

Draft South Saskatchewan Regional Plan 2014 - 2024



Alberta
Government



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Introduction

Background

Alberta's Land-use Framework (LUF), released in December 2008, sets out a new approach to managing our province's land and natural resources to achieve Alberta's long-term economic, environmental and social goals. The LUF establishes seven new land-use regions and calls for the development of a regional plan for each. The *Alberta Land Stewardship Act* supports the LUF and establishes the legal basis for the development of regional plans. Regional plans reconcile provincial policies and set explicit regional outcomes and objectives.

Regional planning is part of the Government of Alberta's Integrated Resource Management System (IRMS). The IRMS supports responsible development of the province's resources and realization of its desired outcomes. The system is founded on setting and managing to clear policies and cumulative outcomes (through regional plans), providing assurance and a monitoring and measurement system to measure the achievement of outcomes. The system is dynamic and adaptive as necessary to reflect new information and also collaborative – achieving desired outcomes requires working with stakeholders and partners.

Contributions from the South Saskatchewan Regional Advisory Council, aboriginal peoples, stakeholders, municipalities and the public have informed the development of the draft South Saskatchewan Regional Plan (SSRP). Development of the draft SSRP utilized input and feedback received through two phases of public consultation:

- input on the region's issues; and
- feedback on the advice from the South Saskatchewan Regional Advisory Council.

Prior to approving the SSRP, the government will review and consider the feedback received during phase three consultations for the draft SSRP.

Purpose

The SSRP sets the stage for robust growth, vibrant communities and a healthy environment within the region over the next 50 years.

With that long-term horizon in mind, the SSRP identifies strategic directions for the region over the next 10 years. The regional plan will be assessed and, if necessary, updated every five years to maintain its relevance and effectiveness while maintaining certainty, stability and commitment to regulatory intent. Any subsequent revisions to the plan require consultation with Albertans.



Elements of a Cumulative Effects Management System

Outcome-based:

Driven by clearly defined outcomes for the desired quality or state of the environment now and in the future, while recognizing the economic, environmental and social implications of meeting those outcomes. Activities will be managed to achieve outcomes.

Place-based:

Different regions may have different needs and outcomes.

Knowledge-based:

The foundation of the system is a sound knowledge base and performance management regime, composed of information and evaluation to determine if outcomes are being met or management actions required.

Adaptive:

The system can adapt to change when performance results are not achieving outcomes, or there is a risk of not achieving outcomes in the future or when circumstances change.

Shared stewardship:

A collaborative process to inform development of outcomes and build commitment for the shared responsibility to achieve outcomes.



The SSRP:

- Establishes a long-term vision for the region;
- Aligns provincial policies at the regional level to balance Alberta's economic, environmental and social goals;
- Reflects ongoing commitment to engage Albertans, including aboriginal peoples, in land-use planning;
- Uses a cumulative effects management approach to balance economic development opportunities and social and environmental considerations;
- Sets desired economic, environmental and social outcomes and objectives for the region;
- Describes the strategies, actions, approaches and tools required to achieve the desired outcomes and objectives;
- Establishes monitoring, evaluation and reporting commitments to assess progress; and
- Provides guidance to provincial and local decision-makers regarding land-use management for the region.

Through regional planning, as well as other initiatives, Alberta is shifting to a more effective and efficient management system that considers the cumulative effects of all activities and improves integration across the economic, environmental and social pillars. This system must adapt to place-based challenges and opportunities as well as allow decision-makers to see the bigger picture.

This direction is a foundation of the Land-use Framework, where the Government of Alberta is committed to manage the cumulative effects of development on air, water, land and biodiversity, and ensuring the value and benefit of these are sustained at the regional level and contributes to provincial outcomes. Cumulative effects management focuses on achievement of outcomes, understanding the effects of multiple development pressures (existing and new), assessment of risk, and collaborative work with shared responsibility for action and improved integration of economic, environmental and social considerations.

Outcomes and objectives are established, along with the strategies and actions that will be used to achieve them. Integrated monitoring, evaluation and reporting systems are essential as they are used to assess progress in achieving outcomes and objectives.

Land-use Planning in Alberta

Planning and decision-making in Alberta are carried out under various provincial legislation and policies. These are applied by a range of decision-makers – including Government of Alberta departments, boards and agencies, and municipal governments – responsible for making decisions about activities in the region.

The SSRP applies to Crown and private lands in the region.

Private Lands

Planning on private lands is primarily governed by the *Municipal Government Act* (MGA) and instruments made under its authority such as the Subdivision and Development Regulation. Private landowners make decisions about how to use and manage their land consistent with existing provincial legislation and municipal bylaws. The SSRP does not change this or alter private property rights.

Municipal governments under Part 17, Planning and Development of the MGA, with few exceptions (such as Sections 618 and 619) are delegated with the responsibility and authority for local land-use planning and development on all lands within their boundaries. This includes the creation of municipal development plans, area structure plans and land-use bylaws. This delegated authority remains with municipalities. Municipal planning and development decisions will, however, have to be in alignment with the regional plan to achieve the regional outcomes established in the plan.

The SSRP, including sub-regional plans, does not rescind land title or freehold mineral rights. Any decisions that may affect private landowners or freehold owners will occur through existing legislation and processes, and private landowners and freehold owners remain entitled to due process. Private landowners and freehold owners may be entitled to compensation under those laws.

Freehold mineral rights underlie about 40 per cent of the region, mainly in the settled area. Freehold mineral rights are private property and are subject to the *Land Titles Act*, the *Law of Property Act* and common law. The Government of Alberta has the power to acquire freehold minerals by expropriation if it is of the opinion that any or any further exploration for the development of those minerals is not in the public interest (Section 8(1) (b), *Mines and Minerals Act*). In cases where the Government of Alberta denies opportunity to develop freehold minerals, the owner of the freehold minerals can apply for compensation to the Land Compensation Board which determines the compensation payable under the *Expropriation Act* (that is, market value, damages attributable to disturbance, value of any special economic advantage, damages for injurious affection). The *Alberta Land Stewardship Act* treats freehold mineral and surface land title holders similarly.

In February 2013 the Property Rights Advocate's office was opened to provide Alberta landowners with accurate information on property rights and help them work through property rights processes.



Crown Lands

Crown lands include lands that are administered as public lands under the *Public Lands Act*, parks under the provincial parks legislation and highways under the *Highways Development and Protection Act*. Crown lands are owned by the Crown and managed for the benefit of all Albertans. The Government of Alberta often allows individuals and businesses to use public lands through statutory consents that grant permission to do certain activities on public land – such as livestock grazing, timber harvesting, energy development or recreational use. In addition, the Government of Alberta grants statutory consents related to the use of, or impacts on, public resources (like water) to allow or support specific development, industrial activity, conservation or other activities.

On public lands, direction under the SSRP will be delivered through existing legislation such as the *Public Lands Act*, the *Forests Act* and the provincial parks legislation and through existing tools such as integrated landscape management plans, access management plans and forest management planning. These further define access to and use of provincial Crown land, and focus on operational activities that reflect the regional priorities and direction.

A Policy for Resource Management of the Eastern Slopes (Revised 1984) has been an enduring guidance tool for the Government of Alberta. The policy provides the foundation for the province's Integrated Resource Plans at sub-regional and local levels within the eastern slopes and sets watershed management as the highest priority in the overall management of the eastern slopes. The natural resources are to be developed, managed and protected in a manner consistent with principles of conservation and environmental protection.

This regional plan incorporates the principles and directions of the Eastern Slopes Policy and replaces it in this region.

The following integrated resource plans will remain in effect and will be reviewed for their relevance and incorporated as appropriate under the implementation strategies in the SSRP or future sub-regional or issue-specific plans developed within the region:

- Bow Corridor Local Integrated Resource Plan
- Castle River Sub-regional Integrated Resource Plan
- Crowsnest Corridor Local Integrated Resource Plan
- Eden Valley Integrated Resource Plan
- Ghost River Sub-regional Integrated Resource Plan
- Kananaskis Country Sub-regional Integrated Resource Plan
- Poll Haven Integrated Resource Plan
- Livingstone Porcupine Hills Sub-regional Integrated Resource Plan
- Eastern Irrigation District Integrated Resource Plan



These plans represent the Government of Alberta's resource management policy for public lands and resources within the defined area and are intended to be a guide for decision-makers. Development decisions on Crown lands will have to be in alignment with the regional plan to achieve the regional outcomes established in the plan.

Informing Land-use Decisions

The SSRP will be implemented by those who already make land-use decisions. Decision-makers are those having legal authority to grant some form of statutory consent, such as a development permit, a water licence or a project approval. Decision-makers include municipal governments and Government of Alberta departments, boards and agencies and other organizations. Local government bodies and decision-making bodies will be required to ensure their regulatory instruments comply with the SSRP. They must also use the regional plan to inform their policies.

The implementation of regional plans must follow the laws of Alberta. All decisions that implement regional plans will be made through existing laws. All rights to appeal, requirements for due process and rights to compensation enjoyed by landowners and rights holders under these laws are not changed by the SSRP.

Compliance with the regional plan does not remove each decision-maker's duty (to the extent that it otherwise would apply) to ensure that its decision making complies with the constitution: for example, regarding consideration of impacts of its anticipated decision on the constitutionally protected rights of aboriginal peoples.

Aboriginal Peoples

Alberta recognizes that those First Nations that hold constitutionally protected rights are uniquely positioned to inform land-use planning. Consulting aboriginal communities on regional planning, particularly those aspects that have the potential to adversely impact their constitutionally protected rights, and reconciling interests are essential to achieving the regional vision. In accordance with applicable government policy as it may be from time to time, the Government of Alberta will continue to consult with aboriginal peoples when government decisions may adversely affect the continued exercise of their constitutionally protected rights, and the input from such consultations continues to be considered prior to the decision.

Other Jurisdictions and Regions

Coordination with other jurisdictions, such as the federal government, provinces and other Land-use Framework regions, will be required to ensure alignment of regional outcomes, and that objectives and strategies are achieved.



Plan Structure

The SSRP has four key components:

- **Introduction** – includes the purpose of the regional plan, land-use planning and decision-making in Alberta, and how the regional plan will inform land-use decisions.
- **Strategic Plan** – includes the vision for the future of the region along with desired regional outcomes. It builds on existing policies and initiatives by establishing a set of strategic directions that help achieve the regional vision and outcomes.
- **Implementation Plan** – includes regional objectives, strategies and actions that will be undertaken to support achievement of the regional vision and outcomes and indicators to measure and evaluate progress.
- **Regulatory Details Plan** – enables achieving the strategic direction and strategies and actions.



Regulatory Details Plan - Part 1 General

Definitions

1 In this regional plan,

- (a) “Act” means the *Alberta Land Stewardship Act*;
- (b) “SSRP Digital Map” means the map attached as Schedule “D” to the SSRP Implementation Plan;
- (c) “SSRP Implementation Plan” means that portion of this regional plan identified by the subtitle “Implementation Plan” and includes the Tables, Appendices and Schedules, but does not include those portions of the SSRP Regulatory Details Plan found among and set apart from the provisions of the SSRP Implementation Plan;
- (d) “SSRP Introduction” means that portion of this regional plan identified by the subtitle “Introduction,” but does not include those portions of the SSRP Regulatory Details Plan found among and set apart from the provisions of the SSRP Introduction;
- (e) “SSRP Regulatory Details Plan” means those portions of this regional plan identified by the following subtitles:
 - (i) **“Regulatory Details Plan Part 1 General”,**
 - (ii) **“Regulatory Details Plan Part 2 Conserved Lands”,**
 - (iii) **“Regulatory Details Plan Part 3 Conservation Areas”,**
 - (iv) **“Regulatory Details Plan Part 4 Air Quality”,**
 - (v) **“Regulatory Details Plan Part 5 Surface Water Quality”,**
 - (vi) **“Regulatory Details Plan Part 6 Recreation and Tourism”,**
 - (vii) **“Regulatory Details Plan Part 7 Monitoring and Reporting”**
- (f) “SSRP Strategic Plan” means that portion of this regional plan identified by the subtitle “Strategic Plan”;
- (g) “planning region” means the South Saskatchewan Integrated Planning Region.

Application of regional plan

2(1) Subject to subsections (2) and (3), this regional plan applies to

- (a) the Crown,
- (b) decision-makers,
- (c) local government bodies, and
- (d) subject to section 15.1 of the Act, all other persons

in respect of land, activities, effects, the environment, species and thresholds in the planning region.



(2) If, in the opinion of the Designated Minister responsible for the following portions of this regional plan:

- (i) “Regulatory Details Plan Part 4 Air Quality”,
- (ii) “Regulatory Details Plan Part 5 Surface Water Quality”,

an activity or proposed activity in respect of land in another planning region is directly or indirectly contributing to the exceedance of a limit or trigger within the meaning of those Parts, the Designated Minister may, by order, declare that the relevant Part applies to one or more of the following entities outside the planning region:

- (a) the Crown,
- (b) a decision-maker or decision-makers,
- (c) a local government body or local government bodies, or
- (d) subject to section 15.1 of the Act, any other person or all other persons, in respect of the activity or proposed activity.

(3) Whether or not a statutory consent has been issued for the activity or proposed activity, if the Designated Minister issues an order referred to in subsection (2), the entity or entities referred to in the order shall, in respect of the activity or proposed activity, comply with the provisions of the relevant Part specified in the order until the earlier of

- (a) the time specified in the order,
- (b) the order is repealed, or
- (c) a regional plan comes into force with respect to the activity, proposed activity or entity.

SSRP Introduction not binding

3 The provisions of the SSRP Introduction are not intended to have binding legal effect, and are statements of provincial policy to inform the Crown, decision-makers, local government bodies and all other persons in respect of this regional plan and the planning region.

SSRP Strategic Plan not binding

4 Except as otherwise provided in this SSRP Regulatory Details Plan, the provisions of the SSRP Strategic Plan are not intended to have binding legal effect, and are statements of provincial policy to inform the Crown, decision-makers, local government bodies and all other persons in respect of the following activities in the planning region:

- (a) identifying the objectives of the Province of Alberta;
- (b) planning for the future;
- (c) managing activities to meet the reasonably foreseeable needs of current and future generations of Albertans, including aboriginal peoples;



- (d) considering future proposals for land use and development;
- (e) setting priorities in the co-ordination of decisions by decision-makers and local government bodies;
- (f) monitoring the cumulative effect of human endeavour and other events;
- (g) responding to the cumulative effect of human endeavour and other events;
- (h) generally in respect of carrying out their respective powers, duties and responsibilities.

SSRP Implementation Plan not binding

5 Except as otherwise provided in this SSRP Regulatory Details Plan, the provisions of the SSRP Implementation Plan are not intended to have binding legal effect, and are statements of provincial policy to guide the Crown, decision-makers and local government bodies in respect of the following activities in the planning region:

- (a) managing activities to meet the reasonably foreseeable needs of current and future generations of Albertans, including aboriginal peoples;
- (b) enforcing compliance with any provision of this Regulatory Details Plan or any other enactment;
- (c) setting priorities in the co-ordination of decisions by decision-makers and local government bodies;
- (d) monitoring the cumulative effect of human endeavor and other events;
- (e) responding to the cumulative effect of human endeavour and other events;
- (f) generally in respect of carrying out their respective powers, duties, and responsibilities.

SSRP Regulatory Details Plan binding on the Crown and others

6 The SSRP Regulatory Details Plan is enforceable as law, and, despite the location of Parts of it within this regional plan, the provisions of the SSRP Regulatory Details Plan bind

- (a) the Crown,
- (b) decision-makers,
- (c) local government bodies, and
- (d) subject to section 15.1 of the Act, all other persons.

Functions and decisions based on regional plan

7(1) After the coming into force of this regional plan, a decision-maker shall, before carrying out any function in respect of the decision-maker's powers, duties and responsibilities in the planning region, consider the SSRP Strategic Plan and the SSRP Implementation Plan.



(2) After the coming into force of this regional plan, a local government body shall, before carrying out any function in respect of the local government body's powers, duties and responsibilities in the planning region, consider the SSRP Strategic Plan and the SSRP Implementation Plan.

(3) Notwithstanding subsections (1) and (2), a decision-maker or local government body must not adjourn, defer, deny, refuse, or reject any application, proceeding or decision-making process before it by reason only of

- (a) the Crown's non-compliance with a provision of either the SSRP Strategic Plan or SSRP Implementation Plan, or
- (b) the incompleteness by the Crown or anybody of any direction or commitment made in a provision of either the SSRP Strategic Plan or SSRP Implementation Plan.

(4) A statutory consent issued after the coming into force of this regional plan cannot be set aside or amended by reason only of a replacement or amendment to this regional plan unless the replacement or amendment complies with section 11 of the Act.

