

Petroleum and Natural Gas
Legacy Sites Restoration Program

Restoration Management Committee Final Report



September 2023

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Acronyms

- BC** – British Columbia
- BCER** – BC Energy Regulator
- BC OGRIS** – British Columbia Oil and Gas Research and Innovation Society
- BRFN** – Blueberry River First Nations
- CAPP** – Canadian Association of Petroleum Producers
- DRFN** – Doig River First Nation
- EMLCI** – BC Ministry of Energy, Mines and Low Carbon Innovation
- EPAC** – Explorers and Producers Association of Canada
- FNFN** – Fort Nelson First Nation
- ha** – hectares
- km** – kilometres
- MOU** – Memorandum of Understanding
- NEBC** – northeastern British Columbia
- NWSS** – Níkanêse Wah tzee Stewardship Society
- PNG** – petroleum and natural gas
- PNG LSRP** – Petroleum and Natural Gas Legacy Sites Restoration Program
- RMC** – Restoration Management Committee
- SUP** – special use permit
- TEK** – traditional ecological knowledge
- TOR** – terms of reference
- WLRS/FOR** – BC Ministry of Water, Land and Resource Stewardship / BC Ministry of Forests
- WMFN** – West Moberly First Nations

Executive Summary / Highlights

Land use and development in northeast British Columbia (NEBC) can disturb habitats and ecosystems, creating a variety of management challenges that have provincial, industry and Indigenous implications. These challenges may include fragmented habitat, changes to wildlife movements, declines in the abundance of sensitive wildlife species, altered surface and groundwater movement, and the introduction of invasive species. Land disturbances that are not restored can remain on the land for many years, even decades, and contribute to the overall cumulative impacts in the region.

The Province of BC and the petroleum and natural gas (PNG) sector believe that proactively restoring disturbances from developments will improve the overall condition of habitats and ecosystems. In 2020, the Province of BC and the PNG sector signed a Petroleum and Natural Gas Memorandum of Understanding (MOU) to collaboratively fund the restoration of historical or legacy PNG activities in NEBC. This was intended to serve as a **proof of concept** that providing a fund for PNG legacy site restoration in NEBC would successfully advance restoration efforts in areas and manners identified as important to NEBC Treaty 8 First Nations.

In addition to helping heal the land, the restoration of legacy sites provides an opportunity to generate a source of employment within communities located in NEBC while addressing and complementing new and existing provincial policy initiatives addressing restoration and building long-lasting relationships and partnerships with First Nations and other parties with an interest in legacy site restoration in NEBC.

The MOU led to the establishment of the Restoration Management Committee (RMC), which included representatives from:

- BC Ministry of Energy, Mines and Low Carbon Innovation (formerly Ministry of Energy, Mines and Petroleum Resources).
- BC Ministry of Forests (formerly Ministry of Forests, Lands and Natural Resource Operations and Rural Development - FLNR).
- BC Ministry of Water, Land and Resource Stewardship (formerly part of FLNR).
- BC Energy Regulator (formerly BC Oil and Gas Commission).
- Canadian Association of Petroleum Producers (CAPP).
- Explorers and Producers Association of Canada (EPAC).

Land use and development in northeast BC has fragmented many areas of the boreal forest. (Photo: Blackbird Environmental Ltd.)



Fragmented habitat can lead to changes to wildlife movements and declines in the abundance of sensitive wildlife species. (Photo: Nikanēse Wah tzee Stewardship Society / Wildlife Infometrics)

The RMC created the **PNG Legacy Sites Restoration Program (PNG LSRP)** as a framework to select and oversee restoration projects and retained Blackbird Environmental Ltd. to provide program management services. In agreement with the RMC, the BC Oil and Gas Research and Innovation Society (BC OGRIS) set up the **BC OGRIS Restoration Fund** to receive funding contributions for the restoration of legacy PNG disturbances.

In total, nine projects received PNG LSRP funding for one or more of three identified restoration phases:

- Phase 1: pre-treatment inventory and planning.
- Phase 2: treatment implementation.
- Phase 3: performance monitoring.

Each of the funded projects was Indigenous-led and many included training or community capacity-building. As active users of the land, **Indigenous communities have insight and traditional knowledge** that is important to successful long-term restoration. Each NEBC Treaty 8 First Nation was approached to determine their interest and capacity for participation in the PNG LSRP, which was then incorporated into the program framework and reflected in the funded projects.

Through the PNG LSRP, just under \$5 million in funding enabled the restoration of approximately 154 km of linear legacy PNG LSRP disturbances, employment and training opportunities for the project teams and participating Nations, research into future legacy site restoration areas, and monitoring for the effectiveness of completed restoration efforts.

Program Outcomes

- Approximately 154 km of linear features were restored under the PNG LSRP.
- PNG LSRP funding generated approximately 27,118 hours of employment and training for 218 people involved in proponent-led projects.
- Capacity building in Indigenous communities was a large component of the PNG LSRP and was successful overall. Focused training opportunities were provided to 47 individuals.
- Final project expenditures totaled \$4.9 million.

1.0 Background

Wildlife have been shown to use linear disturbances for easier movement, enabling more predators to gain access to remote areas and prey species. (Photos: Nikanèse Wah ztee Stewardship Society / Wildlife Infometrics)



Reducing the number of legacy PNG disturbances in forested ecosystems is one component of a long-term strategy to sustain and recover ecosystems impacted by land use and development in BC. (Photo: Blackbird Environmental Ltd.)



Blueberry River First Nations members planting on a seismic line during a training session. (Photo: Blueberry River First Nations)



1.1 Setting

Land use and development in northeast British Columbia (NEBC) can disturb habitats and ecosystems, creating a variety of management challenges that have provincial, industry and Indigenous implications. These challenges may include fragmented habitat, changes to wildlife movements, declines in the abundance of sensitive wildlife species, altered surface and groundwater movement, and the introduction of invasive species.¹ The Province of BC and the petroleum and natural gas (PNG) sector believe that promptly restoring disturbances from developments will improve the overall condition of habitats and ecosystems. Additionally, active restoration may encourage continued investment and development of the BC PNG industry.

In addition to helping heal the land in NEBC, the restoration of historical and legacy sites provides an opportunity to generate a source of employment within communities located in NEBC. It also compliments new and existing provincial policy initiatives addressing restoration and building long-lasting relationships and partnerships with First Nations and other parties interested in legacy site restoration in NEBC.

For the purpose of this program, ‘**legacy PNG disturbances**’ are defined as disturbances that do not involve a regulatory obligation to conduct restoration. These disturbances can typically include seismic lines and associated features but may also include legacy access roads.

In 2020, the Province of BC and the PNG industry (see Part 1.3 for key partners) collaborated to sign a Petroleum and Natural Gas Memorandum of Understanding (MOU) providing funding and a framework for advancing projects to restore disturbances from legacy PNG activities in NEBC. This framework was intended to serve as a **proof of concept** that providing a fund for PNG legacy site restoration in NEBC would successfully advance restoration efforts in areas and manners identified as important to NEBC Treaty 8 First Nations while also respecting provincial jurisdiction.

