

Provincial Caribou Recovery Program

2017/18 ANNUAL REPORT

Ministry of Forests, Lands, Natural Resource Operations
and Rural Development



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Forests, Lands, Natural
Resource Operations
and Rural Development

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Background

In February 2017, the provincial government announced an investment of \$27 million over three years for a comprehensive Provincial Caribou Recovery Program (the Program). In the last century, the caribou population in B.C. decreased from 40,000 animals to about 15,000. Climate change and habitat disturbance are key factors of this decline. Recovery measures are being initiated across the province to save this iconic and culturally significant animal. This report summarizes the key elements of the Program during its developmental year.

In 2017/2018, the Ministry of Forests, Lands, Natural Resource Operations and Rural Development, spent \$3,971,423 on direct action projects to implement caribou recovery measures. This represents approximately 50% of the year's \$8 million budget (Figure 1).

A simplified Program Breakdown Structure (Appendix A) identifies how the Program is organized into themes and outlines significant successes, accomplishments, and progress.

PROGRAM RESULTS

- ✔ Initiated collaboration with **13** Indigenous groups
- ✔ Conducted 19 population or mortality surveys and **4** primary prey surveys
- ✔ Deployed collars in 22 herds
- ✔ Performed predator management in **11** herd areas
- ✔ Provided over **\$2M** to a habitat restoration fund
- ✔ Released **7** calves from the Klinse-Za and Revelstoke maternity pens
- ✔ Issued **251** enforcement actions

Guiding Principles

➔ Caribou Recovery Programming

Vision: Conservation and recovery of British Columbia's caribou through excellence in integrated resource management.

Mission: To transform caribou management through a comprehensive, collaborative and accountable provincial program.

Goals:

1. Reverse the decline and achieve stable, increasing populations of identified woodland caribou herds
2. Provide certainty to affected natural resource users
3. Advance collaboration and reconciliation with Indigenous communities
4. Collaborate with all key partners in caribou recovery
5. Increase public confidence via accountable and effective program delivery and management



➔ Governance

In July 2017, the Province developed a draft Provincial Caribou Recovery Program. The Program has identified 25 areas in order to adequately manage the many factors that affect caribou recovery across the province. To maintain consistency across regional operations, and alignment with provincial planning and prioritization, each program area has an assigned lead.

The program areas strive to address both strategic and operational needs of caribou recovery. This comprehensive approach is designed to aid in reversing population declines and ultimately ensure the long-term survival of B.C.'s caribou.

➔ Planning

The most important guiding principle to caribou recovery is to use consistent approaches for all caribou herds in the province. The program has adopted a consistent format of herd plans that:

- ✔ Recognizes the unique circumstances of each herd;
- ✔ Builds from current caribou management plans;
- ✔ Considers First Nation and stakeholder interests and ideas; and,
- ✔ Can be integrated into larger regional plans.

Herd plans are currently being developed for each of the 54 herds in B.C. The plans assess the status of each herd, its threats and monitors success of direct and indirect recovery management actions. Phase two will commence in 2018-2019.

