PROVINCE OF BRITISH COLUMBIA

ORDER OF THE LIEUTENANT GOVERNOR IN COUNCIL

Order in Council No. 532 *, Approved and Ordered* July 22, 2024

Lieutenant Governor

Executive Council Chambers, Victoria

On the recommendation of the undersigned, the Lieutenant Governor, by and with the advice and consent of the Executive Council, orders that

(a) sections 1, 3 to 9, 11, 12, 14, 15 and 17 of the *Oil and Gas Activities Amendment Act, 2018*, S.B.C. 2018, c. 54, are brought into force, and

(b) the Blueberry River First Nations Implementation Agreement Regulation, B.C. Reg. 146/2023, is amended as set out in the attached Appendix.

Minister of Energy, Mines and Low Carbon Innovation

Presiding Member of the Executive Council

(This part is for administrative purposes only and is not part of the Order.)

Authority under which Order is made:

Act and section: *Oil and Gas Activities Amendment Act, 2018*, S.B.C. 2018, c. 54, s. 19;
Energy Resource Activities Act, S.B.C. 2008, c. 36, ss. 95 and 105.1

Other: OIC 354/2023

R30798817

APPENDIX

1 The Blueberry River First Nations Implementation Agreement Regulation, B.C. Reg. 146/2023, is amended by repealing the title and substituting the following:

TREATY 8 PLANNING AND MITIGATION REGULATION .

2 Section 1 is amended

(a) in subsection (1) by adding the following definitions:

"Area 1" means the Plan area specified in Section 1.4 of the Gundy plan;

"Area 2" means the LPP Area #2 specified in Section 2.0 of the LPP; **,**

(b) in subsection (1) by repealing the definitions of **"direction on allocation"** *and* **"disturbance cap",**

(c) in subsection (1) by adding the following definitions:

"Gundy plan" means the HV1-C Gundy Complex Plan attached as Schedule 4 to this regulation;

"LPP" means the Halfway / BC Landscape Planning Pilot attached as Schedule 5 to this regulation; **,**

(d) in subsection (1) by repealing the definitions of **"regulator"** *and* **"specified instrument",**

(e) by repealing subsection (2), and

*(f) in subsection (3) by striking out "*the plans contemplated by the agreement*" and substituting "*the plans contemplated by the agreement, other than the Gundy plan and the LPP,*".*

3 Part 2 is amended by repealing the heading and substituting the following:

PART 2 – BLUEBERRY RIVER FIRST NATIONS IMPLEMENTATION AGREEMENT .

4 The following division is added to Part 2:

Division 0.1 – Interpretation

Interpretation

1.1 (1) In this Part:

"direction on allocation" means the direction attached as Schedule 3 to this regulation;

"disturbance cap" means an area-based or linear cap established by or in accordance with Section 14.1 of the agreement, as modified by section 3 (3) of this regulation;

"specified instrument" means a permit or authorization that authorizes an energy resource activity or related activity to be carried out in the Claim Area.

(2) Unless a contrary intention appears, words and expressions used in this Part have the same meaning as in the agreement.

5 Section 3 is amended by adding the following subsections:

(3) Despite subsection (2), the disturbance caps established by or under Section 14.1 of the agreement are modified for the purposes of this regulation as follows for 2025 and later calendar years:

(a) the reference in Section 14.1 (a) (i) to 200 hectares is to be read as a reference to 195.2 hectares;

(b) the reference in Section 14.1 (a) (ii) to 550 hectares is to be read as a reference to 536.8 hectares;

(c) the reference in Section 14.1 (b) (iii) to 200 hectares is to be read as a reference to 195.2 hectares.

(4) Subsection (1) does not apply in relation to Area 1 or Area 2 and New Disturbance in those areas is not to be counted against the disturbance caps.

6 Section 6 (1) is repealed and the following substituted:

(1) The regulator may not issue a specified instrument that authorizes New Disturbance to be carried out in

(a) an HV1B area, or

(b) an HV1C area, other than in Area 1.

7 Section 10 is repealed and the following substituted:

Waiver or modification of requirements

10 (1) Subject to subsection (2), this Part does not apply in relation to a requirement in Section 14.4 or 14.6 of the agreement or a requirement to count New Disturbance against a disturbance cap if the requirement is waived or modified, in accordance with Section 14.9 of the agreement, by the Blueberry River First Nations.

(2) This Part does not apply in relation to a requirement referred to in subsection (1) in Area 1 if the requirement is waived or modified both under subsection (1) and by the Halfway River First Nation.

8 The following section is added:

Application of this Part to Area 2

11 Sections 7 to 10 do not apply in relation to Area 2.

9 The following Parts are added after section 11:

PART 3 – BLUEBERRY RIVER FIRST NATIONS GUNDY PLAN

Division 1 – Interpretation

Interpretation

12 (1) In this Part, **"specified instrument"** means a permit or authorization that authorizes an energy resource activity or related activity to be carried out in Area 1.

(2) Unless a contrary intention appears, words and expressions used in this Part have the same meaning as in the agreement and the Gundy plan.

Division 2 – General Policies and Procedures

General policies and procedures

13 The regulator must conduct its affairs, exercise its powers and discretion, carry out its functions and duties and discharge its responsibilities consistently with the following provisions of the Gundy plan:

(a) Sections 6.1 to 6.3;

(b) Section 7.3.

Division 3 – Directions to Regulator

Limitations on disturbance

14 (1) The regulator may not, by issuing or amending a specified instrument, authorize New Disturbance to be carried out in a Protection Zone unless the New Disturbance will occur in an area of Non-PNG Disturbance.

(2) The regulator may not, by issuing or amending a specified instrument, authorize an energy resource activity to be carried out in the area of a seismic line in the Current Industry Maintenance Zone.

Planning

15 The regulator may not, by issuing or amending a specified instrument, authorize New Disturbance in Area 1 unless the applicant for or holder of the instrument, as the case may be, has provided

(a) an environmental management plan that is consistent with Sections 7.2 and 7.5 of the Gundy plan to the regulator and the Blueberry River First Nations, and

(b) the information required by Section 7.4 of the Gundy plan and any site-specific mitigation strategy required by Section 7.6 of that plan to the regulator.

Protective measures

16 The regulator may not, by issuing or amending a specified instrument, authorize New Disturbance in Area 1 unless the instrument is consistent with the

(a) the setbacks in Sections 7.8.1 to 7.8.3 of the Gundy plan,

(b) the timing constraints in Section 7.8.4 of that plan, and

(c) the practices described in Section 7.8.6 of that plan.

Off-site environmental mitigation

17 The regulator must have regard to Section 7.9 of the Gundy plan in exercising a power or performing a duty under section 25.1 (2) *[off-site environmental mitigation activities]* of the Act.

Waiver or modification of requirements

18 This Part does not apply in relation to a requirement in the Gundy plan referred to in section 15 or 16 of this regulation or a limitation imposed by section 14 if the requirement or limitation, as the case may be, is waived or modified by both

(a) the Blueberry River First Nations, and

(b) the Halfway River First Nation.

PART 4 – HALFWAY RIVER FIRST NATION LANDSCAPE PLANNING PILOT

Division 1 – Interpretation

Interpretation

19 In this Part:

"specified instrument" means a permit or authorization that authorizes an energy resource activity or related activity to be carried out in Area 1 or Area 2;

"Treaty 8 Planning and Mitigation Measures" means the Treaty 8 Planning and Mitigation Measures attached as Appendix A to the Adaptive Management Program and Plan attached as Appendix 1 to the LPP.

Division 2 – General Policies and Procedures

General policies and procedures

20 The regulator must conduct its affairs, exercise its powers and discretion, carry out its functions and duties and discharge its responsibilities consistently with Section 6.0 of the LPP, other than as it refers to the Adaptive Management Program and Plan attached as Appendix 1 to the LPP.

Division 3 – Directions to Regulator

Protective measures

21 The regulator may not, by issuing or amending a specified instrument, authorize an energy resource activity in Area 1 or Area 2 unless the instrument is consistent with Section 5.1 of the LPP as Section 5.1 requires compliance with the Treaty 8 Planning and Mitigation Measures.

Waiver or modification of requirements

22 (1) Subject to subsection (2), the Part does not apply in relation to a requirement in the Treaty 8 Planning and Mitigation Measures if the requirement is waived or

modified, in accordance with Section 4.3 of the LPP, by the Halfway River First Nation.

(2) This Part does not apply in relation to a requirement referred to in subsection (1) in Area 1 if the requirement is waived or modified both under subsection (1) and by the Blueberry River First Nations.

PART 5 – OFF-SITE ENVIRONMENTAL MITIGATION

Off-site environmental mitigation

23 For the purposes of section 25.1 *[off-site environmental mitigation activities]* of the Act,

(a) the minister may establish, in the Claim Area within the meaning of the agreement, energy resource management areas and mitigation areas that the minister considers necessary or advisable

(i) for the implementation of the Gundy plan, or

(ii) having regard to the rights and interests of a First Nation with rights under Treaty 8, and

(b) the energy resource activities specified in Section 7.7 of the Gundy plan are prescribed for an energy resource management area established under this section.

10 The following Schedules are added:

SCHEDULE 4

HV1-C Gundy Complex Plan

June 14, 2024

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1.0 Introduction

1.1 Plan Context

On June 29, 2021, the BC Supreme Court decided *Yahey v. British Columbia*, 2021 BCSC 1287. The Court confirmed that Treaty 8 and section 35 of the *Constitution Act, 1982* promise Blueberry River First Nations (BRFN) the right to continue a way of life based on hunting, fishing and trapping, and that this way of life will not be forcibly interfered with. The Court confirmed that inherent in this promise is the promise that the Crown will not significantly affect or destroy the basic elements or features needed for that way of life to continue.

The Court also confirmed that the necessary elements of the protected BRFN way of life include the existence of healthy mature forests, wildlife habitats, fresh clean water and access to these places, as well as healthy populations of moose and other wildlife within the areas traditionally relied upon by BRFN.

The Court declared that:

1. In causing and/or permitting the cumulative impacts of industrial development on BRFN's Treaty Rights, the Province of British Columbia (the Province) has breached its obligation to BRFN under Treaty 8, including its honourable and fiduciary obligations. The Province's mechanisms for assessing and considering cumulative effects are lacking and have contributed to the breach of its obligations under Treaty 8.

2. The Province has taken up lands to such an extent that there are not sufficient and appropriate lands in the Claim Area to allow for BRFN's meaningful exercise of their Treaty Rights. The Province has therefore unjustifiably infringed BRFN's Treaty Rights in permitting the cumulative impacts of industrial development to meaningfully diminish BRFN's exercise of its Treaty Rights in the Claim Area.

3. The Province may not continue to authorize activities that breach the promises included in Treaty 8, including the Province's honourable and fiduciary obligations associated with Treaty 8 or that unjustifiably infringe BRFN's exercise of its Treaty Rights; and

4. The Parties must act with diligence to consult and negotiate for the purpose of establishing timely enforceable mechanisms to assess and manage the cumulative impact of industrial development on BRFN's Treaty Rights, and to ensure these constitutional rights are respected.

To bring effect to these declarations, BRFN and BC entered into the Blueberry River First Nations Implementation Agreement (BRFN IA) in January 2023.

The BRFN IA establishes several measures to address the cumulative effects of past and future resource disturbances on BRFN's exercise of Treaty Rights including the development and implementation of a Cumulative Effects Management Regime.

A series of hierarchical Plans (Land Use Plans, Watershed Management Basin (WMB) Plans, and High Value Plans (HV1)) are being collaboratively developed by BRFN and the Province to manage the cumulative impact of industrial development on BRFN's Treaty Rights and to ensure those impacts do not infringe Treaty Rights and that Treaty Rights are respected by decision makers.

1.2 First Nations Context

1.2.1 Blueberry River First Nations

BRFN is a Dane-zaa (Beaver) and Cree community located in northeastern British Columbia (BC), with over 500 members belonging to five family groups. Their territory has been subject to extensive industrial development.

1.2.2 Halfway River First Nation

Halfway River First Nation (HRFN) is a Dane-zaa community with over 300 members, currently located approximately 100km northwest of Fort St John, BC. HRFN has identified a strong cultural interest in the Plan Area. Guided by Dane-zaa stewardship laws, HRFN has identified their vision for their territory, which is to maintain their traditional way of life and their identity as a distinctive Aboriginal people, which depends on the ability to meaningfully exercise their spiritual, religious, cultural and traditional practices and pass this knowledge on to future generations to practice their way of life.

1.2.3 Other T8 Nations

Both Doig River First Nation and West Moberley First Nations have identified consultation areas that overlap with the Plan Area. BC and BRFN understand that the Plan Area falls outside of the core planning interest areas of these Nations. As such, consultation was undertaken, and draft plans shared for awareness and input.

Doig River First Nation sought to understand the socio-economic impacts associated with the Plan and a potential adverse ripple effect in their territory.

No specific suggestions regarding the Plan were received from West Moberly First Nation.

In addition, Treaty 8 First Nations based outside of BC that have asserted interests over the Plan Area, Dene Tha' First Nation and Horse Lake First Nation, were invited to consult on draft versions of the Plan. Neither chose to engage with BC in respect of this Plan.

1.3 Regional Planning Context

A series of strategic and operational planning exercises will be undertaken with BRFN and other Treaty 8 Nations throughout the northeast. The intent is for these plans to be collaboratively

developed, reconcile overlapping interests and nest within each other to form the future state cumulative effects management framework that will ultimately direct how, where and under what circumstances industrial development may be considered.

1.3.1 Land Use Plans (Strategic Scale):

The North Peace Plan will be co-developed by the Province and interested Treaty 8 First Nations. It will set objectives for natural resource stewardship and management across all sectors and will replace the current Fort St. John Land and Resource Management Plan (LRMP).

1.3.2 Watershed Management Basin (WMB) Plans (Tactical Scale):

WMB plans are watershed-level land use plans that set indicators and thresholds consistent with the BRFN IA and objectives established in higher level plans (i.e. North Peace Plan). The scale of the Priority WMBs allows for the planning and meaningful recovery of natural processes from local to landscape scale, intact and fully functional ecosystems, and the practice of Treaty Rights. WMB Plans will seek to protect Treaty Rights and guide development through enforceable mechanisms reflecting Ecosystem Based Management[1] (EBM) standards and thresholds for reducing ecological risk. The goal of applying the EBM Framework within the Priority WMBs[2] is to ultimately protect and restore the landscape to natural conditions (like those created by natural disturbance regimes).

The outcomes of WMB Plans will include provisions for the protections and measures outlined in the EBM Framework including:

- New land use zones that prioritize protection through special management objectives and strategies.
- Protection for important wildlife habitat and cultural features.
- Objectives and strategies for managing species at risk.
- Objectives and strategies for range activities.
- Access management objectives and strategies that minimize new linear features and/or access to specific areas.
- Objectives and strategies for restoration activities.
- Strategies to mitigate the impacts of climate change; and
- Other objectives and strategies that BRFN and the Province agree to.

The BRFN IA identified the Priority WMB plans which include Blueberry River, a portion of the Middle Beatton River, Upper Beatton River, and a portion of the Lower Sikanni Chief River. Priority is being given to co-develop these plans by December 31, 2025. Cameron River WMB Plan was identified as having similar priority to the Lower Sikanni Chief River WMB Plan but was not included in the Priority WMB plans.

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[1] Ecosystem Based Management: An adaptive approach to managing human activities that seeks to ensure the coexistence of healthy, fully functioning ecosystems and human communities. The intent is to maintain those spatial and temporal characteristics of ecosystems such that component species and ecological processes can be sustained, and human well-being supported and improved (Coast Information Team, 2004).

[2] The EBM Framework is outlined in Schedule C of the BRFN IA.

1.3.3 HV1 Plans (Operational Scale)

High Value Plans (HV1 Plans) are operational plans being completed on a priority basis to provide direction in provincial decision-making and guide Oil and Gas Activity[3] related development and restoration activities over a relatively small area. The BRFN IA identified 37 HV1 Areas ranging in size from 792 ha to 33,445 ha across the Claim Area where there has been an identified need to adjust how these areas are managed in the short term, while WMB development work is ongoing. Figure 1 shows BRFN's Claim Area, the WMBs, and the HV1 areas that will all be eventually planned under the terms of the BRFN IA (most of the HV1 areas are located within the priority WMBs).

In the absence of an existing and overarching WMB Plan providing strategic direction, the HV1 Plans' focus on making operational the commitments made within the BRFN IA while seeking to ensure consistency with the WMB planning.

The BRFN IA establishes three sub-categories of HV1 Plans designed to protect these high value areas (each requiring a different amount of protection from New Disturbance):

1. HV1A: no New Disturbance
2. HV1B: minimum 80% protection from New Disturbance
3. HV1C: minimum 60% protection from New Disturbance

BRFN sought 100% protection of all high value, or critical cultural, areas. However, as the HV1B and HV1C plan areas overlap with existing petroleum and natural gas (PNG) activity that provides ongoing economic and employment benefit for the region, both parties agreed to minimum protection requirements of 80% and 60% respectively for HV1B and HV1C areas. This solution is seen to balance Treaty Rights and the healing of the environment with a sustainable regional economy, in alignment with S.2.1(b) of the BRFN IA.

The BRFN IA identified five HV1C areas which have been prioritized to be managed by three HV1C Plans:

1. "HV1 Plan #1 Gundy Complex"
2. "HV1 Plan #2 Grizzly Creek"
3. "HV1 Plan #3 Upper Halfway"

[3] Oil and Gas Activity means those activities related to conventional and unconventional oil and gas exploration and development (including coal bed gas, hydrogen development, developments aimed at capturing carbon and other forms of exploration and development that may evolve over time related to the presence of subsurface PNG deposits) on Crown land within the Claim Area for which the approval of a Provincial decision maker is required, and includes, but is not limited to, seismic operations and operations on or at well sites, access roads, pipelines and processing facilities (BRFN IA).

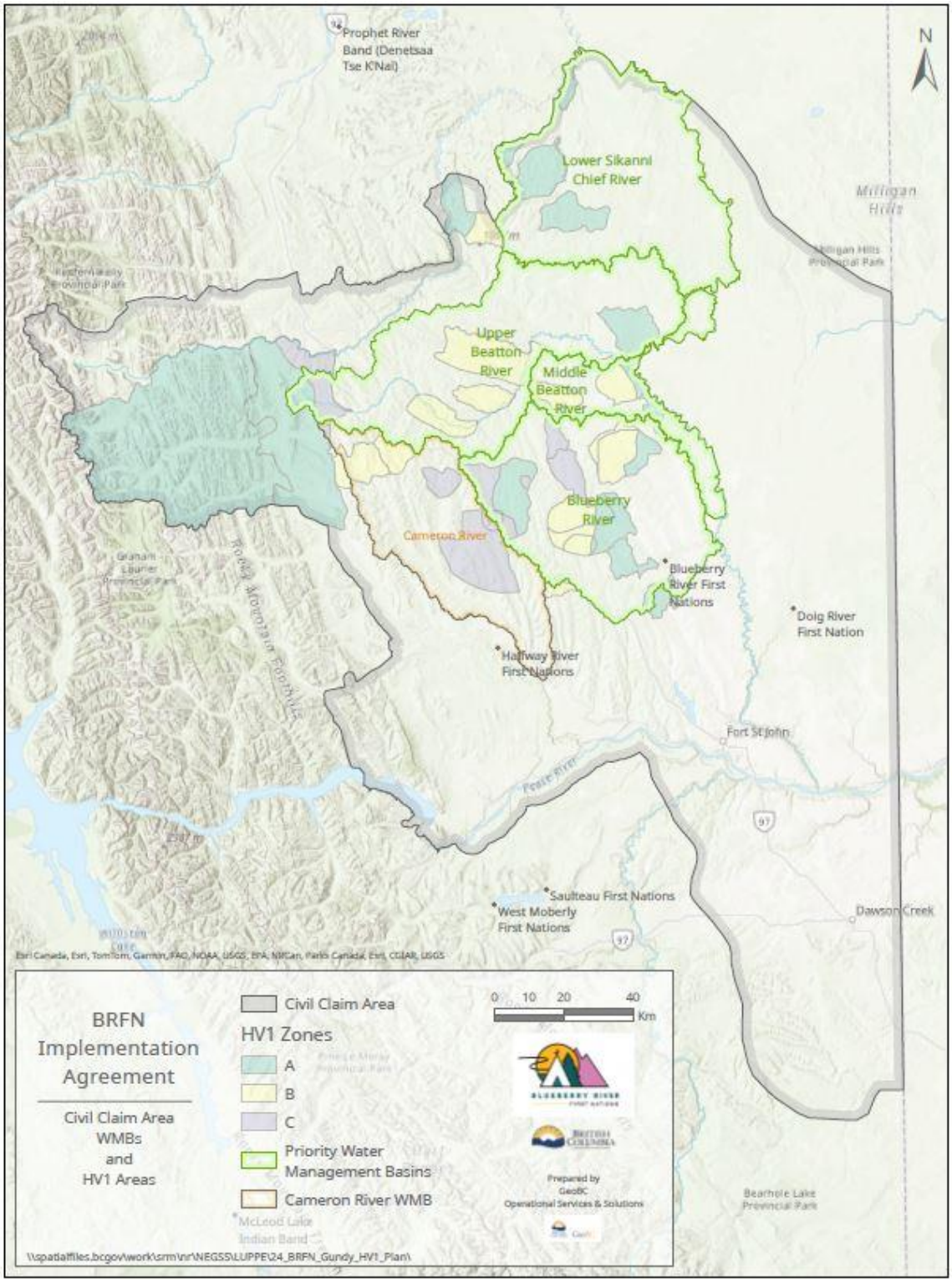


Figure 1: Map of the Blueberry River First Nations Implementation Agreement Claim Area, Water Management Basins and HV1 Areas

1.4 Gundy Complex HV1C Plan Purpose

The purpose of the HV1C - Gundy Complex Plan (the Plan) is to establish and implement actions that support the restoration and recovery of Treaty Rights and necessary elements of the protected Treaty 8 way of life, while enabling limited PNG development. As described in the BRFN IA, the Plan will improve management of the land through a collaborative, long term, evolving relationship and approach to land, resource and economic development-related shared decision-making between the Province and BRFN through the establishment of areas that are protected from New Disturbance,[4] identification of areas where development may occur, subject to the conditions for development articulated herein, and identification and prioritization of restoration activities in the Plan Area. It is the Parties' intent, that by agreeing to this Plan, we will support effective and efficient processes to balance the interests of Nations, BC and industry, recognizing the importance of the environment and cultural values as well as a vibrant local economy as being essential for individual and community well-being.

The Plan operationalizes discrete commitments under the BRFN IA, but in no way alters that agreement.

The total Plan area is 52,873 ha, spans two Watershed Management Basins (Cameron River WMB and Blueberry River WMB) and is comprised of three discrete HV1C areas (the Gundy and Townsend Creek areas are located within the Cameron River WMB, and the Dancing Ground area is located within the western portion of the Blueberry River WMB):

1. Townsend Creek (6,705 ha).
2. Gundy (33,445 ha); and
3. Western block of the Dancing Ground (12,724 ha).

The Plan is expected to coordinate restoration and development activities and achieve the objective of protecting contiguous areas constituting a minimum of sixty percent of each HV1C area from New Disturbance.

More specifically, the purposes of HV1 Plans, as directed by the BRFN IA, are to:

- Protect a minimum of 60% of each HV1C area from New Disturbance.
- Identify and protect larger contiguous undeveloped areas from New Disturbance.
- Identify areas which concentrate areas of development and reduce fragmentation where New Disturbance may occur and the conditions for development in those areas.
- Identify the total amount of required restoration as well as the priorities and schedules for this restoration and share this information with the BRFN Restoration Society.

[4] "New Disturbance" has the same meaning as in the BRFN IA and means, subject to any and all limitations and exclusions provided for in this definition, all (and only) Oil and Gas Activity-related disturbance on Crown land outside of any permitted and existing PNG footprint as identified in the SLU Data Layer, including restored wells with a certificate of restoration but excluding: (i) restoration activities; (ii) Health and Safety Activities; (iii) Environmental Protection Activities; (iv) electricity transmission and distribution line rights-of-way outside of Area 1 or inside Area 1 with the consent of BRFN; (v) new operational activities within existing oil and gas related disturbances or other permanent road structures (including, without limitation, new wells on existing pads and pipelines within established rights of way); and (vi) conversion of non-status roads to oil and gas roads, so long as such conversion does not include any new construction or road modification (BRFN IA).

- Minimize the amount, duration and impact of Oil and Gas Activities within the Plan area by coordinating restoration and development activities, coordinate proposed development activities by Third Party operators and implement measures to minimize cumulative effects where possible.
- Identify key common infrastructure and utility corridors.
- Minimize impacts to areas identified as having the highest cultural value to BRFN.
- As much as possible, protect and balance Treaty Rights and the healing of the environment within a sustainable regional economy.

1.5 Planning Approach

A coordinated and inclusive approach supported development of the Plan and involved expertise from various disciplines and engagement with impacted stakeholders.

Indigenous knowledge of the Plan areas was critical to the planning process, with protection and recovery of Treaty Rights being the goal of the Plan. The BRFN IA was written to be compatible with community and cultural processes and protocols as much as possible; as such, this plan's development has aligned with these processes and protocols. Community guidance and engagement was integral to identifying planning values and objectives and identifying high value and sensitive areas for spatial planning.

A bilateral process with Halfway River First Nation (HRFN) was undertaken by BC following initial drafting. The purpose of this process was to ensure that in areas of cultural significance to both Nations, their collective interests and ideals were considered, reconciled, and articulated in a way that was supported by both Nations and BC.

The Parties engaged with the PNG industry through directly impacted tenure holders and infrastructure owners, and through industry associations, as well as with other First Nations with consultation areas that overlap the Plan Area. The Parties also undertook targeted engagement with proponents that indicated an interest in development in this area over the five-year planning horizon. In addition to inviting these companies to share information regarding their proposed development plans, information was solicited regarding how these operations would consider the values important to the Parties. This engagement supported BRFN and the Province in considering proposed developments and mitigation measures being implemented by these companies in the development of the Plan and establishment of Protection and Development Zones.

2.0 Vision & Guiding Principles for the Plan Area

"My great grandchildren, what are they going to have?" – BRFN Elder

The vision for the Gundy Area is to heal ecosystems and recover traditional foods such that Treaty Rights can be meaningfully exercised. This requires intact and connected ecosystems free of disruptions, disturbances, impaired views, contamination, and noise, including healthy mature forests, wildlife habitats, fresh clean water, and access to these places for spiritual and cultural uses, as well as healthy populations of moose and other wildlife in the areas traditionally relied upon by Treaty 8 Nations.

Additionally, it is envisioned that the Gundy Complex Plan area will continue to provide opportunities that support a sustainable regional economy, through responsible PNG activities that align with community values and priorities. To achieve this vision, the Plan seeks to identify contiguous areas constituting a minimum of 60% of each HV1C area within the Gundy Complex for protection from New Disturbance. The remaining land base (no greater than 40%) is available for responsible PNG development, as guided by this Plan.

This Protection Zone is intended to enable ecosystem recovery to support traditional uses including, but not limited to:

- Hunting, fishing, and gathering activities.
- Trapping for sustenance and cultural practices.
- Cultural burning practices to improve ecosystem values and wildlife habitat.
- Cabins for supporting trapping activities; and
- Cultural sites and sacred areas with spiritual and medicinal significance.

The Development Zone is intended to enable responsible Oil and Gas Activity development that supports the local, regional and provincial economy in consideration of potential cumulative effects and impacts to Treaty 8 rights, by:

- Focusing future Oil and Gas Activity within designated development zone(s).
- Consolidating future development within areas of existing disturbance and/or common infrastructure and utility corridors.

2.1 Guiding Principles

To advance the vision for the Gundy Complex, this Plan is guided by a suite of principles, aimed to: (1) protect areas that are still intact within the Gundy, (2) restore areas that build out protection for habitat and water values, and (3) focus and guide future PNG development in a designated Development Zone.

These principles include:

- Ensure there is connectivity across the Gundy Complex, and with the adjacent areas outside the Gundy Complex.
- Maximize protection in areas that best support values associated with Treaty Rights.

- Prioritize protecting locations of high cultural value within the Gundy Complex; and
- Balance environmental, cultural, and economic considerations to protect Treaty Rights and healing the land while also advancing economic benefits for the area.

This approach should yield future conditions in the Gundy Complex that include:

- Significant, contiguous stands of healthy old forests and recruitment forests.
- Healthy, abundant, and clean water resources, aquatic habitats, and fish populations.
- High value and healthy wildlife habitat and populations (especially moose and furbearers).
- Habitat connectivity with surrounding high value areas; and
- Responsible Oil and Gas Activity, where suitable.

New Disturbance associated with Oil and Gas Activities will be prohibited within designated areas of the Gundy Complex to prevent additional fragmentation and further loss of Values within this Protection Zone. Over time, conditions in this zone will increase the opportunity for forests, wetlands, streams, and other habitats to recover naturally, or be actively restored, into fully functional ecosystems.

Oil and Gas Activities can continue to occur where already existing and may be further developed in specified areas (including Surface Land Use (SLU) co-located with the Protection Zone and as New Disturbance within the Development Zone) of the Plan area, subject to them being carefully planned and permitted according to the Plan's conditions for development (section 7) to ensure impacts to the Plan's values (section 3) are minimized and ecosystems are restored wherever possible. In accordance with the BRFN IA, commercial forestry is not permitted within the Plan Area except as otherwise indicated in Section 8.

3.0 Planning Values

In this plan, the planning values are critical to cultural and ecological interests identified and have been used to identify a set of key elements, referenced as Values herein, to consider in planning and authorizing future PNG development within the Plan Area. Ultimately, the Plan seeks to protect and restore areas to support the exercise of treaty rights while maintaining opportunities to develop the PNG resources that were previously tenured within this area.

BRFN, utilizing information identified through community guidance and engagement, identified a set of values and objectives to guide the development of the Plan with a focus on achieving the Vision described above.

The key values described in this section were developed in consideration of the BRFN IA requirements, engagement from industry and with input from BRFN members, including Chief and Council and through dedicated community engagement sessions with all five BRFN family groups. These collective values were used to guide the planning team in the identification of area-based zones (Protection Zone and Development Zone) and the development of operational requirements to support the recovery of Treaty Rights while maintaining the ability to practice responsible economic development.

BRFN identified the following ecological and cultural values:

- Ecosystems and wildlife
    - Old forests >140 years
    - Functional habitat
    - Moose habitat
    - Moose licks
    - Fisher habitat
- Water
    - Wetlands
    - Streams and rivers
    - Lakes
    - Riparian habitat
- Spiritual and cultural use values, including:
    - Burial sites
    - Cabins
    - Campsites
    - Trails
    - Traplines
    - Peaceful enjoyment

In the absence of an existing and overarching WMB Plan at the time of this Plan development, this Plan prioritizes healthy ecosystems and wildlife, fresh clean water, spiritual and cultural use and sustainable economies and resilient communities, including through consideration of the values articulated in this section. Restoration and development in the Plan Area must be planned and carried out with consideration for the following:

- Old Forest & contiguous diverse ecosystems

- Moose & moose habitat
- Water, aquatic ecosystems & riparian areas
- Habitat for grizzly & other fur-bearers
- Peaceful enjoyment of land and culturally important areas

The goals and priority measures for each of the identified values are described in Table 1 below. The plan considers these values, goals, and priority measures in the establishment of areas of protection and development, in coordination of development and restoration activities, in guidance/support of responsible Oil and Gas Activity development and to limit cumulative effects to allow ecosystems to heal.

Table 1: Goals and Priority Measures for Planning Values within the HV1-C Gundy Complex

OLD FOREST & CONTIGUOUS DIVERSE ECOSYSTEMS	
GOAL	
Maintain and foster functional recovery of contiguous Old Forest, Interior Forest and Interior Habitat Conditions within the Gundy HV1C Complex	*1.* Protect Old Forest[5] and Recruitment Forest (older than 120 years).
	2. Retain remnant patches of Forest Ecosystems and Interior Forest.
	3. Promote contiguity of Forest Ecosystems and Natural Habitat Mosaics (avoid fragmentation through any disturbance footprint).
	4. Restore the landscape such that conditions resemble, or move towards, those created by the natural disturbance regimes at multiple scales, including Old Forest targets established through WMB planning and the EBM Framework.[6]
	5. Incorporate deliberate learning to improve knowledge of forest conditions in the Gundy Complex.
	6. Establish timely and effective restoration practices for Oil and Gas Activities in the Plan area.
	7. Develop restoration strategies that work to alleviate cumulative impacts from Oil and Gas Activities.
	8. Implement best-in-class strategies to reduce the introduction and spread of invasive and non-native species.
	9. Control and reduce existing invasive and non-native species outbreaks.
MOOSE & MOOSE HABITAT	

[5] Old Forest is defined as stands that are greater than / equal to 140 years old, per the EBM Frameworks in the Implementation Agreement.

[6] The EBM Framework is set out in Schedule C of the Implementation Agreement.

GOAL	
Support the recovery of moose habitat and moose populations within the Gundy Complex	1. Maintain the quality, quantity, and connectivity of high value moose habitat for: winter forage and shelter, summer forage habitat, and mineral licks.
	2. Conduct all Oil and Gas Activities in a way that does not harm or stress individuals nor interfere with moose life requisites.
	3. Incorporate deliberate learning to improve knowledge of moose habitat in the Gundy Complex.
WATER, AQUATIC ECOSYSTEMS & RIPARIAN AREAS	
GOAL	**PRIORITY MEASURES**
Protection and recovery of water, aquatic ecosystems, and riparian systems.	1. Safeguard water, including surface water and groundwater quality and quantity.
	2. Protect and recover watercourses, wetlands, muskeg, lacustrine, spring headwaters.
	3. Protect and recover riparian ecosystems.
	4. Incorporate deliberate learning to improve knowledge of aquatic habitat in the Gundy Complex.
HABITAT FOR GRIZZLY & OTHER FUR-BEARERS	
GOAL	**PRIORITY MEASURES**
Support the recovery of grizzly bear and other fur bearer habitat and populations within the Gundy Complex	1. Protect and do not disturb high value grizzly bear habitat, including denning sites.
	2. Minimize impact to fur-bearer species' habitat and movement, particularly denning habitat for fisher and marten.
PEACEFUL ENJOYMENT OF LAND AND CULTURALLY IMPORTANT AREAS	
GOAL	**PRIORITY MEASURES**
Provide the social, environmental, and cultural conditions essential for safe exercise of land uses by BRFN Members, contributing to individual and community well-being.	1. Protect areas important to BRFN.
	2. Allow and create access for BRFN members to travel within the Gundy Complex to access important sites.
	3. Minimize sensory disturbance near culturally important BRFN sites.
	4. Ensure that human health is protected from Oil and Gas Activities.

3.1 Objectives

The Plan will aim to protect and recover the above values and advance the goals and priority measures for each value using the following four objectives (see section 5 for descriptions of the zones):

1. Objective for Protection Zone

   The Protection Zone within the Gundy Complex, representing ≥ 60% of each HV1C area (being the Gundy, Dancing Grounds and Townsend areas), is protected from New Disturbance from Oil and Gas Activities, providing for long term protection of identified values to restore Treaty Rights and the exercise of traditional uses.

2. Objective for Development Zone

   New Oil and Gas Activities within the Gundy Complex occur within the Development Zone, which comprises a maximum of 40% of each HV1 area and establishes operational considerations and measures that support responsible Oil and Gas development and protect ecological and cultural values, subject to an efficient and predictable review and assessment process.

3. Objective for Restoration

   Disturbed areas within the Gundy Complex are identified, restored, and recovered with a priority on restoration activities within the Protection Zone, HRFN's identified Enhanced Management Corridors and Current Industry Maintenance Zone that maximize recovery potential for identified Values.

4. Objective for Treaty Rights & BRFN Land Users

   The cumulative effects of past and future Oil and Gas Activities within the Gundy Complex are addressed and managed to improve the experience and opportunities for BRFN land users to exercise their Treaty Rights.

4.0 Current Conditions

4.1 Description of the HV1C Gundy Complex

The Plan area is comprised of the Gundy, Townsend Creek, and western portion of the Dancing Ground polygons and is total of 52,873 ha (of which 4,324 ha (8.2%) is private (fee simple) land).

The Plan area sits overtop of the Montney Play, a key area of interest for PNG exploration and extraction that extends across northeastern BC and northwestern Alberta. Situated within the boreal white and black spruce (BWBS) bio-geoclimatic zone, the Plan area includes several significant watercourses within the Blueberry River WMB and Cameron River WMB, along with several small lakes and extensive wetland areas. The Dancing Ground HV1C area also contains the headwaters of the Blueberry River, a particularly important place for the BRFN community. The Plan area is important moose hunting area for BRFN and is adjacent to one of BRFN's most culturally valued areas, the Dancing Grounds, part of which is fully protected under the BRFN IA as an HV1A area. Historically, the boreal habitat of mixed spruce, aspen and pine stands across the Plan area held excellent moose and furbearer habitat, values of deep importance to BRFN for the practice of their Treaty rights. As a result of these, and other, Values, the Gundy Complex is a critical cultural area for BRFN.

4.2 History of Development in the Plan area

Ecological conditions with the Plan area have been impacted by uncoordinated resource development and are currently degraded from their historic state. Since the early 2010s, the area in and around the Gundy Complex, which was already heavily impacted by forestry and agriculture, has been subject to intensive PNG exploration and development. Much of the area has been heavily impacted by land conversion (4,324 ha of the Gundy Complex has been converted from Crown to private farmlands), industrial development (including oil and gas as well as forestry), and wildfire. Protecting remaining intact forested areas and restoring key high value areas is of critical importance for restoring BRFN's Treaty rights in this area.

The Montney Play (Figure 2), one of the largest unconventional gas resources (~130,000km^2) in the world, is the source of the PNG activity in the Plan area. Although conventional development of the Montney began in the 1960's, Montney siltstones remained undeveloped until 2005 when technological advances in horizontal drilling and multi-stage hydraulic fracturing made it economically possible to develop the unconventional portion of the Montney profile[7].

[7] https://www.cer-rec.gc.ca/en/data-analysis/energy-commodities/natural-gas/report/archive/ultimate-potential-montney-formation/the-ultimate-potential-unconventional-petroleum-from-montney-formation-british-columbia-alberta-energy-briefing-note.html

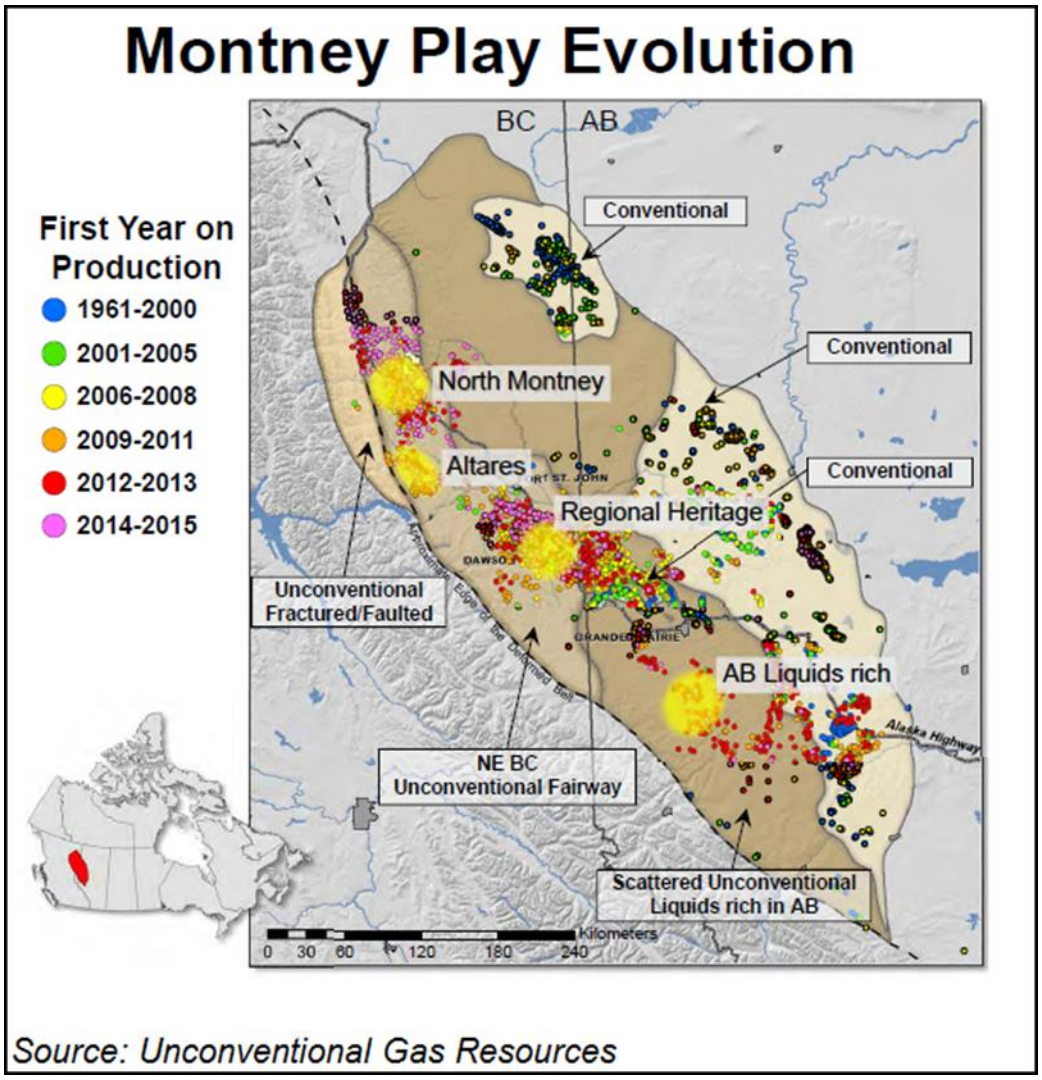


Figure 2: Map showing the history of Development within the Montney Play

As of September 2023, subsurface tenures in the Plan area are held by 17 tenure holders (Appendix 1).

