

6.0 KEY ACTIONS FOR SHORT-TERM IMPLEMENTATION

This plan contains extensive detail about actions to be taken over varying time frames and in different locations—see Appendices A and B. Therefore, it is important to highlight the areas where we can make progress in the next three to five years. The following list gives recommendations for actions that can begin immediately and which will have significant positive benefits for Bowker Creek.

6.1 TEN KEY ACTIONS FOR SHORT-TERM IMPLEMENTATION

All of the actions listed below are high priority. Watershed-wide actions are listed first, followed by reach-specific actions.

1. REVIEW AND REVISE MUNICIPAL PLANS TO INCLUDE BOWKER CREEK GOALS AND ACTIONS

Where this has not already occurred, wording to include Bowker Creek goals and actions should be included in Official Community Plans, Greenway Plans, Park Plans and any other relevant plans such as local area plans and community plans. As appropriate, related items should be incorporated into annual operations plans and budgets. This action is important, as it will ensure that municipalities can be efficient and effective in implementing the Bowker Creek Watershed Management Plan and the Bowker Creek Blueprint.

2. ADOPT REQUIREMENTS TO REDUCE EFFECTIVE IMPERVIOUS AREA FOR NEW DEVELOPMENTS

A goal of reducing Effective Impervious Area (EIA) to a maximum of 30% across the watershed can be achieved incrementally if supported by new policies. A key recommendation is to develop municipal policies for maximum EIA on new developments and re-developments, along with appropriate supporting guidelines, incentives, information, by-laws, and ways to measure compliance. Each municipality should tailor the details of this approach according to their internal processes and needs, with support from the BCI. A likely approach would be to assign specific EIA targets and guidelines to different types of land uses, to achieve a watershed-wide reduction in EIA over time.

3. REMOVE SPECIFIC INVASIVE SPECIES BEGINNING TO COLONIZE THE WATERSHED

Invasive species are an issue throughout the watershed, as they displace native species that provide important ecosystem functions. Bowker Creek is lined with invasive species, particularly blackberry, ivy and yellow willow, and removing all invasive species in the watershed would be a daunting task. However there are two species: invasive knotweed (*Polygonum spp.*) and policeman's helmet (*Impatiens glandulifera*) that should be removed before they become widely established (Figure 13). This effort should include outreach to residents regarding removing these from private property, as well as targeted removal efforts by municipalities in known locations along the creek corridor. To date, all known occurrences along the creek corridor are found in the District of Oak Bay east of Oak Bay High School.

4. COMPLETE A PILOT PROJECT TO LOCATE AND BUILD A DEMONSTRATION RAINWATER INFILTRATION/RETENTION STRUCTURE IN EACH MUNICIPALITY

Green infrastructure is increasingly recognized as an important and effective approach to rainwater and stormwater management. Saanich and Victoria have recently planned and built some green infrastructure features such as raingardens, and Oak Bay is also making changes such as allowing gravel driveways. These

efforts are important, and as municipalities learn about and implement more green infrastructure, they can demonstrate effective approaches and raise awareness about doing business differently.

The BCI has been offered LIDAR (light detecting and ranging) technology to locate the most appropriate and effective locations for installing green infrastructure features such as raingardens and swales. This laser-based technology has already generated location and elevational data during flights over the watershed, and these data can be used to determine a location for a green infrastructure feature in each municipality. A pilot project should be completed using LIDAR to determine appropriate locations, and operational budgets or grant money should be used to allow each municipality to construct one or more demonstration raingardens or other infiltration/retention structures in municipal boulevards.



Figure 13. Policeman's helmet (left) and invasive knotweed (right)
These two problematic invasive species (*Impatiens glandulifera* and *Polygonum spp.*, respectively) getting established in the watershed should be eradicated before they spread.



Figure 14. Trent Street Rain Garden, City of Victoria
Photo Credit: Murdoch de Greeff Inc.

5. SUPPORT DEVELOPMENT OF AN URBAN FOREST STRATEGY IN OAK BAY TO COMPLEMENT THOSE UNDERWAY IN SAANICH AND VICTORIA

Recognizing the importance of the urban forest and their aging stock of trees, Saanich and Victoria are working on urban forest strategies to ensure healthy tree populations into the future. It is important that this happen watershed-wide, and Oak Bay should consider initiating a similar strategy. All three strategies should recognize the importance of native trees for riparian restoration, for stormwater management, and for climate mitigation/adaptation.

6. DEVELOP A STRATEGY TO ACQUIRE KEY PROPERTIES AS THEY COME AVAILABLE

Creek restoration and greenway development often require land acquisition, to make sufficient room for public pathways, a healthy creek channel and floodplain, and native streamside vegetation. Key creek-side properties have been identified to each municipality for potential acquisition. Each municipality will need to develop its own strategy and priorities for these properties, so that when they come on to the market or make application for redevelopment, action can be taken as appropriate. For example, municipalities might ask for first right of refusal on key properties.

