Project ID - T4W#	Project Name	Region	T4W Action	T4W Funding Spent	Final Performance Reporting 2022-2023: Project Achievements - deliverables & outcomes
2223-T4W-024	Moose Monitoring Program - Cariboo	Cariboo	4. Data and Information		A stratified random block moose survey was successfully completed in Zone 5-13A (Alexis Creek). The 2023 moose density was estimated at 0.21 moose per km2. The bull-to-cow ratio was estimated to be 65 bulls per 100 cows and the calf-to-cow ratio was estimated to be 42 calves per 100 cows. The survey provided important information on moose population response following the 2017 Chilcotin wildfires. The 2023 moose density estimate is approximately 18% higher than when last surveyed in 2017, just prior to the wildfires. Definitions: Stratified blocks are survey units designed to sample areas (strata) with different densities of the species of interest. Per stratum, blocks on the landscape are typically selected randomly prior to being surveyed.
2223-T4W-026	Mountain Goat Surveys	Cariboo	4. Data and Information	\$ 80,664.77	Mountain goat inventories were completed in three Population Management Units (PMUs) to obtain current and accurate population estimates, as well as age and sex composition data which provide a measure of survival, recruitment, and population structure. Mountain goat population dynamics and vulnerability to harvest are still poorly understood (Hamel et al. 2006), therefore accurate and frequent population monitoring in these PMUs is important to provide accurate reliable population trends and ensure a sustainable harvest. Confirming current population status and distribution of goats in PMUs through regular monitoring is critical to assess population trends, better understand the primary drivers of population change, and ensure future population sustainability within these areas. This work enhances the regional dataset for mountain goats, as these areas had never been surveyed for goats, and are expected to experience increased industrial activity.
2223-T4W-041	Chilko River Bear Monitoring and Collaborative Management of Recreational Bear Viewing	Cariboo	8. Objective-setting		Forty-two remote cameras were deployed and serviced as part of this Chilko River grizzly bear monitoring and recreation use study. The project supported a graduate student with the University of British Columbia Okanagan who was looking to understand potential impacts of recreation activities on grizzly bear behavior. The goal was to provide recommendations to Xeni Gwet'in First Nation and the Province regarding management of bear viewing and other recreational activities. This camera project is a priority action under the collaborative Xeni Gwet'in-B.C. Chilko River Working Group.
2223-T4W-053	Species management planning and wildlife engagement	Cariboo	8. Objective-setting	\$ 44,194.05	This project supported successful engagement with the Tsilhqot'in Nation, Northern Secwepemc the Qelmucw, Esk'etemc First Nation and Southern Dekelh Nations, as well as hunting and agricultural stakeholders, on the development of the Cariboo Region Elk Stewardship Plan. A plan framework was developed in partnership with Indigenous communities with feedback from stakeholders. Engagement with Nations will continue in 2023/24 towards plan finalization. The project also supported broader engagement with stakeholders at multiple forums including the B.C. Wildlife Federation annual general meeting, the Cariboo Chilcotin Guide Outfitter Association annual general meeting, and the Cariboo Region Hunting and Trapping Advisory Committee.
2223-T4W-056	Building Resilience of Interior Douglas-fir Ecosystems (ARM)	Cariboo	9. On-the-ground Action	\$ 55,320.49	This adaptive management project intends to investigate slight variations in Mule Deer Winter Range forest harvest treatments that may also help achieve other ecological objectives. Questions of interest include the response of understory vegetation and wildlife species to these treatments. Measurements were taken of pre-treatment vegetation plots, snow depth, and forest stand structure to aid with the development of treatment prescriptions and for comparison with post-treatment effects.
2223-T4W-067	Implementing On-the-Ground Stewardship in the Cariboo	Cariboo	9. On-the-ground Action	\$ 22,000.00	This project supported the hiring of a government auxiliary position to support delivery of all regional Together for Wildlife projects including the 2022/23 moose monitoring program, Niagara and Mitchell mountain goat surveys, Chilko River bear monitoring, and elk management planning. In addition, the staff person supported engagement with First Nations at government-to-government forums, and engagement with stakeholders at information-sharing meetings as well as the regional Hunting and Trapping Advisory Committee.
2223-T4W-076	Road Data Cleanup for Access Management Planning in Ungulate Habitat in Cariboo	Cariboo	9. On-the-ground Action	\$ 96,167.13	Road linework (digitized roads) in the Cariboo Region was compared to recent high-resolution satellite imagery to refine and improve the road dataset used to inform access management planning decisions related to ungulate habitat. To date, road data have been assessed in approximately 77% of the Cariboo Region, and this information is now being used to support access management planning and decision-making across the region.
2223-T4W-093	Conservation Land Ecological Values Assessments	Cariboo	11. Conservation Lands	\$ 5,811.24	This project was partially completed through staff delivery and the funds were shifted to complete a structural building assessment at the Hanceville conservation land. The building assessment was necessary to address safety concerns and determine next steps for asset management. This project produced an inventory of vegetation and plant communities, which will help support goals and objectives in a regional conservation land plan.
2223-T4W-112	Implementing Wildlife Safety Response Officer positions (WSROs)	ENV - Conservation Officer	18. FN Co-management	\$ 71,757.03	Funding was received for hiring two Wildlife Safety Response Officers (WSROs). They addressed human-wildlife conflicts and the management of animal attractants (e.g., securing garbage bins so that wild animals can't access them) in Indigenous communities and high-conflict municipalities in B.C. This work focused on shared stewardship with Indigenous communities and local municipalities to encourage preventative conservation measures. The WSROs promoted education about wildlife conflict prevention, public safety, and managing wildlife attractants.
2223-T4W-115	Restorative Justice and First Nations Relations in the COS	ENV - Conservation Officer	21. FN Guardian Programs	\$ 126,367.00	In 2022/23, the Restorative Justice and First Nations Relations program delivered eight three-day guardian training sessions across the province. In total, over 89 guardians and community members received the training, representing 19 First Nations. The program was able to lead the signing of two government-to-government enforcement Memorandums of Understanding with two Nations, which focus on collaborating to protect the natural resources in their territories, respectful communication between the parties, and working with their members. The program also delivered restorative justice facilitator training to 10 community members through a three-day course in a small First Nations community in northern B.C. Additionally, the program was able to conclude 10 restorative justice files in 2022/23 and received approximately 10 new restorative justice files for resolution.
2223-T4W-019	Effects of Prescribed Burning and Plains Bison Grazing in a Montane-Boreal Landscape	FOR - Range	4. Data and Information		Substantial progress was made toward the goal of better understanding bison habitat and the effects of prescribed burning in the Muskwa-Kechika Management Area. To examine successional trends after prescribed burning, detailed plant community data were collected from 16 locations in the study area. To better understand bison diet, 100 manure samples were collected from several different locations and analyzed for diet quality and plant species content. Forage samples of common species were collected across sites, with forage quality analyses completed on 120 samples. In summary, data collected using these funds include post-fire plant species composition and ecosystem characteristics, forage quality, and bison diet. This information is valuable to inform prescribed burning practices for managing habitat for ungulates, particularly bison and also elk.
2223-T4W-016	B.C. Wildlife Health Monitoring	FOR - Wildlife, Data	4. Data and Information	\$ 137,554.35	Biological samples were collected from various wildlife species in B.C. to assess population health and monitor for emerging diseases and health issues. Two staff positions were partially funded by the Together for Wildlife program to support wildlife health surveillance, including data management, public outreach, and disease surveillance activities. The funding supported the monitoring of several emerging diseases of concern: white-nose syndrome in bats, highly pathogenic avian influenza in birds, and chronic wasting disease in cervids (i.e., hoofed ruminant mammals such as deer).
2223-T4W-027	Railway Collision Survey Trial	FOR - Wildlife, Data	4. Data and Information	\$ 21,053.88	A trial aerial survey of a single railway line in the Kootenay Boundary Region was carried out at the end of winter 2022/23. All wildlife mortalities observed from the air were noted, and a sample were subsequently investigated on foot. In total, 60 carcasses were found in only 2.5 hours of flight time. Railway surveys are not usually conducted by the Ministry of Forests given that railway companies are required to report all collisions. However, there appears to be a large discrepancy between what is reported and what is actually observed in independent trials like this aerial survey. This trial indicates that more frequent railway surveys are needed to enhance the biological dataset of ungulate mortalities in the province.
2223-T4W-031	Wild Sheep and Mountain Goat Compulsory Inspection	FOR - Wildlife, Data	4. Data and Information	\$ 13,846.60	Specified parts of wild sheep and mountain goats that were harvested in B.C. and submitted for compulsory inspection were sampled for the presence of the respiratory pathogen Mycoplasma ovipneumoniae (M.ovi). Sampling supplies were purchased and distributed to Compulsory Inspectors. M.ovi is the primary cause of die-offs (multiple deaths within a population) across all age groups and significant lamb mortality, leading to wild sheep and mountain goat population declines in some areas of North America. Through this sampling effort, the geographic spread of this pathogen in B.C. can be monitored. Only one bighorn sheep tested positive during the sampling period, but ongoing annual surveillance is needed to continue monitoring for M.ovi and guide future management.
2223-T4W-037	F&W Data and Licensing Transformation Project-Phase 2	FOR - Wildlife, Data	7. Data Accessibility	\$ 127,353.00	An online tool was developed as part of the Wildlife Information and Licensing system (WILD) for data entry and information storage for the Compulsory Inspection program. Moving Compulsory Inspection reports from the current paper-based process to online allows the data to be captured and available for wildlife management needs in real time. The information is accessible, consistent, and on a reliable server with other hunting- and trapping-related data.

2223-T4W-038	Integrated Population models	FOR - Wildlife, Data	7. Data Accessibility	\$ 140,067.50	This project supported progress on the continued development of Integrated Population Models for a number of wildlife species. The cougar model was tested and revised, and a beta version of a moose model was created which is also being tested and revised. Most revisions to date involved adding new data or recalibrating the harvest data sub-model. A grizzly bear model was scoped and a data structure was created, but no model has yet been built. Further discussions were held regarding elk and mule deer models. The wolf model structure was revised to include a population trajectory component based on a reconstruction from the harvest data. The previous version of the wolf model was simply a density extrapolation. Definitions: Integrated Population Models use multiple different types of data within a single model, and better utilize available information on wildlife populations and individual animals to understand population changes over time.
