

British Columbia Archives images: A01056, A01057, A01058



Shelbourne Valley in the Bowker Creek watershed as it appeared in 1901. Can you see the edge of the Bowker Creek watershed? Can you find some landmarks in the photo, as they are today?

# Bowker Creek Watershed

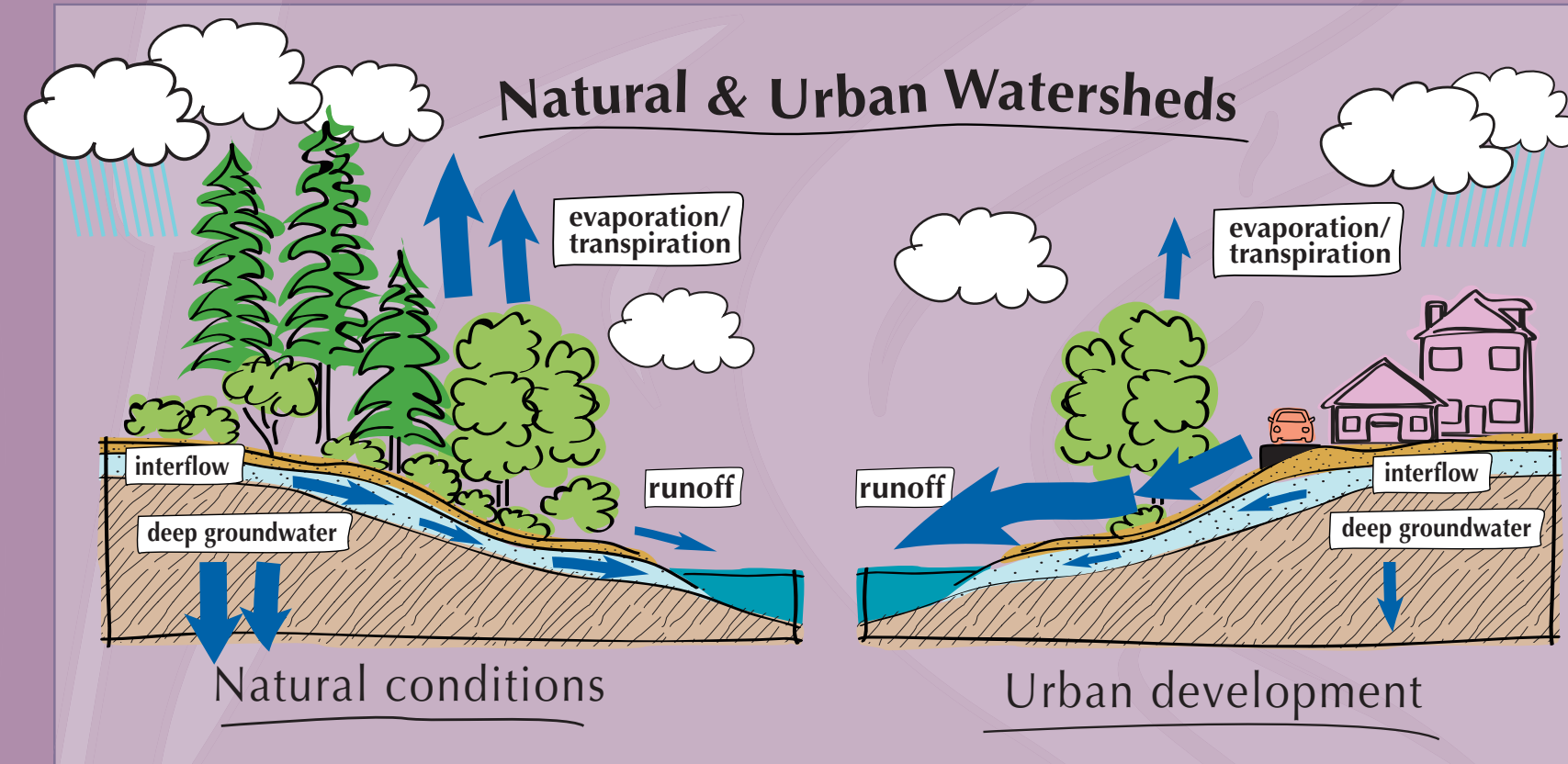
## Do you live, work, or visit in the watershed?



