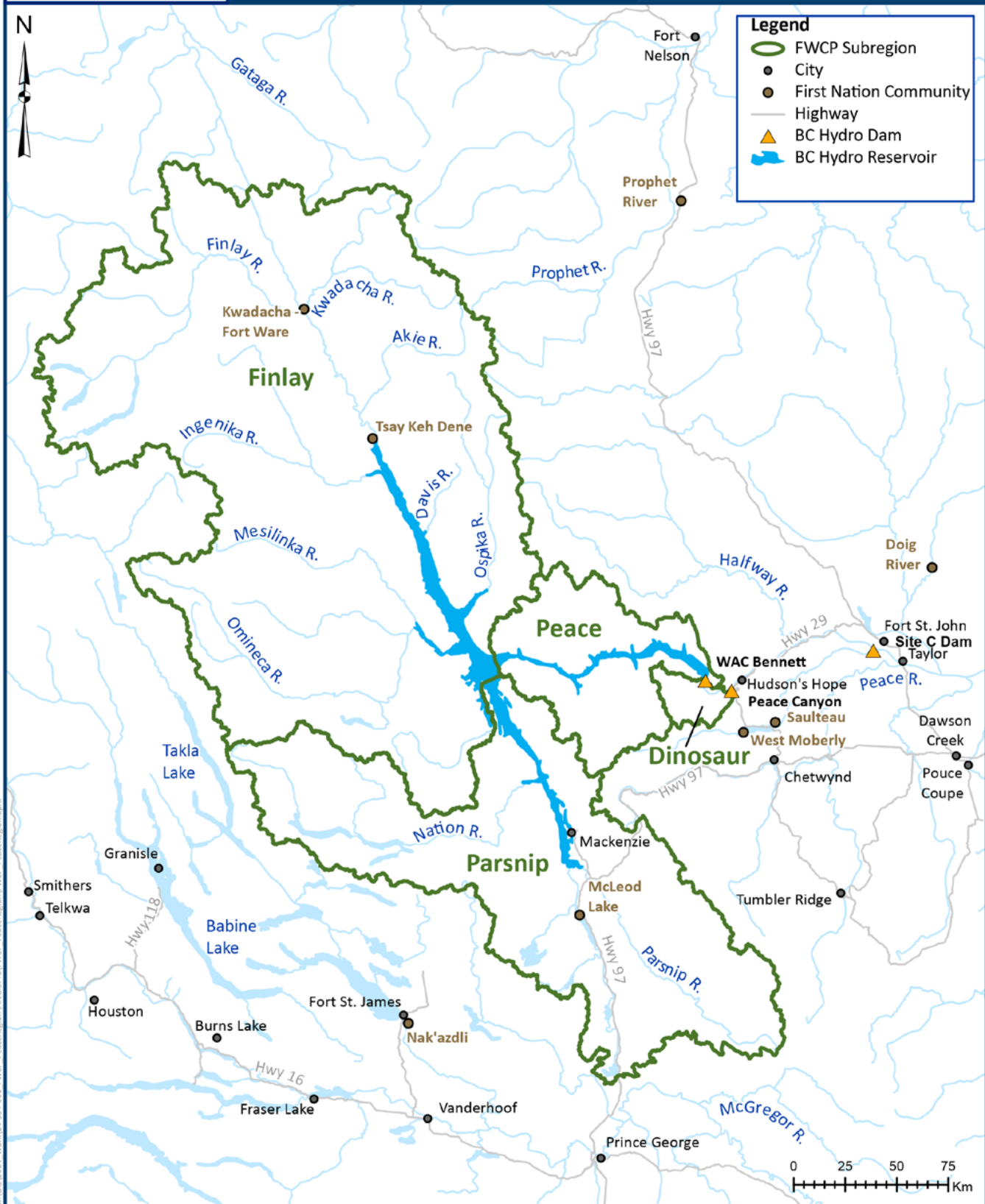






AC - Rev 2 - 2024-09-27

FWCP fish and wildlife projects 2024–2025

Our Coastal, Columbia, and Peace region boards approved ~\$10.4 million for 95 fish and wildlife projects. Each project aligns with our regional action plans, which reflect our strategic objectives, mission, and vision.