Delegated authorities

8 The Designated Minister responsible for any element or provision of this regional plan may, by order, establish delegated authorities and the delegation to one or more delegated authorities of the performance of any of the Designated Minister's duties or functions or the exercise of any of the Designated Minister's powers under this regional plan and make any provision with respect to any such delegation that is made with respect to the Labour Statutes Delegation in Schedule 10 to the *Government Organization Act* or that may be made by regulations under section 2 of that Schedule.

Reporting requirements

9(1) The Designated Minister responsible for any element or provision of this regional plan shall report on the matters referred to in sections 15, 18, 22, 29(b) and (c), 36(b) and (c), 46, and 49

- (a) not less than once within the first 4 years following the coming into force of this regional plan, and
- (b) not less than once within the next following 5 years after the expiry of the period referred to in clause (a).

(2) A report referred to in subsection (1) must be in writing and be publicly available in its entirety in electronic and hard copy upon request by a person and posted on the Land Use Secretariat's website.

Compliance declaration

10(1) For the purposes of section 20(2) of the Act, the time within which a local government body must comply with that section is 5 years.

(2) For the purposes of section 21(2) of the Act, the time within which a decision-making body must comply with that section is 2 years.



Transitional provisions applicable to statutory consents

11(1) This regional plan applies to an application for a statutory consent whether the application is made before or after the date this regional plan comes into force.

(2) If at the time this regional plan comes into force, a statutory consent has been issued and this regional plan makes the activity in respect of which the statutory consent was issued inconsistent with or non-compliant with this regional plan, the statutory consent continues in effect despite the coming into force of this regional plan.

(3) For greater clarification, an inconsistent or non-compliant activity referred to in subsection (2) is subject to lawful directions of an official under sections 31 and 38 to a person responsible within the meaning of those sections.

(4) Subject to subsection (5), where an application is to be determined after the coming into force of this regional plan in respect of a statutory consent that a decision-maker reasonably believes is incidental to a statutory consent referred to in subsection (2), the decision-maker shall have due regard to the SSRP Strategic Plan, but the decision-maker shall render his or her decision in respect of the application notwithstanding the provisions of the SSRP Implementation Plan.

(5) For the purposes of subsection (4), a renewal of a statutory consent shall not be interpreted as being incidental to a statutory consent referred to in subsection (2).

Coming into force

12 This regional plan comes into force on April 1, 2014.

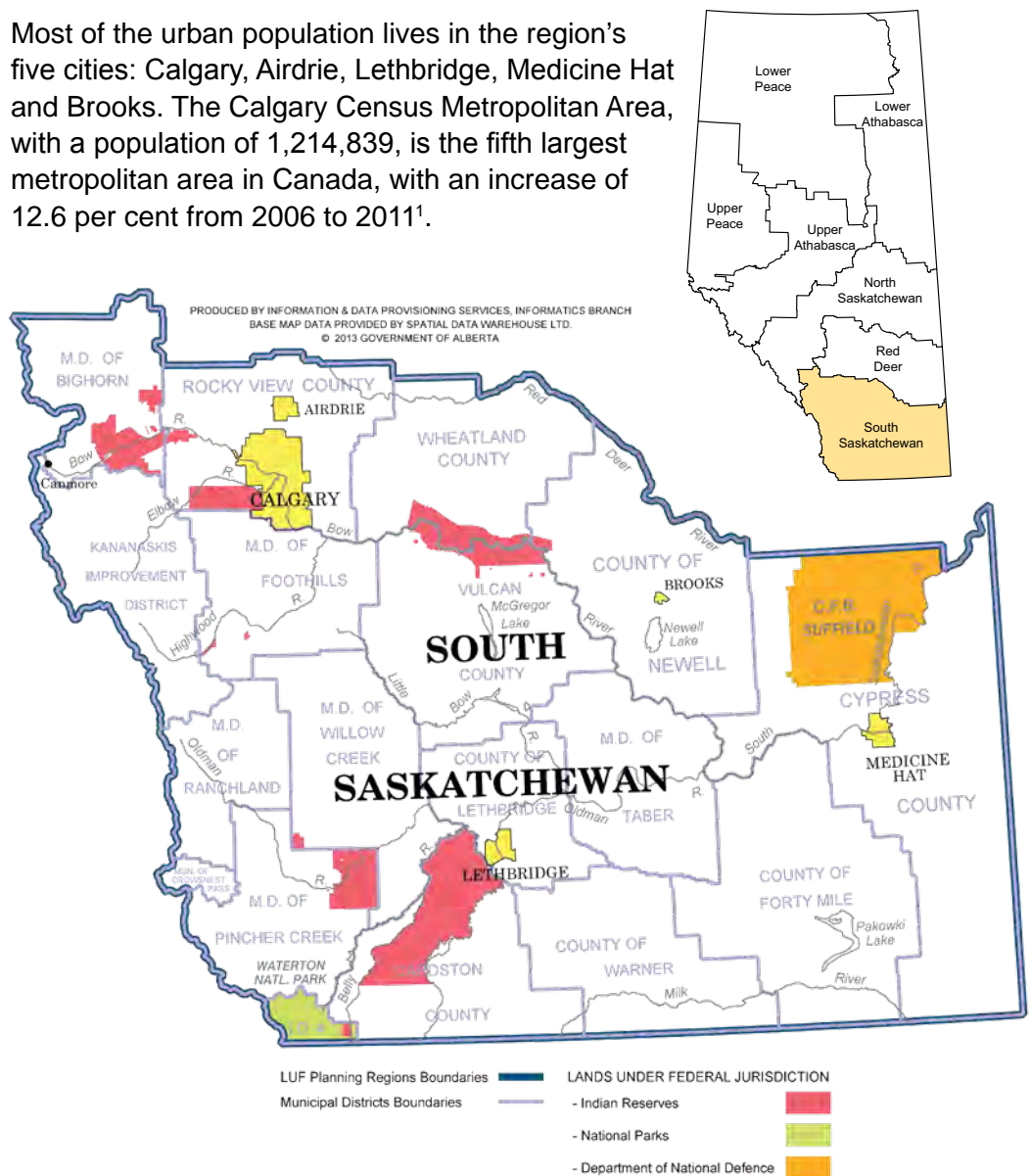
Strategic Plan



The Region Today

The South Saskatchewan Region includes the South Saskatchewan River Basin, the Milk River Basin and the Alberta portion of the Cypress Hills. The region includes 15 municipal districts, one specialized municipality, two improvement districts, five cities, 29 towns, 23 villages, two summer villages and seven First Nations. The South Saskatchewan Region covers 83,764 km² or about 12.6 per cent of the total area of Alberta. About 1.6 million people live in the region, or 45 per cent of the provincial population.

Most of the urban population lives in the region's five cities: Calgary, Airdrie, Lethbridge, Medicine Hat and Brooks. The Calgary Census Metropolitan Area, with a population of 1,214,839, is the fifth largest metropolitan area in Canada, with an increase of 12.6 per cent from 2006 to 2011¹.



¹ Statistics Canada

Economic Development

The South Saskatchewan Region has a diversified economy which contributes to the vitality and prosperity of communities within the region. In addition to a strong agricultural, tourism and forestry economy, the region is fast becoming a major international centre for innovation in the development of energy and mineral resources and environmental technologies to support more environmentally responsible resource development. It is anticipated that local manufacturing and services will continue to expand in support of increasing natural gas (including shale gas and coal bed methane) and conventional oil development in the region. These trends will continue to stimulate development of larger and more diverse retail centres, and growing commercial and professional services and facilities.

The Government of Alberta is taking steps to secure Alberta's economic future, which will benefit the South Saskatchewan Region. This effort is focused on education and entrepreneurship, which are the cornerstones of a dynamic economy, which Albertans build through knowledge, adaptability and an entrepreneurial spirit. Critical elements of this close the participation gap of under-represented groups in post-secondary institutions and increase high school graduation rates, as well as contribute to the conditions that increase business startups and the commercialization of technology.

Expanded market access contributes significantly to the sustainability of the province's export-driven technology. A key element is to develop new access (e.g. through pipelines and rail) to markets outside our traditional core trading partner, the United States.

Alberta has world-class infrastructure, a trained, skilled workforce, up-to-date technologies, legislated environmental protection, and social safety nets that makes the province a great place to live, work and raise a family. The Government of Alberta continues to create a policy and business climate that attracts investment and promotes diversification of the economy including in the agriculture, agri-food, tourism and industry sectors.

Aboriginal peoples' participation in the economy ranges from agriculture and energy (oil and gas, alternatives) to tourism, mines and minerals. Aboriginal people have contributed significantly in the formative years, both as producers and in management, marketing and sales.

Agriculture

The agricultural industry is one of the main economic drivers in the South Saskatchewan Region, with farm cash receipts amounting to \$4.5 billion in 2011, or 43 per cent of the provincial total of \$10.4 billion². The region also accounted for approximately half of the province's \$12.2 billion revenue in 2011 for sales in food and beverage manufacturing³. The economic success

² Alberta Agriculture and Rural Development

³ Alberta Agriculture and Rural Development



of the South Saskatchewan Region is driven in part by a combination of fertile grassland soils and irrigation development that has provided the necessary land base for crop production, livestock grazing, as well as land for the majority of Alberta's cattle feedlot capacity. Agri-food industries in the region include a significant beef processing sector, and processing facilities for poultry and dairy products, potatoes, sugar beets, canola and cereals (flour, feed and distilling).

Provincially, a competitive, self-reliant agriculture industry is ensured through policy development, advocacy, program and services provision, and collaboration with key partners that reinforce economic growth and build lasting prosperity in rural Alberta. There is renewed government effort to:

- enhance research and innovation;
- maximize opportunities in value-added agricultural products and services;
- develop local, national and international markets;
- overcome trade barriers to expand market access;
- attract investment; and
- position Alberta as the preferred global supplier of agriculture products and services.

Although the agriculture, agri-food and agri-product sectors are mainly focused on export markets, consumer demand for locally grown foods is increasing throughout Alberta. This increased demand partially stems from consumers who are increasingly considering factors such as human health and environmental impacts when purchasing food. As the demand for these locally grown food products continues to increase, opportunities for further diversification of the agricultural industry may arise.

The Federal-Provincial-Territorial agricultural policy framework (that is, Growing Forward 2) came into effect April 1, 2013, with various programs, projects and extension services to support the achievement of a profitable, sustainable, competitive, and innovative agriculture, agri-food and agri-products sector for the South Saskatchewan Region and Alberta as a whole. Through cost sharing with the federal government, significant strategic investments will be made in agricultural research, innovation, entrepreneurship, commercialization and market development.

The Government of Alberta is also exploring environmentally responsive solutions and opportunities while ensuring the agriculture industry remains competitive and continues to enjoy social licence to operate. Working with all levels of government, the Government of Alberta is developing integrated environmental policy and continues to facilitate the adoption of beneficial management practices that protect or enhance the environment while meeting climate change, land use, air and water objectives. This is accomplished through supporting extension programs and services, research-based information, and innovative business tools.



Almost 65 per cent of Canada's irrigated land is located in the South Saskatchewan Region. Irrigation of productive soils in an area with higher temperatures and a longer growing season will continue to provide a significant advantage for primary production and value-added opportunities. Beyond greatly increased crop yields, a reliable supply of quality water supplied through the region's irrigation infrastructure, also supports food, feed and bio-industrial processing plants in the region. This, along with proximity to meat packing facilities for both domestic and export markets, explains why much of Alberta's cattle finishing industry exist in the South Saskatchewan Region.

Although irrigated agriculture represents less than five per cent of Alberta's cultivated land base, areas under irrigation are highly diversified; growing more than 50 different crop types, and contributing between 18 to 20 per cent of the agricultural Gross Domestic Product for the province. As competing demands for water will only grow in the future, the irrigation districts, private irrigators and government agencies will continue to deliver advice, regulatory administration and strategic recommendations in order to facilitate the responsible management and use of water delivered through irrigation infrastructure to enhance productivity in this sector. Irrigation infrastructure also provides water to more than 50 towns and villages, and countless wildlife habitat and recreation facilities throughout the southern region.

Grazing on public rangelands has significant economic importance for the province's livestock industry. Within the South Saskatchewan Region there are a total of 2,515 public grazing dispositions that annually provide about 925,000 Animal Unit Months of grazing. This grazing provides significant economic value and supports the operational sustainability of many of the livestock producers in the region.

Energy

Alberta is Canada's largest producer of natural gas. In 2011, Alberta produced 71 per cent of Canada's total natural gas production⁴. For the 2011-12 fiscal year, natural gas and byproduct revenue was about \$1.3 billion, or approximately three per cent of revenues to the Government of Alberta⁵. A significant amount of this natural gas production occurs in the region and nearly half of all Alberta's natural gas wells are drilled there. The levels of employment in the region correlate directly with conventional oil and gas investment, as this region is host to a large share of the roughly 50,000 full-time and part-time jobs in 2012 in conventional oil and gas extraction generated by the province's natural gas and conventional oil industry.⁶

⁴ Alberta Enterprise and Advanced Education, 'Highlights of the Alberta Economy 2012' Energy

⁵ www.energy.alberta.ca/OurBusiness/Gas.asp Energy

⁶ Statistic Canada tables no 383-0030 and 282-0061



Conventional oil plays an important role in supporting the regional economy. For the fiscal year 2011-2012, conventional oil royalties accounted for approximately \$2.2 billion in revenues to the Government of Alberta⁷, with much of the conventional oil development occurring in the region. Significant oil reserves remain in Alberta that can be unlocked using innovative extraction techniques, such as the horizontal drilling of wells, which includes the use of multistage fracturing technology.

Enhanced oil recovery (EOR) using gas injection (such as nitrogen, carbon dioxide and/or natural gas) provides the opportunity to recover more oil from certain mature pools and reduces the amount of water used for injection. EOR largely leverages existing infrastructure rather than creating new surface disturbance, thus also reducing the need for new energy development and the associated disturbance.

Shale-related resource development for oil, natural gas liquids and natural gas also makes use of new horizontal drilling and multistage fracturing technology. The potential for shale development is widespread through the region and is comprised of extensive conventional plays.

The Government of Alberta is continuing to explore development opportunities for our abundant coal deposits. Given the current and anticipated future global demand for coal, particularly from Asian markets, maintaining opportunities for responsible development of coal resources is important to the region and the province. The mountains and foothills in the western part of the region, as well as the plains in the east, have significant coal fields with potential for development.

Mineral commodities being produced in the region include limestone and silica from the Front Ranges (primarily the Exshaw quarry and plant near Canmore) and sulphur. Most of the metallic mineral development potential will need to be extracted using in situ methods, including prospective uranium deposits in the south-southeastern part of the region. Other potential for mineral development include two magnetite deposits in the Crowsnest Pass area, with the main one being the Burmis magnetite project. The Alberta Geological Survey has identified lead, zinc, copper and silver mineralization in the region along the Alberta-British Columbia border as a potential for development. In the Medicine Hat area, several companies are actively exploring for potash. The exploration is currently focused on defining the grade and extent of the potash deposit.

The region is also home to several major industrial facilities that produce a variety of petrochemical and chemical products, including ammonia, methanol, ethylene glycol, alpha olefins, nitrogen/oxygen and ammonium nitrate.



⁷ Alberta Energy, Budget 2012-13

Access to electricity facilitates long-term economic development in the province, and a robust, reliable and efficient transmission system is required. Transmission infrastructure is a public good that must be available in advance of need and be able to accommodate the addition of new generation to meet the demands of, and provide support for Alberta's long-term growth. There are a number of transmission projects under development in southern Alberta with the most notable being the South Area Transmission Reinforcement and the Foothills Area Transmission Development. A number of these transmission projects are to connect current wind power projects to the power grid and to enable the continued development of wind energy in southern Alberta.

Renewable Energy

The region has a natural advantage for the development of renewable (wind, bioenergy, solar, hydro) energy sources. To enable integration of more renewable energy and reinforce the transmission system in the region, the *Electric Statutes Amendment Act* has set the framework for the Alberta Electric System Operator (AESO) to be responsible for the economic planning and the safe, reliable operation of the Alberta Interconnected Electric System (AIES). Provincial policy direction and programs related to renewable energy are provided through Alberta's Climate Change Strategy, the Provincial Energy Strategy, the Bioenergy Infrastructure Development Program and the Nine-Point Bio-Energy Plan. The Government of Alberta also focuses on renewable and alternative energy research, supporting the development and delivery of alternative and renewable energy sources through Alberta Innovates – Energy and Environment Solutions.

