Lower Columbia Rare Species Ecosystem Enhancement Program (LCRSEEP)

News Bulletin 1: Winter 2021/2022

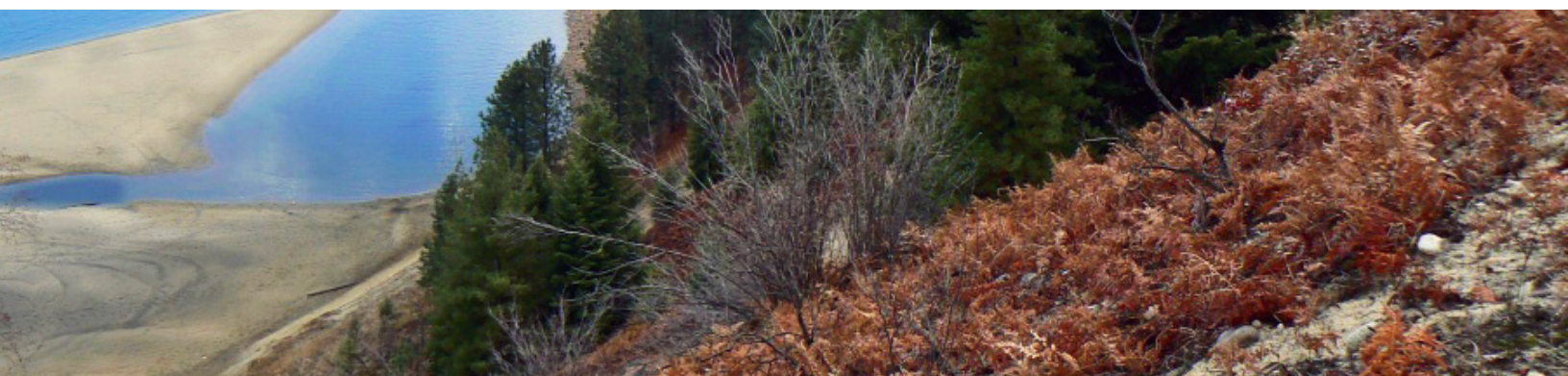
Mission statement: “To foster endangered species and ecosystems, and to enhance local conservation networks through collaborative ecosystem enhancement projects”.

The LCRSEEP is a multi-year collaborative project designed to:

- Support rare and threatened ecosystems and wildlife species in the lower Columbia River valley by enhancing or protecting rare habitats in the Lower Columbia River area, and
- Develop strategic partnerships to help establish a network for collaboration and coordination of future stewardship activities and projects in the area.

LCRSEEP is led by the Okanagan Nation Alliance (ONA) in partnership with the Trail Wildlife Association (TWA), and BC Ministry of Forests, Lands, Natural Resource Operations, and Rural Development (FLNRORD).

