South Athabasca

Sub-Regional Plan

DRAFT VERSION December 2025

Alberta

Contents

Tables

Figures

Part 1: Introduction

Overview

Alberta's public lands are the foundation for our resource-based economy, community well-being, and traditional land uses. Alberta is committed to creating sub-regional plans that feel familiar and are consistent where it makes sense but also reflect the unique differences between areas of the province.

This plan manages footprint from various land uses to allow economic development in the region while also improving the overall landscape condition for people and the environment. The plan recognizes that this sub-region will continue to be a critical contributor to the province's energy future and the approaches in this plan support Alberta's goal to double oil and gas production.

Over the next three decades, this sub-regional plan is intended to achieve positive trends for economic, environmental, and social outcomes. Approaches and requirements in this plan focus on achieving three strategic outcomes:

The Upper Smoky sub-region differs from the South Athabasca sub-region in three key areas: the geography and terrain, the type of energy production, the nature of forest tenure.

Watch for call out boxes throughout the plan that help explain some of these differences.

Outcome 1: Supporting economic opportunities that provide benefits to local municipalities, Indigenous people, and all Albertans.

Outcome 2: Consolidate and manage development over time to support landscape intactness and naturally self-sustaining plant and wildlife populations with a focus on species at risk.

Outcome 3: Support recreational, cultural and traditional land uses, including the practice of constitutionally recognized rights in the sub-region, for the benefit of local people, Indigenous people, and all Albertans.

The plan describes where and how we will achieve a balance of these outcomes using six main strategies: zonation, restoration, surface restrictions, conservation areas, integrated land management, and operational requirements.

The South Athabasca sub-region is split into three zones – Slow Go Zone, Go Zone, and Restoration First Zone. Each zone will be managed to achieve a specific priority outcome, such as to support traditional land use, or to enable economic development. Each section of the plan includes specific direction on how the plan's outcomes will be met through application of restoration, surface access restrictions, integrated land management, or operational requirements. Some requirements apply within a specific zone, and some apply across the sub-region.

The South Athabasca Sub-regional Plan (SASRP) partially fulfills the Lower Athabasca Regional Plan (LARP) commitments under Outcome 3, Strategy D of the LARP's Implementation Plan. The identified strategy calls for development of a landscape management plan for public land in the Green Area; the SASRP will cover the portions of the landscape management plan south of the Clearwater River, with the remaining area being addressed in a subsequent sub-regional plan. The outcomes achieved in this sub-region contribute to achieving the LARP's broader outcomes and objectives for the Lower Athabasca Region.

The SASRP will be enabled under the *Alberta Land Stewardship Act* (ALSA), by adopting the non-binding policy direction under Part 4 in the LARP, and by incorporating necessary legally binding regulatory details into the LARP.

The policy direction in this plan is meant to work with, clarify, and build upon existing legislation, regulations, and policies. In the event of a conflict between this plan and existing policy, the direction in this plan takes priority. For further clarity, a sub-regional plan prevails to the extent of any conflict with a provision of an integrated resource plan.

In coordination with the mandatory 10-year review and 5-year evaluation required under ALSA, all aspects of the plan will be reviewed every ten years, ensuring that it continues to enable development and increased production, while also minimizing environmental impacts and restoring habitat.

The Cold Lake Air Weapons Range is available to the Government of Canada for defence purposes under a Memorandum of Agreement with Alberta. Land use in this area must be compatible with the needs and requirements of the Department of National Defence. The only permitted industrial disturbances support energy development.

Part 2: The Sub-region

The South Athabasca sub-region is in the heart of north-eastern Alberta's Lower Athabasca Region. The sub-region is bordered on the north and west by the Clearwater and Athabasca Rivers, to the south by the Beaver River, and by the Saskatchewan border to the east. A large portion of the sub-region is occupied by the Cold Lake Air Weapons Range. The majority (91%) of the sub-region is located within Alberta's Green Area, and is managed for oil and gas production, timber production, watershed, wildlife, fisheries, and recreational values, and other uses.

The South Athabasca sub-region overlaps significant bitumen resources and is important for supporting Alberta's overall energy production goals. Oil sands tenure and petroleum and natural gas tenure covers about 82% of the sub-region. Forestry activity supports local communities and a resource-based economy; 58% of the sub-region is overlapped by a single Forest Management Agreement. Additionally, this area supports surface materials extraction, including sand and gravel and peat, and has recognized potential as a recreation and tourism destination.

This sub-region overlaps provincial white area and private land. The policy objectives and requirements included in this plan only apply on Crown lands.

There are fourteen parks and protected areas in the sub-region and nineteen public land recreation areas and recreation trails that contribute to the quality of life and culture of local people. The mix of upland forests, wetlands, lakes and rivers contribute to the beauty of the sub-region and are the foundation of a working landscape that maintains future economic diversification opportunities and a practicing landscape for the traditional land uses of Indigenous people.

Indigenous people have a long history in this area and hold a deep connection to the land. The sub-region overlaps portions of the geographic area of Treaty 6, Treaty 8, and Treaty 10. There are several First Nation reserves in the sub-region, and the hamlets of Conklin and Anzac are the traditional homes of many Métis. A number of the sub-region's 199 Registered Fur Management Areas are held by Indigenous trappers and are places where intergenerational knowledge transfer occurs on the land.

The East Side Athabasca Range (ESAR) and Cold Lake Range woodland caribou population and habitat are within the South Athabasca sub-region. The ESAR, is subdivided into seven sub-ranges, including the Agnes, Algar, Bohn, Christina, Egg-Pony, Wandering, and Wiau. The abundance and occurrence of woodland caribou in the sub-region has declined over recent decades. Based on the current calculation used to determine impacts to caribou, the sub-region is 90% "disturbed" – that is, in any location in the sub-region, there is a 90% chance you are within 500 metres of a human-made disturbance less than 40 years old, or you are in a burned area.

Managing a Working Landscape

In 2023, approximately $60 billion (13.9%) of Alberta's gross domestic product (GDP) was derived from the South Athabasca sub-region. The mining, quarrying, and oil and gas extraction sector contributed 83.5% of the sub-regional GDP. This productivity supports jobs in communities inside and outside the sub-region, representing a labour force of approximately 23,760 people.

Oil and gas activity from in situ bitumen production in the sub-region represents approximately 79% of Alberta's in situ bitumen and 38% of Alberta's total bitumen. Natural gas production in the sub-region represents less than 1% of the provincial total. Over the coming decades, Alberta has a goal to double oil and gas production to meet the demands for safe, affordable, reliable energy and North American energy security.

The timber industry provides direct employment opportunities through forestry, logging, and wood product and paper manufacturing jobs located inside and outside the sub-region. This plan empowers responsible forestry companies to maintain their global credibility and certification. Alberta is proud to have world class operators upholding responsible forest management and stewardship on the landscape. In the spirit of responsible forest management, reducing and managing for wildfire risk continues to be important to communities, the environment, and the economy.

The lakes, forests and wildlife in the sub-region create recreational opportunities that are a strong draw for the local and regional tourism industry with benefits to local communities and municipalities. Alongside other land uses, sustainable tourism development, including Indigenous-led tourism, helps diversify local economies, enhances regional identity, and provides long-term benefits to Albertan's while maintaining natural landscapes.

Pursuing a working landscape means considering the economic contributions of these sectors in relation to each other, including the potential for future economic diversification opportunities. To address future economic opportunities while supporting social and environmental outcomes requires suitable lands be available for Indigenous traditional land uses and subsistence and recreational pursuits. Additionally, amidst economic uncertainty, Alberta must have a stable regulatory system that continues to allow the province to grow its major industries and economy, diversify its trade partnerships in energy, forestry, and critical minerals and ensure energy security and affordability for Albertans and Canadians.

Management direction on the scale, pace, and location of development in the South Athabasca sub-region can help achieve the three strategic outcomes. This plan outlines policy objectives and management approaches and requirements for land uses to sustain economic opportunities, landscape intactness, sustainable plant and wildlife populations, and recreational, cultural and traditional land uses into the future.

Vision

The South Athabasca sub-region supports a thriving economy and a working landscape while sustaining diverse habitats and their wildlife populations, and allowing current and future generations to continue enjoying traditional land uses, nature-based recreation, and an outdoor heritage,[1]

[1] The Land-use Framework (LUF) sets out an approach to managing out province's land and natural resources to achieve Alberta's long-term economic, environmental, and social goals. It provides a blueprint for land-use management and decision-making that addresses Alberta's growth pressures (Land-use Framework, 2008). The vision for the South Athabasca sub-region is consistent with the Land-use Framework's vision and supports achievement of the Lower Athabasca Regional Plan's vision.

Part 3: Approaches

Doubling Oil and Gas Production

The South Athabasca sub-region produces the majority of the province's in situ bitumen. To deliver on Alberta's goal to double oil and gas production, the approaches in this plan enable growth of the energy industry. Despite the addition of new oil sands footprint, the plan achieves a reduction in the total amount of energy-related disturbance by requiring timely restoration of footprint that is no longer in use.

Oil sands production in the sub-region cannot be doubled without the addition of new project areas. This plan creates necessary space within the limits to support expected future growth of the industry.

Zonation

The South Athabasca sub-region is divided into three zones (Slow Go, Go, Restoration First) that provide the management intent for different areas of the sub-region (Figure 1). Each section of the plan includes policy objectives and requirements specific to a sector or value; some requirements will apply within a specific zone and others may apply across the sub-region. Zones help manage land uses to achieve different outcomes for different areas; this zonation approach is not intended to limit Indigenous access to parts of the sub-region to practice traditional land uses.

Restoration First Zone – The outcome for this zone is to achieve the greatest improvement in landscape intactness as soon as possible. This zone prioritizes a practicing landscape that supports traditional land uses, including the exercise of Treaty rights. In the Restoration First Zone, expect to see requirements focused on early restoration and greater footprint management.

Go Zone – The outcome for the Go Zone is to support a working landscape while minimizing overall footprint. In this zone, existing policy and requirements continue to apply, and a few new requirements are added to support greater integrated land management.

Slow Go Zone – The outcome for the Slow Zone is to enable a diversity of land uses with industrial and commercial development being balanced by ongoing restoration. The Slow Go Zone has requirements that manage the pace and scale of development, with some restrictions in caribou ranges and sensitive areas.

*In this sub-region, most oil sands production for bitumen recovery occurs within the boundaries of a scheme area, approved under the Oil Sands Conservation Act (OSCA). Throughout this plan, the term **project area** includes OSCA scheme areas for in situ production. To support economic growth from in situ production, industrial activity within a project area has the greatest amount of flexibility, regardless of the zone it falls within.*