As of April 2013, Alberta had a total of 16 wind farms with 1,087 megawatts of wind capacity connected to the transmission system⁸ – enough capacity to serve over 970,000 homes⁹. Of these wind farms, 14 are located in the South Saskatchewan Region with a total estimated capacity of 855 megawatts.¹⁰ As well, approximately 13 new wind projects are under development or planned for the region.¹¹

Bioenergy is any renewable energy or fuel derived from biological sources. Alberta has several potential bio-feedstocks including agricultural products (such as wheat or canola), forestry waste and livestock waste. This biomass often requires expensive management practices to reduce their environmental impact; however, a suite of emerging and established technologies have the potential to convert this waste to renewable sources of energy, including renewable fuels.

⁸ Alberta Electrical System Operator Current Supply Demand Report, April 2013

⁹ Alberta Energy Wind Power Fact Sheet, August 2011

¹⁰ Alberta Electrical System Operator Current Supply Demand Report, April 2013

¹¹ Alberta Electrical System Operator Project List, March 2013



In the South Saskatchewan Region, a 66 million-litre biodiesel facility has recently been constructed in Lethbridge and is currently in the process of being commissioned. Currently, the province's standard requires an average of two per cent renewable diesel (that is, biodiesel) in diesel fuel and five per cent renewable alcohol (bioethanol) in gasoline sold in Alberta.

A 2.8 megawatt biogas facility is under construction in the County of Lethbridge and will be operational by the end of 2013. Once operational, the facility will create enough energy to power more than 2,500 homes. The capture of biogas from waste water treatment facilities, landfills and waste management lagoons is being used to help meet the energy requirements for the companies operating these facilities with excess energy being provided to the provincial energy grid.

Forestry

Forested lands in the Green Area make up 16 per cent of the South Saskatchewan Region. Of this, 48 per cent is actively managed for timber. The Government of Alberta allocates this production on public lands through timber permits, timber quotas and forest management agreements (FMAs). Under an FMA, forest companies have obligations for forest management planning keeping with the principles of sustainable forest management in considering a range of social, economic and environmental factors (watershed function, wildlife habitat). In addition, the Government of Alberta actively monitors, detects and manages any significant forest health issues that threaten values provided by the forest including timber and ecological functions.

Forestry is an important industry within the region, supporting economic activity and providing employment opportunities for local residents. In 2011, Alberta's shipments of forest products reached \$4 billion, and exports were \$2.1 billion¹². The forest industry also reduces risks to our forests from fires and pests, improves the health of our forests and maintains our watersheds through their forest management activities, including forest management planning, forest inventories, forest protection, timber extraction and reforestation. Within the South Saskatchewan Region there is one major FMA holder, two community timber programs and four coniferous timber quotas. There are also small manufacturing facilities in the region including sawmills, round-wood processing facilities, log home manufacturers and remanufacturing plants.

The continued economic viability and competitiveness of the forestry industry is a key economic driver in the region. Managing for a healthy forest is important in order to maintain ecosystem biodiversity and community stability over the long term. Forest management plans are developed using an integrated planning approach which incorporates watershed function,



¹² Alberta Enterprise and Advanced Education, 'Highlights of the Alberta Economy 2012'

esthetics, fisheries, wildlife, pest risk and damage, wildfire, recreation and grazing values. The long-term sustainability of a healthy forest is achieved with plans forecasting 200 years, or two harvest rotations. Also incorporated in these forest management plans are specific management objectives and strategies to carry out the required reforestation activities following timber harvest.

The Government of Alberta also actively promotes the diversification of the forest industry through implementation of the Alberta Forest Products Roadmap to 2020 which will ultimately identify opportunities to diversify the sector through new markets and products, including the bioenergy sector.

Transportation

Transportation systems are crucial to the movement of people and goods within and outside the South Saskatchewan Region to support the region's continued social and economic development. A key aspect of land-use planning is to ensure there are opportunities for all modes of transportation. The timely development of transportation infrastructure will be needed to accommodate changes in economic activity, regional demographics, lifestyles and technologies.

The Government of Alberta is committed to providing a safe, innovative and sustainable world-class transportation system that supports Alberta's economy and quality of life. For the South Saskatchewan Region, this means supplying the region with a transportation system that supports connecting Albertans to world-wide markets and enabling investment and job creation.

The Government of Alberta has three key transportation goals:¹³

- ensure that Alberta's provincial highway network connects communities and supports economic and social growth;
- that Alberta has the safest road system in Canada; and
- that Alberta has a well-connected road-rail-air-port transportation system that supports economic opportunities and the quality of life in all communities.

The Government of Alberta has a long-standing interest in maximizing the efficiencies of land development throughout Alberta. Beginning in the 1960s and 1970s the Government of Alberta began planning for transportation utility corridors around the cities of Calgary and Edmonton. These facilities, now nearly complete, are examples of how stakeholders have worked together to meet their individual needs while minimizing land disturbance through the co-location of linear infrastructure. The Government of Alberta will continue this efficient and progressive land-use planning practice as opportunities arise.

¹³ Alberta Transportation 2012-2015 Business Plan



Substantial investment in transportation infrastructure in the South Saskatchewan Region has contributed to the region's economic and social prosperity. Continued investment will be required to support key industries such as forestry, agriculture, energy, and recreation and tourism, as well as to provide linkages between and within rural and urban communities. The Government of Alberta, through its transportation planning process, has identified potential future capital projects totaling in the order of \$4 billion for the region. These projects include highway twinning, interchange development and bypasses (See Appendix A – Longer Term Transportation Initiatives). The development of these projects will be undertaken as needs arise and funding becomes available, demonstrating the Government of Alberta's ongoing commitment to the needs and safety of the travelling public in the region.

Tourism

The region accounts for approximately 34 per cent of annual tourism expenditures¹⁴ and is an anchor for Alberta's tourism industry. The economic impact associated with these tourism expenditures is \$2.9 billion in value-added income, and includes \$1 billion of direct income and \$1.9 billion of indirect and induced income¹⁵. These tourism expenditure amounts represent new money into the region that would not have occurred had tourists chosen to visit other locations.

Motorized recreation is a growing activity in Alberta for residents and visitors and recreationists spend a substantial amount of money on their recreational activities. The number of off-highway vehicles (OHV, including ATV-tracked, quads, motorcycles, snowmobiles) registered in Alberta rose from 37,042 in 1987 to 138,177 in 2010¹⁶. Additionally, 316,998 recreational vehicles were registered in Alberta in 2010, a 23 per cent increase from 2005. Providing areas for people to recreate is linked to the economic diversification of the region. In 2009 snowmobiling enthusiasts spent \$111.3 million on purchasing new snowmobiles, accessories, parts, and clothing and another \$254.7 million was spent on operating and maintaining these vehicles and on tourism-related activities¹⁷.

Three UNESCO World Heritage Sites are found in the region: Dinosaur Provincial Park, the Head-Smashed-In Buffalo Jump complex, and Waterton-Glacier International Peace Park. Other major nature-based tourism attractions include Kananaskis Country, the Canadian Badlands, Crown of the Continent, Cypress Hills, Writing-on-Stone and Peter Lougheed Provincial parks. There are staffed interpretive programs in Beauvais Lakes, Bow Valley, Writing-On-Stone, and in Kananaskis Country. Similar programs are provided in Waterton-Glacier International Peace Park.

Through tourism activity in the region, communities and Albertans benefit

¹⁴ The Economic Impacts of Tourism Expenditures in the LUF Regions of Alberta.

¹⁵ The Economic Impacts of Tourism Expenditures in the LUF Regions of Alberta (2010 Data)

¹⁶ Alberta Registries Registration System 1987 to 2010

¹⁷ Economic Impact of Snowmobiles in Alberta in 2009



from a range of economic, social and environmental benefits. Additionally, recreation infrastructure and tourism investment have been shown to be key for rural areas to retain residents and helps support economic diversification.

The growth and sustainability of existing tourism operations and innovative development of new tourism products, experiences and destinations are needed to retain vacation dollars within Alberta, and ensure the continued appeal of the province to existing and emerging international markets. The tourism industry in the south requires access to Crown land to facilitate a range of tourism development activities, from recreational trail development to four-season destination resorts. Access to Crown land also needs to be enhanced with policies that provide tenures that are attractive for tourism investors and developers (that is, longer lease terms).

A provincial tourism framework is being developed that will serve to integrate tourism planning, development and marketing activities at both the provincial and regional levels. The goal of this framework is to support significant growth in tourism expenditures from domestic and international markets, and ensure Alberta can effectively compete with other destinations.

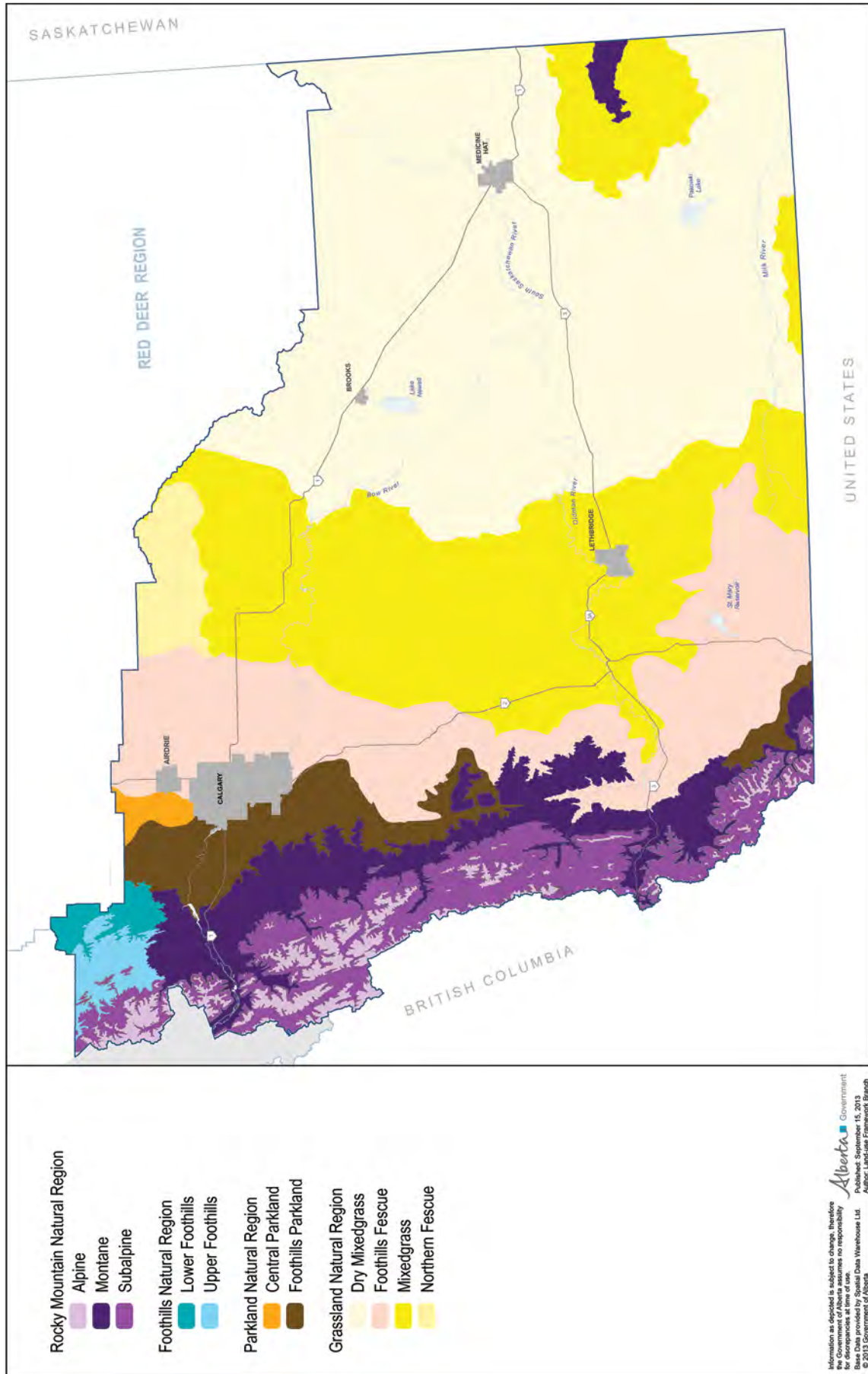
Ecosystems and Environment

Landscapes and Biodiversity

The South Saskatchewan Region contains diverse landforms, vegetation and species. The region spans four of Alberta's six Natural Regions including the Grassland, Parkland, Foothills and Rocky Mountains. The Grasslands are dominated by a diverse and unique native prairie, extensive riparian cottonwood forests and broad plateaus within the Cypress Hills and Milk River Ridge. The Parkland region in the north represents the transition area between grasslands and forests. A small portion of the Foothills lies within the South Saskatchewan Region along the eastern edge of the Rocky Mountains. The Rocky Mountain region that runs along the Continental Divide is characterized by grasslands, shrubs, forests and alpine areas above the tree line.

A wide range of fish, wildlife and plant species exist in the region, including: 17 sport fish species; over 700 vascular plant species; numerous songbirds, hawks, owls, waterfowl, and grouse; and mammals such as moose, deer, pronghorn, wolves, grizzly bears, cougars and lynx. The region also serves as breeding grounds and staging areas for birds during migration and over-wintering periods. The South Saskatchewan Region has more than 80 per cent of the province's species at risk as listed under the federal *Species at Risk Act* and the provincial *Wildlife Act*. Factors contributing to this high proportion include human settlement, disturbance from industrial, recreational and other uses, fragmentation, environmental contaminants, and introduction of invasive species.

South Saskatchewan: Natural Regions and Sub-Regions



The range of species and diversity of ecosystems across the region reflects the biodiversity found here, and means there is a broad range of ecosystem services provided. Biodiversity represents the assortment of life – including the variety of genetics and species, and the habitats in which they occur – all shaped by natural processes of change and adaptation. Biodiversity and ecosystem services are not the same thing but they are interdependent. Ecosystem services are the benefits humans, communities and society as a whole receive from healthy, functioning ecosystems and the biodiversity within them. Biodiversity underpins the supply of ecosystem services, so changes in biodiversity will affect the type and amount of those services available to humans.

All ecosystem services contribute to sustaining a healthy and prosperous way of life for all Albertans. Fish, wildlife, traditional medicinal plants, berries and less-developed spaces are also important for the cultural practices of First Nations peoples.

Water and Watersheds

The region spans the catchment areas of two major river basins: the South Saskatchewan River Basin and the Milk River Basin. These water basins are important over-wintering, spawning and rearing grounds for fish with the associated riparian habitats being major wildlife corridors.

The South Saskatchewan River Basin consists of four sub-basins including the Bow, Oldman, South Saskatchewan and Red Deer; along with their tributaries, these sub-basins drain 120,000 km² of the province. The eastern slopes of the South Saskatchewan Region contain the headwaters of the Bow and Oldman rivers which are critical to water supply and water quality in the region. Most of the Red Deer River sub-basin is not included in the region, and the remaining portion of the South Saskatchewan River Basin in the planning region is about 73,000 km².

The confluence of the Bow and Oldman rivers forms the South Saskatchewan River which flows east through the region eventually draining into Lake Winnipeg in Manitoba. A transboundary agreement is in place to ensure there is appropriate water sharing between all the Prairie provinces. The South Saskatchewan River Basin contains all major urban centres, including the cities of Calgary, Lethbridge, and Medicine Hat, as well as all 13 of Alberta's irrigation districts.