2223-T4W-054	Support for Provincial Grizzly Bear Stewardship Plan	FOR - Wildlife, Data	8. Objective-setting	\$ 127,000.00	Funds were used to support planning of the Southwest British Columbia Grizzly Bear Recovery Working Group (Action 8). The project also supported WildsafeBC coordinators in Bella Coola and Manning Park. The goal in Bella Coola was to reduce grizzly bear conflicts with people, a chronic problem in that community. The goal in Manning Park was to create greater awareness about bear conflict and implement recommendations in the Bear Hazard Assessment previously done for the area (Action 9). Attempts were made to augment the Stein grizzly bear population by translocating bears from the MacBride area, but this effort was postponed (Action 9). Population augmentation was a recovery goal set by the Southwest British Columbia Grizzly Bear Recovery Working Group during previous years of the project.
2223-T4W-057	Cervid Health Program Implementation / Workshops	FOR - Wildlife, Data	9. On-the-ground Action	\$ 5,626.09	Partnerships with First Nations continue to expand. Outreach and virtual presentations were delivered to multiple groups. Two inperson workshops on the health of cervids (i.e., hoofed ruminant mammals such as deer) were delivered in the community for the Takla First Nation and in Fort St. John for Treaty 8 First Nations (Fort Nelson First Nation, Doig River First Nation, Blueberry River First Nations, and Saulteau First Nations). These workshops provided training to community members in wildlife health sampling and shared knowledge about wildlife health issues in the region.
2223-T4W-058	Chronic Wasting Disease Surveillance	FOR - Wildlife, Data	9. On-the-ground Action	\$ 154,521.29	Regional Chronic Wasting Disease (CWD) Program Implementation. Coordinators were hired through the B.C. Conservation Foundation to support on-the-ground activities and initiatives related to CWD in priority areas of B.C. Partnerships with First Nations, stakeholders and local communities continue to grow. Outreach to increase awareness and reduce the risk of CWD was delivered to a range of audiences. Workshops and training on sample collection were delivered in multiple regions. Surveillance (i.e., monitoring) and testing was carried out throughout B.C., with a focus on the highest-risk areas. The program resulted in 1,258 cervids (i.e., hoofed ruminant mammals such as deer) being tested, with no positive cases found. The results were posted to the provincial CWD website to help inform risk assessment and management of this disease. A CWD update was presented to the CWD Advisory Committee in December 2022 and CWD Regional Working Groups in January 2023.
2223-T4W-075	Retrospective testing for Adenovirus Hemorrhagic Disease in Deer/Elk	FOR - Wildlife, Data	9. On-the-ground Action	\$ 4,345.12	Archived biological samples from cervids (i.e., hoofed ruminant mammals such as deer) from the West Coast, South Coast, Thompson-Okanagan, and Kootenay Regions were retroactively analyzed for evidence of exposure to Adenovirus Hemorrhagic Virus (AHD). AHD is a rapidly fatal disease of deer that was first detected in B.C. in the fall of 2019 on Southern Vancouver Island and several Gulf Islands. Detection of antibodies in a bodily fluid (serum) can help assess the spread of AHD within the province. An analysis of these results is underway, but preliminary findings indicate a wider spread than previously thought, based on clinical cases. The significance of this disease on a provincial scale is unknown, but significant declines in Coastal Black-tailed deer populations have been observed in localized areas on Vancouver Island and the Gulf Islands.
2223-T4W-103	Provincial Hunting Review	FOR - Wildlife, Data	12. Wildlife Act	\$ 4,900.00	A sub-committee was created with volunteers from the Provincial Hunting and Trapping Advisory Team. The sub-committee decided that the way Limited Entry Hunts are drawn in British Columbia is often perceived as unfair by clients. A contractor was tasked with summarizing how Limited Entry Hunts are conducted in other jurisdictions in Canada and in the USA. That report will be the basis of recommendations by the sub-committee to the Advisory Team and, once approved, any recommendations for changes that are considered necessary will be passed on to the Ministry of Forests policy team.
2223-T4W-105	Business case for funding - hunting and trapping, non-consumptive	FOR - Wildlife, Data	13. Funding	\$ 116,032.50	The project estimated the economic impacts of hunting and trapping in British Columbia using conventional economic impact measures, based on hunting and trapping license data and secondary information on hunter expenditures. A cost-benefit analysis for protecting fisher habitat in the Cariboo-Chilcotin Natural Resource Region of British Columbia was also undertaken, which compared the reduced profits from timber harvesting (revenues and operating surplus) to benefits from climate regulation (carbon storage) and the public's willingness to pay for the conservation of species at risk, based on benefit transfer methods. A qualitative analysis was completed that considered potential flood mitigation benefits provided by the protected habitat, as forests regulate streamflow during precipitation events, but the results were inconclusive. Information summaries for these projects were shared with stakeholders. The results will support socio-economic analyses of wildlife habitat management and wildlife policy decisions. Definitions: A benefit transfer method is an approach to estimate economic value by transferring information from existing studies that focused on a different location and/or context.
2223-T4W-020	Elk Population Assessment	Kootenay-Boundary	4. Data and Information	\$ 130,100.00	This project included a complete aerial inventory of elk in the South Trench Population Unit and a composition survey for West Kootenay South elk. This work allowed regional biologists to update population estimates and sex ratios for these units as indications of population status and trend. This project also supported the participation of survey observers from Ktunaxa Nation and Shuswap Band. Definitions: Composition surveys record the number of animals in particular age and sex categories, which provides information on recruitment and population structure.
2223-T4W-045	Elk Stewardship Planning	Kootenay-Boundary	8. Objective-setting	\$ 24,567.50	This project significantly helped to advance a regional Elk Stewardship Plan for the Kootenay Boundary Region. The plan in development clearly identifies objectives, strategies, and implementation priorities for the first two years after plan completion.
2223-T4W-048	Managing Impacts to Wildlife and Habitat from Landscape-Level Linear Disturbances	Kootenay-Boundary	8. Objective-setting	\$ 43,641.20	High road densities in the Kootenay Boundary Region pose significant threats to multiple terrestrial and aquatic ecosystem values, and both road rehabilitation and setting objectives for access management are regional priorities. This project covered several objectives that contributed to strategic and operational access management. This project supported operational implementation of Motor Vehicle Prohibition Regulation (MVPR) designations, including Motor Vehicle Closed Areas (MVCAs) and Motor Vehicle Hunting Closed Areas (MVHCAs), which involved communication with multiple stakeholders, internal government agencies, industry, and First Nations regarding the authorization of access within MVPR designations. In collaboration with stakeholders, adaptive management approaches (e.g., mitigation measures) for MVCAs were developed and implemented. Field visits were completed which included field verification and monitoring in addition to installation and maintenance of gates, kiosks, and signage. Other project activities included mapping and administrative work, the development of website and communication materials in the form of an online and hard copy access guide, and assistance with compliance and enforcement issues within access closures.
2223-T4W-063	Grizzly Bear Conflict Reduction	Kootenay-Boundary	9. On-the-ground Action	\$ 30,000.00	This project involved stewardship actions that helped to achieve tangible benefits for wildlife by reducing wildlife conflicts with communities. This project funded a local electric fencing cost-share program in the Kootenay Boundary Region to assist seven residents experiencing conflicts with grizzly bears in purchasing electric fencing materials to effectively secure wildlife attractants on their properties. This project also provided funds to the Elk Valley South fruit tree removal program to remove 13 fruit trees that were attracting grizzly bears and other wildlife into communities. Additionally, these project funds assisted in the purchase of electric fencing materials for a large-scale attractant securement pilot project for a dairy farm in the Creston Valley. Finally, some project funds went towards the purchase of three grizzly bear Global Positioning System collars to monitor movements of bears that are relocated by the B.C. Conservation Officer Service, to inform future response actions for conflict bears.
2223-T4W-064	Habitat Enhancement on Kootenay Conservation Lands	Kootenay-Boundary	9. On-the-ground Action	\$ 35,025.63	This project incorporated two separate treatment areas with a different treatment focus for each species (bighorn sheep and bats). The Wigwam Flats forest thinning project aimed to improve lines of sight for bighorn sheep in their wintering areas, through manual slashing of vegetation. Development of a treatment prescription was completed in partnership with the Rocky Mountain Trench Natural Resources Society. The society and the Ministry of Water, Land and Resource Stewardship initiated the slashing work on the Wigwam Flats Conservation Property Complex parcels and adjacent Crown land to create more open forest habitat and open range habitat. The project was guided by recommendations in the Region 4 bighorn sheep management plan. The focus of the bat habitat enhancement project was to create bat roosting habitat in various locations: Newgate-Earl Bar 40, Bummers Flats, and Red Barn. BrandenBark (artificial tree bark) was purchased and installed on snags (dead or dying standing trees) to promote long-lasting bat roosting habitat underneath the bark. This imitation bark mimics microclimate conditions and visual cues that attract bark roosting bats.
2223-T4W-065	Highway 3 Mitigation	Kootenay-Boundary	9. On-the-ground Action	\$ 35,000.00	This project supported the completion of the Alexander Bridge wildlife underpass, and the installation of two kilometres of highway fencing to reduce wildlife-vehicle collisions and create safe passage across Highway 3 for multiple species. This work supports increased habitat connectivity and safety for wildlife in this corridor.