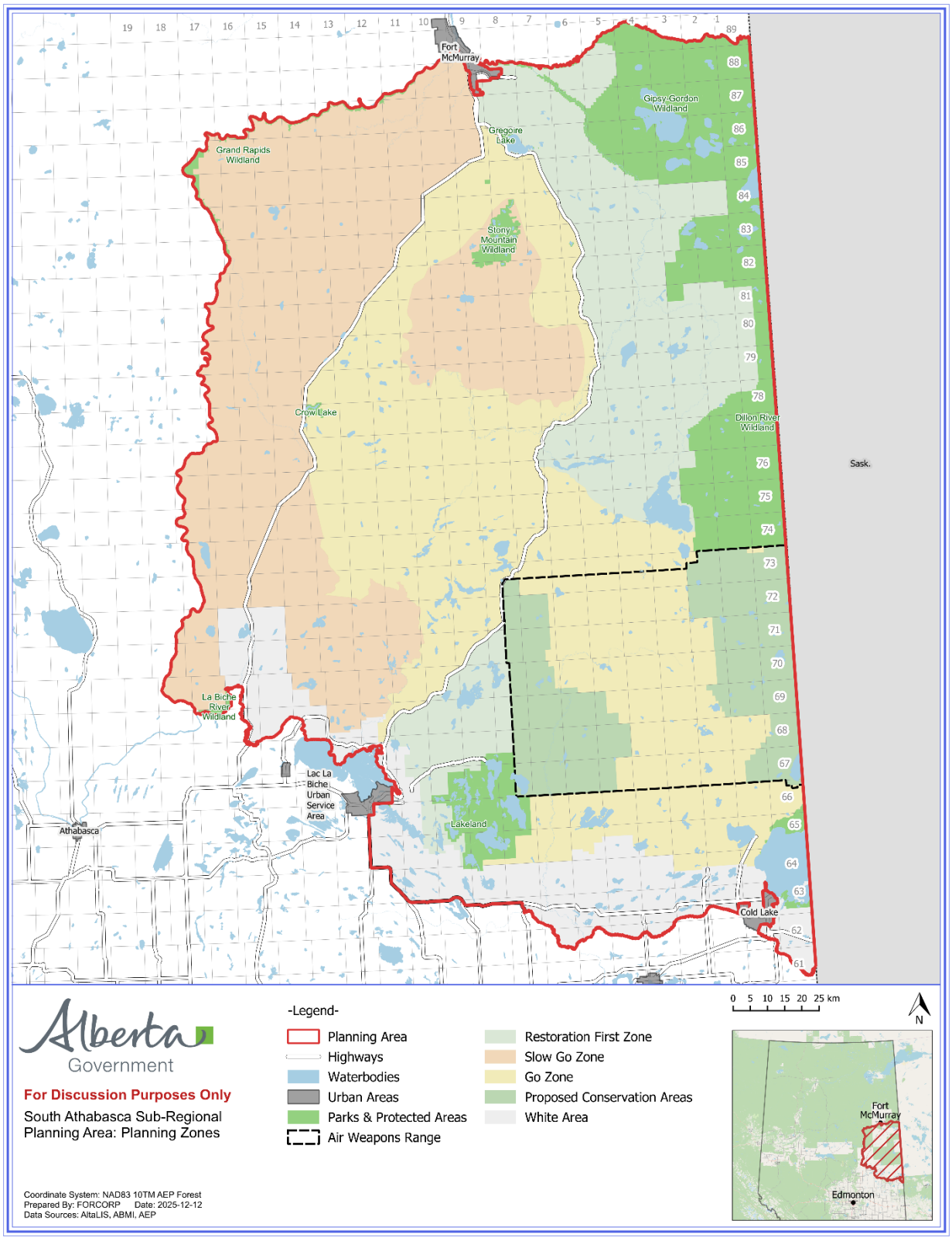
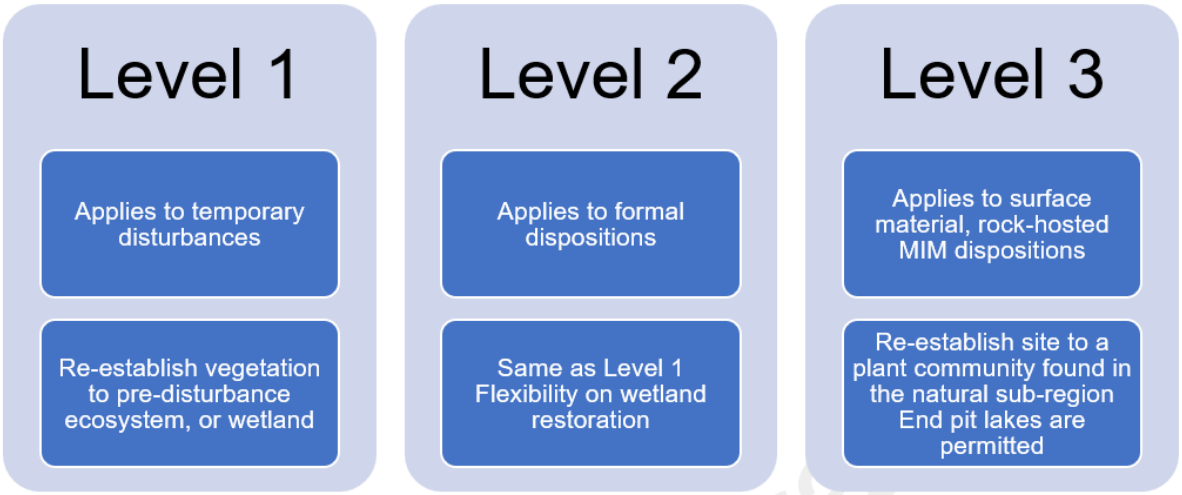


Figure 1: South Athabasca sub-region zones and proposed conservation areas

Restoration

Restoration of human footprint is central to achieving the plan's outcomes. When land has been used and not restored, that land becomes limited in its future uses. Land cannot be created, but restoration ensures that more of the land base is available to support choices for future land use.

This plan includes requirements intended to manage the pace, scale, and outcome of restoration. Three levels of restoration requirements within caribou range are referred to throughout the plan. However, for all levels, if caribou biophysical habitat existed before the site was disturbed, restoration treatments must make sure the site is capable of producing caribou biophysical habitat in the future. The image below provides an overview of the restoration levels that appear in the plan's requirements.



Bohn Restoration Project

The Government of Alberta is working with industry, Indigenous people, and researchers to design and implement a first-of-its-kind research project to help us understand how caribou population numbers change in response to restoration. The Bohn Restoration Project was established because land users expressed a desire for improved understanding of how restoration impacts caribou populations. The goal of this project is to restore all legacy seismic lines and inactive and abandoned industrial footprint in the Bohn caribou sub-unit, through area-based closure. The effectiveness of area-based habitat restoration on caribou outcomes will be evaluated through research and monitoring.

The Bohn area represents a sub-unit of the larger East Side Athabasca Range (ESAR) caribou range. Much of the Bohn caribou range overlaps existing wildland provincial park.

Part 4: South Athabasca Sub-regional Plan

Indigenous Knowledge and Traditional Land Uses

Support the ability of Indigenous people to access and use the land and resources.

Healthy ecosystems, and the ability to access land and food sources, are integral to support Indigenous ways of life, including food security, culture, spirituality, and the continued practice of traditional land uses. This plan takes three approaches to supporting Indigenous peoples in preserving their ways of life: 1) charting a path to a more intact landscape that supports traditional land uses, including the exercise of Treaty rights, 2) monitoring landscape intactness in important areas, and 3) including Indigenous peoples in implementing this plan.

The Restoration First Zone identifies areas of the landscape where restoration and footprint management approaches are focused on improving landscape conditions in the near term to support a practicing landscape for Indigenous people.

*Indigenous peoples of the South Athabasca sub-region informed development of the sub-regional plan in a unique way. 18 Indigenous communities and organizations collaborated in preparing the **Living with the Land** report which includes recommendations for how to manage cumulative effects in the sub-region in support of Indigenous traditional land uses, including the exercise of Treaty rights.*

The area around Indigenous reserves and hamlets can be prioritized for Indigenous traditional land uses with involvement of Indigenous people. Different communities may have different ideas for how the land around their reserves and hamlets should be managed to support their traditional land uses while also allowing industrial activity to occur. Working with communities to plan restoration, development, and wildfire mitigation activities will help ensure alignment.

Indigenous communities have an interest in economic development and growth, and this plan ensures that these communities have opportunities to benefit from jobs and access economic development. Recognition of the importance that these industries have on local Indigenous communities – and the infrastructure, jobs and training that accompanies them – is important to the success of the plan.

In addition to the Indigenous-specific policy objectives identified below, specific sector-based approaches for restoration, surface access restrictions, integrated land management, or operational requirements support achieving the plan's Indigenous-specific outcomes.

Outcomes:

- Increase landscape intactness in areas important to Indigenous communities and people.
- Conserve biodiversity, especially species supporting traditional land uses and Treaty rights.

- Grow Indigenous participation in restoration opportunities through participation in the Caribou Habitat Recovery Program.
- Support Indigenous participation in land management.

Policy Objectives and Requirements

1. **Support Indigenous people to practice traditional land uses, including the exercise of Treaty rights.**
   1.1. Enable Indigenous people to harvest plants and fungi for food, medicine, and cultural use in Wildland Provincial Parks and Provincial Recreation Areas in the sub-region.

2. **Acknowledge the importance of Indigenous-held traplines for the transmission of culture.**
   2.1. Work with Indigenous peoples to explore Registered Fur Management Area (RFMA) system changes in the South Athabasca sub-region for greater alignment with Indigenous traditional land uses.

3. **Build capacity to enable Indigenous participation in plan implementation.**
   3.1. Within 24 months of the plan's approval, establish a South Athabasca Indigenous Guardian Program to support plan implementation and monitoring around Indigenous reserves and hamlets, and in other key areas like the White Muskeg. These programs support Indigenous community members to actively participate in the monitoring, observation, and sharing of information aimed at improving the natural landscape.

4. **Include Indigenous people, values and perspectives in restoration planning, delivery, and monitoring.**
   4.1. Build capacity to support Indigenous participation in the restoration activities, including elements of restoration planning, delivery, and monitoring.

5. **Enhance public awareness of Indigenous values.**
   5.1. Work with Indigenous people in the sub-region to explore and pursue opportunities to use Indigenous languages and place names in plan implementation (e.g. recreation signage, new conservation areas).

6. **Include Indigenous values and perspectives in monitoring and evaluating plan implementation, including wildlife and habitat monitoring.**
   6.1. Work with Indigenous people to review monitoring indicators to understand how the indicators reflect Indigenous values and perspectives.
   6.2. Work with Indigenous people to coordinate information sharing so results from Indigenous community-based monitoring programs can inform plan reviews.

Access Management

Establish a co-ordinated approach to road development that supports resource development, supports the removal of economically unproductive footprint, and reduces impacts on natural values.

A fundamental aspect of this plan is to reduce road footprint across the sub-region. Previously, industry roads were constructed individually for each project, resulting in a scattered network of nearly 9,000 km roads within the sub-region. This section of the plan uses integrated land management principles and operational requirements to coordinate access to resources and to minimize new land disturbance.

The plan establishes a network of primary roads that provides long-term access across the sub-region. New developments will be located near a primary road, helping to concentrate development and allowing larger areas of intact landscape to be created over time. The long-term road network informs a road density outcome that supports the management intent for each zone. For example, in the Go Zone, the road density outcome provides the most space for new long-term roads that may be needed to enable new industrial or commercial development.

This access management approach is designed to support the road-related needs of eastern Alberta's forestry and oil and gas industries. Within an in situ project area, road density outcomes and other access management requirements like appended development, do not apply. Outside an in situ project area, the road density outcome maintains space for new roads. Temporary access roads, which are commonly used to support energy development activities, are also excepted from the road density outcomes.

Similar to the energy industry, many of the roads required by the forestry industry are approved under the *Forests Act* as part of an Annual Operating Plan. These shorter-term roads are not included within the road density outcomes.

East versus West

Oil and gas production in the western sub-regions (e.g. Upper Smoky) is predominately well-based. Many roads may be required to access many wells across the landscape.

In the eastern sub-regions, including the South Athabasca, oil and gas production is predominately in situ, or "in place". Some long-term roads are needed to provide access to each in situ project area, but most road development occurs within the project area's boundary.

Well-based cold flow production in the southern part of the sub-region requires more road access. These areas are already established, or they overlap the white area where access management requirements do not apply.

These requirements can be waived if adequate justification is provided that the stringency strands resources and the environmental impact can be minimized, or roads are required for safety considerations and asset integrity.

Outcomes:

- Enable long-term road access to areas of economic and recreational importance.
- Increase landscape intactness in areas important to Indigenous communities and people.
- Increase landscape intactness in areas supporting caribou recovery and biodiversity conservation.

Policy Objectives and Requirements

1. **Establish a long-term road network using Integrated Land Management principles to provide ongoing resource access while reducing footprint over time.**
   1.1. A long-term road network (Figure 2) applies to roads approved as formal dispositions under the *Public Lands Act* and identifies roads as Primary or Transitional.
   1.2. Roads within an approved in situ project area are not considered as part of the long-term road network and are not subject to road density limits.
   1.3. Transitional roads cannot be renewed unless there is an existing/active disposition that requires the road to be maintained. If a road is required for a longer timeframe, the road may be transitioned to a primary road if the requirements for new primary roads are met.
   1.4. A transitional road can be used to access existing dispositions. New appended developments are not permitted on transitional roads.
   1.5. In the Go Zone, an existing transitional road may be used to access a new disposition if it overlaps the footprint of an existing disposition with no change to the size or location of the new disposition.

The access management approach places no limitations on road density or appended development within an in situ project area.

Similarly, most forestry roads are not approved as formal dispositions and are not affected by the access management approach.

***Primary Roads** are existing or required roads expected to maintain long-term access to sites or activities within the sub-region.*

***Transitional Roads** are existing roads, held under a formal disposition, that provide access to existing infrastructure but are not required to maintain long-term resource access.*

2. **Consider cumulative effects of new roads as part of the application process.**
   2.1. A proposed primary road can be a Class II to Class VI road. Class I roads are not permitted, except when needed for a provincial highway.
   2.2. A proposed primary road must start from a primary road.
   2.3. A proposed primary road must not result in the road network exceeding the maximum allowed road density, in any of the zones it crosses (Table 1).
   2.4. If a proposed primary road will exceed the road density outcome of any zone for the applicable decade, for each km of proposed primary road, the applicant must restore other formal dispositions to restoration level two, according to the area identified in Table 2. This restoration can include roads, well pads, or other disturbances on the landscape under a formal disposition.
   2.5. If an applicant applies for a proposed primary road that exceeds the road density outcomes in Table 1, then for each km of proposed primary road, the applicant must restore formal dispositions that will lead to the creation of undisturbed habitat according to the amount identified in Table 2.

2.6. A proposed primary road crossing through a riparian area identified in Figure 3 must follow the most direct, practicable route.
2.7. An existing transitional road may be converted to a primary road, if the transitional road meets the requirements in 2.1 through 2.8.

Table 1: Allowed road density outcome (km/km^2) per zone by decade for roads outside an in situ project area

Zone	Baseline	Year Ending Time Period		
	2026	2036	2046	2056
Slow Go	0.41	0.38	0.34	0.29
Go	0.25	0.26	0.26	0.22
Restoration First	0.31	0.29	0.24	0.23

Table 2: Restoration ratios for new primary roads that exceed the allowed road density outcomes per zone. (Note: in situ areas are exempt from these restoration requirements.)