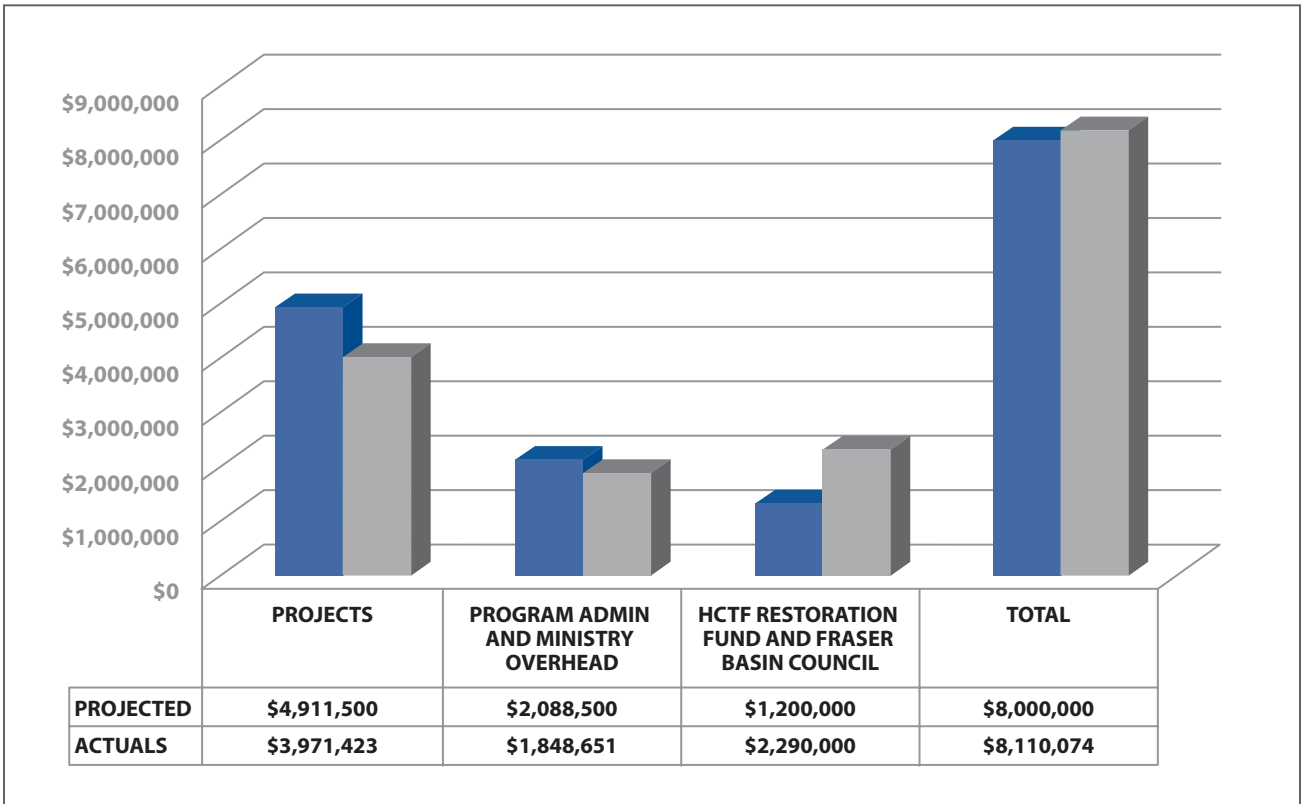