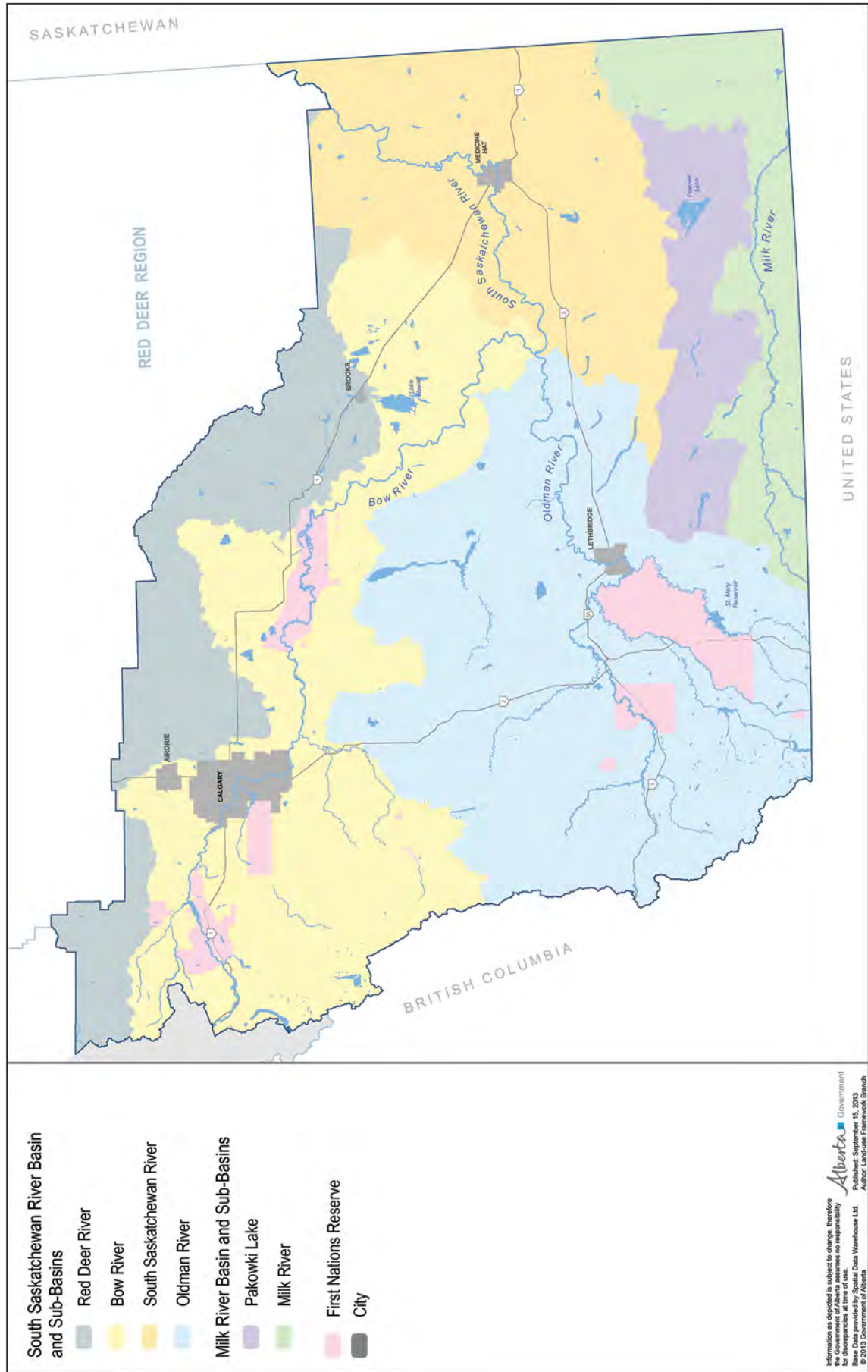
The Milk River originates in Montana; flows eastward through the southern portion of Alberta, and then loops back into Montana as part of the Missouri-Mississippi River Basin. A transboundary agreement with Montana establishes how much water must be shared for both the Milk River and the St. Mary River in Montana. The Alberta portion of the Milk River Basin is 6,500 km² and is the smallest of Alberta's river basins. There are no major urban centres or irrigation districts in the Milk River Basin; however, the irrigation sector remains the largest water user in the basin.

Ecosystem Services

The following are examples of ecosystem services, the benefits that come from healthy functioning ecosystems and the biodiversity found in them:

- food, fiber, fresh water ("provisioning" services)
- flood control, water and air purification ("regulating" services)
- spiritual, recreational, cultural benefits ("cultural" services)
- nutrient cycling, soil formation ("supporting" services)

South Saskatchewan: Major River Basins



Water quality is influenced in each basin and sub-basin by the unique features and land and water uses. All sub-basins are faced with contributions from both point and non-point sources. Generally, non-point sources are key considerations for water quality management in southern Alberta.

Overall, water quality in the Bow River is considered good; however, it is influenced by urban treated wastewater and storm runoff and often deteriorates downstream from Calgary. The Oldman River generally has good water quality with concentrations of nutrients, bacteria and pesticides only occasionally exceeding water quality guidelines. However, concerns exist regarding the health of riparian areas and the impact of withdrawals and altered flow regimes on aquatic ecosystems.

The South Saskatchewan River similarly has good water quality with occasional exceedances of nutrients, but is affected by negative impacts on riparian areas. Water quality in the Milk River is reported to be generally good (with the exception of certain tributaries) with the largest influence on water quality coming from enhanced water flows diverted through Alberta from the United States under the provisions of the Boundary Waters Treaty.

Pressures on water resources in the South Saskatchewan Region are significant. There are currently more than 20,000 water allocation licences and registrations, serving approximately 1.6 million people and a mix of institutions and industries. Among the major users is the agriculture industry, notably irrigation, which accounts for 75 per cent of total water allocation volumes in the region. This is supported by significant investments in water infrastructure. As actual water use accounts for only a portion of allocation (55 per cent and 66 per cent for the municipal and irrigation use, respectively), actual consumption can be expected to increase as existing allocations are more fully utilized to meet the demands of growth. This demand and the resulting pressure on water resources are compounded by periods of natural low flow and drought experienced periodically by the region.

Historic and current land uses have placed pressures on the watersheds within the South Saskatchewan Region. Degradation of riparian lands and loss of wetlands across the Prairies have been widespread leading to altered flow regimes and degraded water quality. Watershed planning and advisory councils and other stewardship groups have successfully undertaken collaborative work to improve watershed health.

Flooding of the major rivers and their tributaries in southern Alberta has resulted in large economic costs in recent decades. Major floods occurred in 1995, 2005, 2010 and most notably in 2013. Although flooding is a natural occurrence that can provide benefits to the environment, land-use development and infrastructure in flood hazard areas has resulted in significant damage when flooding occurs.

Point sources

Pollution that originates from one, easily identifiable cause or location.

Non-point sources

Pollution from diffuse points with no single point of origin.

Riparian Areas

Riparian areas are the lands adjacent to streams, rivers, lakes and wetlands where the vegetation and soils are strongly influenced by the presence of water. They are the place where water and land meet and interact. Riparian areas are critical in reducing the negative effects of various land uses on adjacent waters.

Wetlands

Lands that are saturated with water long enough to promote wetland or aquatic processes are indicated by poorly drained soils, water-loving vegetation and various kinds of biological activity which are adapted to a wet environment. Wetland areas provide clean water, wildlife viewing opportunities and other outdoor recreation activities. They also conserve soil and control erosion, retain sediments, absorb nutrients, degrade pesticides, store water and moderate impacts of floods and droughts, recharge aquifers and help to moderate climate change.



Air Quality

Volatile organic compound:

A large group of chemicals containing carbon and hydrogen atoms that can react quickly to form other chemicals in atmosphere.

Nitrogen oxides (NO_x):

A general term pertaining to compounds of NO , NO_2 , and other oxides of nitrogen, typically created during combustion processes.

Sulphur dioxide (SO_2):

A strong smelling, colourless gas that is formed when fossil fuels, such as coal and natural gas, are burned.

Hydrogen sulphide (H_2S):

A colourless gas with a rotten egg odour emitted from both natural and industrial sources.

Fine particulate matter ($\text{PM}_{2.5}$):

Tiny particles in the atmosphere that are smaller than 2.5 microns, derived from both solid matter and liquid aerosols, that may form in the atmosphere or be emitted by any combustion source including automobiles, industrial and wood burning

Ozone (O_3):

A light blue gas with a sharp odour that is found in the upper atmosphere (ozone layer) and formed near the ground by a reaction involving oxides of nitrogen (NO_x) and volatile organic

compounds (VOCs) in warm, sunny conditions.



Compared to surface water, groundwater is presently not a major source of water in the South Saskatchewan Region; however, there may be growing pressure placed on groundwater resources in the Bow, Oldman and South Saskatchewan river sub-basins since new surface water allocations are no longer available. Pressures on groundwater quality exist in localized areas across the region, with the associated potential for contamination of the aquifers. Once an aquifer becomes contaminated, remediation is extremely difficult and expensive. Consequently, groundwater must be treated as a valuable resource that requires protection. Understanding recharge areas and the connection between surface water and groundwater is important for water management in southern Alberta.

Air Quality

An air zone that aligns with the South Saskatchewan Region boundaries has been delineated as part of Alberta's implementation of the national Air Quality Management System. Place-based management is central to the Air Quality Management System, and air zones for air quality reporting and management across the province have been delineated in alignment with the regional boundaries of the Land-use Framework.

Air quality in the region is influenced by climate and weather systems as well as activities occurring inside and outside of the region. Activities in the region – including those in the municipal, industrial and other sectors – are associated with emissions of a variety of substances, including greenhouse gases, volatile organic compounds, nitrogen oxides, sulphur dioxide, hydrogen sulphide, fine particulate matter, substances that lead to ground-level ozone and others.

The air quality in southern Alberta is generally rated as “low health risk,” according to the Alberta Air Quality Health Index (AQHI). Implemented in Alberta in 2011, the index is a tool designed to help people understand what ambient air quality means to their health and the health of others. In the South Saskatchewan Region, there are three communities where the AQHI is reported: Calgary, Lethbridge and Medicine Hat. In each of these communities, the AQHI is reported in real time and forecasted for the current day, evening and the next day.

Currently the largest source of greenhouse gas emissions in the province is coal-fired electrical generation facilities. Although the South Saskatchewan Region does not currently contain any of these facilities, the growing population of the region is contributing to the increased demand for electricity, much of which is generated by coal-fired facilities.

Human-caused greenhouse gas emissions are also generated from natural gas-fired electrical generation facilities and the production and burning of fossil fuels for activities such as transportation, heating and use by industry, all of which have increased with the rising population.

Historic Resources

The South Saskatchewan Region possesses a remarkably diverse natural and cultural history. The historic resources that embody this heritage are inextricably tied to the landscape. The South Saskatchewan Region contains a wealth of archaeological sites, the greatest concentration of palaeontological sites in Canada, a vibrant First Nations heritage, and diverse historic sites that define its unique character.

Increasing development and recreation are impacting these important historic resources. In order to preserve and protect historic resources, developers are required to submit, for review, their land-based development proposals for evaluation. Ensuring the integrity of historic resources before, during and after development allows future generations to continue to benefit from Alberta's rich past while realizing future potential.

Environmental Management

The cumulative effects of population growth and economic development in the region are placing increasing pressures on the region's air, water, land and biodiversity. The Government of Alberta is committed to responsible development and the province's current environmental management system is intended to reduce and minimize the impacts of development on the environment. This system is supported by provincial policy, legislation, regulations and codes of practice which are implemented using a full range of both regulatory and non-regulatory tools.

Provincial Legislation

- ***Environmental Protection and Enhancement Act*** – Provides for the assessment and regulation of activities to minimize their environmental impacts, based on principles that include continuous improvement and pollution prevention. Activities are designated based on their level of risk, with higher-risks activities subject to increasing levels of regulatory oversight.
- ***Water Act*** – Provides for the allocation and use of Alberta's water resources and the protection of rivers, streams, lakes and wetlands.
- ***Climate Change and Emissions Management Act*** – Provides for the management and reporting of emissions of carbon dioxide, methane and other specified gases, and requires measurable reductions in greenhouse gas emissions for specified activities.
- **Provincial parks legislation** (*Provincial Parks Act* and *Wilderness Areas, Ecological Reserves, Natural Areas and Heritage Rangelands Act*) – Plays an important role in protecting natural diversity and intact habitat for supporting biodiversity, in addition to ensuring a wide range of recreation opportunities and tourism experiences.



- **Public Lands Act and Public Lands Administration Regulation** – Provides for the setting of land disturbance standards and land conservation tools in support of biodiversity management.
- **Forests Act** – Provides for the sustainable management of Alberta's forests, including a legislated requirement for reforestation.
- **Wildlife Act** – Provides for restrictions to protect as well as manage harvests of wildlife, addressing possession, sale and movement of wildlife and controlled animals, and designation and recovery of species at risk. Adds safety provisions addressing use of firearms and other weapons in hunting.
- **Fisheries (Alberta) Act** – Provides for the licensing of fishing activities as well as measures to protect fish health, provides licenses for aquaculture, fish import, fish stocking, research and commercial fish processing.
- **General Fisheries (Alberta) Regulation** – Provides for fish harvest quotas, fishing seasons and fishing methods, and addresses fish stocking and possession.
- **Responsible Energy Development Act** – Provides for a more efficient and effective system for landowners, industry and the environment through a single regulator for oil, gas, oil sands and coal development.
- **Mines and Minerals Act** – Governs the management of rights in Crown-owned minerals, including the levying and collecting of bonuses, rentals and royalties.
- **Historical Resources Act** – Responsible for the preservation, interpretation and promotion of the appreciation of Alberta's historical resources, as well as contributing to the regulation and approval of land development.
- **Soil Conservation Act** – Provides a framework for encouraging sound soil conservation practices, to preserve Alberta's agricultural land base and to ensure long-term productivity in the farming sector.
- **Agricultural Operation Practices Act** – Provides a process for managing nuisance complaints resulting from agricultural activities and establishes a system for regulating manure management and permitting of Confined Feeding Operations (CFOs). Regulations under the Act define siting and construction standards for CFOs and Seasonal Feeding and Bedding Sites as well as manure management requirements for all agricultural operations that handle manure.
- **Weed Control Act** – Regulates noxious weeds, prohibited noxious weeds and weed seeds through various control measures, such as inspection and enforcement. Additionally, it mandates the licensing of seed cleaning plants and mechanisms.
- **Irrigation Districts Act** – Provides for the formation, dissolution and governance of irrigation districts in order that the management and delivery of water in the districts occur in an efficient manner that provides for the needs of the users.



- **Alberta Land Stewardship Act** – Provides the legislative foundation for land-use planning in Alberta.
- **Municipal Government Act** – Provides the legislative framework to guide the operations of municipalities.

Provincial Strategies

In addition to legislation, a number of provincial strategies provide high-level direction on air, water, land, biodiversity and historic resource management goals and how Alberta will achieve these goals. More detailed operational policies take their direction from these higher level strategies and legislation, and translate them into more clearly defined expectations.

Alberta has a strong water management system in place. Since 2003, the Water for Life strategy has provided a roadmap to achieving provincial goals of a safe, secure drinking water supply, healthy aquatic ecosystems and reliable quality water supplies for a sustainable economy. To fulfill these goals, the strategy revolves around the three key directions of knowledge and research, partnerships and water conservation.

The Approved Water Management Plan for the South Saskatchewan River Basin (See Appendix B – Overview of the Approved Water Management Plan for the South Saskatchewan River Basin) recognizes that the limit of water resources has been reached in the Bow, Oldman and South Saskatchewan River sub-basins. This plan establishes water conservation objectives for the three sub-basins and prohibits new applications for surface water allocation; however, it authorizes the use of water allocation transfers to accommodate growth and development. In general, surface water allocations are also no longer available from the rest of the planning area (including the Milk River Basin, and the Many Island and Pakowki terminal basins). Water management and allocation in the South Saskatchewan Region must accommodate commitments made under water-sharing agreements.

The Clearing the Air: Alberta's Renewed Clean Air Strategy reaffirms Alberta's commitment to the wise management of Alberta's air quality for the benefit of all Albertans. The strategy and action plan outline the strategic directions needed for the Government of Alberta, its partners and the public over the next 10 years to enhance Alberta's existing air quality management system and to achieve the outcomes of the strategy.

The Government of Alberta recognizes the benefits and value of biodiversity and has worked with other provinces, territories and the Government of Canada to complete the Canadian Biodiversity Strategy. The province and other Canadian jurisdictions agreed to use the strategy as a guide for actions to conserve biodiversity and to use biological resources in a sustainable manner. A provincial biodiversity strategy is under development, and will support these national and international outcomes. The province delivers and supports many existing programs, initiatives and tools that benefit biodiversity and landscapes, often in partnership with individuals, organizations, the

Water conservation objectives

Established under the provisions of the *Water Act*. A designated official under the Act, a Director, can establish "the amount and quality of water necessary for the

- (i) protection of a natural water body or its aquatic environment, or any part of them,
- (ii) protection of tourism, recreational, transportation or waste assimilation uses of water, or
- (iii) management of fish or wildlife."

Generally, a water conservation objective can be expressed in relation to a rate of flow needed or a water level needed.

Master Agreement on Apportionment

Establishes the terms and conditions regarding water sharing with Saskatchewan. The agreement covers both water quantity and water quality.

Boundary Waters Treaty

Establishes the terms and conditions regarding water sharing with Montana. The agreement covers water quantity.



private sector and other governments. Examples include species recovery plans, the Enhanced Approvals Process (EAP) which outlines oil and gas development requirements, the Landscape Analysis Tool, the Grazing Leaseholders Code of Practice, forest management plans, operating ground rules and existing Public Land Use Zones to manage public access and related impacts to biodiversity and ecosystem function. Wildland Provincial Parks and other conservation designations (Heritage Rangelands, Natural Areas) are tools for conserving key biodiversity components into the long term.

