### Environment and Climate Change Canada Canada Nature Fund: Community-Nominated Priority Places for Species at Risk



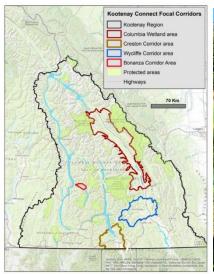
## Trans-Border Grizzly Bear Project



# **Kootenay Connect: Science - YR4**

Contract 2022/23 Birchdale 01

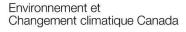
## Projects: 1234GL KCP (MP) 2022-2023 FINAL REPORT Aug 2023





Kootenay Connect is a project facilitated by the Kootenay Conservation Program and funded by Environment and Climate Change Canada







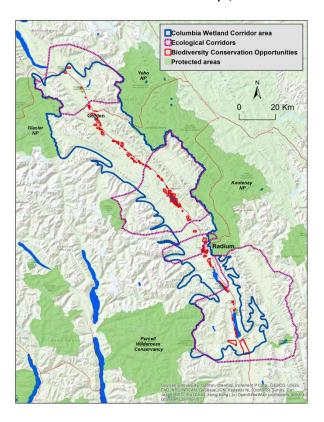
#### **1234GL KCP & Science Expertise**

M Proctor has worked with Marcy Mahr (Kootenay Connect Project Manager) and Juliet Craig (KCP contact) to develop and submit an acceptable Year 3 Kootenay Connect Annual Report and Financial Statements to Environment Canada. Also work was done to develop an acceptable balanced Year 4 budget, work plan, and contracts for all contractors. M Proctor also worked with project leaders in our several focal areas to develop science and project strategies for year 4 that fit within our original vision and project goals. This included a field visit to the Columbia Wetlands focal area for onsite visits and planning meetings. M Proctor also is working on the year 4 annual report to ECCC in the spring of 2023. M Proctor also was part of the discussion and decision process on how to allocate the extra funds among Kootenay Connect offered from ECCC.

#### Columbia Wetlands

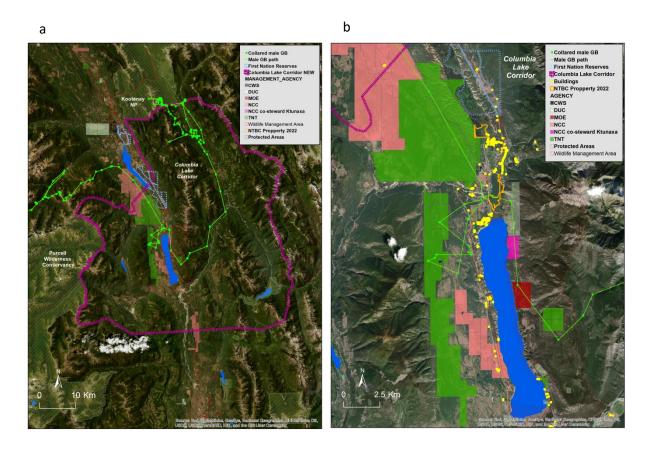
A multi-day meeting was attended with the Columbia Wetlands Science Team in Brisco, BC, in May. Our main objectives included assessing progress and planning for year 4 with the CW team. We also discussed science plans for the Columbia Wetlands for years 5-7. Finer-scale multi-species corridors boundaries were identified as well as a final list of Biodiversity Conservation Opportunities was compiled (Fig. 1).

**Figure 1.** Consolidated upland corridors (purple polygons) decided though consensus of the Columbia Wetland Science Team. Also the Biodiversity Conservation Opportunities (small red polygons) that will be pursued in the coming years, derived from several years of Species at Risk data through a literature search and field surveys, and decided on by the science team.



Downstream effects from this planning work is starting to be realized. For example, the Nature Trust of BC has recently purchased several properties identified by Kootenay Connect (orange polygons in Fig 2b). Interestingly, M Proctor provided a radio collar for the BC Conservation Officer Service to apply non-lethal management to a conflict bear. The bear was moved across the Columbia Valley to habitat where it might den for the winter. In its quest to return to its home range (as they do) the bear had to navigate across the Columbia Valley. Figure 2 shows his path trying to find safe passage eventually passing through several conservation properties, one of which was just recently purchased after being identified as strategic in our Columbia Lake Corridor (Fig 2b). While anecdotal, this example provides a compelling story about the important of cross valley corridor identification and management.