2223-T4W-072	Management of Invasive American Bullfrog in the Kootenay Boundary Region	Kootenay-Boundary	9. On-the-ground Action	\$ 8,356.22	This project contributed to the operational field activities of the Kootenay Boundary American Bullfrog Control Program, which aims to control the spread of invasive American bullfrogs in the Kootenay Boundary Region. American bullfrogs pose a direct and immediate threat to native herpetofauna (reptiles and amphibians) species through predation, habitat competition and the spread of disease. Funds from the program went toward a full-time field technician. Activities that the technician contributed to include visual and audio surveillance of wetlands and terrestrial habitat for American Bullfrog, deployment of acoustic recording devices and data analyses, removal of detected American Bullfrogs and tadpoles, and equipment maintenance. Operations are primarily based in Creston B.C. and are designed to manage a key threat to native wildlife and habitat. This program has successfully preserved wetland and riparian habitat for native species in the region through intensive bullfrog control methods, and has limited the range expansion of bullfrogs in the Creston Valley since 2019. This Together for Wildlife funding supplemented a Canadian federal grant (Environmental Damages Fund) and partial funding from the Fish and Wildlife Compensation Fund (FWCP) to maintain operational capacity and continue to support the conservation of native herpetofauna and recovery of the Northern leopard frog in the Creston Valley.
2223-T4W-074	Radium Bighorn Sheep (BHS) health monitoring	Kootenay-Boundary	9. On-the-ground Action	\$ 27,270.46	The primary objectives of this project were to conduct health sampling of bighorn sheep carcasses and provide funding towards the monitoring of bighorn sheep on the highway near Radium by First Nations. The primary cause of bighorn sheep mortalities was motor vehicle collisions. Samples from 21 bighorn sheep carcasses were collected over a two-year period and all samples were tested for heavy metals. Lab results were discussed in a report by Dr. Amelie Mathieu. Monitoring of bighorn sheep on the highway by First Nations occurred during high traffic periods, such as between Christmas and New Years as well as the February long weekend. The objective of this monitoring is to attempt to educate drivers on reducing vehicle speeds when sheep are on the highway near Radium to decrease the risk of collisions.
2223-T4W-077	Southeast B.C. White-tailed Deer Movements	Kootenay-Boundary	9. On-the-ground Action	\$ 19,200.00	In 2022/23, four mortalities of collared deer were investigated, and five additional collars were deployed in Management Unit 4-03. Health samples were collected from all deer that were collared. Movement data are being used in an MSc project to assess Chronic Wasting Disease transmission routes. Survival rates were 0.83 for adult does, and 0.80 for bucks and does combined.
2223-T4W-092	Ungulate Winter Range (UWR) Designations: Mountain Goat, Elk, Mule Deer, Moose, Bighorn Sheep	Kootenay-Boundary	10. Land Designations	\$ 100,941.28	This project was a continuation of multi-year project. Funding supported a part-time auxiliary staff person to advance priority Ungulate Winter Range (UWR) habitat designations for multiple ungulate species, including mountain goat, bighorn sheep, elk, and mule deer. Funds supported: completion of a mountain goat UWR habitat designation in the East Kootenays; the bighorn sheep working group in collaboration with the Ktunaxa Nation; development of draft linework (spatial boundaries) for elk and mule deer UWRs; evaluation and assessment of elk UWR General Wildlife Measures (management practices that must be implemented); and collaring of mountain goats in the West Kootenays to provide data for a mountain goat habitat model to inform future habitat protection designations.
2223-T4W-094	Conservation Land Management Kootenay Boundary	Kootenay-Boundary	11. Conservation Lands	\$ 58,026.88	This project funded a contractor through the B.C. Conservation Foundation to assist with conservation land management in the East Kootenays. This work included: monitoring site and ecosystem conditions and completing an inventory of infrastructure at numerous conservation land locations; leading and assisting with on-the-ground conservation-focused restoration activities; development and installation of signage; infrastructure maintenance; compiling information on conservation lands; management planning; contract management; and building partnerships with First Nations and external partners.
2223-T4W-098	First Nations input on West Kootenay Conservation Land management planning	Kootenay-Boundary	11. Conservation Lands	\$ 14,200.00	The overall objective of this multi-year, multi-phase project is to jointly renew or co-develop management planning documents for West Kootenay conservation lands that are managed by the Province, or co-managed by the Province and the Nature Trust of B.C. (NTBC), with input from First Nations. The objective for 2022/23 was to initiate early engagement with First Nations (i.e., Phase 1) and to use the results of these discussions to develop a strategy for continued meaningful engagement with First Nations in future conservation land management planning processes (i.e., Phase 2). This was a collaboration with the project leads, NTBC, and engagement specialists who were contracted to coordinate the process and to lead discussions with First Nations. Project outcomes include: compilation of a list of conservation lands in the West Kootenay, and selection of a geographic sub-set to be the focus for project initiation and serve as a pilot to inform future engagement processes for other conservation lands; development of a summary document describing these conservation lands and compilation of existing land management planning documents for these properties; development of an early engagement (i.e., Phase 1) strategy including guidance for discussions with First Nations; implementation of the Phase 1 strategy including contacting First Nations to determine interest and preferences for further engagement; and development of a strategy for First Nations engagement during future conservation land management planning processes (i.e., Phase 2).
2223-T4W-100	Recreation Management Planning at Dry Gulch and East Side Columbia Lake WMA	Kootenay-Boundary	11. Conservation Lands	\$ 20,000.00	This project built on previously Together for Wildlife-funded (2021/22) draft recreation management strategies for Dry Gulch and East Side Columbia Lake Wildlife Management Areas (WMAs). The draft recreation strategies completed a thorough values assessment to determine the level and types of recreation compatible with the conservation mandate of the WMAs, which includes the primary purpose of conserving regionally to internationally significant wildlife, fish, and their habitats. Review of the draft strategies were completed with First Nations, and feedback was incorporated into new draft versions. Online engagement was conducted through govTogetherBC on the draft Dry Gulch Recreation Strategy to receive feedback from regional stakeholders and members of the public. Interviews were completed with 10 key stakeholder groups to receive direct feedback on the strategy and proposed management actions. Feedback from this engagement was reviewed and summarized, and the draft strategy was edited to incorporate feedback results.
2223-T4W-023	Moose inventory Management Unit 7-46	Northeast	4. Data and Information	\$ 47,305.00	A moose population inventory was conducted for Wildlife Management Unit 7-46. Results from this survey provided insight to biologists and managers on the population status of moose (e.g., population estimate, population density, calf recruitment). These results in turn informed management actions such as hunting regulations, annual allowable harvest, Limited Entry Hunt authorizations, and also whether any conservation measures would be necessary to maintain population sustainability.
2223-T4W-034	Effect of canoeing and kayaking on Bullmoose Marsh's bird fledging success	Northeast	6. Citizen Science	\$ 4,183.20	The effect of kayaking and canoeing on the fledging success of birds (i.e., their ability to fly) was evaluated by setting up camera traps and providing observational guidance and survey forms to local stakeholders and First Nations to help them participate in this work. Currently, observations are being collected in an additional control area to better understand the significance of the original findings.
2223-T4W-011	Communication support for regional wildlife monitoring	Omineca	3. Public Engagement	\$ 4,750.00	Funding was used to support public engagement in the form of an infographic showing the status of moose populations in the Omineca Region.
2223-T4W-018	Deliver and support mesocarnivore and ungulate surveys	Omineca	4. Data and Information	\$ 30,486.65	Funding was used to hire a technician to support the completion of moose and elk surveys in the Omineca Region. Additionally, camera and hair snare grids were used to estimate the number of fishers and martens (mesocarnivores) in the southern Omineca Region, in the second year of a two-year project. Reports are available for the Robson Valley moose/elk surveys. Analyses are ongoing for the mesocarnivore population estimates. Definitions: Camera grids are a series of trail cameras set up at known distances from each other, typically across a large area, that capture photographs and/or video of wildlife when motion is detected. Hair snare grids are a series of hair collection stations set up in a similar pattern that often use barbed wire to harmlessly gather hair samples from passing wildlife which can be analyzed for DNA.
2223-T4W-028	Robson Valley Moose survey	Omineca	4. Data and Information	\$ 38,880.18	This project supported the completion of a stratified random block moose survey to estimate moose abundance in the Robson Valley. Additional funds were used to develop an analysis to support the interpretation of the moose survey results. Definitions: Stratified blocks are survey units designed to sample areas (strata) with different densities of the species of interest. Per stratum, blocks on the landscape are typically selected randomly prior to being surveyed.
2223-T4W-070	Large-scale ecological restoration/moose habitat enhancements	Omineca	9. On-the-ground Action	\$ 83,000.00	We successfully completed all habitat enhancements and treatments—associated with moose habitat units (four units that were 14km2) in north-central B.C., where moose populations have recently declined. Treatments included the creation of gaps in vegetation, thinning of vegetation, and full rehabilitation of roads (returning them to a more natural state)—within young pine plantations. These activities are intended to provide moose with a stable source of forage and a future supply of ungulate winter range capable of providing physical cover from predators.
2223-T4W-073	Mitigating human-bear conflicts in the Omineca Region	Omineca	9. On-the-ground Action	\$ 18,819.07	This project supports Action 9 by working with communities to prevent grizzly bear and black bear conflict by funding mitigation measures, education, and outreach. A cost-share electric fence program was funded to prevent bears from accessing non-natural attractants (e.g., fruit trees, chicken coops) in rural and agricultural areas around Vanderhoof and McBride. Since 2021, five electric fences have been funded in the McBride area and educational workshops for landowners in both Vanderhoof and McBride have taken place. Work was completed with the Northern Bear Awareness Society in Prince George to fund outreach and education materials aimed at reducing urban black bear conflict, and specifically signage for high-conflict neighbourhoods and radio ads reminding citizens to secure attractants.

2223-T4W-005	Design and implementation of the Skeena Region Together for Wildlife Engagement Strategy	t Skeena	2. Regional Advisory	\$ 40,000.00	This project resulted in the development of a draft terms of reference for the Northern Wildlife Roundtable, and a corresponding strategy for re-establishment in the fall of 2023.
