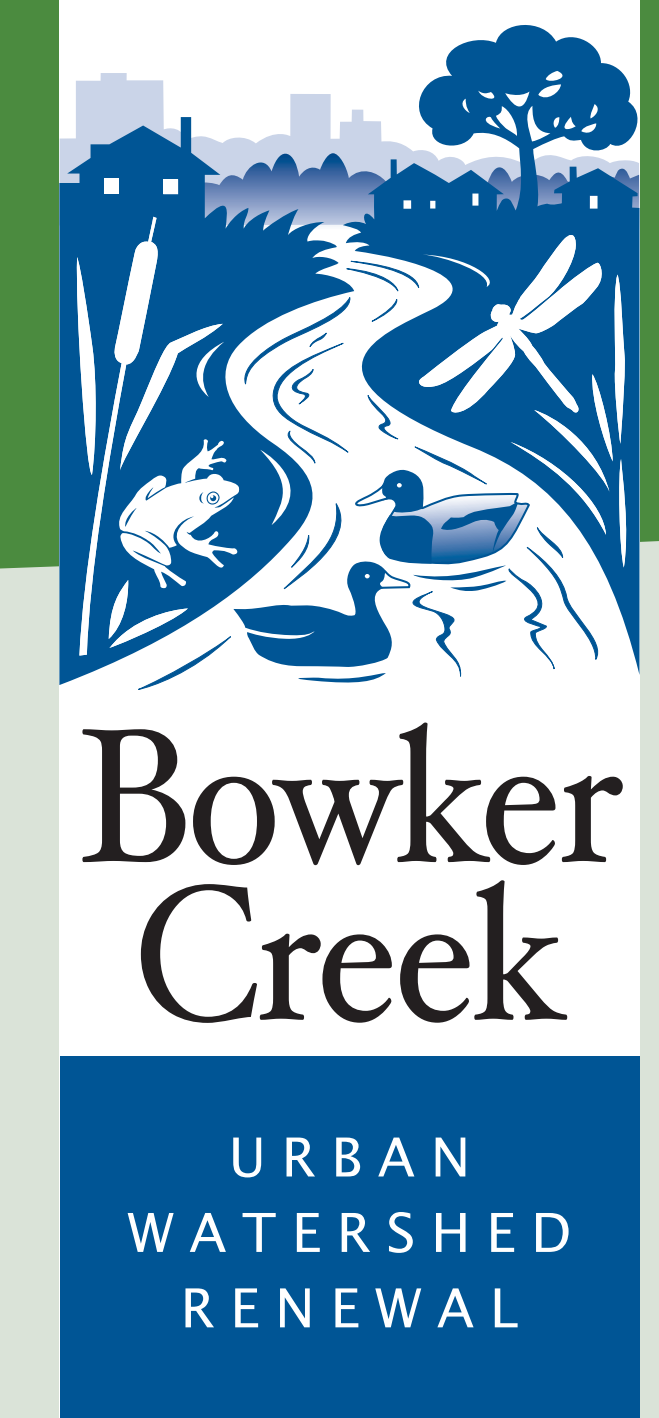


Bowker Creek flows through an urban watershed from its headwaters at the University of Victoria, along Shelbourne Street in Saanich, past Jubilee Hospital in Victoria, to the ocean at Oak Bay.

Creek and Riparian Restoration



What is the BCI?

The Bowker Creek Initiative (BCI) is a partnership among the Capital Regional District, the District of Saanich, the City of Victoria, the District of Oak Bay, institutions, businesses and community groups.

To restore Bowker Creek, the BCI is working to reduce pollution and flooding, connect greenways and restore natural areas in the watershed.

The watershed management goals of the BCI are:

- 1 Take responsibility for actions that affect the watershed
- 2 Manage creek 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



Following creek bank re-contouring, the riparian area was replanted with native trees, shrubs and perennials including Pacific big leaf maple, Garry oak, Douglas-fir, red osier dogwood, snowberry, Nootka rose, native grasses and many other species.

Restoration Goals

- Safe conveyance of flood flows
- Reduce flooding and erosion
- Improve riparian habitat
- Improve water quality
- Create an outdoor learning space connecting the school to the creek
- Community accessible greenspace
- Revitalize community greenway
- Minimize ongoing maintenance

Oak Bay High School was re-built in 2014/15 providing an ideal opportunity to undertake one of the key short term actions for restoring Bowker Creek as outlined in the Bowker Creek Blueprint (see sidebar). The District of Oak Bay and Bowker Creek Initiative partners teamed up to secure funding for a major reconstruction of the creek which then flowed through a concrete channel. During heavy rain events, stormwater from the 60% paved watershed above this site frequently flooded downstream parklands and private property.

Oak Bay High School students helped in the planning and design process, reflecting the collaboration that underpinned this major restoration project. The students' vision included an outdoor classroom now in use by science, art, theater and other classes. A well-used greenway connection greatly improved active transportation networks in the community.

The creek bank was re-contoured to the gentler slope you see now, providing a planting site for native riparian vegetation. While the creek retains its concrete substrate, the three "islands" on the right and placement of boulders in the streambed help to slow the flow, create riffles and increase aeration in the creek.

Oak Bay High School was awarded LEED Gold certification in January 2018 for sustainable initiatives including a stormwater retention system to reduce flooding, erosion and the release of contaminants into Bowker Creek.



High school students planting riparian vegetation on creek bank.



Before the restoration, Bowker Creek flowed through a narrow concrete channel, overgrown by invasive blackberries and golden willow.



Bowker Creek Watershed

- 1,028 hectares in area
- Home to approximately 30,000 people
- 56% of the watershed is impervious
- Bowker Creek is 9.4 kilometres long, with a 1.4 kilometres tributary at Cedar Hill Park
- 60% of the original creek is piped underground

A watershed is the land that drains surface and groundwater to a common waterway such as a creek, lake or ocean. In an urban watershed, impervious surfaces such as buildings, roads and parking lots block water from soaking into the soil. When it rains, the water collects pollutants as it quickly flows into underground stormdrains leading to creeks or shorelines. This can cause flooding, streambank erosion, water pollution and habitat loss.

"A young person's surroundings are always a silent educator and the best way to inculcate a sense of environmental responsibility and stewardship in youth is to model it... It is exactly this kind of real-world project that really engages the positive energy of youth, develops cooperative relationships and goodwill with the local community, and represents the best of 21st century education."

Garrett Brisdon, Vice Principal Oak Bay High School, April 27, 2011

For more information

- Bowker Creek Initiative: info@bowkercreekinitiative.ca
- Oak Bay High School: oakbayinfo@sd61.bc.ca



The Bowker Creek Blueprint

Improving the watershed will take time. The Blueprint is the 100-year action plan that guides this work.

Find out more about Bowker Creek at: bowkercreekinitiative.ca