The MOU led to the establishment of the **Restoration Management Committee (RMC)**, co-chaired by EMLCI and CAPP, which created the **PNG Legacy Sites Restoration Program (PNG LSRP)** to select and oversee these restoration projects. The RMC also partnered with the BC Oil and Gas Research and Innovation Society (BC OGRIS) established the **BC OGRIS Restoration Fund** to receive and distribute funding for restoring legacy PNG disturbances.

The RMC’s work was guided by the following principles:

- Apply sound science and Indigenous knowledge.
- Set measurable objectives and actions.
- Ensure shared responsibility with local Treaty 8 First Nations.
- Apply adaptive management.

To support both ecological and cultural restoration, projects approved for funding under the PNG LSRP were Indigenous-led and many included training or community capacity-building components. Projects also received Indigenous knowledge input from First Nation communities on how a given restoration project should be designed and focused. As active users of the land, **Indigenous communities have insight and traditional knowledge** that is important to successful long-term restoration. Planning and implementation of restoration work was undertaken in a manner that considers and respects Indigenous culture and Treaty rights. Each Nation had capacity to participate, and the program sought synergies and partnerships with other provincial programs, local governments, and stakeholders that have a shared interest in restoration activities.

1.2 The Challenge

Ecological restoration aims to rehabilitate disturbed sites and restore ecosystems to pre-disturbance levels: in other words, helping set nature on a positive path to recovery. Biological and Indigenous cultural systems are closely linked, so ecosystem and habitat restoration also considers cultural components, returning former traditional uses of the land, water, plants, and animals important to Indigenous communities. Restoration also promotes long-term stewardship and management.

Many areas of the boreal forest in NEBC are fragmented, with seismic lines, pipelines, powerlines, and access roads crossing the landscape. Wildlife have been shown to use these linear disturbances for easier movement, enabling predators to gain access to remote caribou herds in increasing numbers. Caribou, once numerous and an important food source for many Indigenous communities, are now listed as a species at risk both federally and provincially. Many other wildlife species, such as moose, have disappeared from historic ranges and habitats, or populations have decreased due to increased stresses and landscape changes. Furthermore, many native plants considered culturally important either can’t compete with introduced invasive or non-native plants, or can’t survive drastic habitat changes such as light, nutrients, soil quality, or water.^{1,2}

Reducing the number of legacy PNG disturbances in forested ecosystems is one component of a long-term strategy to sustain and recover ecosystems impacted by industrial development in BC.

Functional and Ecological Restoration³

For the PNG LSRP, the goal of functional restoration is to implement restoration treatments that reduce the use of linear features by humans or target wildlife species (e.g., blocking access or making travel difficult). Ecological restoration aims to revegetate linear features so they resemble, or are put on a trajectory to resemble, the previously undisturbed condition; it is a longer-term process of managing or assisting ecosystem recovery.

1.3 Key Partners

As established under the MOU, the RMC included representatives from:

- BC Ministry of Energy, Mines and Low Carbon Innovation - EMLCI (formerly Ministry of Energy, Mines and Petroleum Resources).
- BC Ministry of Water, Land and Resource Stewardship - WLRS (formerly Ministry of Forests, Lands and Natural Resource Operations and Rural Development - FLNRORD).
- BC Ministry of Forests - FOR (formerly part of FLNRORD).
- BC Energy Regulator – BCER (formerly BC Oil and Gas Commission).
- Canadian Association of Petroleum Producers – CAPP.
- Explorers and Producers Association of Canada – EPAC.

This kind of collaboration is not new. For instance, between 2011 and 2018, the PNG sector and the province collaborated to support implementation of the province’s Boreal Caribou Implementation Plan. This work and the lessons learned clearly demonstrated that collaboration is a key ingredient in the process to improve habitat and ecosystems and working relationships with Indigenous communities.

The RMC worked together with representatives from Treaty 8 First Nations in NEBC. Treaty 8 First Nations were engaged during the initial PNG LSRP planning phase, including development of the requests for proposals, to learn from previous experiences and ensure Indigenous culture and Treaty rights were considered and respected. These Treaty 8 First Nations included:

- Blueberry River First Nations.
- Doig River First Nation.
- Fort Nelson First Nation.
- Halfway River First Nation.
- McLeod Lake Indian Band.
- Prophet River First Nation.
- Sauteau First Nations.
- West Moberly First Nations.

2.0 Petroleum and Natural Gas Legacy Sites Restoration Program (PNG LSRP) Overview



Training to build community capacity around restoration was an important part of this program. (Photos: Blueberry River First Nations)

2.2 Program design

The RMC developed a work plan for selecting proposed legacy PNG restoration projects in NEBC, as outlined under the RMC's Terms of Reference.

An important first step was to design a technically sound method for evaluating and prioritizing legacy site restoration proposals. The following parameters became the minimum mandatory criteria that must be met for a project proposal to be considered for PNG LSRP funding:

- Location: activities must be executed within NEBC.
- Proponents: applications could be received from the public at large, service contractors, First Nations, industry representatives, community groups, consultants, etc.
- Footprint: activities must occur on legacy PNG disturbances that have no current legal obligation for restoration by third parties, mostly seismic lines and ancillary disturbances, but other features were also considered if they coincided or aligned with priority areas identified during planning.
- Methods: both functional (short-term) and ecological (longer-term) restoration methods were considered. The methods proposed must be clearly defined and outlined to demonstrate how the project would incorporate recent research results and traditional ecological knowledge (TEK).
- Timeframe: all proposed activities, including final reporting, must be completed within the designated timeframe (i.e., by the end of 2022), as specified in the RFPs and by funding contributors.

Proposed PNG LSRP restoration work could encompass one or more of three phases:

- Phase 1 (pre-treatment inventory and planning): conduct inventory and planning to support future on-the-ground restoration work. This phase was designed to support First Nations and other applicants that require additional time, information, and understanding of their interests and needs regarding the type and location of restoration activities.
- Phase 2 (treatment implementation): conduct on-the-ground treatment activities identified in Phase 1 or from previous pre-treatment inventory planning work under a different program.
- Phase 3 (performance monitoring): conduct operational and / or treatment monitoring. This could include monitoring changes during PNG LSRP-funded Phase 2 treatment implementation or returning to a previously completed PNG legacy site treatment area for follow-up monitoring.

The RMC used a request for proposal (RFP) process to solicit applications for funding eligible projects. Project proposals were received, evaluated, and selected through a joint review, first by the RMC and then the BC OGRIS. To be considered, all proposed projects had to align with the PNG LSRP's goals and objectives. Eligible projects were then evaluated using a ranking system based on criteria in the PNG MOU, including input from Treaty 8 First Nations. The ranking system included a review of the proposal's technical soundness, inclusion of Indigenous cultural values, the long-term alignment with existing land designations, alignment with other restoration programs, and project cost (see Part 3.1).

Indigenous Capacity Building

A main principle of the PNG LSRP was to ensure the **projects would be undertaken and / or directed by Indigenous communities**. The restoration of legacy PNG sites provided an opportunity for employment within Indigenous communities, addressing and complimenting new and existing provincial policy initiatives for restoration, and building long-lasting relationships and partnerships with First Nations and other parties with an interest in legacy site restoration.