The Government of Alberta values its heritage and endeavours to protect these resources for future generations through a land-based regulatory system. Development proposals are assessed using a variety of criteria, such as the Listing of Historic Resources and professional review. The Listing of Historic Resources identifies lands, both public and private, which contain or have a high potential to contain historic resources. The listing is issued twice a year and provides industry and other developers with advance notification of possible historic resource concerns. If an historic resource may be impacted, the developer may be required to conduct a study or develop an avoidance strategy. Any studies conducted are evaluated and the developer may then be required to avoid the historic resource, or conduct additional studies prior to development occurring. Lands that contain important historic resources may also be designated as Provincial/Municipal Historic Resources, which provides them with protection from undue impacts.

Environmental Management Frameworks

The development and implementation of environmental management frameworks is a new approach being used by the Government of Alberta to accomplish cumulative effects management. Management frameworks establish outcomes and objectives along with the strategies and actions to achieve them. The frameworks are intended to provide context within which decisions about future activities and management of existing activities should occur. They confirm regional objectives and establish thresholds. They are intended to add to and complement, not replace or duplicate, existing policies, legislation, regulation and management tools.

Monitoring, Evaluation and Reporting

In order to understand the effectiveness of Alberta's environmental management tools, the region's air, water, land and biodiversity conditions are monitored, evaluated and reported on. Responding to the need for more rigorous environmental monitoring, the Government of Alberta is establishing an arm's-length environmental monitoring agency to oversee monitoring across the province. Its centrally coordinated system will integrate the monitoring, evaluation and reporting of air, land, water and biodiversity.



Human Development

The South Saskatchewan Region has experienced significant population growth in the past 10 years, especially in urban areas, where approximately 93 per cent of the population resides. Continued population growth is expected to be spurred on by the region's strong economic expansion in key sectors which will create employment opportunities for many Albertans. This growth, occurring in and around municipalities, is facilitated by a business-friendly environment and opportunities that benefit residents in the local jurisdictions.

Today and in the future, Alberta must compete in a rapidly changing global economy for resources, investment, markets and people. We must take a more deliberate and intentional approach to leveraging our advantages so that we can continue to be successful, and we must start today to create those future conditions. Success requires better collaboration and coordination between government, post-secondary institutions, the research, innovation and commercialization system and the province's business sector. Government will strengthen and focus these relationships by setting common strategic objectives and outcomes that are aligned around key current and emerging economic sectors. Success requires the right people with the right skills. We will create a more efficient and relevant post-secondary system in which our institutions work together to graduate students with the knowledge and skills that they need to excel in the economy of today and tomorrow. Success requires that we identify and foster research that creates ideas and discoveries that can be transformed into products, services and processes. We will bring research, innovation and commercialization together by aligning the research and innovation system and agenda in support of government's priorities. Finally, our success requires a climate where Alberta's businesses and workers are prosperous and productive and our diverse products, services and expertise can compete in the local and global economies. Government will take a more intentional approach to economic development by providing more strategic and responsive policies and tools that better connect and leverage Alberta's advantages.

Municipalities are responsible for the planning and development processes that ensure land is available for developments such as residential, commercial and industrial lands, municipal roads, and water and wastewater treatment facilities to accommodate population growth. Other important social infrastructure that contributes to sustainable communities such as schools, hospitals, seniors' facilities, and cultural facilities are also needed in order to contribute to the overall quality of life.



Alberta's Social Policy Framework's vision focuses on the creation of inclusive and welcoming communities, where every resident has opportunities to fulfill their potential and benefit from a thriving social, economic and cultural life.¹⁸ Decision-makers in the region will need to deliberately cooperate and coordinate their planning to meet the physical and social infrastructure needs of their communities, and to ensure the quality of life for all residents is enhanced in thriving urban and rural communities. The provision of both physical and social infrastructure, in response to growth, will require thoughtful planning in terms of how much land is needed to accommodate the region's needs over the lifespan of the regional plan. To this end, both local and provincial authorities, and other stakeholders, will have to consider how best to use the lands efficiently while minimizing conflicts, thus producing significant savings on infrastructure costs.

In the major metropolitan area surrounding Calgary, there are tremendous pressures as well as opportunities to balance the needs of population growth; namely, protecting the natural environment, regional servicing and transportation, accommodating industrial and residential growth, etc. In response to these pressures and opportunities the Calgary Regional Partnership, a volunteer organization of a number of municipalities, has been working on the Calgary Metropolitan Plan with a common goal of creating a plan to guide sustainable growth in the region.

A small percentage (approximately seven per cent) of the region's population is rural and small town. In response, resilient and sustainable rural communities need to be strengthened as population growth tends to be much greater in urban areas including Calgary (Rocky View County), Lethbridge (the County of Lethbridge), and Medicine Hat (Cypress County). The Government of Alberta supports rural strategies developed by local governments and rural community organizations that help build capacity, take advantage of new economic opportunities and enhance local innovation, connectivity and stewardship.

To enhance rural Alberta as a viable place to live, Government of Alberta programming helps to facilitate the supply of services such as high-speed Internet, electricity, and a safe, secure water supply to rural areas. Initiatives such as the Final Mile Rural Community Program provide funds for local government-led projects to provide access to high-speed Internet in unserved areas. Helping to reduce the high cost of conveying electricity for agricultural purposes, cost-share programs such as the Rural Electric Program provides grant assistance to those in rural areas.



¹⁸ Alberta's Social Policy Framework, February 2013, p. 22.

Long-term water supply is a growing concern for many rural residents in Alberta, particularly in areas where groundwater supplies are restricted. Building on the Water for Life strategy, water supply-related programs under federal-provincial-territorial shared funding arrangements provide and secure water supply for domestic use and future economic growth. Delivering such programs and services is a key requirement to a vibrant rural economy and population.

The continued vitality of rural Alberta is being affected by an aging farming population and a lack of young farmers and new entrants to the agriculture and agri-food industry. Young farmers and new entrants to the agriculture industry are often deterred by many factors such as high start-up costs, agricultural market risk, difficulty in transferring farm assets, and competing career opportunities for both farm owners and potential employees. A consequence of more farmers retiring than entering the industry is the consolidation of farms through the purchase and/or lease of farms from retirees. There are 43,234¹⁹ reporting farms in Alberta which is 13 per cent fewer than in 2006; this trend has been evident for a number of years. Offering a variety of programs and services such as financial loans, grants, and extension services to young farmers and new entrants may help attract new producers and decrease the growing gap between retirees and new entrants, as well as allow for succession and growth among agricultural producers, and lower the average age of producers.

Governed through the *Agricultural Societies Act*, Agricultural Societies also encourage improvements in both agriculture and in the quality of life of small agricultural communities throughout rural Alberta. These provincially funded societies operate approximately 700 facilities province-wide, including facilities such as riding arenas, hockey and curling rinks and local community halls, all in support of active and vibrant rural communities. As of 2012, there were 285 primary Agricultural Societies in Alberta that received significant provincial funding; approximately 60 of these are in the South Saskatchewan Region. In addition to the smaller community societies scattered throughout the region, there are two regional agricultural societies (the Lethbridge and District Exhibition and the Medicine Hat Exhibition and Stampede Company Ltd.), and one major agricultural society (the Calgary Stampede) that receive annual provincial funding. Along with the smaller community societies, these larger societies showcase Alberta's western and agricultural heritage and culture.

First Nations have a long relationship within the South Saskatchewan Region and beyond. Significant sites memorialize a way of life that continues today in songs and ceremony. Traditional alliances provide meaningful opportunities for the aboriginal peoples to continue their ways of life in an autonomous fashion. Treaty 7 is a foundation for relations between First Nations and governments.

¹⁹ 2011 Census of Agriculture



Along with all Albertans, climate, water and energy security are of particular concern for First Nations. On-going consultation, engagement and relationship building are needed to provide consistency and clarity on decisions. Alberta will work with First Nations to establish innovative outreach legacy programs and promote environmental education that is meaningful, relevant and sensitive to First Nations culture. Alberta will also explore mechanisms to allow the meaningful participation of First Nations communities in regional planning processes and implementation, with particular focus on input into the management frameworks.

Some urban communities, native grasslands and forested areas in the region are at risk from wildfires. Alberta will continue its program of wildfire prevention and Community FireSmart program to reduce wildfire hazards near communities. The FireSmart program includes education, vegetation management, legislation and planning, development considerations, interagency cooperation, cross-training and emergency planning.

Recreation, active living and sport are key components of the wellness of Albertans²⁰, their families and communities. Research shows that active living can help people live longer and enjoy a better quality of life as they age. There is also a growing body of research supporting the idea that access to nature is essential for the physical and emotional health of children and adults²¹. The Government of Alberta works with partners in municipalities, the not-for profit sector and the education system to provide recreation, active living and sport opportunities where people learn, live and work. These organizations are supported through various grants and special projects to continue their work and the valuable role they play in Albertans' lives. Thirteen provincial active living associations and 103 provincial sport and recreation associations are provided annual funding for this purpose.

The demand for outdoor recreational opportunities such as camping, hunting, fishing, ski touring, paddling and trail use is growing, and these forms of active living are a significant aspect of the quality of life in the region. The provincial parks system provides a wide variety of outdoor recreational and educational experiences to visitors and helps to conserve biodiversity of natural landscapes. Existing provincial park recreation amenities in the region are generally at or over capacity and demand will increase as the region's population grows.

The use of motorized recreation vehicles is popular within the region and ensures people of all ages and mobility can access the natural experiences the region offers. However, an increase in random use is contributing to environmental impacts, public safety issues and conflict among land users.



²⁰ Active Alberta, 2011

²¹ Active Alberta, 2011

Historic resources represent the natural and cultural history of a landscape that is valued for its ability to link Alberta's past with its present. Careful management and protection of these fragile and non-renewable resources in land-use development planning ensures they retain their conservation value for future generations. As an example, the region is home to 220 protected historic places and thousands of archaeological/palaeontological sites. Researching these sites and interpreting their history enhances the quality of life for the region's residents and all Albertans.

Governments and citizens share the important responsibility of safeguarding and enhancing culture for future generations. The restoration, preservation and protection of the tangible objects and intangible elements of our culture and identity are paramount to the sustainability of Alberta's strong and vibrant cultural heritage. The Government of Alberta recognizes and encourages the important role played by volunteers and non-profit organizations in governing, managing and supporting our cultural resources and continues to support provincial cultural facilities and its foundations.

The Future of the Region

Regional Vision

The vision for the South Saskatchewan Region reflects the Land-use Framework's vision of Albertans working together to respect and care for the land as the foundation of our economic, environmental and social well-being.

Vision for the South Saskatchewan Region

Southern Alberta is a diverse, healthy, vibrant and prosperous region where the natural beauty of the mountains, foothills, farmlands and prairies are managed so that citizens feel connected to the land and its history. The region is a thriving place that offers a wide range of opportunities to residents and visitors alike. Social, economic and environmental values are effectively achieved with shared stewardship and an integrated approach. The quality and integrity of the landscape is sustained through the use of science, innovative thinking, traditional aboriginal and community knowledge, recognizing the interests of all Albertans.

The South Saskatchewan Region has a diverse economy, with sectors including agriculture, energy production, manufacturing, forestry, tourism and recreation. It is one of the most populated regions in the province, containing approximately 45 per cent of Alberta's population, as well as the province's largest city, Calgary. The City of Calgary is home to a number of growing industries, including energy (conventional oil and gas as well as renewable energy), financial services, information and cultural industries, and transportation.



The region has consistently been a strong economic driver. Between 2000 and 2010, the economy grew by more than 28 per cent, the number of workers in the region grew by 29 per cent, and the population climbed by more than 28 per cent. As of March 31, 2013, more than 280 new projects are proposed or under construction, including over 30 projects in the agriculture, energy, forestry and tourism sectors worth more than \$21 billion dollars.

Effective management of water and watersheds will be critical to achieving a diverse, healthy, vibrant and prosperous region. The economy of southern Alberta will continue to rely on having secure water resources, as water is essential for human needs and ecosystem health, and directly supports quality of life. The effective management of biodiversity and sustainability of ecosystem health are also essential. While water will continue to be a centrepiece for the future of the region, entire watersheds must be managed through a cumulative effects management approach. This approach recognizes that airsheds, watersheds and landscapes have limited carrying capacity, and that air, water, land and biodiversity are all intimately connected.

It is also critical that Alberta attracts and retains a skilled workforce required to support the economic outcomes. By working together, governments and industry can go further to ensure the quality of life in the region meets the expectations of its residents. To support achieving this, deliberate steps must be taken to enhance recreation opportunities in the region.

Infrastructure to support economic development and sustainable communities also needs to be considered. In order to maximize the potential of the region, a new systematic and holistic way of looking at the impacts of development is required.

The successful development of a thriving community requires active volunteerism and a strong non-profit sector, solid partnerships and sharing of responsibility among the Government of Alberta, the private sector, community organizations, other government agencies and the general public.

Optimizing our human potential means cultivating Albertans' knowledge and skills throughout their lives and developing, attracting and retaining the talented workforce our economy demands. Government will provide strategic direction to align our post-secondary education system with the needs of students, entrepreneurs, business and communities, and continue to attract and retain talented workers.



How We Will Achieve the Vision

Successfully achieving the regional vision requires new and improved approaches and tools for managing our lands and natural resources. These shifts are already underway, as shown by major Government of Alberta policy frameworks and strategies including the Provincial Energy Strategy; Water for Life; Clearing the Air: Alberta's Renewed Clean Air Strategy; and the Plan for Parks. The SSRP translates these to the regional context and builds on them by setting out strategic directions that will support achievement of the vision and outcomes.

Strategic Directions for the Region

Strategic directions include:

- Conserving and maintaining the benefits of biodiversity;
- Advancing conservation and integrated management of Crown land;
- Supporting and enabling stewardship and conservation on private lands;
- Advancing watershed management;
- Managing air quality through continued collaboration;
- Strengthening communities;
- Providing recreation and tourism opportunities, active living and the preservation and promotion of the region's unique cultural and natural heritage; and
- Inclusion of aboriginal peoples in land-use planning.

The South Saskatchewan Region has a long history of strong economic growth, largely in the agriculture and oil and gas sectors, but with support from forestry, mining and tourism. It is expected that this trend will continue. The region's major cities are home to a range of education, business and financial services, as well as other industries that continue to contribute significant benefits to people living in the region and the rest of Alberta.

Economic growth is the key to future prosperity in the region, and a strong investment climate will allow for a productive and responsive economy. To support this, the Government of Alberta will enable a competitive marketplace through support for innovation, education, infrastructure, and efficient and effective regulation. Enhancing these factors will allow the region to diversify and develop employment opportunities across industry sectors.

The maintenance and enhancement of the region's natural resources is the platform for continued economic growth and success, which brings with it tremendous benefits to people in the region, the rest of Alberta and Canada.



The Government of Alberta will continue implementation of:

- Focusing on What Matters, the final report of the Red Tape Reduction Task Force;
- The Building and Educating Tomorrow's Workforce Strategy to develop the knowledge and skills of Albertans, attract and retain workers in our labour market, and improve workplace productivity;
- Energizing Investment: A Framework to Improve Alberta's Natural Gas and Conventional Competitiveness, which positions the province as one of the most competitive destinations for energy investment; and
- Enhancing Assurance: Report and Recommendations of the Regulatory Enhancement Task Force to the Minister of Energy to create an energy regulatory system that provides clarity, predictability, certainty and efficiency for Alberta's energy industry.
- The Property Rights Advocate Office.

Conserving and Maintaining the Benefits of Biodiversity

Understanding the complexity of biodiversity and functioning ecosystems across the different landscapes of the region is a challenge. The benefits we receive from biodiversity and healthy functioning ecosystems are critical components to the ongoing prosperity of all Albertans. However, these natural features are sensitive to the impacts of human development. Biological responses to human-caused changes on the landscape are complex and difficult to predict, monitor, and respond to. Alberta's historic development and more recent, rapid growth is impacting the province's natural biodiversity assets and ecosystems. The Government of Alberta is committed to using an integrated approach to address these changes and to manage the impacts of multiple land-use demands and pressures.

Objectives will be established for biodiversity in the region, and an appropriate suite of biodiversity indicators that can be measured to assess if those objectives are being achieved will be identified. This will be done under this regional plan through development of a biodiversity management framework. A secondary intent of the management framework will be to support assessment of the health of ecosystems and the ecosystem services they provide.

Cumulative effects are considered to be the combined effects of past, present and reasonably foreseeable future land-use activities on the environment. Although past cumulative effects are considered it is not the intention of the biodiversity management framework to return Alberta to the levels of biodiversity found prior to European settlement. Today's Alberta includes working landscapes, and the Land-use Framework acknowledges the need to balance environmental, social and economic considerations. The focus of the framework is from today into the future, where information from modeled predictions of the past conditions could inform decision-making about desired future conditions.