Zone	New road length (km): Undisturbed habitat created (km^2)
Slow Go	1:2
Go	1:1
Restoration First	1:4

3. Improve future landscape intactness by focusing development along primary roads.

3.1. An edge of a proposed development must be located within 100 metres of a Primary Road, except for a transmission line, a pipeline, or a proposed primary road.
3.2. Appended development rules do not apply within an in situ project area.
3.3. For a proposed sand and gravel development located outside a caribou range or riparian area from Figure 3, the edge of the proposed development must be located within 1,000 metres of a Primary Road.
3.4. To access an appended development, an Appended Development Road may be built.
3.5. An Appended Development Road must be between Class II to Class VI and must be equal to or lower than the class of the primary road it starts from.
3.6. To accommodate the additional length required for an angled road, an Appended Development Road may not exceed 200 metres in length. An Appended Development Road for a sand and gravel development may not exceed 1,500 metres in length.

Appended Development Road: *a road built exclusively to provide access from a primary road to an appended development.*

4. **Minimize the siting of proposed primary roads and future highways in caribou range to support caribou recovery.**
   4.1. Proposed primary roads and future highways should be located outside caribou range if a suitable alternate route exists.
   4.2. A proposed primary road or provincial highway should avoid bisecting a caribou range.

Primary roads and highways become permanent features on the landscape. Caribou movement data in the sub-region show that caribou avoid primary roads and rarely cross highways. Caribou attempting to cross these features have an increased risk of mortality from vehicle collisions, and multiple caribou deaths have been reported along primary roads and highways in the sub-region.

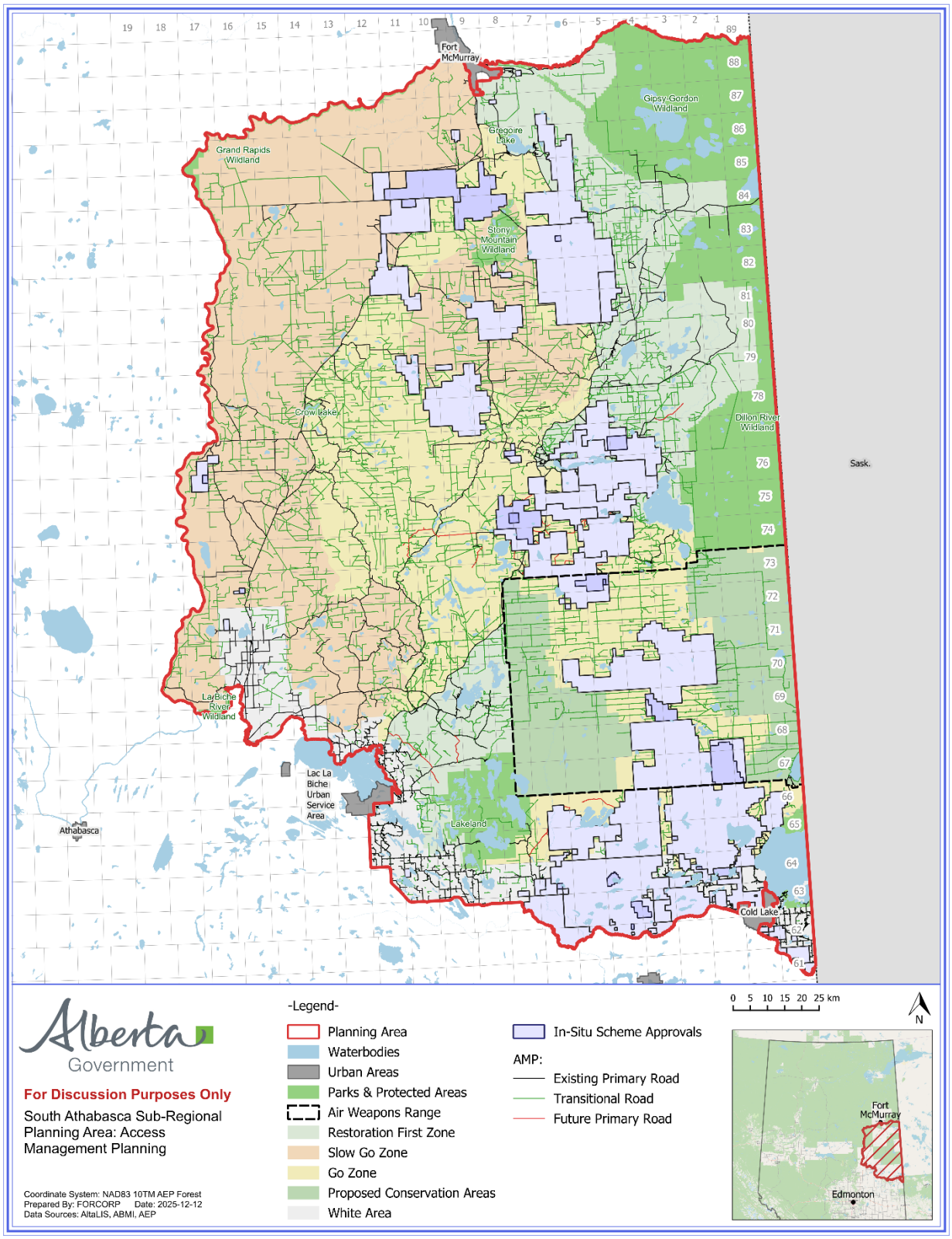


Figure 2: Long-term road network showing the location of project areas existing at the time of plan approval

Riparian Management Areas

Enhance protection of riparian areas associated with identified lakes, rivers and creeks.

Riparian lands are transitional areas between upland and aquatic ecosystems. Across the sub-region, these areas are important for supporting Indigenous traditional land uses, soil conservation, fish and wildlife habitat, biodiversity conservation, and recreation opportunities. Riparian areas around lakes, rivers, and creeks attract people and wildlife and connect the landscape, allowing people and wildlife to move more freely across the landscape.

This plan prioritizes the sub-region's riparian areas for ecological values, traditional land uses, and compatible recreation values, but offers greater flexibility for industry operating within an in situ project area.

These requirements can be waived if adequate justification is provided that the stringency strands resources and the environmental impact can be minimized, or roads are required for safety considerations and asset integrity.

East versus West

The Upper Smoky sub-region in western Alberta has mountains along the west boundary with rough or hilly terrain all the way to the eastern edge. Rivers tend to be faster flowing within deep valleys, and they often lack floodplains. Many of these rivers have headwaters in the mountains and originate from glaciers.

In eastern Alberta, there are no mountains. Rivers tend to move more slowly through wider valleys with large floodplains. Some major rivers, such as the Athabasca River, have headwaters in the mountains. Other rivers, like the Christina River and Beaver River, have headwaters originating from local lakes.

Outcomes:

- Increase landscape intactness in areas important to Indigenous communities and people.
- Maintain the potential of riparian areas for supporting biodiversity and ecological functions.
- Support responsible use of riparian areas for nature-based recreation.

Policy Objectives and Requirements

1. Manage footprint in areas adjacent to lakes and watercourses.

1.1. New footprint is not permitted within 250 m of the bank of a lake and 250 m of the bank of a watercourse identified in the *Surveys Act*.

1.1.1. Exempt activities include water intake and outflows, road crossings, electrical powerline crossings, telecommunication crossings, below ground pipeline crossings, oilsands exploration wells, temporary footprint, environmental monitoring wells, seismic lines, recreational infrastructure (i.e. trails, campgrounds, boat launches), timber harvest, and restoration activities.

A watercourse is a river, brook, stream or other natural water channel along which water flows continuously or intermittently.

A lake is an inland basin full of water and surrounded by land.

1.2. New linear footprint from electrical powerlines, telecommunication lines, and roads is not permitted to parallel a lake or watercourse within 250 m of the bank of a lake or within 250 m of the bank of a watercourse, unless consistent with the objectives of this plan and authorized by the regulator.

1.3. Within an approved in situ project area, new footprint is not permitted within 100 m of the bank of a waterbody and 100 m of the bank of a watercourse identified in the *Surveys Act*. Exceptions are subject to the application process and may be granted if the regulator determines they are consistent with the outcomes of the plan and authorized by the regulator.

1.3.1. Exempt activities include water intake and outflows, road crossings, electrical powerline crossings, telecommunication crossings, below ground pipeline crossings, oilsands exploration wells, temporary footprint, environmental monitoring wells, seismic lines, recreational infrastructure (i.e. trails, campgrounds, boat launches), timber harvest, and restoration activities

Energy

Provide certainty for existing and future oil and gas operators and create space for ongoing energy development opportunities.

The energy approach for the South Athabasca was designed to deliver on Alberta's intention to double oil and gas production. This plan enables full growth of future in situ projects and creates regulatory flexibility to support ongoing energy-related development, including oil sands, petroleum and natural gas tenure (PNG), carbon capture utilization and storage technology, and other emerging resources.

The infrastructure and investment needed to support oil sands development is significant. Existing oil sands tenure encompass approximately half (47%) of the sub-region, with portions of the sub-region containing undeveloped bitumen deposits. PNG tenure covers 35% of the sub-region but the sub-region's contribution to the province's annual production of PNG is small.

Assessing and managing the cumulative energy disturbance in this sub-region is important. Increasing oil and gas production while also creating landscape conditions that can support caribou recovery and Indigenous traditional land uses is about finding a balance between adding new footprint and restoring old footprint. Cumulative energy disturbance is calculated as the total area of all project areas, plus the total area of all dispositions for energy resource activities outside a project area (not including exceptions), plus a 500-metre buffer around all dispositions, minus the overlap between disposition buffers.

The cumulative energy disturbance parameters in Table 3 are not intended to hinder growth in the sub-region's energy industry. Rather, they reflect a commitment to balance new energy-related disturbance with timely restoration of economically unproductive footprint, including from wells and their supporting roads.

The plan provides flexibility and certainty for ongoing energy development within the Go Zone and in situ project areas. Restoration of economically unproductive energy footprint will be prioritized in the Slow Go Zone and Restoration First Zone to improve landscape conditions in areas important for supporting other values, and with the least consequence for industry. The parameters, metrics, and requirements in this section that are unique to this region will be evaluated as part of the review of the plan to ensure they are helping to achieve the overall outcomes.

*Energy resource activities are defined by the **Responsible Energy Development Act**.*

When calculating the cumulative energy disturbance limit, the following energy resource activities area excluded:
- pipelines
- coal exploration programs
- oil sands exploration programs
- surface material exploration
- metallic or industrial mineral exploration

Outcomes:

- Increase energy-related development on public lands.
- Provide regulatory certainty to support investment in energy-based industries.
- Reduce landscape disturbance through restoration of economically unproductive footprint in priority areas.

Policy Objectives and Requirements

1. **Reduce cumulative effects from energy development in key planning areas by managing new surface disturbance.**
   1.1. A cumulative energy disturbance parameter for each zone is established in Table 3.
      1.1.1. Pipeline disposition, and footprint associated with a coal exploration program, oil sands exploration program, surface material exploration program, or metallic mineral exploration program are not included within the disturbance parameter.
   1.2. Companies with approved project areas will complete all related and supporting activities within the project area with the following exceptions: disposal wells, water wells, and monitoring wells required by the Alberta Energy Regulator, carbon sequestration facilities, geophysical and oil sands exploration, transmission lines and belowground pipelines, segments of above-ground pipelines and any associated facilities and infrastructure required to connect an in situ project area to a central processing facility in another in situ project area that doesn't share a boundary.
   1.3. Access management requirements identified in the Access Management section do not apply within an approved in situ project area.
   1.4. All energy-related activities occurring outside an in situ project area must comply with the requirements in the Access Management section.
   1.5. In caribou range and the White Muskeg (Figure 3), new footprint will only be permitted in these circumstances:
      1.5.1. A surface disturbance within a project area;
      1.5.2. A future primary road to provide access to the approved project area
      1.5.3. A surface disturbance within the 5-kilometer buffer around FM468 Clearwater Reserve where it intersects the multi-use corridor identified in Figure 6;
      1.5.4. A water outfall structure;
      1.5.5. A water intake structure; or
      1.5.6. Reuse of an existing footprint as long as no new footprint is created.

Disturbance from existing and future pipelines is not included in the cumulative energy disturbance parameters.

Pipelines are managed separate from the energy industry. See the Linear Features section for more information on pipeline management.

Table 3: Cumulative energy disturbance parameters (%) per zone by decade

Zone	Baseline	Year Ending Time Period		
	2026	2036	2046	2056
Slow Go	41	38	35	29
Go	66	66	66	58
Restoration First	51	49	43	42

2. Enable ongoing energy development by restoring the 2025 baseline footprint that is deemed economically unproductive.

2.1. Restoration targets for economically unproductive well-based footprint for each zone are established in Table 4. Inactive wells will be restored to achieve Level 2 restoration.

2.1.1. In decade 1 (ending in 2036), restoration will be prioritized within 5 km of Indigenous reserves and hamlets, in the White Muskeg, and in the Bohn caribou sub-unit, but outside an approved in situ project area.

2.1.2. In decade 2 (ending in 2046), restoration will be prioritized in caribou range in the Slow Go Zone, and both inside and outside caribou range in the Restoration First Zone.

2.1.3. In decade 3 (ending in 2056), all remaining inactive well pads will be restored.

Outside of existing project areas, industry footprint within the Bohn is mostly inactive and abandoned and is surrounded by legacy seismic lines. This area has high potential to be completely restored through area-based closure.