Training to build community capacity around restoration was a large part of this program. Proponents applying for training funds were required to describe what training was required and how it would be delivered, including a detailed training cost breakdown. Once training was complete, proponents provided an overview of the training process and outcomes, including the number of members or staff supported by the training and any certifications received.

2.1 Program objectives and expected outcomes

Key objectives for the PNG LSRP included:

- Contribute to and manage a fund for implementing restoration projects for legacy PNG disturbances.
- Create a strategic management committee to plan for and approve PNG restoration projects.
- Conduct research, monitoring and reporting on progress of PNG restoration activities, and adapt plans as appropriate to achieve the desired outcomes.
- Seek partnerships with other organizations to enhance funding, diversify projects, and achieve multiple outcomes.
- Engage with Indigenous groups to seek their participation and knowledge, and to determine to what extent they wanted to carry out proposed projects.
- Develop culturally appropriate restoration practices that incorporate traditional ecological knowledge and current research.

The program was expected to achieve these

specific outcomes:

- Carry out restoration strategies and projects that can benefit habitats and ecosystems.
- Implement restoration strategies and projects through collaboration with Indigenous groups, other government agencies, stakeholders, and other funding entities.
- Adaptively manage restoration strategies and projects to deliver longer-term environmental, social, and economic benefits (that is, learn by doing and revise plans and strategies accordingly).
- Establish partnerships with other organizations that have shared interests in PNG restoration.
- Maintain provincial jurisdiction and priority in land and resource management.
- Achieve multiple policy initiatives and priorities through collaboration and alignment of resources and actions.

2.3 Timelines and milestones

The PNG LSRP funding program followed a strict timeline, including milestone expectations for both the RMC and projects, to ensure program funding was allocated within the timeframe specified by funding contributors, while also aiming to provide proponents with sufficient time to plan and execute their projects.

Two requests for proposals (RFPs) were issued to solicit project proposals for PNG LSRP funding in 2021. The first RFP was open for one month between late June and early July. Learnings from the first RFP were then applied to the second RFP, which ran for just over a month between September and October, including a deadline extension per the request of interested proponents. Five proposals were received by the closing date under RFP #1. Under RFP #2, seven proposals were received by the closing date; however, one proposal was withdrawn by the applicant prior to a funding decision.

Under both RFPs, proposals were received by the RMC who then reviewed the proposals and submitted their recommendations to the BC OGRIS for review, consideration, and contract award. Contracts were awarded to all five projects submitted under RFP #1. Of the six project proposals received under RFP #2 for final review, two were requested revisions (i.e., project scope expansions) of projects submitted under RFP #1 and four were new project proposals. All four new projects and two project scope expansions were issued contracts for project funding.

Preliminary project planning, validation, scouting, and capacity building could start as soon as funding was awarded: in late 2021 under RFP #1 and early 2022 under RFP #2. Actual restoration activities occurred in late 2021 and / or under snow-free conditions in 2022.

Where required for project completion, the successful proponents had to obtain all necessary regulatory



In total, nine projects received funding under the PNG LSRP. (Photo: Blueberry River First Nations)

permits and authorizations (e.g., special use permits (SUPs), applications for changes in and about a stream, etc.), prior to initiating work.

At minimum, quarterly progress reports were submitted to the BC OGRIS and RMC by proponents, which provided a short summary of activities completed, effort incurred, level of First Nations participation, training and employment statistics (including both the number of existing and new staff trained and employed by the project during the reporting period), progress against the proposed project timeline, and any issues for the attention of the RMC's or BC OGRIS. Quarterly invoices were likewise submitted with these progress reports.

Where a project scope spanned multiple restoration phases (e.g., both Phase 1 pre-treatment inventory and planning, and Phase 2 treatment implementation), an End of Phase Report was required upon completion of project activities in each phase. This report could be combined with a quarterly report to avoid duplication if timing allowed.

Final reports, including a Final Project Report describing project activities and a Final Administrative Report summarizing project effort and including supporting invoices and timesheets, were required to be submitted for review by the RMC and the BC OGRIS in late 2022. All projects had to be completed, including the submission of final reports and invoicing, by the end of 2022.

All nine projects were considered closed by February 2023 and final reports were posted on the BC OGRIS [website](#).

In total, nine projects received funding under the PNG LSRP, which were completed between 2021 and 2022.

2.4 Program budget and funding sources

Funding and all expenditures were managed by the BC OGRIS under the OGRIS Restoration Fund. Funding was contributed from two primary sources:

- \$1.5 million from the Province of BC.
- \$5 million from the Government of Canada, allocated by the Province to the PNG LSRP from the \$120 million in funding provided to clean up oil and natural gas sites as part of Canada's COVID-19 Economic Response Plan.

3.0 Program Implementation

3.1 Project selection process

All proposals were evaluated and ranked for:

- Meeting the identified mandatory requirements as defined by the RMC as part of the program design (see Part 2.2) and specified in the issued RFPs.
- Proponent experience and personnel. Did the proposed project:
 - o Include meaningful NEBC Treaty 8 First Nations participation (work to be directed or led by a Nation).
 - o fall within an area of significance identified by a Nation.
 - o demonstrate prior team experience conducting comparable restoration work.
- Alignment with land use or restoration plans, such as regional land use plans or provincial land designations. If overlap with an existing land use tenure holder was proposed (e.g. trappers, guide outfitters, etc.), had these tenure holders been approached about the project?
- Methodology, demonstrating that sound methodology was proposed, including the use of either a tactical or strategic restoration plan (if available).
- Project cost, including the use of leveraged funds (i.e., fund sources in addition to the PNG LSRP) and a comparison of the proposed total restoration cost per area (linear kilometres or hectares) relative to both the other submitted proposals and regional comparable restoration averages.



