WORKING TOGETHER TO BALANCE CONSERVATION, RECREATION AND COMMUNITY VALUES

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# WATER QUALITY AND WATERSHEDS

We all live in a watershed. People who live or work in the watersheds that drain into the Gorge Waterway and Portage Inlet have a profound effect on the waterway and everything that lives in it.

#### WATERSHEDS

A watershed is the area of land that drains rainfall, snowmelt, sediment and dissolved materials to a particular water body, such as a stream, river, lake, or marine estuary. The watersheds that drain into the waterway cover an area of 81.6 square kilometres, stretching from Elk Lake in the north, to Mount Doug in the east and the Highlands in the west.

Water makes its way through the natural creeks and rivers of the watersheds, but it also follows the network of storm drains along the streets that eventually open into the waterway. There are more than 140 monitored stormwater discharges along the waterway.

# THE HUMAN INFLUENCE A number of activities affect the waterway in significant ways:

Cars and other vehicles contribute considerable



## TEN COMMON POLLUTANTS

- 1. Fuel and oil cars and storage tanks
- 2. Mercury electronic equipment, batteries
- 3. Cadmium car exhaust
- 4. Copper brakes and starters in cars
- 5. Antifreeze Windshield washer fluid and car radiators
- 6. Lead car exhaust
- 7. Zinc roofing and culverts
- 8. Pesticides yards, gardens, playing fields and parks
- 9. Fertilizers homeowner and public lawns and gardens
- 10. Coliform bacteria faulty sewage and septic facilities

- pollution, especially if they are poorly maintained.
- The use of pesticides and fertilizers on lawns and gardens can cause problems — the former adds to nutrient pollution and the latter leads to concentration of toxins up the food chain in everything from fish to orcas to humans.
- In urban areas, large expanses of roads, parking lots, and roofs of buildings replace forests, soils and wetlands. These impervious surfaces do not allow water to soak into the ground. The increased runoff picks up and transports pollutants. It increases the volume of water, causing erosion that destroys stream channels and banks, wildlife habitat and adjacent property.
- House and road building in the watershed can cause increased siltation. The silt smothers bottom-loving animals and plants, and destroys fish-spawning and bird-feeding areas.
- Sometimes sanitary sewers are incorrectly connected to stormwater drains and along with faulty septic systems, harmful bacteria can contaminate the waterway and cause health concerns.

# VICTORIA'S FAVOURITE SWIMMING HOLE

From 1890 to 1930, the waterway was Victoria's best known scenic attraction, with competitive swimming and diving, boat regattas and other events held throughout the summer. Boating is still popular in the waterway but despite major clean-up initiatives, it has never regained its reputation for swimming that it had



Swimming on the Gorge in the 1920s

throughout most of the first half of the twentieth century.

# CAN I SWIM IN THE WATERWAY?

In 2000, there was a "public swim" in the Gorge, to highlight the success of recent clean-ups. Many people ask whether it is safe to swim in the waterway. Like all urban waterways, water quality is variable. The best place for more information is the Vancouver Island Health Authority, which tests the water at the beach at Craigflower Park for coliform bacteria during the summer. You can find out more about the testing by selecting "Beach Reports" on VIHA's website at www.viha.ca/mho

#### HOW CAN YOU HELP?

- Dispose of hazardous household wastes safely. See the CRD Recycling Guide for information on disposal locations for items such as paint, used motor oil, pesticides and cleaners.
- Reduce or eliminate the use of pesticides and fertilizers in your garden and on your lawn. Learn more about natural

- alternatives for pest control and support pesticide bylaws in your community.
- Wash your car over the lawn or a gravel area to prevent detergents, oil and other pollutants from flowing directly into storm drains.
- Help to reduce impervious surfaces around your home and in your neighbourhood by using pervious alternatives to asphalt and pavement (grass or gravel), and encouraging construction of narrower streets, driveways and paths.
- When undertaking a construction project, ensure soil and sediment are contained and minimize the tracking of dirt onto roads.
- Use a broom instead of a pressure washer to clean your driveway and walkways.
- Make sure your septic system is regularly inspected and maintained.
- If you have a stream or a shoreline on your property, protect or restore the natural vegetation along the banks.

### LEARNING MORE

The CRD website has lots of information on watersheds. Go to www.crd.bc.ca and click on "Caring for our environment."

For more information on the Gorge Waterway Initiative: info@gorgewaterway.ca 360-3065 www.gorgewaterway.ca

This GWI Infosheet is one in a series on the natural and cultural features of the Gorge Waterway, Portage Inlet and surrounding watersheds

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