2223-T4W-017	Bulkley Valley, Lakes District, and Upper Babine Moose Inventory	Skeena	4. Data and Information	\$ 194,536.71	The 2023 Bulkley Valley/Lakes District and Upper Babine moose stratified random block population surveys were completed in February 2023. These surveys were conducted via helicopter over six days, with participation from Ministry of Forests biologists and representatives from local First Nations. Both the Upper Babine and Bulkley Valley/Lakes District moose populations required updated population data, as the Upper Babine had not been surveyed since 2017 and the Bulkley Valley/Lakes District had not been surveyed since 2018. The 2023 surveys provided updated population data for both populations which will be used to estimate population metrics and inform moose harvest management within wildlife management units 6-04, 6-05, 6-06, 6-07, 6-08, and 6-09. This project also included an Entiako moose calf recruitment survey which was flown by Ministry of Forests biologists, Ministry of Water, Land, and Resource Stewardship biologists, and a Wildlife Guardian from Cheslatta Carrier Nation. The survey took place over three days in late March. Surveyors utilized a Bell 206 helicopter and telemetry equipment to locate 32 collared cow moose. Surveyors recorded the presence or absence of a calf with each cow moose to determine winter survival of calves in the Entiako study area. This information will provide insight into the population trend for moose in the area and the impacts of various environmental factors on moose calf survival. Definitions: Stratified blocks are survey units designed to sample areas (strata) with different densities of the species of interest. Per stratum, blocks on the landscape are typically selected randomly prior to being surveyed.
2223-T4W-021	Management Unit (MU) 6-04 Mountain Goat Inventory	Skeena	4. Data and Information	\$ 18,832.20	This aerial survey of mountain goats provided the rationale for Limited Entry Hunting closures in this area. Population estimates in three stratified blocks—were below the critical thresholds (50 animals or fewer) to permit a licensed hunting opportunity. This was a collaborative project that included the Cheslatta Carrier Nation, Skin Tyee First Nation, Nee-Tahi Buhn Band, B.C. Parks, and hunting outfitters in the area. Through these partnerships and information sharing, this project supported area-based stewardship and long-term partnerships. Definitions: Stratified blocks are survey units designed to sample areas (strata) with different densities of the species of interest.
2223-T4W-022	Management Unit (MU) 6-28 Sheep & Goat Inventory	Skeena	4. Data and Information	\$ 61,831.10	An inventory of Wildlife Management Unit (WMU) 6-28 was flown from July 18-22, 2022, and a minimum count of thinhorn sheep and mountain goats was obtained. Some southern blocks, with minimal sheep habitat, could not be flown due to cloud cover. Surplus funds were reallocated to another priority area, Limited Entry Hunting (LEH) Zone 6-27A (the western portion of WMU 6-27), which was flown from July 22-23. The total number of sheep and goats counted will be used to produce population estimates for the respective survey areas. These estimates will help regional biologists understand population dynamics of both species to support decision making and ensure licensed harvest is managed sustainably.
2223-T4W-042	Develop an action plan for the Francois Grizzly Bear Population Unit (GBPU)	Skeena	8. Objective-setting	\$ 19,628.00	This project supported the completion of the first version of a draft action plan for the Francois Grizzly Bear Population Unit. Based on pressures, capacity needs, and information gaps highlighted within this draft action plan, Global Positioning System (GPS) collars were purchased to gain necessary information on grizzly bear habitat use and problem areas (high human-bear conflict zones). The GPS collar data will also support essential priorities defined in the plan including: 1) identifying and maintaining or creating habitat linkage areas; 2) completing wildlife area designations; and 3) monitoring sources and rates of grizzly bear mortality.
2223-T4W-046	Engagement for Recreation Management to Support Bulkley Valley Goats	Skeena	8. Objective-setting	\$ 3,738.06	Funding for this project supported monitoring of the voluntary recreational access closure on Mount McKendrick for 2023. This access closure, located in the alpine area of Mount McKendrick, near Smithers, was implemented in 2021 to decrease disturbance to mountain goats caused by recreationalists. Four monitoring flights were completed via helicopter to assess the effectiveness of the voluntary closure. Snowmobile tracks were quantified to obtain an estimate of the level of disturbance occurring on Mount McKendrick. Mountain goat observations and track locations were also recorded. A final report on monitoring of the access closure for 2022 and 2023 is currently in development.
2223-T4W-078	SSAF Moose Habitat Assessment	Skeena	9. On-the-ground Action	\$ 33,977.81	This project supports Action 9 through the participation of Skeena Sustainability Assessment Forum (SSAF) First Nations biologists and technicians, together with B.C. provincial staff and auxiliary support, in leading delivery of habitat-based fieldwork specific to moose and improving science-informed management of moose habitat. This project completed habitat assessments with SSAF First Nations to support moose habitat model verification and ungulate winter range development and refinement. These represent data gaps that significantly influence the development of carrying capacity estimates of moose within the SSAF study area, and are an assessment priority of SSAF First Nations and provincial biologists. This project created job opportunities for SSAF First Nations Guardians, technicians, and biologists that focused on on-the-ground wildlife assessment and monitoring, and information sharing amongst First Nations members, staff, and governments, and the Province of B.C. Through verification and calibration processes for the moose habitat mapping product, data and results were incorporated into the modeled landscape assessment and into refining moose Ungulate Winter Range (UWR) General Wildlife Measures (management practices that must be implemented). The project has generated trusted information collaboratively with SSAF First Nations and districts that will be used to inform management and decision processes in the south Skeena. Examples of this application include: moose UWR development, landscape planning projects such as the Lakes Resiliency Plan, inputs to timber supply review processes, as well as restoration and enhancement projects.
2223-T4W-079	Skeena Sustainability Assessment Forum (SSAF) Moose Health Assessment	Skeena	9. On-the-ground Action	\$ 23,889.29	The Skeena Sustainability Assessment Forum (SSAF) collected 35 comprehensive moose health samples, including measurements of body condition, pregnancy status, parasite prevalence, viral and bacterial pathogens, stress, and trace nutrients. Collaborative efforts amongst First Nations involved in the SSAF and the B.C. government enabled information gathering across multiple seasons and from various moose mortalities (e.g., moose that were hunted, involved in vehicle collisions, etc.). This increased the project sample size to over 100 collections, strengthening the understanding of moose health baselines and cause-specific factors related to moose mortalities. Specific achievements also included: 1) Information about moose health data gaps within the SSAF study area, which is a priority of both First Nations participating in SSAF and the B.C. government. 2) Mitigation of threats to moose population sustainability associated with body condition, pathogens, parasites, stress, or other concerns. 3) Identification of next steps and/or recommendations for future moose health monitoring and/or moose stewardship. 4) Support of job opportunities for First Nations Guardians, technicians, and biologists participating in SSAF.
2223-T4W-091	South Skeena Moose and Grizzly Bear Mapping and GAR Designation	Skeena	10. Land Designations	\$ 243,247.44	In 2022/23, this project was in year two of a multi-year initiative. Significant advances were made in updating, improving, and expanding regional "in-house" habitat model products to support and inform delineation and development of Government Action Regulation (GAR) areas and General Wildlife Measures (GWMs; management practices that must be implemented) for the whole Skeena region. Of particular focus were the Kalum and Lakes Timber Supply Areas (TSAs) for grizzly bears, and the Lakes, Morice, and Bulkley TSAs for moose. Aerial assessment of the draft polygons within the Bulkley TSA was conducted to delineate and classify potential moose Ungulate Winter Range (UWR). This work will be the basis of a moose UWR Order in the Bulkley, will be used to verify the moose habitat model, and will inform broad-scale opportunities for habitat enhancement and restoration priorities. In the Morice TSA, core and management UWR polygons, objectives, and GWMs were developed using polygons drafted from the 2021/22 aerial surveys and moose habitat mapping. In the Lakes TSA, the proposed GAR pathway within the Skeena Sustainability Assessment Forum (SSAF) was used to refine linework (spatial boundaries) and GWMs. Grizzly bear habitat data were collected in the Kalum and Lakes TSAs. Draft GWMs and Wildlife Habitat Areas specific to grizzly bears are now available for the Lakes TSA. Desktop verification was conducted for the SSAF area, which resulted in multiple updates and upgrades to the habitat model for grizzly bear and the moose habitat mapping. This work was completed in collaboration with SSAF Nations.
2223-T4W-101	Skeena Conservation Lands Program (CLP) Assessment and Development of a Systematic Conservation Planning Tool	Skeena	11. Conservation Lands	\$ 38,878.39	Desktop assessment criteria were developed that will inform a systematic conservation tool. The tool will be transparent and adaptive to assist in identifying, prioritizing, and ranking conservation lands in the Skeena Region. The tool was developed with guidance and input from First Nations involved in the Skeena Sustainability Assessment Forum, providing a framework for future First Nations engagement with the Conservation Lands program.
2223-T4W-119	Skeena First Nations Moose Population Inventory Engagement	Skeena	23. FN Capacity Building	\$ 56,971.76	The Bulkley Valley-Lakes District and Upper Babine moose stratified random block—surveys were collaboratively delivered by six First Nations and the B.C. government. The planning phase included over four months of collaborative meetings, mapping, analysis (including integrating previous collaborative work), and training. This project was completed in January 2023 and included seven days of flying out of four base locations, totaling around 130 flying hours. Every phase of this work was done in collaboration with the Skeena Sustainability Assessment Forum, building a shared understanding of moose population assessments. Specific achievements included: 1) Creation of an opportunity for meaningful First Nations engagement and participation in moose inventory work in the Skeena region, building on ongoing partnerships with First Nations and moose stewardship initiatives currently underway. 2) Increased capacity amongst First Nations for fulsome participation in multiple aspects of moose population monitoring, including planning and data collection. 3) Better-informed collection of moose population information through the engagement of First Nations and the interweaving of Indigenous knowledge and local knowledge with western scientific data and methods. Definitions: Stratified blocks are survey units designed to sample areas (strata) with different densities of the species of interest. Per stratum, blocks on the landscape are typically selected randomly prior to being surveyed.