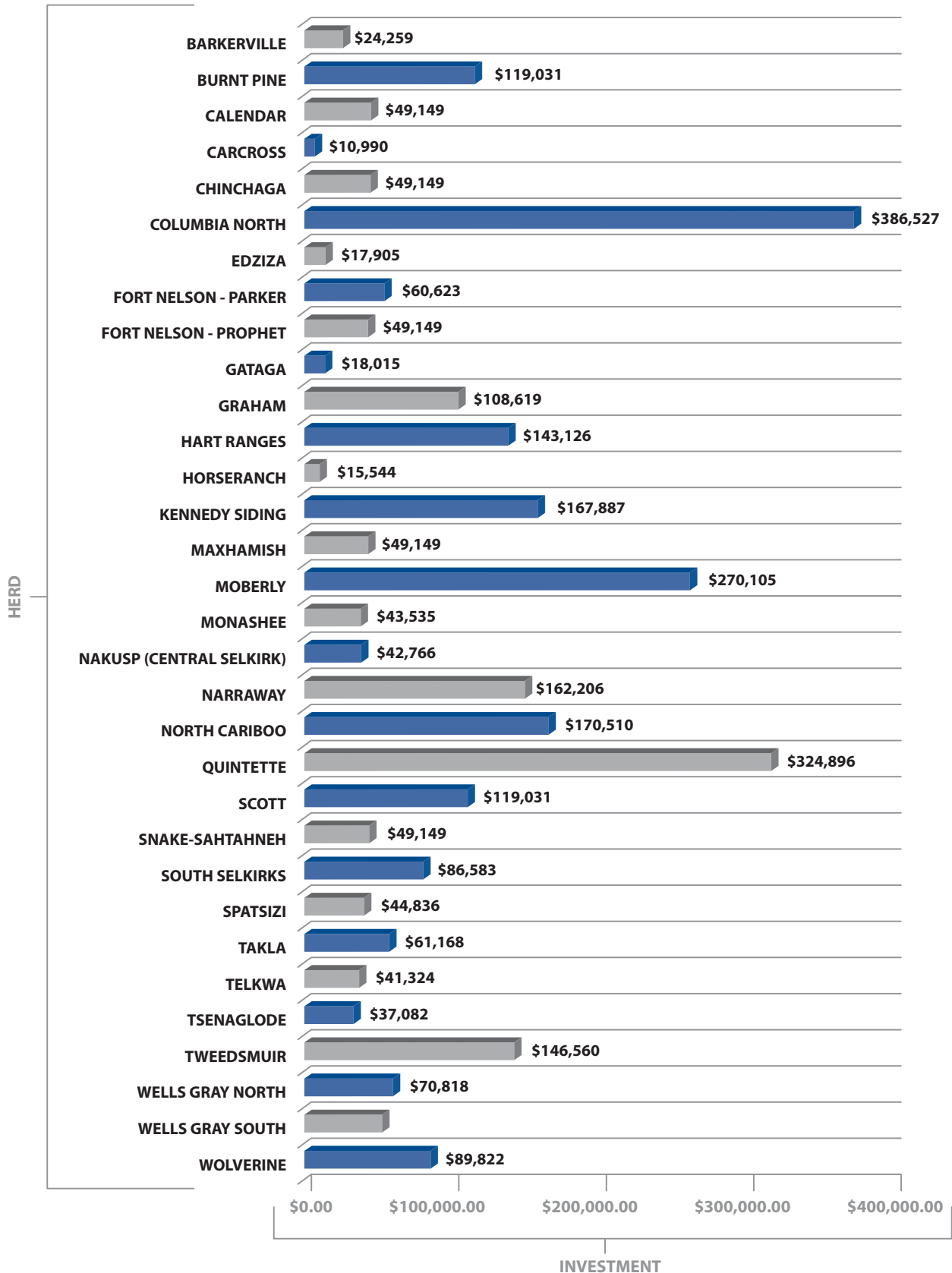