3.2 Overview of the funded PNG LSRP projects

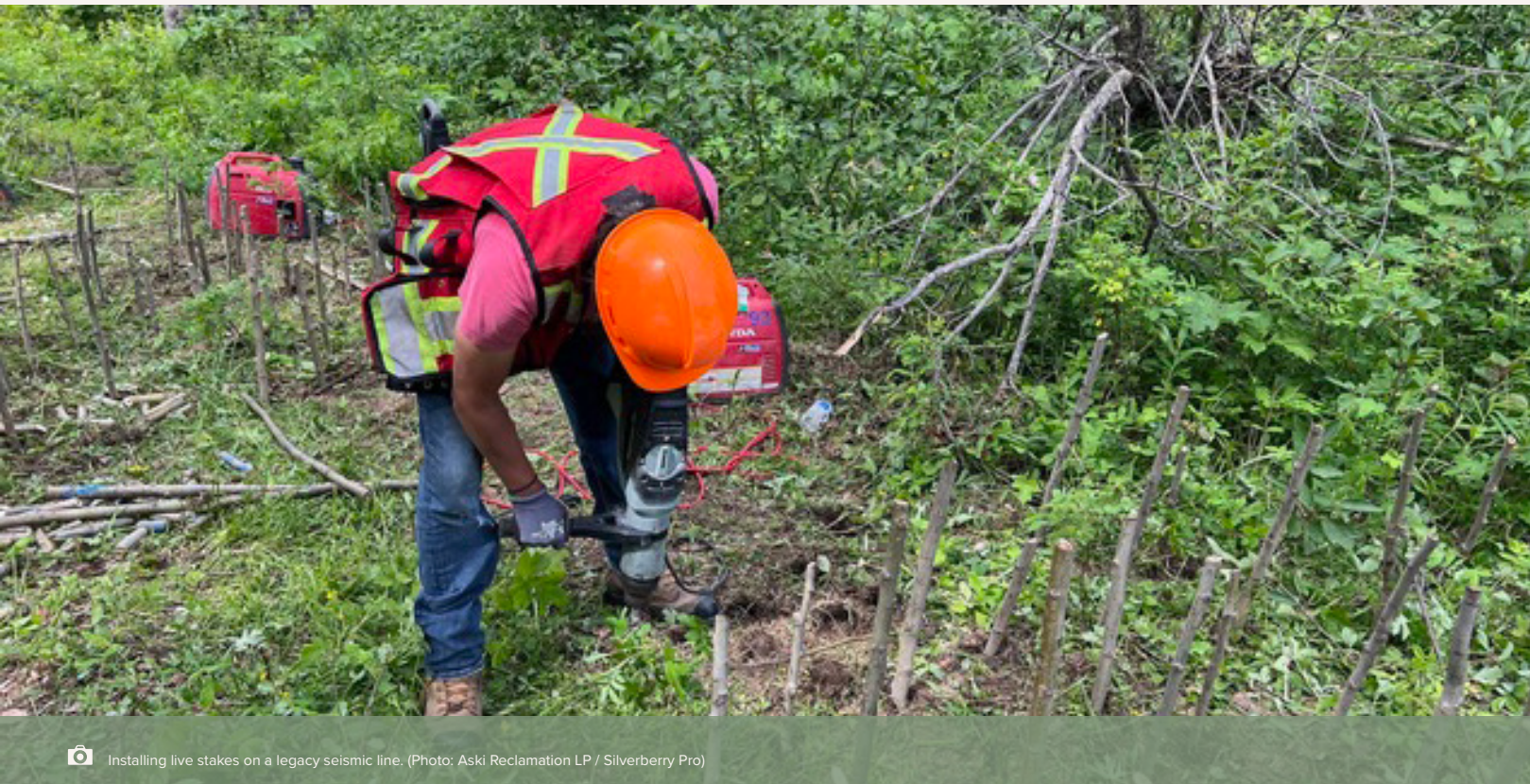
Aski Reclamation LP & Silverberry Pro: Groundbirch-Brassey Phase 1, 2, and 3 Restoration Program⁴

**30.1 km of legacy seismic lines received restoration treatment;
30,000 live stakes and 50,000 eco-cultural seedlings were transplanted.**

Aski Reclamation LP (a wholly owned Saulteau First Nations company) and Silverberry Pro worked with Saulteau First Nations' Treaty Rights & Environmental Protection Branch to complete Phase 1, 2, and 3 restoration (i.e., plan, restore, and establish monitoring stations) along legacy seismic lines within the Groundbirch area of the South Peace River region of NEBC. The PNG LSRP provided approximately \$880,000 in funding to enable project completion. The team combined their expertise in native plant restoration to design a program for legacy seismic line revegetation using a variety of treatments.

The project area was selected for its traditional cultural importance to the Saulteau First Nations, combined with ecological conditions ideal for restoration activities. The team developed a plan focused on information sharing to ensure stakeholder consultation and engagement, providing the community with opportunities to ask questions, voice concerns, and offer recommendations. For training and mentorship, capacity building was done at every phase of the project, supporting the Aski team to obtain project permits and plan project execution. The field crew received training in new tasks and techniques. Throughout the project, 28 staff members received or were involved in a form of relevant training.

The program was a great opportunity for Aski and Silverberry staff to extend their knowledge while delivering quality restoration that will remove linear disturbances from the landscape. Employment opportunities were provided for 41 individuals including staff from both Aski Reclamation and Silverberry Pro as well as contractors.



Installing live stakes on a legacy seismic line. (Photo: Aski Reclamation LP / Silverberry Pro)

Blueberry River First Nations: Phase 2 Nig Creek Restoration⁵

Successfully applied for all permits, sent pre-engagement letters to industry stakeholders, ordered trees and shrubs for restoration work.

Blueberry River First Nations (BRFN) occupy traditional territory over 3.8 million hectares of the Peace River region of NEBC. To address resource development impacts within BRFN's traditional territory, which have influenced their ability to practice their traditional treaty rights and way of life, BRFN has a strong desire to complete restoration work.

The Nig Creek restoration project was designed to restore habitat along ten 20- to 40-year-old legacy seismic lines, encompassing an area of 17.53 ha. These lines were identified and selected for restoration in 2019, including the development of a restoration plan, and approximately \$30,000 in PNG LSRP funding was provided to support and enable Phase 2 restoration activities.

This project faced several challenges which prevented successful completion. Staffing shortages, project management shortfalls, limited native tree and shrub availability, and permitting challenges were faced, preventing restoration work from being completed within the designated timeframe. By the time of project completion, BRFN was successful at applying for all the requisite permits, had sent pre-engagement letters to industry stakeholders, and ordered trees and shrubs. BRFN intends to complete stakeholder engagement, restoration, and ongoing monitoring under separate funding.

Although the project scope was not completed, the completed project activities employed 12 individuals including both BRFN staff and contractors.

Blueberry River First Nations: Phase 1, 2, and 3 Pink Mountain Restoration⁶

**16.04 km of linear disturbances were treated / planted in 2022.
19 First Nations members were trained in various facets of restoration.**

Pink Mountain is critical to BRFN from traditional use, cultural teaching, and treaty rights perspectives. The Pink Mountain area is approximately 42,000 ha, which includes 526 ha of legacy disturbances of various ages, widths, and states of natural regeneration. BRFN chose an initial priority area of 3,950 ha and planned to restore up to 33 km of seismic lines while building community capacity in legacy site restoration work through PNG LSRP funding of Phase 1, 2, and 3 restoration activities. Approximately \$1.83M in PNG LSRP funding was provided to support this project.

This project took place largely over one year with a mapping review and field reconnaissance in September 2021, and restoration implementation in September 2022 on 16.04 km of linear disturbances. Restoration treatments included screening (using heavy equipment to rip compacted soil), planting seedlings, building brush fences, tree felling, and other techniques. BRFN is monitoring results of the brush fences to determine effectiveness as a restoration technique.

The training component took a hands-on approach, covering seed collection and processing, restoration techniques, and earth sciences. Under this project, 17 BRFN members, one Prophet River First Nation member, and one Doig River First Nation member trained in various facets of restoration. Given the scope of restoration needs across the territory, members who received training will have the opportunity to apply their skills in the future.

In total, employment opportunities were provided to 46 individuals through BRFN's Pink Mountain Restoration project, which included BRFN staff and contractors.



Restoration treatments included screening (using heavy equipment to rip compacted soil), planting seedlings, building brush fences, tree felling, and other techniques. (Photos: Blueberry River First Nations)



This project tested using amphibious excavators to perform all heavy equipment components, including mounding and hummock transplanting, under non-frozen conditions. (Photo: Tree Time Services Inc. / Doig River First Nation)

Doig River First Nation / Tree Time: Phase 1, 2, and 3 McMillan Creek Restoration Project⁷

Treated 40 km of legacy seismic lines using functional and ecological restoration techniques, planting more than 40,000 seedlings.