7. WORK WITH OAK BAY HIGH SCHOOL TO DESIGN AND IMPLEMENT CREEK RESTORATION ON SCHOOL DISTRICT PROPERTY

Oak Bay High school is undergoing redevelopment, with two aging buildings being replaced by one building on a different part of the property. The school district is willing to dedicate a limited amount of land—outside of their requirements for the building, parking and sports fields—to widen the creek corridor and allow for creek restoration. The Bowker Creek Initiative and the District of Oak Bay will need to apply for funding and work with the school district to realize this opportunity.

8. PARTICIPATE IN THE SHELBOURNE VALLEY ACTION PLAN PROCESS TO IDENTIFY CURRENT AND FUTURE OPPORTUNITIES FOR CREEK RESTORATION, RAINWATER INFILTRATION, AND/OR GREENWAY DEVELOPMENT

The District of Saanich has initiated a consultative planning process to create a more balanced transportation corridor along Shelbourne Street—including walking, biking and transit—complemented by mixed-use residential and commercial development. The terms of reference include objectives to protect and enhance the natural environment and recognize and integrate the Bowker Creek Watershed Management Plan. The Bowker Creek Initiative should participate in the planning process for the Shelbourne Valley Action Plan, to ensure that opportunities for creek restoration, rainwater infiltration (i.e. low impact development), and/or greenway development can be realized over time.

9. WORK WITH CREEK-SIDE LANDOWNERS BETWEEN PEARL AND TRENT STREETS TO ACHIEVE THE LONG-TERM VISION

The creek section between Pearl and Trent Streets is mainly above ground, and has several institutional landowners including: School District 61, BC Hydro, Bishop of Victoria, Saanich (for road rights-of-way), the Royal Jubilee Hospital, and St. Patrick's School. The Bowker Creek Initiative should work with these landowners to achieve creek restoration—see Figures 11 and 12 for a long-term vision for this section. Restoration in some locations can only happen with future changes in land use or ownership, while in other locations restoration could proceed with the landowners' permission and cooperation.

10. CONTINUE WITH RESTORATION AT BROWNING PARK

The District of Saanich is creating a greenway path through Browning Park and the Wordsworth Street right-of-way, and will be doing a limited amount of riparian restoration at that time. A park redesign is also occurring and these changes will improve some of the riparian buffer. After these projects are complete, potential opportunities for more restoration should be evaluated, and interpretive signage should also be considered. Funding applications for further restoration work can be made, or restoration can be included in Saanich operational budgets as appropriate.

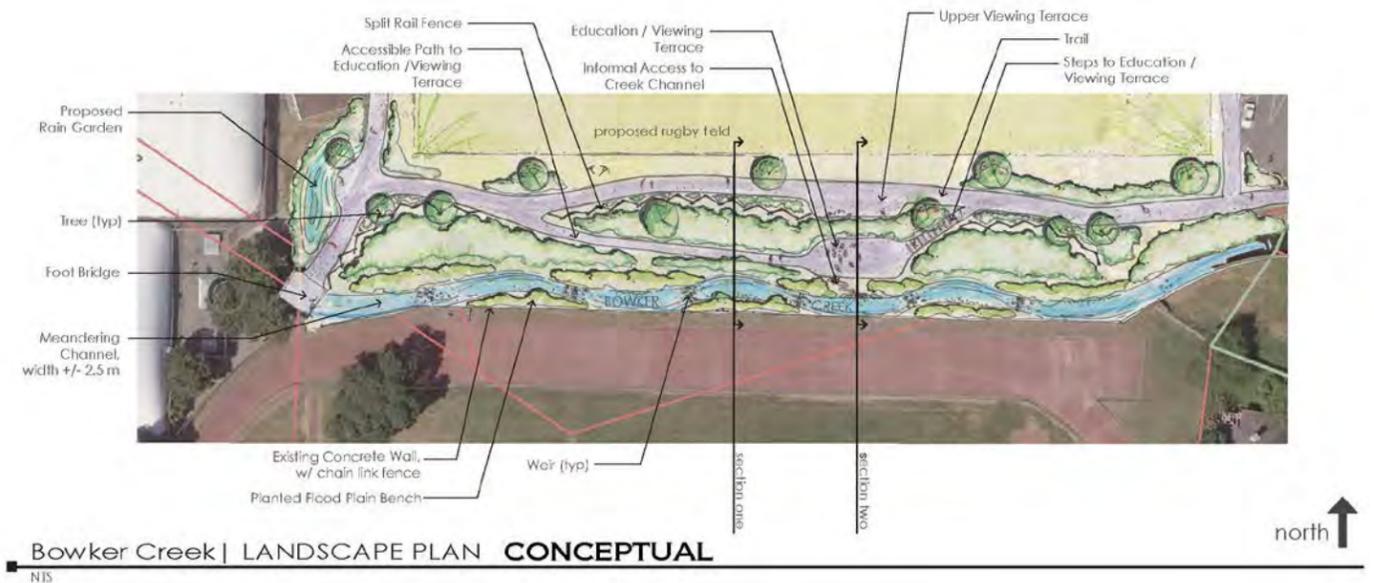


Figure 15. Conceptual Landscape Plan for restoration of Bowker Creek at Oak Bay High School
Conceptual Plan Credit: Kerr Wood Leidal Associates Ltd. and Murdoch de Greeff Inc.