Linked to the maintenance of biodiversity is the conservation of landscapes. Conserving a range of landscape types representative of Alberta's natural diversity provides for habitat that will support and maintain species and other aspects of biological diversity that depend on these landscapes.

Alberta's Natural Regions Landscape Classification Framework identifies natural landscapes found in the province. Targets are in place for all natural landscape types within each of the province's six Natural Regions and 21 Natural Sub-regions (see Appendix C – Alberta's Natural Sub-regions).

Connectivity of wildlife habitat across landscapes is also an important factor in maintaining biodiversity. The southeast area of the region provides important connections for wildlife movement between Alberta, Montana and Saskatchewan. Additionally the southern Rocky Mountain areas are critical to the long-term survival of grizzly bears, wolverines and lynx which require habitat connectivity from Montana north and through Kananaskis.

Achieving the objectives for biodiversity, functioning ecosystems and natural landscapes will require a full range of management approaches and tools in order to address the complex mix of public lands and private land and how they can contribute to those objectives. This means further advancing conservation and integrated management of Crown land, and supporting and enabling voluntary stewardship and conservation on private land.

Advancing Conservation and Integrated Management of Crown Land

Conservation Areas

Conservation areas support the achievement of environmental objectives – especially those for biodiversity – by maintaining ecological systems and processes for biodiversity. They also provide benchmark areas for assessing ecological integrity.

In the eastern slopes, protection of headwaters and water security is a management priority. Key areas focusing on the prime protection zone described in the Eastern Slopes Policy, with sensitive upper headwaters, will be legislatively protected as Wildland provincial parks and will support watershed management values, maintain healthy ecosystems and conserve important habitats (e.g., grizzly bear recovery).

The Castle area borders Waterton National Park and is located within the Crown of the Continent (the area of the Rocky Mountains where Alberta, British Columbia and Montana meet) and is valued for its diverse ecosystems. A variety of conservation management approaches will be used in this area. A Wildland Provincial Park will be established for the prime protection zone. A Public Land Use Zone for conservation purposes will be established under the *Public Lands Act* in the adjacent lower valley areas of the Castle, to be referred to as the Castle Conservation Area. The management intent of these areas will be maintaining biodiversity and headwaters protection. Forestry practices which support this management

Conservation Areas

Definition:

A clearly defined geographical space dedicated and managed to achieve the long-term conservation of biological diversity and ecosystem process.

Management Intent:

Legally protect areas that are relatively undisturbed. They retain their natural character and influence and are areas for measuring ecological performance in relation to human development.

Key Criteria for Conservation Areas

- Areas with little to no industrial activity;
- Areas that support aboriginal traditional uses;
- Areas that are representative of the biological diversity of the area (e.g., landforms, species, vegetation); and
- Areas of sufficient size.



intent will be permitted in the Castle Conservation Area. Enhanced forestry practices may include winter only operations, restricted access, and enhanced buffer zones on riparian areas. Conservation of this area secures an important connection between the Alberta provincial parks system to the north, the British Columbia parks system to the west and Waterton-Glacier International Park to the south.

Currently, approximately 22 per cent of the region's eastern slopes are protected as provincial conservation areas. The new and expanded conservation areas add an additional 11 per cent – to a total of more than 33 per cent of the eastern slopes in the region to be managed as conservation areas (see Schedule C – SSRP Land Uses).

A new conservation area will be established in the Pekisko area on public lands to preserve and protect the natural features representative of Alberta's prairies, using grazing to maintain the grassland ecology. It will offer opportunities to provide important habitat and support maintenance of healthy ecosystems. Not only will the establishment of the Pekisko Heritage Rangeland double the legislative protection of the Foothills Parkland Sub-region from 42 per cent to 84 per cent of the target (that is, Foothills Parkland Sub-region - See Appendix C - Alberta's Natural Sub-region) it also responds to concerns about competing land-use impacts on important rangelands in the area and recognizes efforts of local stakeholders. Opportunities for further conservation management approaches will be explored with stakeholders in areas of grasslands where there are significant gaps in protection for grasslands Natural Sub-regions, and where there is important habitat.

Conservation areas will be managed to minimize or prevent new land disturbance. This means the land disturbance associated with oil and gas, mining, cultivated agriculture and commercial forestry operations are not considered compatible with the management intent of conservation areas. However, those with freehold rights will not be subject to this restriction. Existing grazing activities will continue as carefully managed cattle grazing and traditional ranching practices on long-term grazing leases continue to contribute to the ecological health of large tracts of the remaining native grasslands.

Petroleum and natural gas tenure will be honoured, consistent with current policy. The Government of Alberta will work cooperatively with companies that have existing commitments to ensure surface access impacts are minimized while still honouring commitments. New petroleum and natural gas tenure sold in a conservation area will include a restriction that prohibits surface access.

Conservation areas will be managed to provide low-impact backcountry recreation opportunities and nature-based tourism products and services. Recreational leases will be considered based on the management intent of conservation areas, and existing recreational leases will be honoured.



Hunting, fishing and trapping (including by aboriginal peoples) will continue in accordance with existing provincial laws governing such activities as such laws may be amended or replaced from time to time. Hunting includes commercial guiding and outfitting operations where wildlife species management plans provide an allocation for that use. The reduction in land disturbance is expected to enhance opportunities for these activities.

Where it is permitted off-highway vehicle use in Wildland Provincial Parks and the Castle Conservation Area will be managed to designated trails and areas to mitigate potential impacts to biodiversity associated with random motorized access. The Government of Alberta will engage with First Nations and stakeholders on initiatives to designate motorized access such as identification of trails or areas when developing the regional trail system plan.

Off-highway vehicle use is permitted on existing trails and areas or where a management plan, trails plan or regulation specifies. In areas where designation of trails has not yet occurred, use of existing access can continue, but no new trails or routes or access may be developed without an access management plan. No motorized access is permitted in wetlands and water courses. Off-highway vehicle use will continue to be prohibited in the beds and shores of permanent water bodies.

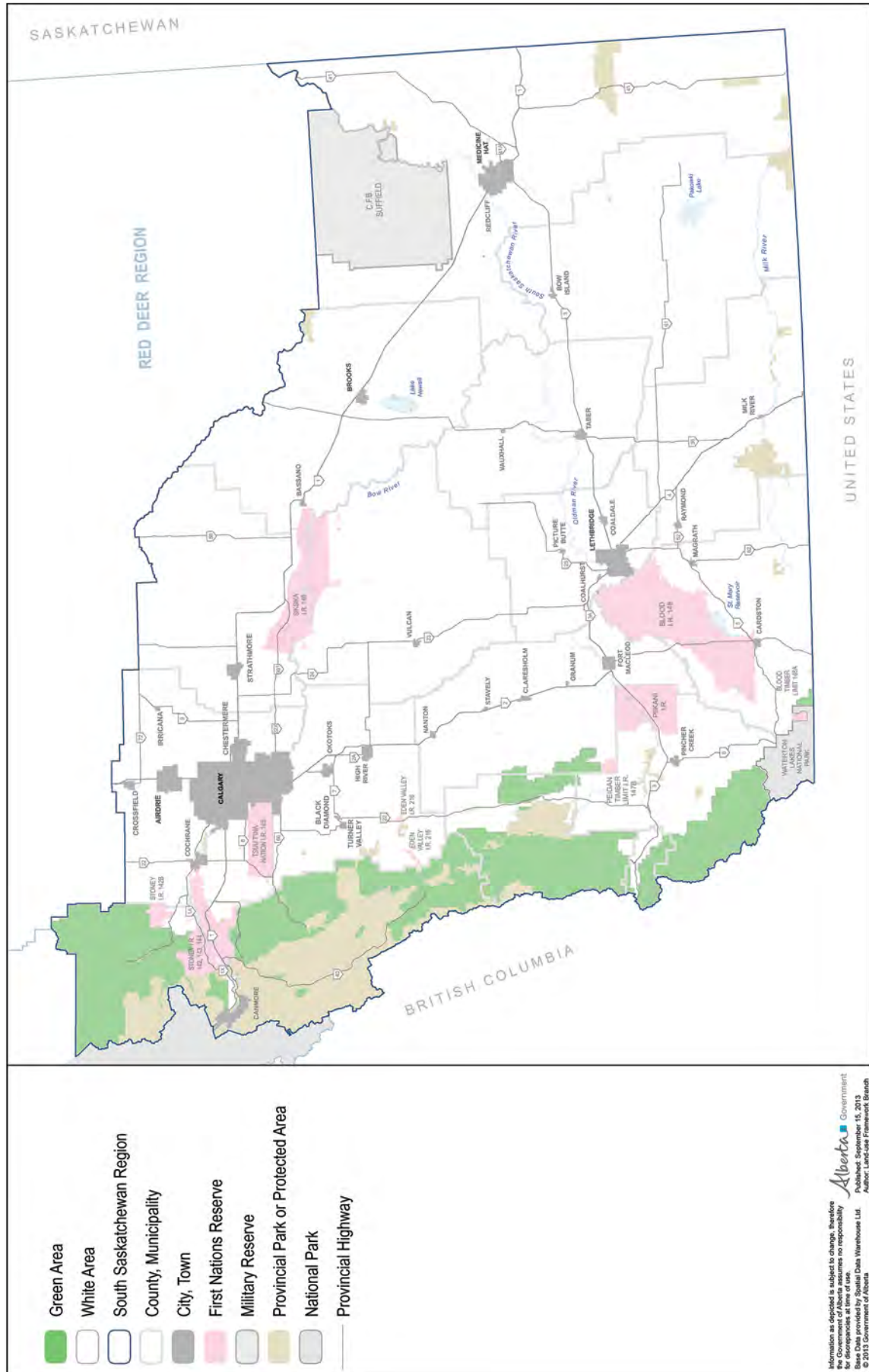
Eastern Slopes – Green Area Public Land

In the Green Area, public land is managed for timber production, watershed, resource development, wildlife and fisheries, recreation and other uses. Agricultural use is limited to grazing where it is compatible with other uses. Grazing on public land in the Rocky Mountain Forest Reserve (headwaters of the North and South Saskatchewan rivers) is administered under the *Forest Reserves Act*. The remainder of grazing in the Green Area is administered under the *Public Lands Act*.

Significant portions of the Green Area public lands are experiencing cumulative impacts on land, headwaters, watersheds, native fisheries, and important habitat that supports grizzly bear recovery and other aspects of biodiversity due to industrial development, recreation and other uses that increase linear footprint. Objectives for biodiversity and healthy ecosystem function will be incorporated as part of multiple objectives for the Green Area. A specific focus is on grizzly bear recovery – the priority species at risk in this portion of the region. A combination of approaches will be used to achieve the objectives and address cumulative impacts on the landscape.

There will be enhanced management of human footprint. Linear footprint disturbance will be minimized through linear footprint management planning with an initial focus on key headwater areas and core grizzly bear habitat areas. In conjunction with this, there will also be accelerated recreation planning in priority areas to address needs for access to recreational opportunities. A focus will be to collaboratively develop an integrated trail system, appropriate access and staging opportunities and a range of facilities to meet the range of needs and desires for recreational experiences. Existing

South Saskatchewan: Green and White Areas



access management plans will be expanded upon and stakeholder work used to support comprehensive and integrated recreation and access management planning. North Castle, Porcupine Hills, Livingstone and Willow Creek areas have been identified as priority locations for creating comprehensive and integrated recreation and access management plans.

There are a number of Integrated Resource Plans, a number of Public Land Use Zones, surface requirements under the *Public Lands Act*; subsurface restrictions on sales of mineral rights; and voluntary practices such as Integrated Land Management to support minimizing human footprint. An integrated planning approach is needed to meet multiple objectives and help reduce conflicts between various users.

The existing Integrated Resource Plans will be reviewed and incorporated as appropriate under the implementation strategies of this regional plan or future sub-regional or issues specific plans developed within the region. Public Land Use Zones (PLUZ) will be consolidated and expanded to provide the ability to more effectively manage public land across the Green Area and address priority issues such as protection of watercourses and sensitive areas. Existing surface and subsurface requirements will be assessed to ensure clarity and consistency and alignment with the direction of the regional plan.

Grasslands – White Area Public Land

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, resource development and fish and wildlife habitat. Some parts of the province have large tracts of public land while other parts have very few scattered parcels. Most of the public land in the White Area is under disposition or is otherwise committed. The unique aspect of the White Area in this region is that these lands contain native prairie which are grasslands with high ecological value for biodiversity and watershed protection. These lands are habitat for the majority of species currently designated at risk in Alberta. While the management intent for agriculture and infrastructure on these lands will not change, there will be additional clarification regarding multiple uses of the White Area public land, which is maintaining intact native grasslands and habitat as a high priority.

Existing grazing activities will continue as carefully managed cattle grazing and traditional ranching practices on long-term grazing leases contribute to the ecological health of large tracts of the continent's finest remaining native grasslands. A combination of approaches will be used to achieve the objectives and address cumulative impacts on the landscape. There will be enhanced management of linear footprint. Linear footprint disturbance will be minimized through linear footprint management planning in the White Area public land with an initial focus on the southeast corner of the region. This will be coordinated with other initiatives in the area including conservation offset pilots and species at risk conservation programs. Existing surface and subsurface requirements will be assessed to ensure clarity, consistency



and alignment with the direction of the regional plan. Conversion of native grasslands to other uses such as cultivation-based agriculture, tame pasture or facility developments will be minimized. Opportunities for further conservation in the future will be explored working with key stakeholders and the public. Through these collaborative efforts, gaps in the Grassland Natural Region under Alberta's Natural Region Landscape Classification Framework may be filled.

Partnerships

The Government of Alberta values and wants to strengthen the support and contributions it receives from partners in maintaining biodiversity on public land. Collaborative stewardship with many organizations such as grazing associations, conservation organizations, watershed planning and advisory councils, watershed stewardship groups, invasive plant management working groups and other local organizations and stewardship groups, as well as responsible individual users of provincial crown lands all contribute to maintaining the region's rich biodiversity.

The management of provincial Crown lands in the South Saskatchewan Region also includes stewardship efforts to protect historic resource values. Integrated decision-making related to the environment and historic resources will support achievement of mutually supportive environmental and cultural outcomes.

Supporting and Enabling Stewardship and Conservation for Private Lands

Alberta farmers and ranchers have a strong tradition of land stewardship and conservation – whether working alone, or in partnership with the Government of Alberta, local authorities, producer groups, watershed stewardship groups, conservation groups and various land trust organizations. The landscapes many Albertans value today are a result of their efforts.

However, Alberta's landscapes and the ecosystem services they provide are being strained from a combination of pressures such as population growth, climate change and industrial development which are impacting limited ecosystem resources. In addition, farmers and ranchers and their communities are dependent on the economic returns they earn from the land. Therefore, as part of a provincial approach for management of ecosystem services, new methods and strategies must be explored and developed to encourage the provision of a broad suite of ecosystem services by private landowners. These approaches may include voluntary opportunities that not only recognize the value of current contributions, but which explore opportunities that reward additional stewardship efforts by private landowners in the region. The Government of Alberta is committed to the exploration and facilitation of economic tools, such as financial incentives, as well as the development of market-based instruments for ecosystem services that are voluntary in nature and which provide business opportunities for private landowners.



The biodiversity management framework for the region will identify objectives and some key indicators related to grasslands which could be a focus for voluntary private land conservation efforts. The framework will also provide guidance to the Land Trust Grant Program which contributes to private land conservation by providing grants to land trust organizations for purchase of conservation easements and the administration and management of new conservation projects on private land.

Advancing Watershed Management

Southern Alberta has rich and varied landscapes with water playing an essential role across the region. The complex relationship between the water, the land and all those that live on it has been recognized and our collective knowledge, understanding and appreciation of this complexity has grown and improved significantly over time. With increasing pressures and demands, we must continue to advance an integrated view across water supply, water quality and aquatic ecosystems in the region. The province's existing system for management of water and watersheds will continue to be the foundation we work from, with enhancements made to support that integration. The 2013 water conversations will inform provincial policy on water and watersheds and will result in enhanced water management in this region.

To the west in the region, the eastern slopes of the Rocky Mountains provide the major headwaters for the region and more than 75 per cent of the region's water supplies. Recognizing the priority for headwaters management and protection, for both water supply and water quality, is a key element of this regional plan.

To the east and the south, southern Alberta must continue to meet its transboundary obligations under the Master Agreement on Apportionment and the Boundary Waters Treaty. Both of these transboundary water management agreements were developed in a spirit of cooperation which is the basis of our relationships with our neighbours.

It is important to continue to use collaborative approaches, and to maintain and build partnerships in the region. A key partnership under Water for Life strategy is with the watershed planning and advisory councils. These councils have demonstrated leadership in their contributions to watershed assessment and planning in the region, and the Government of Alberta is committed to enhancing its relationship with them.