Read [our story](#).

Peace Region projects 2024–2025

In our Peace Region, 25 projects were approved by our board for \$1.9 million. Approximately 37% of approved funding went to projects in the Parsnip sub-region, 28% in the Finlay sub-region, 1% in the Peace sub-region, and the remainder went to basin-wide projects. See Figure 1 for a breakdown of funding by sub-region.

More than half (nearly 53%) of the project funding went to First Nations, with 44% allocated to projects led by non-government organizations. See Figure 2 for a breakdown of funding by proponent type.

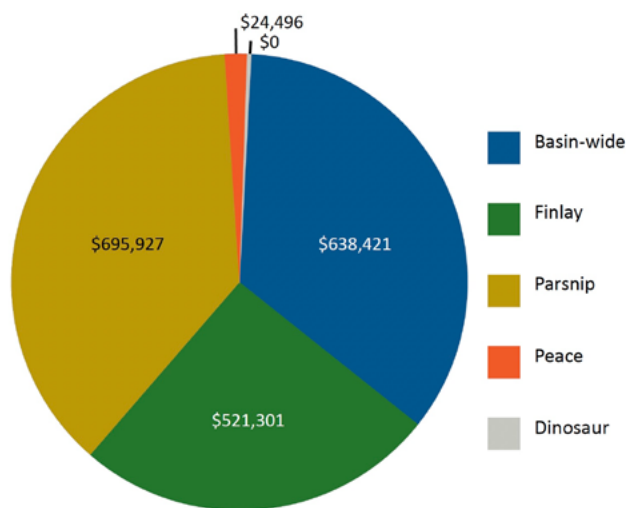


Figure 1: F25 project funding by sub-region

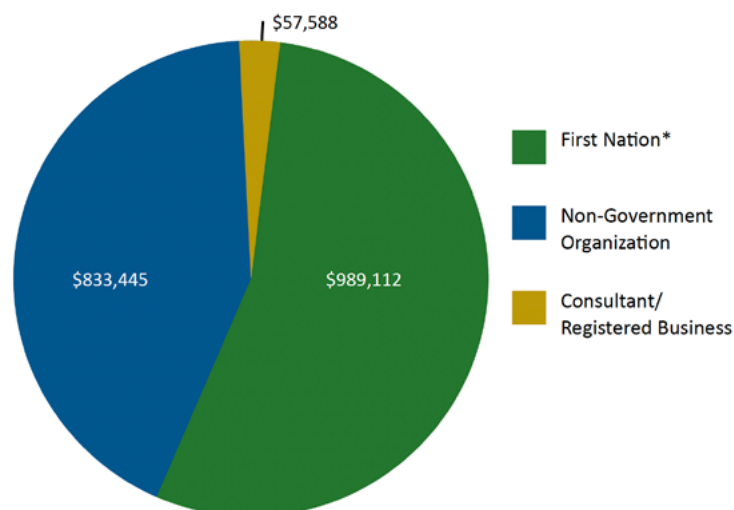


Figure 2: Funding for F25 Peace Region projects by lead proponent type

*Includes First Nations-owned businesses and First Nations-led organizations

The FWCP works to fulfill BC Hydro's applicable water licence obligations to address fish and wildlife impacts resulting from the construction of the W.A.C. Bennett and Peace Canyon dams. The FWCP does not compensate for Site C impacts to fish and wildlife. Site C's water licence obligations require BC Hydro to establish environmental monitoring, mitigation, and compensations programs. Under the water licence, BC Hydro will report to the water comptroller on these programs in ~2030.

Project outcomes

Project outcomes for projects approved for 2024–2025 are summarized on the following pages.

We post final project reports on provincial databases so the results of projects we fund are available to everyone.

Searchable spreadsheets of reports for each FWCP region are available at fwcp.ca/results.html.