2.2. No later than June 30th of each year, the regulator will publish data for each zone, including information on all formal dispositions that contain an inactive well, the areas of each disposition, and the restoration activities completed in the previous calendar year.

2.3. Existing tools and processes, such as the Liability Management Framework, will be used to align provincial spend targets, monitor progress, and nominate sites of companies that are not progressing reclamation activities as expected.

Table 4: Total area (ha) of economically unproductive well sites to be restored in each decade

Zone	Baseline	Year Ending Time Period		
	2025	2036	2046	2056
Slow Go	754	205	303	246
Go	1,975	21	0	1,954
Restoration First	745	115	598	0

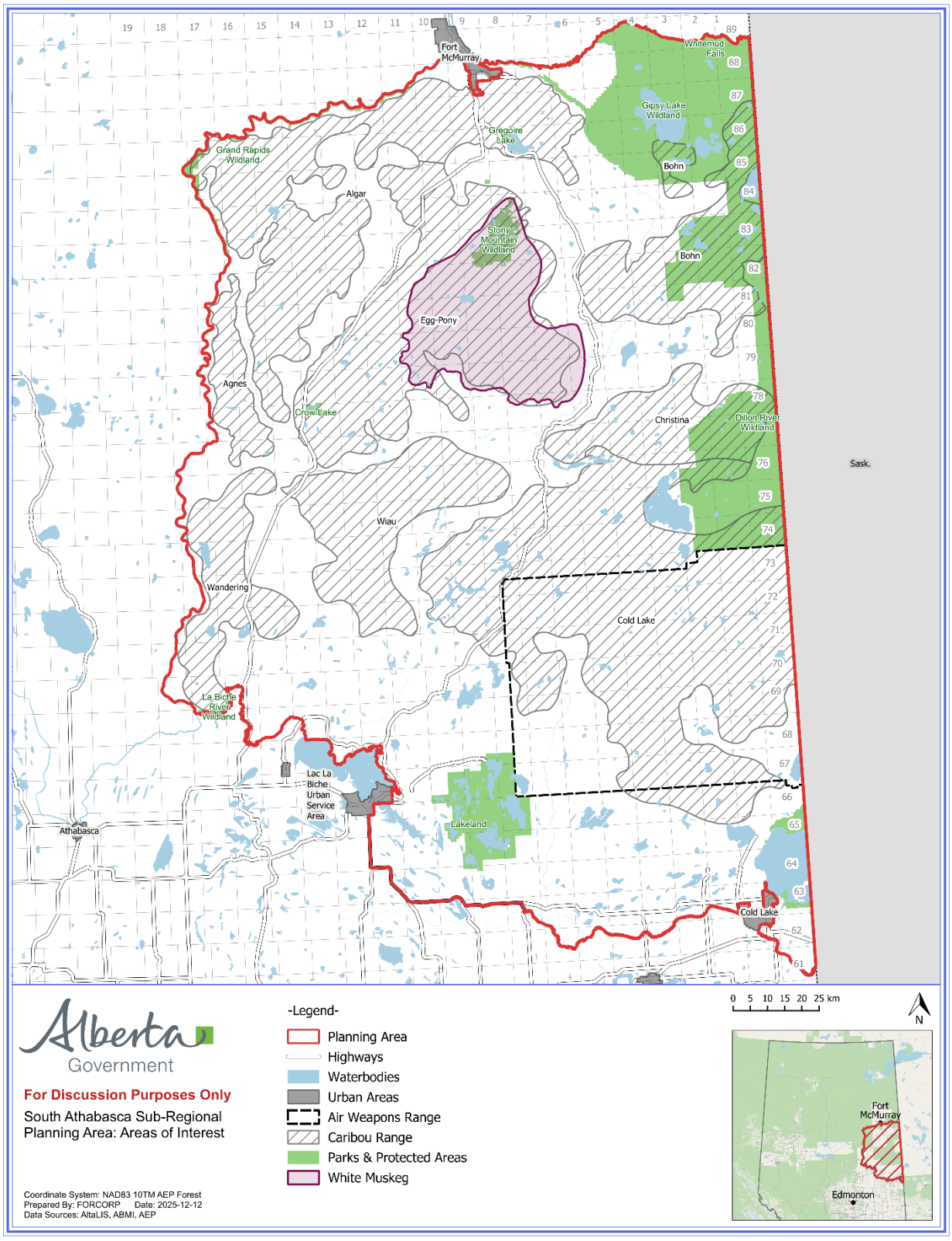


Figure 3: Location of caribou range and the White Muskeg

Linear Features

Reduce linear feature width across the landscape.

Linear features such as pipelines, transmission lines and seismic lines are necessary developments that support activity in the energy industry and other sectors. Seismic lines let companies seek to understand the subsurface geology, and pipelines and transmission lines deliver power and products to customers and markets. The challenge is that linear features often remain on the landscape for decades.

There are opportunities to restore vegetation on portions of these linear features to reduce the extent of clearings while still maintaining the ability to have safe and effective operations.

This section aims to enhance restoration efforts by strategically refining activities that minimize the width of linear disturbances across the landscape. A key objective is to promote the regeneration of trees. These measures are designed to support caribou recovery by limiting access for alternative predator and prey species, while also restricting motorized access to facilitate the successful restoration of linear features.

Outcomes:

- Maintain economic opportunities and investor certainty.
- Reduce landscape disturbance associated with unproductive footprint.
- Reduce further habitat fragmentation of caribou habitat.

Policy Objectives and Requirements

Pipelines

1 Maintain safe pipeline operations for belowground pipelines while restoring vegetation on dispositions.

1.1 For a new pipeline disposition, operators must restore their pipeline right-of-way within one year of construction, as per Public Lands Administration Regulation, but an operator may retain a vegetation control corridor of up to four metres wide where active restoration is not required, except where 1.3 applies.

1.2 For an active pipeline disposition, operators must restore their pipeline right-of-way within twenty years of plan approval, but an operator may retain a vegetation control corridor of up to four metres wide where active restoration is not required, except where 1.3 applies.

1.3 In addition to the requirements in 1.1 and 1.2, where two or more adjacent pipeline dispositions occur in caribou range, each disposition holder must coordinate with other disposition holders to reforest the portion of their own four metre right-of-way over a one kilometre length to create a forested corridor every 10 kilometres.

Multipipeline corridors can create areas of cleared land that travel very long distance across the landscape. When these corridors occur in caribou range, they create a physical barrier that caribou will not cross. By creating a forested crossing area, caribou may more freely move across the sub-region.

1.4 Operators with adjacent pipeline dispositions must submit a coordinated restoration program plan within five years of the sub-regional plan coming into force. The restoration program plan must outline how the operators will complete 50% of the required restoration activities within ten years of the program being submitted and will complete the remaining 50% of required restoration activities within fifteen years of the program being submitted
1.5 On public land, where a pipeline disposition is for an abandoned pipeline, active restoration of the entire right of way is required to apply for a reclamation certificate.
1.6 Vegetation control is permitted within four metres around above-ground installations and infrastructure approved under a pipeline-related disposition including, but not limited to, valve sites, remote metering stations (i.e., fly-in only), cathodic protection, and thermal electric generators.
1.7 Vegetation control is permitted on an area of up to 1,000 square metres for helicopter pads.
1.8 Temporary clearings are permitted for emergency response, integrity dig sites, and monitoring sites and must be restored.
1.9 Human access must be effectively limited on vegetation control corridors intersecting primary roads using strategies as determined by the Government of Alberta and the proponent.

Transmission Lines

2 Restore portions of the dispositions of electricity transmission line.

2.1 New transmission line dispositions must be restored to a Restoration Level 1 within five years of the date the energization certificate is issued.
2.2 Human access must be effectively limited on vegetation control corridors intersecting primary roads using strategies as determined by the Government of Alberta and the proponent.

Geophysical Exploration

Geophysical exploration techniques and technology continue to improve and offer an opportunity to use industry best practices to reduce footprint associated with seismic lines.

3 **Minimize disturbance from seismic exploration.**

3.1 Receiver lines must not exceed 1.75 metres in width, must employ tree avoidance techniques.
3.2 Source lines must not exceed 2.75 metres in width, must employ tree avoidance techniques, and must meander to limit line of sight to less than 100 metres. Turn-around clearings at the end of source lines are permitted.
3.3 Seismic access lines must not exceed 3 metres at any location along the line.
3.4 When operating within a riparian area, a receiver line, source line, or seismic access line, must not exceed 1.75 metres in width.
3.5 Helipads must be constructed in natural open areas or existing clearings, where they exist. Where helipads must be prepared, the area of cleared vegetation will not exceed 1,000 square metres.
3.6 Shot holes drop zones used in heli-portable programs must not exceed 16 square metres.
3.7 The holder of a geophysical approval must establish doglegs at all intersections of a source, receiver or access line with linear features greater than 3.5 metres in width. Access control must extend for 100 m from the point of intersection and effectively deter human use, including off-highway vehicles.

Forestry

Provide certainty for forest harvesting and manage effects on other landscape values.

This plan manages forestry operations in a way that supports other landscape values, including caribou recovery, conservation of forest species, and Indigenous traditional land uses.

The Government of Alberta regulates forestry in the South Athabasca sub-region. Forest management planning is guided by policy processes and regulatory requirements that are essential to sustainable forest management in Alberta.

Forest harvesting must follow forest management plans, forestry policy directives and standard operating procedures. Additionally, this sub-regional plan provides further guidance and direction for forest management planning and harvest operations. Strategic land-use plans are required to ensure the standards and objectives of sustainable forest management are achieved (CaN/CSa-Z809-2002, CSa 4.0; Alberta Planning Standard V 4.1).

Business-as-usual forestry practices create dispersed harvesting areas, which increases landscape fragmentation. Aggregated harvest is an alternate approach that consolidates harvest into larger areas.

For this plan, outside of caribou range, forest harvest remains business-as-usual, allowing operators to re-enter forested areas as needed. Inside caribou range, this plan utilizes a business-as-usual approach in some areas (e.g. overlapping in situ oilsands projects) but delays harvest and/or adopts an aggregated harvest approach elsewhere.

This approach supports flexibility in forest harvest where it makes sense, maintains the forest in areas being used by caribou right now, and consolidates forestry footprint into larger areas that, when reforested, will create more intact habitat to support other values

East versus West

Forestry in the Upper Smoky sub-region has a single Forest Management Agreement focused on conifer harvest, with numerous deciduous quota holders. About 70% of the landbase in the Upper Smoky supports timber harvest operations.

In northeastern Alberta, including in the South Athabasca sub-region, there is a single Forest Management Agreement focused on deciduous harvest, with additional conifer quota holders. About 30% of the South Athabasca landbase supports timber harvest operations. Because available timber is more spread out, more forestry roads are required to access harvest areas.

Outcomes:

- Maintain economic opportunities and investor certainty.
- Manage the extent of harvest-related footprint in caribou range.
- Increase landscape intactness in areas that support traditional land uses and the exercise of Treaty rights.
- Maintain the integrity of the forest ecosystem to support biodiversity conservation.

Policy Objectives and Requirements

1 Provide certainty for forest operators harvesting within caribou range.

1.1 Forest harvesting in caribou range must follow the Harvest Timing Series (HTS) as shown in Figure 4. The Harvest Timing Series will take effect 24 months following approval of the sub-regional plan.

1.2 Harvesting can only occur during the predetermined period identified in the HTS. If harvest is not completed in the assigned decade, it may continue into the next timeframe but harvesting must be completed within one year of initiating harvest in the next specified HTS.

1.3 Once a HTS has been harvested, there will be no further harvesting in the HTS until the following rotation, except for salvage harvesting that follows the requirements in the Access Management section. In single entry HTSs, harvesting may occur again in 100 years. In dual entry HTSs, harvesting will occur according to the assigned decades.

1.4 In deferred entry HTSs, harvesting is not permitted for a minimum of 100 years.

1.5 Formal disposition roads associated with new forestry activities must align with the Access Management requirements outlined in this plan.

1.6 To meet sustainable forest management objectives within an aggregated harvest approach, temporary roads should have a lifespan of less than or equal to three years and should be reclaimed to level 1 restoration as soon as they are no longer required. Where justified, a temporary road within an open HTS may be approved for a period up to 10 years and will be reclaimed/reforested to Level 2 restoration at the end of the 10-year period.

2 Reforest new and existing disturbances to support sustainable forestry.

2.1 Temporary footprints authorized by an annual operating plan approval or temporary field authorization will be restored to Level 1 restoration. Temporary footprints include roads, landings, storage sites, camp locations, and other temporary footprints, as well as roads that follow a pre-existing disturbance not currently under disposition.

2.2 All restoration treatments must be completed within three years of the expiry date of the authorization or approval. For temporary roads within an open HTS with an approved lifespan of longer than three years, level 1 restoration must be completed within three years of the expiry date of the authorization or approval.

2.3 Seismic footprint in new harvest blocks will be reforested to the same standard as the surrounding harvest block.

2.4 Legacy seismic lines required to support Indigenous traditional use, trapper access, or other purposes, that are not reforested with the surrounding harvest block shall not exceed two metres in width and will require approval as part of the annual operating plan.