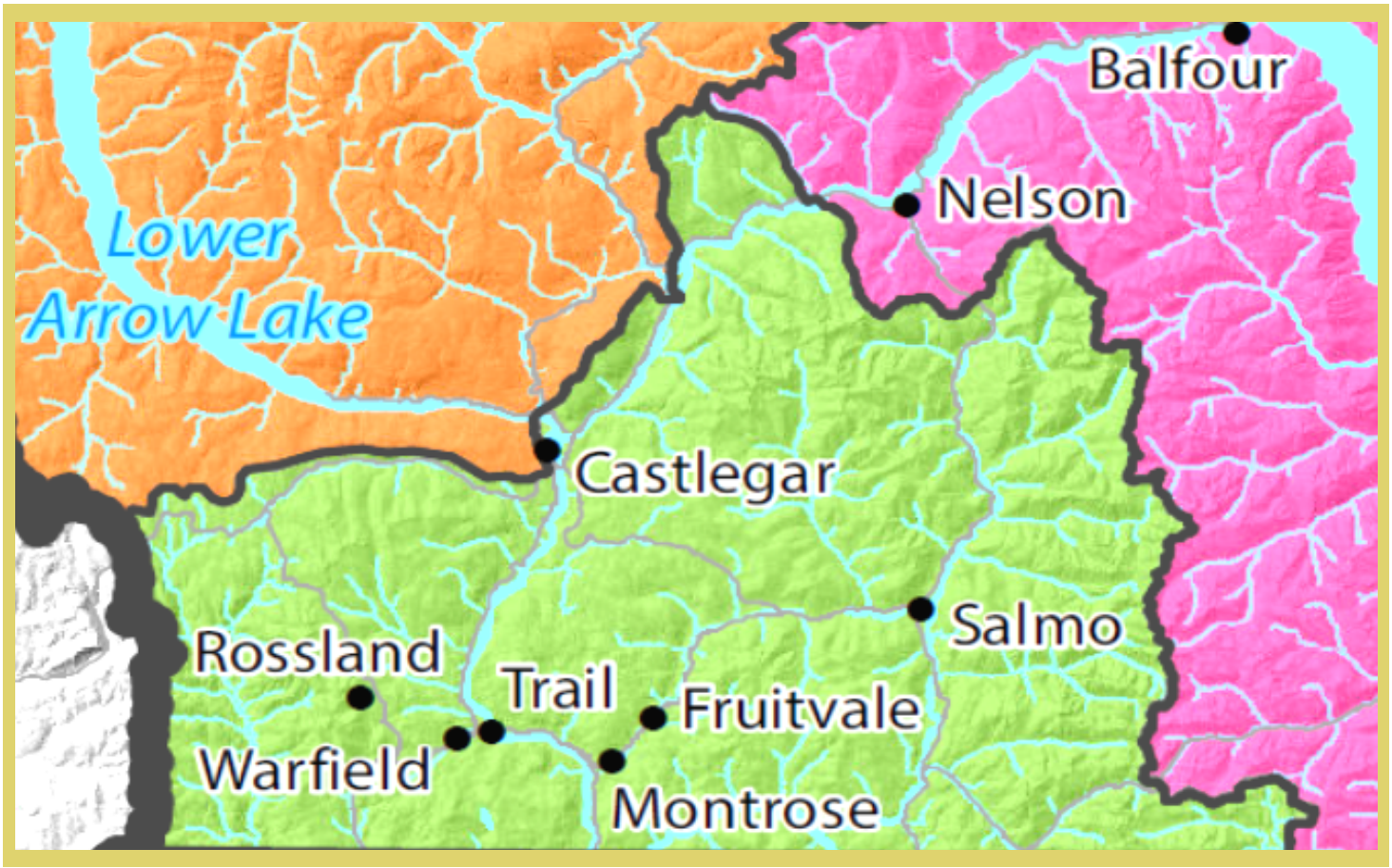
LCRSEEP is funded under the Columbia Basin Trust’s Ecosystem Enhancement Program with additional funds and resources provided by ONA, FLNRORD, BC Hydro’s Fish and Wildlife Compensation Program, and TWA.



LCRSEEP aims to complete 12 different conservation projects over five years including species at risk inventories, habitat restoration initiatives, and community outreach and engagement.




Project area map (green) provided by Columbia Basin Trust EEP



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Current Projects

Riparian Ecological Restoration

This project assessed the impacts of unregulated public use and beaver activity on Lower Columbia River sites with mature and recruiting Cottonwood trees. Restoration of these sites is done by: armouring trees to protect against beaver, ungulate, and rodent damage; planting native species absent from the site; and engaging in disscussion with local recreational users about the project.

In Spring of 2021, Cottonwood and Red-osier Dogwood stakes were planted in bare and disturbed soils to increase tree recruitment and stabilize eroded banks. These plant species will directly benefit the blue-listed Western Screech Owl, blue-listed Great Blue Heron, red-listed Lewis' Woodpecker, and any other wildlife that frequent riparian areas. Although some sites suffered from vandalism, we are looking to enhance more sites in 2022 to protect mature and emerging Cottonwoods for wildlife use.

Bat Habitat Enhancement

This project assessed artificial bark roosting structures for bats (Branden Bark™) to determine their effectiveness as year-round habitat compensation in the event of mature trees lost to logging.