Learn more about our projects

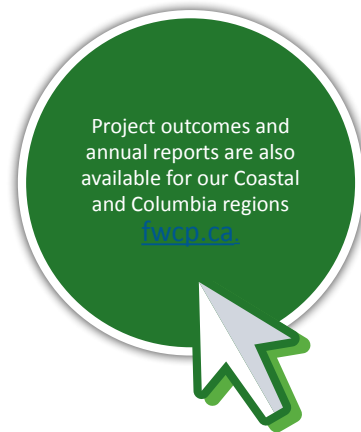


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Fish & Wildlife Compensation Program



Bull trout spawning habitat

PEA-F25-F-3986

Diversified Environmental Services

\$ 24,496

Peace Sub-Region

Research and Information Acquisition



Steve Rooke

Peace Reach Bull Trout Habitat and Spawning Zones: This project will use aerial and ground-based surveys to refine estimates of bull trout critical spawning habitat boundaries and adult spawner abundance in Peace Reach tributaries surveyed in 2016, 2017, and 2021.

44 bull trout redds confirmed

Aerial and ground surveys of bull trout redds (spawning sites) were conducted on Carbon, Clearwater, and Schooler creeks, and the West Nabesche River. Forty-four redds were documented. Thirty-one redds—a record number—were found in Carbon Creek. Redds appeared depressed in the other tributaries surveyed.

Low flows in the West Nabesche River may have limited fish movement past a partial barrier near the confluence with the Williston Reservoir. Some spawning habitat may have been lost in Schooler Creek due to beaver activity, which may have displaced some spawners into Carbon Creek.

[Learn more](#)

Improving fish passage in Kwadacha Nation Territory

PEA-F25-F-4019

Kwadacha Nation — DWB Limited Partnership

\$ 66,908

Finlay Sub-Region

Research and Information Acquisition



iStock P1 lens

Culvert Fish Passage Assessments in Kwadacha Territory: This project will focus on identifying barriers to fish passage within the Kwadacha Nation Territory overlapping the northern portion of the FWCP's Peace Region.

Fish passage assessed at 42 sites

Assessments of fish passage at 42 road crossing sites were completed. This assessment identified 15 candidate sites for potential restoration work to improve fish passage.

This project is restoring fish passage to high-value habitat upstream of existing barriers and it is compensating for habitat lost from dam and reservoir construction.

[Learn more](#)

West shore Arctic grayling in Williston Reservoir Watershed

PEA-F25-F-4051

Chu Cho Environmental LLP

\$ 94,948

Basin-wide

Research and Information Acquisition



West Shore Arctic Grayling Abundance and Critical Habitats: Building on the success of a past project in the Parsnip River Watershed, this multi-year project will use snorkeling surveys and eDNA to assess Arctic grayling abundance and critical habitat tributaries on the reservoir's west shore.

Arctic grayling population declines

The study team completed a mark-resight study in the Mesilinka River to estimate detection probability and abundance for comparison to Arctic grayling data collected in 1992-1999.

Results show that the Mesilinka River Arctic grayling abundance for adults in 2024 is about 20% of the abundance observed previously.

The results of this work inform recommendations for surveys in the remaining target streams.

[Learn more](#)

Bull trout populations and changes in life history

PEA-F25-F-4052

Chu Cho Environmental LLP

\$ 93,808

Basin-wide

Research and Information Acquisition



Williston Bull Trout Population Structure and Life History: This multi-year information-gathering project will fill important data gaps related to the conservation of genetic diversity and the impacts of the reservoir creation on bull trout populations.

255 bull trout genetic samples collected

This information gathering project is filling important data gaps related to the genetic diversity of bull trout and the impacts of reservoir creation.

Thirty-two populations were sampled, and genetic samples were taken from 255 juvenile bull trout via electrofishing at 23 sites.

A preliminary genetic analysis was completed on 12 of the populations using the Rapture protocol which confirmed four distinct populations and validated the continued use of the protocol.

[Learn more](#)

Improving fish passage in our Peace Region

PEA-F25-F-4090-DCA

Society For Ecosystem Restoration in Northern BC

\$ 215,481

Parsnip Sub-Region

Habitat-based Action



Ben Meunier

F25 Fish Passage with Society for Ecosystem Restoration in Northern BC, Year 4: This multi-year project is implementing prioritized fish passage restoration actions identified through earlier FWCP-funded projects.