Photos: D. Lock

Garry oak ecosystems are home to many sensitive species such as those shown: common camas (*Camassia quamash*), satin-flower (*Sisyrinchium douglasii*), chocolate lily (*Fritillaria lanceolata*). Less than 5% of this ecosystem remains. The Mt. Tolmie Conservancy Association works within the park to restore Garry oak ecosystems through the removal of invasive species and planting of native species.

Bowker Creek flows from the headwaters at the University of Victoria, through Saanich and Victoria and drains into the ocean at Oak Bay. It is 8 kilometers long and about 60% of the original creek channel has been piped and is now underground. An open tributary crosses Cedar Hill Golf Course and Park. The Bowker Creek watershed is 1028 hectares in area and is home to approximately 30,000 people. About 30% of the watershed is impervious (i.e. covered in hard surfaces such as buildings, roads and parking lots) due to urban development.



**What is a watershed?**  
A watershed is a catchment area that drains surface and groundwater to a common waterway such as a creek, lake, wetland, estuary or ocean. In an urban watershed, much of the land is covered with buildings, concrete, asphalt and other impervious surfaces that block water from naturally soaking into the soil. When this happens, the water stays on the surface and flows into stormdrains, where it is quickly transported to nearby watercourses.

Stormwater runoff collects pollutants on its way through a watershed: oils and grease from roads and driveways, chemicals from gardens and lawns, litter and anything else that will float or dissolve. This polluted water then flows from the land into creeks, lakes, wetlands or the ocean.

Vegetation in natural watersheds intercepts rainwater, decreasing the rate at which it reaches the ground. Once on the ground, the water infiltrates the soil and moves very slowly through the ground to the creek. Very little water flows over the surface of the ground to creeks. Naturalizing our property can help an urban watershed to function more like a natural watershed. The benefits will include reduced stormwater runoff and flooding, increased habitat and improved water quality.

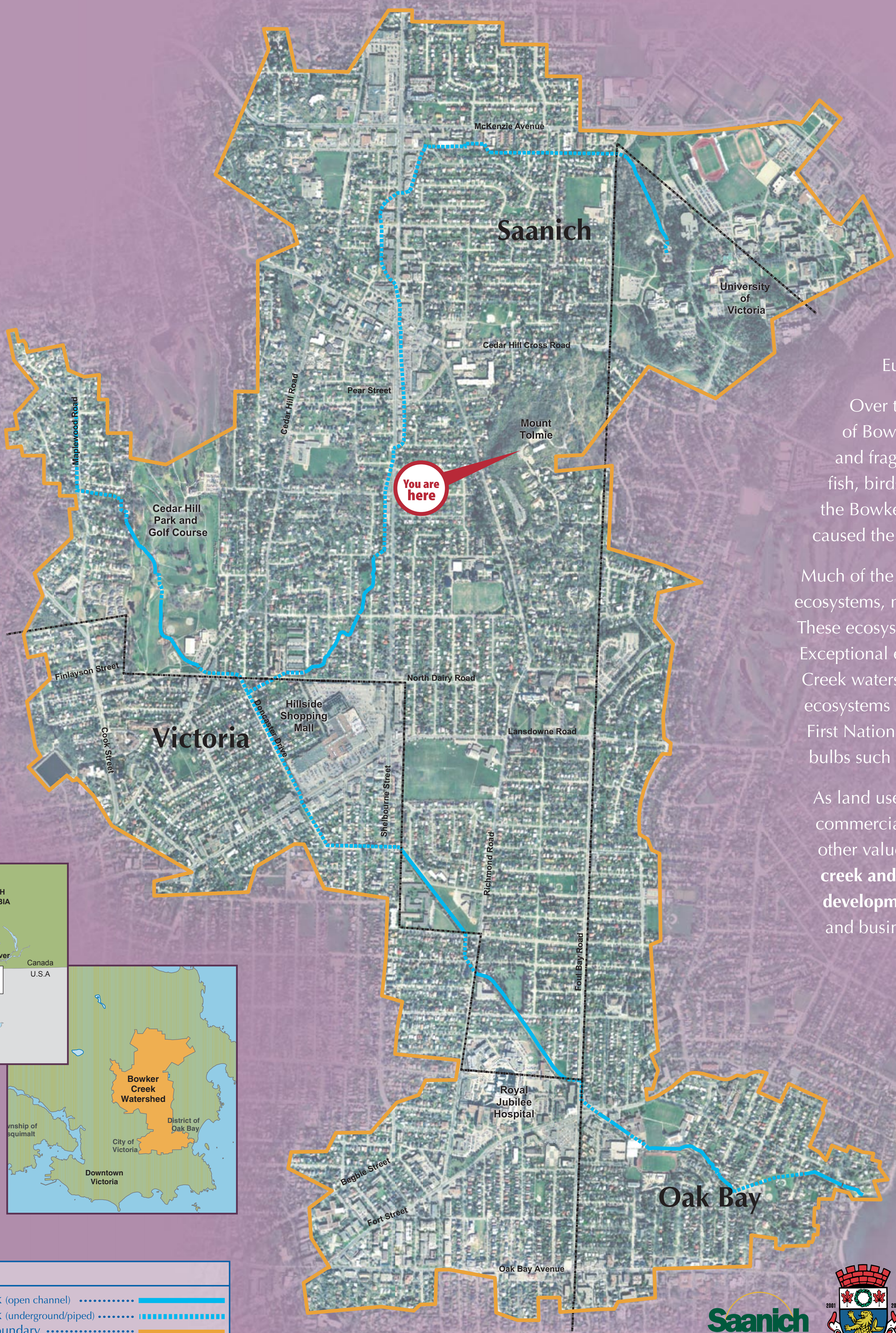
- The Bowker Creek Urban Watershed Renewal Initiative (BCI) is a partnership among local and senior governments, institutions, businesses, stewardship and community groups. The goals of the BCI are to:
- Encourage people to take responsibility for actions that affect the watershed
  - Manage stream flows effectively
  - Improve and expand public areas, natural areas, and biodiversity in the watershed
  - Improve water quality in the watershed