FIGURE 1: 2017-2018 PROGRAM BUDGET OVERVIEW OF ESTIMATED AND ACTUAL EXPENDITURES.

FIGURE 2: 32 HERDS RECEIVED AN INVESTMENT OF GREATER THAN OR EQUAL TO \$10,000



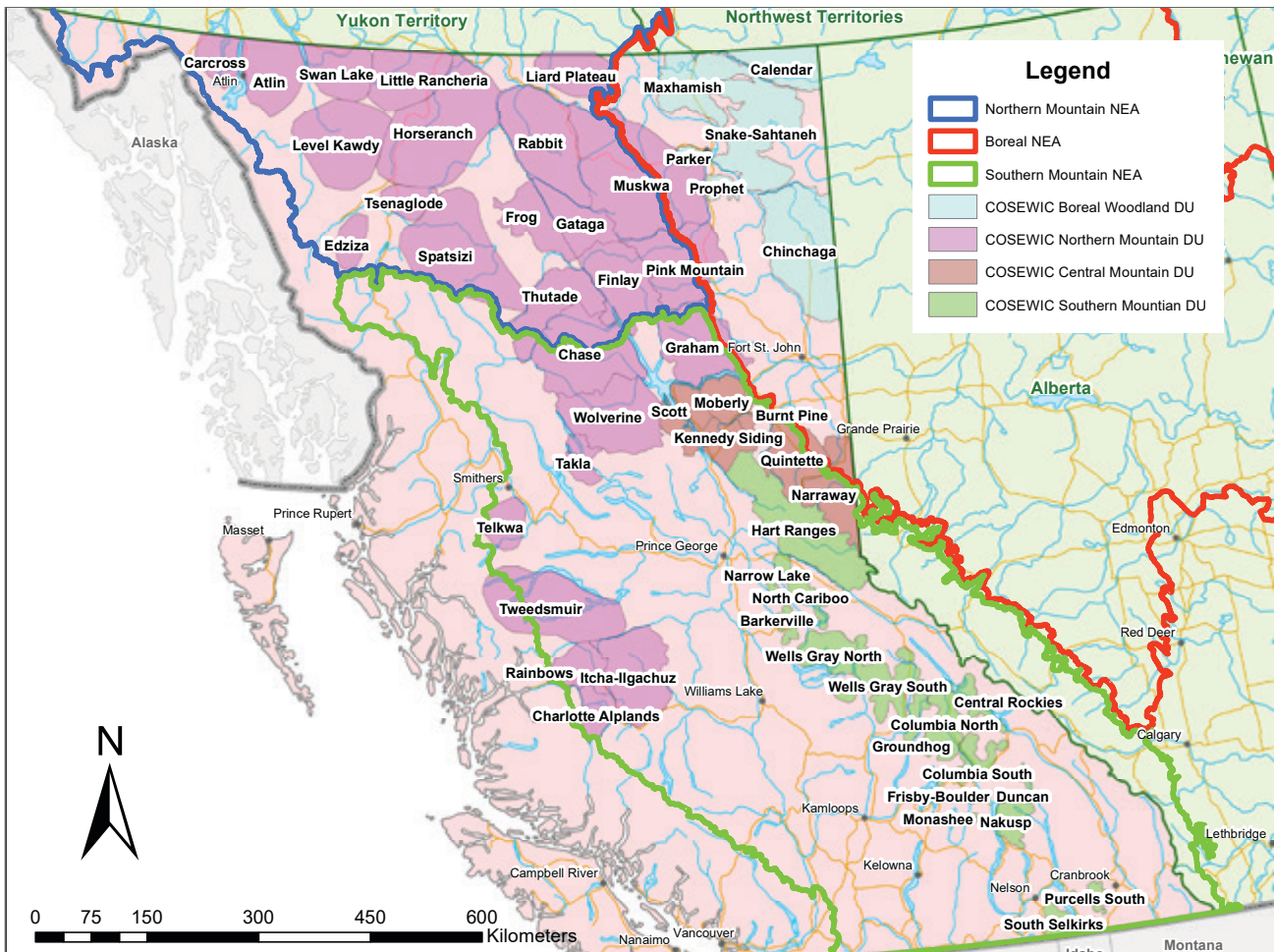


FIGURE 3: DISTRIBUTION OF CARIBOU IN BRITISH COLUMBIA

➔ Structured Decision Making

A planning and engagement framework is being used to support comprehensive caribou recovery planning efforts for Southern Mountain Caribou. This framework uses a Structured Decision Making (SDM) process. SDM is an organized approach to identifying and evaluating alternatives to make choices in difficult situations. The standardized process is designed to make complex choices more explicit, better informed, more transparent and more efficient. A key component of SDM is bringing together people with different interests and perspectives to analyze the consequences associated with specific alternative courses of action. This will successfully allow decision makers to weigh often-competing factors and model alternative scenarios to ensure a consistent,

transparent approach uses the best available science.

The Central Group of Southern Mountain Caribou has been a focus point for B.C. over the last year. This focus was most prominent through the development of a collaborative planning approach to support conservation and recovery. Through work on the Central Group, ministry staff hope to advance collaborative planning for habitat and non-habitat recovery actions in the coming year, having already successfully laid out the groundwork this past year.

British Columbia and Canada have worked diligently to produce a draft conservation agreement, under the *Federal Species at Risk Act*.

This agreement will outline a revised approach on how the two governments collaborate on recovery planning, management and implementation efforts. This draft agreement would represent a first for B.C. and the first of its kind in Canada. The Province's objective is to reverse the decline of caribou, and achieve stable increasing populations.