**Figure 2a)** A radio collared bear trying to cross the Columbia Valley from the Purcell to the Rocky Mountains. His eventual choice had him passing through Kootenay Connect's identified Columbia Lake Corridor eventually making his way to Kootenay National Park, and **b)** a close up of the bear's path just north of Columbia Lake and his passing through a very recently purchased conservation property by the Nature Trust of BC (orange polygon). Yellow dots are houses, note how this bear navigates through the settlement area avoiding houses, and proceeded to pass through more conservation properties on the east side of Columbia Lake on his was to Kootenay National Park.



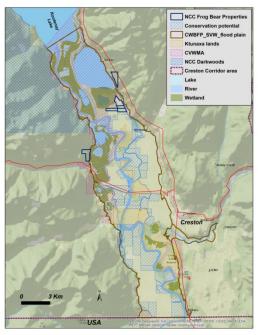
#### GIS support

We also provided GIS mapping support for the Columbia Wetlands team. Support was provided by Vivid Consulting (Marie-Ange Fournier-Beck). Relevant maps will be provided in Columbia Wetland Stewardship Partners and include work with badger burrow survey, wetland cottonwood stands, and Biodiversity Conservation Opportunities mapping.

#### **Creston Valley**

Private land stewardship is an important component of the overall Kootenay connect vision and work. One of the best avenues for this is through Farmland Advantage. They contact strategic landowners to discuss willingness and potential to set up relevant stewardship programs. Dave Zehnder, several others, and M Proctor held an afternoon workshop organized by KCP's Kootenay Connect with Farmland Advantage, Lower Kootenay Band, Creston Valley Wildlife Management Area, Nature Conservancy of Canada and Kootenay-Boundary Farm Advisors guided by GIS layers to identify candidate properties (Fig. 2) from the US border up to Kootenay Lake. Farmland Advantage is contacting individual property owners for discussions. M Proctor also provided a series of maps of the Creston Valley to Farmland Advantage to help them develop their conservation narrative for land owners, and potential funders. This workshop was followed up with a field tour in June 2022 sponsored by Farmland Advantage and the Kootenay-Boundary Farm Advisors to follow up on this mapping conversation about the intersection of sensitive wetland-riparian habitat and agriculture in the Frog Bear Corridor. These discussions led to the Creston Valley Wildlife Management Area's restoration and fencing in the heart of this corridor at the north end of the valley.

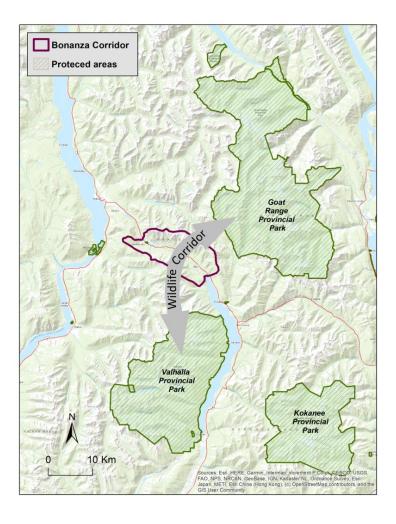
**Figure 5.** Map depicting conservation opportunities for private land stewardship to be pursued by Farmland Advantage in the Creston Valley. Private lands identified are properties adjacent to riparian habitat identified by a working group led by Kootenay Connect.



#### Bonanza Biodiversity Corridor

Leaders working it the Bonanza Corridor have used their 4 years of Kootenay Connect and ECCC funding to culminate in a longer-term landscape level conservation plan. M Proctor participated in several meetings and discussions to help develop this plan and put it in context of the larger landscape. For example, one objective (among several) was to work to connect the larger Provincial Parks (Goat Range and Valhalla Provincial Parks) adjacent to the Bonanza Corridor (Fig. 6).

**Figure 6.** Landscape scale objective to connect the Goat Range and Valhalla Provincial Parks through the Bonanza Biodiversity Corridor in Slocan Stewardship Society's newly develops Conservation Management Plan.



M Proctor was the lead in updated the reporting series for the cumulative results of Kootenay Connect, Kootenay Connect: Riparian Wildlife Corridors for Climate Change, Year 3 Annual Report. This document catalogued and summarized year 3 results from the ECCC funding applied across our four focal corridors. with three years used our belts we re-summarized each corridors results integrating across years for better flow. We also include the work, results and planning in the additional corridors being integrated in our extended funding from ECCC. Those include the Lardeau Valley, Columbia Lake, and the Slocan River areas.

**Figure 7**. Annual technical report summarizing the cumulative results of Kootenay Connect, including projects accomplished with ECCC funding.

