



Castell Creek and You

... *Caring for water quality and wildlife habitat on your property*

You are living in the Castell Creek watershed.

A watershed is an area of land that catches rain and snow and drains or seeps into a marsh, stream, creek, river, lake or groundwater. Gabriola's watersheds are vital for the health and quality of our groundwater and are critical to maintaining nature's biodiversity.

You may be lucky enough to have Castell Creek, or a wetland or smaller wintertime *creeklet* flowing right through your property. The privilege of living alongside a creek or stream comes with the responsibility of understanding how to manage your property to protect the health of our most precious natural resource. Even if it runs dry in the summer or has portions that are now roadway ditches, these are all waterways: the lifeblood of the landscape.

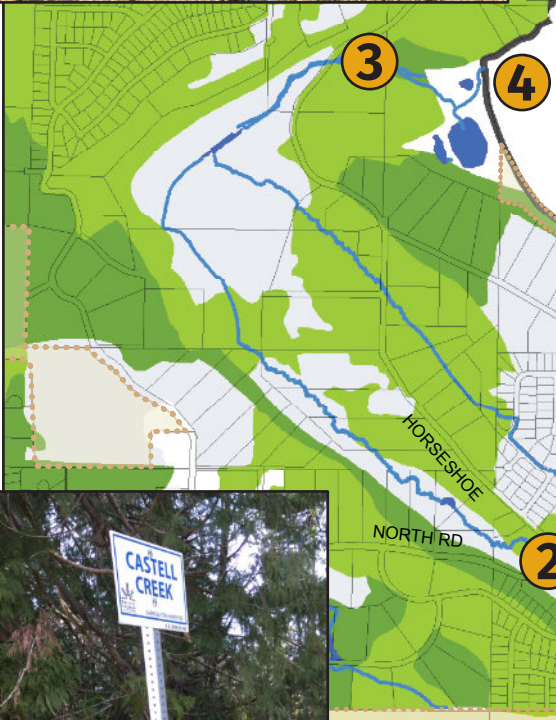
These waterways provide ecological services that landholders, communities, and wildlife jointly benefit from. They are truly an oasis of biodiversity.