➔ Operations

WILDLIFE MANAGEMENT

The main threat to most caribou populations is a high rate of predation by wolves, bears and cougars that is out of balance from the natural cycle. This can happen when natural events (such as forest fires and climate change) and human activity (such as logging and mining) convert large areas of mature forests to young forest landscapes. These young, open forests provide ideal food sources for deer, elk and moose, which are the primary prey of wolves and cougar.

As these prey species increase and subsequently move into caribou habitat, they are followed by wolves, which then hunt the caribou as a secondary prey. Referred to as "apparent competition," (Figure 4) it is the most serious short-term risk to caribou recovery.

To address this observed "imbalance," the Program continues to support moose reduction projects near Revelstoke and Prince George. The aim is to use regulated hunting to reduce moose numbers to those resembling more natural, historic levels in order to mitigate and curtail the aberrant

wolf-caribou dynamic. An increase in caribou numbers in the Columbia North herd near Revelstoke is at least partly attributable to primary prey intervention.

The Program is also directly removing wolves in four locations: South Peace, South Selkirk, Columbia North and Narraway. South Peace herds have shown a strong response to wolf control, in combination with the introduction of a maternity pen; the population exhibited a 26% increase. Columbia North herd, which also has a maternity pen, has shown a weaker but positive response. Operations in the Narraway herd area began in February of 2018 and have not had the necessary time to produce results. The South Selkirk herd continues to decline.

Maternity pens are operated in two herd areas, Columbia North and Klinse-Za (Moberly and Scott herds). These pens are designed specifically to reduce the mortality risk for calves by isolating them from predators during their most vulnerable period – the first six weeks after birth. Initial evidence suggests that both herds appear to be benefitting from the maternity pens. These projects will be assessed since they have reached the culmination of their five-year pilot phase.

To help address possible nutritional deficiencies, the Program supported supplemental feeding for the Telkwa and Kennedy Siding herds. Analytical means to measure success are being developed, but anecdotally, some caribou appear to be benefitting from the additional efforts.