2.5 The Timber Disposition Holder (FMA, quota, and permit) must submit a report to the regulatory body no later than June 1 of the timber year following the closure of an HTS, summarizing all restoration activities conducted in the HTS.

2.6 No earlier than five years and no later than eight years from closure of an HTS, the Timber Disposition Holder must submit a follow up report to the regulatory body demonstrating achievement of Level 1 restoration.

2.7 Treatment of temporary footprint outside caribou range to achieve level 1 restoration must be completed within three years from the expiry date of the authorization or approval.

2.8 By June 1 of each timber year, the Timber Disposition Holder must submit a report summarizing all restoration activities conducted for expired authorizations or approvals that required restoration treatments to be completed within the previous timber year.

2.9 No earlier than five years and no later than eight years from the date on which the authorization or approval for the temporary footprint expires, the Timber Disposition Holder must submit a follow up report demonstrating achievement of Level 1 restoration.

3 Provide certainty for forestry operators in the event of a natural disturbance.

3.1 Salvage harvesting in caribou range in response to a natural disturbance (i.e. wildfire or insect outbreaks) is permitted if the disturbed area is overlapping an open HTS.

3.2 Before any salvage harvest occurs, a salvage harvesting plan must be submitted that includes burn/insect severity and percent mortality assessment maps of all affected stands planned for harvest.

3.3 Wildfire salvage harvesting in caribou range will be prioritized using the following criteria: Severely burned/affected will be prioritized over less severely burned/affected areas. Decisions on moderately burned/affected (moderate severity) areas will be informed by the assessment identified in 3.2. Lightly burned/affected (low severity) areas with less than 25% of the trees killed should be avoided.

4 Reduce wildfire risk to high-value resources and assets.

4.1 The ministry responsible for wildfire management will assess the wildfire risk and will develop and implement a comprehensive wildfire management plan for the sub-region. This plan will contain, at minimum, wildfire detection methods and applicable locations of towers and/or equipment, wildfire response infrastructure such as firebases, aircraft landing locations, and staging areas, and response plans for communities, recreation areas, and major industry developments, including suitable mitigations and treatments to reduce hazardous fuels.

4.2 The Wildfire Management Plans for Fort McMurray and Lac La Biche Forest Areas will be updated at the time of plan approval and will be revised every five years.

4.3 Where an approved wildfire management plan identifies reduced fire intensity objectives in an area, post-harvest debris levels will be maintained at less than 50 m^3/ha.

4.4 The ministry responsible for wildfire management will work cooperatively with Indigenous communities to plan fire smarting and tactical clearing activities in priority areas including, but not limited to, caribou ranges, the White Muskeg, a 5 km buffer area around reserves and hamlets, and recreation areas identified as supporting Indigenous cultural uses.

5 Enhance wildfire prevention strategies to minimize ignition risk and escaped fires.

5.1 Utilize policy tools during periods of high fire danger, including fire bans, forest closures and restrictions.

5.2 Encourage industries to develop operational guidelines to limit or suspend high risk activities during periods of heightened fire risk.

5.3 Ensure Forest Area Wildlife Prevention Plans are reviewed and update annually.

5.4 Update the detection and coverage assessment for the sub-region every five years to ensure optimal surveillance and response readiness.

5.5 Conduct ongoing landscape-level risk modelling and monitoring including re-assessing wildfire risk every ten years and adjust wildfire mitigation and prevention strategies accordingly.

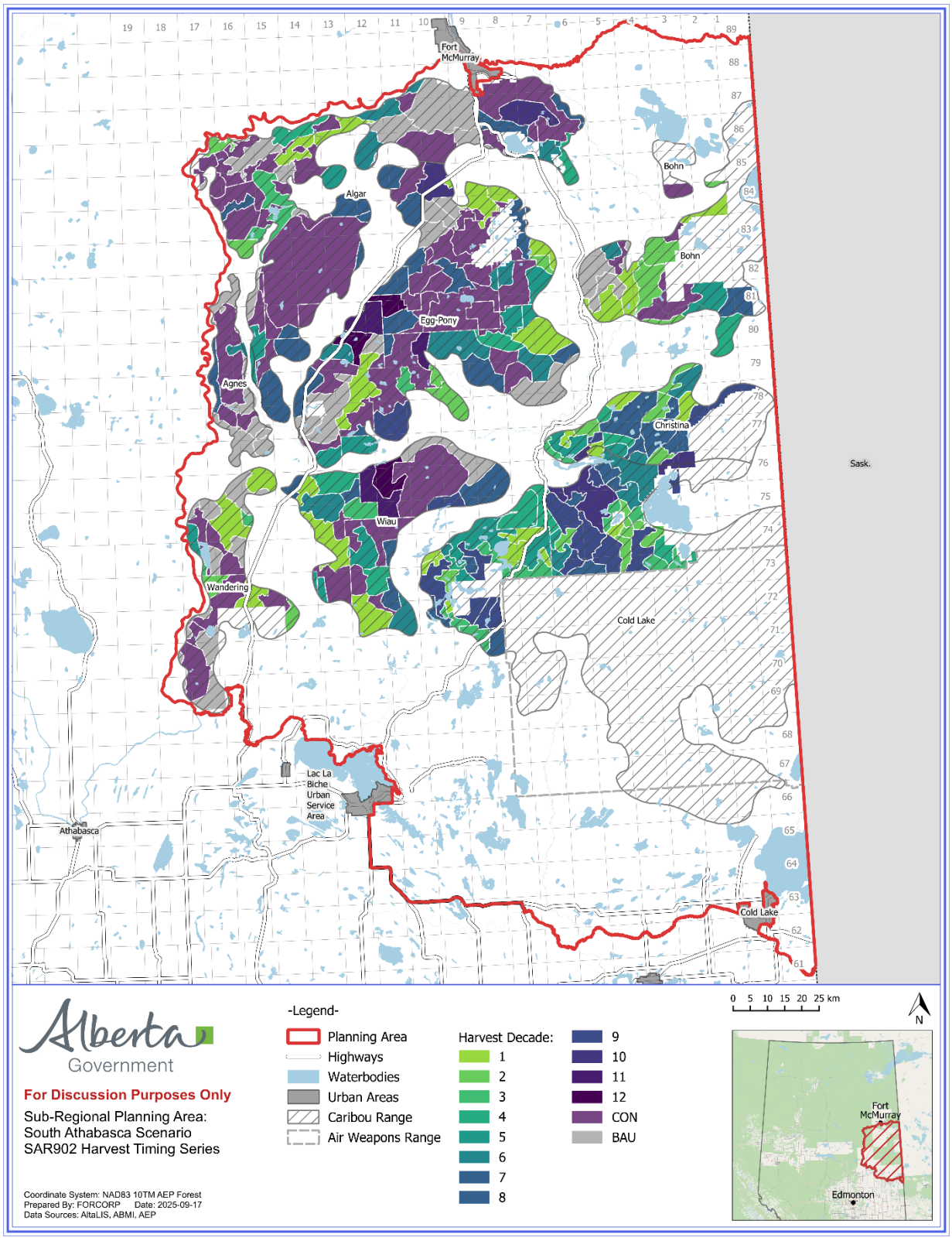


Figure 4: Forestry Harvest Timing series for caribou range. Areas identified by the CON label reference 'conservation areas' where timber harvest will not occur. Areas identified by the BAU label reference areas that will be harvested with a 'Business-As-Usual'.

Recreation and Tourism

Focus and enhance recreation and tourism management to provide quality and sustainable recreation experiences.

Many areas of Crown land support outdoor recreation activities like fishing, hunting, bird watching, hiking, camping, and off-highway vehicle use. These areas often have high scenic value, occur in natural settings, and are associated with rivers or lakes and their surrounding riparian areas and terrestrial uplands.

To grow tourism, benefit the economy, and create employment in the sub-region, this plan identifies areas of focus for recreation and trail planning intended to enhance user experience while minimizing impacts to sensitive areas.

Existing tourism operations on public lands have dispositions enabled through the tourism and commercial lease process.

When a recreation management plan or trail management plan is developed recreation or tourism area in this sub-region, the plan will:

• identify specific areas to prioritize for outdoor recreation and tourism,

• ensure recreation management areas support outdoor recreation activities and tourism development that are compatible with the ecological values of the area,

• consider and manage land uses to ensure they do not compromise the cultural and historical values that also attract users to these areas.

Recreation management plans and trail management plans will be developed with input from stakeholders, the private sector, and Indigenous Peoples interested in ecologically sustainable recreation and tourism development opportunities.

Outcomes:

- Enhance recreation and tourism opportunities and infrastructure in desirable destination areas.
- Support Indigenous tourism as an economic diversification opportunity and to increase awareness of Indigenous culture and values.
- Maintain the integrity of areas that support local recreational use.
- Develop a sustainable trail system that supports a diversity of user needs.
- Manage recreation and tourism footprint in areas that support caribou recovery, biodiversity conservation, and traditional land uses and the exercise of Treaty rights.

Policy Objectives and Requirements

1 Identify priority areas for recreation and tourism.

1.1 Identify the areas in Figure 5 as Recreation Management Areas (RMAs) where recreation and tourism outcomes are a priority land use.

1.2 Develop a recreation management plan for new and existing recreation sites, or a trail management plan for trail planning areas, for the areas identified in Figure 6. Interim guidance for identified recreation management areas in the Cold Lake area will carry forward existing direction and will be published by the Government of Alberta.
1.3 Recreation management plans and trail management plans must be developed with involvement of Indigenous communities and will be considerate of historical, cultural, wildlife and conservation values, in a multiple use landscape.
1.4 Notwithstanding section 1.3, the following Recreation Management Areas will be cooperatively planned and managed with relevant Indigenous communities to support Indigenous priority uses, including Indigenous recreation and tourism opportunities and Indigenous cultural uses: Old Conklin Road/Steepbank Road, Gregoire Lake Provincial Recreation Area, Cowper Lake, Christina Crossing, Bourque Lake, May Lake, Marie Lake, Martineau River and English Bay and Sandy Beach on Cold Lake.
1.5 Undertake a process to add, upgrade and/or modernize infrastructure (e.g. facilities, services and trails) to support and enable high quality visitor opportunities.

2 Minimize impacts from recreation activities.

2.1 All recreation trails in caribou range, and riparian areas, will be limited to a clearing width of no greater than 3.75 m, regardless of activity type.
2.2 Recreation and tourism features and infrastructure planned within riparian areas will align with the requirements for riparian areas.
2.3 In alignment with the Restricted Activity Period for caribou, Off-Highway Vehicle use will not be permitted in the White Muskeg (Figure 3) between February 15 and July 15, except for the following purposes:
    2.3.1 Use by emergency services.
    2.3.2 Use by government staff while conducting business operations.

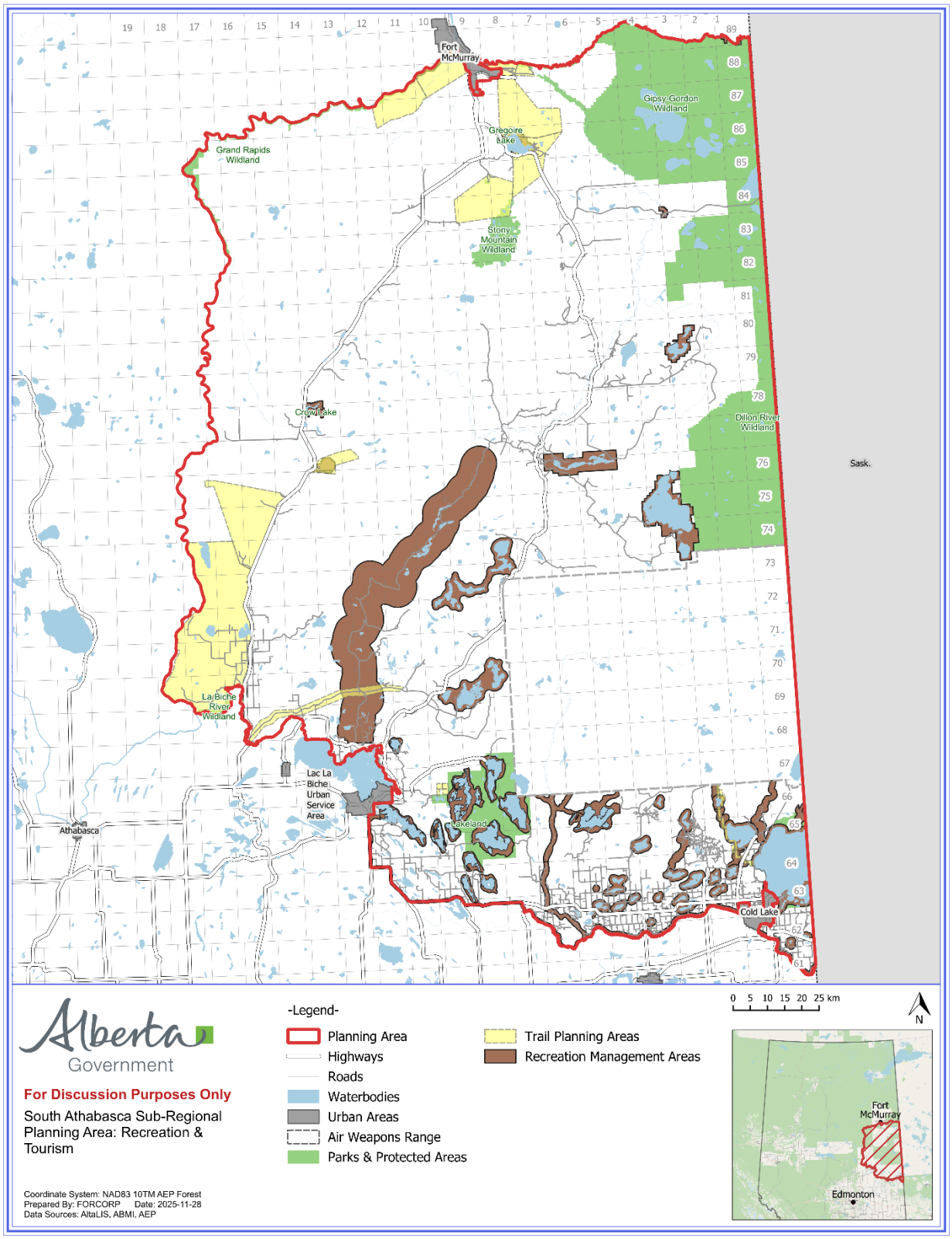


Figure 5: Recreation Management Areas

Surface Materials

Extract surface materials in a manner that reduces overall footprint and environmental impact.

