

## COLUMBIA VALLEY LOCAL CONSERVATION FUND (CVLCF) FINAL REPORT 2019

### General Instructions

- Final reports must be submitted **by 4:00 pm MT January 31, 2020** to the Kootenay Conservation Program.  
Email final report to [info@kootenayconservation.ca](mailto:info@kootenayconservation.ca).
- All areas of the final report must be answered.

### Section A – GENERAL INFORMATION

**1. Project Title** (as indicated in application): Marion Creek Benchlands Forest Restoration Project

**2. Proponent**

- a) Legal Name: The Nature Conservancy of Canada
- b) Organization Registration #: 11924 6544 RR0001
- c) Mailing Address: #200-825 Broughton Street, Victoria, BC Postal Code: V8W 1E5
- d) Contact: Richard Klafki
- e) Telephone #: 250-688-6270 f) Fax #: n/a
- g) Email: [richard.klafki@natureconservancy.ca](mailto:richard.klafki@natureconservancy.ca)

**3. Partner** (*if applicable*)

- a) Legal Name:
- b) Organization Registration #:
- c) Mailing Address: Postal Code:
- d) Contact:
- e) Telephone #: f) Fax #:
- g) Email:

### Section B – PROJECT INFORMATION

**1. Project Location:** RDEK Area F  
(ie: RDEK area, watershed,  
direction from major centre, etc)

**2. Total Project Value:** \$43,010.90

**3. CVLCF Contribution:** \$12,473.00

**4. Non-CVLCF Contribution:** \$24,369.14

**5. Single or multiple year project:** Single

## Section C – PROJECT SUMMARY

1. Please provide a single paragraph describing your project, its objective (goals) and the results. As this summary will be used in CVLCF communications, clearly state the issues addressed and avoid overly technical descriptions. Maximum 2000 characters (~290 words).

The goal of this project was to restore at least 16 ha of Rocky Mountain Douglas-fir forest to dry open forest structure on the Marion Creek Benchlands conservation property. Restoration of open forest structure and core grassland communities in areas where forest ingrowth and encroachment have occurred will improve critical habitat for species such as Mule Deer, Elk, American Badger, and Lewis's Woodpecker, reduce the risk of catastrophic wildfire to nearby communities, and enhance the resiliency of imperiled Rocky Mountain Douglas-fir systems in the face of a changing climate.

The project focused on vegetation management units with high levels of forest ingrowth that were susceptible to an increased risk of catastrophic wildfire. These units also had a limited amount of viable habitat for wildlife. During the 2019-20 winter season, NCC successfully completed a restoration prescription and hand slashing treatments on three units totaling 18.3 ha, and further identified a large unit that will be treated by volunteers in the spring of 2020. Treatment of that final unit in the spring will signal the completion of slashing treatments required on the property, and NCC will be able to shift focus towards eventual plans to maintain these restoration efforts through the use of prescribed fire.

2. OPTIONAL: If your project lends itself to sparking interest through a compelling sound bite (for potential use in CVLCF communications), please tell us what that would be. Maximum 1050 characters (~150 words).

This project addresses the urgent need to enhance critical habitat for species at risk such as American Badger and Lewis' Woodpecker, to improve grazing and overwintering grounds for ungulates such as Elk and Mule Deer, and to reduce the risk of catastrophic wildfire to local communities. Fire suppression and habitat alteration due to climate change contributes to forest ingrowth in areas that were historically open forests and grasslands, which increases the risk of wildfire while also decreasing the amount of habitat available for wildlife. By strategically thinning forests to restore open forest conditions NCC will not only improve critical species-at-risk habitat, but will also improve the resiliency of these ecosystems in the face of a changing climate and reduce the risk of catastrophic wildfire.

3. Biodiversity Targets (please list, maximum 90 words):

Dry Interior Douglas-fir ecosystems  
American Badger  
Common Nighthawk  
Lewis's Woodpecker  
Elk/Mule Deer  
Open forest/grassland vegetation communities

4. IUCN Threats to Target (please list, maximum 90 words):

7.1 Fire and Fire Suppression/7.1.1 Increase in Fire Frequency/Intensity  
7.1 Fire and Fire Suppression/7.1.2 Suppression in Fire Frequency/Intensity  
8.1 Invasive Non-Native/Alien Species  
11.1 Habitat Shifting and Alteration  
11.2 Droughts

## Section D – PROJECT DELIVERABLES AND RESULTS

1. Identify the deliverables outlined in your application in the table below (50 words/field) and list the results of each. Please include copies of any relevant communications products (brochures, posters, videos, websites, photos of signage, etc.) resulting from this project. Add an attachment if you need more room.