Fish passage assessed and improved

A clear-span bridge was installed on the Table River, replacing a road crossing that was impeding fish passage. This project provided access to approximately 4 km² of upstream habitat for fish.

Fish passage was assessed at 15 sites focusing on structures with potential upstream barriers.

Fish sampling occurred at 16 sites across six streams, resulting in 319 captures. All fish were measured (i.e., fork length and weight), life stage classified, and salmonids >60 millimetre were PIT-tagged under permit to enable long-term tracking.

Four sites were checked post-remediation, including electrofishing, habitat observation, UAV imagery and a custom effectiveness monitoring form that considered metrics such as flow velocity, substrate, constriction, riparian condition, and cover.

[Learn more](#)

Conserving Arctic grayling in the Parsnip River Watershed

PEA-F25-F-4178-DCA

West Moberly - DWB Limited Partnership

\$ 54,893

Parsnip Sub-Region

Research and Information Acquisition



Steve Rooke

Arctic Grayling Habitat Enhancement Project: Building from several years of research and information gathering on Arctic grayling, this project will advance efforts to enhance Arctic grayling habitat in the Parsnip River Watershed.

Enhancement options for Arctic grayling identified

This information-gathering project identified a broad range of habitat enhancement options to support Arctic grayling in the Parsnip sub-region. This species was impacted by reservoirs resulting from dams built by hydro-generation and are a priority species for our Peace Region.

Top-ranking enhancement options include remote site incubation, fish salvage (fry and juveniles), remediation of key sites including a clay slump, sediment and erosion control.

[Learn more](#)

Using eDNA for brassy minnow in the Parsnip River Watershed

PEA-F25-F-4143-DCA

University of Northern British Columbia /
BC Hydro

\$ 1,650

Parsnip Sub-Region

Research and Information Acquisition



Langstrom / Zemlak

Sample Collection for Brassy Minnow eDNA Assay: This project aimed at brassy minnow, a species recently assessed as a Special Concern, will focus on collecting samples in the Parsnip River Watershed to develop an eDNA assay.

Sampling and DNA sequencing continues

This project to develop an eDNA assay for brassy minnow is ongoing. A final project report is not yet available but the project team confirms that further DNA extraction and sequencing is ongoing and when complete, the results will support development of an assay for future use.

[Learn more](#)

Bull trout spawner abundance and critical habitats

PEA-F25-F-4054

Chu Cho Environmental LLP

\$ 74,551

Basin-wide

Research and Information Acquisition



E. Taylor

Bull Trout Spawner Abundance and Critical Habitats: This multi-year project will provide estimates of bull trout spawner abundance within index sites in four long-term monitoring sections, and in four newer index stream sections with varying degrees of land use disturbance.

Bull trout populations assessed

In this project year, updated population growth rate estimates in long-term index sections of the Williston Reservoir were completed, monitoring continued in new index sections in Lay and Pelly creeks, and a preliminary list of limiting factors was prepared.

Up to 2024, the Davis River is the only long-term index section experiencing a positive trend, with an annual growth rate 2.60% after an above-average count of 86 redds in 2024.

Fifty redds in Point Creek exceeded the long-term average, and population growth rate improved to 0.06%.

A negative population trend continued for the Scott Creek population with an estimated decline of -3.39% over the time series.

A total of 33 and 67 redds were counted in new index sections Lay and Pelly creeks, respectively.

[Learn more](#)

Cold-water fish and climate change

PEA-F25-F-4053

Chu Cho Environmental LLP

\$ 113,849

Basin-wide

Research and Information Acquisition



Modelling Thermal Regimes of the Upper Peace River Basin: This multi-year project will focus on the cumulative effects of land use, climate change, and water flow regulation on river water temperatures in the upper Peace River Basin.

Water flow & temperatures monitored

As water temperatures increase, there is a need to better understand how to manage for cold-water-adapted fish like Arctic grayling and bull trout.

The initial objective of this project was to monitor water temperature and flow in priority watersheds of the upper Peace River and it has been completed. The results are already providing critical data to support the analysis of limiting factors and the prioritization of conservation and enhancement actions based on thermal habitat availability.