2223-T4W-029	Roosevelt Elk Inventory and Monitoring	South Coast	4. Data and Information	\$	Aerial surveys were performed to collect inventory data to estimate current population size and sex/age-class distribution within Roosevelt elk population units. The goal of the project was to inform decisions about harvest allocation to First Nations, B.C. residents, and guide outfitters. Thirty elk were captured and heath assessments and genotyping were completed. Global Positioning System (GPS)/Very High Frequency (VHF) collars were also deployed to help develop and improve home range estimates and survival rate estimates. Data from the collars will also inform habitat selection, allocation decisions, population and habitat objective-setting, and habitat protection (including co-location of protected areas with those for other values).
2223-T4W-049	Mountain Goat Objective Setting	South Coast	8. Objective-setting	\$	This project supported the completion of separate winter and summer habitat suitability models for mountain goats in the Coast Area (i.e., South Coast and West Coast Regions) to support objective-setting, inventory planning, and habitat effectiveness monitoring. These models were found to perform well both from the perspective of statistically fitting the observation data, and from a field perspective, where model predictions generally followed the subjective evaluation of observed habitat by survey crews. Draft population objectives have been established for 43 Goat Population Management Units (PMUs) in the South Coast Region based on the estimated distribution of high suitability habitat, and on minimum counts of goats observed on PMU inventory flights. A mountain goat inventory and monitoring strategy has also been developed for the South Coast and West Coast Regions to guide future inventory and habitat effectiveness monitoring efforts.
2223-T4W-080	Synthesis of coyote conflict to support coexistence	South Coast	9. On-the-ground Action	\$	This project established a working relationship among the Province, the Animal Behavior and Cognition Lab at UBC, the Vancouver Parks Board, and the Stanley Park Ecological Society. This collaboration seeks to understand the root causes of urban coyote aggression that led to more than 40 attacks on visitors in Stanley Park during the summer of 2021. This work directly supports the development and implementation of mitigation strategies such as an aversive conditioning trial, and an evaluation of the effectiveness of attractant management programs (e.g., securing garbage bins so that wild animals can't access them) being implemented by the Vancouver Parks Board. It also seeks to synthesize the information available on previous attacks, compare diet and body condition of animals in urban and rural environments, and determine the effectiveness of aversive conditioning and attractant management by monitoring coyotes. If successful, these mitigation measures can be applied throughout Metro Vancouver.
2223-T4W-088	DWR Sunshine Coast Timber Supply Area (TSA)	South Coast	10. Land Designations	\$	Ongoing collaborative work with shishalh Nation (sN) was continued to legally establish Ungulate Winter Ranges (UWRs) for Columbian black-tailed deer in the sN swiya (traditional territory) portion of the Sunshine Coast Timber Supply Area (TSA). With contractor support, an expert opinion-based deer winter habitat model was developed for the sN swiya to guide deer UWR spatial planning. Local Indigenous Knowledge was also incorporated into polygon design. To date, 66 candidate deer UWRs have been delineated for the sN swiya. All candidate UWR polygons have been assessed in the field and pre-consultation with stakeholders (i.e., forest licensees) has started. In addition, deer UWR planning in the Sunshine Coast TSA outside the swiya has been initiated. For this area, deer winter habitat models (i.e., winter shelter and winter forage) and a spring forage model have been developed for the Sunshine Coast Natural Resource District. These models will inform selection of candidate UWRs by supporting review of draft deer candidate UWRs previously identified in 2014, and identification of additional candidate UWRs. The next step is to use these newly developed models to support deer UWR planning outside the swiya in collaboration with the appropriate First Nations.
2223-T4W-025	Thompson-Okanagan Moose Monitoring Program	Thompson-Okanagan	4. Data and Information	\$	This project supported the completion of stratified random block surveys in Management Units 8-03 and 8-04 and composition surveys in Management Units 3-18, 3-19, 3-26, 3-27, 3-28, 3-29, 3-30 and 3-39. In Region 3, calf ratios ranged from 28 to 45 calves/100 cows and bull ratios ranged from 39 to 70 bulls/100 cows. Definitions: Stratified blocks are survey units designed to sample areas (strata) with different densities of the species of interest. Per stratum, blocks on the landscape are typically selected randomly prior to being surveyed. Composition surveys record the number of animals in particular age and sex categories, which provides information on recruitment and population structure.
2223-T4W-062	Fraser River Bighorn Sheep Disease Mitigation Program	Thompson-Okanagan	9. On-the-ground Action	\$	Seventy-five bighorn sheep were captured, sampled, and treated for Mycoplasma ovipneumoniae (M.ovi) infection in the High Bar band of sheep along the Fraser River. Four sheep were determined to be positive for M.ovi and were euthanized. Continued treatment effectiveness monitoring also occurred, and six lambs and five yearlings were captured and sampled to assess the level of M.ovi exposure following treatment. Results so far indicate all sheep were M.ovi negative. Lamb survival monitoring indicated improved lamb survival in all areas treated since 2020.
2223-T4W-071	Malakwa Grizzly Bear Conflict Management	Thompson-Okanagan	9. On-the-ground Action	\$	This project was initiated in response to a growing number of human-grizzly bear conflicts in the Thompson-Okanagan Region in recent years. The goal of this project was to reduce these negative interactions through a combination of attractant management (e.g., securing garbage bins so that wild animals can't access them), public outreach, and management of conflict bears. An experienced contractor was hired and worked to successfully hold a community workshop on grizzly bear safety and complete an initial Bear Hazard Assessment and report. Onsite bear safety information and electric fencing consultation were also provided, along with cost-sharing for electric fencing to secure attractants in areas with significant bear activity and human safety concerns. Members of the agricultural community around Malakwa have been engaged and are supportive of this project. This work aligns with actions identified in the draft Grizzly Bear Stewardship Framework for B.C. to promote education regarding public safety and attractant management, focused on minimizing human-bear conflicts. It also directly supports Action 9 of the Together for Wildlife strategy, as it relates to reducing wildlife conflicts with communities.
2223-T4W-082	Thompson-Nicola Conservation Initiative Biodiversity Conservation Strategy	Thompson-Okanagan	9. On-the-ground Action	\$	To support progress towards a predictive mapping tool for grasslands and wetlands in 30-50 years, partners at UBC Okanagan developed a predictive mapping tool for grasslands in the Thompson-Nicola. They also completed the data gathering phase for the wetland component in the Kamloops area and planned for the upcoming field season of ground-truthing. Alongside this work, the Thompson-Nicola Conservation Collaborative met with many Indigenous communities to discuss Traditional Use Plans and Cultural Heritage Assessments, and to identify priority lands for each First Nation.
2223-T4W-083	Thompson-Okanagan Ecosystem Restoration Plan	Thompson-Okanagan	9. On-the-ground Action	\$	This project produced a pilot of an online Geographic Information System (GIS) planning platform for the identification of restoration areas within the dry interior of the Thompson-Okanagan Region. Provincially available species, ecosystem, and land ownership data, along with other types (e.g., wildfire polygons), were loaded into the platform and then used to complete queries based on specified values and objectives. A query is a GIS function that spatially identifies a subset of records from a larger collection of datasets. The platform was shared with all First Nations interested in the project and their input helped define the values and objectives used in the queries. A report summarizing the project outcomes to date and next steps is in progress. More detailed restoration planning will happen at the territory level directly with First Nations communities.
2223-T4W-084	Thompson-Okanagan Region Bighorn Sheep Population Recovery and Stabilization	Thompson-Okanagan	9. On-the-ground Action	\$	As part of continued collaborative management of bighorn sheep disease issues in the Thompson-Okanagan Region, 52 bighorn sheep were captured and assessments of body condition and health were completed. Additionally, collaborative lamb monitoring with partner communities (Tk'emlúps te Secwepemc, Skeetchestn Indian Band, and Okanagan Nation Alliance) was initiated. A disease management response plan was created with Okanagan Nation Alliance and Washington State. Collaborative work with partners (Tk'emlúps te Secwepemc, Skeetchestn Indian Band, Okanagan Nation Alliance, and B.C. Wildlife Federation) was also completed to identify and pursue habitat enhancement options in the region.
2223-T4W-099	McTaggart-Cowan/nsək'łniw't WMA Post-Wildfire Assessment/Restoration	Thompson-Okanagan	11. Conservation Lands	\$	This project supported a Traditional Ecological Knowledge Keeper (TEKK) in completing an assessment of McTaggart-Cowan/nsək'hniw't Wildlife Management Area (WMA), four seasons post-wildfire, as part of a multi-year project. This work was led by the Penticton Indian Band (PIB), directing PIB Natural Resources (PIBNR). This assessment was summarized in a report that provided management recommendations relating to concerns and priorities identified by the TEKK. Restoration (e.g., native planting/seeding, invasive species management, and erosion control) of priority habitat areas such as waterways (cecwixa) was also completed based on priorities identified in previous reports completed by PIB in 2020 and 2021. This project increased joint stewardship of McTaggart-Cowan/nsək'hniw't WMA between the Province and PIB, and improved management of the WMA which supports bighorn sheep, other ungulates, furbearers, carnivores, and species at risk according to both Indigenous and western knowledge systems.
2223-T4W-102	Swan Lake Wildlife Management Area (WMA) Collaborative Management Actions/Planning	Thompson-Okanagan	12. Wildlife Act	\$	The purpose of the 2022/23 (Year 3) project was to enhance collaborative management of the Swan Lake Wildlife Management Area (WMA) with the Okanagan Indian Band by conducting conservation actions in support of a management plan for the WMA. This project builds on Together for Wildlife Action 11 investments in Year 1 (2020/21) and Year 2 (2021/22) to conduct Foreshore Inventory and Mapping of Swan Lake to document current habitat conditions and existing foreshore developments while also incorporating Indigenous Knowledge. The key deliverable this year was a report entitled "Swan Lake Wildlife Management Area Foreshore Integrated Managed Plan," which included species at risk and invasive species management plans, as well as habitat protection and water quality monitoring recommendations. The tangible benefits of this project also included increased partnership and joint stewardship of the Swan Lake WMA with the Okanagan Indian Band.