Restoration initiatives are a high priority for the Doig River First Nation (DRFN). DRFN's strategy for restoring important habitat areas within their traditional territory identified the McMillan Creek area as a target for restoration. Phase 1, 2, and 3 funding (approximately \$1.01 million) was received under the PNG LSRP to enable restoration planning, completion, and the establishment of monitoring stations in the McMillan Creek area.

DRFN, working with Tree Time Services Inc., identified candidate restoration sites which best supported the numbers and health of primarily caribou and moose while minimizing conflicts with industrial activities, existing land tenures, and community members' access to areas where treaty rights are exercised. Forty kilometers of 40- to 60-year-old legacy seismic lines were selected for restoration, many of which experienced poor natural tree and shrub growth, negatively affecting caribou habitat.

Typically, restoration site preparation in muskeg is completed when the ground is frozen, with tree planting in the spring. However, this project tested using amphibious excavators to perform all heavy equipment components by completing a summer program.

The project was successfully completed, treating 40 km of legacy seismic lines using techniques such as mounding, spreading coarse woody debris, tree bending and felling, and planting more than 40,000 tree seedlings. In addition, a post-treatment monitoring plan including the set up of monitoring sites, was prepared. DRFN's capacity to complete restoration projects was built through this project, including mentorship of key staff in restoration project management and techniques, field supervision, and tree planting; and mentorship of a DRFN member and an Úújō Developments operator in the use of amphibious excavators and restoration techniques. The project provided employment for 26 individuals across Tree Time Services, DRFN, and Caribou Tracks as well as employment for 22 contractors which included land consultants, equipment operators, fuel suppliers, medics, and work camp staff.

Fort Nelson First Nation: Phase 1, 2, and 3 Snake-Sahtaneh Restoration⁸


Restored 66.74 km of seismic lines in three different implementations, bringing the two-year total to 74.4 km in the Medzih'tene Restoration Area.

This project was a significant step forward in planning, delivering, monitoring, and communicating Fort Nelson First Nation's (FNFN) caribou habitat restoration efforts in the Medzih'tene Restoration Area (MRA) through the receipt of approximately \$840,000 in PNG LSRP funding, which was leveraged with other funding sources. Phase 1, 2, and 3 restoration funding. PNG exploration and production has been ongoing in the area since the 1960s and the MRA is heavily fragmented by linear features like seismic lines and winter access roads. FNFN identified the MRA as a high-priority area for caribou habitat restoration based on extensive community consultation in 2018.

Phase 1 included planning, implementing, and monitoring winter restoration. Phase 2 included additional funds to buy and plant black spruce seedlings (50,000) on restored seismic lines. In 2022, using leveraged funding, FNFN planned for, scouted, and carried out restoration along 66.74 km of seismic lines in three different implementations and established monitoring plots for future monitoring (Phase 3), bringing the two-year total to 74.4 km restored in the MRA.

FNFN held the contract for this work and led the implementation of all tasks and outcomes. Where possible, FNFN staff were employed, or FNFN-owned, FNFN member-owned or Indigenous-owned contractors were sought for all phases of the project. In total, employment opportunities were provided to 23 individuals through this project, including FNFN staff, land guardians, and staff with four separate contractors.



 The objective of this project was to identify functional restoration opportunities along PNG legacy seismic lines within Halfway River First Nation (HRFN) members' traplines, from the trapline owners' perspectives. (Photos: Halfway River First Nation)

Halfway River First Nation: Phase 1 Trapline Area Restoration Planning⁹

75 legacy seismic lines met the priority criteria set by trapline owners and were identified as potential locations for future restoration work.


PNG development has resulted in significant linear disturbances within Halfway River First Nation's traditional territory. These disturbances have become pathways for predator movement, putting prey species like caribou at risk and impacting trapping success. The objective of this Phase 1 project was to research and identify functional restoration opportunities along PNG legacy seismic lines within Halfway River First Nation (HRFN) members' traplines, from the trapline owners' perspectives. Approximately \$70,000 in PNG LSRP funding was provided to support this research.

Nine registered traplines belonging to HRFN members span almost 8,000 square kilometers in NEBC. Through trapline owner interviews and a desktop study, HRFN identified a total of 126 seismic lines warranting functional restoration field assessments. Of these, an aerial assessment determined that a total of 75 legacy seismic lines met the priority criteria set by trapline owners.

Through the completed preliminary research, HRFN recommends beginning restoration efforts of more remote disturbances first, as these areas are of cultural significance to the Nation, these seismic lines tend to be older and in slower-growing areas of high elevation, and future development is believed to be less likely to impact restoration efforts.

Through the HRFN Phase 1 trapline area restoration planning project, employment opportunities were provided to 12 individuals and six contractors.



 Fort Nelson First Nation planned for, scouted, and carried out restoration along 66.7 km of seismic lines. Winter restoration treatments included installing hummock transplants and tree bending. (Photo: Fort Nelson First Nation)


Halfway River First Nation: Phase 1 Tsaa Nuna Buffer Restoration Planning¹⁰

Defined a two-kilometer buffer around Tsaa Nuna Conservancy Area, recommended functional restoration for 19 sites.

Tsaa Nuna is a relatively undisturbed area of Crown lands where Halfway River First Nation (HRFN) members hunt, fish, and trap, activities integral to HRFN's culture and Treaty 8 rights. Spanning 5,306 hectares along the Halfway River, this largely forested area officially became the Tsaa Nuna Conservancy in February 2021. HRFN used approximately \$20,000 in project funding to complete Phase 1 restoration activities, investigating and developing a functional restoration plan for legacy PNG sites within a two-kilometer-wide buffer around Tsaa Nuna. During project execution, three individuals received employment opportunities.

The project's objective was to evaluate restoration opportunities on PNG legacy seismic lines within the two-km buffer zone. A desktop review was used to identify potential functional restoration sites, while a field assessment and overview flight were completed to evaluate these locations for restoration potential and priority. Based on the conducted research, HRFN identified 19 sites with moderate or high functional restoration potential within the buffer zone south of Tsaa Nuna. An additional 16 sites are recommended to be restored over time. Collected observations about the first 19 locations will aid in planning the future functional restoration of other sites.



 Little natural revegetation on a legacy disturbance (left) versus relatively successful regeneration from local seed sources (right). (Photos: Halfway River First Nation)

Nîkanêse Wah tzee Stewardship Society: Phase 3 Klinse-Za Caribou Range Restoration Monitoring¹¹

Developed an analytical framework for assessing the effectiveness of restoration activities, which was applied to three legacy disturbances in the Klinse-Za Caribou Range.


The Klinse-Za caribou habitat restoration monitoring project was led by the Nîkanêse Wah tzee Stewardship Society (NWSS), a not-for-profit collaboration between West Moberly First Nations and Saulteau First Nations. Restoration of legacy disturbances within Klinse-Za caribou habitat aligns with the two communities' visions for caribou recovery. Under previous restoration initiatives, both functional and ecological restoration was overseen by Wildlife Infometrics Inc. on three historic oil and natural gas access roads (totalling 18 km) in 2018 and 2020. These areas received approximately \$120,000 in PNG LSRP Phase 3 restoration monitoring funding, which was leveraged with other funding sources.