Oil and Gas Activity within the Plan area has consisted of large geophysical and road development programs, followed by wellsite establishment, pipeline construction and ancillary facility construction. Total PNG-related disturbance in the Plan area was almost 3,500 ha by 2016 (when reporting of these were formalized through annual updates to the SLU[8] and has increased to almost 4,400 ha in 2022 (See Figure 3). This quantifies the PNG physical footprint alone.

[8] The BCER is responsible for the tracking and reporting of Oil and Gas Activity disturbances annually by activity type via the Surface Land Use (SLU).

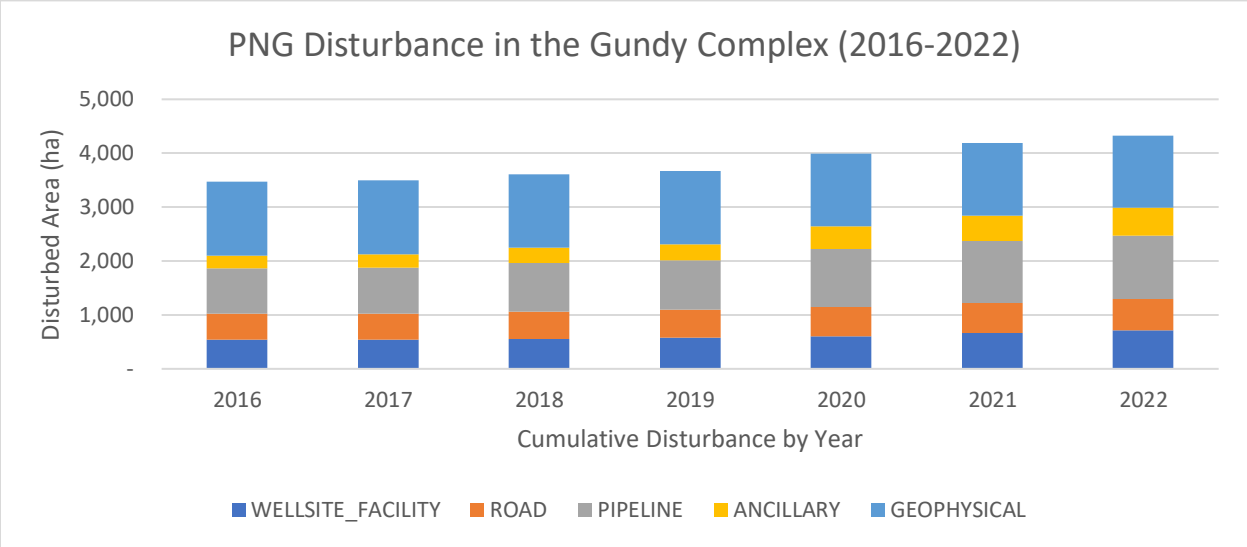


Figure 3: Graph showing the cumulative PNG disturbance (by type) from 2016[9] to 2022 within the Gundy Complex Area[10]

4.3 Existing PNG Footprint

The BRFN IA (s. 7.8 (a)) requires the Plan to contain an estimate of the existing PNG footprint. This will provide a baseline for BRFN and the Province to assess and measure progress toward reducing the PNG footprint over time through increased restoration and lower impact Oil and Gas Activities.

The SLU Data Layer available from the British Columbia Energy Regulator (BCER) represents surface disturbances as polygons associated with oil and gas exploration and production activities permitted by the BCER for which post construction submissions have been received by BCER (i.e. the SLU layer includes only constructed oil and gas infrastructure). It is the basis on which New Disturbance is defined in the BRFN IA. SLU data are classified as one of five categories including Well/Facility, Roads, Pipelines, Associated and Ancillary (Other Related) Activities, and Geophysical (Seismic). The SLU Data Layer was first created in 2016 and is now updated once yearly. Schedule I in the BRFN IA lists "Existing Priority Applications" for PNG activities or works that BRFN agreed to proceed to BCER for determination. For the purpose of establishing the Existing PNG Footprint these are being considered as "Existing" and included in the existing PNG footprint dataset. Finally, spatial data associated with the BCER dataset "Well and Facility Areas (Permitted)" was also included; this dataset contains spatial data collected on or after October 30, 2006, and includes approved and post-construction land areas associated with well or facility activities. All three of these data sets were merged to establish the existing PNG footprint spatial dataset. The total disturbance footprint by activity type is reflected in Table 2.

[9] Disturbances occurring prior to 2016 were reported in 2016.
[10] Information received from BCER on Aug 15, 2023. Summarized information by SLU types (well/facility pads, oil and gas roads, pipelines, ancillary and associated activities and geophysical) from 2016 to 2022.

Table 2: Total existing disturbed area by oil and gas activity type within the Plan Area.

PNG Activity Type	Total Existing Disturbed Area
Wellsite/Facility	715.8 hectares
Pipeline	1,173.3 hectares
Road	583.5 hectares
Geophysical	1,342.0 hectares
Related Activities	515.7 hectares

5.0 Protection and Development Zones

This section of the Plan summarizes the methodology used to develop the protection and development areas and identifies those zones within the Gundy Complex Plan Area. The Plan's vision, values and objectives identified above were prioritized in identifying these methods.

Since the WMB plans that contain the Gundy Complex have not yet been prepared, the methods did not have the benefit of this forthcoming higher order direction. To seek alignment with the future WMBs, the methods considered (a) the directions and values contained in the EBM Framework wherever relevant for a HV1 plan, (b) a larger area than the Gundy Complex as context for the spatial planning, (c) BRFN community values and concerns within the general watersheds overlapping the Gundy Complex, input from other Treaty 8 Nations and industry, and (d) the ecological and cultural datasets that would be used for WMB planning. As a result, it is expected that this HV1 plan will nest appropriately and effectively within the future WMB plans with a focus on the same general values and a spatial planning methodology that can be applied at a WMB level.

5.1 Methods

A coordinated and collaborative approach utilized extensive input from BRFN, and other Treaty 8 First Nations, as well as feedback from industry and relevant stakeholders, and expertise from various technical disciplines was used to develop the Plan. BRFN provided initial proposals for Plan content and protection areas; collaboration between the Parties and subsequent engagement with affected stakeholders informed the final outcome for both.

BRFN local knowledge of the Plan area and input into the identification and selection of ecological and culturally significant areas was critical in the development of the Plan and the establishment of protection and development areas. Community guidance and engagement was undertaken by BRFN and was integral to identifying planning values and objectives and identifying high value and sensitive areas for protection.

Considerable data comprised of ecological spatial datasets and cultural data gathered through extensive community guidance and engagement was compiled and analyzed to identify planning values, objectives and, high value and sensitive areas for protection. Using a systematic conservation planning software (decision support tool) called Marxan with Zones (Watts et al.

2009), the Parties were able to identify areas within the Gundy Complex that were of highest importance from an ecological and cultural perspective based on the planning values described in Section 3.0, and target these high value areas for protection, while other areas of lesser importance were identified as candidate areas for Oil and Gas Activity development (see Appendix 2 for a detailed description of the methodology that was used).

HRFN's Enhanced Management Corridors data set, which identifies HRFN cultural areas was also considered in the establishment of the Protection and Development Zones. Where these corridors overlap with public land, they were largely incorporated into protection areas.

PNG industry tenure holders and other relevant stakeholders were engaged to gather information about their proposed development plans as well as how their operations would consider the values important to BRFN and the Province. This initial sharing of information allowed for the consideration of proposed future developments and mitigation measures being considered and utilized by these companies in the development of the Plan components and establishment of Protection and Development Zones.

Utilizing the information described above, an extensive data-based approach was used to identify areas for protection and development within HV1C Gundy Complex. Where locations of cultural features were known or shared by BRFN members through this process, these features and their associated setbacks were incorporated into the Protection Zone.

A desktop analysis was utilized, informed by various sources of spatial data, including but not limited to:

- BRFN modeling of areas of high ecological and cultural value based on ecological and cultural data, including field verification with BRFN members.
- Vegetation Resources Inventory
- Regional Strategic Environmental Assessment (RSEA) data, including data on those specific Plan values identified in Section 3.
- Information pertaining to the potential type/location of near-term proposed Oil and Gas developments.

As part of the initial evaluation of these spatial outputs, the Parties sought to confirm alignment between areas of proposed protection, the development proposed to provide access to tenured subsurface resources, and those areas indicated to have the highest concentrations of intact identified values (i.e... Old Forests, critical habitat etc.) and/or where these proposed protection areas overlapped with existing non-PNG disturbances.

In doing so, the Parties identified, delineated, and removed areas from within the proposed Protection Zones where there is existing PNG infrastructure that is currently known to be at earlier stages in the development lifecycle (i.e. currently understood to be not appropriate to "wind down"). Further verification will also be undertaken, through implementation of this Plan and in consultation with the oil and gas operators responsible for infrastructure within the Current Industry Maintenance Zone (CIMZ), to determine the current lifecycle stage of said infrastructure, project end of life and restoration timelines, and to better understand any additional spatial requirements for ongoing maintenance of existing infrastructure.

Protection and Development Zones

To meet the requirements of the BRFN IA, two core distinctions are identified within each of the three HV1C areas forming the Gundy Complex:

- The Protection Zone; and
- The Development Zone**,** which consists of the areas set aside to contain future industrial footprint, including New Disturbance resulting from Oil and Gas Activities.

HV1C Conditions for Development (detailed in Section 7) apply to all future Oil and Gas Activities proposed within the Gundy Complex, as do the requirements described in Article 14 of the BRFN IA and established in regulation.

The thresholds, criteria and rules described within the HV1C Conditions for Development are not intended to duplicate existing regulatory requirements, but rather supplement (and in some cases replace) existing rules and regulations, and do not derogate from existing laws and regulations governing Oil and Gas Activities, including the BRFN IA Regulation to the extent it may be amended to implement this Plan.

5.2 Protection Zone

The Protection Zone as shown in Figure 4, is designed to meet the 60% protection target within each of the three HV1C areas, which make up the Gundy Complex, and are areas where no New Disturbance is permitted, and are intended to recover the ecological and cultural Values identified in Section 3.

Activities allowed within the Protection Zone include activities associated with the practice of Treaty Rights, restoration activities and the continuation of existing Oil and Gas Activities. It is anticipated that restoration activities in the Gundy Complex will focus primarily on the recovery of the Protection Zone.

New Disturbance that allows the use of existing Non-PNG Disturbances may be permitted within the Protection Zone, in accordance with the Conditions for Development outlined herein.

5.2.1 Current Industry Maintenance Zone

To protect larger contiguous areas, it was necessary in some places to include the Existing PNG Footprint (Section 4) within the broader Protection Zone. Where possible the planning team endeavored to include only existing PNG activities that are unlikely to be permanent and disturbance that can be more easily restored, including seismic lines and roads to cut blocks that have reached free-to-grow status. However, more permanent roads and pipelines were encompassed by the Protection Zone in some cases. Where active Oil and Gas Activities are co-located within the Protection Zone, these are categorized as being with the CIMZ, where existing activities can continue to be operated and be maintained.

The intention of the CIMZ is to recognize that there are existing industry operations occurring within areas that have been identified as having high ecological and cultural values and that these operations will likely be wound down and incorporated into the Protection Zone over time

as they reach the end of their useful life. Existing infrastructure and wells may continue to operate and produce until they are depleted, and expansions of existing infrastructure may be considered where this is proposed as an alternative to development outside the Protection Zone that would result in less optimal cumulative effects management outcomes (such as the activities outlined in s.7.3 of the BRFN IA).

During the plan implementation, BRFN and BC will undertake an evaluation of this existing infrastructure, in consultation with permit holders as applicable, to identify areas in the CIMZ in which restoration activities can be advanced with the intent to reach a restoration status that supports infrastructure removal from the CIMZ to be protected from future development. This work will be completed with these considerations:

1. Restricting future PNG activities on existing CIMZ seismic disturbances that have sufficient shrub or tree cover establishment and updating the Existing PNG Footprint dataset to acknowledge areas that have been assessed as being Ecologically Recovered or on a trajectory to ecological recovery and will be included in the Protection Zone. Upon the effective date of the Plan, any seismic line within the CIMZ that has not been put to an alternate PNG use will be restricted from future PNG development activities. As assessment is undertaken, BRFN and BC may agree to utilization of seismic lines that are not on a trajectory to recovery in support of future development activities.
2. For more permanent infrastructure, BRFN and BC will engage with the permit holders during plan implementation to assess what the operational timeline for given infrastructure is anticipated to be, including a discussion of opportunities to wind down infrastructure that is in the later stages of the operational lifecycle and the identification of areas that are Ecologically recovered within the CIMZ (and could be converted to the Protection Zone). During the development of the plan a number of candidates for review and potential advancement of restoration were identified and are identified for future reference in Appendix 3.

5.3 Development Zone

The Development Zone is the identified area (Figure 4) where New Disturbance may occur subject to the Conditions for Development in Section 7.

The Development Zone generally prioritizes the inclusion of areas of existing permanent infrastructure, including key common infrastructure and utility corridors.

Figure 4: HV1-C Gundy Complex Protection and Development Zones

6.0 Restoration

Restoration activities are intended to improve the condition of impacted ecosystems within the Plan Area and are an important tool in the recovery of ecological and cultural values to improve ecosystem health, human well-being, and livelihoods of First Nations land users. While this plan focusses on coordinating PNG development and restoration, cumulative effects to Treaty Rights include other activities and industries that impact the landscape. In general, the goal of restoration within the Plan Area is to heal the land and people by taking steps to restore the full mosaic of ecologically important habitats and culturally significant places and resources.

The BRFN IA (s. 7.8 b-g) is focused on prescribing restoration to support resetting the balance between the ability to meaningfully practice Treaty Rights and the development of oil and gas resources. The BRFN Restoration Society (BRRS) is responsible for implementing BRFN-led restoration efforts in the Plan area and the broader Claim Area. This Plan will support the overarching work of the BRRS, which is empowered to coordinate the development of restoration plans and implement restoration decisions throughout the Claim Area and informs other types of restoration activities. Strategic restoration planning will occur through the planning processes established by the BRRS with BRFN, which will take place over a larger area and consider all the HV1s, traplines and WMBs in a way that maximizes the cumulative benefit of restoration activities. This Plan identifies priorities and objectives for this important restoration work and shares this information with the BRRS. This strategic planning work may take several years and in the interim, there are restoration opportunities in the Plan area which may be advanced.

Independently from the above, HRFN may also identify and undertake restoration activities within the Plan Area.

6.1 Restoration Areas

Within the Plan area, pockets of somewhat undisturbed natural habitat areas remain, however, the combined direct and indirect impacts of fragmentation are pervasive. The priorities for restoration opportunities and planning will focus on reversing existing cumulative effects. This may include prioritizing restoration efforts on areas that contribute to poor water quality and create edge effects and restoration that reduces linear disturbance.

The direct and indirect effects of industrial development may have impacted over 41,500ha or ~78.5% of the Plan area[11]. A desktop analysis has supported this disturbance quantification and includes areas of direct and indirect effects from all types of potential disturbance within the Plan area. Field verification is needed to confirm current conditions of these areas, develop site

[11] In the 52,873 ha Gundy complex, 78.5% of the total area is impacted by disturbance, including both physical footprint and areas that may have experienced indirect impacts, resulting in 41,535.1 ha that may require active restoration activities, pending future disturbance condition assessments. Supporting data have been provided to the BRRS.

specific restoration prescriptions, as needed, and support future restoration projects to be carried out by the BRRS, HRFN, PNG industry, and others.

The restoration desktop analysis used available data from the BCER, BC government, Agricultural Land Commission, Open Canada, and BRFN Land Department as well as the RSEA disturbance layer. The analysis included available disturbance information from all industries and uses in conjunction with ecologically relevant information to identify both where direct disturbance has occurred and the direct and indirect effects to ecological and cultural values from that disturbance. This included applying buffers from to disturbance areas to account for indirect or offsite effects to values that may also need to be restored or mitigated. Future analysis of restoration needs and disturbance in the Gundy Plan area will rely on data obtained through field visits and the restoration/development reporting through the implementation of this plan.

Linear features are associated with adverse ecological impacts and the goal for the Gundy is to reduce these features on the land, recognizing that the Plan only applies to Oil and Gas Activity. Field analysis and restoration work are intended to reduce the existing linear density and the conditions for development are intended to reduce new linear disturbance.

There are different types of restoration opportunities and activities that may occur within the Plan area. The Plan focusses on non-regulated restoration of areas of highest value to BRFN and HRFN as well as required restoration related to Oil and Gas Activities.

6.1.1 Non-Regulated Restoration

Legacy oil and gas sites are areas that have been disturbed by historic oil and gas activities but have no current legal obligation for restoration. These sites differ from Dormant and Orphan Sites, described below, in that there is no entity responsible for completing restoration. Legacy Sites may include historic seismic lines, ancillary sites, or other types of oil and gas disturbance. More information on legacy sites is available on the BCER website[12].

To ensure that values are fully restored, effects from industries other than oil and gas (e.g. forestry, agriculture, etc.) which are acting cumulatively to impact a value may be identified and addressed through the restoration that will be directed and led by BRFN and the BRRS, HRFN or another Treaty 8 Nation. BC and BRFN will coordinate and cooperate with other Treaty 8 Nations in an effort to establish similar restoration standards.

6.1.2 Oil and Gas Activities Restoration

The Dormancy and Shutdown Regulation (DSR) sets timelines by which restoration at all dormant and former oil and gas sites must occur. The DSR also sets notification and follow-up obligations to ensure companies (permit holders) communicate regularly with interested persons (as defined by the DSR) about the specified work they have planned to decommission, assess, or restore their dormant and former sites.

In the Plan area there are 175 dormant oil and gas well sites, estimated to make up approximately 252 ha of the restoration opportunity. Each of these well sites require restoration

[12] https://www.bc-er.ca/

in accordance with the DSR and any other relevant agreements and plans. Of these 175 dormant sites, 127 have had some form of closure work completed, in-progress, or planned since the DSR was enacted in 2019. There are currently no designated Orphan Sites within the Plan area. Dormant Sites located within the Plan area are currently under review for potential Priority Site designation. These discussions are ongoing with BRFN and BCER and form part of the recommendation to accelerate site restoration within HV1 as we work to balance decisions on restoration timelines with community goals for standards and participation.

Existing well sites for which a Certificate of Restoration (COR) has been issued by the BCER were restored to the regulatory standard relevant at the time of issuance. Restoration standards are constantly evolving and improving and as such, some older sites that have been restored may require further intervention to ensure a high standard of restoration and minimization of potential impacts. These sites have been shared with the Nations and BRRS for consideration of additional restoration activities in restoration prioritization and planning. These obligations will not be conveyed to the original permit holder but may provide an opportunity in the context of identifying offsetting opportunities.

In addition to the Dormant Sites, some PNG companies have identified associated infrastructure that could be prioritized for field review and restoration planning.

6.2 Restoration Objectives

The goal of restoration activities, regardless of who is undertaking them, is to enhance the ability for the meaningful practice of Treaty Rights and to restore ecological values. The specific methods, goals, and objectives of a restoration project will differ based on where the restoration is occurring, who is leading the work, and what is the preferred end-state for the land. Restoration in the Plan Area should be undertaken in a culturally appropriate way in accordance with applicable laws and regulations. Restoration methods and outcomes ideally deliver both cultural and ecological benefits and considers Indigenous Knowledge[13], where available, as well as best available science and community knowledge.

There are different types of restoration that will be undertaken in the Plan area. Regulated restoration led by industry focusses on returning a discrete area disturbed by a specific activity to an ecologically improved future state. The DSR guides the timeline requirements for sites based on their classification as either an "A", "B", "C", or Priority Sites.[14] In some cases there may be opportunities for permit holders to undertake interim or expedited restoration to support the objectives of this Plan and those of the BRRS.

The Nations are best placed to identify the relevant values at a site when planning for restoration. Any restoration projects undertaken in the Plan Area must ensure that BRFN and HRFN are provided with an opportunity to provide their knowledge and information at all stages of the project from planning through implementation and monitoring. Permit holders and others undertaking restoration in the Plan Area should ensure they identify and consider the

[13] Indigenous Knowledge may only be accessed and used with the permission of the Knowledge Holder and in accordance with any restrictions they may identify.
[14] See s. 16, 17, and 18 of the DSR for specific timelines.

most up to date guidance available from BRRS, BRFN,[15] HRFN and the BCER. This includes consideration of the forthcoming Restoration Framework from BRFN which will outline their approach to achieve five-star restoration and provides an evaluation wheel which considers ecological, cultural, and social values.

The Plan defers restoration prescriptions for BRFN-directed restoration activities to the BRRS, to be undertaken as part of restoration planning throughout the Claim Area and HRFN-directed restoration activities to HRFN as part of restoration planning throughout their territory.

6.2.1 BRFN Identified Restoration Objectives

Holistic and reciprocal restoration led by the BRRS on behalf of BRFN focusses on addressing the multiple stressors and impacts to a value and often includes many different activities and their effects. The goal of this plan is to ensure that the restoration efforts of multiple parties at different scales all contribute to the broader vision for the Plan area. Some of the values of most importance when planning restoration activities are:

- Freshwater quality and quantity including lakes, rivers, streams, springs, groundwater, wetlands (muskegs), ephemeral drainages, agricultural waterways, and riparian areas.
- Moose licks and calving areas.
- Wetted areas that provide important berry and plant harvesting
- Habitat quality, including reducing edge effects, connectivity, and healthy ecosystems.
- Peaceful enjoyment for the practice of Treaty Rights.
- Cultural sites including cabins, trails, traplines, harvesting areas and others as shared by BRFN.

6.3 Restoration Priorities and Schedules

The technical and cultural analyses that supported the identification of Protection Zones has also identified areas where values have been impacted and restoration activities could improve those values. Generally, restoration activities should prioritize work to restore freshwater biomes and habitat connectivity in the Protection Zones over those in the Development Zones.

The scheduling of BRFN-led restoration activities within the Plan area is the responsibility of the BRRS in the context of implementing restoration planning throughout the Claim Area. Priorities and schedules identified in this section are recommended for consideration by the BRRS in the broader planning, which may prioritize restoration in HV1A and HV1B areas first.

The scheduling of HRFN-led restoration activities within the Plan Area is the responsibility of HRFN. When considering offsets and other restoration opportunities, locations within HRFN's identified Enhanced Management Corridors should be prioritized.

Regulated Oil and Gas Activity restoration will adhere to the timelines identified in the DSR, including priority site designations where applicable. In some cases, the PNG industry may identify opportunities for expedited restoration of a site. Where an active, Dormant, or Orphan

[15] https://blueberryfn.com/departments-services/restoration/

Site is located within the CIMZ or in proximity to an important cultural or ecological site, it may also be identified for potential expedited or interim restoration.

Regardless of priority, it is expected that assessments will be carried out by the BRRS and HRFN to determine if there is disturbance within the CIMZ and Protection Zone that is naturally recovering and where further restoration efforts are required. BRRS and HRFN will consider these recommendations to identify the appropriate timing in consideration of other restoration priorities.

Stream crossings typically require intervention, as many extant bridges and culverts do not promote dynamic stream morphology such as meanders and riffle-pool sequences. Where undersized or perched culverts are present, replacement can be a tremendous return on restoration investment. It will be important for those undertaking restoration planning to identify which transportation infrastructure may be a regulatory liability for another entity (including other PNG operators, forest companies, a government or other), and to coordinate planned activities as appropriate. Enhancement to existing transportation corridors for the protection of aquatic ecosystems can include bioswales, infiltration galleries, and bank stabilization with bioengineering; to reduce sedimentation, eutrophication, and contamination of streams, roadside restoration is imperative.

There are many different opportunities for restoration in the Plan area. Plan implementation will include monitoring to confirm if restoration activities are effectively reducing the amount of required restoration over time. Parties who are undertaking restoration in the Plan Area should also look for opportunities to work cooperatively with other restoration projects being undertaken in the area to increase the cumulative value of restoration at the landscape scale and to create more efficient and cost-effective restoration processes.

6.4 Monitoring and Reporting

The results of field verification and other restoration and restoration supporting activities undertaken by BRRS, HRFN, industry, and any other restoration activities permitted or undertaken by BC or BCER will be included in annual reporting of restoration activities to BC and BRFN to support agreement implementation and may be incorporated into broader restoration tracking for the region. This information may also be provided to other parties in accordance with any relevant information sharing commitments. Further details on specific metrics to be provided are available in Section 10 Performance Measures.

7.0 Conditions for Development of Oil & Gas Activities

The following describes the conditions under which any Oil and Gas Activity may be carried out within the Plan Area. These conditions are specific to the Plan Area and are additive to existing requirements. The Province will provide legally effective direction to the BCER, to implement these conditions for development.

These thresholds, criteria and rules described below are intended to supplement (and in some cases replace) existing rules and regulations, and do not derogate from existing laws and regulations governing Oil and Gas Activities, including the BRFN IA.

7.1 Values, Goals & Priority Measures to be Considered in the Assessment of New Oil & Gas Activities

The Values established for the Gundy Complex to support the practice of Treaty Rights are listed in Section 3 of this plan, including the goals and priority measures for each identified Value. It is expected that new Oil and Gas Activities within the Gundy Complex will be planned and carried out with consideration of these Values, particularly in the design and development of new Oil and Gas Activities, including associated assessments, and applications.

7.2 Overview of Approach

Proponents seeking to develop PNG resources within the Plan Area must demonstrate the operational measures they will implement to avoid, minimize, and mitigate the effects of Oil and Gas Activities on the Values and land users that may be exercising Treaty Rights in this area.

7.2.1 Professional Reliance and Results-based Approach

The conditions for development outlined herein align with BC's professional reliance model, by which government relies on qualified professionals to provide sound and impartial advice and recommendations for the purpose of informing decisions in relation to resource management and environmental protection in BC[16].

Qualified Professionals (QPs) and Qualified Environmental Professionals (QEPs) are responsible, within their scope of practice, for ensuring that activities proceed in a manner that will not undermine identified Values. To provide proponents and their QP/QEPs with clear expectations while maintaining space for proponent creativity and QP/QEP autonomy, the conditions for development describe the elements that must be addressed or the outcomes that must be achieved without prescribing how. Appendix 5 provides guidance for proponents and QP/QEPs operationalizing these conditions for specific activities, including guidance and the type of prescriptions that would satisfy condition requirements and expected depth of assessment.

[16] Professional Accountability Policy - Province of British Columbia (gov.bc.ca)

7.2.2 Environmental Management Plan

In advance of preparing or submitting applications within the Plan Area, proponents must prepare and provide the BCER and First Nations with an Environmental Management Plan (EMP). The EMP will describe the best management practices that a proponent will implement, how the proponent will consider the impact of their development activities on the Values and sets out, as a matter of standard practice, how those impacts will be avoided, minimised, and mitigated. The EMP will describe how proponents will achieve the requirements for all Oil and Gas Activities described in 7.5, and operational rules described in Section 7.8.

The EMP, once filed, will be reviewed for compliance with these conditions for development, and subsequently accepted by BCER and First Nations once fully in compliance. The accepted EMP may then be applied in respect of applications within the Plan Area that satisfy all conditions for development, subject to site-specific assessment and mitigation measures that may be required according to specifications laid out below.

The circumstances where site-specific considerations are triggered to supplement a Plan Area EMP to address impacts to Values are listed in 7.6. In these cases, a supplemental site-specific mitigation strategy will be expected to identify any additional considerations and project-specific mitigation measures to address any potential impacts. The Development Categories for proposed new Oil and Gas Activities (Section 7.3) and associated trigger criteria for a site-specific mitigation strategy delineate the cases where an EMP is expected to be sufficient versus when a supplemental site-specific mitigation strategy is required, and possible offsetting proposals. Where a supplemental site-specific mitigation strategy is prepared, it is expected to work together alongside the EMP during construction. The EMP and any site-specific mitigation strategy form an integral part of the cumulative effects management regime specific to an individual company's operations. The operational commitments within these documents must be available, understood and implemented at the field level by construction and operational personnel and contractors.

Proponents will be expected to have QEP/QPs, as applicable, confirm that the measures being implemented, via the Plan Area EMP and/or supplemental mitigation strategy are sufficient for Value protection.

7.3 Development Categories

There are three categories for proposed new Oil and Gas Activities, based on the type of disturbance and the potential for the activity to negatively impact one or more of the Values identified in Section 3.1. They are defined below and illustrated in Figure 5. The intent of these development categories is to set common expectations for industry, BCER and BRFN in the scope of assessment and guide the depth of detailed review and consultation for individual applications. They are:

- Category 1 Developments where no site-specific mitigation triggers (or offsets) apply.
- Category 2 Developments where site-specific mitigations are required to address impacts to Values but no offsets apply; and,

- Category 3 Developments where impacts requiring offsetting cannot be avoided and therefore require both site-specific mitigations and offsetting to manage impacts.

Category 1 Developments:

- Oil and Gas Activities that **may or may not** propose New Disturbance, **and**
- Where a QP/QEP confirms that no site-specific mitigation triggers apply (per 7.5), and therefore no offsetting (per list in 7.6), **and** that the General EMP is sufficient to protect Values.

Category 2 Developments:

- Oil and Gas Activities that **may or may not** propose New Disturbance, **and**
- Where a QP/QEP confirms that one or more site-specific mitigation triggers apply (per 7.5) and site-specific mitigation measures will implemented to address impacts to Values, **and**
- Where a QP/QEP confirms that impacts requiring offsetting (per list in 7.6) will be avoided.

Category 3 Developments:

- Oil and Gas Activities that **do** propose New Disturbance, **and**
- Where impacts requiring offsetting (per list in 7.6) cannot be avoided, thus requiring an offsetting plan along with site-specific mitigation measures in the EMP.

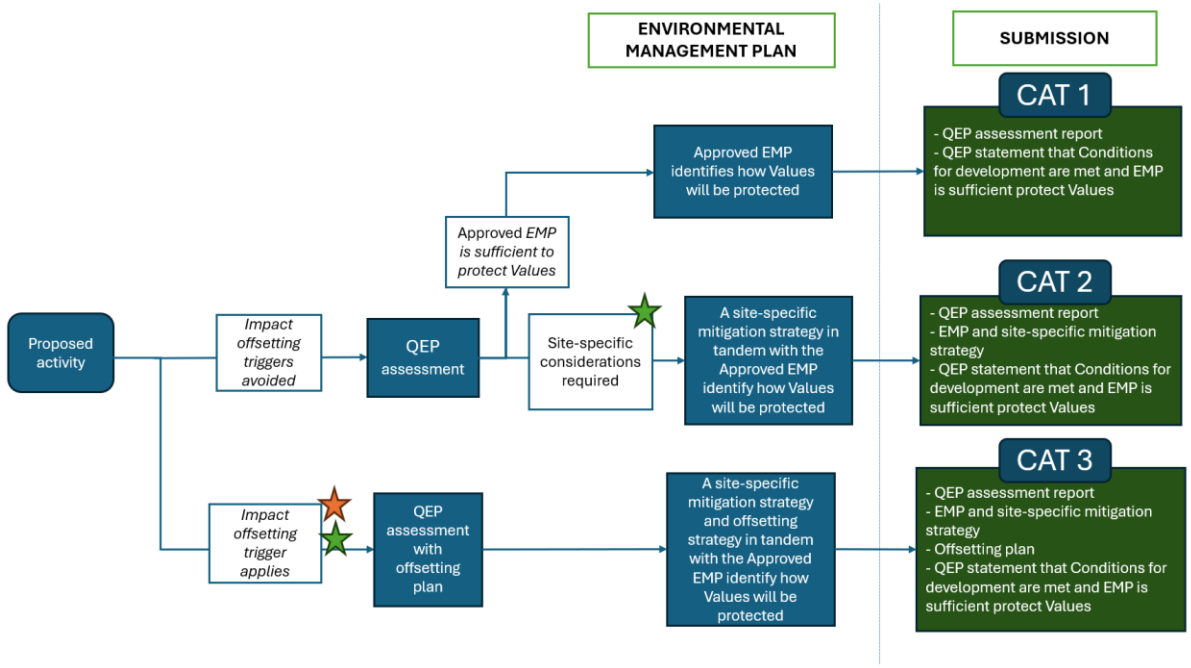


Figure 5: Pathway for category 1 (CAT 1), category 2 (CAT 2), and category 3 (CAT 3) applications in the Gundy Complex. The green star indicates the application pathway where site-specific mitigation measures must be determined (per 7.6) and the orange star indicates the application pathway where offsetting is required (per 7.7).

7.4 General Application Information Requirements

To support robust and efficient consideration of new Oil and Gas Activities within the Plan area during early pre-engagement and in application materials, proponents will be expected to provide the following information as early as possible in discussions, to the extent that it is known or can be estimated:

a. An explanation of the necessity of the proposed activity, and the proponent's self-assessment of development category under s. 7.3.

b. An estimate of expected temporary and permanent changes to the landscape and Values as a result of proposed activities. To comply with this condition, the EMP should include a high-level summary of:

   i. All the activities proposed, including temporary and permanent activities;

   ii. Proposed construction start date(s) and duration, with consideration of how the proposed timing has been influence by, and overlaps with, environmental timing windows;

   iii. A high-level overview of the equipment and personnel that will be mobilized.

c. The proximity of the proposed development to known Values including known occurrences of valued components and cultural, ecological and wildlife habitat features.

d. For activities that will involve New Disturbance, a summary of temporary and long-term changes to the landscape and surroundings including, but not limited to any infrastructure that will be installed, vegetation removal, water use, soil disturbance, changes to viewsheds or soundscapes, and any anticipated changes to access to the local area by land users.

e. Identification, rationale, and status of ecological recovery (if applicable) for the Zone of Influence associated with the proposed activity.

f. Additional information that proponents will need to support pre-engagement discussions as well as application preparation are:

- Any proximate occurrences of identified or known Values.
- Any proximate known occurrences of species or ecosystems at risk.
- Any proximate known ecological, wildlife habitat or cultural features.
- Photographs, as applicable and particularly where physical site conditions differ from expected.

g. Names and scope of practice relevant to the proposal of any QEP/QP (i.e. which QEP/QPs assessed or are expected to assess which elements of the development proposal).

h. Timing and considerations for restoration of temporary disturbances at end of use.

7.5 Environmental Management Plan and Value-Specific Requirements

Through the EMP, and supplemental site-specific mitigation strategies as required, proponents must demonstrate how they will address or achieve the following for Oil and Gas Activities in the Plan Area. Appendix 5 provides guidance to QEP/QPs to meet the expectations articulated; however, proponents are invited to develop creative and innovative measures, provided they achieve the outcomes.

1) **Demonstrate how development activities will be designed to minimize or avoid impacts to Values**. This includes:

a) Process and best management practices used for project siting, including:

i) A description of the considerations that will influence how and where activities are situated.

ii) A description of the process followed, and any QEP/QP guidance considered, in evaluating the feasibility of using existing SLU or consolidating with any other existing disturbance;

iii) Where Oil and Gas activities are proposed in a CIMZ, considerations for minimizing timing, duration and impact of activities and supporting eventual wind down, as applicable.

iv) When it is not possible to use existing SLU or consolidate with any other existing disturbance, describing what process proponents will undertake to confirm with QP/QEP guidance why it is not possible.

b) An overview of how a proponent will consider and determine the Zone of Influence for Oil and Gas Activities.

2) **Commitment to avoid, reduce, and mitigate impacts to Values.** Proponents must outline how the following will be addressed in the planning and carrying out of Oil and Gas Activities. This includes any planning considerations to avoid impacts to these Values and commitments that will mitigate any anticipated and unavoidable impacts:

a) **Old forest and contiguous diverse ecosystems:** demonstrate how activities will avoid intact patches of forest, promote connectivity, and minimize further fragmentation. This includes identifying measures for:

i) Avoiding impacts to Old Forest, recruitment forest, and contiguous diverse ecosystems;

ii) Retaining and improving connectivity between contiguous ecosystems surrounding the project site

b) **Moose and moose habitat:** demonstrate how impacts to moose and moose habitat will be avoided. This includes identifying measures for:

i) Avoiding incursions into high and moderate suitability and capability moose habitat;

ii) Retaining or improving moose connectivity during and following construction, to enable moose to move throughout and between habitats;

iii) Avoiding or minimizing stress and disruptions to moose, including moose-vehicle conflicts.

iv) Maintaining safe access for wildlife along wildlife trails.

c) **Water, aquatic, and riparian habitat:** demonstrate how the health and integrity of aquatic and riparian habitat will be preserved. This includes identifying measures for:

i) Avoiding and mitigating impacts to aquatic and riparian habitat;

ii) Avoiding impacts to water quality and quantity, including the release of deleterious substances into aquatic or riparian habitats.

iii) Selection of crossing methods and the best management practices that will be implemented to ensure protection of aquatic and riparian values.

iv) Any applicable progressive restoration, including timelines, to be implemented at crossings to promote streambank stability and establishment of suitable riparian vegetation.

v) Avoiding and mitigating impacts to surface and groundwater quality during well drilling and operations.

d) **Habitat for grizzly and other fur-bearers:** demonstrate how impacts to grizzly bears and fur-bearers will be avoided. This includes identifying measures for:

i) Avoiding impacts to high suitability or high capability habitat for grizzly bears, fisher, or marten;

ii) Preserving the safe passage of grizzly bear, fisher, and marten;

iii) Best management practices for locating and assessing grizzly bear den sites.

e) **Peaceful Enjoyment of Land and Culturally Important Areas:** demonstrate how impacts to the peaceful enjoyment of land and culturally important areas will be avoided, including identifying measures for:

i) Protecting culturally important sites and maintaining setbacks (the majority of known sites and their associated setbacks have been situated in the Protection Zones and would only be relevant to activities in the CIMZ or in the event that a previously unknown cultural site is identified within Development Zones);

ii) Avoiding visual, noise, and air quality impacts using the mitigation measures identified under item 3 below;

iii) Preserving safe access for Treaty 8 members to culturally important areas and the Protection Zones.

3) **Other mitigation measures** the measures a proponent will implement during construction and operational activities to avoid, minimize or mitigate impacts to wildlife and land users within respect to the following:

a) Light impacts.

b) Noise impacts.

c) Air quality, including odours and dust.

d) Traffic management.

e) Waste management: onsite and offsite management of wastes including measures to prevent materials that may pose a risk to human health from entering the food chain.

f) Prevention or migration of deleterious materials to wetlands: specifically, how will proponents monitor and prevent interaction between hydrocarbons and other materials within shallow subsurface well bores and groundwater.

g) Metal Leaching (ML) and Acid Rock Drainage (ARD) management: a description of how hazards and risks of potential metal leaching or acid rock drainage at well sites, road networks and other activities that are built with, disturb, or occur proximal to acid-generating rocks will be assessed and mitigated.

h) Any other important values that may be identified within the subject area, along with any other standard operating procedures that may be applicable and explanatory.

4) **Restoration:** the measures that a proponent will implement in support of restoration objectives, including:

a) Progressive restoration techniques and typical associated timelines, including but not limited to addressing ecological succession processes and soil health.

b) Commitments and means for consideration and incorporation of Indigenous knowledge in restoration activities.

c) Phases of restoration, including deactivation, decommissioning, investigation, remediation, and reclamation at end of life of pipelines, well sites and facilities; and

d) Management of invasive plants including revegetation practices and seed mixes, strategies to control and reduce the spread of invasive and non-native vegetation.

e) Monitoring and adaptive management

5) **Monitoring and Reporting:** details of how and when the proponent will monitor and self-report with respect to the following:

a) Water quality.

b) Effectiveness of ARD mitigations in areas or for activities with metal leaching or acid rock drainage potential.

c) Unintentional release of wastes.

d) Air emissions and depositions.

e) Wildlife interactions.

f) Condition compliance.

g) Specific results of implementing EMP commitments. Improvements or adjustments to the EMP over time in the context of overall environmental performance.