The Approved Water Management Plan for the South Saskatchewan River Basin continues to provide important guidance for water management in the region. It establishes the limit of the water resource for the Bow, Oldman and South Saskatchewan River sub-basins; recommends an interim limit of the water resource for the Red Deer River sub-basin; and establishes water conservation objectives for instream flow. The Milk River does not currently have an approved water management plan, but the international



Boundary Waters Treaty has a significant influence on this basin through the identification of how the available water must be shared for both the Milk River and the St. Mary River in Montana.

Matching water supply and demand is a key challenge throughout the South Saskatchewan Region. Continued population growth and economic development will depend on using the existing water allocations as efficiently and effectively as possible. Alberta's Water for Life strategy has established a provincial target of 30 per cent improvement in water use efficiency and productivity by 2015, based on 2005 levels. This target will continue to be pursued in the region through implementation of water conservation, efficiency and productivity plans development by the seven major water-using sectors.

Significant investment in water management infrastructure has been made in the region. It is important that this investment continue to be protected so it can continue to provide a range of economic, environmental and social benefits into the future. On-and-off-stream storage that is part of the public infrastructure is one of the management tools that can contribute to the goals of conservation, productivity and efficiency. In addition, although existing storage infrastructure is not designed for flood attenuation, there can be some capacity for dampening the severity when managed for this intent.

Compounding the challenge of matching water supply and demand in the region are other factors that will alter the amount of available water in the future, such as climatic conditions. Planning to support climate change adaptation, and ensure preparedness for drought management and flood response are all essential to ensuring the region can be resilient and adapt to changing conditions over time.

Appropriate flood management contributes to long-term community sustainability and resiliency. Mitigating impacts from flooding reduces risk to public safety, developments and infrastructure, provides environmental benefits and results in savings in tax dollars for post-flood recovery costs. This can be achieved through enhancements to the existing flood management systems used by both the Government of Alberta and municipalities. This includes improved development practices and use of flood management tools and infrastructure, and by making better land-use decisions in flood hazard areas.

Currently water quality is managed in the region based on provincial policy, legislation and regulations, including ambient water quality guidelines and the use of beneficial management practices by landowners. The emphasis has been on ensuring effective regulation of point-source discharges. Under this regional plan, a management framework for surface water quality for the main stems of the Bow, Milk, Oldman and South Saskatchewan rivers will be implemented to add to and complement, not replace or duplicate the existing policies, legislation, regulations and management tools. This new approach will support management of the cumulative effects of all development.



The framework is a proactive and dynamic management approach that will help ensure negative trends are identified and assessed, regional limits are not exceeded and the environment remains healthy for the region's residents and ecosystems. Management responses provide opportunities for collaborative work with governments and stakeholders in the region to find options and solutions. Understanding and managing non-point sources using a combination of both non-regulatory and regulatory tools will be important to achieving water quality objectives in this region. The watershed planning and advisory councils and associated stewardship groups will be key contributors to implementation of the framework.

Groundwater is important in some local areas in the region and they are experiencing increasing pressure within those basins that have water allocation restrictions. Priority areas for groundwater management are being confirmed. A knowledge base is needed prior to selecting the most appropriate groundwater management approach to ensure groundwater quantity and quality are sustained.

The use of hydraulic fracturing is not new in Alberta. Currently oil and natural gas developments using hydraulic fracturing are regulated under the same regulatory framework as other oil and gas projects in the province. In recent years, advances in hydraulic fracturing technology have made it economical to produce oil and natural gas resources from formations which were previously unsuitable for development and this has introduced a new pressure on surface and groundwater in the region.

In addition to water supply and the water quality, the Government of Alberta is looking at aquatic ecosystems including management needs for riparian lands, wetlands and watersheds. Cumulative impacts from agriculture, resource development, tourism and recreation, forestry, wildfire and urban development affect water supplies, water quality, aquatic ecosystems and wildlife habitat. The environmentally significant areas assessment and mapping provides information on areas that significantly contribute to maintaining healthy aquatic ecosystems.

Riparian lands are important as they are highly productive, rich and resilient parts of the landscape. The Alberta Water Council is currently leading a collaborative initiative with the purpose of enhancing knowledge and providing recommendations for effective conservation and management of riparian land in support of goals in Water for Life. The Government of Alberta will consider the recommendations when this work is completed. Existing initiatives such as the Alberta Riparian Habitat Management Society program (better known as "Cows and Fish") highlight the stewardship commitment and positive contributions of landowners to riparian health. The continued implementation of voluntary approaches such as Stepping Back from the Water provide practices intended to assist local authorities and watershed groups with policy creation, decision-making and watershed management relative to structural development near water bodies.



Renewed Clean Air Strategy

Clearing the Air: Alberta's Renewed Clean Air Strategy articulates a shared Government of Alberta commitment to enhancing Alberta's air quality management. It is an expression of the Integrated Resource Management System and sets the Government of Alberta's focused agenda for air.

The strategy's goals are to assure that:

- the well-being of Albertans is supported by effective air quality management;
- air quality will maintain, protect and sustain healthy ecosystems; and
- air quality management will continue to support economic sustainability.

The four key areas for enhancements are:

1. regional air management including complementary management of point and non-point emission sources;
2. shared responsibility and partnerships;
3. integrated monitoring, evaluation and reporting; and
4. knowledge enhancement.



Wetlands are highly diverse and complex ecosystems and have long been recognized for the contributions they make to human and ecosystem health. They provide benefits including resiliency to drought and flood conditions, water purification, groundwater recharge, and recreational opportunities, and they are centres of high biodiversity. In southern Alberta approximately 64 per cent of wetlands have disappeared since the beginning of settlement. The Government of Alberta has approved the Alberta Wetland Policy which will replace the current interim wetland policy, Wetland Management in the Settled Area of Alberta – An Interim Policy, as it is implemented. Implementation of the Alberta Wetland Policy will take into consideration the regional context including the past and current pressures on these areas. The Government of Alberta is also committed to increasing knowledge and mapping of wetlands, including standardizing and updating the existing wetland inventory and working with partners where appropriate.

Aquatic invasive species are of concern for maintaining healthy aquatic ecosystems. The current focus is on preventing the establishment of the three most noxious aquatic invasive species: zebra mussels, quagga mussels and Eurasian water-milfoil. In addition to aquatic ecosystem impacts, there are high economic costs associated with affected water infrastructure. The Government of Alberta is committed to continued prevention and control work with multi-jurisdictional organizations such as the Crown Managers Partnership (Crown of the Continent).

Managing Air Quality through Continued Collaboration

The Renewed Clean Air Strategy enhances the existing provincial air quality management system by incorporating direction from the national Air Quality Management System. Alberta has endorsed the national Air Quality Management System as a comprehensive approach for improving air quality in Canada. It is the product of unprecedented collaboration by the federal, provincial and territorial governments and stakeholders.

Collaborative approaches through the Clean Air Strategic Alliance (CASA) and local airshed groups have been important in the province and the region for effective air quality management. As the national Air Quality Management System continues to be implemented in Alberta, it is important to continue to support and maintain effective partnerships and collaborative approaches in the region.

Currently, air quality is managed in the region based on provincial policy, legislation and regulations including ambient air quality objectives. The emphasis has been on ensuring effective regulation of point source emissions. A management framework for air quality will be implemented to add to and complement, not replace or duplicate, the existing policies, legislation, regulations and management tools. The new approach will support management of the cumulative effects of all development.

The framework is a proactive and dynamic management approach that will help ensure negative trends are identified and assessed, regional limits are not exceeded and the environment remains healthy for the region's residents and ecosystems. Management responses provide opportunities for collaborative work with government and stakeholders in the region to find options and solutions. Understanding and managing non-point sources using a combination of both non-regulatory and regulatory tools will be important to achieving air quality objectives in this region. It is expected that local airshed groups in the region will be contributors to implementation of the air quality framework in the region.

While the management framework deals with key substances of concern in the region, there are also some air quality issues in the region that are more localized in nature. Regulatory requirements will continue to be applied to ensure protection of human and ecosystem health. There will also be a need to use collaborative approaches to find solutions to some of the issues.

Specific to rural areas of the South Saskatchewan Region, local air issues are often associated with odour and dust from confined feeding operations (CFOs) and cultivated fields. The agricultural industry, as well as all levels of government, continues to collaborate on achieving effective air quality management in the region. There are regulations in place to deal with the management of manure and odour-related issues. Research continues to inform baselines and identify beneficial management practices. The implementation of many beneficial agricultural management practices has contributed to the reduction in ammonia emissions from CFOs and dust from cultivated fields.

Strengthening Communities

Alberta's success starts at the community level, those places Albertans call home. Communities are where life happens. The projected population growth in the South Saskatchewan Region, particularly in the urban centres will require thoughtful and intentional management of the landscape. There is a need to explore ways to engage communities that will help improve collaboration and processes for decisions that make wise use of land, air and water. To effectively address the challenges that increased future growth will bring to the South Saskatchewan Region, all decision-makers will require collaboration with stakeholders in order to achieve the regional outcomes.

Land-use planning is both a municipal and provincial activity. The province's responsibility, with certain exceptions, extends to managing air, water, and renewable and non-renewable natural and historic resources. Provincial legislation, policies and programs for land-use planning and resource management can affect municipal interests. Conversely, municipal decisions and actions affecting land-use and development can impact the success of provincial objectives designed for the benefit of all Albertans. It is therefore important that municipal and provincial planning efforts pursue a high level of collaboration, coordination and integration. This cooperation extends to

The National Air Quality Management System

The national Air Quality Management System includes:

- new Canadian Ambient Air Quality Standards for fine particulate matter and ground-level ozone;
- industrial emission requirements that set a base level of performance for major industries in Canada;
- a framework for air zone management within provinces and territories that enables action tailored to specific sources of air emissions in a given area;
- regional airsheds that facilitate coordinated action where air pollution crosses a border; and
- improved intergovernmental collaboration to reduce emissions from the transportation sector.



providing infrastructure linked to land use, such as transportation networks, municipal services, recreation, leisure and cultural facilities, and other institutional uses.

The Government of Alberta is committed to continuing to encourage and promote this collaborative approach in the South Saskatchewan Region. The Calgary Regional Partnership is an example of a voluntary partnership consisting of municipalities in the Calgary region working together to address issues of a regional nature in the Calgary Metropolitan area. In June 2012, the partnership submitted the Calgary Metropolitan Plan (CMP) to the Government of Alberta for approval. The Government of Alberta, upon reviewing the CMP, reinforced the importance of the participation of all municipalities (rural and urban) within the Calgary Metropolitan Region and therefore directed a process to do so. Other inter-municipal initiatives include inter-municipal development plans, regional services commissions, irrigation districts and watershed planning and advisory councils, to name a few.

Municipalities are considered to be in the forefront of building strong and sustainable communities. The Government of Alberta is committed to providing policy direction that:

- encourages communication, cooperation and collaboration for collective impact;
- gives people a sense of belonging through shared values;
- promotes participation and mutual responsibility;
- leverages resources from both inside and outside the community;
- fosters a stable, innovative local economy that provides employment opportunities and generates wealth; and
- protects and effectively manages the local environment.

In supporting the regional outcomes, municipal decisions in the region should aim to:

- make efficient use of land, infrastructure, public services and public facilities to establish land-use patterns that influence human activity, facilitate health and well-being, and promote social interaction and inclusion;
- promote resource conservation;
- protect, enhance and promote the historic and cultural integrity of an area;
- enhance economic development activities;
- minimize environmental impacts on land, air and water;
- protect significant natural environments;
- contribute to the development of healthy, safe and viable communities; and
- contribute to a safe, efficient and cost-effective provincial transportation network.



The cumulative footprint of communities will continue to grow to accommodate population increases as well as economic growth. There are many ways to use land efficiently; all require foresight, creativity and good planning. Ultimately the goal is the efficient and economical use of land by implementing the principles of best practice for planning, managing and minimizing the impacts of land-use on the environment and reducing the extent of the built environment, while utilizing our energy and natural resources wisely.

Regional planning is aimed at guiding and directing land-use decisions in Alberta, and the Government of Alberta recognizes there is a link between how land is used and the achievement of desired social and community outcomes. The Government of Alberta's Social Policy Framework includes two key outcomes that the South Saskatchewan Regional Plan (SSRP) will help to achieve: "Albertans are healthy," and "Albertans are active and engaged."²²

The air and surface water quality frameworks for the South Saskatchewan Region add to the province's existing environmental management system and will contribute to safeguarding the health of Albertans by helping to maintain air and water quality. In addition, by encouraging municipalities to coordinate land-use planning activities with health authorities on areas of mutual interest, SSRP will contribute to the provision of health care services in local communities.

New and expanded outdoor recreational spaces and conservation areas on public lands provide places for Albertans to actively participate in recreational activities and cultural experiences such as camping, hiking, bird-watching, berry picking, hunting, fishing and outdoor photography. Municipalities are encouraged to work with the Government of Alberta and other partners on planning for future infrastructure needs, including accessible recreational spaces, and on identifying and preserving significant historical resources. This will help provide Albertans with new opportunities for rich cultural experiences and new ways to become active and engaged members of their communities.

Providing Recreation and Tourism Opportunities

Recreational opportunities are important for residents and visitors and provide areas for people to visit, play and enjoy the natural beauty of Alberta. Providing access to nature is essential for the physical and emotional health of children and adults, and nature-based recreation activities promote the appreciation of natural and cultural features. Increasing recreational opportunities throughout the region by enhancing recreational and outdoor spaces will increase quality of life and active living.

²² Alberta's Social Policy Framework, February 2013



Areas on Crown land have been identified that provide diverse, safe, sustainable and enjoyable outdoor recreation opportunities that contribute to healthy lifestyles and a diversity of recreational opportunities. These areas consist of a combination of physical, biological, cultural, constructed and/or geographical factors that can provide recreation and tourism opportunities. These areas are intended to provide quality recreational experiences, attract tourism investment and provide security of land tenure for private and not-for-profit investment. Work will continue to occur with municipalities, recreational communities and other key stakeholders, such as industry, to better manage the recreational pressures and activities in these areas.

Existing recreational opportunities in the region were developed for a much smaller population and do not meet the full range of recreational experiences of today's growing population. The long-term vision is to establish new and expanded recreational areas (see Appendix D – Overview of New Conservation and Recreation and Parks Areas in the South Saskatchewan).

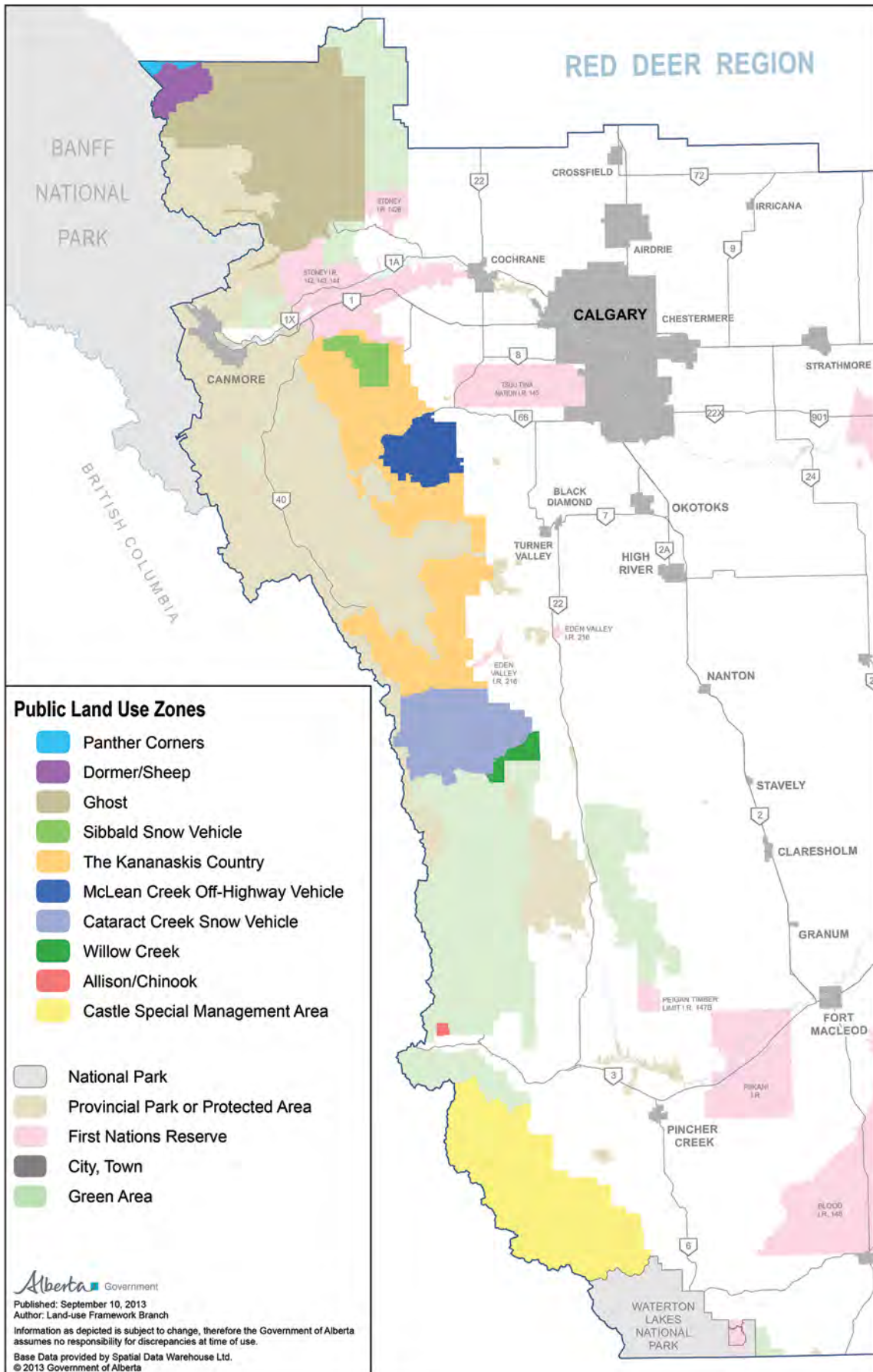
Over the next several decades, to meet growing demands, the focus will be on managing existing recreational areas and access management. Additional camping opportunities will be developed and key recreational areas will be enhanced through facilities re-investment. The flood of 2013 damaged a number of recreational areas in Kananaskis Country and along the Bow River. These areas will be reassessed and where appropriate re-developed to support recreational demand. Development and investment in recreational opportunities will occur over the next several decades as demand grows.