Through this project, Wildlife Infometrics Inc. completed an evaluation of the implemented restoration techniques (i.e., seedling and vegetative cover success) and the effectiveness of these techniques for reducing human and predator access (i.e., camera traps) along the restored areas for the three restored legacy access roads. Effectiveness was considered at multiple levels: first, at the small (i.e., individual feature) scale, and second, at the intermediate (i.e., meso-watershed) scale. Overall, the functional (operational) effectiveness of the applied restoration techniques showed small decreases in predator and human use of the roads. Similarly, vegetation growth was shown to increase along two of the three restored roads, resulting in an overall decrease in disturbance footprint, suggesting that restoration efforts are beginning to work at the meso-watershed scale.

Overall, the implemented restoration effects were shown to have small improvements along the three sites and these effects are expected to strengthen over time (i.e., through continued tree growth and ingrowth, and declines in predator and human use). The developed analytical framework and monitoring approach continues to evolve, and refinements will be made for future monitoring events.

Employment opportunities were provided for 10 individuals through the PNG LSRP and enabled training and capacity building for technicians from both West Moberly and Saulteau First Nations.



 Seedling two years after planting.
(Photo: NWSS / Wildlife Infometrics)

West Moberly – WM-DWB LP: Phase 1 Nachii Adaage Restoration Planning¹²

Completed Phase 1 pre-treatment investigations for legacy site restoration in the Nachii Adaage study area. Developed restoration plans for 11 seismic lines (36.47 km) and eight seismic line junctions.

The Nachii Adaage area is within Treaty 8 territory where several Indigenous communities reside and / or use the land. The area, located east of Tumbler Ridge, BC, consists of low elevation winter range with important caribou habitat. West Moberly-DWB Limited Partnership (WM-DWB LP) received approximately \$100,000 to complete Phase 1 preliminary investigations of the Nachii Adaage area to identify sites for potential restoration and to develop site-specific restoration prescriptions for each candidate feature. West Moberly First Nations, McLeod Lake Indian Band, and Saulteau First Nations were engaged during this project and information was used to enhance the development of treatment plans.

High-resolution aerial photographs were collected of Nachii Adaage and used for initial analysis. Those seismic lines identified as having restoration potential were assessed in the field to further refine the list of candidate sites and to identify suitable treatment methods. Based on the investigations, the seismic lines with limited vegetation regeneration are typically those that are used as trails or roads. Eleven seismic lines (36.47 km) and eight seismic line junctions were identified for restoration, and restoration plans were developed. Treatment options focused on preventing human access, reducing predator sight lines, and promoting vegetation regrowth, particularly traditional forage plant species.

This project successfully provided employment opportunities for 13 individuals and contract work for a local aerial imagery consultant. In addition, the project provided capacity building and training opportunities for members of WMFN in field work, photography, and conducting seismic line research.



(Photos: Blackbird Environmental)



Preliminary investigations of the Nachii Adaage area was undertaken to both identify sites for potential restoration and to develop site-specific restoration plans. (Photo: West Moberly – DWB LP)

3.3 Summary of project expenditures and employment outcomes

Funding provided to restoration projects enabled investigations into PNG legacy sites suitable for restoration within areas of high priority to the participating NEBC Treaty 8 First Nations. In so doing, employment was provided to the Nations as well as their preferred consultants and contractors, totalling 218 individuals.

The program's allocated \$4.9 million in funding enabled the restoration of approximately 154 km of legacy PNG linear features, restoration effectiveness monitoring, preliminary investigations to identify and plan future restoration efforts identified as important to NEBC Treaty 8 First Nations, and training and capacity building opportunities within the participating Nations. Restoration costs per kilometer, calculated solely on Phase 2 restoration treatment implementation work (i.e., excluding Phase 1 planning, Phase 3 monitoring efforts, and identified training initiatives) ranged from approximately \$26,000/km to \$114,000/km.

4.0 Program Outcomes

4.1 Successes and achievements

Key successes and achievements realized through the PNG LSRP include:

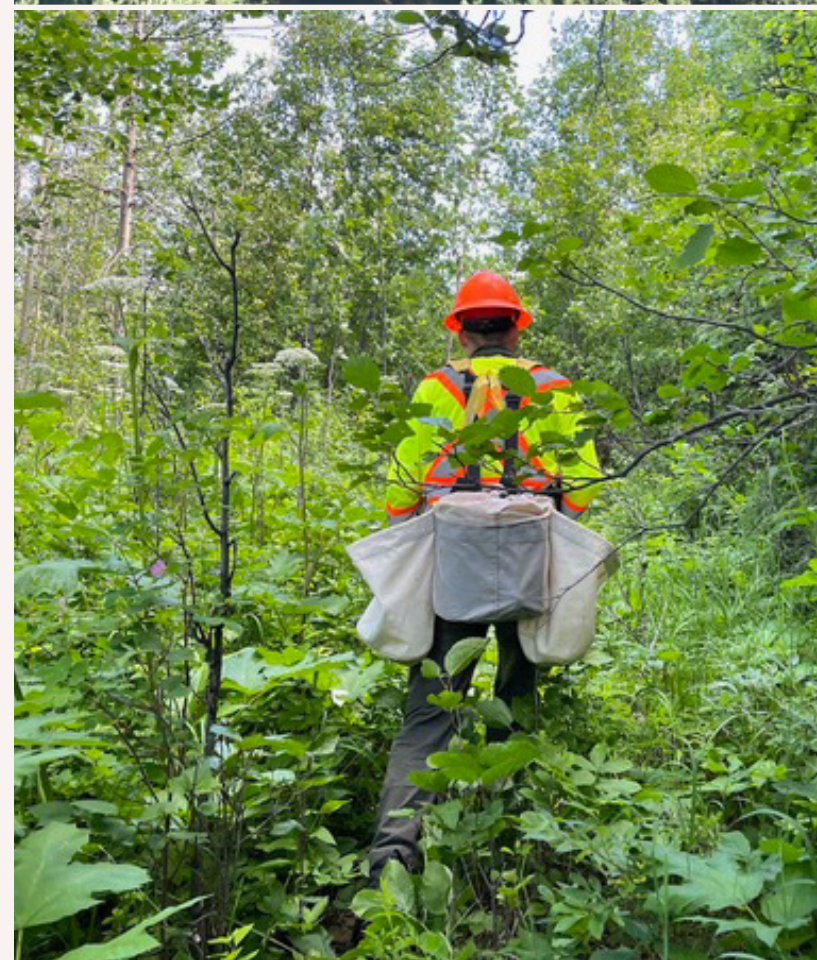
- Approximately 154 km of linear features were restored.
- Approximately 27,118 hours of employment generated.
- Employment opportunities were provided for 218 people.
- Final project expenditures totaled \$4.9 million.
- Restoration effectiveness monitoring was completed for three previously restored legacy sites, adding to the community body of knowledge.
- Eight Treaty 8 First Nations were meaningfully engaged through PNG LSRP development, stakeholder engagement, and permitting. In total, six First Nations completed nine PNG legacy sites restoration projects.