Surface materials (also known as aggregates) refer to materials such as sand, gravel and clay. In the sub-region, aggregates are used both by industry and provincial and municipal governments to access resources and develop infrastructure.

This plan provides opportunities for ongoing extraction of surface materials while reducing footprint in areas supporting traditional land uses and Treaty rights, biodiversity, caribou recovery, and recreation and tourism opportunities. Surface materials operations will be subject to access management, riparian area, and restoration requirements.

Outcomes:

- Maintain a diversity of economic opportunities in the sub-region.
- Minimize landscape disturbance by progressively restoring unproductive footprint.
- Improve landscape conditions to support caribou recovery, biodiversity, and traditional land uses and the exercise of Treaty rights.

Policy Objectives and Requirements

1 Reduce footprint by aggregating activities.

1.1 New surface material dispositions must follow the appended development rules in the *Access Management* section.

1.2 Surface material exploration or development activities will not be permitted within the White Muskeg (Figure 3), in a 5 km buffer around Indigenous reserves and hamlets, and in riparian areas.

2 Use progressive phasing to restore land as extraction areas expand.

2.1 For new surface material dispositions, an extraction cell must not exceed 8 hectares with undisturbed uplands between cells. Restoration treatments must be completed before a new extraction cell can be entered.

2.2 Prior to amending or renewing a disposition, a reclamation report and supporting spatial files must be submitted and approved demonstrating progressive reclamation has been completed.

2.3 New and existing surface materials dispositions will be required to achieve Level 3 restoration. For sites larger than 32 ha, an end pit lake can cover no more than 50% of the total hectares disturbed.

2.4 A site, or portion of a site, will be exempt from the requirements if it is pending reclamation certification at the time of policy approval.

2.5 Surface Material Exploration activities will be required to achieve Level 2 restoration.

Peat

Support peat harvest in areas that reduce overall footprint and environmental impact.

Peat extraction in the sub-region is governed by Alberta's established policy on peat resource management – *Allocation and Sustainable Management of Peat Resources on Public Land (2016)* – to ensure that operations are responsibly conducted within designated areas.

Outcomes:

- Maintain a diversity of economic opportunities in the sub-region.
- Retain lands that support caribou recovery, biodiversity conservation and traditional land uses and Treaty rights.

Policy Objectives and Requirements

1 Manage peat extraction in accordance with Alberta's Peat Policy.

1.1 Peat extraction operations must be located entirely outside of caribou range and within peat application areas developed by the Government of Alberta.

1.2 Peat extraction operations must comply with the *Allocation and Sustainable Management of Peat Resources on Public Land (2016)*, as may be updated from time to time.

Grazing

Support grazing opportunities in the white zone.

In the sub-region, no new grazing dispositions are permitted on Crown lands within the Green Area. Grazing dispositions may be granted in the White Area, subject to evaluation of land suitability and compatibility with other uses. This land use is not prevalent in the sub-region; approved grazing areas occupy 1.5% of the sub-region.

Outcomes:

- Support the most economically valuable development opportunities on public lands.
- Retain Crown lands to support current and future traditional land uses and the exercise of Treaty rights.
- Retain lands that support caribou recovery and biodiversity conservation.

Policy Objectives and Requirements

1 **Retain all lands in the green zone as a public resource.**

1.1 New grazing dispositions (permits, licences, leases) or reservations on public lands are only permitted within the white area identified in Figure 1, depending on land suitability and compatibility with other uses.

Public Lands

Maintain public lands for the use and enjoyment of all Albertans.

Public lands maintain access to ongoing resource extraction and economic growth opportunities, provide opportunities for Indigenous traditional land uses, including the exercise of Treaty rights, and are required to support caribou recovery and biodiversity conservation.

Public lands sales will be supported in the White Area of the sub-region and where municipal expansion is required.

Outcomes:

- Support future opportunities for economic development on public lands.
- Support the ongoing use and enjoyment of Crown lands by Albertans.
- Retain public lands to support caribou recovery, biodiversity conservation, and traditional land uses and Treaty rights.

Policy Objectives and Requirements

1 **Retain identified lands in the green area as a public resource.**

1.2 Public land sales may be supported in the White Area in Figure 1 and in any planning zone (Figure 1) where there is an overlapping approved area structure plan or municipal development plan.

1.3 Public lands may be transferred to the federal government to support the creation or expansion of a First Nation reserve or to a Métis settlement.

1.4 Public lands may be sold to if they overlap the footprint of an existing/historic Métis residence that is deemed appropriate for sale by Forestry and Parks.

2 Retain all lands in identified riparian areas as a public resource.

2.1 Public lands in riparian areas will not be available for sale.

2.1.1 Exceptions may be approved for existing/historic Métis residences deemed appropriate for sale according to established Forestry and Parks policy.

Implementing Lower Athabasca Regional Plan Commitments

In July 2025, nearly all of the Gipsy-Gordon Wildland Park (GGWP) conservation area was designated as the Gipsy-Gordon Wildland Provincial Park. The Lower Athabasca Regional Plan (LARP) identified commitments and expectations for the remainder of the GGWP conservation area that require a different designation than a Wildland Provincial Park. A Public Land Use Zone (PLUZ) offers a suitable designation because it can maintain land for biodiversity, recreation, and Indigenous traditional land uses. The LARP establishes use of a PLUZ with a conservation intent to designate the Birch River conservation area.

To implement this change to the LARP, Schedules F and G will be updated to:

- Enable the remainder of the GGWP conservation area to be designated as a PLUZ
- Maintain access through the GGWP conservation area to natural resources
- Identify a multiuse corridor through the GGWP conservation area that enables linear infrastructure to cross the Clearwater River (e.g. forest industry road access, carbon capture and storage pipeline crossing).

Outcomes:

- Support ongoing economic opportunities for industry in alignment with the LARP.
- Maintain the Clearwater River as a conservation area that supports the intent of the LARP.
- Conserve Crown lands that support long-term biodiversity conservation and traditional land uses and the exercise of Treaty rights.

Policy Objectives

1 Formally designate the Clearwater River Public Land Use Zone with a conservation intent.

1.1 Establish the Clearwater River Public Land Use Zone identified in Figure 6.
1.2 Include the Clearwater River PLUZ in the group of WPPs in northeast Alberta presently under Indigenous-specific cooperative management.
1.3 Amend the LARP Schedule F to enable limited forestry access through the PLUZ to access timber quota north of the PLUZ boundary.
1.4 Limits for total disturbance from forestry access roads will be established by the minister responsible for this plan.

2 Create a multiuse corridor through the Clearwater River PLUZ

2.1 Create a multiuse corridor through the PLUZ at the location identified in Figure 6 to enable the co-location of linear infrastructure that supports critical economic linkages to markets.
2.2 Linear infrastructure will be restored according to the requirements of this plan.

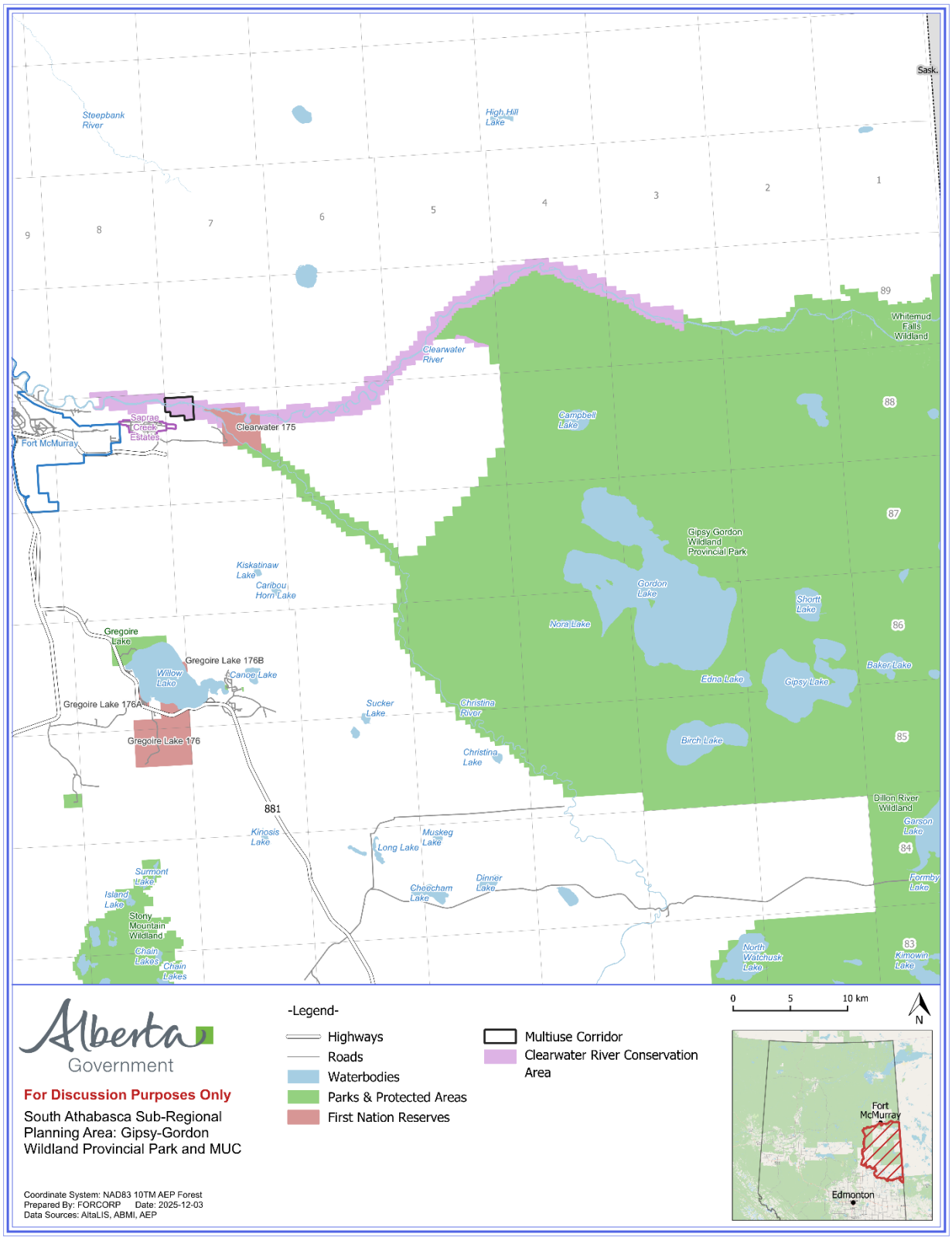


Figure 6: Identification of the Clearwater River Conservation Area and the location of the multi-use corridor through the conservation area

Conservation Areas

Establish new conservation areas

The Cold Lake Air Weapons Range (CLAWR) has two areas of importance for supporting caribou recovery and biodiversity conservation, and for securing land for the exercise of Treaty rights and traditional land uses. Both proposed conservation areas are adjacent to existing protected areas and will contribute to long-term landscape intactness and connectivity.

Outcomes:

- Conserve Crown lands that support long-term biodiversity conservation.
- Secure lands for traditional land uses, including the exercise of Treaty rights.

Policy Objectives

1 Establish two new conservation areas in the Cold Lake Air Weapons Range

1.1 Establish the two conservation areas identified in Figure 7.
  1.1.1 Establishment of the conservation areas will not impact any activities allowed under the current Memorandum of Agreement with the Government of Canada.

1.2 Existing oil sands, petroleum and natural gas tenure will be honoured.
  1.2.1 This includes all subsurface and surface activities needed to explore, develop, and extract resources, as defined in the existing Memorandum of Agreement with the Government of Canada. It also includes renewing subsurface and surface dispositions, approvals and agreements.
  1.2.2 Applications for new dispositions to access existing subsurface commitments and seismic programs will be honoured, subject to review under the current approval process.

1.3 Enable First Nations with right of access to the CLAWR to lead the development of a management plan for the conservation areas, including use of non-commercial forestry to manage wildfire risk.

