

Bowker Creek Homeowner's Guide

Who Are We?

The Bowker Creek Initiative is a collaborative effort between people, organizations, and governments who envision the creek as a community amenity and a healthy, life sustaining environment for native vegetation and wildlife.

Our Vision

The varied human uses 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.

Our Goals

- Take responsibility for actions that affect the watershed.
- Manage flows effectively
- Improve and expand public areas, natural areas, and biodiversity in the watershed
- Achieve and maintain acceptable water quality in the watershed



A Homeowner's Guide to Caring for the Bowker Creek Watershed

What Is A Watershed?

We all live in a watershed. Another word for watershed is "catchment," a way to describe how rain falling within a watershed's boundaries makes its way downhill into a creek or river and eventually to the sea.

Bowker Creek drains one of the largest watersheds in Greater Victoria – extending from the University of Victoria, through the District of Saanich and City of Victoria, and out to the ocean through the District of Oak Bay. Most of the rain that finds its way into the creek runs off roofs, roads and parking lots, and is collected from curbside gutters, which are directly connected to the creek via underground pipes. Like any urban creek, Bowker Creek needs participation from its neighbours in order to become clean and healthy. About 30,000 people live in this watershed, and everyone can make a difference.

How Can A Homeowner Help Bowker Creek?

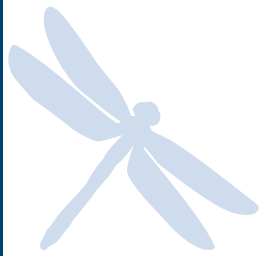
Everyone can help improve the health of an urban watershed. There are three main ways the typical homeowner can contribute:

1. Allowing rainwater to infiltrate into the ground on your property.
2. Reducing pollution running off your property and your car.
3. Gardening with native plants and removing invasives

Allowing Rainwater To Infiltrate Your Property

Before the Bowker Creek watershed became heavily populated, rain that fell on its forests and farms was able to seep into the ground. Some of this moisture would evaporate, and some would slowly make its way to Bowker Creek, allowing for steady and reliable creek flows. As a result of urban settlement, half of the watershed is covered by 'impervious' surfaces such as roofs, parking lots and roads. When it rains, water runs off these surfaces and is quickly delivered to Bowker Creek, causing 'flashy'

Above photo:
Bioengineering Volunteer Crew.



Annual Bowker Creek rubber ducky race.

Bowker Creek Initiative Partners

- District of Saanich
- City of Victoria
- District of Oak Bay
- Capital Regional District
- Friends of Bowker Creek Society
- University of Victoria
- Camosun Community Association
- Quadra Cedar Hill Community Association
- North Jubilee Neighborhood Association

flows, flooding and erosion. This rain run-off delivers oil and other pollutants from the streets and brings them into the creek.

A homeowner can reduce flooding and pollution problems and improve water quality by increasing the infiltration of rainwater into the ground, using a variety of techniques:

- Minimize the area required for driveways, patios and rooftops.
- For your deck and driveway, choose 'pervious' paving stones, pervious concrete/ asphalt, or other systems that allow infiltration into the ground. The paving stones (or concrete/asphalt) are usually underlain with a layer of gravel that stores some water, allowing for slower run-off. These storage areas also allow natural micro-organisms to break down some kinds of chemicals, leading to improved water quality.

- Redirect the water coming off your roof or driveway into one or more specially designed 'rain gardens' (landscaped areas with absorptive soil/compost and a gravel underlay), or to areas of deep, loose soil in your yard.



Red - flowering currant is a popular native plant for gardening

Reducing Pollution From Your Property And Car

Curbside gutters take run-off from streets and properties, allowing it to be efficiently piped away. What many people don't realize is that these gutters and pipes are directly connected to Bowker Creek, or the closest urban waterway. The surfaces of

roadways and parking lots are often contaminated with oil and other chemicals from cars, and this pollution is quickly delivered to the creek when it rains, causing serious pollution problems. One cup of oil can contaminate enough water to fill an Olympic sized swimming pool.



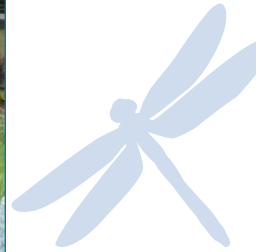
Storm drains connect directly to Bowker Creek and other urban waterways.

There are a number of ways you can reduce the pollution entering Bowker Creek or other urban creeks:

- Maintain your car to eliminate oil or fluid leaks, and drive less when possible.
- Avoid using pesticides on your lawn and garden, including insecticides, herbicides and fungicides.



This newly planted rain garden will help reduce flooding while improving water quality.



These chemicals make their way into the nearest creek when it rains, and are toxic to aquatic life.

- Inspect your heating oil tank for leaks. In particular, aging underground tanks can be corroded and leaky.
- Wash your car on your lawn or at a car wash facility. This is important because detergents are toxic to aquatic life. Washing on your lawn allows the water to be at least partially filtered and absorbed. Using a car wash is helpful because commercial car wash facilities screen their wash water, and discharge the rest into the sanitary sewer.
- Use a broom to clean your driveway instead of a power washer.
- Use water and vinegar instead of windshield washing fluid in your car.

Gardening With Native Plants And Removing Invasives

Our region has many native plants attractive for gardening. One advantage of using native plants is their low maintenance; once established they are tolerant to drought and pests, reducing the need for watering and chemicals. In addition, a perennial garden area will infiltrate and use more water than a lawn will, reducing 'flashy' runoff into Bowker Creek or other urban watercourses.