6) **Safety**: measures the proponent will implement with respect to the safety of land users that may be exercising treaty rights in the HV1 area, including:

a) Check-in procedures.

b) Road safety; and

c) Communication or notification protocols in the event of an emergency.

Unless indicated otherwise, the expectation is that Oil and Gas Activities will be planned, constructed, operated, maintained and restored in accordance with the EMP on file and this will be enforced through the application of relevant permit conditions and compliance/enforcement processes.

7.6 Site-Specific Mitigation Triggers

Site-specific assessment and mitigation measures are required for proposed Oil and Gas Activities where a General EMP is not expected to sufficiently avoid or mitigate impacts to key Values. A site-specific supplemental mitigation strategy, prepared with applicable QP/QEP oversight will be required to articulate additional considerations and/or mitigation measures that will be implemented to address the following:

- Impact Old Forest and/or Recruitment Forest. Proponents must demonstrate how impacts to Old Forest (140+) and Recruitment Forest (120+) have been minimized,

considering the characteristics of the Old Forest/Recruitment Forest that will be impacted.

- Impact critical habitat for federally listed Species at Risk, or habitat that has a reasonable likelihood of supporting provincially-listed Species at Risk and/or Endangered/threatened ecosystems, as identified in the BC Conservation Data Centre. Proponents must identify the species and/or ecosystems at risk and explain how impacts will be avoided or mitigated.
- Impact aquatic habitat (e.g., watercourses and wetlands) as allowable by these conditions, except to facilitate a low risk crossing as defined in Section 7.6.1. The site-specific mitigation measures will demonstrate how impacts to the aquatic feature will be minimized and to characterize the aquatic habitat that will be impacted.
- Impact a Riparian Management Area (as defined in Figure 6), except to facilitate a low risk crossing as defined in Section 7.6.1. Proponents must demonstrate how the riparian and aquatic values will be maintained, and impacts minimized.
- Establish a new wellpad within a Riparian Management Area. The site-specific mitigation measures will include measures to protect aquatic and riparian habitat from inadvertent returns, including both solid and liquid material.
- Impact high suitability/capability moose habitat and/or fisher habitat. Proponents must identify measures to minimize impacts to the moose or fisher habitat.
- Carrying out Oil and Gas activities in high or moderate value moose habitat that may disrupt moose during the caution or critical moose timing window. Proponents must identify measures to avoid, minimize and mitigate impacts to moose during this period.

7.6.1 Low-Risk Crossings

Low-risk crossings where a site-specific mitigation strategy is not required, unless other triggers require a site-specific mitigation strategy, include:

Dry streambed ford:

- A one-time crossing (over and back) in a seasonally dry streambed.
- Where compaction/rutting can be avoided.

Winter crossings:

- Snow fills that are constructed of clean snow and will not restrict water flow at any time.
- Will not result in sedimentation or compaction/rutting.
- Where the aquatic feature is frozen completely or where there is sufficient stream flow and water depth to prevent the ice/snow bridge from coming into contact with the stream bed or restricting the water movement beneath the ice.
- Does not require placing any other materials into the aquatic feature (e.g., rocks, logs, gravel).

Clear-span bridges:

- Where work does not require:

- Realignment of the watercourse
- Placement of fill/structures, including scaffolding, abutments, footings, and rock, below the 1 in 5-year high water mark.
- Installing a culvert (temporary or permanent)
- Pile driving.

AND where:

- a QEP/QP confirms the EMP is sufficient to protect aquatic and riparian habitat, and,
- tree removal (greater than 20 cm diameter breast height (DBH)) can be avoided.

7.7 Impact Offsetting Triggers

Environmental offsetting will be required, in addition to site-specific mitigation measures, to address any of the following impacts:

- New Disturbance within Riparian Reserve Zones (as defined in Table 3) and/or aquatic habitat as may be allowable by these conditions; and/or
- Impacts to Old Forest.

In these cases, offsetting in association with individual applications for Oil and Gas Activities will require an offsetting plan. Details on the offsetting plan requirements are provided in Section 7.9.

7.8 Operational Rules: Setbacks, Timing Constraints, Limits and Activity-Specific Conditions

In addition to the requirements described above, proponents will need to comply with the following operational rules for all activities in the Gundy Complex. These operational rules are additive to existing regulation, policy, and guidance under the Environmental Protection and Management Regulation and BRFN IA Regulation.

7.8.1 Riparian Setbacks

In addition to the Riparian Reserve Zones (RRZ), Riparian Management Zones (RMZ) and Riparian Management Areas (RMA) prescribed in regulation and policy under the Environmental Protection and Management Regulation (EPMR) and the BRFN IA Regulation, the setbacks outlined in Table 3 apply in relation to Oil and Gas Activities carried out within the Plan area. With respect to Table 3:

- "aquatic features" includes S1-S6 streams, non-classified drainages, wetlands (as defined in the *Water Sustainability Act*), and bogs.
- The RMA, RRZ, and RMZ are measured from the greater of the top of bank, 1 in 5-year high water mark, or where there is a distinct shift from aquatic vegetation to upland vegetation.
- As part of the RMZ consideration of material adverse effect, New Disturbance in the RMZ will only be considered when it can be demonstrated that proposed works:

- Cannot be relocated out of the RMZ due to operational or technical constraints as confirmed by a QEP/QP.
- Can proceed without interfering with the integrity of the RRZ or aquatic habitat. *Site-specific mitigation measures are required for New Disturbance that is not a low-risk crossing (as defined in 7.6.1) proposed in the RMZ.*

- New Disturbance is not permitted within the RRZ except to facilitate crossings or in accordance with the activity specific practices detailed in s. 7.8.6 (Geophysical Activities).

For any permanent infrastructure (e.g. well or facility and pipelines that propose trenched construction methods) proposed within a wetland, proponents must demonstrate how the natural flow of water within the wetland will be maintained over the life of the development.

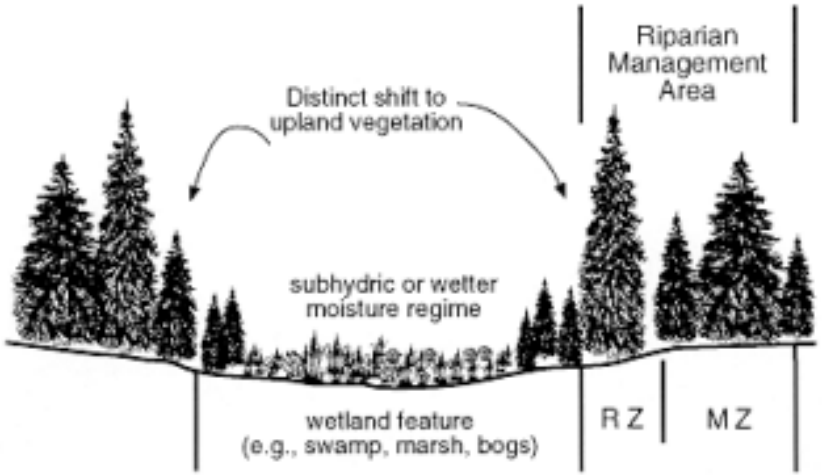


Figure 6: Aquatic Riparian Management Area, Riparian Reserve Zones, and Riparian Management Zones. Figure obtained from the Environmental Protection Management Guideline

Table 3: Minimum expected widths for RMZ, RRZ, and RMA

Feature	Riparian Reserve Zone	Riparian Management Zone	Riparian Management Area
S1-A Stream	100 metres	100 metres	200 metres
S1-B Stream	100 metres	40 metres	140 metres
S2 Stream	100 metres	30 metres	130 metres
S3 Stream	40 metres	40 metres	80 metres
S4 Stream	30 metres	30 metres	60 metres
S5 Stream	30 metres	30 metres	60 metres
S6 Stream and non-classified drainages (that are hydraulically	20 metres	20 metres	40 metres

Feature	Riparian Reserve Zone	Riparian Management Zone	Riparian Management Area
connected to fish bearing streams)			
Non-classified drainages (that are not hydraulically connected to fish bearing streams)	0 metres	20 metres	20 metres
W1 Wetland	50 metres	50 metres	100 metres
W2 Wetland	30 metres	30 metres	60 metres
W3 Wetland	30 metres	30 metres	60 metres

7.8.2 Cultural Setbacks

The following cultural setbacks will apply in the Gundy Complex:

- 1 km setback from First Nations' cabins as established in regulation.
- 500m setback from First Nations' campsites, spiritual and medicinal plant sites as established in regulation.
- 250m setback from mineral licks or wallows and established cultural trails as established in regulation; and
- 1 km setback from First Nations burial sites for all activities including trenchless construction methods.

These setbacks apply where these locations have been communicated directly by a First Nation to the proponent or mapped and provided to the Province in accordance with s. 14.4(c) of the BRFN IA.

7.8.3 New Disturbance within 250 metres of a Protection Zone

For activities proposed within 250 metres of a Protection Zone, proponents must take measures to evaluate and address the following risks to ensure that the Protection Zone is not impacted, following QP advice:

- Windthrow hazard.
- Risk of deleterious materials (dust, sediments, airborne contaminants, etc.) or invasive species introduction.
- Impacts to viewscapes and soundscapes.
- Impacts to hydrological flows to and within the Protection Zone; and
- Erosion and slope instability.

7.8.4 Timing Considerations

In general, construction and maintenance activities should be planned to be carried out at times and during seasons where they will have the least risk of adverse impacts to identified Values. For example, instream activities should be carried out during least-risk windows for fish, per the Environmental Protection and Management Guideline. The priority for most timing considerations in the Plan Area relate to peaceful enjoyment and moose.

Peaceful Enjoyment: In consultation with Nations, proponents should determine, at a site-specific scale, when proposed activities would be the least impactful to land users. For example, the Nations may prefer that construction activities be avoided in late summer where they are proposed near berry picking areas.

Moose: Commencement of construction activities within high or moderate suitability or capability moose habitat should be avoided between May 15 and July 15. Activities that have begun before this period may continue and activities that cannot be avoided may commence, provided applicable mitigations to minimize stress on moose are implemented in accordance with the proponent's EMP or a supplemental mitigation strategy.

Wherever possible, activities with the potential to increase stress on moose within high or moderate suitability or capability moose habitat, should be planned to occur during the low-risk period, between July 16 – November 15.

7.8.5 Limits (New Disturbance Caps)

Subject to confirmation at the Annual Meeting, and upon legal implementation of the Plan, the Plan Area is not subject to the New Disturbance Caps. An annual review of implementation of caps under the BRFN Implementation Agreement must take place at the Annual Meeting under s.7.15 of the Implementation Agreement.

Should any additional development activities be proposed beyond what was considered in developing the Gundy Plan and to which BRFN opposes on the basis of additional New Disturbance, BRFN may trigger a review of the proposed additional activities in relation to the Plan. Those activities will not be permitted under the Gundy Plan until a review is carried out with BRFN, and a determination is made regarding whether the HV1 areas may or may not support the additional development.

7.8.6 Activity-specific practices

For activities that have unique impacts and/or risks to Values, some activity specific practices are required.

7.8.6.1 Pipelines:

1) Incorporate the best available line-of-sight mitigations along linear developments at least every 200 m (or more frequently if the case specific circumstances warrant) and where linear disturbances intersect roads, seismic lines, and electrical transmission lines. Line-of-sight mitigations may include, but are not limited to, tree bending, boulder placement and dog legs.

2) Demonstrate Best Efforts[17] to reduce the width of existing corridors for the full linear length where proposed activities overlap existing rights-of-way.
3) Adopt water and wildlife movement-friendly designs, including, but not limited to avoiding hardscaping (e.g., concrete, asphalt, pavement) when permeable materials suffice (e.g., nature-based solutions), integrate small mammal and amphibian crossing structures into right of way post-construction remediation, integrate beaver deceivers, and ensure ditches and barrows will not entrap wildlife.
4) Above-ground appurtenances must not be located within an RMZ. Riser sites and pigging facilities must not be located within wetlands.

7.8.6.2 Geophysical Activities:

1) Where the program has demonstrated need, new geophysical activities must be planned and carried out in accordance with the following:
    a. Line of sight and access mitigations, including meandering avoidance, tree bending, boulder placement, dog legs and other mitigations as appropriate, must be implemented at minimum at:
        - Intersection points of seismic lines and roads.
        - Intersection points of seismic lines and pipelines.
        - Intersection points of seismic lines and electrical transmission lines; and
        - At regular intervals along the seismic lines.
    b. Industry standard best practices for low impact seismic techniques.
    c. Vegetation should be hand trimmed and compressed under equipment to support regeneration after completion of works and mulch should not exceed 4 centimetres in depth.
    d. Avoid intersections with access routes wherever possible.
    e. Source lines must avoid the RMA established for all streams, lakes, wetlands where operationally feasible. Where source lines are proposed within RMZ they must be appropriately justified (demonstrated need) and require a site-specific mitigation strategy to identify and address impacts to riparian values. Source lines within the RMZ must avoid trees to the extent feasible and use a meandering path to avoid creating lines of sight. Source lines must avoid the RRZ.
    f. Receiver lines within the RMA (RMZ and RRZ) must have demonstrated need, be hand cut, avoid trees (>20 cm dbh), and use a meandering path to avoid creating lines of sight.
    g. Implement a QEP/QP developed restoration plan within one growing season of seismic activities. In addition to the restoration requirements within 7.5(4) the restoration plan for seismic lines must achieve:
        - Recovery of exposed soils within one growing season,

[17] Best Efforts means all reasonable and good faith efforts to achieve the objective.

- Vegetation re-growth to the lesser of: the height of the surrounding vegetation (e.g., in shrub habitat) or moose height (2 m) within five years. If this is not achievable given the vegetation present pre-disturbance, the QEP/QP will provide an alternative performance indicator suitable for the location,

h. Implement a QEP/QP developed success monitoring and maintenance plan to monitor the effectiveness of seismic line restoration works over five growing seasons to determine restoration efficacy. This includes but is not limited to:
   - Noting areas of potential impact, including where vegetation is not regenerating or where predator/recreational access may be of concern.
   - Evaluating restoration work against the following success criteria:
     - Measurable improvement in the ecological condition of the restored,
     - Indication that the restored ecosystem is self-sustaining, and
     - Indication that no further harm is inflicted in the restored area.

i. Where the restoration monitoring effectiveness identifies deficiencies, adaptive management including additional restoration strategies (riparian areas, or areas of concern identified through monitoring) must commence within one growing season of final activities or the identification of need, whichever is sooner. Restoration success and challenges must be documented.

7.8.6.3 Borrow Pits: the following requirements apply to borrow pits within the Plan Area:

- Construction of borrow pits that do not hold water is encouraged. Where pits do contain water, restoration activities with a priority of naturalizing the borrow pit must begin within one growing season of the last use of the pit for fill material.
- Borrow pits must not be located such that there is hydrological connectivity with streams, lakes or wetlands and must be constructed to ensure no compromise to or interference with slope stability or drainage patterns.
- As soon as practicable following the use of the borrow pit to support operations, steps must be taken to recontour the borrow pit and, where feasible, refill with appropriate soil materials.

7.8.6.4 Linear Disturbances in High Value Moose Habitat

Projects that will result in new linear infrastructure (e.g., pipelines, roads) on portions of the CIMZ overlapping or bisecting high and moderate suitability and capability moose habitat will apply measures to maintain or enhance habitat connectivity across the areas of disturbance. In these circumstances, proponents must implement measures to facilitate unimpeded wildlife movement across the linear development at least every 500 m along it.

Opportunities to improve landscape permeability to moose with respect to pipelines and other ROWs include:

a) burying infrastructure and revegetating with a native plant assemblage that provides visual shelter.

b) Installing a wildlife overpass structure where above-ground pipelines or other infrastructure may impede moose passage across the right of way for more than 250 metres.

c) Elevate above-ground pipelines at least 180 cm from the ground to allow for moose passage underneath.

Measures to reduce the potential for moose-vehicle collisions on roads must also be implemented. These may include:

a) Monitoring to produce hot spot mapping for moose crossings and enhancing safe passage conditions at these locations.
b) Establishing forage on roadsides with less palatable species and altering dates and times of ditch cutting.
c) Reducing any roadside mineral licks that attract moose to roadsides – moving them or creating mineral licks off road.
d) Motion detection wildlife crossing signs.
e) Reduced speed limits.

7.9 Offset Considerations

Anticipated development within the Plan Area has been considered in the context of the protection, restoration and conditions for development outlined in this section and in the BRFN IA. As a result, residual offset requirements are not anticipated to be needed where proposed development avoids New Disturbance within RRZs and/or Old Forest (per 7.5).

If careful siting, design of the project activities and application of mitigation measures are not expected to alleviate the risk of impacting RRZs and/or Old Forest, then these proposed developments must propose a compensatory restoration and/or enhancement plan to offset the proposed impact (Category 3).

Offsetting provides proponents with an avenue for moving forward on proposed activities that require incursions into important areas or unavoidable impacts on Values that are not otherwise addressed in these Conditions for Development. Offsetting is a tool available to proponents after all options to avoid, reduce and mitigate have been duly and carefully considered.

The Offset Plan that includes proposed compensatory restoration, and/or enhancement measures, must demonstrate a net benefit contribution to impacted ecological values and be commensurate to the magnitude of impact. Offsets may include conventional restoration-style projects, such as compensating for an incursion into a riparian buffer by restoring off-site riparian habitat at a ratio that accounts for time lags and restoration effectiveness. Creative options for offsetting are also acceptable, such as soil restoration efforts in the Plan Area.

Proponents seeking to carry out development that would fall in Development Category 3 are encouraged to discuss offset opportunities including candidate restoration areas and proposed ideas through early pre-engagement with Nations. The suite of activities that may be considered as potential offsets includes but is not limited to:

a) Restoration activities on legacy disturbances (e.g. restoration of disturbances that do not have a regulatory restoration obligation, such as historic seismic lines; improvement of stream crossings on permitted roads; non-status roads).
b) Ecological restoration projects in partnership with one or more Nation.

A compensatory habitat offsetting ratio must be identified by a QEP/QP based on site-specific conditions. A ratio of 4:1 or equivalent (by area or impact) is recommended as the base level that may result in a neutral level of offset, but determination of the appropriate offset will be subject to the recommendations of the QEP.

The following considerations apply to determination of potential suitable offset opportunities:

a) Offset proximity to potential impact: consideration should be given to maximizing the benefit of the offset relative to the impact and, depending on the specific circumstances, may be more appropriate either closer or further from the location of the development footprint being considered.
b) Offset projects may not need to be "in kind" with the potential impact: if opportunities to positively impact the ecosystem exist that support other values or overall ecosystem health, these could also be evaluated and considered.

8.0 Forestry

This Plan only applies to Oil and Gas Activity. Commercial forest harvesting is not permitted within the HV1 areas that comprise the Plan Area, per the BRFN IA. Timber harvesting activities may continue in woodlot W2102 without additional conditions. Guidance and direction for Forestry activities is otherwise addressed in Article 6 of the BRFN IA.

9.0 Water

BRFN has long expressed to the Province concern with several water quantity and water quality issues, including water over-extraction, with streams and surface water bodies being pumped to low levels, impacting the health of the aquatic environment, including fish and wildlife resources, and impairing the ability of BRFN to utilize the streams and surface water in their traditional territory in a manner promised in Treaty 8.

In response to BRFN's concerns and treaty rights, BRFN and the Province are jointly and cooperatively piloting a quantitative Environmental Flow Needs (EFN) approach that is to be applied to water use authorizations issued by the Province under the *Water Sustainability Act* (WSA) within the 'pilot' area consisting of the Blueberry River, Upper Beatton River, and the Lower Sikanni Chief River WMBs. This new approach, outlined in Schedule P of the BRFN IA, is intended to provide a standard defensible, quantitative framework through which BRFN can have confidence that surface waters are not being over-extracted, the health of the aquatic environment is protected, and BRFN can utilize streams and surface water in their traditional territory in a manner promised in Treaty 8. BRFN endorsed this new EFN approach in November 2023. Upon implementation, the pilot phase of this new EFN Framework will remain in effect

until made permanent or replaced following its collaborative review, which is to be completed before December 31, 2024.

The Dancing Ground portion of the Gundy Complex falls within the Blueberry River WMB, and thus Schedule P's pilot area. However, all proposed water use projects are strongly encouraged to be consistent with the new EFN Framework throughout the entire Plan area.

10.0 Performance Management and Reporting

10.1 Approach

BRFN and the Province will evaluate the level of progress of the Plan in achieving the objectives identified in Section 3 and will review the Plan as contemplated under s. 7.12 of the BRFN IA every five years.

The overall focus of the performance management approach is to answer the following:

1. Is the Plan being implemented as efficiently and effectively as possible?
2. Are adjustments to the Plan required to improve the effectiveness of the measures in meeting the outlined objectives?

The following section outlines guiding principles for tracking both implementation measures and effectiveness measures of the Plan:

- Implementation Monitoring measures the status of plan implementation. This includes considerations such as:
    - Have the measures and actions described in the Plan been implemented?
    - What is the status of implementation, relative to the target implementation timeline?
    - Have the milestones and deliverables identified through the planning process been met?
    - Have the funds and resources allocated to plan implementation been assigned, leveraged, and applied as anticipated?
- Effectiveness Monitoring provides for an assessment of how well the measures and objectives identified in the plan are achieving their intended results and advancing the plan vision. As an example, effectiveness monitoring includes considerations such as:
    - Are the measures, objectives, and actions in the plan providing for recovery of the plan area in a manner that improves the ability to exercise Treaty Rights?
    - Are the measures, objectives, and actions identified in the plan resulting in recovery of identified ecological values?
    - How well is the Plan aligned with and supporting progress towards achieving Old Forests as identified in the EBM Framework, and other targets identified in the

Blueberry River and Cameron River WMB Plans (note: these WMB plans are not yet developed)

- How effective are the "Conditions for Development" in guiding applications to avoid or mitigate impacts on the environment and ability to practice Treaty Rights?

Due to the extensive and pervasive nature of past disturbances, a significant timeframe is expected before appreciable progress towards objectives is likely to be observable. Should implementation or effectiveness monitoring detect issues of concern, a scope of deeper inquiry will be discussed and implemented by BRFN and the Province.

10.2 Constraints and Limitations for Performance Monitoring

It should be noted that data limitations for the current baseline conditions and the capacity to periodically update these data must be considered in identifying how performance will be evaluated over the lifecycle of the Plan. Significant resources will be needed to accurately detect and confirm changes in the condition of the Values that this Plan seeks to address, and it is unclear if these resources will be available.

The WMB planning is more comprehensive and will provide direction for all sectors. WMBs are long-term plans covering a large geographic area and will manage Values over a longer temporal scale. It is anticipated that these attributes of WMBs will allow for a more fulsome linkage between objectives and indicators that can assess trends in improving identified Values. The development of objectives and indicators for the WMBs can consider expanded effectiveness monitoring of the plan with respect to the Values included in HV1 Plans (including this Plan).

10.3 Plan Evaluation and Reporting on Key Indicators

Monitoring and reporting will be undertaken to track progress towards achieving the objectives identified in this Plan and to inform the mandatory three-year review of the Oil and Gas Activity provisions under the BRFN IA under section 7.16 of the Implementation Agreement, with specific reference to 7.16(e), which requires an assessment of progress and effectiveness of any agreed-upon HV1 Plans. In addition, approved HV1 Plans shall be reviewed every five years by BRFN and BC under s. 7.12 of the BRFN IA.

Tracking and monitoring of key performance indicators is critical for ensuring that the plan is achieving its stated objectives and is in alignment with broader environmental, cultural, economic, and regulatory considerations in the region. It provides a systematic and data-driven approach to assessing both progress and effectiveness of plan implementation, for the benefit of current and future generations.

Indicators have been chosen with consideration of achieving future alignment with relevant WMB Plans, such that HV1 Plan indicators may complement those that may likely be used to track progress of WMB Plans.

The tables below provide a suite of indicators that will be used to monitor both the Implementation progress of plan, as well as the effectiveness of the plan in achieving plan objectives.

Protection Zones			
INDICATOR – PLAN OBJECTIVE 1	**Target**		
1. > 60% of each HV1C area is protected from New Disturbance from Oil and Gas Activities	Year 1	Year 3	Year 5
	> 60%	> 60%	> 60%
2. Amount of New Disturbance permitted within Protection Zone.	Year 1	Year 3	Year 5
	0	0	0

Restoration			
INDICATOR – PLAN OBJECTIVE 3	**Target**		
Area (ha) of existing disturbance within the Plan Area assessed and determined whether restoration is required	Year 1	Year 3	Year 5
	500 ha	1000 ha	1500 ha
The distribution and density of linear features (transmission lines, roads, pipelines, and seismic lines) for the Protection Zone (inclusive of CIMZ) and for the Development Zone for each HV1 area.	Year 1	Year 3	Year 5
	Same	Consolidation is evident	Increased consolidation from Year 3
Net change of linear disturbance (km) in each HV1 area	Year 1	Year 3	Year 5
	Same	Same or lower	Lower
Area (ha) with active restoration initiated (by any party). Targets to be informed by BRRS work planning	Year 1	Year 3	Year 5
	TBD by BRRS Workplan		

Development Zones			
INDICATOR – PLAN OBJECTIVE 2	**Target**		
% of new Oil and Gas development applications that demonstrate measures to reduce footprints and consolidate proposed activities with existing disturbance.	Year 1	Year 3	Year 5
	100%	100%	100%
% of compliance verifications showing satisfactory implementation of permits / conditions during construction, operations, and/or de-commissioning.	Year 1	Year 3	Year 5
	>90%	>95%	>97%

Socio-economic Factors			
INDICATOR – PLAN OBJECTIVE 2	**Target**		
The proportion of existing subsurface petroleum tenures within the Plan Area reported inaccessible by the tenure holders.	Year 1	Year 3	Year 5
	0%	0%	0%
Ratio of applications for Category 1 & 2 to Category 3 developments submitted.	Year 1	Year 3	Year 5
	80/20	80/20	80/20

Additional indicators may be identified by BRFN and BC at the time of any assessment process.

The methods required to collect the relevant data to assess progress against the identified indicators above may include field investigations, community engagement, desktop analysis of available information, and additional data collection, as necessary.

Should the monitoring and evaluation process identify critical items to address, BRFN and the Province shall establish a scope of work to conduct a deeper inquiry, including possible additional data collection as needed.

11.0 Implementation

11.1 Roles and Responsibilities

To facilitate the implementation of the Plan, clear roles and responsibilities will be defined for each party involved. An overview of these roles is outlined in this section; however, there may be additional responsibilities that emerge through plan implementation that will be assigned as applicable. The effective date of the Plan will be the date that it is given legal effect through regulation. BC will discuss implementation steps, consider roles and responsibilities for implementation actions and timelines for completion in consultation and collaboration with First Nations.

11.1.1 Government of BC

The Province, as a signatory to the BRFN IA and this Plan, has certain responsibilities in its implementation. These include but are not limited to:

- Giving legal effect to the Plan, including establishing legal protection for the Protection Zone, and directing the BCER to implement plan elements in adjudication of statutory decisions.
- Providing support, resources, and expertise, as applicable, to assist in the implementation of the Plan. Leading joint implementation forum, as applicable.
- Jointly with BRFN, providing recommendations to the BRRS regarding restoration opportunities and priorities in the context of the Plan.
- Jointly with BRFN, monitoring and evaluating the effectiveness of the Plan's implementation and considering consequential adjustments as required. This may include collection and analysis of information to support performance management and monitoring under this Plan.
- Jointly with BRFN, consider how consultation on other natural resource applications within the Plan area may be informed by the Plan in advance of completion of applicable WMB Plans.

11.1.2 BRFN

BRFN will play a significant role in the implementation of the Plan as a key component of the Cumulative Effects Management Regime set out in the BRFN IA. Their responsibilities include (but are not limited to):

- Jointly with BC, developing tools to support application submission, application review and consultation processes for PNG applications within the Plan area.
- Participation in provincial statutory decision-making processes, through consultation on applications, related to Crown authorizations within the Plan area.
- Participation in BRFN-BCER Consultation Process for all proposed Oil and Gas Activities, in a manner consistent with obligations under the BRFN IA and other processes agreed to by BRFN and BCER. BRFN and BCER will consider amendments to current approach to the agreed upon consultation process to support the acknowledgement in s. 7.14 of the BRFN IA in support of expeditious consideration of Oil and Gas Activity applications that are consistent with the Plan.
- Jointly with BC, providing recommendations to the BRRS regarding restoration opportunities and priorities in the context of the Plan.
- Jointly with BC, monitoring and evaluating the effectiveness of the Plan's implementation and considering consequential adjustments as required.
- Jointly with BC, consider how consultation on other natural resource applications within the Plan area may be informed by the Plan in advance of completion of applicable Watershed Basin Management Plans.

11.1.3 BC Energy Regulator

The BCER, as the regulator for Oil and Gas Activities in BC, will have a significant role in implementing the elements of Cumulative Effects Management Regime established under this Plan. This includes:

- Implementing the operational component of the Plan with First Nations in a manner consistent with obligations under the BRFN IA, other agreements with First Nations, direction from Government, and other processes agreed to by First Nations and BCER.
- Review of all submitted Oil and Gas Activity applications within the Plan Area to ensure compliance with the Plan, including its restrictions on New Disturbance within the Protection Zone, goals to wind down and protect activities within the CIMZ and new rules and conditions for development that apply to all new for Oil and Gas Activity development applications, prior to referral to First Nations.
- Jointly with First Nations, develop tools to support application submission, application review and consultation processes for PNG applications within the Plan area to ensure appropriate implementation of the Plan.
- Ensure compliance for with relevant laws, regulations, and policies for new and existing PNG activities as well as other regulated elements of Plan implementation.
- Providing support, resources, and expertise, as applicable, to assist in the implementation of the Plan.

11.1.4 PNG Industry

PNG industry proponents are required to comply with this Plan. Specifically, proponents will be expected to:

- Ensure proposed activities are planned and proposed in accordance with any restrictions and the conditions for development outlined herein.
- Pre-engage with First Nations regarding proposed development activities within the Plan Area.
- Tenure holders and infrastructure owners in the Plan area must make best efforts to meet (at least once per year) with BRFN to discuss annual permitting and construction priorities.
- Submit to BCER and First Nations an EMP, per Section 7, that pertains to their planned development within the Plan Area.
- Collect and provide information as requested to support performance management and monitoring under this Plan.

11.2 Shared Decision-Making

BC and BRFN have acknowledged and agreed on a commitment to advancing new approaches to shared decision-making through the collaborative development and approval of HV1 Plans. This plan represents the shared decision between BC and BRFN regarding future PNG development and restoration activities within the Gundy, Townsend Creek and Dancing Grounds HV1-C Areas. Any new Oil and Gas Activity applications that are consistent with this Plan shall proceed through the BCER-BRFN consultation process.

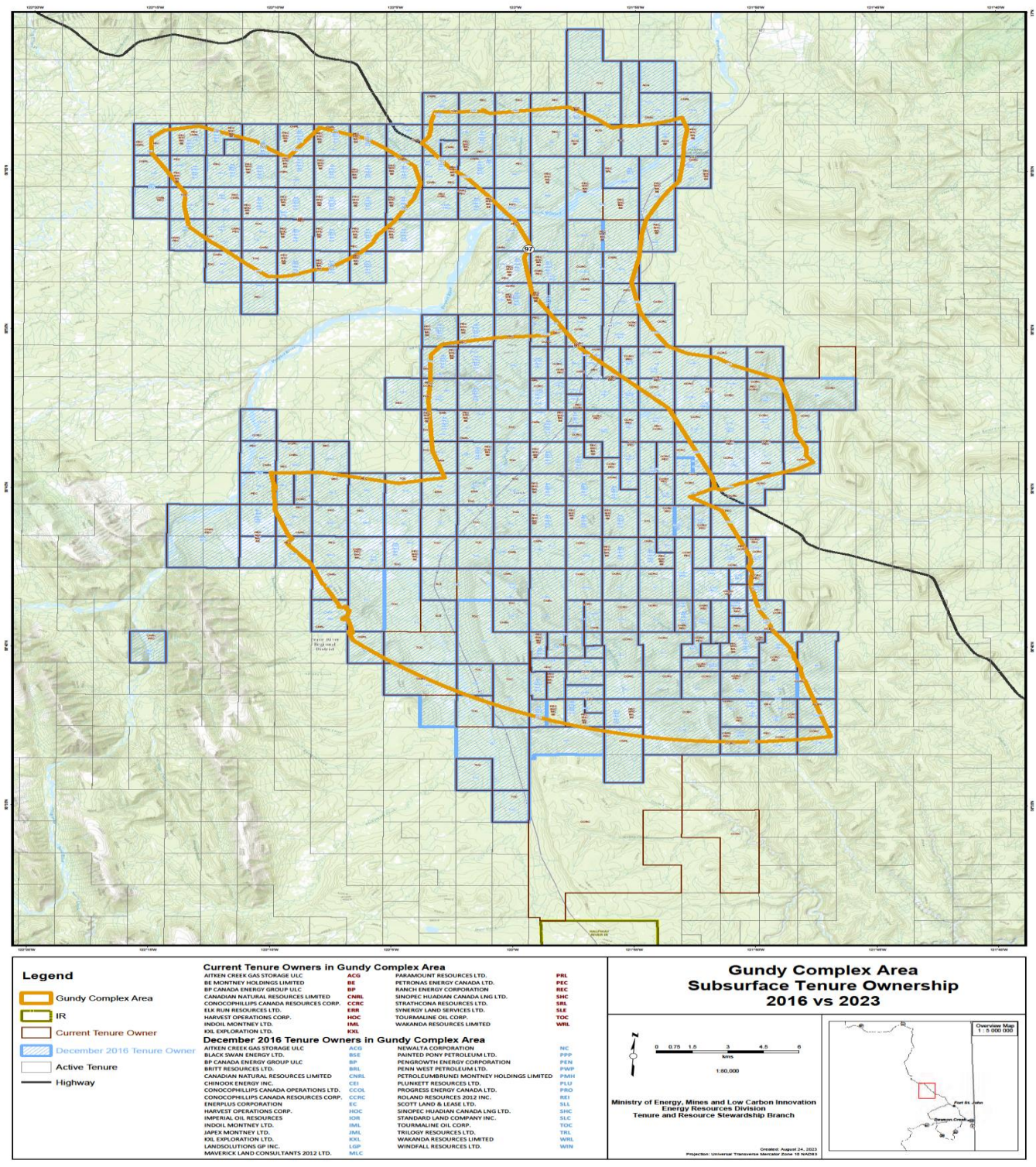
Plan elements may be considered for application to other natural resource sector activities through BRFN/BC consultation on individual proposed activities and through Watershed Basin Management planning to be undertaken for the Cameron River and Blueberry River WMBs.

11.3 Revisions or Amendments to the Plan

This Plan shall be reviewed every five (5) years, or as may otherwise be agreed to by BRFN and the Province, and upon any such review may be revised by mutual agreement between the BRFN and the Province as provided for under s. 7.12.

12.0 Appendices

Appendix 1 Oil and Gas Tenure Holder Map



Appendix 2 BRFN Technical Modelling of High Value Areas

The High Value Areas identified through technical modelling were based on ecological and cultural data analysis as well as consideration of PNG interests. This data provided integral information in the development of the Protection and Development Zones presented within the Plan. This appendix summarizes that work.

Data Layers

As this is the first HV1 plan, there was considerable upfront effort and time to access, compile and review datasets so they could be used to undertake the spatial analysis.

The BRFN planning team considered 29 spatial data layers using Marxan software (see description below), covering five broad categories:

- Land jurisdiction and ownership information, including information about existing PNG tenures.
- Ecosystem information, including base layers for ecosystem information and derived ecosystem value layers.
- Cultural values.
- Wildlife values; and
- Disturbance data inputs, including the existing infrastructure footprint.

Primary data sources used to build the spatial dataset for the Gundy HV1C Plan include the vegetation resources inventory (VRI) from 2021; two key datasets from the Northeast RSEA , including the disturbance dataset and the moose habitat model; the SLU Data Layer plus Schedule I approvals from BCER; a fisher habitat model developed by the government of British Columbia; a digital elevation model; and BRFN's internal cultural use database.

Consideration of the existing infrastructure footprint, including PNG Tenures, existing PNG infrastructure and associated roads used by oil and gas operators, was a key dataset considered by the planning team and incorporated into the Gundy Complex Plan. The planning team conducted an analysis to establish the existing disturbance footprint (Existing Infrastructure Footprint (EIF)) associated with PNG activities within the Plan area. The purpose of developing this disturbance layer was to inform the modeling and analysis work needed to identify the Protection and Development zones in the Plan by identifying areas with relatively lower and higher levels of disturbance. The goal was to accurately classify the EIF associated with all surface disturbance within the Gundy Complex, including oil and gas exploration and production and temporary roads associated with forestry activities (where these were also used for PNG activities). The planning team used multiple data layers to create a single EIF dataset, which was then attributed using a series of other datasets.[1] This process is summarized below.

The EIF dataset was analyzed to distinguish between different classes of existing PNG infrastructure, with the objective of distinguishing high-impact, permanent infrastructure, most appropriately located within the Development Zone, and infrastructure that can either be restored (i.e. seismic lines, road to cutblocks with free-to-grow status) or may not be permanent.

Table 1 *Disturbance Classification Types*

Class	Description
1a	High impact, permanent infrastructure (i.e., larger, midstream pipelines that gather product from numerous locations, roads that are larger than 20 m wide, camps; both within and outside / directly adjacent to Gundy HV1C complex)
1b	Permanent infrastructure with a lower relative impact (i.e., smaller industrial roads)
1c	Newly approved development (treat as per Class 1 but with caveat that it has not yet happened / may be adaptable to meet new plan standards and conditions)
2	Infrastructure that may not be permanent. Infrastructure in this category is not well characterized in the dataset and may be recovering or restorable. Infrastructure in this class could be reclassified through field verification or remote sensing (e.g., LiDAR), in combination with an improved status dataset.
3	Infrastructure that can be restored, primarily seismic lines, roads to cutblocks that have reached free-to-grow status.

Initial Community Guidance and Engagement

BRFN knowledge of the planning areas has been a critical component of the planning process, as protection and recovery of Treaty Rights is an ultimate goal of the Plan. The BRFN IA was written to be compatible with community and cultural processes and protocols to the greatest extent possible; as such, the development of this plan has aligned with these processes and protocols. Community guidance and engagement was integral to setting an overarching approach to the plan, including by identifying values and objectives and high value and sensitive areas for spatial planning. BRFN values are fundamental to the development of the plans associated with the BRFN IA, and community engagement seeks to ensure that the content of these Plans is shaped by BRFN Indigenous knowledge of the planning area.

BRFN undertook extensive community engagement with all five BRFN family groups in both summer and fall of 2023 over multiple weeks.

The initial community engagement session in July-August 2023 included on-territory mapping and field verification of specific sites identified in family-based mapping sessions. During summer engagement, participants confirmed that the values and weightings for the Marxan model were appropriate and that the team should focus on protecting these areas, emphasizing the importance of rivers and streams, riparian areas, wetlands, moose licks, berry patches, medicinal plants, and old forest, particularly mixed wood and white spruce-leading stands. Participants emphasized the importance of protecting the values that support the exercise of Treaty rights for all Treaty 8 Nations.

Extensive materials were prepared to facilitate engagement sessions and record information shared by BRFN.

Data collected during field verification sessions also confirmed spatial classifications used in the VRI_2021_ reflected forests on the ground and aligned well with habitat suitability models for moose and fisher. Data layers were updated to incorporate data shared by BRFN knowledge holders.

Marxan with Zones Modelling

Given the complexities of planning for protection within a heavily impacted landscape and the many overlapping values to be considered within the plan, a systematic conservation planning software called Marxan with Zones (Watts et al. 2009) was used to identify the best areas for protection. Marxan is a decision support tool that can be used to help identify the best areas for protection based on the values captured within these areas, the proximity of areas to development, and the requirement to meet certain spatial targets within each zone. This structured planning software allows for a holistic consideration of the many values required to support Treaty Rights, and to identify the best areas for protection of ecological, cultural and connectivity values in consideration of existing industrial infrastructure, including areas which concentrate development and reduce fragmentation. By weighting different factors appropriately within the Marxan planning tool, the planning team has been able to integrate ecological and cultural values to ensure that the final Protection Zone reflects a strong path forward for the recovery of Treaty Rights and their associated values within this area of Treaty 8 territory.