The next steps in this multi-year project will use the modeling framework to address other research questions.

The results to date have been used to inform two existing FWCP projects ([PEA-F25-F-4051](#) and [PEA-F25-F-4054](#)) examining abundance and critical habitats for Arctic grayling and bull trout.

[Learn more](#)

Critical habitats for bird and bats

PEA-F25-W-3994

Birds Canada

\$ 129,649

Basin-wide

Research and Information Acquisition



Cori Lusen

Motus Wildlife Tracking System, Peace Basin Expansion: This project will continue to expand the Motus Wildlife Tracking System to track birds and bats affixed with digitally encoded radio transmitters to help identify critical habitat and effective conservation measures.

Birds & bats tracked and surveyed

During this year of the project, 132 kilometres of riverbanks and bluffs along Williston Reservoir were surveyed for at-risk bank swallows. Thirty-two colonies were located and 16 were active nesting sites.

The team installed three large tracking stations and four mini stations at wetlands in Tsay Keh Dene Core Territory to track bank swallow use of wetlands for foraging and roosting.

The stations are part of the Motus Wildlife Tracking System—an international research community working to study bird and bat movements.

Three myotis bats were tagged in Tsay Keh Dene Core Territory and the team took part in educational activities with students at Moberly Lake Elementary School.

[Learn more](#)

Grizzly bears in Tsay Keh Dene Nation Territory

PEA-F25-W-4017

Chu Cho Environmental LLP

\$ 47,029

Finlay Sub-Region

Research & Information Acquisition



Stock J Huevel

Understanding Grizzly Bear Habitat Use and Populations: This multi-year project will increase understanding of culturally significant and at-risk grizzly bear populations in Tsay Keh Dene Nation Territory. This year, the project will expand into the Ospika study area, east of the Williston Reservoir.

Grizzly bear monitoring fills data gaps

Using 50 paired camera sites, totalling 10,620 monitored days, the project team increased the understanding of local grizzly bear populations and movement corridors.

Site-specific detection rates reflected seasonal use by grizzly bears. Hair analyses confirmed use by seven individual grizzly bears and indicated recurring use of sites by bears.

In addition to grizzlies, other valued species, including caribou, moose, lynx, and several bird species, were also detected.

[Learn more](#)

Conserving ecologically significant plants

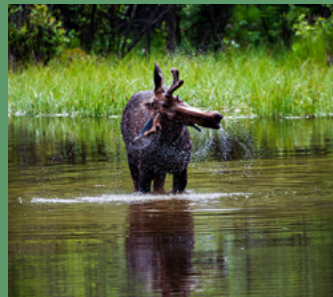
PEA-F25-W-4027

Chu Cho Environmental LLP

\$ 50,578

Finlay Sub-Region

Research and Information Acquisition



Chris Gale Wild North Photos

Tsay Keh Dene Nation Herbarium for Plant and Knowledge Conservation: Plants, lichens, and fungi that are integral to the ecology and culture of Tsay Keh Dene Nation since time immemorial are at risk due to climate change, human activities, and natural disturbances.

189 plant species documented

Data about plants were collected at 15 sites and 189 different plant species were documented, including 153 vascular plants, 26 bryophytes, and 17 lichens and fungi.

One hundred and thirty-six specimens were added to the herbarium, and 42 specimens were prepared for long-term storage.

Elders, staff and community members shared knowledge about the linguistic and cultural uses of the plants, helping ensure this project creates a resource for the Nation on culturally significant plants. The team also tested an online herbarium game app that will use the Tse'kene language and a repository of photos among other features.

[Learn more](#)

Protecting wetland function by reducing erosion

PEA-F25-W-4035

British Columbia Wildlife Federation

\$ 42,101

Parsnip Sub-Region

Habitat-based Action



BCWF

McIntyre Lake Wetland Restoration: The McIntyre Lake wetland near the community of McLeod Lake is an important peatland complex. Significant erosion has occurred and as a result the peatland soils are becoming dewatered, degrading the function of the wetland.

