

# GWI infosheet

GORGE WATERWAY INITIATIVE

WORKING TOGETHER TO BALANCE CONSERVATION, RECREATION AND COMMUNITY VALUES

[info@gorgewaterway.ca](mailto:info@gorgewaterway.ca) • [www.gorgewaterway.ca](http://www.gorgewaterway.ca)

## FISH OF THE WATERWAY

Estuaries like the Gorge Waterway and Portage Inlet have been called “nurseries of the sea” for their important role providing sheltered habitat, food and spawning areas for a variety of fish species.



Julian Anderson

Counting fence on Colquitz Creek

### HISTORY OF HERRING

The herring population of the waterway is genetically distinct, and herring numbers have decreased considerably over the past few decades. Historically, crowds of anglers used to line Craigflower Bridge during the annual spring herring migration to spawning grounds in Portage Inlet.

People still jig for herring during March and April, but scientists say that significant spawning has not occurred in the inlet since the late 1980s. The reasons for this are not clear.

Humans are not the only species with an interest in herring. Birds such as the blue-listed Double-crested Cormorant feed on herring. A decline in the cormorant's numbers in recent years may in part be due to the reduced numbers of herring.

### SAFE HAVEN FOR SALMON AND TROUT

Two streams that flow into Portage Inlet — Craigflower Creek and Colquitz River — support spawning populations of coho and chum salmon, as well as cutthroat trout.

Most of the salmon in Craigflower Creek were wiped out in the 1970s due to in-stream barriers caused by road construction and other development. In the 1980s, parts of the stream were restored, and juvenile coho were transplanted from nearby Goldstream River. Recently, restocking has ceased, and the returning populations seem to be stable.

The Victoria Fish and Game Protective Association operates a fish counting fence on Colquitz River. The fence and the volunteer efforts of the club have played a key role in providing information about migrating salmon and trout in the creek. Between 200 and 400 wild coho and several dozen wild

chum salmon spawn in Colquitz River each year. Although these runs are probably much smaller than in historic times, they are a rare asset for an urban stream.

The protection and food provided by habitat such as extensive eelgrass beds in Portage Inlet and the Gorge Waterway provide “safe passage” for young salmon and are crucial to their survival before they head out to sea.

Sea-run cutthroat trout also spawn in Colquitz River and Craigflower Creek and take shelter in the eelgrass beds.



Chris Bos

Young cutthroat trout

## SUPPORTING THE FOOD CHAIN

A variety of other fish species frequent the Gorge — stickleback, sculpins, bullheads, flatfish, etc. — and they play a significant role as food for mammals such as otters, larger fish, and a host of fish-eating bird species including herons, mergansers, kingfishers and cormorants.

## KNOWING THE RULES

If you fish for herring or any other species in the Gorge Waterway or Portage Inlet, you will need to get a tidal water fishing licence from the federal Department of Fisheries and Oceans. Licences are available province-wide from more than 400 vendors, including sporting goods stores, resorts, service stations, marinas, charter boat operators and department stores.

The federal *Fisheries Act* is powerful legislation, enforced by fisheries officers, that protects fish habitat. The act states that no person “shall carry out any work or undertaking that results in the harmful alteration, disruption or destruction of fish habitat” and also that “no person shall deposit or permit the deposit of a deleterious substance of any type in water frequented by fish . . .”

Consult your local municipality before conducting any work on your shoreline to obtain information on required permits and approvals.

## HOW CAN YOU HELP PROTECT WATERWAY FISH?

Wherever you live, your activities on land affect the fish and other organisms that live in the water.

- Ensure that sediment from land-based construction activities is contained to prevent it from entering nearby streams or the



Herring fishing, 1947

Esquimalt Municipal Archives

waterway where it can smother vegetation, clog the gills of fish, and impact other marine species.

- Take measures to reduce or avoid the use of lawn and garden pesticides and synthetic fertilizers, properly recycle and dispose of oil, paints and other chemicals, and maintain your septic system. These actions will help stop polluted water from entering the stormdrains and the waterway where it causes poor water quality.
- Explore ways to allow rainwater to infiltrate into the ground and reduce the amount of impervious surfaces on your property. Impervious surfaces, such as driveways, parking areas, and even your house, do not allow rainwater to infiltrate into the ground. Instead, the rainwater flows along these hard surfaces, picking up pollutants before entering stormdrains and the waterway where it impacts water quality.
- A naturally vegetated shoreline helps to filter pollutants from surface water flowing into the waterway, protects the soil from eroding, and overhanging

vegetation provides shaded habitat for fish and other wildlife.

- Leaves and garden clippings left on or near the shoreline can end up in the waterway where they rot and reduce the oxygen needed for fish and other aquatic organisms.
- Use best practices to reduce the impact of shoreline structures on habitat.
- Try to navigate watercraft away from resting waterfowl and sensitive waterway vegetation like eelgrass and marshes to minimize damage to these habitats and disturbance to the species that inhabit them.
- Participate in community shoreline clean-ups or help at the counting fence on Colquitz river ([inquiry@vfpga.org](mailto:inquiry@vfpga.org)).
- Support local government initiatives to upgrade failing storm and sanitary sewer infrastructure to minimize pollution to the waterway.

## LEARNING MORE

The Department of Fisheries and Oceans has information on everything from fish biology to the *Fisheries Act* to where to get an angling licence ([www.pac.dfo-mpo.gc.ca](http://www.pac.dfo-mpo.gc.ca)).

For more information on the Gorge Waterway Initiative:  
Email: [info@gorgewaterway.ca](mailto:info@gorgewaterway.ca)  
Phone: 360-3065  
Website: [www.gorgewaterway.ca](http://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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