

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, under Firemen's Park to the ocean at Glenlyon Norfolk School in Oak Bay.

# Bowker Creek in Oak Bay



**Bowker Creek**

URBAN WATERSHED RENEWAL

## 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



Channelization and piping of the creek has resulted in habitat loss, poor water quality, flooding and erosion. Stormwater flows off impervious surfaces (e.g., roads, roofs) into stormdrains that lead directly to the creek, resulting in fast flows during heavy rain events.



As the city grew across the watershed, Bowker Creek was put underground in pipes and stormwater from streets, roofs and parking lots directed into it.

The Bowker Creek watershed has been dramatically altered over time from a natural ecosystem to an agricultural area to the current mix of residential, commercial and institutional uses. Ditching and piping the creek and construction of roads and buildings has resulted in habitat loss, poor water quality, flooding and erosion throughout the watershed and in the creek channel. Impervious surfaces such as roofs, roads and parking lots were traditionally designed to direct rainwater off the land quickly and into underground pipes. Increased stormwater flows, combined with floodplain loss, building too close to the creek and clearing away riparian vegetation has resulted in erosion, flooding and habitat loss for wildlife. Rainwater picks up urban pollutants as it makes its way through the watershed into stormdrains and ultimately into Bowker Creek. The lower reaches of the watershed in Oak Bay suffered more of the flooding and erosion caused by development and changes higher up in the watershed.

Infrastructure design in Oak Bay now incorporates green techniques that allow more rainwater to soak into the ground through rain gardens, bioswales and storage or detention systems that slow and filter pollutants from stormwater. These innovations will help alleviate the increased intensity and duration of rainfall and storm events predicted with climate change in our region. Fortunately most of the Bowker Creek channel through Oak Bay has remained open to the sky, making it easier to undo some of the harms of past development practises.

Ecological restoration projects such as the native plant garden at Monteith Drive, and the creek reconstruction at Oak Bay High School are helping to slow flow, improve water quality and increase habitat for urban wildlife. Important corridors for wildlife and people are being established as greenways along Bowker Creek, connecting people, places, wildlife and habitat and re-establishing ecological continuity for all.

### For more information

- Bowker Creek Initiative: [info@bowkercreekinitiative.ca](mailto:info@bowkercreekinitiative.ca)
- Oak Bay Parks: [oakbay.ca/parks-recreation/parks-playgrounds](http://oakbay.ca/parks-recreation/parks-playgrounds)
- Oak Bay Community Association: [oakbaycommunityassociation.org](http://oakbaycommunityassociation.org)



## 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.

## What Can You Do?

- Keep your property well vegetated with native plants and trees to attract wildlife, absorb rainwater, slow runoff and reduce erosion
- Remove invasive species (e.g., Scotch broom, English ivy, Daphne, Himalayan blackberry)
- Use watershed-friendly garden and household products and use them sparingly
- Compost garden waste away from riparian areas
- Replace impervious pavement with grass, paving stones or gravel to allow rainwater to infiltrate
- Install rain gardens or bioswales to decrease and filter roof and driveway runoff
- Reduce runoff from your property: wash your car on lawn or gravel; sweep sidewalks and driveways instead of hosing them off
- Collect rainwater in cisterns or holding tanks to use for irrigation
- Join a local stewardship group
- If you live along the creek, consult an expert to help you create habitat for wildlife

### 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](http://bowkercreekinitiative.ca)

