

Gorge Waterway Initiative

2019 Annual Update



Introduction

The Gorge Waterway Initiative (GWI), supported by the Capital Regional District (CRD), is a collaborative, community-driven group of organizations and local government partners working to protect, enhance and restore the natural and cultural features of the Gorge Waterway, Portage Inlet and the surrounding watersheds. GWI provides a coordinated approach to environmental stewardship of the Gorge and Portage Inlet and their watersheds. GWI is led by a consensus-based steering committee responsible for guiding the implementation of the Gorge Waterway Stewardship Strategy. A part-time coordinator initiates and manages projects, seeks funding and provides administrative support.

In 2019, GWI provided input to the Ministry of Transportation and Infrastructure regarding the McKenzie Interchange Project, and worked with regional partners to promote the Greater Victoria NatureHood and the local migratory bird sanctuaries. GWI members attended many community events with the GWI display and watershed model, reaching over 1,700 people with conservation and stewardship messaging. Member groups continued work in their particular areas of the Gorge watersheds, with hands-on restoration works, water quality and environmental monitoring, fundraising and research.

Vision

A healthy environment for all life in the Gorge Waterway, Portage Inlet, their watersheds and communities for the well-being of present and future generations.

Goals

- Provide a forum for the exchange and sharing of information regarding the Gorge Waterway, Portage Inlet and their watersheds
- Promote education and awareness programs on appropriate land and water use
- Establish and encourage activities that show care and concern for the natural environment

Highlights

Water Quality

Each year, CRD staff conduct a variety of monitoring programs in the Gorge Waterway and Portage Inlet to assess the impacts of stormwater on the environment and public health. In 2018, staff conducted intensive marine sampling in Victoria Harbour, the Gorge and Portage Inlet and their watersheds, and analysis was completed in 2019 (full report is posted here: <https://www.crd.bc.ca/about/document-library/documents/plans-reports/wastewater-stormwater/2018>). Water quality parameters of most concern in creeks flowing into the harbours are bacteria, phosphorus, turbidity and metals. Elevated phosphorus levels are attributed to human and animal presence in these watersheds. Most of the marine water quality parameters met the provincial draft water quality objectives with the following exceptions: dissolved oxygen, copper, zinc and bacteria (fecal coliforms and enterococci). These parameters were outside the objectives at some of the measuring sites.

In 2019, CRD staff sampled 54 of the 145 stormwater flows that discharge into the Gorge Waterway and Portage Inlet for bacterial levels in summer and winter. Sediment was collected from nine stormwater discharges. Staff are currently assigning public health concern ratings to those discharges, and data will be available in 2020.

Land & Water Use

Members attended community meetings regarding improved access to the Gorge, organized by the Gorge Swim Fest Society. From the 21 publicly owned access points examined, five were recommended to municipal councils for improvements: Banfield Park (larger dock, improved beach for swimming and forage fish), Burleith Park (wildlife viewing area), Esquimalt Gorge Park (naturalized creek and beach) and Curtis Point (easier access, preserve existing natural ecosystems).

McKenzie Interchange Project

The GWI consulted with the BC Ministry of Transportation and Infrastructure (TRAN) several times in 2019 about the McKenzie Interchange Project adjacent to Cuthbert Holmes

Park and the Colquitz River. Heavy winter rains led to flooding at the construction site and sediment spills into Colquitz River. As partial compensation for this environmental damage, TRAN fisheries biologist Sean Wong designed and constructed two wetland treatment ponds that will collect and treat runoff from the partial cloverleaf on the interchange. The ponds will slow runoff and allow sediments and contaminants to settle and be absorbed by aquatic plants before water is discharged into nearby Colquitz River. Other features include addition of large woody debris, spawning gravel added to parts of the creek, roosting sites for raptors, and bat boxes. Polster Environmental Services used a “rough and loose” bioengineering treatment on the large berm created from excavation of the highway underpass. This treatment will help reduce runoff, increase slope stability and support tree growth. The entire area has been planted with native trees and shrubs. At the mouth of the Colquitz River, a series of dendritic channels were created to provide off-channel habitat for salmonids and other wildlife using the estuary.

Aruncus Consulting presented their ecosystem mitigation options analysis undertaken to offset Garry Oak and Trembling Aspen ecosystems destroyed during the interchange construction. The report concluded that there were no sites within the project footprint or adjacent Cuthbert Holmes Park suitable for replacing the dry rocky site Garry Oak ecosystem. Provincial mitigation strategy



GWI members had a tour of the wetland construction site to see the many restoration techniques being incorporated into the site as mitigation for the McKenzie Interchange project.

A public path is being built between the slope of the partial cloverleaf at McKenzie Interchange and the constructed wetland. This will offer great opportunities for bird and wildlife viewing around the new pond.



guidelines state that the mitigation plan should then consider the Garry Oak ecosystem replacement to be carried out in a protected area within 15km of the project site. Following consultation with the nearby municipalities, several sites in local parks are being considered for this mitigation work. Several sites within Cuthbert Holmes Park were identified as suitable for replacing the Trembling Aspen ecosystem that was lost in the construction.

Elk/Beaver Lake

The Elk/Beaver Lake Initiative Coordinator presented plans for remediation in the lake. The ongoing problem of high phosphorus levels that lead to repeated blue-green algal blooms are of concern. Another concern is the proliferation of invasive plants such as Eurasian milfoil, which continually chokes the areas where rowers practice. CRD Parks staff remove several hundred tonnes of aquatic invasive plants annually with a mechanical harvester. Invasive non-native fish are another problem, a recent survey in the lake captured no native fish species at all. Other concerns include the large populations of Canada geese, American bullfrogs and red-eared slider turtles in and around Elk/Beaver Lake.