The planning team employed two approaches to Marxan: (1) a values-driven approach aimed at protecting the highest value ecological and cultural areas while ensuring landscape connectivity; and (2) combining the values-driven approach with industrial interests which pushed Marxan to protect areas further from the EIF while also creating industry corridors with emphasis on the locations of Class 1 disturbance types, particularly concentrations thereof, described in the table above.

Through these approaches, a draft protection areas map was developed, with some principled adjustments made to systematically review and remove the smallest isolated polygons from protection with the goal of creating more contiguous protection zones.

The result was a draft protection/development map identifying candidate areas for protection to be verified with BRFN leadership, community, and knowledge holders.

Community Engagement and Protection Areas Verification

The second community engagement session occurred in early October 2023, which was delayed due to wildfires in the region. This week-long engagement session focused on verification of revisions to the candidate areas for protection resulting from the two Marxan approaches. Community engagement included: meetings with BRFN family groups, community open houses and field- and helicopter-based data verification, including verification of proposed protection and development zones. Extensive materials were again prepared by the Firelight Group to facilitate engagement sessions and record information shared by BRFN knowledge holders.

The specific guidance provided by BRFN families confirmed the importance of protecting high value ecological areas including moose habitat, old forests, water, streams, wetlands and beaver dams in addition to cultural zones of importance. Concern was expressed that any industrial

activity would be allowed to continue or occur within the Protection Zones, with cultural access and restoration seen as the only two permissible activities within protected areas.

For all three of the areas, community members emphasized the importance of ensuring that specific areas of high cultural use and spiritual value (i.e., cabin sites and surrounding areas within 1 km, trails, burial sites), as well as moose licks and moose hunting areas, were included in the Protection Zone. The guidance below is in addition to the general principles and values applied when creating the final zones:

- **Dancing Ground HV1C**:
    - Community members emphasized protecting the areas closest to the Dancing Ground HV1A area.
    - Community members identified specific linear features that occur too close to the Dancing Ground HV1A area, and that should be shut down. Specifically, participants want one of the roads to be closed to industry and for community access only.
    - One pipeline was identified in proximity to the Dancing Ground HV1A area, but community members suggested maintaining this line as opposed to moving it and creating a new disturbance elsewhere.
    - Community members identified that the culturally and ecologically important Blueberry River headwaters are located in this area, and that these headwaters need to be protected.
- **Townsend HV1C:**
    - Community members want to protect as much of this area as possible, including restoring areas that currently have pipelines, to support and recover Treaty Rights practices.
    - The riparian corridor through the west side of this area is especially important as this is relatively intact. Participants identified that the pipelines that cross this expanse of land should be turned off.
    - Likewise, the pipelines that cross the large riparian corridor through the centre of the block should also be turned off, primarily to reduce access to this area and decrease fragmentation between the two ridges and the valley between them, as this area is an important moose hunting area.
- **Gundy HV1C:**
    - Community members want to protect the remaining good habitat in the area and reduce the number of parallel corridors. When possible, participants want the corridors that are most disturbed from PNG or forestry activities located in the Development Zone.

Finalizing the Protection and Development Zones

The draft protection/development areas developed by the BRFN planning team were shared with BRFN community in October and were revised by the BRFN planning team to incorporate the input received. This included changing the maps to ensure consistency with community

input and on-territory data collection and protection of key cultural and ecological values including BRFN cabin locations, values maps, streams and associated riparian areas, forest values, wetlands, mineral licks and connectivity corridors.

PNG operators with tenure in the Gundy Complex were given an opportunity to provide information, including detailed future plans, for consideration by BRFN and BC. This included specific information from Tourmaline, Enbridge, Petronas and ConocoPhillips. In addition, First Nations, including HRFN were provided with the opportunity to identify areas for protection.

Based on collaborative discussions between BRFN and BC, and engagement with industry, additional changes were made to proposed Protection and Development Zones. These included removing particularly small, isolated areas of protection and small isolated areas of development enveloped by protection areas that would otherwise be inaccessible to PNG operators. Detailed engagement was undertaken with individual operators to reconcile cases where development interests were identified to overlap with the proposed protection zones. These locations were evaluated on a case-by-case basis and removed where appropriate based on the specific circumstances. This included consideration of ecological, cultural and PNG interests.

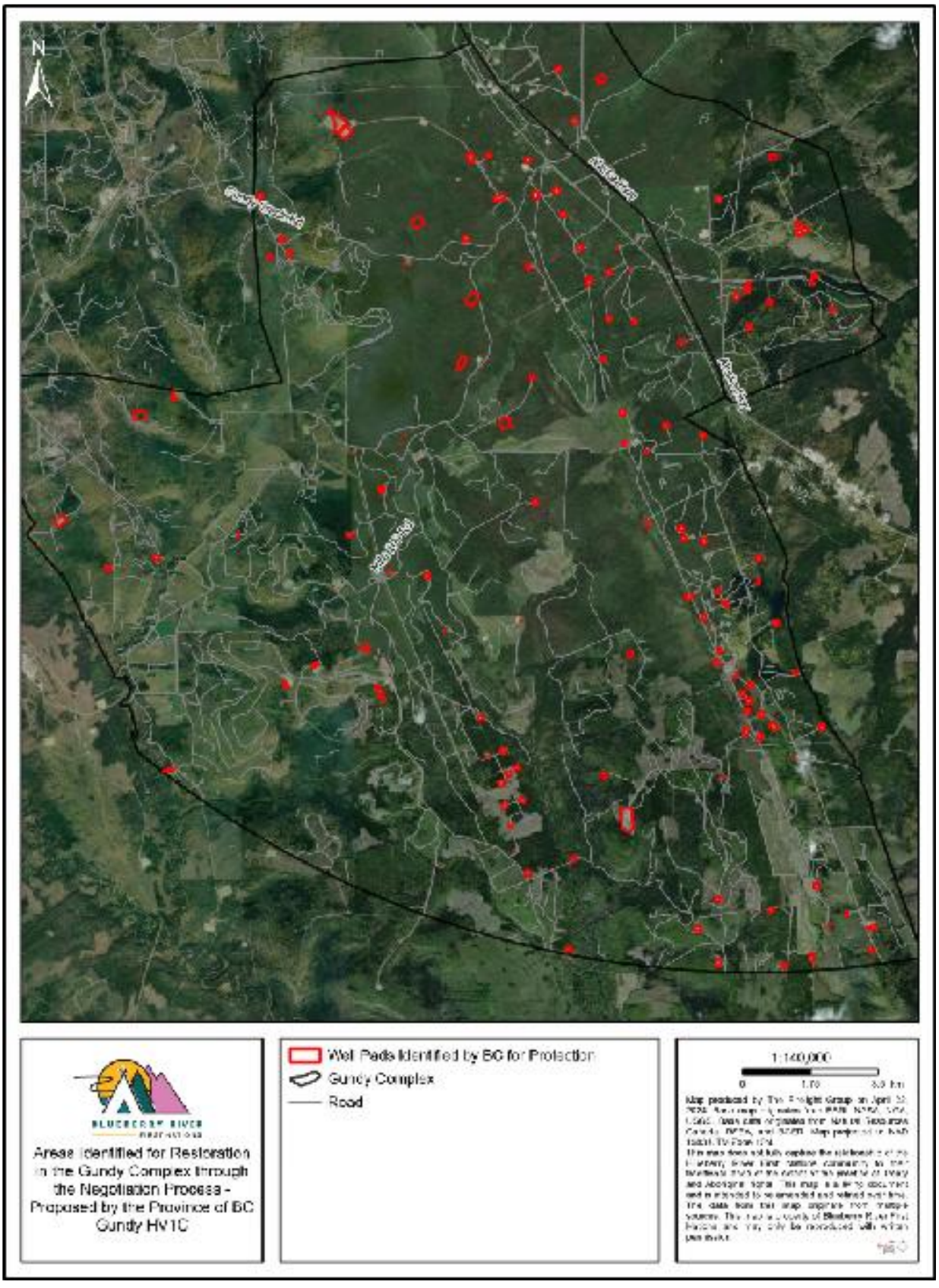
Hexagonal boundaries of the zones were smoothed to further minimize the potential for edge effects resulting from activities that may be proposed near protection boundaries. Best efforts were made to smooth edges based on on-the-ground realities (i.e. following roads or existing disturbances, forest stands, culturally important areas etc.).

A systematic and principled approach was taken to finalize the Protection and Development Zones.

Appendix 3 PNG Disturbances Identified for Potential Priority Regulatory Restoration Activities

During the development of the plan several candidates for review and potential advancement of restoration were identified and are presented in the following maps for future reference.

BRFN and BC will engage with the permit holders during plan implementation to assess what the operational timeline for given infrastructure is anticipated to be, including a discussion of opportunities to wind down infrastructure that is in the later stages of the operational lifecycle and the identification of areas that are Ecologically recovered within the CIMZ (and could be converted to the Protection Zone).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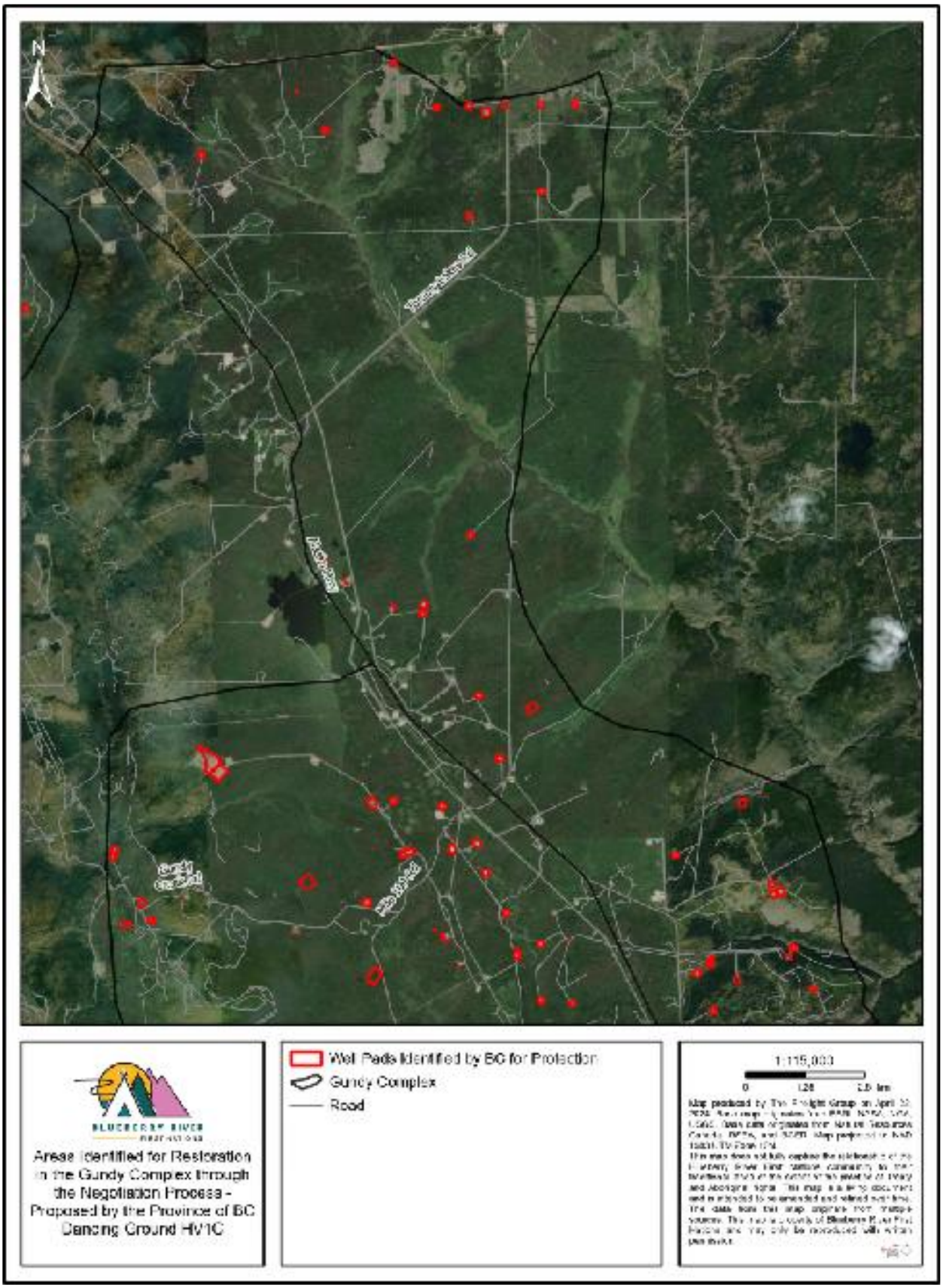
Areas Identified for Restoration in the Gundy Complex through the Negotiation Process - Proposed by the Province of BC Gundy HV1C
Well Pads Identified by BC for Protection
Gundy Complex
Road
1:140,000
0
1.75
3.5 km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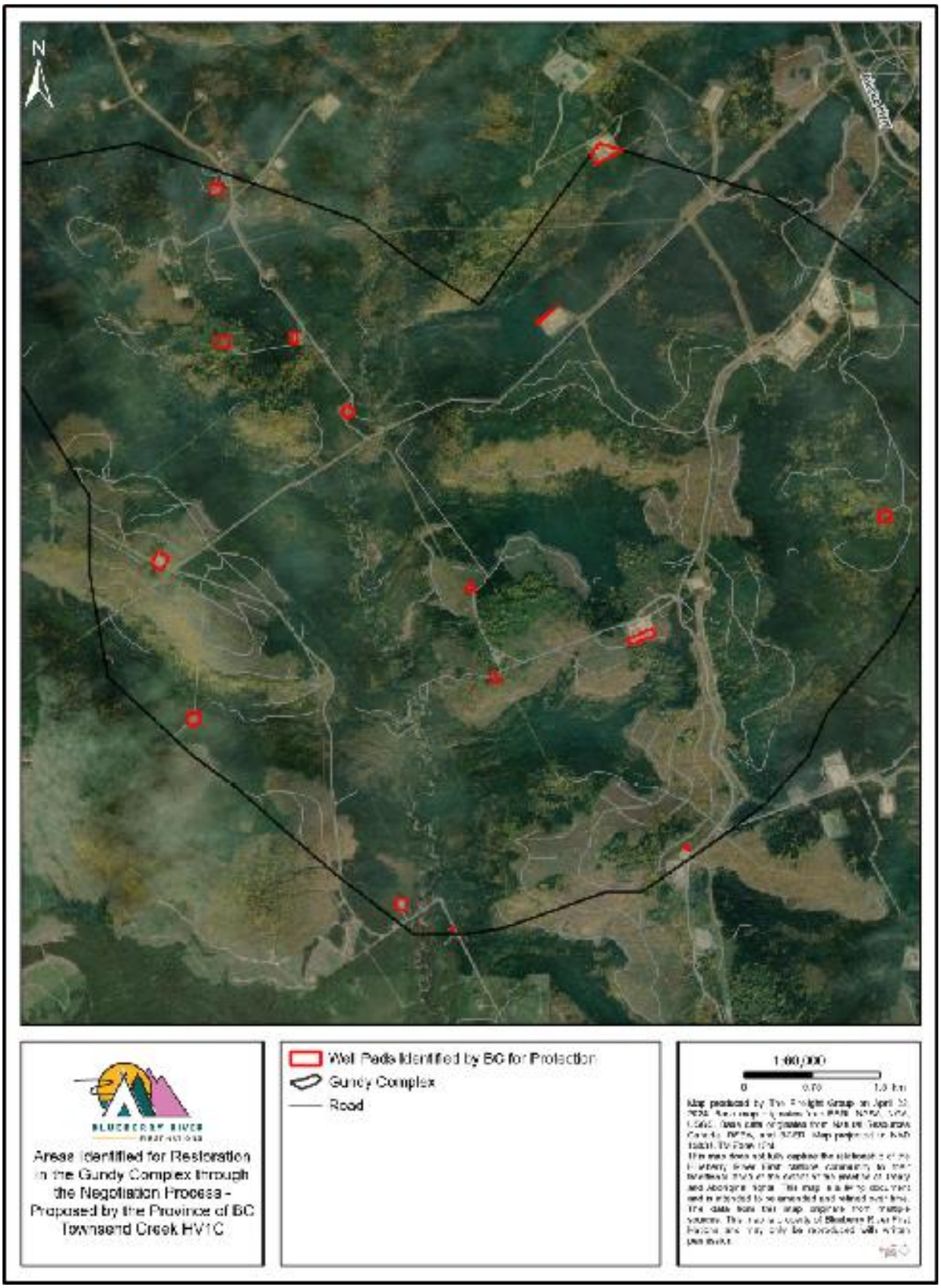
Well Pads Identified by BC for Protection
Gundy Complex
Road
1:115,000
0
1.25
2.5 km
BLUEBERRY RIVER
Areas Identified for Restoration in the Gundy Complex through the Negotiation Process - Proposed by the Province of BC Dancing Ground HV1C


N
Areas Identified for Restoration in the Gundy Complex through the Negotiation Process - Proposed by the Province of BC Townsend Creek HV1C
Well Pads Identified by BC for Protection
Gundy Complex
Road
1:80,000
0
0.70
1.3 km

Appendix 4 HVC-1 Gundy Complex - QEP Guidance for Oil and Gas Activities in the Gundy Complex

These guidelines are intended to supplement the Conditions for Development. They describe information and assessments that proponents should include in a project application to support BRFN in evaluating the potential impacts of a development proposal on Treaty Rights and other cultural interests and put forward strong mitigation and avoidance measures.

1.0 EMP Value-Specific Requirements

The EMP must describe how Oil and Gas Activities should address and be consistent with the following value-specific requirements:

1.1 Old Forests & Contiguous Diverse Ecosystems

To demonstrate how activities will avoid impacts to Old Forest, recruitment forest, contiguous diverse ecosystems, and ecological connectivity the QEP/QP should consider and report on:

a. the extent of these ecosystems relative to the proposed project footprint and zone of influence. This should include:

i. Relevant maps and spatial files (.kmz or shapefiles)

ii. A written description supported by photographs that characterizes the current condition of the Old Forest and Contiguous Diverse Ecosystems. For example: stand age, disturbance history, presence of invasive species, suitability, forest health concerns/signs of ecological stress, and opportunities for restoration.

iii. How the proposed project footprint has been situated to avoid Old Forest and Contiguous Diverse Ecosystems to the extent feasible.

iv. Mitigation measures to reduce secondary impacts to Old Forests and Contiguous Diverse Ecosystems, including but not limited to the spread of invasive plants and land/water contamination.

b. Should an incursion into an Old Forest or recruitment forest be demonstrated as unavoidable, the proponent should provide the following as part of their application for a proposed Oil and Gas Activity:

i. Detailed rationale for the proposed incursion, including a description of what alternative design options were considered to avoid incursions and why these alternatives were not considered feasible.

ii. Strategies to avoid and mitigate impacts through minimizing the extent, impact, and duration of the incursion. This includes but is not limited to impacts from clearing, grubbing, and root compression.

**A site-specific mitigation strategy is required for activities that impact old forest and/or recruitment forest (Section 7.6). Offsetting is required for activities that will impact Old Forest (Section 7.7).*

1.2 Moose and Moose Habitat

To demonstrate how activities will avoid impacts to moose and moose habitat, the QEP/QP should consider and report on:

a. the locations, types, ratings, and condition of moose habitat in relation to the project's Zone of Influence, including:

i. Winter forage and shelter habitat,

ii. Summer forage habitat (including browse intensity),

iii. Mineral licks and wallows (inclusive of a 250m buffer), and

iv. Wildlife trails.

b. Should proposed activities overlap high or moderate suitability or capability moose habitat or otherwise have the potential to adversely impact this habitat, the QEP/QP should consider:

i. Alternative design options to avoid incursions and impacts into these habitats,

ii. Strategies to minimize the extent, impact, and duration of the incursion, and

iii. Demonstrate how relevant provincial guidelines for moose will be incorporated into construction and operations, with particular attention to sensitive timing windows.

***work occurring in high suitability/capability moose habitat requires a site-specific mitigation strategy.*

To demonstrate how activities will retain or improve moose habitat connectivity during and following construction, the QEP/QP should consider:

a. The importance of the location for facilitating moose habitat connectivity relative to the movement barriers proposed by works to identify appropriate mitigation measures. General guidelines that QEP/QPs may consider to reduce movement barriers for moose include:

i. Conduct works during low-risk timing windows for moose (see above),

ii. Avoid temporary workspaces in moose habitat,

iii. Effective line-of-sight management and use of visual barriers at a minimum of every 200 m along a ROW, and where linear corridors intersect,

iv. Restoration of temporary worksites as soon as possible after activities have been completed.

b. Opportunities to improve connectivity for linear disturbances as described in Section 7.8.6.

To demonstrate how stress and disruptions to moose will be avoided or minimized, including due to moose-vehicle conflicts, the QEP/QP should consider:

a. How activities will adhere to current provincial guidance and best practices, including:

i. Development and adherence to an Access Management Plan that satisfies access management guidelines for moose, pursuant to the provincial guidelines[19] for moose and ungulates during industrial development.

ii. Measures to reduce the likelihood of moose-vehicle collisions, including but not limited to signage, speed restrictions, and access control measures during high conflict periods.

1.3 Water, Aquatic and Riparian Habitat

To demonstrate how impacts to aquatic and riparian habitat will be avoided and mitigated during activities, the QEP/QP should consider and report on:

a. Efforts made to locate activities outside of the Riparian Management Area(s) listed in Section 7.8.1.

b. If aquatic features (streams, lakes, or wetlands) and/or Riparian Management Areas overlap the Zone of Influence of the project or activity, then a QEP/QP should provide the following as part of the General Application Requirements in the form an Assessment Report:

i. A map(s) showing the locations and types of aquatic features, Riparian Management Area (Riparian Reserve Zone and Riparian Management Zone) in relation to the project's Zone of Influence,

ii. A written description supported by photographs that characterizes the current condition of the aquatic feature and/or Riparian Management Area.

iii. Mitigation and avoidance measures to ensure that the integrity of the Riparian Reserve Zone and aquatic habitat is maintained.

Subject to the terms in Section.7.6 of the Plan, work occurring within a Riparian Management Area requires site-specific mitigation measures to demonstrate how Water, Aquatic, and Riparian Habitat values will be maintained and impacts will be minimized

c. If a crossing is proposed in a Riparian Reserve Zone and/or aquatic habitat, the QEP/QP should consider and report on:

i. rationale for why the crossing cannot be moved to avoid the Riparian Reserve Zone and/or aquatic habitat

ii. the condition of the aquatic habitat and Riparian Reserve Zone,

iii. The extent of proposed impacts

d. measures to avoid, reduce, and mitigate impacts to aquatic and riparian habitat. This includes:

i. opportunities to use low impact crossing techniques (Section 7.6.1)

ii. how interference with channel morphology and fish access will be avoided,

iii. measures to avoid use of riprap, downcutting, incising, and other hard armouring techniques in aquatic areas.

** New Disturbance is not permitted within the Riparian Reserve Zone except to facilitate crossings or in accordance with the activity specific practices detailed in Section 7.8.6. *New Disturbance within Riparian Reserve Zones and/or aquatic habitat will require offsetting (Section 7.7).*

To demonstrate how impacts to water quality and quantity, including the release of deleterious materials that may migrate to aquatic or riparian habitat, will be avoided, the QEP/QP should consider and report on:

a. If a proposed Oil and Gas Activity has the potential to interact with surface or groundwater the proponent must include a water quality monitoring program as part of the EMP that:

i. Describes the indicators that will be used to assess water quality. In addition to typical water quality indicators (e.g., turbidity, contaminants of potential concern, etc.), the proponents shall request BRFN input into any indicators based on traditional knowledge BRFN wishes to include.

ii. Includes a Trigger Action Response Plan with thresholds/trigger-points that, if crossed, require operations to take precautionary actions, including cessation of activities until conditions recover to acceptable levels.

iii. Identifies the frequency of sampling and reporting, and

iv. Includes a commitment to report the findings of the monitoring program to BRFN/BCER upon request.

1.4 Habitat for Grizzly and Other Fur-Bearers

To demonstrate how impacts to grizzly bears and fur-bearers will be avoided, the QEP/QP should consider and report on:

a. For New Disturbance, conduct a stand-level grizzly bear habitat survey using methods identified in the provincial guidelines (FLNRO 2014)[20]. The results of the grizzly bear habitat survey will be provided in a report that:

i. Describes the survey findings,

ii. Identifies potential impacts of proposed activities on grizzly bear and grizzly bear habitat, and

iii. Describes a robust avoidance and mitigation program as part of the avoidance and mitigation program.

b. A QEP/QP shall assess if high suitability or high capability fur-bearer habitat overlaps the Zone of Influence, including habitat for fisher and marten.

c. If high suitability or high capability fur-bearer habitat overlaps the Zone of Influence, the QEP/QP shall conduct a habitat survey to determine the quality and distribution of habitat for fur-bearers, including denning habitat for fisher and marten. Where impacts are identified, the proponent will include a mitigation and avoidance strategy as part of the EMP that demonstrates how impacts to high value habitat will be avoided.

d. Demonstrates how relevant provincial guidelines for grizzly bear and furbearers will be incorporated into construction and operations.

1.5 Peaceful Enjoyment of Land and Culturally Important Areas

To demonstrate how culturally important sites and their buffers will be protected, QEP/QPs should consider and report on:

a. If the effect(s) of a proposed activity overlaps with cultural use areas or their setbacks, as determined by BRFN during pre-engagement and to the extent allowable in the Conditions for Development:

i. Characterize the area to be disturbed directly and indirectly by the Oil and Gas Activities, including the timing of disturbances (including indirect disturbances such as visual, sound, and odours).

ii. Description of how (where and when) the disturbances may impact the peaceful enjoyment of the land, by land users.

iii. Identify measures to avoid, mitigate or minimize the impacts, including alternative means to provide safe access for land users.

If the proposed development has the potential to interact with groundwater or otherwise introduce contaminants into the food chain, the proponent shall conduct a human health risk assessment. Measures to avoid and mitigate impacts to the health of land uses, as determined in the risk assessment, must be incorporated into the EMP.

To demonstrate how impacts to viewsheds, noise levels, and air quality will be avoided, QEP/QPs should consider and report on:

a. Best Efforts to avoid and reduce sensory disturbances near known BRFN sites, including but not limited to traffic and other noise.

b. Protect viewsheds surrounding cultural use areas by expanding buffers as needed to ensure that unobstructed views from cultural use areas are preserved.

To demonstrate how impacts to Treaty 8 members safe access to culturally important areas and the Protection Zones will be avoided, QEP/QPs should consider and report on:

a. Measures the proponent will implement with respect to the safety of land users that may be exercising in the HV1C area,

b. Measures within a Road and Access Management Plan that mitigate impacts of roads and traffic on identified values, including (but not limited to):

i. Measures to reduce road usage within the Protection Zone

ii. Check in procedures,

iii. Road safety, and

iv. Communication or notification protocols in the event of an emergency.

v.

1.6 Restoration

In consideration of the magnitude of past and ongoing cumulative effects in the Plan area, restoration is expected as part of all new Oil and Gas Activities.

a. Proponents are expected to use evidence-based restoration strategies that support ecological recovery. Where disturbances are prolonged or staged, Interim Restoration strategies should be contemplated.

b. The restoration strategy will contemplate plant assemblages that are:

i. Native species, desirable to BRFN and support exercising Treaty Rights,

ii. Adaptive to future climate change realities,

iii. Fire adapted species that support natural disturbance regimes,

iv. Plant assemblages and planting strategies that foster resilience.

1.7 Invasive Plant Control and Prevention

The strategy to address the spread and control of invasive species that includes, but is not limited to the following:

a. Confirmation that non-native plants are not used for any purpose in the Plan area, including but not limited to an erosion and sediment control measure and in restoration areas.

b. Strategies for reducing the spread of invasive and non-native species within the Plan area. The QEP/QP is responsible for identifying site-specific mitigation measures to prevent the introduction and spread of invasive and non-native plants.

c. Confirmation that herbicide treatments are not be used in the Plan area.

d. Description how any existing outbreaks will be manually removed and restored with native plants. If the outbreaks cannot be removed in a short timeframe (i.e., within one growing season), mapping the distribution and a removal strategy that details the schedule of activities to complete the removal will be included.

2.0 Monitoring and Adaptive Management

The monitoring program shall:

a. Define the role for a QEP/QP, their monitoring activities and schedule for detecting changes to site conditions and impacts to Values throughout the proposed Oil and Gas activities.

b. Describe performance criteria and trigger points that will guide project changes to avoid or mitigate impacts to Values.

The adaptive management program shall outline:

a. The types of effects or trends that adaptive management will be able to detect and respond to, and a schedule for when these effects/trends will be evaluated for possible adaptation.

b. Areas with a high *consequence* for deleterious environmental outcomes, or uncertainty around the effectiveness of the proposed mitigation measures. High risk or high uncertainty components of an application require definition of feasible alternatives to support an adaptive management program in advance of works.

c. A strategy to monitor the effectiveness of the adaptive management program. Industry is responsible for maintaining records of the adaptive monitoring program and its findings.

Appendix 5 Glossary of Terms

Applicable Law: Means all statutes, laws, rules, orders, directives and regulations in effect from time to time and made by governments or their agencies with jurisdiction over the Claim Area;

BCER: The British Columbia BC Energy Regulator.

BRFN: Means the Blueberry River First Nation Implementation Agreement.

Certificate of Restoration: A document issued by the BCER, certifying that an abandoned wellsite has been restored to meet regulatory requirements.

Conditions for Development: Conditions that must be considered by PNG industry for any proposed Oil and Gas Activity within the Gundy HVC1 Plan area. These conditions apply in addition to provisions of the BRFN IA and any other requirements applying to new Oil and Gas Activity applications.

Contiguous Diverse Ecosystem: A contiguous group of ecosystems (forest, non-forest, riparian, lakes) that are sufficiently buffered from anthropogenic edge such that they are sheltered from anthropogenic edge effects.

Cumulative Effects Management Regime: Means timely and enforceable regulatory and legislative mechanisms and processes (including, without limitation, restoration, resource management commitments, as identified in ARTICLE 14 of the BRFN Implementation Agreement, that are and will be developed to assess the cumulative impact of industrial development on BRFN's Treaty Rights.

Current Industry Maintenance Zone: Areas overlapping the SLU Data Layer co-located in a Protection Zone, as defined in Section 5.0 of the Gundy HV1C Plan.

Development Zone: Area(s) located outside the Protection Zone and is the area within which New Disturbance can occur subject to the Conditions for Development.

Dormant Site: A well site that does not meet a threshold of activity for five consecutive years or does not produce for at least 720 hours a year.

Ecological Recovery: The long-term re-establishment of ecological structure, function, and stability to conditions that support BRFN Values and the practice of Treaty Rights.

Ecosystems at Risk: An extirpated, endangered or threatened ecosystem or an ecosystem of special concern (formerly called vulnerable). And/or ecological communities identified by the BC Conservation Data Center as blue listed (special concern) or red listed (at risk of being lost – extirpated, endangered, or threatened).

Ecosystem Based Management (EBM): Means that adaptive approach to managing human activities described in Schedule "C", which seeks to ensure the coexistence of healthy, fully functioning ecosystems and human communities and the intent of which is to maintain those spatial and temporal characteristics of ecosystems such that component species and ecological processes can be sustained, and human well-being supported and improved.

Ecological Recovery: A formerly disturbed area presents signs of natural regeneration and is expected to continue ecological recovery in the absence of additional disturbance. Evidence of ecological recovery includes the presence of native vegetation. The presence of non-native

vegetation does not preclude an area from exhibiting evidence of ecological recovery. The QEP shall assume evidence of ecological recovery is present unless it can be demonstrated otherwise.

Edge Effects: refers to changes in a population or community along the boundary of a habitat.

Environmental Protection Activities: means activities related to site remediation, erosion control and/or prevention of or response to product release as it pertains to potential environmental impacts.

EPMR: means the Environmental Protection and Management Regulation, B.C. Reg 200/2010.

Forest Ecosystem: Inclusive of Old Forest (defined as 140+ year old stands), recruitment forest (defined as 120+ year old stands), young forest, and shrub habitat (e.g., willow stands) that may transition to forested ecosystems if given sufficient time to recover.

Health and Safety Activities: Means bridge replacement, road realignment or intersection upgrades specific to improving safe travel or use of roads and/or prevention of or response to product release as it relates to risk to people or communities, road resurfacing, sealing or coatings, culvert replacement and beaver dam removal, where flooding or road use impacts are anticipated, replacement of existing livestock fencing, nuisance wildlife measures, landslide repairs, scientific fish collection and amphibian salvage for road and access related purposes.

HV1: Means the high value areas with the boundaries identified on Schedule "B".

HV1 Plan: Means a restoration and development plan in respect of HV1 and made pursuant to this Agreement.

Interim Restoration: Means restoration plans and/or activities established for the time being, pending a permanent arrangement.

Interior Forest: A contiguous forested area that is sufficiently buffered from a naturally occurring or anthropogenic forest edge such that it is sheltered from edge effects. Edge effects include, but are not limited to, habitat fragmentation, invasive species dispersal, and changes to soundscapes or viewscapes.

Legacy Sites: Areas that have historically been disturbed and for which there are no responsibilities for restoration.

Linear Disturbance: Means, subject to any and all limitations and exclusions provided for in this definition, any seismic line, road or pipeline on Crown land within the Claim Area which is regulated by a Provincial decision maker under the Energy Resource Activities Act, S.B.C. 2008, c. 36 and/or for which the approval of a Provincial statutory decision maker under the Energy Resource Activities Act is required for installation and/or operation.

Member: Means any person who is a "member of the band" (as that phrase is defined in the Indian Act, R.S.C. 1985) of BRFN.

Natural Habitat Mosaic: A contiguous group of ecosystems (forest, non-forest, riparian, lakes) that are sufficiently buffered from anthropogenic edge such that they are sheltered from anthropogenic edge effects.

New Disturbance: Means, subject to any and all limitations and exclusions provided for in this definition, all (and only) Oil and Gas Activity-related disturbance on Crown land outside of any permitted and existing PNG footprint as identified in the SLU Data Layer, including restored wells with a certificate of restoration but excluding: (i) restoration activities; (ii) Health and Safety Activities; (iii) Environmental Protection Activities; (iv) electricity transmission and distribution line rights-of-way outside of Area 1 (as described in Schedule M of the BRFN IA) or inside Area 1 with the consent of BRFN; (v) new operational activities within existing oil and gas related disturbances or other permanent road structures (including, without limitation, new wells on existing pads and pipelines within established rights of way); and (vi) conversion of non-status roads to oil and gas roads, so long as such conversion does not include any new construction or road modification.

New Linear Disturbance: Means any Linear Disturbance permitted after the Effective Date in respect of Oil and Gas Activities which is not over, under or immediately adjacent to an existing Linear Disturbance or permanent road infrastructure.

Non-PNG Disturbance: Means an existing hard surface disturbance (for clarity, this includes roads, borrow or aggregate locations, and other semi-permanent disturbances, but does not include cutblocks) that is not reflected in the SLU Data Layer because it was permitted and constructed under a statute other than the ERAA.

Non-Status Road: Means an existing road, or portion of an existing road, that is currently being used for oil and gas purposes and that: (i) will be maintained to facilitate the carrying out of Oil and Gas Activities; and (ii) is not already required to be maintained under the Energy Resource Activities Act S.B.C. 2008, c. 36 or other Applicable Law.

Oil and Gas Activity: Means those activities related to conventional and unconventional oil and gas exploration and development (including coal bed gas, hydrogen development, developments aimed at capturing carbon and other forms of exploration and development that may evolve over time related to the presence of subsurface PNG deposits) on Crown land within the Claim Area for which the approval of a Provincial decision maker is required, and includes, but is not limited to, seismic operations and operations on or at well sites, access roads, pipelines and processing facilities.

Old Forest: Pursuant to RSEA1, Old Forest includes stands greater than 140 years old.

Orphan Site: Means wells, facilities, pipelines and associated areas where an oil and gas companies are declared bankrupt or cannot be located.

Treaty 8 First Nations: Means the Doig River First Nation, Fort Nelson First Nation, Halfway River First Nation, Prophet River First Nation, Saulteau First Nations, West Moberly First Nations and McLeod Lake Indian Band or any of them.

Party: Means the Province or BRFN, as the context requires.

PNG: Means petroleum and/or natural gas.

Priority Site: Means a dormant site or former site identified under section 5 of the Energy Resource Activities Act Dormancy and Shutdown Regulation, S.B.C. 2008, c. 36, ss. 106, 111.1 and 112.

Protection Zone: The zone within the Gundy HV1C Plan outside of the SLU Data Layer where no New Disturbance is permitted. This area constitutes over 60% of each HV1C area.

Qualified Environmental Professional (QEP): As defined in Section 3.1 of this document.

Qualified Professional: As defined in Section 3.1 of this document.

Reciprocal Restoration: Mutually reinforcing restoration of land and culture such that repair of ecosystems contributes to cultural revitalization and renewal of culture that promotes restoration of ecological integrity.

Restoration: Means the intention and/or actions taken to improve the condition of impacted ecosystems within the Plan Area and are an important tool in the recovery of ecological and cultural values to improve ecosystem health, human well-being, and livelihoods of BRFN community members.

Restoration Prescriptions: A set of conditions under which restoration activities are to occur to meet the Plan's restoration objectives.

RSEA: The Regional Strategic Environmental Assessment (RSEA), undertaken through the Environmental Stewardship Initiative (ESI) and which is currently leading various cumulative effects projects in the Northeast region. RSEA is a collaboration between seven Treaty 8 Nations and the Province of BC.

SLU Data Layer: The surface land disturbance data layer prepared as of the Effective Date by the BCER, and which may be subsequently updated pursuant to Section 14.7(c) of the Implementation Agreement.

Soundscape: The sounds experienced by people and wildlife on a landscape, including the volume, frequency, and duration of sound disturbances.

Species at Risk: An extirpated, endangered or threatened species or a species of special concern (formerly called vulnerable) and/or species identified as red- or blue-listed by the BC Conservation Data Center, or designated as a species at risk (extirpated, endangered, threatened, or special concern) under the Federal Species at Risk registry.

Third Party: Means any individual or entity other than the Province and BRFN, including without limitation the Other Treaty 8 First Nations, any other First Nation, partnership, corporation, trust, unincorporated organization, union, government and any department and agency thereof and any heir, executor, administrator or other legal representative of an individual.

Trapline Areas: Means those areas being with the boundaries identified in black on Schedule "G" of the BRFN IA.

Treaty 8: Means Treaty 8 (1899) being a treaty within the meaning of Section 35 of the Constitution Act, 1982 (being Schedule B to the Canada Act 1982 (U.K.), 1982, c.11. reprinted R.S.C. 1985, App. II).

Treaty Rights: Means the asserted and established treaty rights of the subject First Nation.

Values: All aspects of the Gundy Complex that support the practice of Treaty Rights. This includes, and is not limited to, Forest Ecosystems, moose and their habitat, water, aquatic

ecosystems (including wetlands and muskeg), riparian habitat, peaceful enjoyment, fur-bearers and their habitat, and Ecosystems at Risk.

Viewscape: The visual characteristics of a landscape, as experienced by wildlife and people. This includes views unhindered by disturbance.

Zone of Influence: The area potentially affected by a proposed Oil and Gas Activity, including the direct footprint, as well as areas outside the direct footprint affected by air contaminants, noise, light, and wastes. The Zone of Influence must be justified by the QEP and cannot be less than a 250 m buffer surrounding the proposed footprint.

SCHEDULE 5

Halfway / BC Landscape Planning Pilot

June 19, 2024

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1.0 Purpose

This Landscape Planning Pilot (LPP) is between Halfway River First Nation (HRFN) as represented by Chief and Council and His Majesty the King in right of the Province of British Columbia (BC), as represented by the Ministry of Energy, Mines and Low Carbon Innovation (EMLI) and the Ministry of Water, Land and Resource Stewardship (WLRS), collectively the "Parties". The purpose of this LPP is to pilot operational implementation of HRFN's Adaptive Management Program and Plan (AMPP) for oil and gas development over discrete areas. This pilot constitutes the initial step toward the eventual implementation of the AMPP as HRFN's vision for a future state of a culturally based, legally enforceable, land-use decision making plan that operates at landscape and operational levels on Crown lands within the entire AMPP administrative area. The AMPP forms Appendix 1 of this LPP.

The AMPP seeks to balance HRFN's exercise of treaty rights and the healing of the environment with a sustainable regional economy. It identifies objectives, indicators and targets based on Dunne Za laws and HRFN values as they relate to the land. The indicators and targets have been developed to measure the current condition of the land base. The indicators represent defined values with associated targets that represent the outcome of a desired future condition. The AMPP is currently under development to conduct spatial analyses that will further define current and desired future conditions, upon which the results will inform management direction to guide land use activities and restoration planning. The LPP focuses on a set of operational measures for oil and gas activities while the finalized AMPP will, in addition to operational measures, focus on strategic management direction for all industrial related activities.