Beaver dam analogue improves wetland resilience

B.C. Wildlife Federation, in collaboration with McLeod Lake Indian Band, initiated the McIntyre Lake wetland restoration project. Together they installed 17 beaver dam analogues (BDAs) along 218 metres of stream within the McIntyre Lake wetland complex near McLeod Lake.

This low-tech work to simulate beaver dams with woody debris and mud helps retain water on the landscape and improve the resilience of this five-hectare wetland.

Without the installation of the BDAs this wetland was at risk of diminishing water storage capacity, shortened wetted periods, and degraded peat due to stream incision and advancement of headcuts in the wetland. And that would impact the many species that depend on this important habitat type that was impacted by reservoir creation.

Monitoring is proposed for future years to document the efficacy of the project.

[Learn more](#)

Effectiveness of wildlife tree enhancements

PEA-F25-W-4036

Strategic Resource Solutions

\$ 33,091

Finlay Sub-Region

Monitoring and Evaluation



Enhancing Wildlife Tree Habitat – Effectiveness Monitoring: This project will assess the effectiveness of 60 wildlife trees created in 2017-2018 in the Tsay Key Dene Nation Territory with FWCP funding.

Sixty “created” wildlife trees assessed

This project assessed the effectiveness of 60 wildlife trees created on the Tsay Key Dene Nation Territory in 2017-2018 using stem modification and fungal inoculations.

This wildlife tree project will provide needed habitat for cavity nesters.

Monitoring confirms 42% of the trees treated in 2018 show signs of woodpecker feeding and the onset of decay. The team is encouraged by the development of decay-causing heart rot in cottonwoods and spruce which is rapid compared to natural decay dynamics.

The project team hosted a presentation and discussion at the Tsay Keh Dene School for students and community members.

[Learn more](#)

Olive-sided flycatchers in the Ingenika River Watershed

PEA-F25-W-4038

Chu Cho Environmental LLP

\$ 58,082

Finlay Sub-Region

Research and Information Acquisition



Olive-sided Flycatcher Habitat Across a Disturbance Gradient: This is the final year of a three-year project to evaluate olive-sided flycatcher occupancy, habitat characteristics, and prey abundance and diversity at various sites across a natural and anthropogenic disturbance gradient.

Project builds data set for olive-sided flycatcher

During the final year of this project to build understanding and fill gaps about the olive-sided flycatchers in our Peace Region, a species of Special Concern, the team completed detection surveys at 123 sites and found the songbird at 16 sites.

Habitat assessments were completed at 34 sites, and findings suggest no associations between the birds' presence and habitat characteristics. There was also no evidence to suggest a relationship between habitat disturbance type or intensity and insect availability.

In some instances, the presence of the bird was associated with sites with less human disturbance or greater natural disturbance within the surrounding landscape. More study is needed to explore these findings.

Since 2018, the team has compiled a large data set (i.e., 303 survey sites and 59 detections) that can be leveraged in future studies to further our understanding of olive-sided flycatchers and their breeding range. At this time, the team feels beneficial management practices cannot yet be developed from the results.

[Learn more](#)

Restoring roads to support caribou recovery

PEA-F25-W-4049

Chu Cho Environmental LLP

\$ 47,924

Finlay Sub-Region

Habitat-based Action



Chu Cho Environmental

Chase Caribou Road Restoration Program: This multi-year project will use ecological and functional restoration techniques to restore abandoned resource roads in the Chase caribou herd range and accelerate their return to a mature forest environment, reducing human and predator use.

Road restoration continues to support caribou

In year two of this five-year project to restore abandoned access roads to support caribou recovery in our Peace Region, 2.5 kilometres of road were restored. More than 1.15 hectares were “de-compacted” prior to equipment failure that limited further work to recontour and loosen the surface.

De-compacted road sections were planted with Lodgepole pine seedlings at a targeted density of 600 stems/hectare.

Four trail cameras in the Swannell River Valley documented wildlife for 3,270 camera days, making 453 independent wildlife detections of 18 species. Wolves were documented the most, followed by snowshoe hare and moose. New detections included Stone’s sheep, mountain goat, and mule deer.