Native plants also support native birds and wildlife, making the watershed healthier and encouraging biodiversity.



Just as important as introducing native species, is removing certain invasive exotic plant species that cause problems. Common problem species are English Ivy, blackberry, Scotch broom and Daphne. Blackberry and ivy line the banks of Bowker Creek, displacing native species and encouraging erosion. Scotch broom and Daphne are other common plants that displace important native species in our region.

A newer invader that everyone should be on the lookout for is Japanese knotweed. This plant is still sold in some garden stores, but takes over streamside areas and is extremely difficult to eradicate once established.



Photo: Mark Macdonald

Japanese knotweed should be removed everywhere it is found.

The Bowker Creek Urban Watershed Renewal Initiative (BCI) is a unique multi-jurisdictional effort to improve the health of a highly urbanized watershed. The Initiative was established because of concerns about flooding, pollution, and the degraded condition of Bowker creek.



Crayfish still thrive in Bowker Creek.

More Information

Bowker Creek Initiative and Action Pledge
www.bowkercreekinitiative.ca

Caring For Your Watershed
www.crd.bc.ca/watersheds

Designing and Building A Rain Garden
www.pierce.wsu.edu/Water_Quality/LID/Raingarden_handbook.pdf

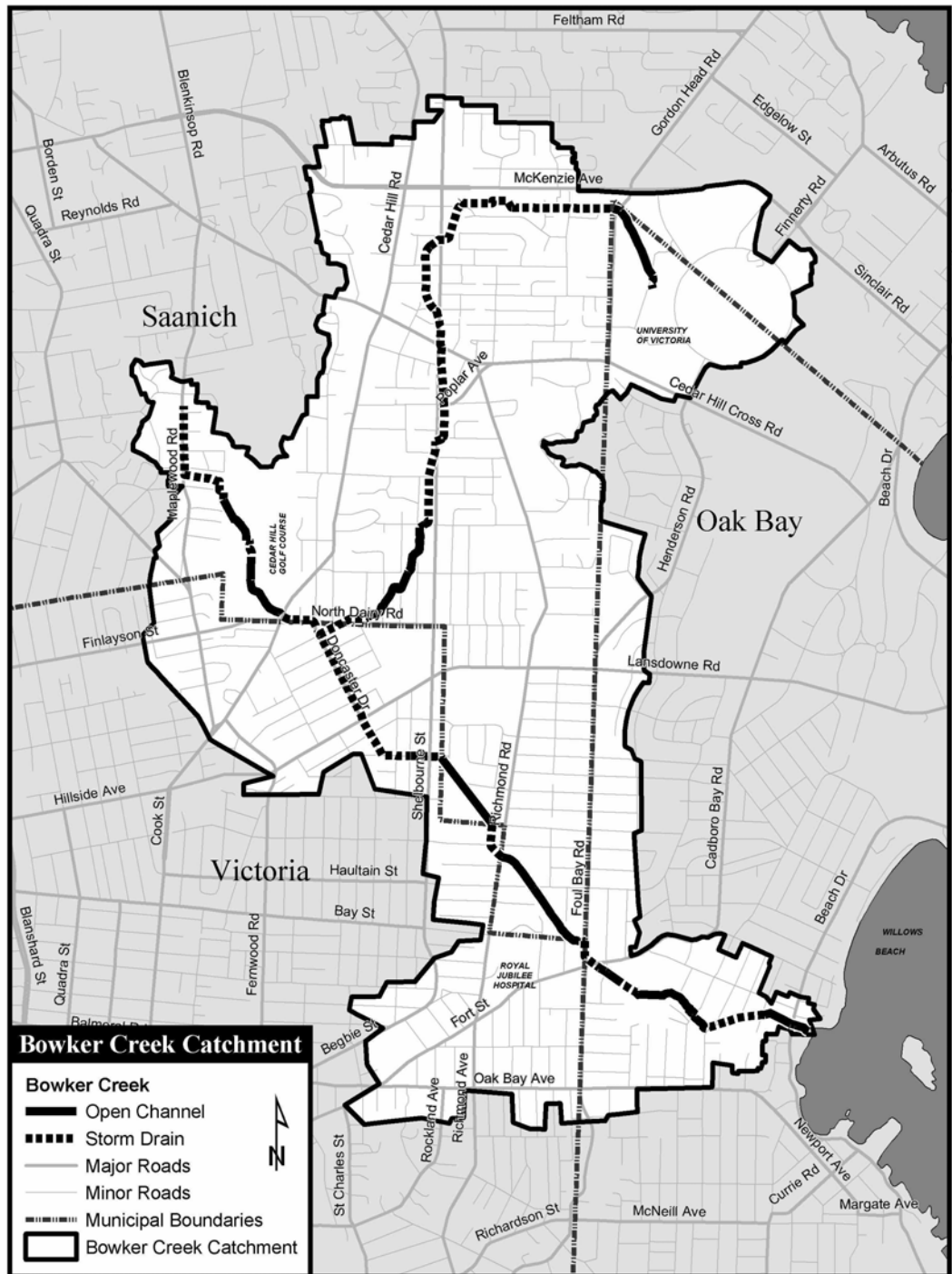
Home Heating Oil Tanks: What You Should Know!
www.gov.saanich.bc.ca/resident/utilities/pdfs/Otank.pdf

Gardening With Native Plants
www.hctf.ca/nature.htm

Identifying And Controlling Invasive Plant Species
www.coastalinvasiveplants.com

For more information contact:

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 Victoria, BC V8W 2S6



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