Plans are underway to develop and install an in-lake remediation system. CRD staff are collaborating with stakeholders to develop a watershed management plan to address external nutrient inputs.

Community Outreach

GWl display and 3D interactive watershed model were displayed at many community outreach events in 2019, including the Vic West Street Fest, Selkirk Waterfront Festival, two Oceans Day events, Canada Day on the Gorge and the Gorge Swim Fest. Approximately 1,700 people were reached through these efforts. In addition, the GWl display, InfoSheets and the interactive watershed model of the Gorge Waterway were on display and used for programming at the Gorge Waterway Nature House throughout the year.

The GWl co-hosted a public talk with the Esquimalt Lagoon Stewardship Initiative, on the Southern Vancouver Island Salmon Enhancement Program. This talk was presented by Department of Fisheries & Oceans Community Advisor Melissa Nottingham. Many of the GWl member groups focus their conservation work on salmon enhancement in watersheds that drain to the Gorge Waterway.

The CRD Harbours Program initiated the Harbour Stewardship Speakers Series in 2019. The first event was “Blue is the New Green”, presented by an award winning scientist from Israel whose company EConcrete has developed new approaches with concrete for marine infrastructure in urban areas. The second talk was on Restoration Effectiveness of Living Shorelines, by Jason Toft from University of Washington, who has done ground breaking work in Puget Sound restoring and enhancing urban shorelines using Green Shores approaches. Both public talks were well-attended.

GWI Partners

Community Groups

- Burnside Gorge Community Association
- Esquimalt Anglers
- Esquimalt Residents Association
- Friends of Cuthbert Holmes Park
- Friends of Swan Creek Watershed
- Friends of Victoria Harbour Migratory Bird Sanctuary
- Gorge Swim Fest Society
- Gorge Tillicum Community Association
- Gorge Waterway Action Society
- Habitat Acquisition Trust
- Peninsula Streams Society
- Portage Inlet Protection Society
- Portage Inlet Sanctuary Colquitz Estuary Society
- Salmon in the City
- SeaChange Marine Conservation Society
- South Island Aquatic Stewardship Society
- South Island Sea Kayaking Association
- Veins of Life Watershed Society
- Victoria Canoe and Kayak Club
- Victoria Golden Rods and Reels Fishing and Social Club
- Victoria Highland Games Association
- Victoria West Community Association
- World Fisheries Trust
- World Wildlife Fund

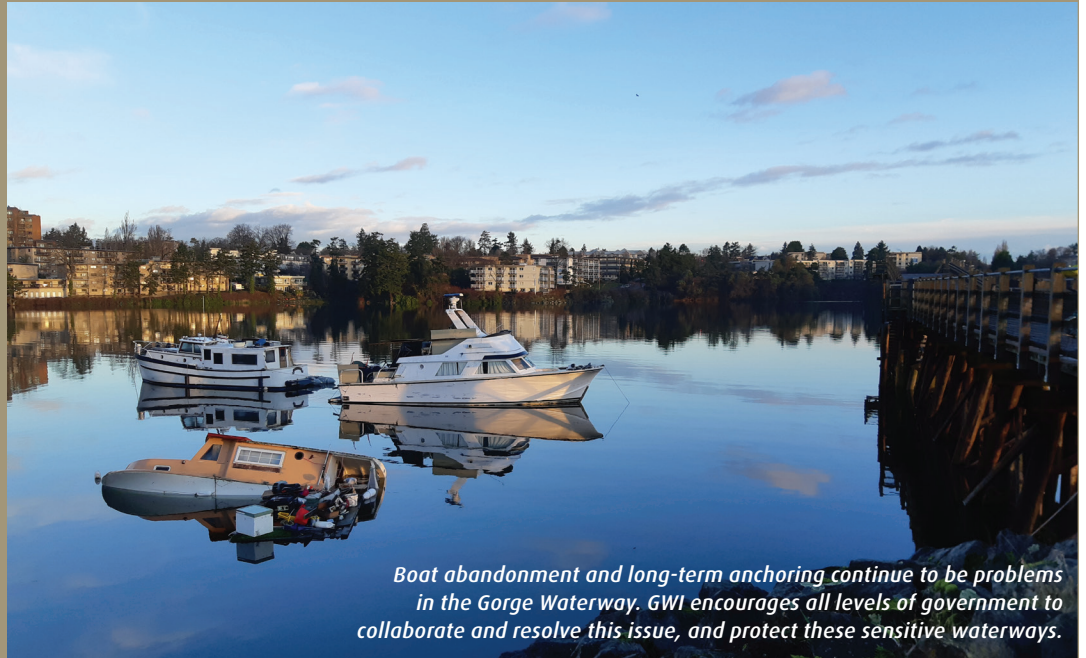
Government Agencies

- Capital Regional District
- City of Victoria
- District of Saanich
- Township of Esquimalt
- Town of View Royal
- Canadian Wildlife Service

Gorge Waterway Initiative

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Focus for 2020

In 2020, GWI will focus on:

- Continuing to provide input to review processes for developments along the waterway.
- Providing input to the CRD Harbours Program habitat mapping, focusing on tidal marsh, eelgrass, kelp and Olympia oysters and identifying key areas for restoration.
- Providing input to bird and fish surveys throughout the waterway.
- Sponsoring Harbour Stewardship Series speakers events.
- Promoting the Green Shores™ program to shoreline residents and encouraging municipalities to incorporate Green Shores principles into planning initiatives.
- Promoting activities that engage the community in stewardship of the Gorge Waterway and Portage Inlet.

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