- What you can do**  
*Put waste where it belongs:*
- Ensure all household chemicals/cleaners are disposed of at a safe, environmentally appropriate location
  - Recycle used oil, solvents and paints at local collection centres
  - Repair automobile leaks
  - Put extinguished cigarette butts and other litter in the garbage
  - Collect pet waste and bury it or flush it down the toilet
  - Compost yard waste, do not put it in or store it near the creek

- For more information contact:**
- Friends of Bowker Creek Society [www.bowkercreek.org](http://www.bowkercreek.org)
  - Saanich Parks 475-5522
  - Mt. Tolmie Conservancy Association 595-2730



Legend	
Bowker Creek (open channel)	.....
Bowker Creek (underground/piped)	.....
Watershed Boundary	.....
Municipal Boundary	.....



### Mount Tolmie

Historically, the Bowker Creek watershed was an important part of the traditional territories of the Songhees First Nation. Much of the watershed was converted to agricultural use following European settlement.

Over time, **land use changes** have had a negative effect on the ecology of Bowker Creek and its watershed. Vegetation clearing, channelization and fragmentation of the creek corridor have meant a **loss of habitat** for fish, birds and other wildlife. Historic land development practices within the Bowker Creek watershed have not only affected the creek, but have also caused the degradation of other types of habitat.

Much of the upland area of the watershed originally sustained Garry oak ecosystems, now one of the most endangered plant communities in Canada. These ecosystems support many rare and endangered plants and animals. Exceptional examples of these ecosystems are located within the Bowker Creek watershed at Mt. Tolmie Park and the University of Victoria. Garry oak ecosystems are an important part of the cultural heritage of British Columbia. First Nations peoples tended them with fire and cultivation, and depended on bulbs such as camas as a staple for food and trade.

As land use in the watershed has changed over time to the existing residential, commercial and institutional uses we see today, the ecological health and other values of the watershed has declined. Opportunities to **improve the creek and upland habitat** will occur as the watershed is redeveloped. **Future development and land use planning**, as well as **things we do** at our homes and businesses will help to **restore the health** of the watershed.