Deliverables	Results
1. Based on the Property Management Plan (PMP) for the Marion Creek Benchlands Conservation Area (NCC 2018) and Rocky Mountain Trench climate modeling, assess which vegetation management units on the Marion Creek Benchlands conservation property are most vulnerable to the effects of climate change.	A registered professional forester (RPF) was contracted to develop a Vegetation Management Plan. The plan focused on prioritizing treatment units throughout the property based on levels of forest ingrowth and relative habitat value.
2. Develop forest stewardship prescriptions that take into account conservation values, climate change and limit soil conditions.	An RPF was selected and contracted to prepare a detailed forest restoration prescription for each treatment unit. These prescriptions were based on recommendations in the Vegetation Management Plan, and addressed archaeological concerns by prescribing activities to occur on frozen soils and without the use of large machinery.
3. Implement prescriptions on the Marion Creek Benchlands conservation property.	A local forestry contractor was selected to implement slashing treatments on 18.3 ha according to the restoration prescription. All treatments were completed by hand, with slash either being dispersed or burned in a pile depending on the volume of slash generated.
4. Enhance land management and community partnerships in the RDEK Area F region.	NCC staff regularly communicate with the public and neighbors, who are aware of the benefits of forest restoration and are supportive of NCC's restoration work so far. Volunteers with the Lake Windermere Rod & Gun club will be invited onto the property in spring 2020 to help complete slashing treatments on the last remaining unit on the property.

## Section E – PROJECT EFFECTIVENESS

1. Please evaluate the effectiveness of the project using objective standards, quantifiable criteria and/or quality control measures identified in your application/proposal. Maximum 2000 characters (~290 words).

### Objective 1

Result: Jeff Allen (Registered Professional Forester) prepared a Vegetation Management Plan for NCC's Marion Creek Benchlands Conservation Area in 2013, which highlighted the ecological units most in need of forest restoration treatments.

### Objective 2

Result: Jeff Allen prepared a restoration prescription to guide forest slashing treatments. The prescription covered three distinct treatment units (3.6, 5.5, and 9.2 ha) and took into account climate change modeling, wildlife habitat needs, as well as community needs via the reduction of wildfire risk.

### Objective 3

Result: A total of 18.3 ha of ingrown forest was successfully restored by January 31, 2020.

### Objective 4

Result: NCC staff regularly communicated with the public and neighbors, who are supportive of NCC's restoration work so far. NCC staff attend meetings with MFLNRORD biologists and the Rocky Mountain Trench Ecosystem Restoration program to coordinate restoration on adjacent landscapes. NCC staff plan to host volunteers from the Lake Windermere Rod & Gun club in spring of 2020 to complete further treatments.

2. What are the top 3 lessons learned from the project that would be important to communicate to others doing similar work throughout the RDEK? Maximum 1050 characters (~150 words).

1. The "lop and scatter" treatment approach works well in areas with relatively low volumes of slash. In order to reduce fire hazard when the slash loading gets higher, it's recommended to burn small piles of slash in appropriate areas.
2. While implementing restoration treatments in the winter is good for limiting soil disturbance, it is important to limit or postpone work immediately following large snowfall and/or rain events. Deep snow covers small trees and lower branches get buried under snow they are often missed, and small trees may get cut at the snow line rather than at the prescribed stump height. Melt/rain events may cause access vehicles to create muddy ruts that could possibly allow invasive plants to take hold.
3. It is important to treat the area for invasive plants before and monitor/treat for them after restoration projects.

## Section F – FURTHER COMMENTS

1. Please provide any further comments including recommendations for future conservation efforts. If your project produced a narrative or scientific report or additional project products (e.g. maps, photos), attach them as an Appendix (maximum 90 words).

1. Follow-up monitoring of treated areas should be a priority for the NCC to determine effectiveness of treatments.
2. NCC staff should prepare to maintain the open forest and grassland communities in the future through the use of prescribed fire, working with the MFLNRORD biologists, BC Wildfire Service, and the Rocky Mountain Trench ER society to complete landscape-level prescribed burning.

## Section G – FINANCIAL REPORT

1. Please submit a financial report for the project outlining revenue and expenditures with a comparison to the budget submitted with your CVLCF application. **Use the Final Budget Reporting form provided.** Details on any discrepancies from the budgeted amounts or items are required (maximum 90 words).

The overall project came in over budget due to additional funds being allocated for prescription development and contractor oversight. The in-kind work by wildlife clubs that was originally budgeted did not occur during the time line for this project, rather it is scheduled for spring 2020.