In addition, the PNG LSRP predominately achieved the MOU's identified objectives and outcomes. The program enabled the creation and management of a fund for implementing PNG restoration projects in NEBC. The program engaged with Treaty 8 First Nations to determine how, and in what manner, they wanted to participate. The program successfully respected provincial jurisdiction and priority in land and resource management, restoration strategies

and projects that benefit habitat and ecosystem condition and trend were completed through enhanced collaboration with Indigenous groups, other government agencies, stakeholders, and other funding entities.

One MOU objective was not completed directly through the PNG LSRP: to develop culturally appropriate restoration and reclamation practices that incorporate traditional ecological knowledge and current research. As culturally appropriate practices vary by Indigenous group and habitat types, the RMC actively avoided being overly prescriptive with the PNG LSRP to allow each community to guide and own both their projects and the related outcomes.

Outside of the program, restoration guidelines have been released or are under development by other governmental and funding organizations and duplication of effort is not required. These include, among others, the BCER's Ecologically Suitable Species Guidelines for short-term PNG site preparation and revegetation reclamation objectives; the BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development's Operational Restoration Framework for restoration in BC's woodland caribou habitat; and the Habitat Conservation Trust Foundation's Project Monitoring Guidance for their Caribou Habitat Restoration Fund.



The PNG LSRP successfully achieved the MOU's identified objectives and outcomes. (Photos: West Moberly – DWB LP)

Ecologically Suitable Species Guideline

In partnership with NEBC Treaty 8 First Nations, in 2023 the BCER published the Ecologically Suitable Species Guideline.¹³ It provides reclamation guidance to the PNG sector related to planning, implementing, and performance reporting of soil and vegetation metrics for reclaimed project areas on Crown forested land in NEBC, as well as considerations for working collaboratively with Indigenous Nations and the use of Indigenous Knowledge. The guidelines include a minimum threshold for the establishing ecologically suitable species to support longer-term ecological restoration outcomes.

Operational Framework for Woodland Caribou Habitat Restoration in BC

In 2021, the BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development released their operational framework for woodland caribou habitat restoration in BC. This framework provides guidance to caribou habitat restoration initiatives, including planning, permitting, implementation, and monitoring phases.¹⁴

Caribou Habitat Restoration Fund Project Monitoring Guidance

The Habitat Conservation Trust Foundation has developed and released project monitoring guidance to support projects being completed under their Caribou Habitat Restoration Fund. Guidance on how to develop a monitoring program for implementation monitoring 3-5 years following project completion as well as how to determine the effectiveness of caribou habitat restoration for longer-term projects. Several methods of monitoring are presented and will depend on the objectives of the project.¹⁵

4.2 Evaluations of the program

Following project completion, each of the project teams that received funding under the PNG LSRP had an opportunity to offer valuable and insightful comments on the program. As part of demonstrating the PNG LSRP's proof of concept, the received feedback is important to enable future funding program improvements:

Aski Reclamation LP & Silverberry Pro: Groundbirch-Brassey Phase 1, 2, and 3 Restoration Program

- Eco-cultural restoration of legacy seismic lines through live stake and eco-cultural seedling installation remains a relatively new restoration method. Currently, there is a lack of clear guidelines on best practices and methodologies. As a result, there are many opportunities for learning throughout each phase of the program.
- The program contract's quarterly billing terms restricted their ability to implement a larger-scale project, though BC OGRIS was flexible and accommodating on billing terms.
- Shovel-ready projects with the applicable restoration permitting issued (e.g., permits for special use, tree cutting, stream crossings, etc.) would speed up restoration work.
- Longer-term or multi-year projects would enable the completion of larger-scale restoration. Multi-year funding (ideally three years) would allow for the best planning and seed collection.
- Risks to the success of landscape-scale restoration programs were identified as limited skilled labour (qualified personnel who can sign off on plans for restoration treatments), limited trained field staff, and the plant nursery's ability to supply plants and materials.

Blueberry River First Nations: Phase 1, 2, and 3 Pink Mountain Restoration and Phase 2 Nig Creek Restoration

- BRFN's projects were restricted by internal capacity (project management staff), limited nursery capacity for certain plant species, and the tight timing of the funding deadlines.
- The current SUP and other permitting processes were significant barriers to implementing both the Nig Creek and the Pink Mountain project.
- The Pink Mountain project included a significant training and capacity building component, which will make future restoration projects much easier.

Doig River First Nation – Tree Time: Phase 1, 2, and 3 McMillan Creek Restoration Project

- Restoration is a new enterprise for DRFN. A third-party contractor (Tree Time Services Inc.) was retained to implement the program and build capacity for DRFN.
- The SUP application process was confusing and difficult, which resulted in some project delays.
- The project ran into timing conflicts with wildfire restrictions and wildlife timing windows.
- The relatively low availability of skilled labour familiar with habitat restoration was identified as a significant risk to future restoration projects.
- Applying for a multi-year SUP covering all potential areas with current and future restoration potential would have helped streamline the process for DRFN moving forward.



Monitoring newly delivered hummocks in the Snake-Sahtaneh restoration area. (Photo: Fort Nelson First Nation)

Fort Nelson First Nation: Phase 1, 2, and 3 Snake-Sahtaneh Restoration

- The SUP process used by FOR's Fort Nelson Resource Operation office, which focused on a large area and multi-year restoration activities, worked well for this project.
- The PNG LSRP's requirements were too rigid and onerous. In their experience, projects don't have distinct breaks between one phase and the next. For example, detailed ground-truthing to identify current site conditions occurs right before restoration.
- FNFN directly engaged PNG producers with surface and subsurface tenures in the project's target area to address potential conflicts early in the process. This approach was very successful.
- FNFN stressed the importance of developing a community of restoration practitioners that freely share successes and lessons learned.

Halfway River First Nation: Phase 1 Trapline Area Restoration Planning & Phase 1 Tsaa Nuna Buffer Restoration Planning

- It was requested that the province consider updating legislation to address seismic line restoration. Current legislation does not have a requirement for seismic / cut line restoration as they typically do not result in exposed soil, making them exempt from Section 19 of the Environmental Protection and Management Regulation. Requiring restoration regardless of soil exposure would reduce the longevity of future disturbances and the need for publicly funded restoration efforts.
- Concern was raised about future disturbances on planned restoration areas should restoration occur. They encouraged government agencies to work collaboratively to understand the impacts of current and future development on restoration efforts, and to coordinate efforts so they may happen in balance.

Nikanêse Wah tzee Stewardship Society: Phase 3 Klinse-Za Caribou Range Restoration Monitoring

- NWSS stated that project learnings include the need for:
 - o landscape- or watershed-level permits for restoration projects,
 - o information sharing between practitioners, and
 - o consistent monitoring for restored sites.
- The tracking and protection of restored features is currently inconsistent. There is a need to establish an accessible, easy-to-use database of restored sites to ensure their long-term protection.