Predator detections exceeded ungulate detections at two sites. Caribou were not common but were recorded (27 detections; 5.9%), and human presence was minimal, with only two non-staff detections.

[Learn more](#)

Habitat conditions for Stone’s sheep

PEA-F25-W-4056

Wild Sheep Society of British Columbia

\$ 90,127

Finlay Sub-Region

Research and Information Acquisition



Chris Gale Wild North Photos

Stone’s Sheep Range Condition in Northern BC: This project aims to build on established partnerships and fill knowledge gaps about Stone’s sheep nutrition and range condition in the Tatlatui, Swannell, and Russel ranges, west of the Williston Reservoir.

Project confirms range, habitat & forage preferences

This research project successfully identified critical insights into winter range conditions and reproductive status that influence the body condition of Stone’s Sheep in our Peace Region. Data collected from this habitat and range assessment project will directly inform habitat enhancement recommendations and contribute to ongoing conservation efforts for Stone’s sheep, a unique and iconic mountain ungulate.

Data from 28 collared ewes helped delineate herd boundaries and tracked individual body condition and led to the collection of more than 395 vegetation samples across 39 plots. This helped the team identify the nutritional value on core summer ranges, and forage preferences.

[Learn more](#)

Wolverine density and abundance in Tsay Keh Dene Nation Territory

PEA-F25-W-4068

Chu Cho Environmental LLP

\$63,618

Finlay Sub-Region

Research & Information Acquisition



Stock Waindshoot

Wolverine Density and Abundance in the Chase Caribou Range: This project will use non-invasive genetic sampling to estimate wolverine density and abundance within Tsay Keh Dene Nation Territory, with a focus on the Chase caribou herd range, west of the Williston Reservoir.

38 wolverine monitoring stations set up

The project team was busy in year one of this project to estimate wolverine population density in the Tsay Keh Dene Nation Territory. Thirty-eight monitoring stations with a hair snag and camera were established within the Chase caribou herd range.

Wolverines, a species of cultural concern for the Nation, were detected at 76% (29) of the 38 monitoring stations. One hundred and forty-four hair snags were collected for genetic analysis scheduled for completion in fall 2025.

The team is reviewing the photos and looking closely at chest fur colour and patterns to help identify individuals.

[Learn more](#)

Restoring caribou habitat for Klinse-Za Herd

PEA-F25-W-4069

Nikanese Wah tzee Stewardship Society

\$99,968

Basin-wide

Habitat-based Action



Nikanese Wah tzee Stewardship Society

Restoring Caribou Habitat in the Klinse-Za Herd: The focus of this multi-year project is on restoring habitat for the at-risk herd and managing access to the range to reduce impacts on the population.

Linear features restored for caribou

This project resulted in enhanced habitat for the Klinse-Za caribou herd.

In 2024, the project team completed direct mechanical site preparation of 14.7 kilometres and tree falling on 2.9 kilometres. Seedlings were planted along 36.9 kilometres of restored road network, and our partners planted tree seedlings on 36.9 kilometres of linear features.

[Learn more](#)

Nak'azdli Whut'en elk population and movements

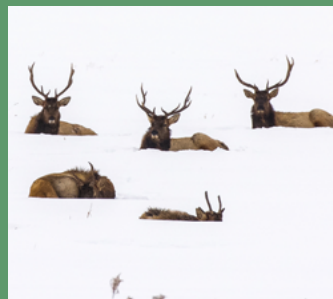
PEA-F25-W-4070

Nak'azdli Whut'en

\$59,012

Parsnip Sub-Region

Research & Information Acquisition



Elk Distribution and Range Expansion on the Nation River: This monitoring and assessment project will determine if elk are expanding their range to the west side of Williston Reservoir, which is likely due to climate change and increased fire frequency.

Elk population assessments underway

In this project year, 20 cow elk were collared: 10 were from the Mason-Nation river area, and the rest were collared in the Pinchi Lake area.

A complete health assessment was completed on 19 elk, and all were released without injury.

Data from the collared elk, together with surveys of First Nation community members about sightings, will help confirm the range and if it is expanding to the west side of Williston Reservoir.