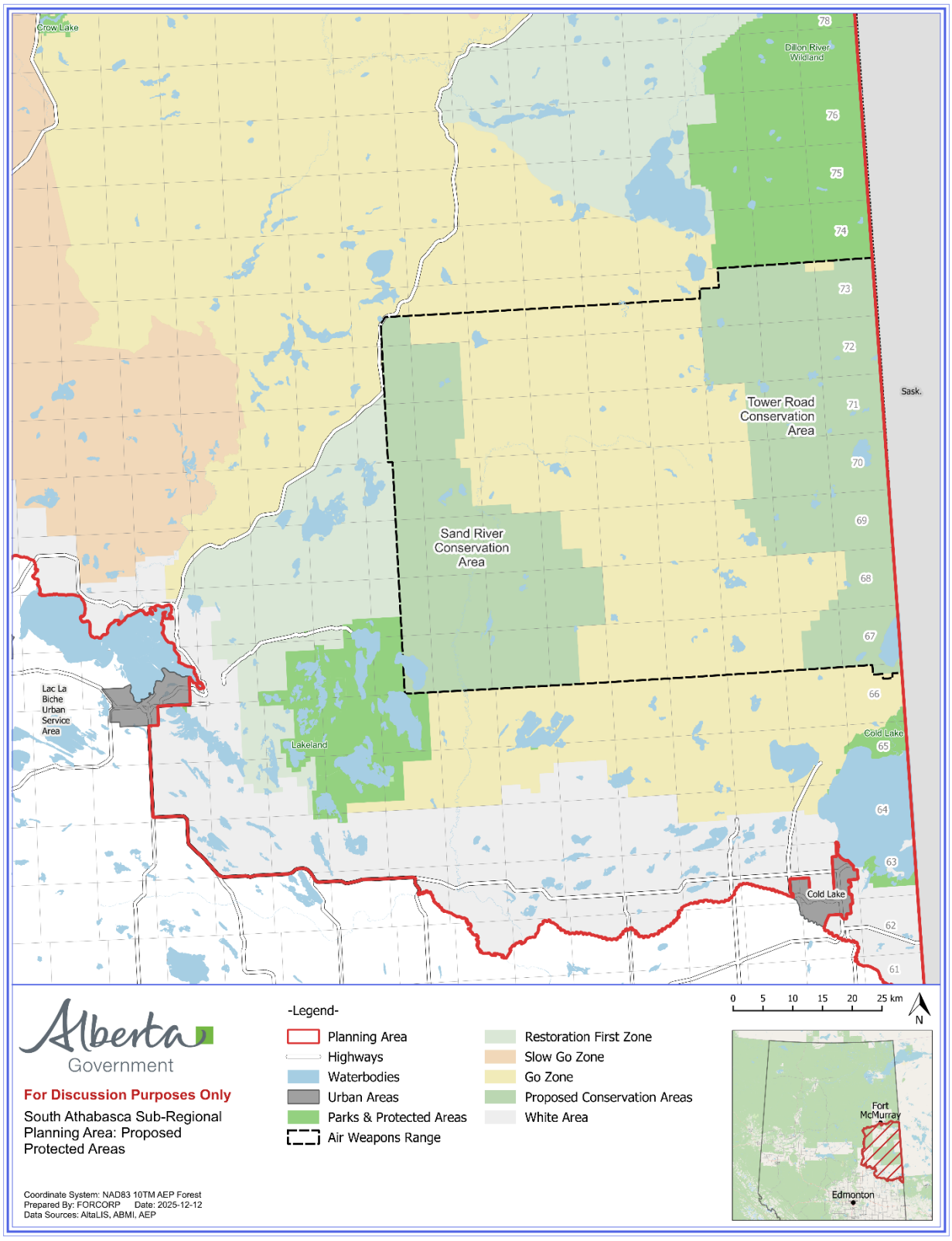


Figure 7: Location of proposed conservation areas within the Cold Lake Air Weapons Range

Restoration

Support long-term ecological processes in the sub-region.

The South Athabasca landscape supports vegetation that is important for maintaining economic opportunities such as forest harvesting, for caribou habitat recovery and biodiversity conservation, and for sustaining a practicing landscape that supports Indigenous traditional land uses. It is important to ensure the areas restored after the disturbance result in a landscape that supports other values. Recovering areas impacted by human use is critical in ensuring land uses and natural values are sustainable over time.

Restoration guidance in this plan establishes caribou biophysical habitat in addition to reducing overall landscape disturbance. Biophysical habitat refers to the natural areas that caribou need to live, feed and survive, especially areas with older conifer forests and treed wetlands. The land also needs to be relatively undisturbed by human activity, so caribou can avoid predators and move freely across the landscape.

Areas of older conifer forest and treed wetlands provide important habitat for caribou because they often contain lichens. Lichens are a major food source for caribou, especially in the winter.

On public land, the current expectation for surface disturbances is that operators will reclaim dispositions back to the pre-disturbance land use. Reclamation is directed under the Environmental Protection and Enhancement Act and the Conservation and Reclamation Regulation. In addition to legislation and regulations, further direction and information is provided in guidelines, standards and criteria. This includes reclamation criteria for forested lands and peatlands. This section is complementary to the documents and guidance described above.

The purpose of this section is to ensure wetland loss is limited and that trees are planted where removed.

Outcomes:

- Support ongoing resource development opportunities enabled by a restored landscape.
- Improve landscape intactness in areas that support caribou recovery, biodiversity conservation, and traditional land uses and Treaty rights.

Restoration Levels

Table 5: Summary of restoration levels

Restoration Level	Disposition Types	Upland Ecosystem Requirements	Wetland Ecosystem Requirements	Caribou Biophysical Habitat	
				Upland Ecosystem Requirements	Wetland Ecosystem Requirements
Level 1	Applies to temporary disturbances	Restore to pre-disturbance ecosite found in the natural sub-region	Restore to pre-disturbance wetland class found in the natural sub-region	Restore to an ecosite capable of producing caribou biophysical habitat	Restore to a wetland found in the natural sub-region capable of producing caribou biophysical habitat
Level 2	Applies to formal dispositions (non-extraction related activities)		Restore to a plant community found in the natural sub-region		Restore to an ecosite capable of producing caribou biophysical habitat
Level 3	Applies to formal dispositions (extraction-related activities)	Restore to a plant community found in the natural sub-region End pit lake permitted		Restore to an ecosite capable of producing caribou biophysical habitat End pit lake permitted	

Policy Objectives and Requirements

1 Provide certainty of restoration outcomes.

1.1 Restoration Level 1 (Table 5) is required for:
- 1.1.1 Temporary dispositions (e.g. temporary field authorizations).
- 1.1.2 Disturbances approved within forest annual operating plans (excluding forest harvest).
- 1.1.3 Restoration of all lands in a geophysical exploration approval not occupied by receiver or source lines.
- 1.1.4 Transmission line dispositions (excluding vegetation control corridor).
- 1.1.5 Pipeline dispositions (excluding vegetation control corridor).

1.2 Restoration Level 2 (Table 5) is required to obtain a reclamation certificate for a formal disposition excepting surface materials extraction, and rock-hosted metallic and industrial minerals extraction.

1.3 Restoration Level 3 (Table 5) is required to obtain a reclamation certificate for a formal disposition for surface materials extraction, and rock-hosted metallic and industrial minerals extraction.

1.4 Requirements to restore lands which are listed in this section are additional to reclamation requirements prescribed in regulation.

1.5 Where there is a conflict between a restoration level described in the sub-regional plan and other requirements prescribed by regulation, the requirements prescribed in the sub-regional plan will take precedence.

2 Restore the land to equivalent land capacity conditions following surface disturbance.

2.1 When the regulator issues an EPEA approval, or an amendment to an EPEA approval, to an operator for the lands contained in an in situ project area, the regulator will include a requirement that reclamation plans will need to be updated to align with the restoration requirements identified in this plan.

2.2 Portions of a disposition that received treatment prior to the plan being in place will not be required to align with the plan. Untreated portions must align with the plan's restoration requirements.

2.3 All restoration treatments need to be reported to the regulator, including the spatial extent of the treatments.

Legacy Seismic Lines

Treat legacy seismic lines to promote future contiguous habitats.

The sub-regional plan cannot achieve its outcomes of supporting new development and increasing undisturbed habitat over the landscape without restoring legacy seismic lines.

Seismic lines in Alberta are primarily created to assess the occurrence of sub-surface oil, gas, and mineral resources. Modern seismic practices and technology have reduced the disturbance associated with seismic operations. However, many older or "legacy" seismic lines are not supporting forest re-growth and remain on the landscape decades after they were constructed.

Restoring legacy seismic lines helps reduce the amount of economically unproductive footprint in the sub-region, reducing landscape fragmentation, supporting biodiversity, and providing opportunity for new development.

Ongoing partnerships, including funding arrangements with industry and the federal government, are important since restoring these features will require a coordinated effort. To coordinate this work, the Government of Alberta established the Caribou Habitat Recovery Program. This program directs restoration priorities, guides operations, and involves local and Indigenous peoples in restoration activities and outcomes.

Since 2018, the Caribou Habitat Recovery Program has assessed and treated more than 2,000 km of legacy seismic lines in the South Athabasca sub-region. Nearly one million trees have been planted in the sub-region as part of this program.

To support the ongoing restoration of legacy seismic lines, a formula will be developed to ensure that both existing and new proponents contribute in a fair and equitable manner.

Outcomes:

- Support ongoing resource development opportunities supported by a restored landscape.
- Improve landscape intactness in areas that support caribou recovery, biodiversity conservation, and traditional land uses and Treaty rights.

Policy Objectives and Requirements

1 Restore all legacy seismic lines within the sub-region.

1.1 In the first decade following plan approval, the Caribou Habitat Recovery Program will coordinate the restoration of legacy seismic lines within Restoration First Zone, the White Muskeg, and in the 5-kilometre buffer around Indigenous reserves and hamlets.

1.2 In the second decade following plan approval, the Caribou Habitat Recovery Program will coordinate the restoration of legacy seismic lines within Slow Go Zone.

1.3 In the third decade following plan approval, the Caribou Habitat Recovery Program will coordinate the restoration of legacy seismic lines within Go Zone.

1.4 Seismic lines that overlap the first five timing series (Figure 5) will not be considered for restoration until after forest harvesting is completed.

1.5 The legacy seismic lines not contained within caribou range and the 5-kilometre buffer around Indigenous reserves and hamlets will be restored within the next 40 years.

1.6 A legacy seismic line restoration component will be included as part of surface rent for formal dispositions within the caribou ranges.

Implementation committee

Establish a committee to incorporate local and other perspectives during the implementation of this plan.

The Northeast Implementation Committee (NEIC) will be an informal committee to support the implementation of the South Athabasca Sub-Regional Plan. It will be convened and chaired by the Government of Alberta and have representation from Indigenous peoples, local municipalities, energy and forestry sectors, and others as appropriate. The NEIC will not have a regulatory or auditing function and will serve as a mechanism to identify local and other perspectives regarding plan implementation.

Outcomes:

- Involve stakeholders and rights holders in discussion on the effectiveness of the sub-regional plan.
- Identify gaps and opportunities in sub-regional plan implementation and monitoring.
- Identify emerging issues within the sub-region.

Monitoring

Monitor individual and cumulative effects and adapt management in response to species and landscape indicators.

The sub-regional plan will address a range of cumulative effects across the sub-region. Impacts of cumulative disturbances are often assessed using species and landscape indicators that help us understand risks to values associated with human disturbances.

A set of indicators has been identified to assess the implications of land uses. In addition to indicators, regulators collect information and data about the activities they authorize. Making monitoring information available to all regulators will be critical to ensuring each regulator is operating using the most up-to-date information and authorizing activities in alignment with the plan objectives.

Outcomes:

- Facilitate awareness about changes to the South Athabasca landscape following plan implementation.
- Track progress towards achievement of the plan's cumulative effects outcomes.

Policy Objectives and Requirements

1 Monitor key indicators to support evaluation of the Plan.

1.1 Regulators authorizing activities in the sub-region will share information and data for efficient implementation and review of the sub-regional plan.

1.2 Indicators in Appendix A will be evaluated periodically to assess progress towards achieving the plan's outcomes.

A Living Plan

Ensure regular plan reviews and adjust management approaches as needed to reflect social, economic and environmental circumstances.

Building on monitoring and reporting, regular sub-regional plan reviews will be important to ensure positive environmental, economic, and social outcomes. Sub-regional plans can be adapted over time to ensure land-use plans remain effective.

Outcomes:

- Maintain economic opportunities and investor certainty.
- Increase landscape intactness to support biodiversity conservation.
- Increase landscape intactness to support traditional land uses and the exercise of Treaty rights.
- Support sustainable recreation and tourism opportunities.

Policy Objectives and Requirements

1 Regularly assess the effectiveness of the sub-regional plan.

1.1 The plan will be reviewed 10 years after coming into force and every 10 years afterwards.

2 Ensure relevancy of the plan in the event of natural disturbances.

2.1 A plan assessment will be triggered if:

2.1.1 The annual total natural disturbance (e.g. wildfire, insects, weather events) within a caribou range exceeds 1%.

2.1.2 Within eight years of the plan coming into force the cumulative new natural disturbance exceeds 4% of a caribou range.