The LPP will pilot the AMPP in the context of oil and gas development by implementing its operational elements to promote and support the ability to meaningfully practice Treaty 8 Rights and facilitate the ongoing evolution of the AMPP for broader implementation including across a larger area and with respect to all industrial activities, in a manner that respects other land use planning initiatives underway with Treaty 8 Nations. It describes the key elements of the AMPP that will be implemented while baseline information continues to be gathered and the supporting programs are more fulsomely developed and implemented.

2.0 Geographic Area

The HRFN AMPP Administrative Area encompasses Indian Reserve #168 and adjoining lands, which constitute a small segment of a much larger area where HRFN members have practiced their way of life since time immemorial. The LPP targets two distinct areas within the AMPP Administrative Area: (1) LPP Area #1, which is the same area that is covered by the Blueberry River First Nations' (BRFN) Gundy Complex HV1 Plan (Gundy Plan) Area; and (2) LPP Area #2 (Figure 1). Until planning is completed for the remainder of the AMPP Administrative Area, oil and gas development will only be considered for LPP Area #1 and Area #2 in accordance with this LPP.

LPP Area #1

Over LPP Area #1, the HRFN AMPP is being implemented alongside the BRFN Gundy Plan. The Gundy Plan covers 52,873 ha situated north of HRFN's IR #168, within the Cameron River and Blueberry River Watershed Management Basins. The provisions of both plans will apply to new oil and gas

activities within the Gundy Plan Area, which includes the Townsend Creek, Gundy and western Dancing Ground High Value 1 areas.
Previous oil and gas development within LPP Area #1 includes approximately 4,330 ha of development footprint, which is summarized by activity type in Table 1.

Table 1: Total existing disturbed area by oil and gas activity type within the LPP Area #1

PNG Activity Type	Total Existing Disturbed Area (ha)
Wellsite/Facility	715.8 hectares
Pipeline	1,173.3 hectares
Road	583.5 hectares
Geophysical	1,342.0 hectares
Related Activities	515.7 hectares

LPP Area #2 (Tsaa Dunne Za and area southeast of HRFN IR #168)
LPP Area #2 covers approximately 91,208.7 ha adjacent to HRFN's IR #168 within the Farrell Creek, Lower Halfway, Cameron River and Cache Creek Watershed Management Basins. Over this area, the HRFN AMPP replaces the BRFN Implementation Agreement Article 14 Rules to the extent that they are addressed within this pilot.

Previous oil and gas development within LPP Area #2 includes approximately 2,731.3 ha of development footprint, which is summarized by activity type in Table 2.

Table 2: Total Existing Disturbed Area by Oil and Gas Activity Type within LPP Area #2.

PNG Activity Type	Total Existing Disturbed Area (ha)
Wellsite/Facility	319.4 hectares
Pipeline	165. 7 hectares
Road	184 hectares
Geophysical	1,968.6 hectares
Related Activities	93.6 hectares

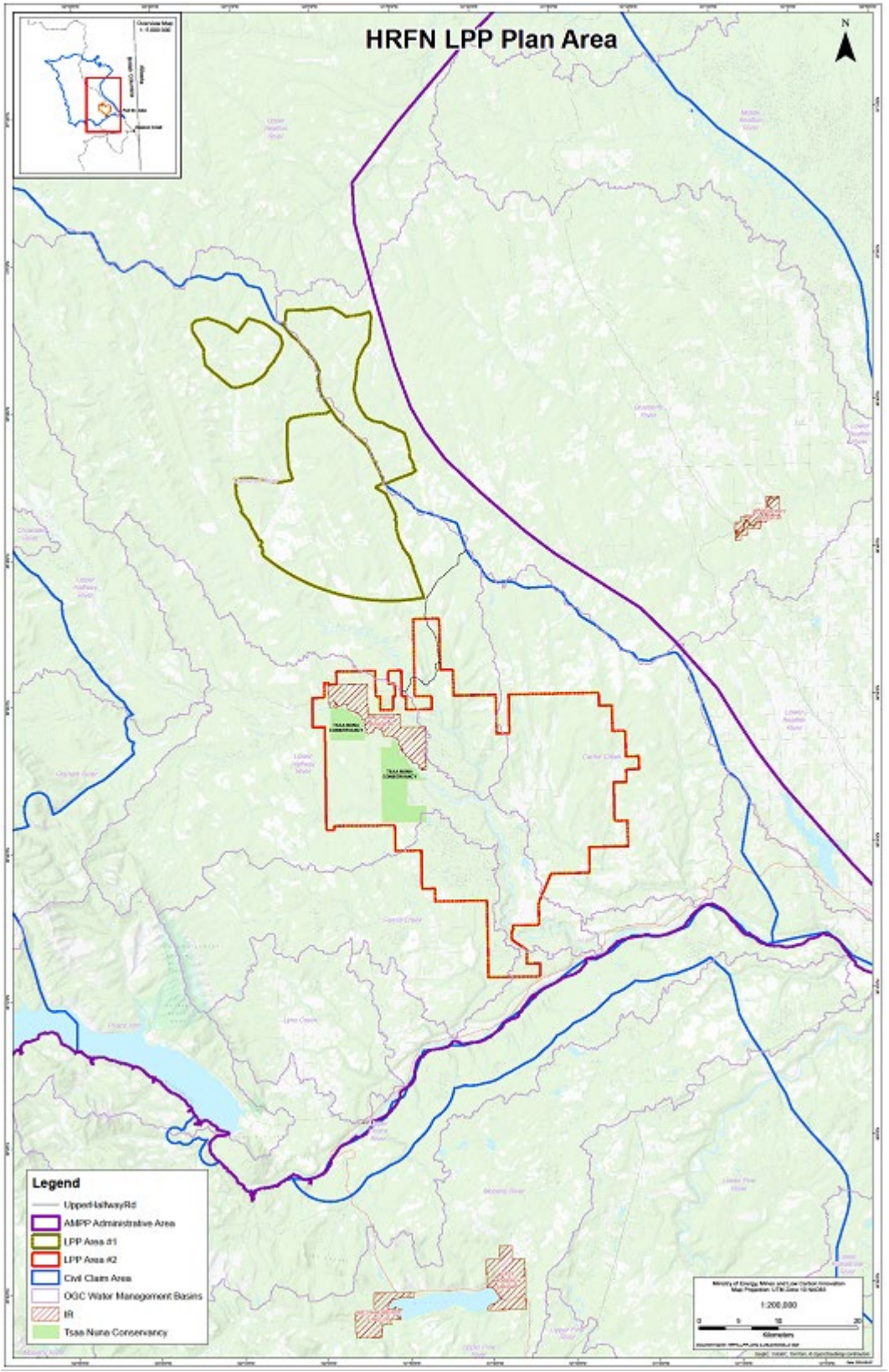

Figure 1: Areas covered by the LPP.

3.0 Cumulative Effects Goals

The AMPP integrates HRFN's current views for addressing the cumulative effects of industrial development with the values that HRFN identifies as important for the exercise of treaty rights now and for future generations. The LPP approach incorporates protection, restoration and development planning/operational measures that will form the interim cumulative effects framework for oil and gas development while the AMPP continues to evolve and be implemented more broadly across sectors and over the AMPP administrative area. The AMPP describes HRFN's vision and principles for land and cumulative effects management in section 3. Section 6 further describes HRFN's key values that support the traditional way of life and includes primary objectives for each value.

The LPP is focused on initial implementation of the AMPP over narrow spatial areas and a single industrial activity (i.e., oil and gas development), thereby limiting the ability to effectively assess and manage cumulative effects of industrial development overall. However, it contains operational measures that are intended to address the cumulative effects of new oil and gas development in the short term, while contributing to the understanding of potential cumulative effects (e.g., accurate reporting of disturbance footprints) to support cross-sector implementation of the AMPP, including forthcoming management direction and a more holistic cumulative effects management regime in the future. By focusing on early stages of the standard mitigation hierarchy (i.e., avoidance and reduction), the goal is to effectively assess and manage oil and gas development at both the project and landscape level.

4.0 Protections and Limits

4.1 Protection

The BRFN Gundy Plan establishes Protection Zones where new oil and gas development is not allowed. The LPP does not identify additional areas to be protected from New Disturbance within LPP Area #1.

Within LPP Area #2 and shown in Figure 1, is the Tsaa Nuna conservancy. No new oil and gas activities are allowed within this area unless in accordance with the Tsaa Nuna conservancy management plan.

As noted above, the AMPP is currently under development to conduct spatial analyses that will further define current and desired future conditions, upon which the results will inform management direction to guide land use activities and restoration planning. The LPP focuses on a set of operational measures for oil and gas activities while the finalized AMPP will, in addition to operational measures, focus on strategic management direction for all industrial related activities. The Parties' intention is for the LPP to eventually be replaced by the finalized AMPP.

4.2 Disturbance Limits

New Disturbance Caps established under s.14.1 of the BRFN IA do not apply over the areas pertinent to this LPP.

Over LPP Area #1, New Disturbance caps are addressed and replaced through the BRFN Gundy Plan.

Over LPP Area #2, this LPP replaces the New Disturbance caps through the implementation of the AMPP management regime. The proposed oil and gas activities that were considered in the development of the LPP Area #2 are listed in Appendix 2. This list of applications includes activities that have already received permits, for which the proponent and HRFN have negotiated additional measures. Additional activities, not listed in Appendix 2, may be subject to further consideration in the context of the LPP and may not be supported if found to be inconsistent or incompatible with the LPP/AMPP, including the ongoing development of management direction.

Where one or more additional activities not listed in Appendix 2 are proposed within LPP Area #2 (the "New Activities"), HRFN may, upon written notice to BC, initiate a review of the New Activities to assess if it meets HRFN values as expressed in the LPP and AMPP. Where this review is initiated by HRFN, the New Activities will not be permitted until the review is complete and any concerns are addressed. Where agreement between HRFN and BC on the fate of the New Activities cannot be reached, either Party may initiate the dispute resolution process described below.

4.3 Exemptions

HRFN may convey in writing to the BC Energy Regulator (the "BCER"), their consent for any variance from the protection, restoration and operational requirements established by this LPP and the associated AMPP. The BCER will consider this consent in the relevant statutory decision-making process and will not authorize permits that vary from the protection, restoration and operational requirements established by this LPP without HRFN's consent.

5.0 Operational Measures

5.1 Mitigation

The standard elements of the mitigation hierarchy including avoid, reduce, and mitigate are embedded within the objectives, indicators and targets presented in the AMPP. The Treaty 8 First Nations, including HRFN, and the BCER co-developed the Treaty 8 Planning and Mitigations Measures (the "Treaty 8 Mitigations"), which are the collective interpretation of the AMPP's operational direction for the oil and gas sector in applying the mitigation hierarchy to new development activities. Proposed oil and gas activities within the LPP areas must follow the Treaty 8 Mitigations in Appendix A of the AMPP unless otherwise agreed to by HRFN.

5.2 Key Themes

Key themes of the operational measures include:

- Avoidance of direct (e.g., vegetation clearing) and indirect (e.g., sensory intrusion) effects on Spiritual Places and Spaces, trapping cabins, and cultural camping places. As a general rule, 1km is the distance within which sensory impacts to these features may be experienced by land users.
- Reducing the need for additional linear disturbance to support exploration and development (e.g., by co-locating access or utility routes).
- Routing of linear infrastructure and micro-siting of all infrastructure to avoid sensitive ecosystems (e.g., riparian vegetation) or habitat features (e.g., mineral licks).
- Operational air quality monitoring for fugitive dust and emissions.
- Water use and maintenance of water quality in accordance with regulatory requirements and permit conditions.

If AMPP expectations cannot be met using commercially reasonable efforts, HRFN will work with the proponent during the pre-engagement process to seek consensus regarding an alternative mitigation measure that addresses HRFN's concerns. The reverse scenario may also be true (i.e., additional mitigation measures may be required for work in areas deemed especially sensitive).
The Treaty 8 Mitigations are supplementary to existing requirements established through the Environmental Protection and Management Regulation, and other relevant statutes. They are not intended to be duplicative and where there are overlapping requirements, the expectation is that these can be satisfied through a single application deliverable that addresses the highest standard. Unless otherwise stated, the Treaty 8 Mitigations replace the provisions outlined in Article 14.4 of the BRFN Implementation Agreement.

6.0 Restoration

For all proposed activities, progressive restoration during active operations is an important component of the development lifecycle. Taking steps early to address the impacts of construction activities on areas that are not required during active operations is an important mechanism to minimize and address the cumulative impacts of oil and gas development activities. The AMPP identifies the need to build out a Restoration Priorities Program that addresses and prioritizes restoration of areas disturbed by a variety of industrial development activities to support conservation and recovery of HRFN's identified values. The Treaty 8 Mitigations include requirements to initiate restoration activities much earlier in the operational lifecycle than has been current practice.

Restoration activities being undertaken by proponents within LPP Area #1 should be prioritized first within HRFN's Enhanced Management Corridors and within the Protection Zones established under the Gundy Plan. The LPP acknowledges that HRFN-directed restoration will be carried out in accordance with HRFN's restoration objectives, and that BRFN-directed restoration will be undertaken in accordance with the Blueberry River Restoration Society planning, priorities and standards. Restoration associated with Gundy Plan offset requirements should be carried out as close to the area impacted as possible. In LPP Area #2, HRFN has taken an alternative approach to offsetting than that required by the BRFN Gundy Plan in LPP Area #1. HRFN's approach for LPP Area #2 seeks to align with Dunne Za stewardship laws including the law of reciprocity, which provides that you take from the land only what you need and, whenever you take, you must make a meaningful gift back to the land. HRFN and proponents in LPP Area #2 have reached agreement regarding appropriate measures for gifting back to the land for the activities in Appendix 2, considered holistically at a landscape level. Additional gifting back measures will be discussed with proponents proposing New Activities in LPP Area #2.

Additional restoration opportunities within the LPP Area #2 will be identified as HRFN's internal analyses supporting the AMPP are conducted. Once these analyses are more fully developed. BC, HFRN and industrial partners will collaborate to identify additional priority areas for restoration.

7.0 Performance Measures

The AMPP identifies a broad range of targets and indicators. For the pilot's purposes, a subset of those indicators will be monitored, measured, and evaluated to support baseline data collection,

ongoing AMPP development, and potential adjustments to the piloted approach. Any proposed changes resulting from ongoing monitoring and reporting will inform LPP reviews/amendments and future iterations of the AMPP.

The critical evaluation of adherence to this LPP and, by extension, the AMPP requires the submission and verification of key pieces of information, including but not limited to:

- Documentation of the disturbance footprint associated with a permitted activity, including the provision of spatial data to the HRFN (e.g., roads, pads, and utility corridors). This documentation is a key contribution to understanding cumulative effects.
- Written records of the completion of required environmental management activities (e.g., air or water quality monitoring), steps taken to adhere to AMPP expectations (e.g., the use of trenchless wetland crossing methodology where practical), and compliance with provincial and federal statute (e.g., *Wildlife Act*, *Migratory Birds Convention Act*). These must be retained by the permit holder and submitted to HRFN.
- Written record (with accompanying spatial files) indicating which portions of a permitted disturbance footprint has been subject to progressive or interim restoration be submitted to HRFN by the permit holder.
- Workplans required under the Dormancy and Shutdown Regulation must be submitted by the permit holder to HRFN at the same time they are submitted to the BCER.
- Relevant documentation associated with the restoration process, including spatial data, must be submitted to HRFN at the same time it is submitted to the BCER.

8.0 Implementation

8.1 Roles and Responsibilities

To facilitate the implementation of the LPP and the AMPP in the context of oil and gas development, clear roles and responsibilities will be defined for each entity involved. An overview of these roles and responsibilities is outlined in this section. It is expected that revisions will be required, as the LPP is implemented and as the AMPP evolves and is finalized. While there will be specific responsibilities unique to a particular entity, success of the implementation of the LPP will largely rely on a collaborative approach with all the entities (i.e. the BC, HRFN, BCER and the oil and gas industry).

BC, as a Party to the LPP, will be responsible for:

- Giving legal effect to the LPP through regulation and direct the BCER to implement LPP elements in adjudication of statutory decisions.
- Providing support, resources, and expertise, as applicable, to assist in the implementation of the LPP, including following Dispute Resolution procedures identified in section 7.1 and the procedures for consideration of proposed amendments identified in section 7.3.

HRFN, who are piloting their AMPP over a small segment of where their members have practiced, and continue to practice treaty rights and are a Party to the LPP, will be responsible for:

- Assisting in the implementation of the LPP, including following Dispute Resolution procedures identified in section 7.1 and the procedures for consideration of proposed amendments identified in section 7.3.
- Participating in applicable pre-engagement and consultation processes for oil and gas activity applications within the LPP areas.

The BCER, as the regulator for oil and gas activities in BC, will be responsible for:

- Implementing the operational component of the LPP in a manner consistent with obligations under the LPP and AMPP, BRFN IA and other agreements with First Nations (as applicable), direction from Government, and other processes agreed to by First Nations and BCER.
- Reviewing oil and gas related applications submitted for LPP Area #1 and LPP Area #2, to ensure compliance with the protection, restoration and operational requirements established by this LPP and associated sections of the AMPP, including adherence to the Treaty 8 Mitigations.
- Ensuring key information identified in section 6, that supports a collective understanding of cumulative effects as it relates to the LPP and oil and gas, is shared with HRFN in a timely manner.

Oil and gas industry proponents, operating within LPP Area #1 and LPP Area #2, will be responsible for:

- Ensuring proposed activities are planned and proposed in accordance with the protection, restoration and operational requirements established by this LPP and the associated AMPP, including adherence to the Treaty 8 Mitigations.
- Following HRFN pre-engagement requirements within the LPP Area #1 and LPP Area #2 to meet AMPP expectations.
- Collecting and providing information as requested to support LPP implementation including performance management and monitoring data.

The Entities share the following joint roles and responsibilities:

- Developing tools to support application submission, application review and consultation processes for oil and gas applications within LPP Area #1 and LPP Area #2.
- Monitoring and evaluating the effectiveness of the LPP's implementation. This may include collection and analysis of information to support performance management and monitoring and consideration of amendments.
- Participating in AMPP revisions and finalization as it applies to the AMPP administrative area and other industrial development activities and make necessary amendments to the LPP as a result.
- Identifying additional priority areas for restoration within LPP Area #2 following HRFN's internal analyses being made available.
- Providing support, resources, and expertise, as applicable, to assist in the implementation of the LPP.

8.2 Treaty 8 Nations

The LPP and AMPP fall within the boundary of Treaty No. 8. BC and HRFN are committed to working collaboratively with other Treaty 8 Nations in areas of overlapping interest, including but not limited to the South Peace planning process and Doig River First Nation's enhanced planning areas.

8.3 Term

The LPP will become effective on the date upon which the provincial order to implement it is brought into force, It will remain in effect for five (5) years from the Effective Date unless replaced by fulsome implementation of the AMPP by HRFN and BC, amended or extended upon agreement by HRFN and BC, or terminated in accordance with its terms.

8.4 Amendments

Either Party can propose an amendment to the LPP. Proposals must be made in writing to the other Party and best efforts will be made to meet within a reasonable time to engage regarding the proposal and appropriate next steps. The Parties' intention is for the LPP to eventually be replaced by the finalized AMPP, including further management direction.

8.5 Dispute Resolution

The Parties recognize that the successful implementation of the LPP and AMPP, in the context of oil and gas development, will depend on their ability and willingness to recognize, explore and resolve differences which may arise between them, and will endeavour to resolve such differences in a manner that fosters an improved, ongoing and respectful government-to-government relationship.
If either Party has concerns regarding the implementation of the LPP or AMPP, in the context of oil and gas development, they should be raised in writing to the other Party. The Parties will use their best efforts to meet at the technical level within ten (10) business days of a written notice being given of the dispute and will attempt to resolve the dispute through collaborative negotiations. If the meeting fails to resolve the dispute, unless otherwise agreed to by the Parties, the Parties will elevate the dispute to HRFN Chief and Council and relevant provincial senior officials with statutory responsibility for the subject matter of the dispute.

If the dispute is not resolved within ten (10) business days of having been elevated to senior officials, either Party may, upon written notice to the other, terminate the LPP with respect to LPP Area #1 and/or LPP Area #2, as the case may be, and the area(s) will default to the BRFN IA regime unless otherwise replaced by an Other Plan. BC will take the steps necessary to initiate the applicable regulatory amendments as soon as reasonably practicable following the termination notice.

SIGNED on behalf of Halfway River First Nation by:

DocuSigned by:
491E4034E2F84C2...

Chief Darlene Hunter, Halfway River First Nation

SIGNED on behalf of HIS MAJESTY THE KING IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA as represented by the Minister of Energy, Mines and Low Carbon Innovation and Minister of Water, Lands and Resource Stewardship, by:

Shannon Baskerville, Deputy Minister of Energy, Mines and Low Carbon Innovation

Lori Halls, Deputy Minister of Water, Land and Resource Stewardship

Appendix 1 – Halfway River First Nation Adaptive Management Program and Plan

HALFWAY RIVER FIRST NATION

Adaptive Management Program and Plan

Draft as of May 2024

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Appendix A. BCER Treaty 8 Planning and Mitigation Measures

Glossary and Abbreviations

Term	Definition
AMPP	Adaptive Management Program and Plan
AUM	Animal Unit Months
BCER	British Columbia Energy Regulator
BGC	Biogeoclimatic
DFO	Fisheries and Oceans Canada
ECA	Equivalent Clearcut Area
EMLI	The Ministry of Energy, Mines and Low Carbon Innovation
HRFN	Halfway River First Nation
ILOO	Investigative License of Occupation
LOO	License of Occupation
NCD	Non-Classified Drainages
PNG	Petroleum and Natural Gas
SFMP	Sustainable Forest Management Plan
the Province	Province of British Columbia
TUS	Traditional Use Study
WMB	Water Management Basin

1 Introduction

1.1 Purpose

The purposes of this Adaptive Management Program and Plan (AMPP) are:

- to facilitate the implementation of culturally based, legally enforceable, land-use decision making at landscape and operational levels on Crown lands in a defined administrative area within Treaty 8; and
- to protect Halfway River First Nation's (HRFN) way of life by balancing the ability to practice Treaty 8 rights with industrial development or activities.

The AMPP describes HRFN's expectations regarding proponent and regulatory behaviour within the administrative area and sets the stage for the development of effective and meaningful Government-to-Government shared decision-making management processes for the reduction of direct, indirect, and cumulative impacts on the land as they relate to rights of all Treaty 8 nations (e.g., Blueberry River First Nation's HV1-C Gundy Complex Plan). The AMPP itself is an adaptive, living document that will require frequent updating to maintain contemporary relevance.

It is HRFN's expectation that adherence to the goals and practices established in this AMPP become incorporated as conditions of any land tenure or activity authorizations (e.g., mineral tenures or exploration permits) granted by the Province of British Columbia (the Province) and that proponents of individual projects will likewise incorporate the content of the AMPP into referral or application documents.

Effective implementation of the AMPP will be significantly improved with provincial government support. HRFN's specific expectations for government responsibilities include:

- Giving legal effect to the plan, including plan elements in adjudication of statutory decisions.
- Providing support, resources, and expertise, as applicable, to assist in the implementation of the plan.
- Jointly, with HRFN, monitoring and evaluating the effectiveness of the plan's implementation and considering consequential adjustments as required.

HRFN is committed to finding workable, efficient, and productive solutions as a partner with regulators and industry (Figure 1-1).

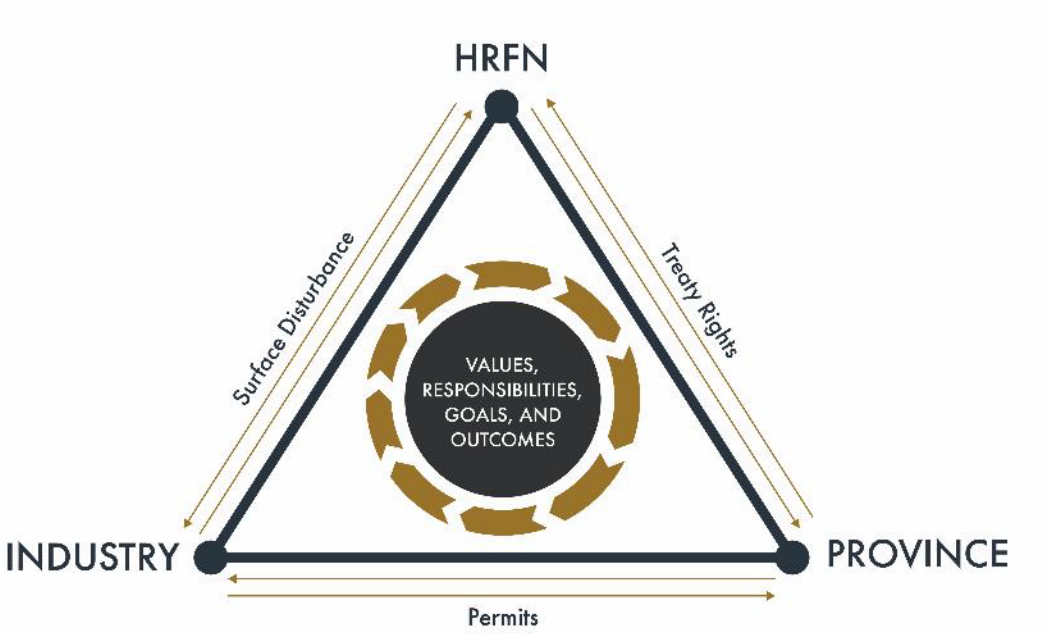


Figure 1-1. Integrated AMPP Decision-Making Framework.

1.2 Context and Scope

The AMPP is based on Dunne Za laws and values, and Treaty 8 rights as they apply to the land. Dunne Za laws are oral. This AMPP contains a written version of these laws which is not meant to be used as all-inclusive or as doctrine; rather, the written version of these laws is meant to provide a foundation for the practice of culturally based land management.

Western science is used as a way of translating Dunne Za laws and values, and Treaty 8 rights into land management practices within the AMPP. For example, the Dunne Za law of "take only what you need" may be translated into a landscape-level threshold whereby industrial activities are constrained by ecosystem-based, land-management principles, such as maintaining a minimum amount of old forest cover within a Water Management Basin (WMB).

Once the Dunne Za laws and values and Treaty 8 rights have been translated into western science principles, the principles may be incorporated into provincial or federal law. Continuing with the example above, maintaining sufficient old forest within a WMB may reasonably adhere to Dunne Za law and is protective of multiple values and Treaty 8 rights. Should the Province make maintaining sufficient old forest within a WMB legally enforceable, the Province would effectively merge its laws with Dunne Za laws.

The act of creating legally enforceable mechanisms to honour Treaty 8 rights is not within the scope of this AMPP. However, it is the intention of this document to make the integration of the two legal systems possible through the translation of Dunne Za laws into carefully articulated objectives, indicators, and targets.

This AMPP identifies objectives, indicators and targets based on Dunne Za laws and HRFN values as they relate to the land. When land that has been taken up is restored, it is possible that land will again become available for resource extraction. This is the landscape level context by which this AMPP is designed. Landscape level indicators and targets seek to reduce the cumulative impacts on Treaty 8 rights. Operational level indicators and targets provide detailed instructions on how to make the balance between the practice of Treaty 8 rights and continued resource extraction possible.

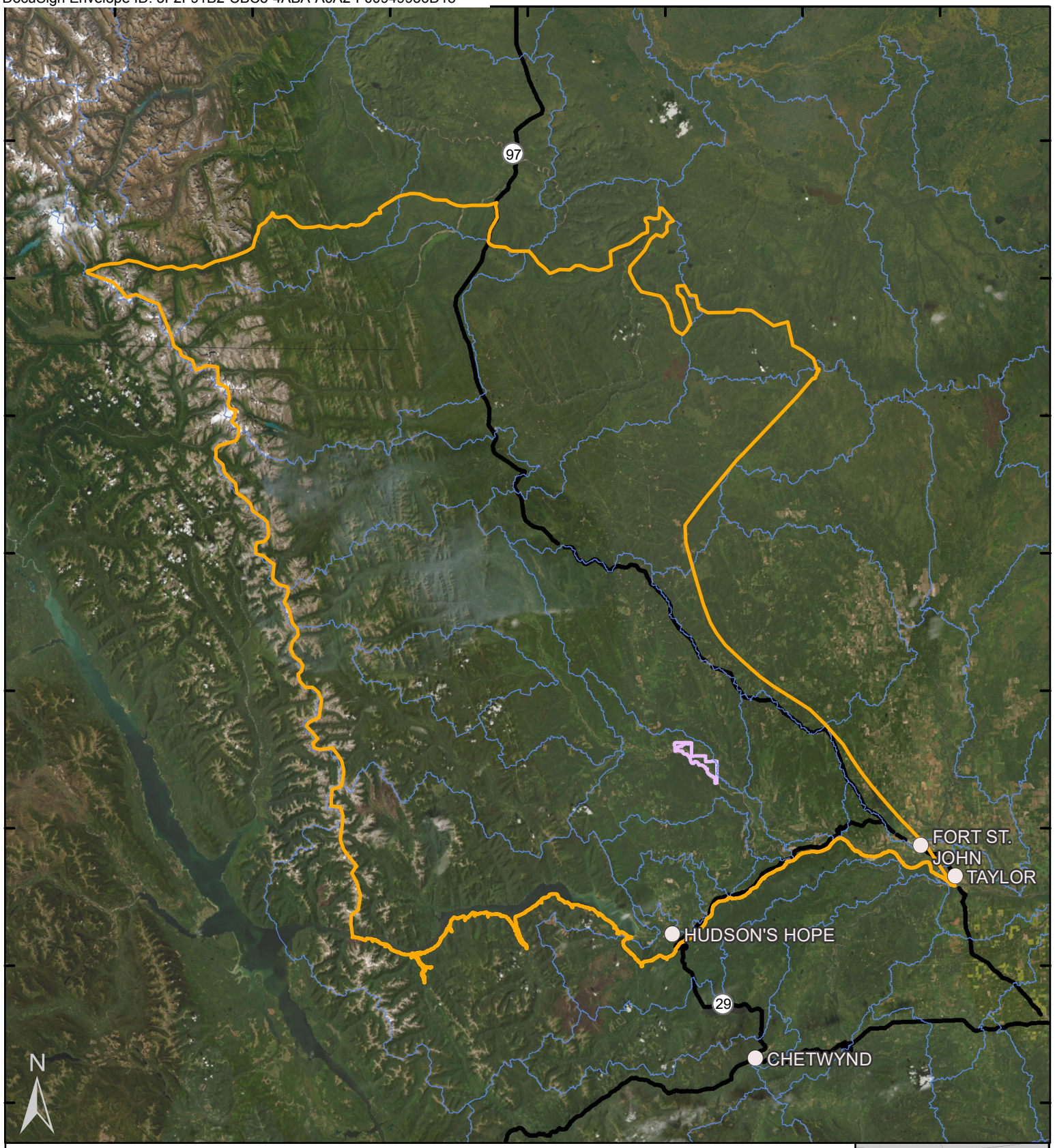
This AMPP acknowledges that the land and associated ways of using the land are complex. Because of the complexity, this document acknowledges that the systems designed for managing the land may be incomplete or imperfect. The AMPP is designed to use a Traditional Knowledge methodology of "applying and observing" or of "learning as you go", systems that are based on prior knowledge and a knowledge that the world is complex and ever changing. This methodology may also be called adaptive management.

Finally, this AMPP is one of many land use planning initiatives currently underway among the Treaty 8 nations. HRFN's ultimate vision is the development of a single, unified plan that clearly describes expectations for resource and industrial activity to meet the goals of all nations while recognizing regional differences.

1.3 Administrative Area

The objectives, indicators and targets apply within a defined administrative area within a portion of the Treaty 8 lands (Figure 1-2). The HRFN AMPP Administrative Area encompasses Federal Reserve #168 and adjoining lands where HRFN members have practiced their way of life since time immemorial. This area has experienced significant changes to the land because of agriculture and industrial impacts and does not represent the full extent of HRFN territory. This administrative area is shared with other First Nations people as well as the people within the Province and Canada who are all beneficiaries of Treaty 8.

The 3-million-hectare Administrative Area is broken down into WMBs, which are spatial units defined by the British Columbia Energy Regulator (BCER). The BCER uses WMBs to manage requests for water use and water withdrawal, primarily by the petroleum and natural gas (PNG) industry. However, as the WMB boundaries generally follow existing watershed boundaries defined by topography and hydrology, they provide a useful framework for defining regionally relevant objectives, indicators, and targets for the AMPP.



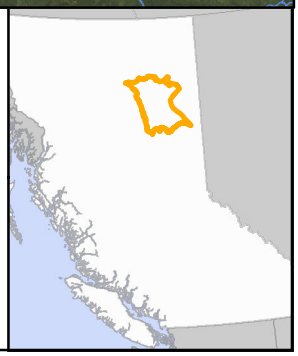
Halfway River First Nation

Administrative Boundary for HRFN's
Adaptive Management Program and Plan
Figure 1-2

Date: 2024-03-28
Map Number: HRFN-001
Coordinate System: NAD 1983 UTM Zone 10N
Projection: Transverse Mercator
Datum: North American 1983

0 10 20 30 40
1:1,500,000 km

- Community
- Halfway River First Nation Administrative Boundary
- Halfway River First Nation Reserve
- Water Management Basins
- Highway



EcoLogic consultants

2 Dunne Za Land Stewardship Laws

Dunne Za land stewardship laws guide the HRFN community on how they interact with the land. The laws listed below were summarized from HRFN's internal written records, which in turn provide a glimpse of oral history laws, for the purposes of guiding this AMPP; it is not an exhaustive list.

Natural Law / First Law

All law comes from the Creator through Story.

1. Everything is alive.
2. Everything is connected.
3. Everything is equal.
4. Everything has a gift to give.
5. When you receive a gift, you must give something meaningful in return.
6. You must use each gift with deep respect.
7. Take only what you need; take no more than half.
8. You can burn money to keep you warm, but you cannot eat it.
9. Consider how the decisions you make today will impact future generations.
10. Remember the teachings of your Elders: live with honesty, respect, truth, courage, wisdom, humility, and love for all things.

3 HRFN Vision Statement and Guiding Principles

HRFN has developed a Vision Statement and a set of Guiding Principles based on Dunne Za land stewardship laws.

HRFN's vision statement is:

> To maintain our traditional way of life and our identity as a distinctive Aboriginal people, which depends on the ability to meaningfully exercise our spiritual, religious, cultural, and traditional practices and pass this knowledge on to future generations.

The following guiding principles provide direction for the development of HRFN's land use management strategies:

1. Knowledge, identity, and respect in order to survive as a people
2. Maintain our traditional way of life and connection to the land and culture
3. Ecosystem approach to management
4. Conservation of resources takes precedence to ensure sustainability
5. Shared responsibility for management planning, decisions, and implementation
6. Accountability of management decisions
7. Diversity of approaches and benefits
8. Stewardship
9. Respect and recognition

4 HRFN Management Structure and Responsibilities

4.1 HRFN Chief and Council

HRFN's Council is the governing elected authority for the Nation. Council is made up of one Chief and six family representative Councillors. The responsibilities of Chief and Council include representing HRFN with external entities and other levels of government, making administration and governance decisions on behalf of HRFN, and informing and consulting members on matters relating to HRFN's affairs.

4.2 Lands Department

HRFN's administration office includes various departments responsible for the daily implementation of the community's affairs. The Lands Department is responsible for operational-level consultation with provincial and other government agencies in matters related to land and natural resources.

HRFN's Lands Department has been delegated the responsibility to develop this AMPP. HRFN's Chief and Council retain final decision-making authority over the approval and implementation of this AMPP. This document may be used by the Lands Department for both strategic and operational consultation purposes.

5 Adaptive Management Background

5.1 Conceptual Introduction

Adaptive management is a management and decision-making process with three deceptively simple steps: identifying objectives and acceptable outcomes (including any assumptions central to outcome establishment), monitoring to determine if assumptions are valid and management actions are meeting outcomes and, adjusting underperforming practices to improve the probability that desired outcomes are met. By its very nature, a well-executed adaptive management program is a continual feedback process (Figure 5-1).

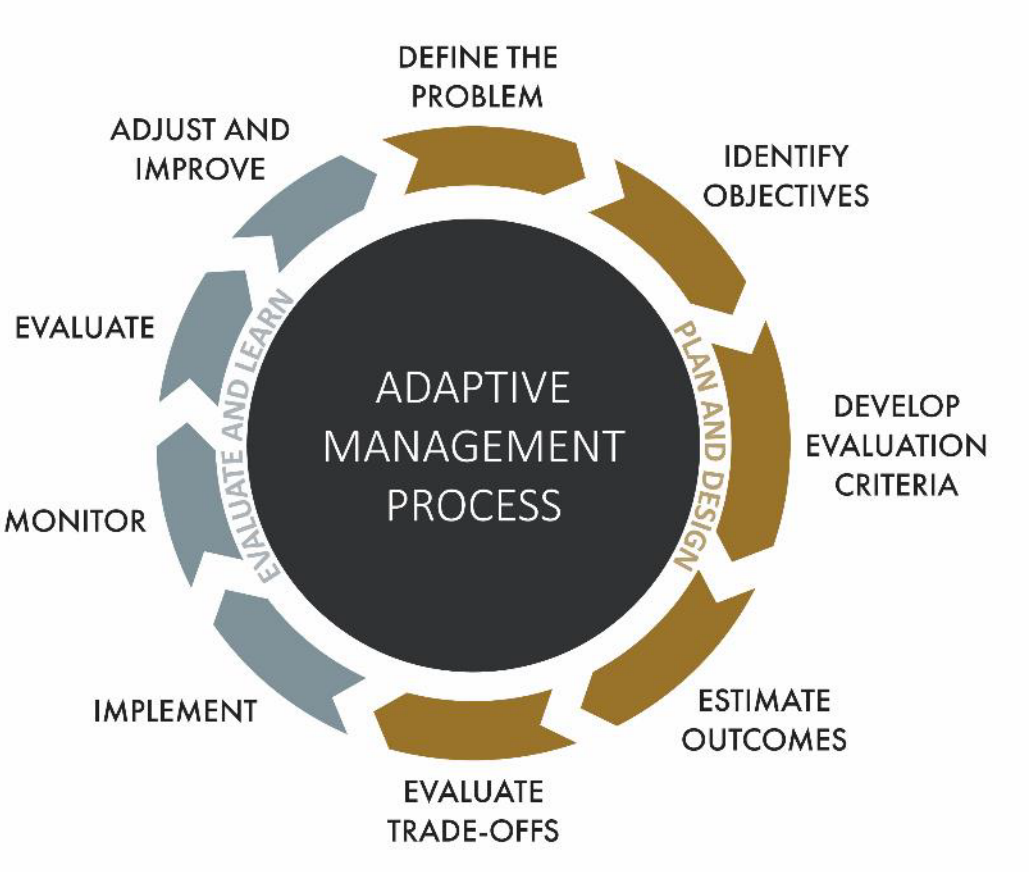


Figure 5-1. Conceptual Framework for Effective Adaptive Management.

Adaptive management recognizes that knowledge about complex systems is often uncertain and that complex systems may best be managed by a process of observation and adaptation, of testing what works and what does not. It is a process of learning while doing. During the process of learning while doing, adaptive management plans may be used to reduce direct, indirect, and cumulative effects and inform decision making.

5.2 Putting Adaptive Management into Practice

The AMPP is designed to facilitate the asking of the following questions:

1. What are the current conditions?
2. What are our goals?
3. What actions are needed to reach our goals?
4. How do we measure the extent to which our actions have helped us reach our goals?
5. How do we capture and act upon what we've learned?

The AMPP has seven fundamental components that provide the basis for communication clarity and strength of purpose (Figure 5-2).