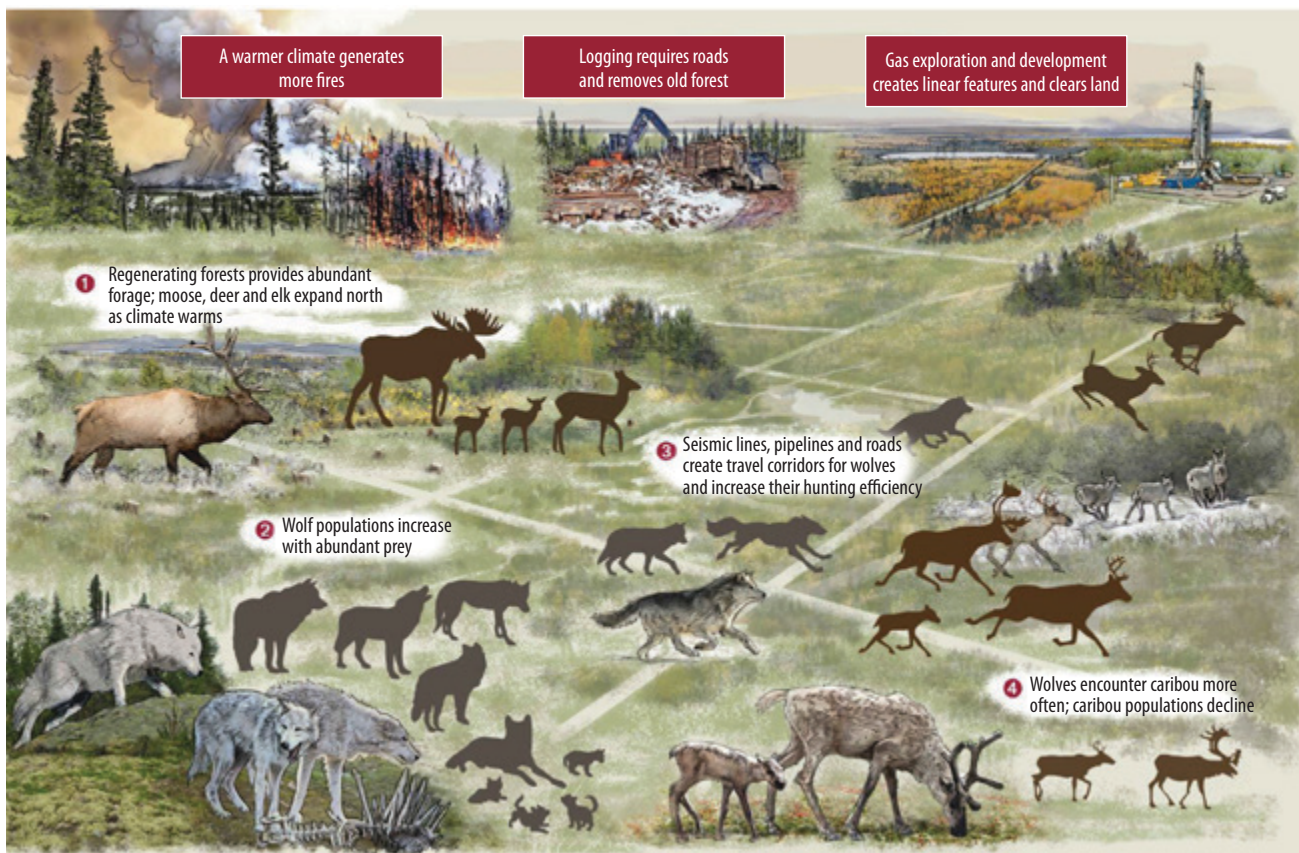


FIGURE 4: NATURAL AND HUMAN-CAUSED ACTIVITIES CHANGE THE LANDSCAPE AND AFFECTS PREDATOR-PREY DYNAMICS.

HABITAT PROTECTION AND RESTORATION

Roads, trails and seismic lines create new routes that make it easy for predators like wolves to reach caribou herds. The Province has provided \$2 million to the Habitat Conservation Trust Foundation to support caribou habitat restoration projects. Eligible projects will be prioritized through input from the Provincial Caribou Science Team, regional stakeholder committees and existing caribou planning documents.

The Program initiated work and advanced its partnership networks to complete the Quintette Caribou Habitat Implementation Plan and the Lichen Restoration Trial in Tweedsmuir. Approximately 6,700 metres of road was

deactivated, and 5,000 metres of other terrain was remediated as part of the Big Mouth Restoration Project. Additionally, research and development continues on the Caribou Climate Prediction Model, a tool which will aid in understanding of existing and future habitat trajectories related to climate change and its impacts to caribou habitat.

RECREATION

The recreation program confirmed its mandate to re-engage with the adventure tourism sector, and started discussions on a renewed memorandum of understanding with HeliCat Canada. They are developing a partnership for co-funded retrospective data analysis, including an improved data collection process for wildlife sightings.

➔ Science

SCIENCE TEAM

Science plays a critical role in supporting the Program by helping to identify, analyze, and implement the most appropriate tools to support recovery efforts in a consistent efficient manner. The Caribou Science Team has a wealth of knowledge that will be incorporated into management decisions and delivery of on-the-ground operations. The team is identifying fundamental gaps in understanding of caribou biology to enable recovery to be as efficient and effective as possible. The team has compiled all research into a compendium, and has established research priorities. This work will help guide future and ongoing work.

HEALTH

The health team continues to assess the fitness of caribou. One of the ways they are accomplishing this is by creating herd health profiles for B.C. caribou using a standardized sampling and testing protocol. The team was responsible for successfully coordinating a variety of samples, when caribou were being handled for collaring and penning operations. The team also evaluates the health impacts of maternity penning on penned cows and calves; provides operational staff with technical advice; and, standardized protocols for capture and mortality investigations. The health team also supported external maternity pen projects and other management actions with veterinary expertise at time of capture and release, and during all other regular activities.

