

Target: We want to protect and enjoy the benefits of healthy stream, lakefront, and estuary habitats.

Indicators:

- 50% of “intact” riparian habitats protected by 2021
- 10% of impacted riparian habitats restored by 2021

Rationale

Food, shelter and water are considered the basic needs of life; and for everything that lives in the river, those first two needs point to healthy riparian habitats. Instream and shoreline plants and structures (such as logs) provide essential food, cover from predators, shade, and protection from strong currents. These habitats are also like a highway from source to sea, permitting safe travel up and down the river corridor. Riparian habitats can be like the gas stations on a long highway, each one an essential landing pad on the journey.



Barry Hetschko photo

Progress

The riparian working group aims to restore private and park land wherever possible. Eradicating invasive plants and educating homeowners on responsible landscaping are also key factors to success. Plants such as knotweed pose a threat to the ecosystem, so replacing the invaders with native vegetation is vital.

The Cowichan Lake and River Stewardship Society (CLRSS) is an inspiring leader in this work. Through a multi-year shoreline project, the group has made exceptional progress re-establishing natural riparian conditions through planting potted native shrubs and “live stakes” (pieces of re-sprouting native shrubs such as red osier dogwood and willow), restoring over 3,000 square meters of riparian habitat along the lakeshore since 2014. The group is also very involved in education and awareness around the importance of natural shoreline habitats, carrying out an extensive door knocking campaign every summer. Another awareness-raising tool they are using is the Shoreline Steward driveway sign indicating participation in the program. A visible indicator of success is that these signs are popping up throughout the Cowichan Lake area. The group also produced a riparian care and maintenance manual, which is an effective reference for identification and a gardening guide on riparian plants.

Other active partners include Cowichan Tribes and the British Columbia Conservation Foundation (BCCF), which are leading a riparian restoration initiative funded federally through the Coastal Restoration Fund. Almost \$1 million will be dedicated to this work in the Cowichan and Koksilah watersheds from 2017 to 2021. In the summer of 2017, the partners led a project that restored over 2,000 sq. metres of riparian habitat along the Cowichan and Koksilah Rivers.

The riparian working group has a second priority: to develop a generic monitoring system that all Cowichan Valley practitioners could adopt to track riparian restoration data. Again, CRLSS and BCCF are playing a leadership role in this important work. In addition, funding has been received for two Cowichan Valley residents to become certified Green Shores auditors, who can help to assess riparian restoration work in terms of internationally recognized Green Shores standards.

These targets and priorities are ambitious, pushing the CWB riparian group and its partners to take positive steps towards lasting solutions. Its work also includes increasing understanding and engagement through hosting events such as a recent forestry tour and forest hydrology workshop.

Monitoring

Thanks to funding from a variety of sources, Cowichan partners including Cowichan Tribes, Cowichan Lake and River Stewardship Society and the British Columbia Conservation Foundation continue to be actively engaged in riparian restoration on a watershed scale. In order to monitor and maintain these works, extensive inventories of restored sites – and sites that still require restoration – are being created. All areas that have been restored are assessed annually and recently restored sites are irrigated using fire pumps during the dry summer months to ensure the young plants survive their critical first summer.

Next Steps

- Continued riparian inventory, restoration and monitoring in the Cowichan and Koksilah watersheds including common riparian monitoring protocols and data base
- Invasive exotic riparian management workshop
- Funding campaign for riparian habitat purchase including critical Shaw creek area

Along the shores of local waterways lurks a plant that is on BC's top-10 worst invasive list: Japanese knotweed. Setting a strategy to manage this plant invader is one of the goals of the Cowichan Watershed Board's riparian working group.

Said one riverfront property owner, "There was one stalk of Japanese knotweed sticking out of the ground. I pulled it out and thought, there, it is done." Then she saw another shoot coming up about three metres away. That's when she recognized she was waging a battle with an underground enemy – the plant's extensive root system.

Not only does knotweed grow taller than many native plants, it also gets a head start in the spring, shading and stunting the others such as willow and young cottonwood that offer salmon a cool habitat when the water level rises in the fall. Then the knotweed dies back, exposing previously shaded areas just as salmon swim upriver to spawn. Salmon are seriously affected but so are species such as the screech owl that nests in cottonwood trees.