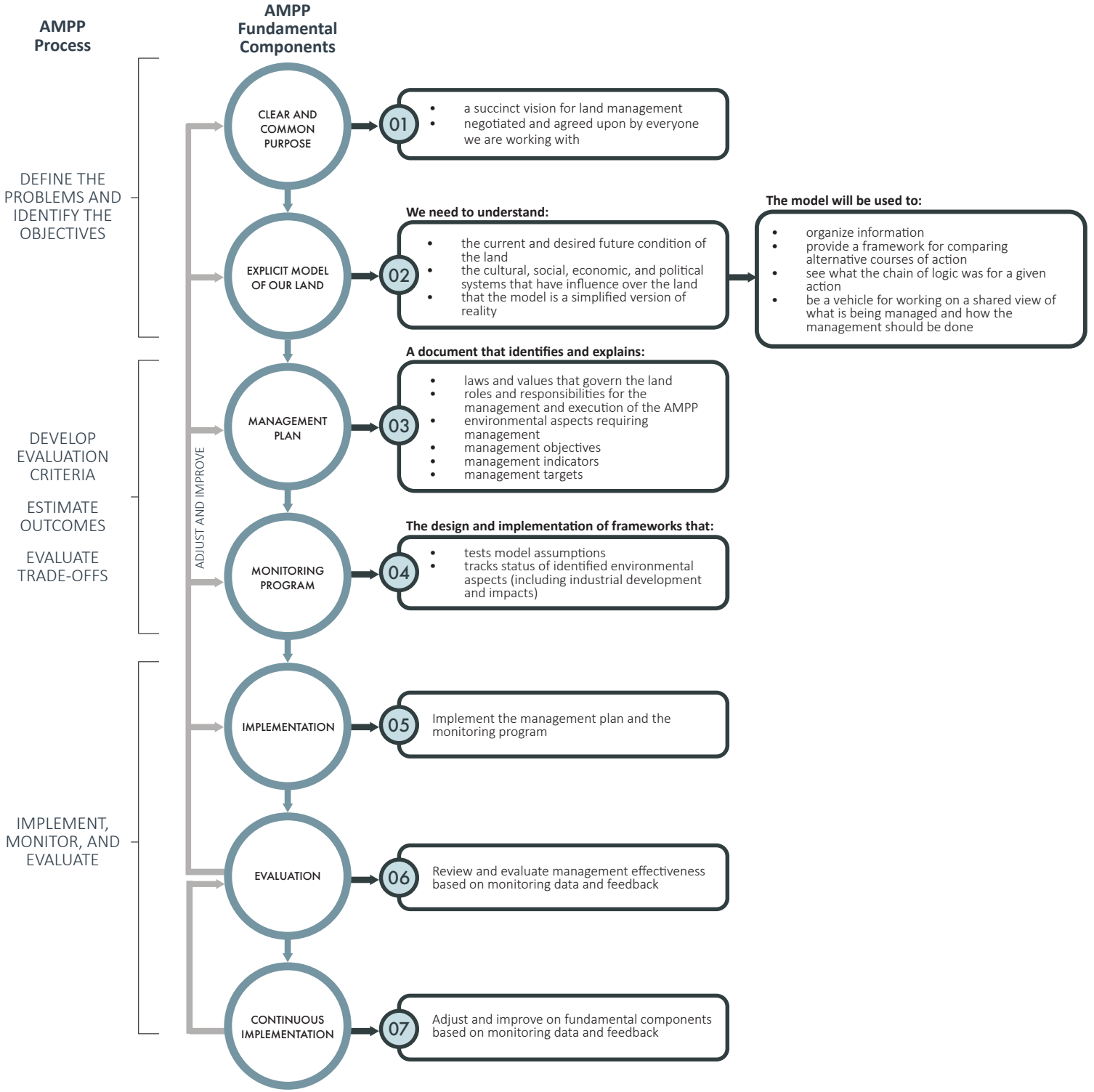


Figure 5-2. Fundamental Components of the HRFN Adaptive Management Program and Plan.

5.3 Mitigation as an Adaptive Management Tool

The standard mitigation hierarchy of avoid, reduce, and mitigate is embedded within the objectives, indicators and targets presented in the AMPP (Section 6). HRFN's expectation is that, at a minimum, project proponents will adhere to HRFN-endorsed best management and mitigation practices that are relevant to a given industrial activity. For example, all proposed oil and gas activities within the AMPP Administrative Area must follow the BCER Treaty 8 Planning and Mitigation Measures (Appendix A), and not just within Enhanced Mitigation Corridors. HRFN consent is required to vary any Appendix A mitigation measures. If a mitigation measure cannot be implemented using commercially reasonable efforts on a project, HRFN will work with the proponent during the pre-engagement process to seek consensus regarding an alternative mitigation measure that addresses HRFN's concerns.

6 HRFN Values and AMPP Objectives

6.1 Operational Definitions

The AMPP is guided by six key HRFN values (Figure 6-1).

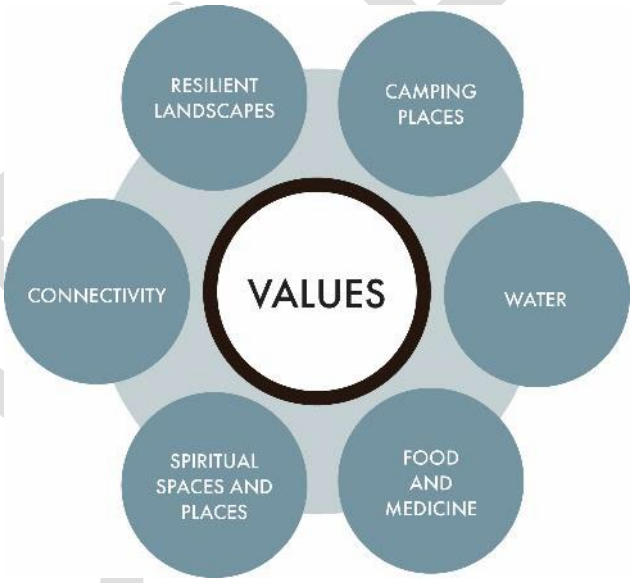


Figure 6-1. HRFN Values Related to Land Use.

These values are then contextualized with a series of inter-related objectives related to the Desired Future Condition of the land, with associated indicators, targets, and rules (Figure 6-2). It is expected that targets may be met in some WMBs but not in others. This is due to the extent to which lands have been "taken up" following the signing of Treaty 8. As lands have been taken up, they have become unavailable for the reasonable practice of Treaty 8 rights. For example, the conversion of Crown land to fee simple land has constrained hunting access throughout the geographic areas covered by this AMPP, despite the common law affirmation that Aboriginal and treaty rights may extend to private lands.

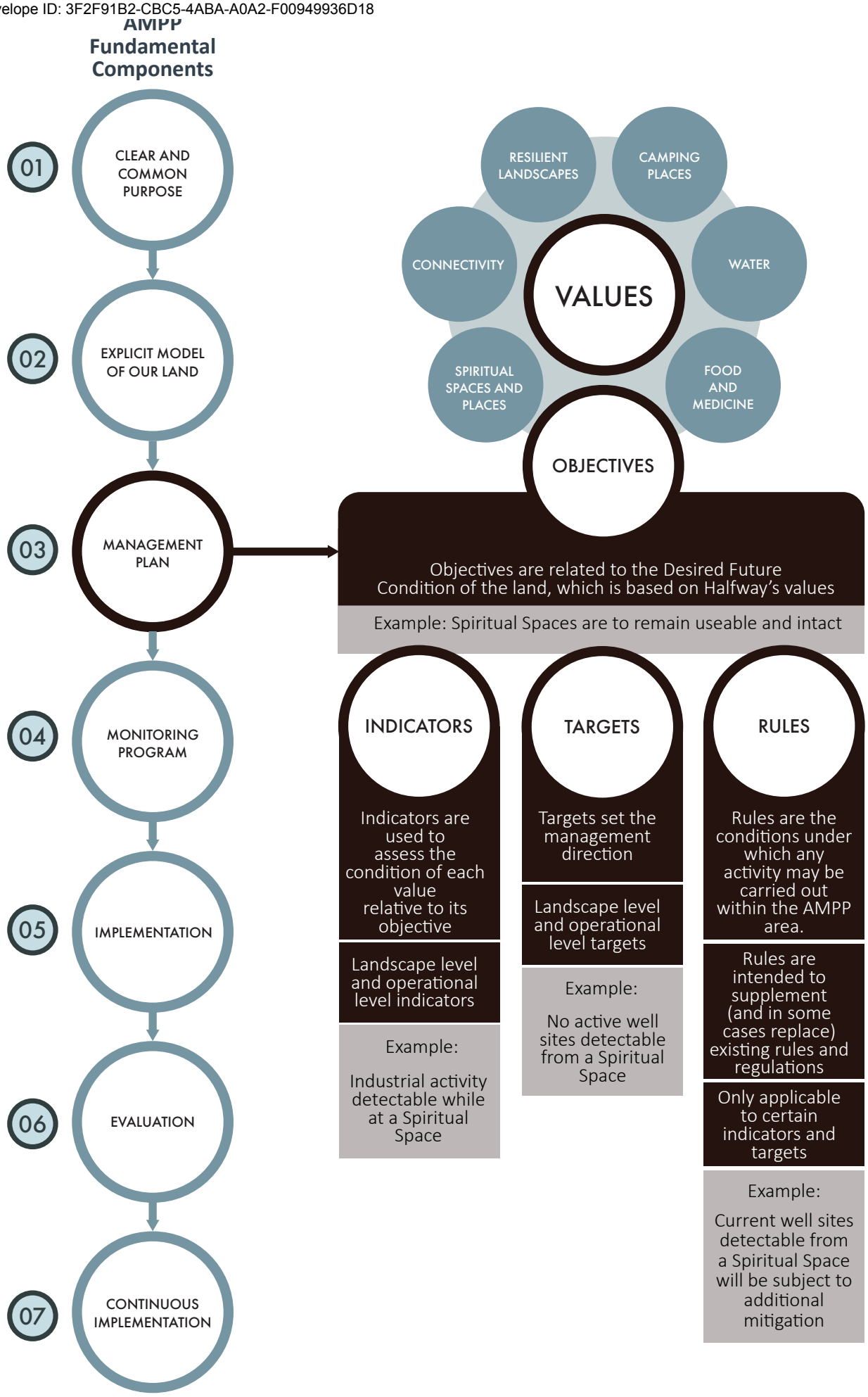


Figure 6-2. Incorporation of HRFN values into the Adaptive Management Program and Plan.

6.2 Spiritual Spaces and Places

Spiritual spaces and places are found throughout the land base and are connected to everything else. Elders will note when someone is entering a spiritual space; one notes on arrival that there is no defined beginning or end to the space that can be drawn on a map. It is not always possible to draw a boundary around a spiritual space and the connectivity to these spaces is as important as the space itself.

HRFN also identifies spiritual places as spatially defined sites including those where petroglyphs are found, caves used for spiritual quests, places where ancestors were born and buried, ancestral gathering places, ceremonial areas, and teaching places.

Developing quantitative indicators describing the condition of spiritual spaces is difficult for a few key reasons. First, spiritual spaces often cannot be reduced to defined spatial areas circled on a map and connect with the larger landscape. As HRFN's culture has mixed with Western culture since contact, some spiritual spaces may be defined as they are defined in other cultures, such as birth and burial sites, dancing circles, and dreamer sites. Other spaces may have no physical boundaries. They are connected to everything else. You are in these spaces when you are in them. The elders may let you know, or you may simply feel that you are in such a place. There have been attempts to draw boundaries around these spaces, but such boundaries are forced through maps and spatial geographic information systems. Such boundaries are the best attempt at fitting HRFN's beliefs and knowledge into a western system. Second, HRFN's desire to keep specific spiritual areas confidential for fear that they will be destroyed or degraded can limit the ability to describe and physically locate the areas.

These reasons present challenges from both HRFN's perspective (i.e., what information and guidance can we give to effectively manage for this value) and from project proponents who need to know where and how to work effectively on the land.

The primary objective for the Spiritual Spaces and Places value is that they remain usable, connected, and intact (Table 6-1).

Table 6-1. Landscape-level and operational-level indicators and targets associated with the Spiritual Spaces and Places value. All indicators and targets calculated at the level of WMB, unless otherwise indicated.

INDICATOR	TARGET	MECHANISM/PROCESS	RULE
OBJECTIVE: Spiritual spaces are to remain useable, connected, and intact.			
Landscape level			
Percentage of Spiritual Spaces and Places with associated written records or description	100% To capture the remaining knowledge that has been lost though the implementation of the *Indian Act*.	• Knowledge Keeping Project within Spiritual Spaces Monitoring Program (Section 7.3)	Not applicable
Percent overlap between Crown land tenures and Spiritual Spaces and Places	Information purposes only to better understand existing encroachment on Spiritual Spaces.	• Analysis Program (Section 7.1.1) • Current Conditions Program (Section 7.1.3)	Not applicable
Percent overlap of private land and Spiritual Spaces and Places	Information purposes only to better understand existing encroachment on Spiritual Spaces.	• Analysis Program (Section 7.1.1) • Current Conditions Program (Section 7.1.3)	Not applicable
Percentage of Spiritual Spaces and Places that currently have legislated protection	Information purposes only to identify potential gaps and initiate discussion on protection options.	• Analysis Program (Section 7.1.1) • Current Conditions Program (Section 7.1.3) • Legislative Changes Tracking Sheet (Section 7.2.2)	Not applicable
Operational level			
Number of referrals or applications with overlap of Spiritual Spaces and Places	Information purposes only	• Referrals Tracking Program (Section 7.2.1) • Referrals Review Checklist (Section 7.2.1)	Not applicable

INDICATOR	TARGET	MECHANISM/PROCESS	RULE
Number of referrals or applications with overlap where deep consultation occurs, and proposed avoidance or mitigation measures are contained in the consultation record	100%	• Referrals Tracking Program (Section 7.2.1) • Referrals Review Checklist (Section 7.2.1)	Consultation records must indicate accommodation measures
Number of Investigative License of Occupations (ILOOs) and License of Occupations (LOOs) for wind-energy projects that overlap with Spiritual Spaces and Places	Zero	• Referrals Tracking Program (Section 7.2.1) • Referrals Review Checklist (Section 7.2.1) • Legislative Changes Tracking Sheet (Section 7.2.2)	Wind tenure ILOOs and LOOs may not overlap Spiritual Spaces or Places
Number of PNG facilities that may be seen or heard from Spiritual Spaces and Places	Zero	• Restoration Priorities Program (Section 7.1.4) • Spiritual Spaces and Places Monitoring Program (Section 7.3)	Permits may be issued for PNG facilities in Spiritual Spaces with conditions requiring visual and audible mitigation measures so that a facility is not seen or heard from a Spiritual Space or Place
Percentage of permits or other authorizations with avoidance or mitigation measures	100%	• Referrals Tracking Program (Section 7.2.1) • Spiritual Spaces and Places Monitoring Program (Section 7.3)	Government-issued permits or authorizations for activities within Spiritual Spaces and Places must have documented agreed-upon avoidance or mitigation measures (e.g., permit conditions)
Number of inspections with satisfactory findings related to permit conditions	100%	• Spiritual Spaces and Place Monitoring Program (Section 7.3)	The company which has been issued a permit to operate within a Spiritual Space or Place must demonstrate compliance with permit conditions

6.3 Connectivity

Everything is connected to everything else, the animals in each season, the plants in each habitat, to the rivers and mountains, to spiritual places, and to each other. Without connectivity, HRFN's essential way of life is lost. WMBs have been chosen as the unit to evaluate connectivity objectives across the administrative area (Figure 1-2). This allows indicators, targets, and comparisons to be made in a consistent manner at an appropriate scale.

The primary objective for the Connectivity value is for people to be able to use and move through lands for the practice of Treaty 8 rights (Table 6-2).

Table 6-2. Landscape-level and operational-level indicators and targets associated with the Connectivity value. All indicators and targets calculated at the level of WMB, unless otherwise indicated.

INDICATOR	TARGET	MECHANISM/PROCESS	RULE
OBJECTIVE: for people to be able to use and move through lands for the practice of Treaty 8 rights			
Landscape level			
Spatial area of land that overlaps Fee Simple land	Information purposes to inform restrictions on hunting access	• Analysis Program (Section 7.1.1) • Current Conditions Program (Section 7.1.3)	Not applicable
Spatial area of land that overlaps range tenure	Information purposes to inform restrictions on hunting access	• Analysis Program (Section 7.1.1) • Current Conditions Program (Section 7.1.3)	Not applicable
Spatial area of land that overlaps PNG well sites and facilities	Information purposes to inform restrictions on hunting access	• Analysis Program (Section 7.1.1) • Current Conditions Program (Section 7.1.3)	Not applicable
Spatial area of land that overlaps Section 16 grazing reserves, Crown land leases, parks and protected areas with hunting restrictions, and areas within no shooting zones	Information purposes to inform restrictions on hunting access	• Analysis Program (Section 7.1.1) • Current Conditions Program (Section 7.1.3)	Not applicable
Spatial area of land that contains inaccessible Crown land (e.g., surrounded by private lands)	Information purposes to identify restrictions on hunting access, for example.	• Analysis Program (Section 7.1.1) • Current Conditions Program (Section 7.1.3)	Not applicable
Spatial area of land that has been converted to sod- forming grass vegetation communities	Information purposes to inform restrictions on plant gathering activities	• Analysis Program (Section 7.1.1) • Current Conditions Program (Section 7.1.3)	Not applicable

INDICATOR	TARGET	MECHANISM/PROCESS	RULE
Spatial area of land that falls within the outfall zone of a dispersion modeling report (e.g., air quality exceedance zone)	Information purposes to inform restrictions on plant gathering activities	• Analysis Program (Section 7.1.1) • Current Conditions Program (Section 7.1.3)	Not applicable
Percentage of land that is currently available for the practice of Treaty 8 rights	Minimum 65% is available	• Land Accounting Program (Section 7.1.2)	Permits may not be issued in WMBs with less than 65% land available for the reasonable practice of treaty rights
	Minimum 65% is resilient and healthy (as defined in Section 6.4)	• Analysis Program (Section 7.1.1) • Current Condition Report (Section 7.1.3)	Permits may be issued in WMB with equal to or greater than 65% land that is deemed resilient and healthy
Spatial area of land available for restoration	Information purposes only	• Restoration Priorities Program (Section 7.1.4)	Not applicable
Percentage of available land for restoration that has been restored	Information purposes only	• Land Accounting Program (Section 7.1.2) • Restoration Priorities Program (Section 7.1.4)	Not applicable Guided by 65% land threshold rules. Known wildlife movement corridors to be restoration priorities.
Operational level			
Number of referrals and applications with Crown land disturbance or land conversion (fee simple or lease)	Information purposes only	• Referrals Tracking Program (Section 7.2.1) • Referrals Review Checklist (Section 7.2.1)	Not applicable
Spatial area of disturbance within the approved application	Less than or equal to 35% disturbance	• Analysis Program (Section 7.1.1) • Land Accounting System (Section 7.1.2) • Referrals Tracking Program (Section 7.2.1)	Guided by 65% land threshold rule

INDICATOR	TARGET	MECHANISM/PROCESS	RULE
Total hectares restored, per year, per WMB by disturbance type	Information purposes only	• Analysis Program (Section 7.1.1) • Land Accounting System (Section 7.1.2) • Restoration Priorities Program (Section 7.1.4)	Guided by Restoration Priorities Program (Section 7.1.4) Guided by 65% land threshold rule. Known wildlife movement corridors to be restoration priorities.
Percentage of "Treaty 8 Friendly" grazing tenures	100% of tenures have "Treaty 8 Friendly" signage on gates and at every 500m along fence lines	• Analysis Program (Section 7.1.1) • Land Accounting System (Section 7.1.2) • Restoration Priorities Program (Section 7.1.4) • Range Monitoring Program (Section 7.3)	Range tenure fencing must have signage on gates and at every 500m along fence lines
Percentage of inaccessible Crown land "unlocked" with easements	100%	• Analysis Program (Section 7.1.1) • Land Accounting System (Section 7.1.2) • Restoration Priorities Program (Section 7.1.4)	Crown land parcels must be accessible for the reasonable practice of Treaty rights

6.4 Resilient Landscapes

Resilient landscapes sustain ecological functions, robust biodiversity, and critical landscape processes over time. These landscapes are healthy enough to persist and adapt. HRFN's way of life is dependent on resilient landscapes. Resilient landscapes provide the foundation of healthy air, water, and land on which to practice Treaty rights. They support a healthy and abundant supply of plant and animal species and populations, which are necessary for the meaningful ability to hunt, fish, and trap, as well as gather plant medicines and foods.

Resilient landscapes include:

1. Unique geophysical, biological, and cultural aspects;
2. Physical, biological, and chemical drivers, events, and processes that create and sustain landscapes over time;
3. Linkages between habitats, processes, and populations that enable movement of materials and organisms;
4. Richness in the variety, distribution, and spatial configuration of landscape features that provide a range of options for species, which can further be broken down into:
    a. Landscape-scale diversity of habitat types and connections between different habitat types,
    b. Site or habitat-scale vegetative diversity and physical heterogeneity,
    c. Response diversity and a diversity of life history strategies both within and between species, and
    d. Diversity in genes and traits within species populations;
5. Multiple similar or overlapping elements or functions with a landscape that promote diversity and provide insurance against loss; and
6. Spatial extent and time frames at which landscapes may operate to allow species, processes, and functions to persist. (resilientsv.sfei.org) (see website for additional references)

There are five primary objectives within the Resilient Landscapes value (Table 6-3):

- Forests that provide resilient habitat for people, plants, and wildlife
- Diverse and abundant functioning ecosystems that are resilient to climate change and wildfire risk
- Healthy air for people, plants, and wildlife
- Connectivity (Section 6.3)
- Healthy water (Section 6.6)

Table 6-3. Landscape-level and operational-level indicators and targets associated with the Resilient Landscapes value. All indicators and targets calculated at the level of WMB, unless otherwise indicated.

INDICATOR	TARGET	MECHANISM/PROCESS	RULES
OBJECTIVE: Forests provide resilient habitat for people, plants and wildlife			
Landscape level			
Ecosystem representation	Full range of expected ecosystems within each Biogeoclimatic (BGC) Zone present in at least 65% of a given WMB	• Analysis Program (Section 7.1.1) • Restoration Priorities Program (Section 7.1.4)	The full range of ecosystem representation must be demonstrated for 65% or greater of the land available for the reasonable practice of Treaty rights.
Forest age class distribution	x% young seral. mid seral, and old seral. Target percentages to be determined following completion of Analysis Program (Section 7.1.1).	• Analysis Program (Section 7.1.1) • Restoration Priorities Program (Section 7.1.4)	Age class distribution must be demonstrated for 65% or greater of the land available for the reasonable practice of Treaty rights
Forest patch size distribution	Minimum patch size young seral, mid seral, and old seral. Target patch sizes to be determined following completion of Analysis Program (Section 7.1.1).	• Analysis Program (Section 7.1.1) • Restoration Priorities Program (Section 7.1.4)	Forest patch size distribution must be demonstrated for 65% or greater of the land available for the reasonable practice of Treaty rights
Intact forest	Minimum area interior forest young seral, mid seral, and old seral. Target areas to be determined following completion of Analysis Program (Section 7.1.1).	• Analysis Program (Section 7.1.1) • Restoration Priorities Program (Section 7.1.4)	Minimum hectares of interior forest must be demonstrated for 65% or greater of the land available for the reasonable practice of Treaty rights
Linear feature density	At least 60% undisturbed by linear features	• Analysis Program (Section 7.1.1) • Restoration Priorities Program (Section 7.1.4)	Linear feature density (Low Risk Class) must be demonstrated for 65% or greater of the land available for the reasonable practice of Treaty rights

INDICATOR	TARGET	MECHANISM/PROCESS	RULES
Unhealthy old forest	Minimize the forested area classified as unhealthy (e.g., insect outbreak damage)	• Analysis Program (Section 7.1.1) • Restoration Priorities Program (Section 7.1.4)	Identified unhealthy forest may be prioritized for restoration; restoration may include harvesting; forest health concerns may influence *Resilient Landscape* rules
Operational level			
Cutblock adjacency	100% of adjacent cutblocks meet moose height or 2-m	• Analysis Program (Section 7.1.1) • Restoration Priorities Program (Section 7.1.4) • Referrals Tracking Program (Section 7.2.1) • Referrals Review Checklist (Section 7.2.1) • Forestry Monitoring Program (Section 7.3)	Prior to issuing a Cutting Permit, must demonstrate that adjacent cutblock meets moose height or 2 m; except in agreed-upon cases where forest health and wildfire risk is identified
Regeneration contains a diversity of species at a range of stockings	100% where ecologically appropriate	• Analysis Program (Section 7.1.1) • Restoration Priorities Program (Section 7.1.4) • Referrals Tracking Program (Section 7.2.1) • Referrals Review Checklist (Section 7.2.1) • Forestry Monitoring Program (Section 7.3)	Silviculture adheres to *HRFN Forestry Guidelines* (under development); silviculture incorporates diversity of species at a range of stocking densities
OBJECTIVE: Diverse and abundant functioning ecosystems that are resilient to climate change and wildfire risk			
Landscape level			
Calculate wildfire hazard ratings	Maximize area within each WMB classified as Low Wildfire risk	• Analysis Program (Section 7.1.1)	Identified areas of high wildfire hazard ratings may be prioritized for restoration; restoration may include harvesting; wildfire risk

INDICATOR	TARGET	MECHANISM/PROCESS	RULES
			concerns may influence *Resilient Landscape* rules
Operational level			
Number of cutblocks with "fire-smart" silviculture practices applied	100%. All cutblocks follow HRFN best practices.	• Analysis Program (Section 7.1.1) • Referrals Tracking Program (Section 7.2.1) • Referrals Review Checklist (Section 7.2.1) • Forestry Monitoring Program (Section 7.3)	Silviculture adheres to *HRFN Forestry Guidelines* (to be developed)
Regeneration contains a proportion of deciduous and low fire risk species	100% where ecologically appropriate.	• Analysis Program (Section 7.1.1) • Restoration Priorities Program (Section 7.1.4) • Referrals Tracking Program (Section 7.2.1) • Referrals Review Checklist (Section 7.2.1) • Forestry Monitoring Program (Section 7.3)	Silviculture adheres to *HRFN Forestry Guidelines* (to be developed); silviculture incorporates proportion of deciduous and low fire-risk species
OBJECTIVE: Healthy air for people, plants, and wildlife			
Landscape level			
Number of delineated airsheds	Entire study area is delineated into airshed.	• Analysis Program (Section 7.1.1) • Airshed Monitoring Program (Section 7.3)	Not applicable
Number of airsheds with coordinated airshed monitoring	All Province to set up and maintain continuous and passive air monitoring programs at appropriate scales. The Peace	• Legislative Changes Tracking Sheet (Section 7.2.2) • Airshed Monitoring Program (Section 7.3)	Not applicable

INDICATOR	TARGET	MECHANISM/PROCESS	RULES
	Airshed Zone Association may be a useful model to follow.		
Operational level			
Number of natural gas processing facilities with SO_2 emissions	Referrals with natural gas processing facilities with $S0_2$ emissions are tracked	• Referrals Tracking Program (Section 7.2.1) • Referrals Review Checklist (Section 7.2.1)	Not applicable
Number of natural gas processing facilities with SO_2 emissions with air quality and biophysical monitoring	All	• Referrals Tracking Program (Section 7.2.1) • Referrals Review Checklist (Section 7.2.1)	Facilities that meet SO_2 emissions threshold have Waste Discharge Permits requirements for air quality and biophysical monitoring; monitoring at scale and frequency to address human, animal, water, vegetation health related to practice of Treaty rights within the SO_2 dispersion zone
Number of air quality / biophysical monitoring reports with exceedances	Zero	• Airshed Monitoring Program (Section 7.3.6)	Facilities that meet SO_2 emissions threshold have Waste Discharge Permits requirements for adaptive management to address permit exceedances

6.5 Camping Places

HRFN people were once nomadic and did not build permanent structures or establish territorial settlements. The people of HRFN travelled across the land through space and time and set up residence along the way. The office, school, church/temple, recreation center, hospital, graveyard, rivers, trees, mountains, the earth itself. One was born, lived, and died along the way.

Elders will point out the best or worst places to camp and they will point out places where family groups would gather, but Elders do not point out historic permanent village sites. Today, the people of HRFN may spatially identify camping places. These are located where cabins have been built or specific places in and around Reserve #168 where people gather, including Tsaa Nuna.

Like spiritual spaces, there are challenges to creating quantitative indicators to camping places. Historic and current camping places are spatially identified in HRFN's Traditional Use Site (TUS) data; however, there will be new places in the future as the climate and HRFN's needs shift. HRFN's methods for camping have evolved over the years from accessing areas by foot and horse to motorized vehicles, and it is expected to continue to change in the future. The objectives for clean water and resilient forests with abundant food and medicine are applicable not just in the camping place itself but also depend on the wider landscape condition.

Trapping is included in this section as it relates to trapping cabins (i.e., camping places), the connecting resilient forests, and the ability to access drinking water from natural sources. Unlike cultural camping places, trapping cabins and associated traplines are permanent and spatially identifiable. Thus, it is easier to create quantitative indicators and measure associated targets.

There are four primary objectives associated with the Camping Places value (Table 6-4):

- Trapping remains a feasible treaty right and way of life, as measured by:
    - Land available for trapping;
    - Resilient forests that provide abundant plant foods, plant medicines, wildlife, and fish remain available (Section 6.4); and
    - Natural drinking water source availability (Section 6.6).
- Trapping cabins are not altered or degraded by industrial development and associated activities.
- Cultural camping places are not altered or physically degraded by industrial development and associated activities.
- Cultural camping places are free from indirect disturbance (e.g., noise) during Cultural Camp season (August) and Trapping season (late October to May).

Table 6-4. Landscape-level and operational-level indicators and targets associated with the Camping Places value. All indicators and targets calculated at the level of WMB, unless otherwise indicated.

INDICATOR	TARGET	MECHANISM/PROCESS	RULE
OBJECTIVE: Trapping cabins are not altered or degraded by industrial development or activities			
Landscape level			
Spatial area of land available for trapping	Information purposes only	• Analysis Program (Section 7.1.1) • Current Condition Report (Section 7.1.3)	Not applicable
Spatial area of land available for trapping with overlapping tenures (e.g., guide outfitting, traplines not HRFN owned)	Information purposes only	• Analysis Program (Section 7.1.1) • Current Condition Report (Section 7.1.3)	Not applicable
Spatial area of land available for trapping by HRFN-owned trapline	Information purposes only	• Analysis Program (Section 7.1.1) • Current Condition Report (Section 7.1.3)	Not applicable
Operational level			
Number of referrals or applications within 1 km of Trapline Cabins	Information purposes only	• Referrals Tracking Program (Section 7.2.1) • Referral Review Checklist (Section 7.2.1)	Not applicable
Number of approved permits within 1 km of Trapline Cabins with agreed upon mitigations and associated permit conditions	100%	• Referrals Tracking Program (Section 7.2.1) • Referral Review Checklist (Section 7.2.1)	Permits issued with 1k m of Trapline Cabins must have agreed upon mitigations and associated permit conditions
Number of inspections with satisfactory results for implementation of agreed-upon mitigation measures	100%	• Trapping and Camping Monitoring Program (Section 7.3)	Not applicable
Number of salt blocks within 1km of Trapline Cabins	Zero	• Range Monitoring Program (Section 7.3)	Salt blocks are not permitted within 1 km of a Trapline Cabin

INDICATOR	TARGET	MECHANISM/PROCESS	RULE
Number of cattle grazing opportunities within 1 km of a Trapline Cabins	Zero	• Range Monitoring Program (Section 7.3)	Cattle grazing opportunities are not permitted within 1 km of a Trapline Cabin during trapping season
OBJECTIVES: • **Cultural camping places are not altered or physically degraded by industrial development or activities.** • **Cultural camping places are free from indirect disturbance (e.g., noise) during Cultural Camp season (August) and Trapping season (late October to May)** • Note: objectives combined due to extensive overlap of indicators and targets			
Landscape level			
Cultural camping places are spatially defined	100%	• Analysis Program (Section 7.1.1)	Not applicable
Spatial area of current development within 1 km of a Cultural Camping Place	Information purposes only	• Analysis Program (Section 7.1.1) • Current Condition Report (Section 7.1.3) • Restoration Priorities Program (Section 7.1.4)	Not applicable
Number of industrial operations visible from or within auditory range of Cultural Campling Places during camping season and trapping seasons.	Information purposes only	• Analysis Program (Section 7.1.1) • Current Condition Report (Section 7.1.3) • Restoration Priorities Program (Section 7.1.4)	Not applicable
Operational level			
Number of referrals or applications within 1 km of Cultural Camping Places	Information purposes only	• Referrals Tracking Program (Section 7.2.1) • Referral Review Checklist (Section 7.2.1)	Not applicable
Number of approved permits within 1 km of Cultural Camping Places with agreed upon	100%	• Referrals Tracking Program (Section 7.2.1)	Permits issued within 1 km of Cultural Camping Places must

INDICATOR	TARGET	MECHANISM/PROCESS	RULE
mitigations and associated permit conditions related to direct and indirect disturbance		• Referral Review Checklist (Section 7.2.1) • Legislative Changes Tracking Sheet (Section 7.2.2)	have agreed upon mitigations and associated permit conditions
Number of inspections with satisfactory results for implementation of agreed-upon mitigation measures	100%	• Trapping and Camping Monitoring Program (Section 7.3)	The company which has been issued a permit to operate within 1 km of a Cultural Camping Place must demonstrate compliance with permit conditions
Number of salt blocks within 1 km of Cultural Camping Places	Zero	• Trapping and Camping Monitoring Program (Section 7.3)	Salt blocks are not permitted within 1 km of Cultural Camping Places
Number of cattle grazing opportunities within Cultural Camping Places during cultural camping season	Zero	• Range Monitoring Program (Section 7.3)	Cattle grazing opportunities are not permitted within 1 km of Cultural Camping Places during cultural camping season

6.6 Water

Water is essential and a foundational right. Elders will speak of its different forms. First, it forms an essential need. How long will the seedling or the child survive without it? Second, it takes on medicinal and healing forms. Natural springs will contain minerals for medicine and healing. Licks provide necessary minerals for animal life stages, such as birthing and antler development. Lakes, rivers, and wetlands take on food production form: they produce the fish, the muskrat, and the moose. Water, and land adjacent to water, takes the form of connection. People and animals travel in and by it to connect with each other. Water, in and of itself, is a life form, has spirit, and is spiritual. Water is connected to and connects with everything. When water is contaminated and flow is cut off or dammed, there is loss. There is loss when the HRFN Reserve does not have access to clean drinking water. There is loss when the river valley is dammed for electricity production. There is loss when a road cuts through a wetland. There is loss when contaminants are released into the ground and flow through the groundwater into the rivers. When changes occur on the landbase for economic needs and wants, the Elders remind: You cannot eat or drink money. It is essential to protect water.

Water is a value that truly reflects cumulative impacts across space and time. It demonstrates the connectivity between all elements of nature and embodies HRFN's holistic and adaptive view of land management.

There are four primary objectives associated with the Water value (Table 6-5):

- Maintain the quality and quantity of water in watercourses to support drinking water and aquatic life.
- Maintain function and connectivity of riparian habitat along watercourses.
- Maintain healthy wetlands.
- Manage the water objectives into the future considering the impacts of climate change.

Table 6-5. Landscape-level and operational-level indicators and targets associated with the Water value. All indicators and targets calculated at the level of WMB, unless otherwise indicated.