[Learn more](#)

Caribou predation in Nak'azdli Whut'en Territory

PEA-F25-W-4075

Nak'azdli Whut'en

\$66,000

Finlay Sub-Region

Research & Information Acquisition



Wolf Density and Distribution in the Wolverine Caribou Herd, Year 2: Wolves are the main predator of caribou in the Wolverine herd.

14 wolves collared to help estimate pack size

This wolf density and distribution project is focused on updating wolf population data in the Wolverine caribou herd range.

Three more wolves were collared during this project year, bringing the total to 14 collared wolves.

Forty live traps were placed in key locations near former den sites, but no wolves were captured.

An aerial census estimated a minimum of 117 wolves from 15 packs within and adjacent to the Wolverine Herd range, resulting in a minimum estimate of 11.1 wolves per 1000 km² and 1.5 packs per 1000 km².

A total of 14 wolves have been captured and collared over the last two years as part of this project. We collared three wolves this year and two were in newly identified packs.

[Learn more](#)

Restoring moose habitat for food security

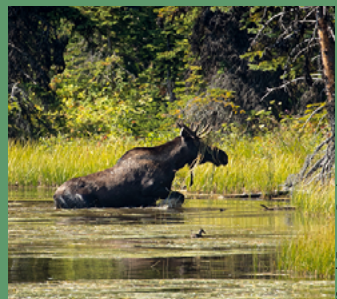
PEA-F25-W-4136-DCA

Society For Ecosystem Restoration in
Northern BC & McLeod Lake Indian Band

\$297,000

Basin-Wide

Habitat-based Action



Moose Habitat Enhancement, Year 2: This project supports First Nation food sovereignty and wildlife habitat by promoting biodiversity through recruitment of old stand variables and increasing heterogeneity of the landscape to benefit moose and overall biodiversity.

Planning and permitting underway

This project tweaked conventional commercial thinning to focus on recruiting key wildlife habitat features. Thinning to various stand densities to promote understory forage for moose, creation of gaps in canopy, and girdling of trees to promote decay for wildlife tree creation were completed this year. Various stand measurements, wildlife use monitoring, climate and air temperature monitoring data were collected and will be used to assess effectiveness of the treatments. Next year, road restoration and more manual thinning will occur.

Halfway River, Doig River, West Moberly and McLeod Lake First Nations were engaged in the project and expressed support and enthusiasm for this important work. The project has been discussed at regional events and these conversations have attracted the interest of professionals across many different disciplines who wish to be a part of the process. Hydrologists, forest professionals, and biologists have all proposed methods to assist in monitoring and we the project team is currently identifying opportunities for collaboration with interested parties.

[Learn more](#)

Mugaha Marsh Bird Banding Station

PEA-F25-W-4133-DCA

Mackenzie Nature Observatory

\$25,790

Parsnip Sub-Region

Research & Information Acquisition



Mugaha Marsh Banding Station 2024-2025: This long-term, multi-year project will add to 20-plus years of bird monitoring data collected at the Mackenzie Nature Observatory, one of 27 stations in the Canadian Migration Monitoring Network.

2,116 birds banded at Mugaha Marsh

This long-term data collection project about breeding bird populations continued to add to its data set: 2,116 birds—representing 58 bird species—were banded this year.

This is down from close to 2,800 birds banded last year resulting in fewer birds per net hour likely due to rain, wind and predators.

Using audio lures, the owl program successfully resulted in the capture and banding of 120 northern saw-whet and 23 boreal owls.

[Learn more](#)

Leveraging academic partnerships with UNBC

PEA-F25-W-4134-DCA

University of Northern British Columbia
(UNBC)

\$15,001

Basin-Wide

Research & Information Acquisition



F25 UNBC Presentation Series: This multi-year project provides education and outreach by building connections and developing relationships through a series of free presentations focused on research that is underway in, or could be applied to, our Peace Region.

268 people attended presentations

This series of presentations, hosted by the University of Northern British Columbia, attracted 268 people to three presentations.

Topics included supplemental feeding of caribou, marine ecology conservation, and beaver dam analogues.

[Learn more](#)