2223-T4W-117	Habitat Response Monitoring of 2021 Wildfire within Skeetchestn Territory	Thompson-Okanagan	22. FN Data Sharing	\$	This project supported the monitoring of the vegetation community response to wildfire by comparing parameters such as vegetation biomass and forage quality between burned and adjacent unburned areas across a series of ecosystems (Biogeoclimatic Ecosystem Classification Zones). This work was led by the Skeetchestn Indian Band, directing the Skeetchestn Natural Resource Corporation (SNRC). SNRC collected baseline information on vegetation communities, with a focus on aspects related to wildlife, in both unburned and burned areas within a landscape mosaic. Field technicians documented unburned vegetation conditions (i.e., a control), including assessments of vegetation ground cover, species, biomass, and nutritional quality, as well as annual response of the burned vegetation (i.e., the treatment) over time. This project also established permanent sample grids for long-term monitoring of plant community succession. Information was summarized in an annual report that documented the results of the analysis of key parameters to compare the control and treatment areas.

2223-T4W-123	Resourcing 2022/23 Together for Wildlife Delivery in the Thompson-Okanagan Region	Thompson-Okanagan	4. Data and Information		Project funding was used to support the hiring of an auxiliary wildlife biologist in the Thompson-Okanagan Region to ensure projects funded by Together for Wildlife were completed. The auxiliary staff person helped support regional projects focused on moose monitoring, Fraser River bighorn sheep disease mitigation, ecosystem restoration, and improving mule deer stewardship. The staff person also supported field data collection, report writing, data submission, equipment inventory, and presentations about the projects to different organizations.
2223-T4W-010	Communicating West Coast Region wildlife & habitat management objectives and approaches	West Coast	3. Public Engagement		Three infographics were created for the West Coast region for the purpose of communicating work to the public, stakeholder groups, and First Nations. The infographics highlighted black bear den management, Ungulate Winter Range protections, and a Columbian black-tailed deer landscape ecology project.
2223-T4W-030	Roosevelt Elk Inventory and Monitoring, West Coast Region	West Coast	4. Data and Information		Roosevelt elk inventories were conducted in key Elk Population Units of the West Coast Region in March 2023. Population estimates and sustainable harvest rates will be developed once the survey data are analyzed. This information will be used to support discussions with First Nations regarding sustainable harvest opportunities in 2023.
2223-T4W-043	Developing Management Objectives for Elk on Haida Gwaii, West Coast Region	West Coast	8. Objective-setting	\$ 17,393.36	Wildlife staff from region and district met multiple times with the Council of Haida Nation staff to further the development of stewardship objectives for Rocky Mountain elk on Haida Gwaii. Collectively, the 2021/22 survey information was reviewed in light of local knowledge that was shared regarding the distribution and habitat use of these elk. Stewardship boundaries were drafted, areas with knowledge gaps were highlighted, and another series of information gathering flights was collectively delivered to help refine stewardship boundaries and inform objectives. A report was completed summarizing the elk distribution information from work conducted in 2021/22 and 2022/23.
2223-T4W-059	Collaborative Wildlife Stewardship and First Nation Engagement on Vancouver Island	West Coast	9. On-the-ground Action		Regional wildlife staff continued annual Roosevelt elk harvest meetings with over 20 First Nations who have elk in their care-taker areas to work collaboratively to ensure elk harvest remains sustainable. Additionally, regional wildlife staff carried out focused discussions with four First Nations with overlapping territories regarding the potential for collaboratively developing a framework that will provide transparency regarding future harvest intentions. This work continues and includes co-developing communications materials to help stakeholders understand the Nations' harvesting rights. Regional wildlife staff also finalized an elk translocation video with interviews from Uchucklesaht and Quatsino First Nations. This video will be used as a communication tool to help First Nations, stakeholders, government agencies, and the public understand why elk translocations occur. Additionally, working with the Maa-nulth Treaty Nations, regional wildlife staff continued to implement the collaborative elk project in the Nahmint Elk Population Unit (EPU) which focuses on better understanding elk in the area. Remote cameras were deployed in the summer and fall of 2022. Work in 2023/24 will focus on deploying the remaining cameras and maintaining them in the field. Final data analysis and recommendations will be developed after approximately two years of data collection. Also, year-round movements of collared elk, and winter elk activity near highways on Vancouver Island, were monitored to improve the understanding of elk using areas near highways, which creates potential vehicle collision and public safety risks caused by these large animals crossing busy highways.
2223-T4W-066	Implementing Bear Den Management on Vancouver Island and Haida Gwaii	West Coast	9. On-the-ground Action	\$ 67,268.11	In the 2022/23 year of this project, the total number of bear dens included in long-term monitoring was increased to 120 (from 54 in 2020, and 80 in 2021). The number of remote cameras deployed was increased to 44 (from nine in 2020, and 24 in 2021). Additionally, three den workshops were conducted which were attended by three First Nations, three or more forestry companies, contractors, and government staff. There have been ongoing improvements to the den database and den survey techniques. A key success was expanding to Haida Gwaii in partnership with the Council of the Haida Nation. Project leads continued conversations with First Nations and forest licensees around bear den identification and management through presentations, meetings and workshops. Partnerships for this project will continue to be explored where there is interest. An infographic was also developed, which will be posted in 2023. Early data from the study have provided a better understanding of den characteristics and forestry treatments and management. Windthrow has been identified as a risk factor for dens, emphasizing the need for wind-firm forested buffers around retained dens.
2223-T4W-068	Important Bird Nest Monitoring on Vancouver Island	West Coast	9. On-the-ground Action		This project delivered on-the-ground stewardship by surveying historic and new bald eagle and heron nests across Vancouver Island, where nest habitat is threatened due to urban and rural development. Field staff conducted surveys at over 150 nest sites using a newly developed direct data entry application to provide developers, local governments, consultants, First Nations, land managers, and researchers with up-to-date data to inform land use planning and decision making.
2223-T4W-085	West Coast Roosevelt Elk Habitat Selection and Supply Monitoring	West Coast	9. On-the-ground Action	\$ 11,297.34	In 2022/23, on-the-ground monitoring of key seasonal habitats for Roosevelt elk was conducted in the West Coast Region. An additional 10 Global Positioning System (GPS) radio collars were deployed on adult female elk, and approximately 50 previously collared elk were monitored to sample habitat use across nine Elk Population Management Units. Telemetry flights were conducted over summer and winter range to count and classify groups of collared elk, as well as check on the collar status of potential mortalities and malfunctions. It is estimated that over 125,000 GPS points are being collected annually. A network of remote camera stations was also monitored to measure snow depths and index winter severity. The data are being used to develop preliminary habitat selection models for elk in winter. This work used a dataset of 68 GPS-collared elk, with a total of 148 unique winter seasons and more than 70,000 elk locations over a broad range of habitats. Winter habitat selection of elk was modelled and the initial results were spatialized across the study area to provide a spatially explicit (i.e., on-the-ground) assessment of winter habitat supply to support habitat management objectives and effectiveness monitoring of Ungulate Winter Ranges. Ongoing model development in the coming year will include refinements to the candidate model structures and integration of more variability in winter conditions (e.g., severe winter bouts from camera data), which is foundational to informing on-the-ground habitat management for elk.
2223-T4W-087	Deer and Elk Ungulate Winter Range Effectiveness Monitoring	West Coast	10. Land Designations		Progress was made on developing and implementing stand- and landscape-level Ungulate Winter Range (UWR) effectiveness monitoring protocols for Columbian Black-tailed deer and Roosevelt elk. Work included the compilation of known information and included digitizing historic habitat assessments, and creating deer and elk UWR ArcGIS dashboards to display results of Geographic Information System (GIS) spatial analyses. Additionally, wildlife cameras were deployed and fieldwork was completed to assess deer UWRs that were identified as most at risk of not being effective.
2223-T4W-090	Mountain Goat Ungulate Winter Range Occupancy and Effectiveness Monitoring	West Coast	10. Land Designations		Over the course of five days of helicopter surveys, government biologists surveyed mountain goat Ungulate Winter Ranges (UWRs) on the central coast where the presence of goats had not been previously verified. In addition to identifying mountain goats and tracks, habitat assessments were completed to inform future amendments to the boundaries of UWRs.
2223-T4W-055	Assessing effectiveness of wildlife salvage activities conducted under B.C. Wildlife Act permits	WLRS - Ecosystems	9. On-the-ground Action		This project assembled salvage permit application packages (which include an Animal Care Application, or ACA) from 2019-2021 from each region in the province. Using R software, each Animal Care Application was searched and the information was used to populate an Excel database. Various parameters were included in this database (e.g., types of projects, number of applications per region, review turnaround time) to look at trends across the province and over time. A report was prepared with a first section that focused on government processes for salvage permits, and a second that examined their biological impact, which was shared with FrontCounter B.C. staff for review. The first section will become a standalone report and will be submitted to EcoCat (Ecological Reports Catalogue), and the second section will be adapted into a scientific manuscript and submitted to a peer-reviewed journal. Additionally, an auxiliary employee on this project began her MSc at UBC with Dr. Tara Martin, focusing on the effectiveness of wildlife salvage in B.C. She completed course work, established her research committee, and completed her research proposal. Her research is addressing the effect of salvage on survivorship and movement of Columbia spotted frog. Definitions: Salvage permits are required when development activities are anticipated to disturb habitat for small mammals, amphibians, and reptiles. Prior to development, salvage is conducted to survey for, capture, and relocate these animals to nearby suitable habitat.
2223-T4W-060	Conserving Fisher Habitat and Populations	WLRS - Ecosystems	9. On-the-ground Action	\$ 70,876.13	In support of Together for Wildlife Action 9, the B.C. Fisher Habitat Working Group engaged with forest practitioners to improve their ability to conserve fisher habitat throughout forestry planning, layout, and operations. This included developing and improving existing tools to better support forestry planners and operational staff in identifying and retaining fisher habitat during the forest development process. Through the Fisher Habitat Extension Program, the team conducted pre- and post-harvest cutblock evaluations to provide feedback requested by forestry planners to improve their ability to successfully implement available fisher habitat guidance. In addition to these stewardship activities, over 300 genetic samples were analyzed to estimate fisher population density and distribution in areas significantly impacted by mountain pine beetle salvage harvest and wildfire. Lastly, the team partnered with First Nations land guardian programs to conduct biodiversity monitoring. This included developing tools (e.g., infographics, protocols) and delivering training workshops to support the implementation of a camera monitoring program. In addition to collecting information on species of interest to Indigenous partners, this program will provide data on fisher distribution to validate existing landscape models and identify target areas for conservation.

