highlighted the actions with the greatest environmental and social benefits versus costs.

The following **watershed management principles and actions** are summarized in this blueprint (see Section 4 and Appendix A for details):

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

Recommended **reach infrastructure upgrades or specific actions** (see Section 5 and Appendix B) range from small restoration efforts such as invasive species removal, to large changes such as day-lighting buried creek sections and/or channel re-alignment and riparian restoration. Some reach-specific actions can proceed immediately while others will need to wait until opportunities arise. Opportunities will occur with changing land uses, as funding comes available, as infrastructure needs to be upgraded, and as societal priorities change.

**Ten key actions** have been identified as important first steps for municipalities and other land stewards in the next three to five years, as follows (see Section 6 for details):

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 Valley 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.

A **monitoring program** has been developed in order to provide periodic feedback on the effectiveness of actions undertaken by the BCI partners. Monitoring indicators include percent effective impervious area, percent urban tree cover, the extent of creek restoration and kilometres of greenway trail development, improvements in water quality and overall watershed health (see Section 7 and Appendix D).

This document is a blueprint for implementing long-term change along the creek corridor and throughout the watershed, to achieve the vision and goals of the Bowker Creek Watershed Management Plan. Continuing efforts and cooperation will be required by Bowker Creek Initiative members, decision-makers and the wider community, with the rewards of cleaner water, healthier ecosystems, less flooding and new greenways throughout the watershed.