West Moberly – DWB LP: Phase 1 Nachii Adaage Restoration Planning

- The relatively short timeframe of the PNG LSRP, as well as the limited availability of skilled labour, were identified as constraints that influenced project delivery.
- More in-depth contingency planning would have been beneficial (project timelines were impacted by nearby wildfires).
- Community engagement following the initial development of restoration plans proved more effective than earlier engagement (it was easier to engage people with something in hand).



First Nations provided practical and insightful feedback on their projects. (Photos: Blueberry River First Nations)

4.3 Lessons learned

Both the RMC and the project teams identified key learnings throughout the PNG LSRP. These learnings are valuable for refining and improving the program and can inform future restoration funding opportunities.

Permits and authorizations

- The permitting processes in place during PNG LSRP project completion were repeatedly described as confusing and difficult to navigate. It was unclear which permits would be required when, and some permits (such as the Special Use Permit - SUP) required significant unexpected efforts. As a result, obtaining a SUP caused delays with cascading effects for several projects, and other projects applied for permits that weren't required for the scope of their project.
- Advising interested proponents to speak with government officials regarding the permitting process within the RFP, prior to applying for funding (to aid in both project footprint selection and to receive guidance on the permitting process), was generally unsuccessful. A published process and/or procedure, directly from the permitting agencies, may be more successful in the future.

Changes to Legacy Site Restoration Permitting

The NEBC restoration permitting pilot project is a new initiative between Ministry of Forests and BC Energy Regulator (BCER) to support permitting efficiency for restoration projects in NEBC. In July 2023, the BCER was delegated authority to authorize certain types of restoration activities. Applicants may now apply directly to the BCER for projects that propose to restore areas of Crown land where legacy disturbance related to PNG activities has occurred and no outstanding or permitted restoration requirements exist.

Funding and timelines

- Extensive delays in awarding contracts impacted the program's reputation and put the project teams' abilities to execute their projects at risk. Contracts must be awarded by mid-summer to enable project teams sufficient time to conduct their initial planning and assessments, collect seeds and order seedling stock (if applicable), and schedule qualified equipment operators.
- The program's tight funding timeframe did not allow for project delays. As a result, some projects were unable to achieve their intended restoration goals.

Public and community engagement

- Once a clear project scope has been defined, discuss engagement preferences with impacted rights holders and stakeholders early in the project planning process (e.g., would an impacted Nation prefer to discuss a proposed project early in the initial planning process, or following the completion of preliminary field scouting).
- If guidance documents are to be used to engage and inform about PNG restoration, consider the audience. Guidance documents are well suited to a scientific community and consultants while methods that incorporate Indigenous knowledge transfer techniques would be better for traditional learners.

Labour resources

- Availability of specialized personnel, ranging from project management and environmental professionals to trained field labour and equipment operators, was repeatedly mentioned as a potential risk to the mid- and long-term success of restoration efforts in NEBC.
- A regional community of restoration practitioners would be valuable for sharing project learnings, successes, and failures. Given the relative newness of legacy site restoration, this would be an excellent way to increase capacity and support the planning and completion of better restoration projects overall.
- Collaboration between First Nations and experienced contractors, and between First Nations in NEBC, facilitated knowledge sharing and mentoring to build capacity among the Nations.

Nursery capacity

- Suitable seedling stock, in sufficient quantities, was difficult to source. To be successful, seedling stock orders need to be in place by October annually.

Long-term protection of restored areas

- It is disheartening for communities if restored areas are damaged or destroyed by subsequent industrial development. Planning industrial development with consideration for restoration efforts, or providing long-term protection for restored areas, may help to improve engagement while ensuring the efficient use of restoration resources.
- Ongoing monitoring of restoration treatments is necessary to refine restoration planning and to identify techniques suitable for the habitats and species important to NEBC First Nations.
- Restoration techniques are very localized: what works in northern Alberta won't necessarily work in NEBC, and what works in the BC Peace region won't necessarily work in the Northern Rockies Regional Municipality. Local knowledge can be incorporated by involving local community members in program plans, decisions, and recommendations.



📷 Sourcing seedlings was cited as a challenge for several of the funded projects. (Photo: Blueberry River First Nations)

5.0 Future Directions



Re-establishing wildlife use and diversity is among the goals of legacy disturbance restoration. (Photos: NWSS / Wildlife Infometrics)

5.1 Opportunities for future funding and collaboration

The PNG LSRP has been an important learning opportunity for all parties involved. Through the program, opportunities for future funding and collaboration were identified:

Legacy site restoration: although the PNG LSRP successfully restored nearly 154 km of legacy seismic lines, countless kilometers of mapped and unmapped legacy disturbances remain throughout NEBC. As these and other legacy PNG site disturbances do not have a regulatory obligation for restoration, significant funding is required for further restoration work to continue.

First Nations participation: meaningful ongoing collaboration with the region's Treaty 8 First Nations will be vital to ensure restoration of high-priority areas in a manner that respects traditional values and practices. Consideration of reciprocal restoration is important.

Training: limited labour resources regionally is a challenge. Opportunities to provide and fund site restoration training initiatives for both local practitioners and equipment operators would be valuable, whether through a formal education program or an innovative mentorship strategy.

Mapping: to date, limited restoration work has been mapped on the landscape and made publicly available. A publicly available database of restoration footprints would increase awareness of where restoration work is planned or has been completed, empowering informed decision making by restoration practitioners, funding bodies, and industries.

Monitoring: it is difficult to evaluate the success of a restoration program, and the restoration and reclamation techniques used, without follow-up monitoring. However, short-term funding programs (including the PNG LSRP) traditionally haven't supported monitoring, which should occur at intervals following restoration for up to 10 years. Supporting follow-up monitoring would be valuable for both the regional body of knowledge and to develop and refine ecosystem-specific restoration techniques.

Partnerships: additional research and restoration efforts are being supported through the provincial government as well as other regional and provincial funding bodies. These include, among others: the BC Ministry of Water, Land and Air Protection; Habitat Conservation Trust Foundation; Society for Ecosystem Restoration in Northern BC; and Fish and Wildlife Compensation Fund. These initiatives see restoration and reclamation projects being completed throughout NEBC with a variety of targets and goals in mind. Collaboration between parties with a common restoration goal, in a non-competitive manner, may enable funding providers and restoration practitioners alike to develop and refine ecosystem-specific restoration recommendations and techniques, avoid project footprint overlap, and increase the regional and provincial body of knowledge while achieving multiple regional outcomes.

5.2 Future funding program considerations

The PNG LSRP has reached a successful conclusion, addressing the identified goals and objectives. As legacy PNG disturbances continue to be restored throughout NEBC, the following ideas will be valuable for future funding programs:

- Clearly **outline stakeholder engagement expectations**, including timelines, contact methods, etc. This is important to ensure all stakeholders understand project areas, impacts, and objectives.
- Ensure the public is aware of the work being completed. To encourage respect for the restoration work, **signage** should be installed at the entrance of legacy seismic lines when planting or other treatments are underway.
- Design a more **flexible funding approach** that allows shorter payment terms, multi-year restoration projects, long term funding, and follow-up monitoring.
- Specify a **funding cap** per project in the RFP, either a maximum restoration cost per km or general cap.

Endnotes

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Petroleum and Natural Gas Legacy Sites Restoration Program
Restoration Management Committee Final Report

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