INVENTORY

Inventory and monitoring activity is an important part of measuring the effectiveness of the Program. This past year's efforts confirmed a 61% increase in the South Peace herds; conversely, the Purcells South and South Selkirk herds exhibited sharp declines. Radio collars were installed on approximately 150 caribou in 22 herds. The Province was successful in performing 19 population and/or mortality surveys and conducted four primary prey surveys. The Province collaborated with 13 Indigenous groups, with 12 herds receiving five or more inventory and monitoring actions.

➔ Communications and Engagement

To support the strategic direction of the Program, staff began a three pronged engagement process. A Discussion Paper was written that details the challenges and opportunities that lay ahead for recovery and sustainable stewardship of B.C.'s woodland caribou. The discussion paper was used to start conversations with Indigenous communities, stakeholders and the general public.

The Government of British Columbia is committed to fully adopting and implementing the United Nations Declaration on the Rights of Indigenous Peoples, and the Calls to Action of the Truth and Reconciliation Commission. This has important implications for the Program and provides a framework to build upon and highlights the need for extensive, effective engagement with Indigenous groups.

During year one, a process to effectively engage with Indigenous communities was developed. In subsequent years, the Program will engage First Nation communities across B.C. to ensure their interests are represented at all levels of decision-making, from early policy development to on-the-ground actions. British Columbia will work with First Nations, other provincial ministries, environmental organizations, adjacent jurisdiction partners and industry representatives to advance reconciliation throughout the lifecycle of the Program.



Reconciliation has started with relationships already established and in place, such as government-to-government agreements. The Program will work closely with regional staff to ensure a transparent and consistent approach is achieved.

Complementary to engagement with Indigenous communities, the program has asked stakeholders and the general public for their input to strategy development. Web-based and workshop means were used to gather input and comments.

The Province continues its long-standing and valued collaboration on caribou recovery and research with adjacent jurisdictions, including Alberta, Northwest and Yukon Territories, Idaho, Montana, and the federal government of Canada. We will continue to seek and formalize valuable collaborations with these jurisdictions, to share science, solutions and resources.

➔ Compliance and Enforcement

Between October 2017 and March 2018, the Conservation Officer Service (COS) participated in trade shows and public events to promote compliance with legislation to protect caribou and caribou habitat. The COS also used traditional and social media programs to promote compliance and raise awareness of the COS's caribou-related enforcement operations. During the same period of time, conservation officers conducted enforcement operations by ground and air. The COS dedicated a total of 2,602 hours to caribou compliance and enforcement activities. This resulted in 4,540 contacts, 154 charges and 97 warnings. Other incidents of non-compliance remain under investigation by the COS.

Conclusion

The Province conducted 19 population and mortality surveys, three spring calf surveys, and four primary prey surveys. Additionally, approximately 150 collars were deployed in 22 caribou herds, including predator management activities in 11 herd areas.

Regular meetings, partnerships and collaboration efforts were held with adjacent jurisdictions and governments; including, the province and Alberta, the Yukon and Northwest Territories, the States of Washington, Idaho, and Montana, and 13 Indigenous groups, communities and governments.

Engagement with Indigenous communities, local governments, the public, industry, and stakeholder groups were successfully conducted across the province, including the release of a provincial discussion paper. The comments, recommendations and results collected will directly influence ongoing and future caribou management activities.

As the Province looks towards the future, in recognition of this year's achievements and accomplishments, we encourage you to visit [gov.bc.ca\caribou](http://gov.bc.ca/caribou) for the latest updates and progress.



Appendix A:

2017-2018 Program Progress and Successes

Program funding was used to deliver over 100 projects across the province. Below is a summary of achievements by theme.