3 Near Daniel Way, above the salt marsh



At Sandwell Beach **4**



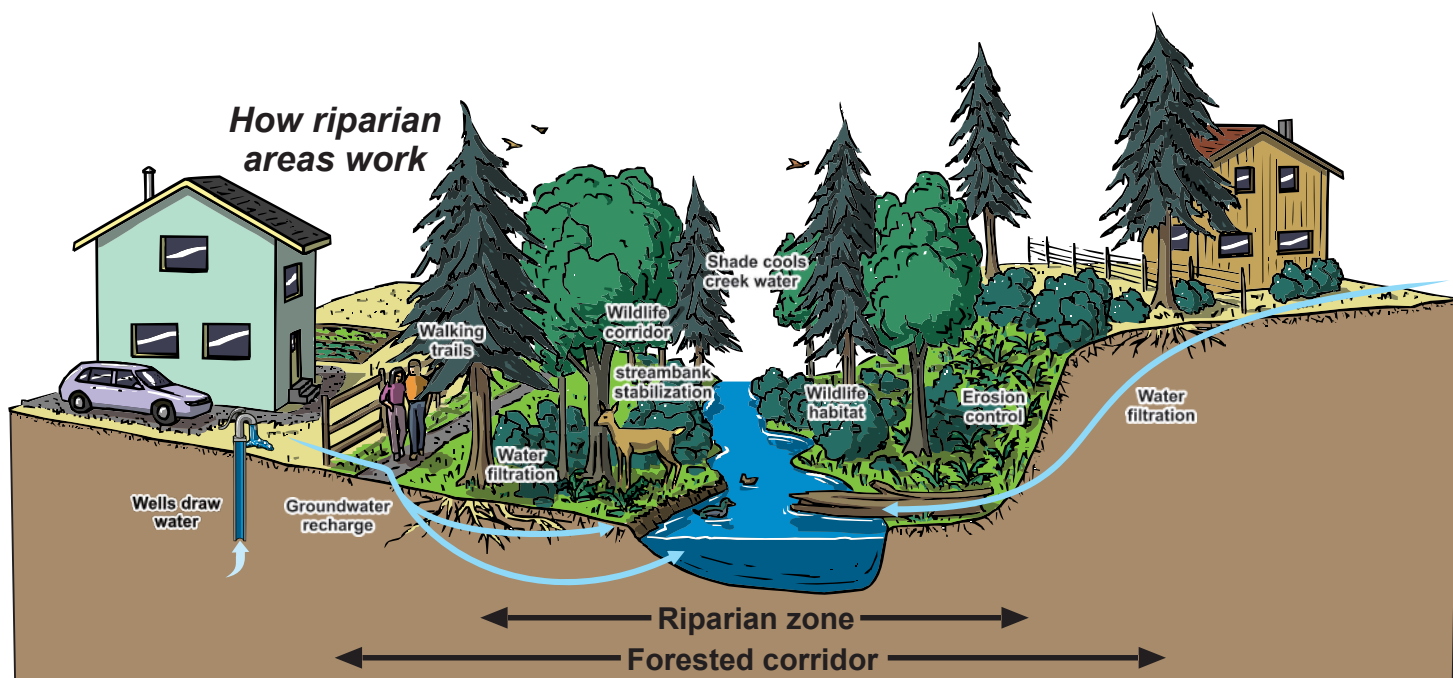
Mid-way along Suzanne Ave **1**



2 North Road culvert crossing

Get to know your neighbourhood watershed

Castell Creek's headwaters begin collecting from the 707 Park. During subdivision and roadway development several decades ago, wild water flows were ditched along Suzanne Avenue and the Rollo-McClay neighbourhood. After passing through a culvert near the intersection of North and Horseshoe Roads, it has several wild and natural stretches through the acreages of Horseshoe Road, before opening to a hayfield, then through a culvert on Daniel Way, and finally tumbling wild through a mature forest into the lagoon and estuary of Lock Bay (Sandwell Park). Several portions have been impacted by overuse and removal of vegetation, other stretches are slowly re-naturalizing.



(Regional District of Nanaimo, graphics by Richard Franklin; adapted with thanks)

Maintaining a Healthy Riparian Area

The vegetated area along the sides of a creek or stream is called a *riparian area*. Riparian areas are very important transition zones between land and water. Healthy creeks are dynamic—they change with the seasons and contain features like pools, riffles, and runs that harbour aquatic life.

Trees and plants within a riparian area shade the water, provide food and habitat for wildlife, reduce streambank erosion, and filter stormwater run-off.

It all eventually flows into the ground or into the sea!

The riparian area on either side of a stream, creek, or edges of any wetland (even a roadside ditch) is vital for the health of freshwater ecosystems and watersheds, including household well water quality.

These are complex ecosystems. Even small actions upstream can have a big impact further downstream.

Being a caring steward of your backyard or neighbourhood creek means working to maintain healthy and intact riparian areas to ensure a safe and reliable supply of freshwater for your family, community, and the environment.

Caring for Your Watershed: Tips

Manage and filter rainwater — Use gravel, loose bricks or flagstones instead of impermeable surfaces like pavement and concrete whenever possible. Let rainwater from roof gutters drain into the soil, create rain gardens in these areas, or collect it for home and garden use.

Manage people, pets, and livestock — Compost and safely dispose of garden waste. Establish walking paths and fence or otherwise limit free-ranging humans and pets all along creek sides, so tender riparian plants aren't destroyed leaving bare soil. Don't leave pet wastes or trash near the creek.

Protect and plant native vegetation — Preserve existing natural streamside grasses, sedges and forbs, trees and shrubs,

and replant degraded areas. This vegetation controls soil erosion and runoff from heavy rains, helping to filter and purify surface water so it doesn't flow into waterways. Downed wood in the riparian zone builds soil moisture and habitat. Avoid removing stumps and dead trees in or along the stream, unless they create a full barrier or a hazard to people and property.

Control and remove invasive species — Plants like Himalayan blackberry and Yellow-flag iris are non-native species that can spread so aggressively, all other native plants are choked out, severely impacting wildlife habitat.

GaLTT is here to help

Climate change is bringing more droughts and "atmospheric rivers" to our island. And over many years, we have learned from the engineered mistakes of the past. Actions that help make our watersheds healthier, more natural and more resilient (as touched on in this factsheet) are a great start.

Thanks to a Gabriola taxpayer-funded grant from the **RDN-Watershed Stewardship Program**, GaLTT is helping our community with watershed conservation and awareness. We

will be offering native plants and volunteer help for local restoration efforts. For more stewardship resources and info about riparian habitat, check out galtt.ca/nature-stewards-resources/

And if you want to get involved with watershed monitoring and conservation as part of a "Streamkeepers" group in your neighbourhood, please get in touch! E-mail naturestewards@galtt.ca

conserve + connect

EMAIL: naturestewards@galtt.ca • WEBSITE: galtt.ca/naturestewards