In October 2021, the artificial bark was installed on nine trees, and an additional 9 trees were modified by arbourists with a chainsaw to create other micro habitats. Acoustic data loggers were used to assess occupancy and species identification by recording bat echolocation signals. Species identification will be confirmed by collecting guano for genetic analysis from guano traps placed below the Brandenbark. As well, temperature and humidity data loggers were installed to monitor habitat conditions within the artificial bark. This data will be compared to that of nearby natural roosting sites to help predict if these artificial structures can be suitable habitat for more widespread use. If so, the artificial bark structures may play an important role in the future of bat habitat enhancement in the Lower Columbia.

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Lewis's Woodpecker (LEWO) Surveys

Lewis's Woodpecker (LEWO) surveys were conducted in July 2021. A total of 14 active nests were located throughout the West Kootenays, which is an increase from 9 in the 2020's. Two of the nests observed were new locations, however, 4 known nest trees had fallen since 2015. LEWO were observed using some new tree species for nesting, which were Lodgepole Pine and Paper Birch. Tree species typically used are: Ponderosa pine, Douglas-fir, Black Cottonwood, and Western Larch.

Yellow Breasted Chat Surveys

From May to June 2021, field surveys were conducted in the Pend d'Oreille river valley burn site. Surveyors used call-playback surveys and recorded incidental observations during Lewis's Woodpecker surveys. A total of four active territories were confirmed, with an additional one suspected. Restoration activities, such as brushing, will be planned for fall 2022 to help enhance this red-listed species' habitat.

Western Screech Owl Surveys

Western Screech Owls are a Threatened Species. They are year-round residents in the Columbia River Valley and nest in deciduous trees with cavities, especially mature cottonwoods that are close to water.

Inventories conducted in the spring of 2021 confirmed six active territories within the Lower Columbia study area. Results of these surveys will help inform high priority sites for our Riparian Ecological Restoration projects.

Species at Risk surveys were completed by Jakob Dulisse Consulting with support from FLNRORD and funding from the Fish and Wildlife Compensation program.

Gathering Local Conservation Knowledge

Conservation work that was undertaken by the ONA and government agencies is well documented, but less is known about what kinds of projects have been done historically by local sportsmen and women and other outdoor enthusiasts. We interviewed members of TWA and others in the community to learn more. TWA developed a report providing a basic overview of conservation efforts by the local community within the study area.

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Brushland and Grassland Ecological Restoration

Low-elevation brushland ecosystems are some of the most at-risk ecosystems in BC. These are fire-maintained ecosystems that are very sensitive to human disturbance. In 2021, we worked on two sites: Fort Shephard Conservancy near Trail, and Dove Hill near Castlegar.

Dove Hill

With help from Selkirk College students and the Castlegar Friends of Trails Society, we initiated restoration on the brushland ecosystem at Dove Hill, near the City of Castlegar. This habitat is important for the red-listed Yellow-breasted Chat and blue-listed Western Skink, amongst other wildlife species.

Restoration practices conducted in 2021 included invasive species hand-removal and deactivation of spur trails by closing with logs and natural debris. Twelve large garbage bags of invasive plants, mainly Common Vetch and Spotted Knapweed were removed from the site.

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Fort Shepard Conservancy Area

In 2021, a field tour of Fort Shepard resulted in the contribution of valuable insight towards restoration ideas from several key stakeholders. It was stressed during the tour that invasive plants are a serious threat to these ecosystems and are often accidently introduced to sites by industrial activities and seed mixes currently used by those industries. It was discussed that industries accessing the area for maintenance work need clarity on best management practices to use in these sensitive ecosystems. As a result, clear and concise best management practices for industry use will be developed in 2022.

Prescriptions at this site will involve brushing, thinning, and prescribed burning to mimic natural fire regimes and revitalize the ecosystems. A custom native seed mixture was developed in 2021 and will be recommended for use specifically in these brushland ecosystems to help mitigate the threat of invasive plant introduction and spread. A full prescription is currently in the early developmental stages and will include a 25-hectare polygon treatment in a prime open-bench winter range that will be brushed and thinned in 2022.

If you or your organization is interested in collaborating with the Lower Columbia Rare Species Ecosystem Enhancement Program, please contact Al Mallette, Project Communications at blueritchey@gmail.com

Thank you to all partners and sponsors involved in this project.

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