2223-T4W-061	Feral Pig Early Detection, Monitoring and Control in the Cariboo	WLRS - Ecosystems	9. On-the-ground Action	\$	Invasive species are recognized as a key threat to wildlife and habitats under Action 9 of the Together for Wildlife strategy. Feral pigs are one of the world's most widespread and damaging invasive species. To address the threat of feral pigs in B.C., this project investigated historical and current feral pig reports in the Cariboo, Peace, and Thompson-Nicola Regions. This project also supported the drafting of a feral pig provincial response plan, development of educational material, creation of custom feral pig trapping equipment, trapping of pigs at large, and increased awareness of feral pigs and their impacts through public outreach activities. Provincial biologists and Conservation Officers conducted surveillance to search for feral pigs in areas of concern using helicopter surveys. Close to 1700 kilometres were surveyed by air in the Cariboo (Quesnel, Nazko, Williams Lake, 100 Mile, 70 Mile, and Clinton areas), Thompson-Nicola (Monte Creek, Kamloops, and Cache Creek areas), and Peace Regions (Hudson's Hope, Fort St. John, and Dawson Creek areas). On the ground, trapping was conducted following continued release of domestic pigs from private property. Additional trapping equipment was purchased to enable easy access to a feral pig response kit across the province. The B.C. Feral Pig Working Group was also created, which supported the development of a provincial response plan, and a feral pig workshop was cohosted with the Invasive Species Council of B.C. and the B.C. Wildlife Federation. An infographic was created to share with the public and collaborating non-government organizations, showing updated information about feral pigs in B.C., the risks from these animals, and their potential impacts to B.C.'s environment and economy.
2223-T4W-106	Fiscal measures to incentivize ecosystem-based management/old growth conservation	WLRS - Ecosystems	13. Funding	\$	The purpose of the second year of the Conservation Fiscal Incentive Project was to explore potential components of a provincial stewardship incentive program for conservation of biodiversity on private lands, while including Indigenous leadership in accordance with Indigenous peoples' rights and responsibilities for their territories. A jurisdictional scan of existing monetary tools was conducted, including their funding sources and suitability as a potential case study for this project. Based on this research, the working group developed criteria to select non-profit agencies that had existing fiscal incentive programs for private landowners to partner with the Province. Four agencies were selected to participate in this project as case studies to inform the Province's approach for developing a policy framework for private land incentives. Two Indigenous technical advisors provided valuable perspectives and recommendations on next steps for implementing work plans. This work contributed to a better understanding of how additional capacity for private land incentives improves conservation outcomes for wildlife and habitat stewardship in British Columbia.
2223-T4W-036	BC Telemetry Data Warehouse (BCTW)	WLRS - NRIDS	7. Data Accessibility	\$	In 2022/23, the Knowledge Management Branch continued development work on the B.C. Telemetry Warehouse, a system that supports Together for Wildlife (Action 7) by housing and providing real-time access to the telemetry location data of collared animals. The B.C. Telemetry Warehouse brings together wildlife telemetry data into a single warehouse, and in a common, well-understood and documented standard. The warehouse stores an inventory of all animal and device associations across the province, allowing users to manage information on an animal or device independently. To date, the warehouse has focused on aggregating and managing caribou telemetry; in 2022/23, work was undertaken to expand monitoring to other collared species. User interfaces were also improved as were features to summarize system data and to improve download of datasets. To support B.C. Telemetry Warehouse, an additional sub-component was also developed to allow administrators and users to manage and access animal-specific information (e.g., capture and mortality information, physical tags and markings, body measurements, and family relationships).
2223-T4W-039	Provincial Wildlife Data Compilation, Loading and Access	WLRS - NRIDS	7. Data Accessibility	\$	This 2022/23 project supported Together for Wildlife (Action 7) to make sure data are accessible, reliable, and integrated. It allowed the Knowledge Management Branch to coordinate data submissions and loading requirements for the previous fiscal year (2021/22). Of the 2021/22 projects that identified as data generating, the branch worked with project leads to achieve nearly 100% submission to appropriate corporate data repositories that included training of projects leads on the submission process as well as templating support. Throughout 2022/23, the branch reviewed submissions for quality (Quality Assurance/Quality Control), and reviewed data to implement the Species and Ecosystems Data and Information Security Policy. Datasets were then loaded to the corporate databases that enable data (as well as other deliverables including spatial files, models, and reports), to be accessible via various web-based tools (e.g., Species Inventory Web Explorer, Habitat Wizard, B.C. CDC iMap) and via Wildlife Species Inventory (WSI) B.C. Geographic Warehouse layers.
2223-T4W-040	Wildlife Health Data System Phase 1	WLRS - NRIDS	7. Data Accessibility	\$	In 2022/23, the Knowledge Management Branch continued development work on the Wildlife Health Information System. This system supports Together for Wildlife (Action 7) by managing data from the Wildlife Health Program and helping to standardize capture, sampling, mortality investigation, and diagnostic protocols for wildlife. The system also ensures provincial coordination, storage, and archiving for all wildlife health and genetic samples collected in British Columbia. The user groups that depend on reliable and accessible wildlife health information include regional staff, research partners, human health authorities, laboratories, First Nations, the public and many other interested parties. The development of a modernized Wildlife Health Information System promotes efficiency and enables better flow of wildlife health information from acquisition to application. In 2022/23, development focused on wildlife health ID generation and tracking. Phase I of the system is anticipated to be available for use by the Wildlife Health team in June 2023.
2223-T4W-001	Minister's Wildlife Advisory Council	WLRS - WHSR	1. Minister's Advisory	\$	The Minister's Wildlife Advisory Council provided strategic advice to government on a number of topics in 2022/23, including financial governance, Regional Wildlife Advisory Committees, performance measures, and research. The Council also held another successful round of wildlife dialogues with First Nations and stakeholder groups. To date, the Council has provided over 20 recommendations to government on a wide range of issues that impact wildlife and habitat integrity.

2223-T4W-008	Regional Wildlife Advisory Committees Provincial Development	WLRS - WHSR	2. Regional Advisory	\$ 7,111.52	In 2022/23, significant strides were made in the policy development for Regional Wildlife Advisory Committees (RWACs). Workshops were held internally and with the provincial advisory bodies (Minister's Wildlife Advisory Council, Provincial Hunting and Trapping Advisory Team, and the First Nations-B.C. Wildlife and Habitat Conservation Forum) to determine policy options, potential governance structures, roles, and responsibilities, and to develop a terms of reference template. The establishment of RWACs must account for regional diversities and needs and have flexibility as a core feature of design.
2223-T4W-009	Regional Wildlife Advisory Committee contractor support	WLRS - WHSR	2. Regional Advisory	\$ 96,263.08	Contractor support was provided to staff in the Kootenay-Boundary and Thompson-Okanagan regions to facilitate exploration of Regional Wildlife Advisory Committee (RWAC) formation, including engagement sessions with First Nations and stakeholders. Engagement with First Nations was completed to determine how each individual First Nation preferred to be connected to the committees. Stakeholder meetings were held in the Okanagan and East Kootenay sub-regions, resulting in interest from stakeholders in both areas and the formation of an interim wildlife and habitat committee in the East Kootenays. The contractor produced a "lessons learned" report that will help other regions with their RWAC formation.
2223-T4W-012	Together for Wildlife Communications	WLRS - WHSR	3. Public Engagement	\$ 46,920.00	A communications contractor completed 340 hours of work consulting and preparing infographics, high resolution logos, and other communications materials for various projects. A road access guide was created for the Kootenay Boundary region and at least seven species were featured in infographics, and all of which went through the approval process of Government Communications and Public Engagement (GCPE). Providing these materials has allowed for increased opportunities for the public to learn about and engage on wildlife stewardship issues. The contractor also created Together for Wildlife reporting materials using financial and project data in consultation with the Together for Wildlife implementation team, the Minister's Wildlife Advisory Council, and the First Nations-B.C. Wildlife and Habitat Conservation Forum.
2223-T4W-013	BC Wildlife History Project	WLRS - WHSR	3. Public Engagement	\$ 32,110.53	This project supported a new publication that will highlight the history of wildlife management in British Columbia, which upon release will offer British Columbians a unique perspective.
2223-T4W-032	Action 5 implementation	WLRS - WHSR	5. Research	\$ 230,000.00	Funding was provided to the Habitat Conservation Trust Foundation to facilitate delivery of an academic student scholarship program in 2023. Ten academic scholarships (\$20,000 each) were awarded to Master's and PhD candidates undertaking research that will support stewardship, management, policy, or decision-making related to wildlife in B.C. These scholarships also aim to support reconciliation and collaboration, diverse perspectives, and community capacity building among Indigenous communities and rural areas of B.C. The student scholarship program is being delivered in partnership with the First Nations-B.C. Wildlife and Habitat Conservation Forum.
2223-T4W-033	Citizen science framework	WLRS - WHSR	6. Citizen Science	\$ 21,414.17	This project delivered a strategic-level framework which includes results from a baseline survey on the current citizen (or community) science landscape in B.C. Community science (CS) involves the participation of public volunteers in various aspects of science, such as the collection of field data. This project included a comparison of the digital CS platforms active in the province, an overview of three different styles of CS with provincial examples for each, and strategic recommendations for next steps relating to engagement and outreach, data quality and management, and staffing.