INDICATOR	TARGET	MECHANISM/PROCESS	RULE
Objective: The quality and quantity of water in watercoures is maintained to support drinking water and aquatic life			
Landscape level			
Density of crossings	Maintain a low density of crossings	• Analysis Program (Section 7.1.1) • Current Condition Report (Section 7.1.3) • Restoration Priorities Program (Section 7.1.4)	Density of crossings with a Low Risk Class must be demonstrated for 65% or greater of the land available for the reasonable practice of Treaty rights
Number and volume of water withdrawals	Info only	• Water Quantity and Quantity Monitoring Program (Section 7.3)	Not applicable
Number of WMBs with real-time flow monitoring data	As Identified	• Water Quantity and Quantity Monitoring Program (Section 7.3)	Ministry of Environment to establish real-time flow monitoring stations at agreed-upon locations
Number of WMBs with low-flow thresholds	All	• Water Quantity and Quantity Monitoring Program (Section 7.3)	Ministry of Environment to establish low-flow thresholds
Number and volume of water withdrawals during low-flow conditions	Zero	• Water Quantity and Quantity Monitoring Program (Section 7.3)	Government agencies to pause water withdrawals during low-flow conditions
Percent forest cover change in headwaters of WMB	Low (<15% Equivalent Clearcut Area [ECA] change)	• Analysis Program (Section 7.1.1) • Current Condition Report (Section 7.1.3) • Restoration Priorities Program (Section 7.1.4)	Percent forest cover change in headwaters (Low Risk Class) must be demonstrated for 65% or greater of the land available for the reasonable practice of Treaty rights
Operational level			
Demonstrate adherence to the Federal *Fisheries Act*	100%	• Referral Tracking Program (Section 7.2.1)	Provide evidence for the Request for Project Review

INDICATOR	TARGET	MECHANISM/PROCESS	RULE
			process and related project authorizations as needed.
Number of Range Use Plans with waterbody access management conditions	100%	• Referral Tracking Program (Section 7.2.1)	Range Use Plans must have agreed upon waterbody access management conditions. Appropriate watercourse and wetland setbacks to be established by QPs on a case-by-case basis.
Number of range inspections with satisfactory water quality results	100%	• Range Monitoring Program (Section 7.3)	The company which has been issued a permit to operate a grazing license must demonstrate compliance with Range Use Plan conditions
Number of PNG inspections with satisfactory water quality results	100%	• PNG Monitoring Program (Section 7.3)	The company which has been issued a permit to operate must demonstrate compliance with applicable legislation related to water quality
Number of Forestry inspections with water quality satisfactory results	100%	• Forestry Monitoring Program (Section 7.3)	The company which has been issued a permit to operate must demonstrate compliance with applicable legislation related to water quality
Number of Camping and Trapping inspections with satisfactory water quality results	100%	• Trapping and Camping Monitoring Program (Section 7.3)	Not applicable
Number of PNG facilities with groundwater sampling programs	100%	• PNG Monitoring Program (Section 7.3)	PNG facilities with potential to impact groundwater must have permit conditions for groundwater monitoring

INDICATOR	TARGET	MECHANISM/PROCESS	RULE
Number of PNG facilities with groundwater sampling programs with satisfactory results	100%	• PNG Monitoring Program (Section 7.3)	The company which has been issued a permit to operate must demonstrate compliance with applicable permit conditions
Number of placer and mining inspections (water quality) with satisfactory results	100%	• Mining Monitoring Program (Section 7.3)	The company which has been issued a permit to operate must demonstrate compliance with applicable legislation related to water quality; threshold for water quality at "end of pipe" is aquatic life
Number of permits with conditions to manage low flow conditions	100%	• Referrals Tracking Program (Section 7.2.1) • Referral Review Checklist (Section 7.2.1)	Permits for water withdrawals must indicate low-flow conditions; water withdrawal to cease with low-flow threshold met
Number of permits with flow measurement requirements	100%	• Referrals Tracking Program (Section 7.2.1) • Referral Review Checklist (Section 7.2.1)	Permits for water withdrawals must indicate requirement for daily flow measurement, under Qualified Professional (QP) supervision, during periods of withdrawal
Number of water withdrawal inspections per year with satisfactory results	100%	• Water Quantity and Quantity Monitoring Program (Section 7.3)	The company which has been issued a permit to withdraw water must demonstrate compliance with applicable permit conditions
Number of PNG companies fracking at one time	Information purposes only, perhaps as part of BCER pilot program on environmental flow needs	• Water Quantity and Quantity Monitoring Program (Section 7.3)	Not applicable
OBJECTIVE: Maintain function and connectivity of riparian habitat along rivers and streams			

INDICATOR	TARGET	MECHANISM/PROCESS	RULE
Landscape level			
Percentage of disturbed riparian habitat	Low (i.e., <12%)	• Analysis Program (Section 7.1.1) • Restoration Priorities Program (Section 7.1.4)	Percentage of disturbed riparian habitat (Low Risk Class) must be demonstrated for 65% or greater of the land available for the reasonable practice of Treaty rights. Appropriate watercourse and wetland setbacks to be established by QPs on a case-by-case basis.
Percentage of range disturbance through riparian habitat	Low (i.e., <12%)	• Analysis Program (Section 7.1.1)	Data managed by MOF; rolls into overall indicator. Appropriate watercourse and wetland setbacks to be established by QPs on a case-by-case basis.
Percentage of PNG disturbance through riparian habitat	Does not exceed the cumulative Low percentage of disturbed riparian habitat	• Analysis Program (Section 7.1.1)	Data managed by BCER; rolls into overall indicator. Appropriate watercourse and wetland setbacks to be established by QPs on a case-by-case basis.
Percentage of forestry disturbance through riparian habitat	Does not exceed the cumulative Low percentage of disturbed riparian habitat	• Analysis Program (Section 7.1.1)	Data managed by MOF; rolls into overall indicator. Appropriate watercourse and wetland setbacks to be established by QPs on a case-by-case basis.
Percentage of road (e.g., MOTI) disturbance through riparian habitat	Does not exceed the cumulative Low percentage of disturbed riparian habitat	• Analysis Program (Section 7.1.1)	Data managed by MOTI; rolls into overall indicator. Appropriate watercourse and wetland setbacks to be

INDICATOR	TARGET	MECHANISM/PROCESS	RULE
			established by QPs on a case-by-case basis.
Percentage of transmission line (e.g., BC Hydro) through riparian habitat	Does not exceed the cumulative Low percentage of disturbed riparian habitat	• Analysis Program (Section 7.1.1)	Data managed by BC Hydro; rolls into overall indicator. Appropriate watercourse and wetland setbacks to be established by QPs on a case-by-case basis.
Percentage of fee simple land management disturbance through riparian habitat	Does not exceed the cumulative Low percentage of disturbed riparian habitat	• Analysis Program (Section 7.1.1)	Data managed by WRLS; rolls into overall indicator. Appropriate watercourse and wetland setbacks to be established by QPs on a case-by-case basis.
Percentage of placer mining through stream and riparian habitat	Does not exceed the cumulative Low percentage of disturbed riparian habitat	• Analysis Program (Section 7.1.1)	Data managed by the Ministry of Energy, Mines and Low Carbon Innovation (EMLI); rolls into overall indicator
Operational level			
Demonstrate adherence to the Federal *Fisheries Act*	100%	• Referral Tracking Program (Section 7.2.1)	Provide evidence for the Request for Project Review process and related project authorizations as needed.
Number of Range Use Plans with waterbody access management conditions	100%	• Referrals Tracking Program (Section 7.2.1) • Referral Review Checklist (Section 7.2.1	Range Use Plans must have agreed upon waterbody access management conditions. Appropriate watercourse and wetland setbacks to be established by QPs on a case-by-case basis.
Number of range inspections (riparian habitat) with satisfactory results	100%	• Range Monitoring Program (Section 7.3)	The company which has been issued a permit to operate a grazing license must

INDICATOR	TARGET	MECHANISM/PROCESS	RULE
			demonstrate compliance with Range Use Plan conditions
Number of PNG applications with open cut stream crossings	Information purposes only	• Referrals Tracking Program (Section 7.2.1) • Referral Review Checklist (Section 7.2.1	Trenchless stream crossings for fish-bearing waterbodies unless geotechnical report indicates stability concerns.
Number of PNG applications with open cut stream crossings that have a restoration plan written and signed by a QP	100%	• Referrals Tracking Program (Section 7.2.1) • Referral Review Checklist (Section 7.2.1	Open cut stream crossings have restoration plan written and signed by a QP. Appropriate watercourse and wetland setbacks to be established by QPs on a case-by-case basis.
Number of PNG inspections (riparian) with satisfactory results	100%	• PNG Monitoring Program (Section 7.3)	The company which has been issued a permit for an open cut crossing must demonstrate compliance with submitted restoration plan.
Number of PNG above-ground appurtenances within Riparian Management Areas	Zero	• Referrals Tracking Program (Section 7.2.1) • Referral Review Checklist (Section 7.2.1 • PNG Monitoring Program (Section 7.3)	Above ground appurtenances are not permitted within Riparian Management Areas
Number of Forestry inspections (riparian) with satisfactory results	100%	• Forestry Monitoring Program (Section 7.3)	Company will demonstrate compliance with existing legislation and HRFN Forestry Guidelines (under development) related to riparian management areas
Riparian Area Regulation updates	Inclusion of the Peace Region for the protection of riparian areas through Fee Simple lands	• Legislation Tracking Sheet (Section 7.2.2)	Legislation update / change to include Peace Region in the Riparian Area Regulation

INDICATOR	TARGET	MECHANISM/PROCESS	RULE
	(including ability for wildlife to move through using riparian corridors)		
BCER Environmental Management and Protection Regulation	Inclusion of Non-Classified Drainages (NCD) as watercourses (with associated Riparian Management Areas)	• Legislation Tracking Sheet (Section 7.2.2)	Legislation update / change to include NCD as watercourses
MOF Forest and Range Practices Act (associated regulations)	Inclusion of NCD as watercourses (with associated Riparian Management Areas)	• Legislation Tracking Sheet (Section 7.2.2)	Legislation update / change to include NCD as watercourses
OBJECTIVE: Maintain healthy wetlands			
Landscape level			
Number and spatial area of wetlands	Information purposes only	• Analysis Program (Section 7.1.1) • Current Condition Report (Section 7.1.3)	Not applicable
Percentage of "properly functioning" wetlands	Information purposes only	• Restoration Priorities Program (Section 7.1.4) • Wetland Monitoring Program (Section 7.3)	Not applicable
Number and spatial area of wetlands within a grazing tenure	Information purposes only	• Analysis Program (Section 7.1.1) • Current Condition Report (Section 7.1.3)	Appropriate watercourse and wetland setbacks to be established by QPs on a case-by-case basis.
Number of identified wetlands that have been classified	100%	• Wetland Classification Project (Section 7.3) • Province to work with HRFN to classify wetlands in Administrative Area	Not applicable
Determine wetlands and other waterbodies with no surface connectivity to other water features	Information purposes only	• Analysis Program (Section 7.1.1)	Develop protection program for unconnected watercourses

INDICATOR	TARGET	MECHANISM/PROCESS	RULE
		• Current Condition Report (Section 7.1.3)	
Operational level			
Percentage of individually mapped wetland or wetland complexes disturbed	Low (15% or less disturbance = Properly Functioning)	• Analysis Program (Section 7.1.1) • Current Condition Report (Section 7.1.3)	Permits must not be issued for activities in wetlands if disturbance is above low threshold. Appropriate watercourse and wetland setbacks to be established by QPs on a case-by-case basis.
Percentage of individually mapped wetland or wetland complexes with disturbed riparian areas	Low (15% or less disturbance = Properly Functioning)	• Analysis Program (Section 7.1.1) • Current Condition Report (Section 7.1.3)	Permits must not be issued for activities in wetland riparian areas. Appropriate watercourse and wetland setbacks to be established by QPs on a case-by-case basis.
Number of PNG applications indicating riser sites or pigging facility in a wetland	Zero	• Referrals Tracking Program (Section 7.2.1) • Referral Review Checklist (Section 7.2.1	Not applicable
Number of PNG pipeline applications indicating wetland crossings	Information purposes only	• Referrals Tracking Program (Section 7.2.1) • Referral Review Checklist (Section 7.2.1)	Not applicable
Number of PNG pipeline applications with wetland crossings that have trenchless crossing methodology	Information purposes only	• Referral Tracking Program (Section 7.2.1)	Not applicable
Number of PNG pipeline applications with open cut wetland crossings with hydrological integrity plan	All	• Referral Tracking Program (Section 7.2.1)	Open cut wetland crossings have restoration plan written and signed by a QP. Appropriate watercourse and wetland setbacks to be

INDICATOR	TARGET	MECHANISM/PROCESS	RULE
written by a Qualified Professional			established by QPs on a case-by-case basis.
Number of PNG inspections with satisfactory results related to wetland function	100%	• PNG Monitoring Program (Section 7.3)	The company which has been issued a permit for an open cut crossing must demonstrate compliance with submitted restoration plan. Appropriate watercourse and wetland setbacks to be established by QPs on a case-by-case basis.
Number of Range inspections with satisfactory results related to wetland function	100%	• Range Monitoring Program (Section 7.3)	The company which has been issued a range license must demonstrate compliance with submitted restoration plan.
Objective: Manage the water objectives into the future considering the impacts of climate change			
Landscape level			
Number and volume of water withdrawals	Information purposes only	• Analysis Program (Section 7.1.1) • Current Condition Report (Section 7.1.3) • Restoration Priorities Program (Section 7.1.4) • Referrals Tracking Program (Section 7.2.1) • Water Quantity and Quantity Monitoring Program (Section 7.3)	Annual renewals of water withdrawals permits and authorizations adjusted relative to local climatic conditions (e.g., few permits and lower withdrawal amounts in drought years).
Operational level			
Number of permits and applications with water use or withdrawal conditions with climate-related volume calculations.	100%	Water Quantity and Quantity Monitoring Program (Section 7.3)	Permits and authorizations for water use are not granted without climate-related management actions.

6.7 Food and Medicine

Food is a relationship between plants and animals. People are related and connected to plants and animals, as expressed through the phrase “all my relations”. The Elders teach that before a plant is harvested and after an animal is killed, an offering must be given to express gratitude for the life giving itself up to sustain another. Passed down with the knowledge of how to hunt, gather, and process food is a knowledge that food and people are connected. Before harvesting a plant, thanks is given. After an animal is killed, thanks is given. Thanks is given for one life giving life for another. Through this connection, it is known to take only what is needed. Food is a reciprocal relationship. When food is given by the plant or the animal, there is a duty to take only what is needed when it is needed. The Elders teach a respect for food that is given. This respect is tied to purpose, vocation, relationship. When the relationship is healthy and life is purposeful, there enters a sense of well-being, of happiness, of living a good life.

Prior to the arrival of Europeans and the introduction of agriculture, trading posts, and industrialization, all food was collected and processed in nature. This collection and processing were, and may still be, intrinsically connected to survival and a sense of purpose. Hunting, gathering, and processing food and medicines were, and may still be, considered important jobs, vocations even. An essential job where the food and medicine are harvested to keep the family alive, and a vocation where there is a duty of care to the plants and animals as well.

As a nomadic people before contact with Europeans, the people of HRFN relied solely on the land for food and medicine. HRFN had a non-agricultural culture; they did not cultivate land, nor did they raise animals in captivity. To survive, the people had to intimately understand the land and how everything interacted through space and time. Each had to be a master at their trade: the hunter, the gatherer, those who processed the food, those who administered the medicine. This knowledge was learned over a lifetime and passed down through the generations.

Since contact, HRFN’s relationship with food has changed. Since knowledge learned over lifetimes and passed down through generations has been lost through shifting times, the master tradespeople and their knowledge are waning.

Also shifting is the health of the land. Pollutants are introduced with the advance of commercial forestry, commercial agriculture, and natural resource extraction. Herbicides are applied, grazing cows wander the eroding creeks and rivers, pipelines sometimes burst and more often leak, mines and hydroelectric dams release harmful elements that bioaccumulate into the system. Animals that were once plentiful are now imperiled by this shifting landscape. For example, although HRFN knows there are not enough caribou for harvest, the government still proposes to allow industrial development in critical habitat and commercial and recreational hunting.

It is clear the connection has been broken and things can never be put back to what they once were. The people of HRFN are not attempting to fix what cannot be fixed. They know there is no going back to a nomadic way of life; they also know that their food is inexorably connected to culture. That food is related to vocation, to social connection, to health, to life itself.

The 'food and medicine’ value is substantial and incorporates many elements and considerations. To further explain and measure this value, it is broken into the following interrelated categories:

- Resilient landscapes (Section 6.4)
- Food and Medicinal Plants
- Fish
- Wildlife

6.7.1 Food and Medicinal Plants

HRFN's law states that everything is connected. It is not possible to harvest the diamond willow fungus without the willow. It is not possible to grow a willow without some soil. Without nutrients provided by the organisms that process decaying plant matter, the soil would be sterile. Without adequate and clean water, the willow could not drink. And without the carbon dioxide from our breath, the willow could not breathe.

Because everything is connected, it is not possible to delineate individual plants or communities of plants and ensure a healthy and abundant supply of plants for food and medicines for future generations. For example, a huckleberry patch, a highly prized and valuable site, will produce the most berries after a disturbance (fire or logging) but will not produce many berries under a dense forest canopy with little light (Keefer et al. 2010). Prized huckleberry patches change over time. This is why, although berry patches may be identified in TUS data, polygon delineation of specific plants and plant communities are not used in this AMPP for the long-term protection of HRFN's Treaty right to gather food and medicinal plants.

The ability to meaningfully practice HRFN's Treaty rights is captured within the objectives, indicators, and targets below.

The primary Food and Medicinal Plant objective within the Food and Medicine value is that:

- The community should have continued access to a healthy and abundant supply of plants for food and medicine (Table 6-6) as measured through:
    - Plants free from contamination;
    - Connectivity (Section 6.3); and
    - Resilient Landscapes (Section 6.4).

Table 6-6. Landscape-level and operational-level indicators and targets for Food and Medicinal Plants within the Food and Medicine value. All indicators and targets calculated at the level of WMB, unless otherwise indicated.

INDICATOR	TARGET	MECHANISM/PROCESS	RULE
Objective: Community to have access to a healthy and abundant supply of plants for food and medicine			
Landscape level			
Percentage of available land base that has potential for the use of broadcast herbicides or pesticides	Information purposes only	• Analysis Program (Section 7.1.1) • Current Condition Report (Section 7.1.3)	HRFN does not support the use of broadcast herbicide or pesticide applications
Percentage of dormant well sites without Certificate of Restoration (COR)	Information purposes only	• Analysis Program (Section 7.1.1) • Current Condition Report (Section 7.1.3) • Restoration Priorities Program (Section 7.1.4)	All projects should have current CORs.
Percentage of dormant sites with an out-of-date COR	Information purposes only	• Analysis Program (Section 7.1.1) • Current Condition Report (Section 7.1.3) • Restoration Priorities Program (Section 7.1.4)	All projects should have current CORs.
Percentage of available land base for gathering that does not overlap range tenures	Information purposes only	• Analysis Program (Section 7.1.1) • Current Condition Report (Section 7.1.3)	Not applicable
Operational level			
Sustainable Forest Management Plan (SFMP) (or equivalent) and herbicide use language	Work with Ministry of Forests (MOF) and EMLI to remove broadcast herbicide ability	• Legislative Change Tracking Program (Section 7.2.2)	HRFN does not support the use of broadcast herbicide or pesticide applications
PNG and herbicide use	Work with EMLI to remove broadcast herbicide ability in areas where fire hazard is not a concern	• Legislative Change Tracking Program (Section 7.2.2)	HRFN does not support the use of broadcast herbicide or pesticide applications

INDICATOR	TARGET	MECHANISM/PROCESS	RULE
Percentage of biophysical monitoring in areas where air pollutants are of known concern	100%	• Airshed Monitoring Program (Section 7.3)	Not applicable
Number of cows per range tenure	Sustainable Animal Unit Months (AUM) per range tenure	• Range Monitoring Program (Section 7.3)	Not applicable
Level of grazing	Minimum stubble height; cows are removed from Crown range when average stubble height falls below 10 cm	• Range Monitoring Program (Section 7.3)	Not applicable

6.7.2 Fish

The ability to fish is dependent on healthy fish populations, which in turn need clean waters to spawn, hatch, rear and rest. The water should be clean and free of pollutants, flow freely, and have healthy riparian habitats that provide shade, food, and nutrients. Fish face cumulative anthropogenic challenges including formal and informal human-made dams and draws, fishing pressure, invasive species, decreasing seasonal low flows, poor water quality, and rising temperatures.

HRFN's definition of fish aligns with the Fisheries and Oceans Canada (DFO) definition of fish which "includes finfish, shellfish, crustaceans, and molluscs in any stage of life, including eggs. Also includes any parts of a fish". A species of note in the area is Bull Trout.

The primary Fish objectives within the Food and Medicine value are to:

- Ensure ability to exercise Treaty 8 rights to fish (Table 6-7) by:
    - Maintaining clean aquatic environments (Section 6.6);
    - Maintaining healthy populations within each WMB area that can be consumed in all seasons without fear of contamination or other ill effects on human health; and
    - Ensuring abundant aquatic and riparian habitat which provides for every life stage of fish, especially breeding, resting, spawning, and rearing habitat.

Table 6-7. Landscape-level and operational-level indicators and targets for Fish within the Food and Medicine value. All indicators and targets calculated at the level of WMB, unless otherwise indicated.

INDICATOR	TARGET	MECHANISM/PROCESS	RULE
Objective: Healthy and abundant populations of fish available to harvest annually and safe to consume			
Landscape level			
Determine spatial extent of watercourses (including ephemeral water bodies) with information on presence of fish	100%	• Analysis Program (Section 7.1.1 • Current Condition Report (Section 7.1.3) • Develop protection program for watercourses with DFO. • Combine TUS and DFO fisheries data for comprehensive understanding of fish presence	Not applicable.
Determine presence of formal and informal dams, draws and beaver dams on watercourses	Information purposes only	• Analysis Program (Section 7.1.1 • Current Condition Report (Section 7.1.3) • Identify illegal and informal dams. • Develop program for removal	Not applicable.
Presence and management using umbrella species	Determine suitable umbrella fisheries species for types of fishing species (e.g., bull trout)	• Fish and Wildlife Monitoring Program (Section 7.3)	Under development
Monitoring of bull trout populations and quotas per WMB	Number of bull trout available for HRFN consumption and recreational fishing / harvest	• Fish and Wildlife Monitoring Program (Section 7.3)	Under development
Amount of land available for herbicide / pesticide use (per river system?)	Zero herbicide or pesticide use within identified area	• Fish and Wildlife Monitoring Program (Section 7.3)	Under development

INDICATOR	TARGET	MECHANISM/PROCESS	RULE
Operational level			
Demonstrate adherence to the fish protections within the Federal *Fisheries Act*	100%	• Referral Tracking Program (Section 7.2.1)	Provide evidence for the Request for Project Review process and related project authorizations as needed.
Number of target species (e.g., bull trout) surveys per river system. Surveys to include population estimates, and assessments body condition and chemical analysis.	One survey every five years	• Fish and Wildlife Monitoring Program (Section 7.3)	Under development
Objective: Ensuring abundant aquatic breeding, resting, spawning, and rearing habitat			
Landscape level			
Target species (e.g., bull trout) habitat types identified in the HRFN web mapping tool	All	• Fish and Wildlife Monitoring Program (Section 7.3)	Appropriate watercourse and wetland setbacks to be established by QPs on a case-by-case basis.
Current type and amount of disturbance within each habitat type.	Information purposes only	• Fish and Wildlife Monitoring Program (Section 7.3)	Appropriate watercourse and wetland setbacks to be established by QPs on a case-by-case basis.
Operational level			
Demonstrate adherence to the fish habitat protections in the Federal *Fisheries Act*	100%	• Referral Tracking Program (Section 7.2.1)	Provide evidence for the Request for Project Review process and related project authorizations as needed.
Number of referrals or applications across sectors that overlap target species (e.g., bull trout) habitat	Information purposes only	• Fish and Wildlife Monitoring Program (Section 7.3)	Under development

6.7.3 Wildlife

6.7.3.1 Species at Risk

The AMPP approach outlines how to move forward to heal our fractured landscape into a healthier and more robust ecological state. Federal and provincial recommendations for specific Species at Risk that intersect with the Administrative Area can be amalgamated with this AMPP for additional protection (e.g., updates to the Migratory Birds Regulations protecting nest trees of key species, even if the nests are not currently active).

6.7.3.2 Wildlife

Wildlife is defined as all animal species present in an area including vertebrates and invertebrates. The approach to conservation and management taken by the Province typically focuses on single species that are of conservation (e.g., rare) or management (e.g., hunted) interest. This approach, although occasionally successful in the short term, often leads to unforeseen and unintended consequences. For example, the killing of wolves in the hopes of reducing predation on caribou has resulted in increases in local beaver populations, resulting in additional dams and reductions in flows from tributaries. Wildlife management must prioritize the whole system.

This single-species approach has not been successful in maintaining healthy and functioning ecosystems. This approach has not kept fish stocks high or wildlife numbers thriving. Traditionally, HRFN maintains a different perspective, one in alignment with nomadic ancestry and traditions that prioritize the protection and understanding of what is *seasonally abundant* on the landscape. Traditional Knowledge tells us that that all species will be protected by maintaining and restoring healthy ecosystems, walking more softly on the earth and protecting the species that can be hunted and fished.

The focus of wildlife management within the AMPP is maintaining habitat, especially for ungulates such as moose, elk, white-tailed deer, and caribou. A further critical aspect of habitat management is maintaining the connectivity of wildlife trails and mineral licks. It is critical that wildlife species be able to move across the landscape to complete their life cycles as well as to adapt to changing landscapes, seasonal and weather patterns, and climate change.

The primary objective for Wildlife within the Food and Medicine value (Table 6-8) is to maintain and enhance wildlife habitat and populations to ensure long-term viability and accessibility for the practice of Treaty 8 rights. The overall objective has multiple sub-components, including:

- Maintaining an abundant supply of food from hunting;
- Protecting mineral licks; and
- Ensuring animals are safe to eat in their entirety (e.g., meat, organs, marrow) or safe to use for cultural practice (e.g., processing tick-free hides, use of bear grease).

HRFN's objective around wildlife is direct: it focuses on healthy, abundant, and resilient populations. How this translates into indicators, targets, or management direction is much more complicated. There are links to water, forest condition, habitat availability, connectivity, and all other HRFN values. They are affected by many different pressures such as oil and gas activities, mining, forestry, agriculture, range, contamination, habitat fragmentation, and climate change. Wildlife abundance and health are high-level integrators of cumulative effects.

This AMPP attempts to simplify these factors, objectives, and pressures into an analysis framework; however, this AMPP represents a first step, and it is expected that it will be updated as new data and ideas become available.

In general, the approach is to choose a manageable number of wildlife species of importance to HRFN and look at existing models that describe their habitat requirements. Moose, caribou, fisher, and bears have been chosen as starting points for this iteration. It should be noted that this approach does not fit well with HRFN's more holistic way of looking at ecosystem health and connectivity but was thought to be necessary to translate wildlife objectives into management direction that industry and regulators can follow. Periodic monitoring in a way that is compatible with HRFN's world view will be implemented as part of this adaptive management plan to see if this more Western way of seeing is working for HRFN in this context.

The habitat models developed as part of the Analysis Program (Section 7.1.1) will be used to assess the current amount and distribution of habitat for all life stages, thereby identifying opportunities for restoration to improve connectivity and habitat quality. Consistent with other sections, summaries will be scaled to the WMB unit.

Table 6-8. Landscape-level and operational-level indicators and targets for Wildlife within the Food and Medicine value, all indicators and targets calculated at the level of WMB, unless otherwise indicated.

INDICATOR	TARGET	MECHANISM/PROCESS	RULE
OBJECTIVE: Maintain and enhance wildlife habitat and populations to ensure long-term viability and accessibility for the practice of Treaty 8 rights			
Landscape level			
Percentage of range or agricultural fencing that is "wildlife friendly"	100%	• Analysis Program (Section 7.1.1) • Current Condition Report (Section 7.1.3)	Under development
Spatial area of land available for broadcast herbicide use related to forestry	Information purposes only	• Analysis Program (Section 7.1.1) • Current Condition Report (Section 7.1.3)	HRFN does not support the use of broadcast herbicide or pesticide applications.
Spatial area of land available for broadcast pesticide use related to agriculture	Information purposes only	• Analysis Program (Section 7.1.1) • Current Condition Report (Section 7.1.3)	Under development
Spatial area of land available for the baiting of ungulates for the purpose of recreational hunting	Information purposes only	• Analysis Program (Section 7.1.1) • Current Condition Report (Section 7.1.3)	Under development
Moose: The amount and distribution of habitat for all life stages is available	(≥ 75% connected habitat per WMB to support low risk moose populations.	• Analysis Program (Section 7.1.1) • Current Condition Report (Section 7.1.3) • Fish and Wildlife Monitoring Program (Section 7.3.4)	In the existing RSEA moose model, 75% of core effective habitat remaining is considered no risk. If there is a risk flag (e.g., road density, disturbance buffers, habitat suitability), risk-specific strategies are to be developed within each WMB or other appropriate spatial scale

INDICATOR	TARGET	MECHANISM/PROCESS	RULE
Caribou: The amount and distribution of habitat for all life stages is available	65% undisturbed critical habitat (gives a herd 60% chance of self-sustaining population).	• Analysis Program (Section 7.1.1) • Fish and Wildlife Monitoring Program (Section 7.3.4) • Current Condition Report (Section 7.1.3)	Under development
Fisher (as a proxy for Marten): The amount and distribution of habitat for all life stages is available	Based on the BC Fisher habitat working group landscape targets for key habitat components: • Rearing or breeding habitat (36%) • Resting habitat – spruce (16%) and mature (33%) • Foraging habitat – snowshoe hare (8.7%), squirrels (7.2%) • Movement habitat – 75% with total cover >20%	• Analysis Program (Section 7.1.1) • Current Condition Report (Section 7.1.3) • Fish and Wildlife Monitoring Program (Section 7.3.4)	Under development
Black bear: the amount and distribution of habitat for all life stages is available	60% (low risk)	• Analysis Program (Section 7.1.1) • Current Condition Report (Section 7.1.3) • Fish and Wildlife Monitoring Program (Section 7.3.4)	Under development
Spatial area of land of forest preventing ungulate movement (e.g., due to blowdown)	Information purposes only	• Analysis Program (Section 7.1.1) • Current Condition Report (Section 7.1.3)	A follow-up survey to confirm or identify problem forest types should be scheduled.
Spatial area of land of regenerating cutblocks with “ungulate friendly” stocking or natural regeneration of typical browse species	Information purposes only	• Forestry Monitoring Program Section 7.3.8)	All stocking standards to be “ungulate friendly” or foster natural regeneration.

INDICATOR	TARGET	MECHANISM/PROCESS	RULE
HRFN's mineral lick locations and associated wildlife trails are captured spatially	Information purposes only	• Analysis Program (Section 7.1.1)	Not applicable
Provincial mineral lick spatial locations copied spatially	Information purposes only	• Analysis Program (Section 7.1.1)	Not applicable
Operational level			
Number of range applications	Information purposes only	• Referrals Tracking Program (Section 7.2.1) • Referral Review Checklist (Section 7.2.1)	Under development
Number of Range Use Plans that indicate requirement for wildlife-friendly fencing	All	• Range Monitoring Program (Section 7.3.7)	Under development
Number of range inspections with satisfactory results related to wildlife-friendly fencing	All	• Range Monitoring Program (Section 7.3.7)	Under development
Number of PNG pipeline applications with intersecting linear corridors	Information purposes only	• Referrals Tracking Program (Section 7.2.1) • Referral Review Checklist (Section 7.2.1) • PNG Monitoring Program (Section 7.3.9)	Under development
Number of PNG pipeline applications with intersecting linear corridors with associated line of sight mitigation measures	Information purposes only	• Referrals Tracking Program (Section 7.2.1) • Referral Review Checklist (Section 7.2.1) • PNG Monitoring Program (Section 7.3.9)	Under development
Number of inspections with satisfactory results related to line of sight	100%	• PNG Monitoring Program (Section 7.3.9)	Under development

INDICATOR	TARGET	MECHANISM/PROCESS	RULE
Number of PNG pipeline applications with intersecting wildlife trails	Information purposes only	• Referrals Tracking Program (Section 7.2.1) • Referral Review Checklist (Section 7.2.1) • PNG Monitoring Program (Section 7.3.9)	Under development
Number of PNG pipeline applications with intersection wildlife trails with associated mitigation plans written by a QEP	100%	• Referrals Tracking Program (Section 7.2.1) • Referral Review Checklist (Section 7.2.1) • PNG Monitoring Program (Section 7.3.9)	Under development
Number of inspections with satisfactory results related to wildlife trails	100%	• Referrals Tracking Program (Section 7.2.1) • Referral Review Checklist (Section 7.2.1) • PNG Monitoring Program (Section 7.3.9)	Under development
Ministry of Environment and Climate Change regulations updates re: herbicide use	MOE to eliminate broadcast herbicide use. Spot (manual) application of herbicides can be acceptable under an approved plan.	• Legislative Change Tracking Program (7.2.2)	Under development
Number of referrals and applications reviewed by Lands staff with overlapping mineral licks	Information purposes only	• Referrals Tracking Program (Section 7.2.1) • Referral Review Checklist (Section 7.2.1)	Not applicable
Number of permits with avoidance of mineral licks	100%	• Referral Tracking Program (Section 7.2.1)	Permits must not be issued for activities that overlap / disturb an identified mineral lick. Appropriate setbacks to be established by QEPs on a case-by-case basis.

INDICATOR	TARGET	MECHANISM/PROCESS	RULE
Number of inspections with satisfactory results related to avoidance of mineral licks and associated wildlife trails	100%	• PNG Monitoring Program (Section 7.3.9) • Forestry Monitoring Program (Section 7.3.8) • Range Monitoring Program (Section 7.3.7) • Mining Monitoring Program (Section 7.3.10)	The company which has been issued a permit for activities must demonstrate compliance on condition that mineral licks must be avoided. Appropriate setbacks to be established by QEPs on a case-by-case basis.

7 Supporting Programs

Realizing the full potential of the framework provided in Sections 2 to 6 of the AMPP requires the creation of integrated, supporting programs. These programs have been organized into three categories (Figure 7-1):

- Assessment Programs – programs designed to assess current conditions within the Administrative Boundary and to provide a quantitative assessment of land cover, habitat availability, industrial activity, historical and current disturbance, and HRFN values.
- Tracking Programs – programs designed to evaluate the progress of referrals, to assess the achievement of protection and restoration objectives, and to monitor compliance, adjustments and amendments to legislation, regulations, by-laws, and regulatory guidance.
- Monitoring Programs – programs designed to monitor activity within the Administrative Boundary, evaluate adherence to stated indicators and targets, and identify areas that require adaptive management attention.

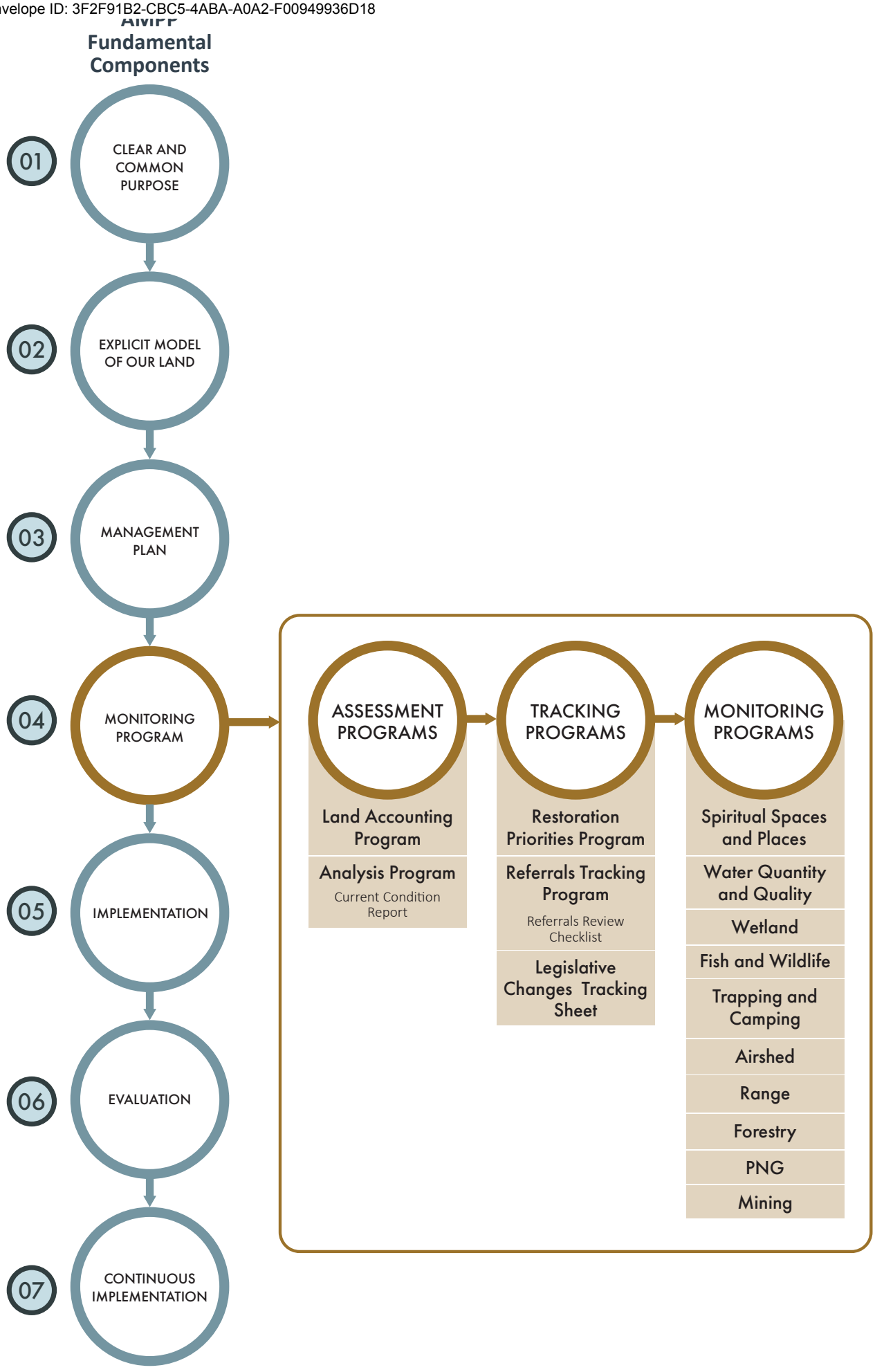


Figure 7-1. Supporting Programs for the HRFN Adaptive Management Program and Plan.

7.1 Assessment Programs

7.1.1 Analysis Program

Purpose

The purpose of the Analysis Program is to analyze the current condition of the land base using GIS-based land cover mapping, disturbance mapping (e.g., well sites, linear features), wildlife habitat modelling, connectivity assessment, and airshed and viewshed assessments.

Product

A primary result of the Analysis Program will be the creation of a "living" map of the Administrative Area that can be updated as information is gathered. The Analysis Program provides the foundation for all other supporting programs and feeds directly into the Land Accounting Program (Section 7.1.2) and Current Conditions Report (Section 7.1.3).

Data Sources

The first step of the Analysis Program will be to generate land cover and ecosystem mapping data for the Administrative Area. This will involve compiling all available existing datasets to first determine how much of the Administrative Area has been mapped, and second, to consider developing a model data set to fill in data gaps as appropriate. A variety of land cover products are available from the BC Data Catalog each pertaining to a different sector and/or purposes (e.g. forestry, PNG, environmental assessment, and agriculture).

Predictive Ecosystem Mapping (PEM) is available for 2.6 million hectares (87%) of the 3-million-hectare Administrative Area. PEM is designed to delineate ecosystems for vast tracts of land using available spatial data, knowledge of ecological-landscape relationships, and computer automation. Other mapping and inventory products available for the Administrative Area that will be used to address identified gaps include the provincial Vegetation Resources Inventory (VRI) and recent (2020) Land Cover of Canada mapping.

Past and existing disturbance layers will be compiled through disturbance datasets available from the BC Data Catalogue. This includes forestry, roads, oil and gas, transmission lines, mining and exploration, urban development and agriculture and grazing. Relevant datasets will be processed and compiled to create a regularly updated account of disturbance on the land.

Analytical Approach

The Analysis Program will be based upon current conditions of the land base by WMB. Given the size of the Administrative Area and range of data sources, it is expected that there will be areas of the landscape that lack complete data coverage (e.g., absence of ecosystem mapping data in the southwestern WMBs). Where such gaps in existing datasets occur, modelling will be used to make predictions about the environmental and ecological conditions within the gaps. The predictive modelling program will make use of ongoing advancements in machine learning, remote sensing, and high-performance computing to generate detailed maps of different spatial characteristics, including ecosystems, disturbance regimes (e.g., cutblocks, forest fires), and soil properties (e.g., moisture, nutrients).

From the existing and modelled land cover data, we will explore generating wildlife habitat models. The development of a habitat model would involve gathering background information on focal wildlife species and summarizing this information into species accounts and developing assumptions and wildlife habitat ratings based on this background information and available field data.

The model would be continually refined with the addition of field-based data, which would also be used to both complement existing training data and fact-check spatial predictions generated through modelling. All maps produced through the modelling process would be incorporated into the living map of the Administrative Area to help visualize spatial gaps and predicted land base characteristics.

7.1.2 Land Accounting Program

Purpose

To track the amount of land, by WMB, available for the meaningful practice of treaty rights. Available land will decrease as land is disturbed and will increase as land is restored.

Data Sources

- Analysis Program (Section 7.1.1)
- The results of each of the industry-focused monitoring programs

Key Metrics

Unless otherwise indicated, all metrics will be quantified at the level of WMB.

- Percentage of land that is currently available for the practice of Treaty 8 rights
- Spatial area of land that overlaps Section 16 grazing reserves, Crown land leases, parks and protected areas with hunting restrictions, and areas within no shooting zones
- Spatial area of land that overlaps Fee Simple land
- Spatial area of land that contains inaccessible Crown land (e.g., surrounded by private lands)
- Percentage of inaccessible Crown land "unlocked" with easements
- Spatial area of land that has been converted to sod-forming grass vegetation communities
- Number of referrals and applications with Crown land disturbance or land conversion (fee simple or lease)
- Spatial area of disturbance within approved applications
- Percentage of disturbed riparian habitat
- Linear feature density by ecosystem type (e.g., riparian)
- Percentage of area classified as Low Wildfire Risk
- Percentage of available land base that has potential for the use of broadcast herbicides or pesticides

7.1.3 Current Condition Report

One important output of the Analysis Program (Section 7.1.1) is the Current Condition Report. This report will set the benchmarks against which adoption of and adherence to the AMPP is measured for each HRFN value.

7.1.4 Restoration Priorities Program

Purpose

Within the context of this AMPP, restoration priorities are based on the ability to meaningfully practice treaty rights, a goal which is embedded in each of the Value-based objectives and associated indicators, targets, and rules. The Restoration Priorities Program will identify areas currently not meeting AMPP targets and will provide target-specific recommendations to move towards success.

Data Sources

- Analysis Program (Section 7.1.1)
- Land Accounting Program (Section 7.1.2)
- Current Condition Report (Section 7.1.3)

Key Metrics

Unless otherwise indicated, all metrics will be quantified at the level of WMB.

- Spatial area of land available for restoration
- Percentage of available land for restoration that has been restored
- Spatial area of land restored (per year) by disturbance type
- Ecosystem representation within BGSs
- Forest age class and patch size distribution within BGSs
- Total hectares of interior forest across seral classes

7.2 Tracking Programs

7.2.1 Referrals Tracking Program

The HRFN Lands Department has a delegated responsibility to work with industry and government agencies in the review of referrals (also known as applications). Referrals may be for industrial activities such as forestry, petroleum and natural gas, and mining. Referrals may also be required for land designation changes such as Crown land leases, licenses of occupation, and land transfers from Crown to Fee Simple. Other referrals may be for commercial agricultural purposes, such as range.

Many referrals have the potential to negatively impact treaty rights. The Lands Department interacts with government agencies through consultation. Government agencies have a duty to consult. The Lands Department also interacts directly with application (referral) proponents whose activities may cause surface disturbances related to water, air, and / or land. This engagement is done to better understand disturbance impacts and to provide mitigation recommendations where applicable.

The Lands Department will review referrals and make comments and / or recommendations on impacts to treaty rights. The government, through its duty to consult, has an obligation to consider these impacts.

The Referrals Tracking Program is designed to track all referrals (applications) that the Lands Department processes. The program is designed to track whether and how mitigation recommendations are

considered by government agencies. This program will also inform the Analysis Program (Section 7.1.1) and Land Accounting Program (Section 7.1.2).

To support the Referrals Tracking Program in the context of the AMPP, a Referrals Review Checklist will be developed to quickly assess whether an application meets the requirements of the AMPP and, if not, identify potential areas of conflict that may require additional attention. Demonstration of adherence to environmental regulations is an expectation of the AMPP process, including alignment with the federal *Fisheries Act* regarding the protection and management of water and fish.

The long-term vision for the Referrals Tracking Project is the development of an on-line portal that is linked with both the Analysis Program (Section 7.1.1), the Current Conditions Report (Section 7.1.3) and this AMPP that would allow proponents to immediately see where their project fits into the landscape of other disturbances and whether or not the project is consistent with the values and expectations of the HRFN.

7.2.2 Legislative Changes Tracking Sheet

The Legislative Changes Tracking Sheet will identify regulatory changes that would better support AMPP objectives and will provide an additional administrative record of HRFN interactions with provincial and federal regulators.

7.3 Monitoring Programs

All AMPP monitoring programs will utilize the results of the Analysis Program (Section 7.1.1) and content of the Current Conditions Report (Section 7.1.3) as the benchmarks against which to evaluate adherence to stated indicators and targets, and to identify areas that require adaptive management attention. The monitoring programs integrate objectives, indicators, and targets across values thereby encouraging a more expansive understanding of how current and proposed land use might affect HRFN values and cultural practice.

7.3.1 Spiritual Spaces and Places Monitoring Program

Purpose

Identifying spiritual spaces and places, and assessing, preserving, and repairing the ability of members to visit, use, and travel between different locations.