2.1.3 Within 10 years of the plan coming into force the cumulative new natural disturbance area exceeds 4% of the entire sub-region.

Glossary

Term	Definition
Access Control	deterring access to and travelling on linear features, including seismic access lines, by off highway vehicles and may include, but is not limited to debris roll back, tree felling or bending across the line, and reforestation site preparation
Aggregated Harvest	harvest planning that concentrates forestry activities in space and time. This results in contiguous patches of forest that contribute to achieving larger areas of intact caribou habitat through time
Anthropogenic Footprint	the visible alteration or conversion of native ecosystems to temporary or permanent recreational, agricultural, or industrial landscapes by human use
Annual Operating Plan	a plan prepared and submitted by the timber disposition holder each year to the Department, which when approved, provides the authorization to harvest
Annual Operating Plan Approval	an authorization to harvest timber issued under the *Timber Management Regulation*
Appended Development	development that occurs within 100 metres from the edge of the lands contained in the formal disposition for a primary road
Borrow	sand, silt or non-manufacturing clay material for use in construction projects
Caribou Biophysical Habitat	habitat containing characteristics required by boreal caribou (*Rangifer tarandus*) to carry out life processes necessary for survival and recovery within caribou ranges in Alberta as identified through the methodology and classification system published by the Department, as amended or replaced from time to time
Caribou Range	those lands identified as caribou range in Figure 3
Closed HTS	a HTS during which timber harvesting is not permitted
Commercial Recreation	instructing/guiding/outfitting activities (for example, commercial trail riding, dog sled tours, heli-ski tours, fishing, game hunting, off-highway vehicle tours, etc.) or developments that offer facility-oriented recreational, tourism, or accommodation services or programs to the general public on public land for which a consumer pays a fee and which the operator requires a permit or disposition.
Disposition	a disposition as defined under the *Public Lands Act*
Dogleg	a sharp bend in a linear disturbance to reduce the line of sight
Ecosite	an ecosite as defined by Beckingham, J.D., Archibald, J.H. (1996) in the “Field Guide to Ecosites of Northern Alberta”
End Pit Lake	a body of water that is created by and remains after the reclamation of a pit
Existing Primary Road	a road identified as an existing primary road in Figure 2
Exploration Approval	an exploration approval as defined under the *Mines and Minerals Act*
Footprint	The impact or extent of a disturbance on public land. This includes the intensity, frequency, and nature of any uses or activities related to the disturbance

Formal Disposition	a formal disposition as defined under the *Public Lands Administration Regulation*
Forest Management Activity	any activity on the lands contained in the applicable timber disposition regulated by the *Forests Act* or the *Timber Management Regulation*, or both, and excludes the harvesting of timber
Forest Management Agreement (FMA)	A renewable 20-year agreement between the government and a company that grants the company the rights and obligations to manage, grow, and harvest timber on a specific area in a manner designed to provide a yield consistent with sustainable forest management principles and practices.
Geophysical Exploration	surveying that is aimed at the subsurface investigation of the earth and requires the application of geophysical sciences, but does not include drilling
Green Area	Comprises most of northern Alberta as well as the mountain and foothill areas along the province's western boundary and is managed for timber production, watershed, wildlife and fisheries, recreation, and other uses
Habitat Restoration	The practice, process, or result of active human intervention and treatments to renew and restore degraded, damaged, or destroyed ecosystems and habitats.
Harvest Area	an area with defined boundaries where timber harvesting is scheduled, or has occurred
Harvest Timing Series (HTS)	the time period for the aggregated harvesting approach to timber harvest within an area identified in Figure 4 and does not apply to a forest management activity
Heli-portable Drop Zone	program drill sites with a cleared or open area for helicopter access
Inactive Well	(i) for critical sour wells (perforated or not) that have not reported any type of volumetric activity (production, injection, or disposal) for six consecutive months, and (ii) for all other wells that have not reported any type of volumetric activity (production, injection, or disposal) for 12 consecutive months, but does not include observation wells, water source wells and any other wells authorized for another purpose by the regulator
Inactive Well Site	land that contains one or more inactive wells that have been inactive for five years or more and no active wells
Indigenous Peoples	"Indigenous peoples" includes "Aboriginal peoples of Canada" within the meaning of Section 35 of the Constitution Act, 1982
In situ Project Area	the boundaries within which bitumen recovery may occur over the life of an in situ project, including any changes to the boundaries over time, approved under the *Oil Sands Conservation Act*
Legacy Seismic Line	a linear feature that was used for geophysical exploration and no person has responsibility to restore
Natural Disturbance	disturbance to the landscape that is not human caused including fire, wind, insects, floods, and landslides
Next Open HTS	the area identified in Figure 4 that will be available for harvest after the current open HTS

Open HTS	a HTS that is available for the harvesting of timber during the HTS identified in Figure 4
Plant Community	a collection or association of plant species within a designated geographical unit, which forms a relatively uniform patch, distinguishable from neighboring patches of different vegetation types, and it is a subdivision of the ecosite phase and the lowest taxonomic level in the hierarchy
Public Lands	land of the Crown in right of Alberta.
Pre-disturbance	the state of the lands at a site prior to a human-caused disturbance and does not include natural disturbance
Primary Road	existing primary roads and those roads built under a formal disposition in accordance the access management section 2, 3, and 4
Proposed Primary Road	a road requiring a formal disposition, and that meets the requirements of sections 2, 3, and 4
Quarry	any opening in, excavation in or working of the surface or subsurface for the purpose of working, recovering, opening up or proving (i) any mineral other than coal, a coal bearing substance, oil sands or an oil sands bearing substance, or (ii) ammonite shell, and includes any associated infrastructure
Receiver Line	a linear feature identified within the exploration approval, used exclusively for stringing geophones
Reforest or Reforestation	re-establishing timber on lands in accordance with the requirements of the Reforestation Standard of Alberta and the Alberta Forest Genetic Resource Management and Conservation Standards under the *Timber Management Regulation*, as amended or replaced from time to time
Regulator	the Regulator as defined in the Responsible Energy Development Act
Regulatory Body	the regulatory body that issued the statutory consent
Recreation Management Area (RMA)	an area identified as a recreation management area or a trail planning area in Figure 5
Recreational Purpose	a recreational purpose as defined under the Public Lands Administration Regulation
Restoration	the process of restoring site conditions as they were before the land disturbance
Right of Way (ROW)	a cleared area facilitating linear activities which contains an access road and its associated features (such as shoulders, ditches, cut and fill slopes) or the area cleared for passage of utility corridors containing power lines or over- or under-ground pipelines. Typically, the ROW is a specially designated area of land having very specific rights of usage attached
Riparian Areas	transitional areas between upland and aquatic ecosystems that include both above and below ground lands and are variable in width.
Road Classification	a classification as published by the Designated Minister referred to in section 5 as amended or replaced from time to time with the highest road classification being class I and lowest road classification being class VI

Rock-hosted minerals	metallic and industrial minerals other than brine-hosted metallic and industrial minerals
Seismic Access Line	an existing or new linear feature used for access into and within the lands identified in the exploration approval
Seral Stage	a stage of forest succession. A series of plant community conditions that develop during ecological succession following a major disturbance to the climax stage. Most common characteristics/classifications include tree species and age
Source Line	a linear feature identified within the exploration approval, which energy source points are established for the purposes of generating seismic waves
Stand or Stand Type	a community of trees sufficiently uniform in species, age, arrangement, or condition as to be distinguishable as a group in the forest
Statutory Consent	statutory consent as defined in the *Alberta Land Stewardship Act*
Sub-regional Plan	sub-regional plans address location-specific issues through the integration of higher-level plans, policy, and operational requirements. Plans are outcome based, provide clear operational direction, and must be considered when making decisions in the planning area. Enabled through the Alberta Land Stewardship Act and ministry legislation (for example, Public Lands Act), sub-regional plans are built through a collaborative process and include input and feedback from Indigenous peoples, stakeholders, and the public
Sub-regional Plan Area	the geographical area identified in Figure 1
Surface Material	sand, gravel and borrow and does not include peat
Temporary Field Authorization (TFA)/ Regulator Temporary Field Authorization (RTF)	stand-alone authorizations issued for short-term activities for the occupation and use of public land issued under the *Public Lands Act* and includes but is not limited to authorizations issued for a coal exploration program, oil sands exploration program, surface material exploration or metallic mineral exploration
Temporary Footprint	any temporary surface disturbance outside of a harvest area authorized by an annual operating plan including a temporary road, landing, or storage site
Temporary Road	a road that provides access within a harvest area or that connects harvest areas, and that is authorized under an annual operating plan under the *Timber Management Regulation*
Timber Salvage	the harvesting of timber damaged or destroyed by a natural disturbance authorized under an annual operating plan approval
Timber Year	year as defined in the *Timber Management Regulation* (the period from May 1 to April 30th)
Traditional Uses	for the purposes of this plan, “traditional uses” has the same meaning as in the GoA’s policies on consultation with First Nations and Métis Settlements on land and natural resource management as those policies may read at any one time.
Traditional Land Use	for the purposes of this plan, in the context of Indigenous peoples, this includes both Treaty rights and Traditional Uses and harvesting by recognized Métis harvesters.
Traditional Values	values associated with the traditional land uses of First Nations and Métis, including the exercise of rights to hunt, fish, and trap for food

Trail	infrastructure that is purposefully designed and used for one or more recreation activities that must be approved by the Crown or the private landowner, mapped, marked and actively managed and maintained
Trail Management Plan	a plan established by the Designated Minister referred to in the Recreation and Tourism section that identifies the location of a designated trail and permitted uses for a trail
Transitional Road	a road that (i) exists on the landscape at the time this Part comes into force; (ii) is authorized under a formal disposition, (iii) accesses development, and (iv) is not considered a primary road
Transmission Line	a line greater than 25 kilovolts
Treaty rights	constitutionally protected rights to hunt, trap, and fish for food. These rights may be practiced on unoccupied Crown lands or lands to which First Nations members have right of access for such purposes
Tourism	the activity of persons traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business, and other purposes not related to the exercise of an activity remunerated from within the place visited. A tourism trip occurs when visitors take an overnight trip or a same-day trip of more than 40 kilometres (one-way) outside of their home community
Upland	any land that is not a wetland
Vegetation Control	the selective removal, control or other management of vegetation growth
Waterbody	a water body as defined in the *Water Act*
Watercourse	A watercourse as defined in the *Water (Ministerial) Regulation*
Well	an orifice in the ground completed or being drilled for the production of oil or gas, for injection to an underground formation, or as an evaluation well or test hole
Wetland	a wetland as defined in the “Alberta Wetland Policy”, published by the Department, as amended or replaced from time to time
Wetland Class	a wetland class as described in the Alberta Wetland Classification System, published by the Department, as amended or replaced from time to time
White Area	the White Area (settled portion) consists of the populated central, southern, and Peace River areas of the province. In the White Area, public land is part of the agricultural landscape. It is managed for various uses, including agriculture, recreation, soil and water conservation, and fish and wildlife habitat

Appendix A – Monitoring Indicators

Indicator	Description
Caribou biophysical habitat	Amount (ha) and forest cover type, including a trend of biophysical attributes.
Caribou population demographic rates	Estimated trend in population size (lambda).
Caribou population size	Estimated number of caribou.
Cumulative forestry footprint on RFMAs	Amount (%) of footprint on a Registered Fur Management Area (RFMA) from timber harvest areas less than 40 years old
Forest structure	The variety of forest structure on the landscape, estimated using the amount of area (%) in each forest stand type by seral stage.
Indigenous reserves and hamlets	Amount (%) of industrial and commercial footprint disturbance within 5-km of Indigenous reserves and hamlets.
Intergenerational Cultural Landscapes	Amount (%) of industrial and commercial footprint disturbance on each Intergenerational Cultural Landscape (ICL).
Interior habitat	The amount of habitat (%) left unaffected after taking out anthropogenic disturbances and associated edge effects.
Lakes, rivers, and creeks	Amount (%) of industrial and commercial footprint disturbance in identified riparian areas.
Landscape connectivity	The degree to which the landscape facilitates or impedes species movements among resource patches. Calculated for both upland and lowland habitats.
Legacy seismic line restoration	Kilometres of line restored, either through active restoration or by field-confirmed natural recovery.
Linear density	The density of all linear features including roads, trails, pipelines and seismic lines (km/km2) including legacy and temporary features where re-vegetation has not yet been initiated.
Natural disturbances	Size and location of natural disturbances across the sub-region, to inform management strategies such as sustainable harvest levels. May inform future re-openings or revisions of the sub-regional plan.
Riparian disturbance	Amount of human footprint within riparian areas.
Stream connectivity	Amount of connected habitat (%) between upstream and downstream segments within a stream network, calculated at a HUC10 watershed scale.
Suitable habitat	Change in suitable habitat (%) relative to a baseline condition for a range of species including forest songbirds, grizzly bear, barred owl and American marten.
Wetland native cover	The amount of wetland and riparian area free from anthropogenic disturbances. Calculated for each of Riparian, Bogs, Fens, Marshes, and Swamps.
White Muskeg	Amount (%) of industrial and commercial footprint disturbance within the White Muskeg.
South Athabasca sub-region	Amount (%) industrial and commercial footprint disturbance within the sub-region and by planning unit.