➔ **Themes 1 and 2: Collaboration with Canada and Performance Management and Reporting**

- 1.1** – Advanced collaboration with Canada
- 2.1** – Developed systems and processes to enable cross-province functionality, including the development of a Program Roadmap: Program Vision, Mission and Goals, Work Plan and Reporting templates
- 2.2** – Improved knowledge and accessibility of historic caribou data and information

➔ **Theme 3: Planning**

- 3.1 and 3.2** – Initiated work to develop structured decision-making and modelling tools to make better informed decisions on the land base; held workshop and staff training initiatives
- 3.3** – Developed a detailed socio-economic baseline report for the boreal range
- 3.3** – Completed 75% of herds plans in their initial form (Phase 1)
- 3.4** – Treated seismic site and purchased cameras to monitor use of restoration trial
- 3.5** – Engaged Indigenous and local governments on revised Boreal Caribou Implementation Plan

➔ **Theme 4: Habitat Protection and Management Actions**

- 4.1** – Initiated work and advanced partnership development to complete Quintette Caribou Habitat Implementation Plan and Lichen Restoration Trial in Tweedsmuir
- 4.1** – Deactivated 6,700 metres of road and remediated over 5,000 metres of other terrain as part of the Big Mouth Restoration Project
- 4.1** – Supported existing monitoring plots on lichen restoration
- 4.1a** – Created habitat restoration fund (at the request of First Nations) in concert with the Habitat Conservation Trust Fund (HCTF) and provided \$2,000,000 in seed money
- 4.2** – Contributed toward development of the Caribou Climate Prediction Model to contribute to understanding the future trajectories of current and future habitat for all herds in the province
- 4.4** – Improved data acquisition processes for wildlife sighting data collected by heli- and cat-ski operators
- 4.5** – Initiated development of management plan for caribou within our protected area system – *“The Role of Protected Areas in Caribou Management in BC”*
- 4.6** – Natural Resource Officers and Compliance and Enforcement staff reduced illegal disturbances in areas closed to snowmobiles in four regions and conducted public outreach to improve awareness of closed areas

➔ Theme 5: Science

5.1 – Held provincial workshop for staff to develop an approach for the Science and Research Program – initial work to form new science team; identified research gaps and current research activity in the Province; developed scientific/research priorities for the Province

5.1 – Initiated a comprehensive assessment of Northern Mountain Caribou health with opportunity for future health monitoring; funded a Master's thesis to build understanding of how northern caribou winter habitat is predicted to change through time and under a range of restoration and forest management strategies

5.1 – Improved analyses of genetic sampling

5.2 – In addition to work funded by other sources, Program funding was used to deploy collars in 22 herd areas (caribou and wolves); conducted population survey and monitored mortality in 19 herds; spring calf surveys in 3 herds; primary prey surveys in 4 herds and predator surveys in 11 herds; and, data fees in 19 herds

5.3 – Commenced foundation work to develop herd health profiles for each caribou herd

➔ Theme 6: Population Management

6.1 – Identified strengths and weakness of trapping to control wolves

6.1 – Removed free ranging buffalo from caribou habitat to lower the risk of disease transmission to caribou

6.1 – Conducted caribou-predator management studies in the Tweedsmuir and Telkwa herds

6.1 – Removed 151 wolves from 7 herd areas

6.2 – Improved calf survival through continuation of two maternity pens:

➔ **Klinse-Za** – capture and holding of 12 cows (10 pregnant); seven calves released in July 2017

➔ **Revelstoke** – capture and holding of 18 pregnant cows; seven calves in July 2017

6.3 – Contributed to herd population growth in the Kennedy Siding herd through supplemental feeding and developed a plan for the Telkwa herd

6.4 – Conducted various caribou, moose and predator assessments to contribute to provincial management actions

➔ Theme 7: Communications and Engagement

7.1 – Initiated development of an MOU for the Quintette herd - Quintette Strategic Action Plan

7.1 – Critical engagement with Treaty 8 Nations in development of a *Species at Risk Act*, Section 11 Agreement to advance caribou management options

7.2 – Confirmed common interests between jurisdictions of Alberta and BC

7.3 – Confirmed approach to formally engage external entities with an interest or concern for caribou recovery

7.5 – Reported on discussions regarding restoration efforts with Canadian Association of Petroleum Producers to MOU Strategic Leadership Team





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