2223-T4W-035	WildCam contribution	WLRS - WHSR	6. Citizen Science	\$ 40,000.00	Funds were provided to the B.C. Parks Foundation to hire a staff person to support standardization, coordination, and synthesis of wildlife camera surveys through the Wild CAM network. Remote wildlife cameras (camera traps) have become a major tool for wildlife monitoring and research around the world. A coordinated camera trap network can contribute significantly to improving scientific knowledge and public engagement in support of effective wildlife management in B.C. and beyond. The Wild CAM network is intended to support large-scale expansion of the use of wildlife cameras to benefit wildlife stewardship in B.C.
2223-T4W-047	Fisher Management Planning and Engagement: Northeast BC	WLRS - WHSR	8. Objective-setting	\$ 79,950.00	This project supported management and recovery planning for fisher in response to population concerns. Project engagement was conducted online which supported involvement of a large number and wide geographic distribution of interested organizations and individuals. Invitations to participate in online sessions were sent to more than 100 First Nations whose territories overlap with mapped fisher habitat, as well as government staff, industry representatives, and stakeholder organizations. Representatives from the provincial fisher and cumulative effects teams hosted online meetings to share information and discuss key topics. During the initial scoping phase, the Province heard there is a need to integrate what is known about fisher into a more holistic approach for supporting forest ecosystem resilience. A second round of engagement was undertaken to support the development of a framework for recovery within the context of biodiversity/forest ecosystem resilience, and the initial design of possible recovery scenarios along with clear, measurable objectives. Participants identified several principles to guide biodiversity and fisher recovery planning. First, biodiversity/fisher planning should pursue a more holistic approach by seeking opportunities to integrate with other values, as fisher is just one species within a troubled ecosystem. Second, a stewardship approach to "walk on two legs" should be applied by integrating science and Traditional Ecological Knowledge, and there should also be acknowledgement that status quo management is failing many species. Third, there should be different ways of assessing the implications of species and land management on socioeconomic values. Fourth, biodiversity/fisher planning should evaluate gaps in existing regulatory mechanisms to meet objectives. Lastly, planning processes should include respectful accommodation of diverse Indigenous communities.
2223-T4W-050	Policy and Procedure Engagement Support	WLRS - WHSR	8. Objective-setting	\$ 19,865.00	Staff worked with a contractor to develop a provincial guidance framework for linking wildlife population and habitat objectives, and organized a technical feedback session with internal staff on an early draft. A final version of the framework was produced, which will inform stewardship planning and objective-setting procedures under Action 8.
2223-T4W-052	Public Engagement on Elk and Grizzly Bear Frameworks	WLRS - WHSR	8. Objective-setting	\$ 18,325.00	This project supported collaboration between staff and govTogetherBC to develop materials, including survey forms, for online public engagements on the draft provincial stewardship frameworks for Rocky Mountain elk and grizzly bear, as well as on the draft Commercial Bear-Viewing Strategy. Revisions to the draft elk framework were also completed by a contractor. Public engagements will open in 2023, and the responses will inform the final versions of these documents which support Action 8 of the Together for Wildlife strategy.
2223-T4W-086	Auxiliary hiring to support Action 10 implementation	WLRS - WHSR	10. Land Designations	\$ 49,627.80	A contracted wildlife habitat analyst conducted scientific analyses that improved the understanding of biodiversity retention and availability, and the management of habitat for multiple species. This work will be used to support improved land designations and land management, and will be used to assess the effectiveness of current land designations (with special attention paid to Old Growth Management Areas). The habitat analyst began by developing a methodology to assess provincial datasets to help characterize attributes associated with forest seral stage (age of a forest stand). The analyst identified data gaps in provincial datasets where an effective characterization could not be made and developed a sampling methodology to fill in those gaps, before implementing the first stage of sampling in the Cariboo Region (data collection continued in the summer of 2023). The Cariboo Region was chosen due to the degree of fragmentation and habitat loss from multiple disturbances (e.g., beetle infestations, fire activity, timber harvesting) and the need for restoration and retention of high-value habitat features. The habitat analyst then supported the development of Habitat Suitability Models in the Cariboo Region and completed a model for pine marten that predicts the decline in high-value habitat availability from pre-colonial contact to present.
2223-T4W-089	Habitat Designations Review and Effectiveness Analysis (Phase 2)	WLRS - WHSR	10. Land Designations	\$ 76,267.45	This project built on previous Action 10 work from 2021/22 and focused on completing an analytical report, producing communication materials, and building a Geographic Information System dashboard to spatialize the results. The dashboard highlights the extent and severity of mapped natural and anthropogenic disturbances within specific land designations, and supports various land-based planning projects.
2223-T4W-095	Conservation Lands Habitat Infrastructure Inventory	WLRS - WHSR	11. Conservation Lands	\$ 25,000.00	This project created a database for tracking information on existing dams and other water control structures (which manage water levels) on administered conservation lands. To do this, the project lead reviewed documentation such as inspection records and created a spreadsheet containing details about all dams on conservation lands, including the name and file number of each dam, related water licenses and land agreements, and engineering drawings. A spatial map layer was created that shows the location and attributes of dams, and includes tables that can be used to link the conservation lands spatial layer and the dams spatial layer. A documents library was also created to house all relevant documents that were compiled during the review. This project supports Action 11 of the Together for Wildlife strategy by improving data management for conservation lands. Recordkeeping of this infrastructure on conservation lands is important because individual regions can track and report on maintenance and functionality of dams to help safeguard people, wildlife species, and habitats.
2223-T4W-096	Conservation Lands Program Strategic Plan	WLRS - WHSR	11. Conservation Lands	\$ 62,815.94	This project has resulted in a final draft of the Conservation Lands Program Strategic Plan which aims to provide internal strategic direction for the program, and includes goals, objectives, indicators and targets. The consultant team, including Indigenous technical advisors, worked closely with the Minister's Wildlife Advisory Council, the First Nations-B.C. Wildlife and Habitat Conservation Forum, and the Conservation Lands Program NGO Partnership to seek advice and input into the draft plan. The draft plan includes ambitious targets to grow the lands conserved within the program and improve management of existing lands, in partnership with First Nations. The draft plan is undergoing internal government review and will ensure alignment with other provincial initiatives including the commitment to protect 30% of lands and waters by 2030. It is anticipated that the final plan will be endorsed and released in the fall of 2023.

2223-T4W-109	Performance Measure Framework	WLRS - WHSR	14. Performance Management	\$ Action 14 of the Together for Wildlife strategy commits to developing a performance measure framework. In 2022/23, a Mitacs fellow was brought on board to support this work. Draft performance measures were presented to the Together for Wildlife advisory bodies (Minister's Wildlife Advisory Council, Provincial Hunting and Trapping Advisory Team, and the First Nations-B.C. Wildlife and Habitat Conservation Forum) to seek guidance. Since then, analysis has continued with the aim of testing out a performance framework as part of the upcoming reporting cycle for Together for Wildlife. Definitions: Mitacs is a national organization focusing on research and innovation.
2223-T4W-113	Shared Decision Making Regional Needs Assessment	WLRS - WHSR	18. FN Co-management	\$ This project provided training to public servants across the province on the concept of "ethical space," which provides a framework for different worldviews and knowledge systems to respectfully engage and be equally valued. Eight workshops were held, one in each region. Regional staff learned about Indigenous Knowledge, worldviews, and building bridges between knowledge systems when engaging with Indigenous Peoples.
2223-T4W-114	Guardian Program Wild CAM training	WLRS - WHSR	21. FN Guardian Programs	\$ 51,876.27 Funds were provided to the Wild CAM network, through the B.C. Parks Foundation, to hire a staff person to deliver training and outreach on the use of wildlife cameras to interested Indigenous partners and First Nations Guardian Programs. Collaborative wildlife stewardship with Indigenous governments is a key element of Together for Wildlife. Training and support allow First Nations Guardian Programs to collect, manage, and analyze data in standardized ways following best practices. Remote wildlife cameras (camera traps) have become a major tool for wildlife monitoring and research around the world. A coordinated camera trap network can contribute significantly to improving scientific knowledge and public engagement in support of effective wildlife management in B.C. and beyond. The Wild CAM network is intended to support large-scale expansion of the use of wildlife cameras to benefit wildlife stewardship in B.C.
2223-T4W-120	First Nations-B.C. Wildlife and Habitat Conservation Forum	WLRS - WHSR	24. FN Wildlife Forum	\$ Forum members are invaluable partners in the implementation of the Together for Wildlife strategy and in 2022/23 they carried out significant work, including co-drafting an Indigenous Knowledge Policy, endorsing a Shared Decision-Making Project Charter which guided the development of a Shared Decision-Making Policy and Procedure, and creating a Forum logo. The Forum, its Secretariat, and related working groups met over 60 times in 2022/23.
2223-T4W-121	Indigenous Youth Intern	WLRS - WHSR	23. FN Capacity Building	\$ 84,124.73 Funding supported the salary for an Indigenous youth intern to support the implementation of Together for Wildlife and the First Nations-B.C. Wildlife and Habitat Conservation Forum.
2223-T4W-122	Program Administration	WLRS - WHSR	NA	\$ 1,402,370.88 Program staffing, resourcing, and administration.
TOTAL				\$ 7,492,728.99

Explanatory note 1: Together for Wildlife costs were captured, at the bottom line, in the Ministry of Water, Lands and Resource Stewardship. Due to organizational changes brought about by the creation of the ministry there were some expenses that were recorded in the Ministry of Forests, but were corrected corporately in year-end adjustments between the two ministries.

Explanatory note 2: Each year, potential projects are aligned with recommendations from the Minister's Wildlife Advisory Council and the priorities identified at provincial and regional levels that are consistent with T4W actions. Partnerships and collaboration are important

considerations that inform final funding decisions.

Explanatory note 3: The T4W Strategy aims to increase provincial spending on wildlife and habitat stewardship by up to \$10 million. This summary does not include projects that benefit wildlife from other program areas (e.g., cultural and prescribed fire, collaborative

indigenous stewardship framework, species at risk recovery, etc).

Explanatory note 4: In FY23, slippage of planned funding was primarily due to incompatible winter weather and an extraordinary wildfire year, decreasing the total planned spend. Under spent funding was reallocated to within Ministry pressures and emergent priorities, including wildlife and habitat program work.