Supporting Projects

- The Spiritual Spaces and Places Monitoring Program will be supported by a Knowledge Keeping Project.
- The Knowledge Keeping Project will be initiated in parallel with the Analysis Program (Section 7.1.1) and will be conducted in two phases:
    - Collation of existing documentation of Spiritual Spaces and Places and development, to the extent practical, of a spatial representation of the known location.
    - Nation-led conversations with Elder and knowledge holders:
        - To verify or otherwise confirm the existing knowledge and mapping; and

- To identify additional spaces and places that are currently or were historically used for spiritual practice.

Key Metrics

Unless otherwise indicated, all metrics will be quantified at the level of WMB.

- Percentage of spiritual spaces and places with associated written records or descriptions
- Percent overlap between Spiritual Spaces and Places with Crown Land tenures and with private land
- Percentage of Spiritual Spaces and Places that have legislated protection
- Number of referrals or applications with overlap with Spiritual Spaces and Places
- Number of referrals or applications with overlap with Spiritual Spaces and Places with appropriate levels of consultation and engagement
- Number of permits or authorizations with appropriate avoidance or mitigation measures, as supported by inspection results
- Number of PNG facilities that can be seen or heard from Spiritual Spaces and Places
- Number of ILOOs and LOOs for wind-energy developments that overlap Spiritual Spaces and Places

7.3.2 Water Quantity and Quality Program

Purpose

Tracking water withdrawal activities, alterations to watercourse hydrology (e.g., flow rates), and the maintenance of fish habitat.

Supporting Projects

- Analysis Program (Section 7.1.1)

Key Metrics

Unless otherwise indicated, all metrics will be quantified at the level of WMB.

- Density of watercourse crossings
- Number and volume of water withdrawals
- Number of permits and applications with water use or withdrawal conditions with climate-related volume calculations.
- Number of WMBs with real-time flow monitoring data
- Number of WMBs with low-flow thresholds
- Number and volume of water withdrawals during low-flow conditions
- Percent forest cover change in headwaters
- Number of Range Use Plans with waterbody access management conditions
- Number of inspections with satisfactory water quality results for range, PNG, forestry, and mining.
- Number of Camping and Trapping inspections with satisfactory water quality results
- Number of PNG facilities with groundwater sampling programs

- Number of PNG facilities with groundwater sampling programs with satisfactory results
- Number of permits with conditions to manage low flow conditions
- Number of permits with flow measurement requirements
- Number of water withdrawal inspections with satisfactory results
- Number of permits with low flow conditions
- Percentage of disturbed riparian habitat
- Percentage of disturbance through riparian habitat within and across sectors
- Percentage of individually mapped wetlands and wetland complexes with disturbed riparian area

7.3.3 Wetland Monitoring Program

Purpose

Monitoring the extent, quality, and functionality of wetlands within the Administrative Area. The Wetland Monitoring Program will also track the health of riparian ecosystems within the Administrative Boundary.

Supporting Projects

- For this program to be successful, it will be necessary to have a complete and accurate inventory of wetlands within each WMB.
- A preliminary Wetland Classification Project will be completed as part of the Analysis Program (Section 7.1.1).
- Field verification and follow-up monitoring is the purview of the Wetland Monitoring Program.

Key Metrics

Unless otherwise indicated, all metrics will be quantified at the level of WMB.

- Number and area of classified wetlands
- Percentage of “properly functioning” wetlands
- Number and areas of wetlands and waterbodies with no surface connectivity to other water features
- Number and area (hectares) of wetlands within a grazing tenure
- Number of identified wetlands that have been classified
- Percentage of individually mapped wetland or wetland complexes disturbed
- Percentage of individually mapped wetland or wetland complexes with riparian area disturbed
- Percentage of disturbed riparian habitat
- Percentage of disturbance through riparian habitat within and across sectors
- Number of PNG applications indicating riser sites or pigging facility in a wetland
- Number of PNG pipeline applications indicating wetland crossings
- Number of PNG pipeline applications with wetland crossings that have trenchless crossing methodology
- Number of PNG pipeline applications with open cut wetland crossings with hydrological integrity plan written by a Qualified Professional
- Number of inspections with satisfactory wetland function results within and across sectors

7.3.4 Fish and Wildlife Monitoring Program

Purpose

Integrating the fish and wildlife-focused aspects of the Analysis Program (e.g., habitat models, mapping of fish-bearing waterbodies) with the Connectivity and Resilient Landscape objectives.

Supporting Projects

- Analysis Program (Section 7.1.1)
- Landscape-level metrics will be integrated with hunting, trapping, and fishing data, along with a formal field-verification program of the habitat models.

Key Metrics

Unless otherwise indicated, all metrics will be quantified at the level of WMB.

- Percentage of disturbed riparian habitat
- Extent of watercourses (including ephemeral water bodies) with information on presence of fish
- Presence of formal and informal dams, draws and beaver dams on watercourses
- Bull trout population levels
- Number of referrals or applications across sectors that overlap target species (e.g., bull trout) habitat
- Existing and proposed disturbance to fish habitat
- Percentage of range or agricultural fencing that is “wildlife friendly”
- Number of hectares available for the baiting of ungulates for the purpose of recreational hunting
- Moose: The amount and distribution of habitat for all life stages is available
- Caribou: The amount and distribution of habitat for all life stages is available
- Fisher (as a proxy for Marten): The amount and distribution of habitat for all life stages is available
- Black bear: the amount and distribution of habitat for all life stages is available
- Number of hectares of forest preventing ungulate movement (e.g., due to blowdown)
- Number of hectares of regenerating cutblocks with “ungulate friendly” stocking or natural regeneration of typical browse species
- Locations of mineral licks
- Number of referrals or applications overlapping mineral licks
- Number of permits with avoidance of mineral licks as a permit condition
- Number of inspections with satisfactory results related to avoidance of mineral licks

7.3.5 Trapping and Camping Monitoring Program

Purpose

This program will be directly focused on the Camping Places value and will track and monitor the ability of HRFN members to access, use, and enjoy traditional trapping and camping locations.

Supporting Projects

- Analysis Program (e.g., identification of cultural camping places; Section 7.1.1).

Key Metrics

Unless otherwise indicated, all metrics will be quantified at the level of WMB.

- Total spatial area available for trapping
- Total spatial area available for trapping with overlapping tenures (e.g., guide outfitting, traplines not HRFN owned)
- Total spatial area available for trapping by HRFN-owned trapline
- Number of referrals or applications within 1 km of Trapline Cabins and Cultural Camping Places
- Number of approved permits within 1 km of Trapline Cabins and Cultural Campling Places with agreed upon mitigations and associated permit conditions
- Number of inspections with satisfactory results for implementation of agreed-upon mitigation measures
- Number of salt blocks within 1km of Trapline Cabins and Cultural Camping Places
- Number of cattle grazing opportunities within 1 km of Trapline Cabins or Cultural Camping Places (during camping season)
- Amount of current development within 1 km of a Cultural Camping Place
- Number of Camping and Trapping inspections (water quality) with satisfactory results

7.3.6 Airshed Monitoring Program

Purpose

Developing and integrating air quality monitoring activities, especially for SO_2 emissions associated with natural gas processing. Additional areas of monitoring focus could include fugitive dust monitoring along resource roads to better understand effects on vegetation health and indirect effects on ungulate browse quality.

Supporting Projects

- Analysis Program (Section 7.1.1)

Key Metrics

Unless otherwise indicated, all metrics will be quantified at the level of WMB.

- Total spatial area of land that falls within the outfall zone of a dispersion modeling report (e.g., air quality exceedance zone)
- Proportion of airshed with consistent air quality monitoring
- Number of natural gas processing facilities with SO_2 emissions
- Number of natural gas processing facilities with SO_2 emissions with air quality and biophysical monitoring
- Number of air quality or biophysical monitoring reports with exceedances

7.3.7 Range Monitoring Program

Purpose

Identifying and quantifying the interactions between livestock grazing activity and HRFN values (e.g., fencing structures and wildlife movement, water quality and wetland health, disturbance of mineral licks, and health of range ecosystems).

Supporting Projects

- Analysis Program (Section 7.1.1)

Key Metrics

Unless otherwise indicated, all metrics will be quantified at the level of WMB.

- Total spatial area of land that overlaps range tenure
- Percentage of "Treaty 8 Friendly" grazing tenures
- Number of cattle grazing opportunities within 1km of Trapline Cabins and Cultural Camping Places
- Number of Range Use Plans with waterbody access management conditions
- Number of range inspections with satisfactory water quality results
- Percentage of range disturbance through riparian habitat (per WMB)
- Number and spatial area of wetlands within a grazing tenure
- Percentage of available land base for gathering that does not overlap range tenures
- Sustainable Animal Unit Months (AUM) per range tenure
- Minimum stubble height
- Percentage of range fencing that is "wildlife friendly"
- Number of range applications
- Number of Range Use Plans that indicate requirement for wildlife friendly fencing
- Number or range inspections with satisfactory results related to wildlife-friendly fencing
- Number of inspections with satisfactory results related to the avoidance of mineral licks

7.3.8 Forestry Monitoring Program

Purpose

Identifying and quantifying the interactions between forestry activities and HRFN values (e.g., wildlife habitat, water quality and quantity).

Supporting Projects

- Analysis Program (Section 7.1.1)
- Work with Ministry of Forests (MOF) and EMLI to remove broadcast herbicide ability

Key Metrics

Unless otherwise indicated, all metrics will be quantified at the level of WMB.

- Percent forest cover change in headwaters
- Number of Forestry inspections with satisfactory water quality results
- Percentage of forestry disturbance through riparian habitat
- Cutblock adjacency with respect to moose habitat
- Percentage of forested landscapes categorized as unhealthy (e.g., insect outbreak damage)
- Species and stocking densities associated with silviculture activities
- Proportion of replanting comprised of deciduous and low fire risk species
- Percentage of area classified as Low Wildfire Risk
- Number of cutblocks with "fire-smart" silviculture practices applied
- Spatial area of regenerating cutblocks with "ungulate friendly" stocking or natural regeneration of typical browse species
- Number of inspections with satisfactory results related to mineral lick avoidance

7.3.9 PNG Monitoring Program

Purpose

Identifying and quantifying the interactions between PNG activities and HRFN values (e.g., air quality, water quality and quantity, disturbance to sacred spaces).

Supporting Projects

- Analysis Program (Section 7.1.1)
- Work with EMLI to remove broadcast herbicide ability in areas where fire hazard is not a concern

Key Metrics

Unless otherwise indicated, all metrics will be quantified at the level of WMB.

- Number of PNG inspections with satisfactory water quality results
- Number of PNG facilities with groundwater sampling programs
- Number of PNG facilities with groundwater sampling programs with satisfactory results
- Percentage of PNG disturbance through riparian habitat
- Number of natural gas processing facilities with $S0_2$ emissions
- Number of natural gas processing facilities with $S0_2$ emissions with air quality and biophysical monitoring
- Number of air quality / biophysical monitoring reports with exceedances
- Number of PNG applications indicating riser sites or pigging facility in a wetland
- Number of PNG pipeline applications indicating wetland crossings
- Number of PNG pipeline applications with wetland crossings that have trenchless crossing methodology
- Number of PNG pipeline applications with open cut wetland crossings with hydrological integrity plan written by a Qualified Professional
- Percentage of dormant well sites without Certificate of Restoration
- Percentage of dormant sites with an out-of-date Certificate of Restoration
- Number of PNG pipeline applications with intersecting linear corridors

- Number of PNG pipeline applications with intersecting linear corridors with associated line of sight mitigation measures
- Number of inspections with satisfactory results related to line of sight
- Number of PNG pipeline applications with intersecting wildlife trails
- Number of PNG pipeline applications with intersection wildlife trails with associated mitigation plans written by a Qualified Professional
- Number of inspections with satisfactory results related to wildlife trails
- Number of inspections with satisfactory results related to avoidance of mineral licks

7.3.10 Mining Monitoring Program

Purpose

Identifying and quantifying the interactions between mining activities and HRFN values (e.g., wildlife habitat, water quality and quantity).

Supporting Projects

- Analysis Program (Section 7.1.1)

Key Metrics

Unless otherwise indicated, all metrics will be quantified at the level of WMB.

- Number of placer, coal and large-scale metal mining inspections with satisfactory water quality results
- Number of inspections with satisfactory results related to avoidance of mineral licks
- Number of active placer mines
- Number of historic placer mines and current restoration status
- Number of coal and metal mining tenures
- Number of coal and metal mines in construction
- Number of coal and metal mines in operation
- Number of coal and metal mines in care and maintenance
- Number of coal and metal mines in development
- Number of NOW applications with intersection wildlife trails with associated mitigation plans written by a Qualified Environmental Professional
- Number of inspections with satisfactory results related to avoidance of mineral licks
- Status of water quality and ground water testing per mine
- Number of air quality / biophysical monitoring reports with exceedances
- Number of inspections with satisfactory results related to wildlife trails
- Number of inspections with satisfactory results related to avoidance of mineral licks

8 Evaluation and Continuous Improvement

Central to the success of an adaptive management planning process is the frequency of evaluation and reporting for continuous improvement. Each of the assessment, tracking and monitoring programs will

have independent evaluation methods and reporting frequencies, which will be established as implementation of the AMPP progresses. The results from these programs will inform the nature and frequency of internal updates to the AMPP.

A process for providing external updates will be further developed to ensure timely communication of relevant AMPP changes. At this stage, we anticipate the following reporting frequency:

- Annual reporting of the AMPP
- Annual current conditions reporting (contingent on source data availability)
- Real time updates of the analysis toolkit and webtool, available for external use as requested

9 References

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Appendix A. BCER Treaty 8 Planning and Mitigation Measures

BRITISH COLUMBIA ENERGY REGULATOR

Treaty 8 Planning and Mitigation Measures

VERSION 1.0: January 2024

About the Regulator

The British Columbia Energy Regulator (Regulator) oversees the full life cycle of energy resource activities in B.C., from site planning to restoration. The Regulator ensures activities are undertaken in a manner that protects public safety and the environment, supports reconciliation with Indigenous peoples, conserves energy resources and fosters a sound economy and social well-being. We work collaboratively across government and industry sharing policy and technical expertise in support of B.C.'s transition to low-carbon energy and helping meet future global energy needs.

Vision, Mission and Values

Vision

A resilient energy future where B.C.'s energy resource activities are safe, environmentally leading and socially responsible.

Mission

We regulate the life cycle of energy resource activities in B.C., from site planning to restoration, ensuring activities are undertaken in a manner that:

- Protects public safety and the environment
- Supports reconciliation with Indigenous peoples and the transition to low-carbon energy
- Conserves energy resources
- Fosters a sound economy and social well-being

Values

Respect is our commitment to listen, accept and value diverse perspectives.

Integrity is our commitment to the principles of fairness, trust and accountability.

Transparency is our commitment to be open and provide clear information on decisions, operations and actions.

Innovation is our commitment to learn, adapt, act and grow.

Responsiveness is our commitment to listening and timely and meaningful action.

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Preface

Proponents play a vital role in successful engagement with Indigenous communities. The BC Energy Regulator (the Regulator) requires proponents to meet and engage in dialogue with affected Indigenous communities when planning oil and gas activities. This is part of the Regulator's requirement to implement the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) within Regulator processes.

About the Document

In March 2023, the Province of BC and Treaty 8 Nations signed Letters of Agreement endorsing the Consensus Documents that set out various initiatives to enhance natural resource management in Treaty 8 Territory to achieve sustainability for future generations, meet the Crown's obligations to uphold constitutionally protected Treaty Rights, and support responsible resource development and economic activity.

As a step to honour this commitment and align with the Declaration on the Rights of Indigenous Peoples Act, the Regulator now requires operators to employ the following Treaty 8 Planning and Mitigation Measures (the Measures) for all applications within the Treaty 8 Area.

The Measures are important new natural resource conservation initiatives and a starting point for collaborative co-management. The Measures were-drafted with input from Treaty 8 Nations before publication, drawing from extensive discussions on longstanding issues and insights gained during energy development consultations. Furthermore, the Measures are informed by industry feedback and built upon innovative practices utilized by oil and gas operators. They are tangible, practical actions aimed at conserving the environment, safeguarding the practice of Treaty Rights, and enabling sustainable resource development.

The Measures are not intended to be exhaustive or final, and will be adapted collaboratively, as necessary, to meet future needs. Additional measures may be co-developed with specific First Nations.

As of March 7, 2023, the Regulator requires proponents to engage affected First Nations prior to application submission (pre-engagement) when planning energy resource activities. The Regulator encourages applicants to use the pre-engagement process to ensure their projects align with the Measures before submitting applications.

The Regulator's Oil and Gas Activity Application Manual will be updated to include the new measures that applicants must implement during the planning stage. Applications must align with the Measures before an application moves to the consultation and decision-making phases. Authorizations will include specific conditions and advisory guidance to ensure compliance with the Measures during construction, operation, and upon completion of activities. This document aims to assist users in understanding the procedures and recommended practices involved in the process.

Additional Guidance

As with all Regulator documents, this does not take the place of applicable legislation. Readers are encouraged to become familiar with the acts and regulations and seek direction from Regulator staff for clarification. Some activities may require additional requirements and approvals from other regulators or create obligations under other statutes. It is the applicant and permit holder's responsibility to know and uphold all legal obligations and responsibilities.

Throughout the manual there are references to guides, forms, tables and definitions to assist in creating and submitting all required information. Additional resources include:

- Glossary and acronym listing on the Regulator website.
- Documentation and guidelines on the Regulator website.
- Frequently asked questions on the Regulator website.
- Advisories, bulletins, reports and directives on the Regulator website.
- Regulations and Acts listed on the Regulator website.

The Regulator honours Indigenous rights, title and values as foundational in our decision-making and applies this in all facets of our work with First Nations and Indigenous communities, as partners in building B.C.'s energy resource future.

Document Revisions

The Regulator is committed to the continuous improvement of its documentation. Revisions to the documentation are highlighted in this section and are posted to the Energy Professionals section of the Regulator's website.

Version Number	Posted Date	Effective Date	Chapter Section	Summary of Revision(s)
1.0	January 15, 2024	April 15, 2024	All	This is a new document; users are encouraged to review in full. Updates to the Oil and Gas Activity Application Manual to Support Consultation with First Nations will be published on the Regulator's website soon. For more information, please refer to Information Update IU2024-01.

1.0 Baseline Planning and Mitigation Measures

1.1 Seismic

The following are the minimum required documentation and plans that must be included with the application at time of submission to the Regulator.

STREAM, WETLAND, AND LAKE CROSSINGS

- Documentation identifying all stream, wetlands, and lake crossings must include:
  a. maps and construction plans identifying each stream, wetland, and lake that will be crossed by seismic activities,
  b. a table indicating each class of stream, wetland, and lake that will be crossed by seismic activities,
  c. within the table, the gross area of impacted Riparian Management Area for each stream, wetland, and lake crossing, and
  d. within the table, the type of crossing that will be used.
- Documentation indicating that motorized vehicle crossing methodology for fish-bearing streams is via clear-span bridge, open-bottomed culvert, or snow-fill.
- For Riparian Management Areas that will be impacted by seismic activities, a restoration plan written and signed by a qualified professional must be submitted. This plan must include, at a minimum:
  a. how the restoration will follow ecological succession for the Biogeoclimatic Ecosystem Classification system site series present at the site prior to any disturbance,
  b. the timing of ecological succession, up to and including the time at which vegetation is expected to reach “moose height” or 2 metres or an alternative threshold suitable to the surrounding area, as determined by a qualified professional,
  c. whether restoration will include natural revegetation, the planting of woody vegetation, the use of seed mix in accordance with the Ecologically Suitable Species Guideline, or combination,
  d. if using sod-forming seed mixtures to address erosion concerns, it must be confirmed when the sod-forming species are to be replaced with a suitable non-sod-forming species mix for the Biogeoclimatic Ecosystem Classification system site series present at the site prior to any disturbance, and
  e. Indigenous Knowledge, values and interests provided during the pre-engagement process, when applicable.

MINERAL LICKS AND WALLOWS

- All mineral licks and wallows and their associated trail networks that may be impacted by the seismic activity must be identified on maps and construction plans.
- For mineral licks and wallows and their associated trail networks that may be impacted by the seismic activity, a mitigation plan written and signed by a qualified professional must be submitted. This plan must include, at a minimum:

a. how the mineral licks and wallows will be avoided to maintain functionality of the mineral licks and wallows, including:

   i. setback distances from seismic activity,

   ii. how associated trail systems that connect with the mineral licks and wallows will be maintained, and

   iii. Indigenous Knowledge, values and interests provided during the pre-engagement process, when applicable.

LINE OF SIGHT

- Where a seismic line intersects a linear corridor, documentation, including maps and construction plans, will indicate where line-of-sight mitigation measures will occur. At a minimum, line-of-sight mitigation measures will be used at:
  a. the intersection points of seismic lines and roads,
  b. the intersection points of seismic lines and pipelines,
  c. the intersection points of seismic lines and transmission lines, and
  d. at regular intervals along the seismic lines.

ADDITIONAL PROJECT PLANNING CONSIDERATIONS

- Follow existing industry best management practices, including low-impact seismic practices.
- End source and receiver lines at the edge of the Riparian Management Area of fish-bearing streams to reduce the number of stream crossings.
- Maintain isolation from access routes. End source and receiver lines prior to intersecting with roads, except where access into the seismic program is necessary.
- Cut seismic lines by hand wherever possible.
- Hand-cut source and receiver lines within the Riparian Management Area of S1 or S2 watercourse.
- Do not cut trees greater than 20 centimetres in diameter.
- Monitor seismic lines after program completion and note areas of potential impact including where vegetation is not regenerating and where predator access may be of concern.
- Mulch should not exceed 4 centimetres in depth.
- When operating in a wetland, activities must be carried out in frozen ground conditions.
- Restoration of impacted Riparian Management Area should begin within one growing season of final activities, as per the approved qualified professional restoration plan.

1.2 Roads

The following are the minimum required documentation and plans that must be included with the application at time of submission to the Regulator.

STREAM, WETLAND, AND LAKE CROSSINGS

- Documentation identifying all stream, wetlands, and lake crossings must include:
  a. maps and construction plans identifying each stream, wetland, and lake that will be crossed by a road,
  b. a table indicating each class of stream, wetland, and lake that will be crossed by a road, and within the table, the type of crossing that will be used.
- For fish-bearing streams, documentation must indicate that crossings will be via clear-span, open bottom culvert, or snow-fill.
- When roads cross through a wetland, a wetland hydrological integrity plan written and signed by a qualified professional must be submitted. This plan must include, at a minimum, how the natural flow of the wetland will be maintained.
- Documents, including maps and construction plans, will indicate that roads are a minimum of 100 metres from the top of bank of S1 or S2 watercourse unless to facilitate a crossing.

MINERAL LICKS AND WALLOWS

- All mineral licks and wallows and their associated trail networks that may be impacted by a road must be identified on maps and construction plans.
- For mineral licks and wallows and their associated trail networks that may be impacted by a road, a mitigation plan written and signed by a qualified professional must be submitted. This plan will include, at a minimum:
  a. how the mineral licks and wallows will be avoided to maintain functionality of the mineral licks and wallows, including:
    i. setback distances from roads,
    ii. how associated trail systems that connect with the mineral licks and wallows will be maintained, and
    iii. Indigenous Knowledge, values and interests provided during the pre-engagement process, when applicable.

LINE OF SIGHT

- Where a road intersects a linear corridor, documentation, including maps and construction plans, must indicate where line-of-sight mitigation measures will occur. At a minimum, line-of-sight mitigation measures should be used at:
  a. the intersection points of roads and seismic lines,

b. the intersection points of roads and pipelines, except, through consultation with the pipeline owner, to facilitate pipeline maintenance access, and

c. the intersection points of roads and transmission lines, except, through consultation with the transmission line owner, to facilitate transmission line access.

RESTORATION

- A restoration plan for all workspaces and roads, written and signed by a qualified professional, must be submitted. This plan must include, at a minimum:

  a. how the restoration will follow ecological succession for the Biogeoclimatic Ecosystem Classification system site series present at the site prior to any disturbance.

  b. the timing of ecological succession, up to and including the time at which vegetation is expected to reach “moose height” or 2 metres, or an alternative threshold suitable to the surrounding area, as determined by a qualified professional.

  c. whether restoration will include natural revegetation, the planting of woody vegetation, the use of seed mix in accordance with the Ecologically Suitable Species Guideline, or combination.

  d. if using sod-forming seed mixtures to address erosion concerns, it must be confirmed when the sod-forming species are to be replaced with a suitable non-sod-forming species mix for the Biogeoclimatic Ecosystem Classification system site series present at the site prior to any disturbance, and

  e. Indigenous Knowledge, values and interests provided during the pre-engagement process, when applicable.

ADDITIONAL PROJECT PLANNING CONSIDERATIONS

- Use existing roads wherever possible to decrease cumulative impacts on the land base.
- Except to facilitate a crossing, a road must be a minimum of 100 metres from the top of bank of an S1 or S2 watercourse.
- The restoration of temporary workspaces must begin within one growing season of final temporary workspace activities, as per the approved qualified professional restoration plan.
- The restoration of the road will begin within one growing season of deactivation, as per the approved qualified professional restoration plan.
- Soil stockpiles must be revegetated and established with an ecologically suitable species. Soil stockpiles should be limited in height (1 metres maximum preferably). Piles must not exceed a 3H:1V slope (horizontal: vertical).

1.3 Aggregate and Borrow Pits

The following are the minimum required documentation and plans must be included with the application at time of submission to the Regulator.

WILDLIFE

- All mineral licks and wallows and their associated trail networks that may be impacted by an aggregate or borrow pit must be identified on maps and construction plans.
- For mineral licks and wallows and their associated trail networks that may be impacted by an aggregate or borrow pit, a mitigation plan written and signed by a qualified professional must be submitted. This plan must include, at a minimum:
  a. how the mineral licks and wallows will be avoided to maintain functionality of the mineral licks and wallows,
  b. setback distances from the aggregate or borrow pits,
  c. how associated trail systems that connect with the mineral licks and wallows will be maintained, and
  d. Indigenous Knowledge, values and interests provided during the pre-engagement process, when applicable.
- Documentation, including construction plans, must indicate that aggregate and borrow pits will be graded to a resting angle that:
  a. facilitates reasonable egress by wildlife, and
  b. does not exceed a grade of 3:1.
- Documentation, including construction plans, will indicate that a visual vegetation buffer of no less than “moose height” or 2 metres is maintained or created between a road and an aggregate or borrow pit.

WATER

- Documentation, including maps and construction plans, must indicate that aggregate and borrow pits are a minimum of 100 metres from the top of bank of Class A watercourses.
- If water is planned to be captured from surface runoff and ground water infiltration into the aggregate or borrow pit, documentation, including construction plans, must indicate the maximum volume of water to be held.
- If an aggregate or borrow pit is expected to capture water and hold surface runoff and ground water, a plan, written and signed by a qualified professional, indicating whether the pit may be hydrologically connected via surface and/or groundwater flow, must be submitted.

RESTORATION

- A restoration plan, written and signed by a qualified professional, must be submitted. This plan must include, at a minimum:
  a. the area to be restored,

b. how the restoration will follow ecological succession for the Biogeoclimatic Ecosystem Classification system site series present at the site prior to any disturbance,

c. the timing of ecological succession, up to and including the time at which vegetation is expected to reach “moose height” or 2 metres, or an alternative threshold suitable to the surrounding area, as determined by a qualified professional,

d. whether restoration will include natural revegetation, the planting of woody vegetation, the use of seed mix in accordance with the Ecologically Suitable Species Guideline, or combination,

e. where sod-forming seed mixtures are being used to address erosion concerns, the plan must confirm when the sod-forming species are to be replaced with a suitable non-sod-forming species mix for the Biogeoclimatic Ecosystem Classification system site series present at the site prior to any disturbance, and

f. Indigenous Knowledge, values and interests provided during the pre-engagement process, when applicable.

ADDITIONAL PROJECT PLANNING CONSIDERATIONS

- Aggregate and borrow pits that hold water may be deemed “ecological traps” that draw wildlife to these unnatural water features. The construction of pits that do not hold water is encouraged.
- Aggregate and borrow pits must be recontoured once the pit is no longer required to support operations.
- Refilling of borrow pits after final use is encouraged.
- Pits should be used to their full capacity rather than creating multiple pits in an operating area.
- The applicant must hold the long-term tenure over the aggregate and borrow pit and the aggregate and borrow pit may revert to the Crown once final restoration obligations have been met.
- Restoration activities must begin within one growing season of final oil and gas activities, as per the approved qualified professional restoration plan.
- Soil stockpiles must be revegetated and established with an ecologically suitable species. Soil stockpiles should be limited in height (1 metres maximum preferably). Piles must not exceed a 3H:1V slope (horizontal: vertical).

1.4 Pipelines

The following are the minimum required documentation and plans must be included with the application at time of submission to the Regulator.

STREAM, WETLAND, AND LAKE CROSSINGS

- Documentation identifying all stream, wetlands, and lake crossings must include:
  a. maps and construction plans identifying each stream, wetland, and lake that will be crossed by pipeline activities,
  b. a table indicating each class of stream, wetland, and lake that will be crossed by pipeline activities:
     i. within the table, the gross area of impacted Riparian Management Area for each stream, wetland, and lake crossing, and
     ii. within the table, the type of crossing that will be used.
- Documentation indicating that motorized vehicle crossing methodology for fish-bearing streams is via clear-span bridge, open-bottomed culvert, or snow-fill.
- Where pipelines are required to cross through a wetland, the preferred crossing method is Horizontal Directional Drill (HDD), where feasible.
- When pipelines cross through a wetland and an HDD crossing method is not feasible, a hydrological integrity plan, written and signed by a qualified professional must be submitted. This plan will include, at a minimum, how the natural flow of the wetland will be maintained.
- Restoration activities within impacted Riparian Management Areas must begin in the next growing season following construction.
- Documents, including maps and construction plans, will indicate that pipelines are a minimum of 100 metres from the top of bank of an S1 or S2 watercourse unless to facilitate a crossing.

MINERAL LICKS AND WALLOWS

- All mineral licks and wallows and their associated trail networks that may be impacted by the pipeline activity must be identified on maps and construction plans.
- For mineral licks and wallows and their associated trail networks that may be impacted by the pipeline activity, a mitigation plan, written and signed by a qualified professional must be submitted. This plan will include, at a minimum:
  a. how the mineral licks and wallows will be avoided to maintain functionality of the mineral licks and wallows, including:
     i. setback distances from pipelines,
     ii. how associated trail systems that connect with the mineral licks and wallows will be maintained, and
     iii. Indigenous Knowledge, values and interests provided during the pre-engagement process, when applicable.

LINE OF SIGHT

- Where a pipeline intersects a linear corridor, documentation, including maps and construction plans, will indicate where line-of-sight mitigation measures will occur. At a minimum, line-of-sight mitigation measures must be used at:
  a. the intersection points of pipelines and seismic lines,
  b. the intersection points of pipelines and roads, except where necessary to facilitate pipeline maintenance access, and
  c. the intersection points of pipelines and transmission lines, except, through consultation with the transmission line owner, to facilitate transmission line access.

WILDLIFE TRAILS

- All wildlife trails that may be impacted by the pipeline activity must be identified on maps and construction plans.
- For wildlife trails that may be impacted by the pipeline activity, a mitigation plan, written and signed by a qualified professional, must be submitted. This plan will include, at a minimum:
  a. how wildlife trails will be maintained through construction and operational phases of the pipeline, and
  b. Indigenous Knowledge, values and interests provided during the pre-engagement process, when applicable.

ASSOCIATED ABOVE-GROUND APPURTENANCES

- Associated above-ground appurtenances must be identified on documentation, including construction plans. At a minimum, documentation must indicate that appurtenances are:
  c. at least 100 metres from the top of bank of an S1 or S2 watercourse, and
  b. not located within Riparian Management Areas.
- Riser sites and pigging facilities must not be in wetlands.

PIPELINE RIGHT-OF-WAY

- Documentation, including construction plans, must indicate the extent of pipeline right-of-way needed for ongoing operational activities according to CSA Z662 standards.
- A rationale must be provided to justify the requested right-of-way width.

TEMPORARY WORKSPACES

- Documentation, including construction plans, must indicate temporary workspaces.
- Restoration of temporary workspaces must begin immediately after activities have been completed.

RESTORATION

- For areas requiring restoration, including Riparian Management Areas and temporary workspaces, a restoration plan, written and signed by a qualified professional, must be submitted. This plan must include, at a minimum:
  a. how the restoration will follow ecological succession for the Bio geoclimatic Ecosystem Classification system site series present at the site prior to any disturbance,
  b. the timing of ecological succession, up to and including the time at which vegetation is expected to reach “moose height” or 2 metres, or an alternative threshold suitable to the surrounding area, as determined by a qualified professional,
  c. whether restoration will include natural revegetation, the planting of woody vegetation, the use of seed mix in accordance with the Ecologically Suitable Species Guideline, or combination,
  d. if using sod-forming seed mixtures to address erosion concerns, it must be confirmed when the sod-forming species are to be replaced with a suitable non-sod-forming species mix for the Biogeoclimatic Ecosystem Classification system site series present at the site prior to any disturbance, and
  e. Indigenous Knowledge, values and interests provided during the pre-engagement process, when applicable.

ADDITIONAL PROJECT PLANNING CONSIDERATIONS

- Pipelines may follow existing corridors to reduce forest fragmentation. However, consider methodology for reducing overall impact by reducing corridor widths, maximizing Riparian Management Area restoration areas, and installing sight line barriers at regular intervals along the pipeline. Working with adjacent pipeline tenure holders is encouraged.
- The restoration of temporary workspaces must begin within one growing season of final temporary workspace activities, as per the approved qualified professional restoration plan.

1.5 Facilities including: Wellsites, Compressor Sites, Disposal Wells, Water Storage Facilities, and Processing Facilities

The following are the minimum required documentation and plans that must be included with the application at time of submission to the Regulator.

STREAMS, WETLANDS AND LAKES

- Streams, wetlands, and lakes will be indicated on documentation, including maps and construction plans. Documentation must indicate that facilities:
  a. will avoid streams and lakes and their associated Riparian Management Areas, and
  b. are a minimum of 100 metres from the top of bank of an S1 or S2 watercourse.
- If a facility is built within a wetland, a hydrological integrity plan, written and signed by a qualified professional, must be submitted. This plan will include, at a minimum, how the natural flow of the wetland will be maintained.

MINERAL LICKS AND WALLOWS

- All mineral licks and wallows and their associated trail networks that may be impacted by the facility must be identified on maps and construction plans.
- For mineral licks and wallows and their associated trail networks that may be impacted by the facility, a mitigation plan, written and signed by a qualified professional, must be submitted. This plan will include, at a minimum:
  a. how the mineral licks and wallows will be avoided to maintain functionality of the mineral licks and wallows, including:
     i. setback distances,
     ii. how associated trail systems that connect with the mineral licks and wallows will be maintained, and
     iii. Indigenous Knowledge, values, and interests provided during the pre-engagement process, when applicable.

AIR QUALITY

- Documentation must indicate the types and amounts of Criteria Air Contaminants that may be emitted to atmosphere during construction and operational phases. This documentation must indicate:
  a. how the proponent will use air and deposition monitoring to identify the potential impacts that air emissions may have on people, wildlife and/or vegetation, and
  b. how frequently the reporting of monitoring results will be provided.

INTERIM RESTORATION

- Construction plans must indicate:
    a. the area needed for ongoing activities once final construction has been completed, and
    b. the area available for interim restoration.
- The area available for interim restoration may be used for the propagation of shrub and tree species available for use at the time of final restoration.

WILDLIFE MONITORING

- Documentation must indicate the type and frequency of wildlife monitoring and reporting that will occur at the facility. Documentation must include:
    a. adaptive management measures to be taken if monitoring indicates negative impacts to wildlife because of oil and gas activities, and
    b. Indigenous Knowledge, values, and interests provided during the pre-engagement process, when applicable.

ADDITIONAL PROJECT PLANNING CONSIDERATIONS

- Facilities, pipelines, roads, and other disturbances may impact the ecological and hydrologic functioning of a wetland. If there is existing disturbance in a wetland, consider evaluating cumulative impacts prior to application of additional disturbance.
- Interim restoration may have the following benefits during the life of the wellsite: less wellsite area to actively maintain, available shrub and tree species for use on-site at time of final restoration, reduction of surface disturbance, and early return to available wildlife habitat.
- The facility should be designed in a manner to reduce the need of air and noise emitting equipment.
- The facility, where applicable, should be designed to centralize the storage of chemicals and produced fluids, in order to reduce the number of temporary storage units.

1.6 Water

- Documentation associated with water withdrawals must indicate whether the water withdrawal location is hydrologically connected to surface water; confirmed by a qualified professional.
- If a water withdrawal is hydrologically connected to surface water, documentation must indicate:
  a. that flow measurements will be taken at least once per day at or upstream of the point of diversion, if not, a rationale written by a qualified professional must be provided.
  b. the low-flow rate, and
  c. a statement that withdrawal will cease when monitoring indicates the low-flow rate has been met or exceeded.

ADDITIONAL PROJECT PLANNING CONSIDERATIONS

Hydrologically connected aggregate and borrow pits used for water withdrawal purposes must demonstrate that environmental flow needs required for the proper functioning of the aquatic ecosystem of the stream are met.

Appendix 2 – Developments Considered in the HRFN Landscape Planning Pilot

MS Number	Ownership	Application Type	BCER Application Status
100107526	Private	Camp	Approved
100107026	Crown & Private	Pipeline	Approved
100109367	Crown & Private	Pipeline	Approved
100113573	Crown & Private	Pipeline	Approved
100108925 (PL) 100114034 (Amendment)	Crown	Pipeline	Approved
100115641	Private	Road	Approved - not built
100109568	Crown & Private	Pipeline	Approved
100110684	Crown	Pipeline	Approved
100114926	Crown	Facility	Approved
100115100	Crown	Powerline	Approved - not built
100108618	Crown	Borrow	Approved - not built
100113620	Crown	Powerline	Approved - not built
100114536	Crown	Wellsite	Approved
100113765	Private	Road	Approved - not built
100115014	Crown	Wellsite	Approved - built
100114540	Crown	Wellsite	Approved - built
100114109	Private	Wellsite, Borrow	Approved
100114700	Private	Pipeline	Approved
100113287	Crown	Pipeline	Approved - not built
100113284	Crown	Powerline	Approved - not built
100113915	Crown	Road	Approved - not built

MS Number	Ownership	Application Type	BCER Application Status
100114027	Crown	Wellsite, Road, Borrow	Approved - not built
100113822	Crown	Pipeline	Approved - not built
100113487	Crown	Powerline	Approved - not built
100115297	Private	Road	Approved
100114043	Crown	Wellsite	Approved
100116111	Private	Powerline	Approved - under construction
100115428 (Rd Permit)	Private	Road	Approved - not built
100116819	Crown	Road	Approved - not built
100113920	Crown	Wellsite	Approved - Existing Lease constructed
100109569	Crown & Private	Pipeline	Approved
100113305	Crown	Powerline	Submitted
100112147	Crown & Private	Road	Submitted
100113653	Crown & Private	Powerline	Submitted
100113666	Crown & Private	Powerline	Submitted
100113276	Crown	Pipeline	Submitted
100116620	Crown	Road	Submitted
100116334	Crown	Borrow	Submitted
100114106	Crown	Wellsite, Road, Borrow	Submitted
100114226	Crown	Borrow	Submitted
100114224	Crown	Pipeline	Submitted
100114252	Crown	Pipeline	Submitted
100114107	Crown	Wellsite, Road, Borrow	Submitted

MS Number	Ownership	Application Type	BCER Application Status
100113187	Crown	Wellsite, Road, Borrow	Submitted
100113665	Crown	Powerline	Submitted
100113595	Crown	Powerline	Submitted
100114060	Crown	Wellsite, Road, Borrow	Submitted
100113988	Crown	Pipeline	Submitted
100113955	Crown	Powerline	Submitted
100114059	Crown	Wellsite, Road, Borrow	Submitted
100114289	Crown	Pipeline	Submitted
100117545	Crown	Powerline	Submitted
100115978	Private	Facility	Submitted
100114095	Crown	Wellsite, Road, Borrow	Revised
100114253	Crown	Wellsite, Road, Borrow	Submitted
100114112	Crown	Pipeline	Submitted
100114554	Crown	Powerline	Submitted
100116850	Private/Crown	Pipeline	Submitted
100116191	Private	Wellsite, Road	Submitted
100115984	Private	Wellsite	Submitted
100116421	Crown & Private	Wellsite, Road	Submitted
100116108	Crown & Private	Wellsite, Road	Submitted
100116004	Private	Other	Submitted
100115782	Crown	Borrow	Submitted
100109866	Crown	Wellsite, Road, Borrow	Submitted
100116419	Crown	Wellsite, Road, Borrow	Submitted