For many areas of Crown land, there are existing access management plans (e.g. Ghost Waiparous and Castle areas). These plans will be expanded upon and the work that stakeholders have already done will be used to support comprehensive and integrated recreational land access management planning. This will contribute to ensuring these areas are available for Albertans now and in the future, and there is a range of quality recreational experiences and nature-based recreation and tourism opportunities through the creation of a sustainable recreational access system. The access system should be sensitive to the environment and work to mitigate potential impacts to biodiversity associated with the multitude of land-use demands including recreation activities.

North Castle, Porcupine Hills, Livingstone and Willow Creek areas have been identified as priority locations for creating comprehensive and integrated recreation and access management plans. Areas will be managed to minimize impact of activities such as dumping of garbage and random campfires. To ensure these areas meet the preferences, diversity and expectations of residents and visitors, infrastructure enhancements will be needed, such as camping, staging areas, trail systems, and access to and within recreation and tourism areas.

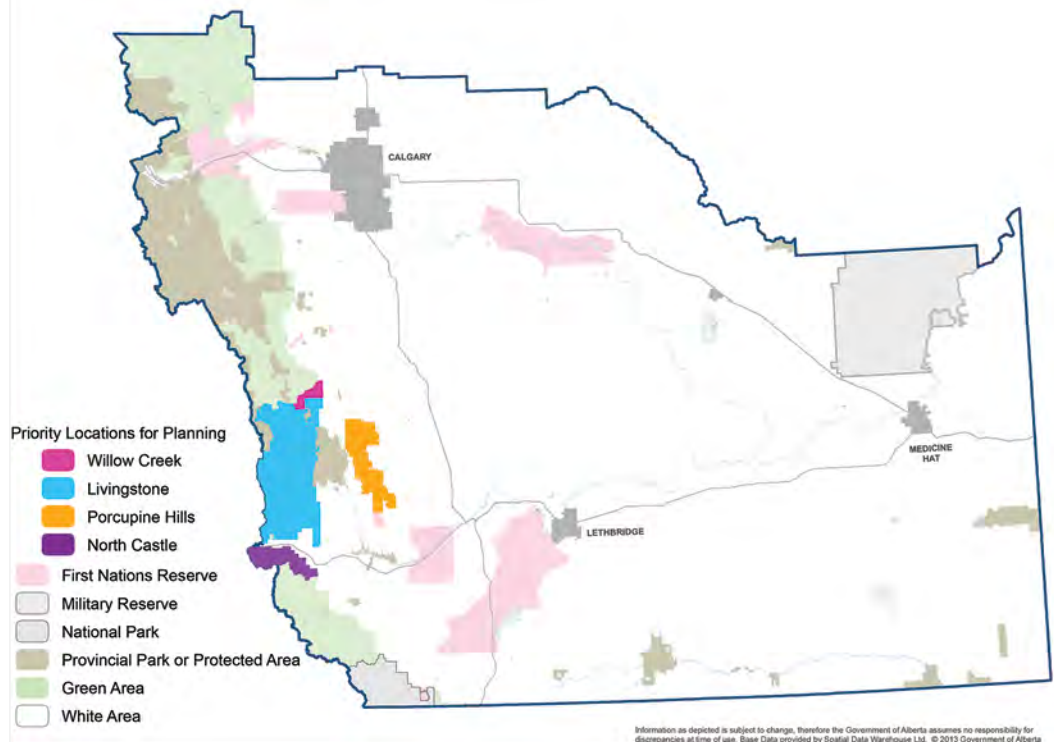


South Saskatchewan: Public Land Use Zones





South Saskatchewan: Priority Locations for Planning



Continued formalization of motorized and non-motorized trails with improvement to existing trails and development where needed will occur collaboratively. Planning for new tourism development such as recreation trails and associated amenities needs to address environmental concerns, in particular near watercourses, wetlands, and lakes with sensitive fisheries vulnerable to increased human access. Trails in sensitive source water or ecological areas will be assessed and may be relocated, closed or reclaimed. Designated staging areas will also play a role in the management of public lands and waters to enhance the recreation experience for users.

The Government of Alberta aims to provide a diversity of outdoor recreation and nature-based tourism opportunities for Albertans. Clustering use, improving safety for diverse users, reducing environmental damage and connecting to the surrounding designated trail system are important considerations. Some of the recreational activities that will be provided include serviced and unserviced campgrounds, day-use areas, boat launches, motorized and non-motorized staging areas, designated motorized, non-motorized and mixed-use trails, and special event and tourism opportunities. More specifically, the design of these camping areas will be in the spirit of coming together with family and friends in a natural setting. Intensively developed vehicle (motorized) access camping and day-use facilities will be expanded while keeping in mind the need to maintain the esthetics of the area and quality recreation and tourism experiences. Enhancements may need to occur across the region to help modernize existing facilities to better accommodate and manage increasing demands and changing expectations of visitors.



New Public Land Recreation Areas will be established in the eastern slopes to support random camping and access to trails. These sites are highly popular areas of random camping on public lands. They will be developed to include basic amenities such as fire rings and gravel pad and no fees will be charged. A Guardian program will be established to provide outreach and education. A program will be established to provide “on the ground” outreach and education regarding responsible use of public lands.

The recreation and parks areas will be managed to minimize industrial land disturbance and ensure quality recreation experiences. Petroleum and natural gas tenure will be honoured, consistent with existing policy. The Government of Alberta will work cooperatively with companies that have existing commitments to ensure surface access impacts are minimized while still honouring commitments. New petroleum and natural gas tenure sold in a recreation and parks area will include a restriction that prohibits surface access.

Hunting, fishing and trapping (including by aboriginal peoples) will continue in accordance with existing provincial laws governing such activities as such laws may be amended or replaced from time to time. Hunting includes commercial guiding and outfitting operations where wildlife species management plans provide an allocation for that use.

Recreation, tourism and industry must co-exist on the landscape outside the designated camping areas, industrial activity will continue (that is, petroleum and natural gas; coal, metallic and industrial minerals, grazing, and forestry) and new industrial tenures will continue to be granted. Impacts to identified recreation and tourism features and scenic values will need to be minimized where possible and practical. To contribute to tourism and recreational opportunities industrial access resource roads or developments and areas scheduled to be reclaimed may be deferred or amended for recreational uses.

Water-based recreation is highly valued within the region and the need to maintain or develop access to recreational water bodies is important for recreation and nature-based tourism opportunities. Support of current initiatives and other potential cooperative initiatives is needed to provide stable, long-term public access to these water bodies in order to enhance water-based recreational experiences. The Government of Alberta, irrigation districts, municipalities, communities and stakeholders will continue to work in collaboration to provide recreational opportunities while respecting the operation of water management infrastructure and the needs of other water users.

The region’s unique blend of cultural and aboriginal heritage, many attractive recreation and tourism features and an abundance of provincially unique and awe-inspiring areas have the potential to attract visitors and gain national and international recognition. One of these areas is Writing-on-Stone Provincial Park. The Government of Alberta has the intention of supporting the nomination of Writing-on-Stone Provincial Park for inscription on the



Water Sub-Table

At a Protocol Agreement meeting with the Premier of Alberta in 2009, the Grand Chiefs requested and later it was agreed that a Water Sub-Table be established to provide input on the province's water allocation management system. The province is committed to having meaningful conversations with Albertans to hear their input and advice. Discussions through the Water Sub-Table can contribute to these water conversations.

Given the unique regional dynamics and differing water issues between the northern, central and southern regions the Water Sub-Table consists of three sub-tables – one for each Treaty Area. The Government of Alberta and First Nations establish the strategic direction and identify the joint priorities for each water sub-table.

Treaty 7 was identified as the top priority largely due to issues of water scarcity in the South Saskatchewan River Basin. The joint priorities and goals of the Treaty 7 water sub-table include:

- working together to understand current and future water needs of First Nations, and
- working towards water agreements between individual

First Nations and Alberta to ensure First Nations water security.



UNESCO World Heritage site list. Writing-on-Stone is a site sacred to the Blackfoot and preserves native grasslands for future generations.

Work needs to occur with local communities to enhance and support current initiatives to offer a variety of quality, unique and appealing visitor experiences that contain a wide range of tourism opportunities in the form of accommodations, attractions, events, activities and amenities. The aim should be to develop areas to be attractive to tourism investors and help diversify the region's economy. These areas should have a community driven plan reflective of the unique features that fall within it.

Inclusion of Aboriginal Peoples in Land-use Planning

The Government of Alberta will continue to look for opportunities to engage aboriginal peoples and invite them to share their traditional knowledge to inform land and natural resource planning in this region. Aboriginal culture with its connection to the land and environment provides a unique opportunity for engagement in land-use planning, management and initiatives.

The Government of Alberta will look to collaborate with First Nations in the South Saskatchewan Region through the establishment of a Land Sub-Table as a mechanism for strategic consultation and continuing government-to-government relations. The Government of Alberta will continue to work with First Nations through the previously established Treaty 7 Water Sub-Table process to provide input to government on water issues. This will include discussions related to on-reserve water needs.

The Sub-Table process is participant driven and adapted to the unique requirements of each aboriginal community. Priorities established at the regional level, with Chiefs and Ministers, will guide the aspects of a water sub-table and land-use sub-table, how they relate, how they differ, and whether they continue as one. Opportunities for First Nation involvement in the collaborative work of watershed planning and advisory councils in the region will continue to be encouraged.

The Treaty 7 Tourism Development Initiative will inform on-going work to identify tourism and cultural experiences that may provide economic opportunities to aboriginal communities. Participation in the regional economy will be encouraged as well as maintaining and seeking opportunities for aboriginal traditional land-uses within the region.

In accordance with applicable government policy as it may be from time to time, the Government of Alberta will continue to consult with aboriginal peoples when government decisions may adversely affect the continued exercise of their constitutionally protected rights, and the input from such consultations continues to be considered prior to the decision.

Implementation Plan

Strategies and Outcomes

The SSRP is designed to help achieve the three desired province-wide outcomes of the Land-use Framework. The regional vision describes the desired future state of the South Saskatchewan Region, and is consistent with the outcomes and principles of the Land-use Framework.

To support achievement of the three province-wide outcomes and the regional vision, the SSRP identifies strategic directions and regional outcomes. These qualitatively describe what is wished to be achieved at the regional level.

A number of objectives are identified for each regional outcome and they describe what must be done to achieve the outcome. Strategies describe regulatory and non-regulatory approaches that will be used to achieve each objective.

As a means of assessing whether regional outcomes and objectives are being achieved, a series of economic, environmental and social indicators will be regularly monitored, evaluated and reported.

Various governments, ministries and agencies will work together in an integrated manner to develop the required system and tools to support implementation of the regional plan. While the following strategies and actions each fall primarily into the mandate of one or more ministries, it is important to note that a government-wide approach will be taken to implement the strategies. This is part of the shift to a cumulative effects management system as envisioned by the Land-use Framework.

Land-use Framework – Provincial Outcomes

- Healthy economy supported by our land and natural resources;
- Healthy ecosystems and environment; and
- People-friendly communities with ample recreational and cultural opportunities.





Vision for the Region

Southern Alberta is a diverse, healthy, vibrant and prosperous region where the natural beauty of the mountains, foothills, farmlands and prairies are managed so that citizens feel connected to the land and its history. The region is a thriving place that offers a wide range of opportunities to residents and visitors alike. Social, economic and environmental values are effectively achieved with shared stewardship and an integrated approach. The quality and integrity of the landscape is sustained through the use of science, innovative thinking, traditional aboriginal and community knowledge, recognizing the interests of all Albertans.

Strategic Directions:

- Conserving and maintaining the benefits of biodiversity;
- Advancing conservation and integrated management of Crown Land;
- Supporting and enabling conservation and stewardship on private lands;
- Advancing watershed management;
- Managing air quality through continued collaboration;
- Strengthening communities;
- Providing recreation and tourism opportunities, active living and the preservation and promotion of the region's unique cultural and natural heritage; and
- Inclusion of aboriginal peoples in land-use planning.

Regional Outcomes

1. The region's economy is growing and diversified;
2. Biodiversity and ecosystem function are sustained with shared stewardship;
3. Air quality is managed to support healthy ecosystems and human needs through shared stewardship;
4. Watersheds are managed to support healthy ecosystems and human needs through shared stewardship;
5. Community development needs are anticipated and accommodated;
6. The quality of life of residents is enhanced through increased opportunities for recreation, active living and the preservation and promotion of the region's unique cultural and natural heritage; and
7. Aboriginal peoples are included in land-use planning.



Outcome 1:

The region's economy is growing and diversified

Energy (Petroleum and Natural Gas, Coal and Minerals)

Objective:

- Opportunities for the responsible exploration, development and extraction of energy resources are maintained.

Strategies:

- Ensure rules regarding **access to energy and processing and transportation of energy resources** are clear and ensure economic development opportunities are appropriately considered against other land uses and values.
- Maintain **physical access to freehold** (that is, privately owned) petroleum and natural gas, coal and minerals.

Growth of all energy sectors is crucial for the regional and provincial economies, and maintaining a positive investment climate is critical to the success of these industries. Securing long-term opportunities for development of the region's energy resources will support provincial and international sources of supply, and will help leverage our traditional energy commodities by accessing new and expanded markets for processed and refined products. This must be supported by the alignment of policy direction across planning regions which will facilitate access to and distribution of these resources.

Provincial legislation governing the energy, mineral and coal sectors include the *Responsible Energy Development Act*, the *Mines and Minerals Act*, the *Gas Resources Preservation Act*, the *Gas Utilities Act*, the *Oil and Gas Conservation Act*, the *Coal Conservation Act*, the *Coal Sales Act*, the *Environmental Protection and Enhancement Act*, the *Water Act*, the *Electric Utilities Act*, the *Hydro and Electric Energy Act*, the *Public Lands Act*, the *Surface Rights Act*, the *Freehold Mineral Rights Tax Act*, provincial parks legislation, and the *Alberta Land Stewardship Act*. Various other regulatory and non-regulatory requirements including policies, strategies and frameworks also apply.

Renewable Energy

Objectives:

- Opportunities for the responsible development of the region's renewable energy industry are maintained in support of Alberta's commitment to greener energy production and economic development.
- Value-added opportunities that enhance the sustainability of Alberta's industries and communities are created.



Strategies:

- a) Ensure policies are in place to promote and remove barriers to **new investments in renewable energy** (that is, wind, biofuels, solar, hydro) production.
- b) Invest in the development, demonstration and deployment of **renewable and alternative energy technologies** targeted to improve Alberta's overall energy efficiency. This will include support for the application of new technologies and support on-going research and development in partnership with other institutions.
- c) Ensure reinforcement of the **transmission system** to enable more renewable wind power in the region.

The South Saskatchewan Region has a natural advantage for renewables such as wind, solar, bio and hydro energy; exploring opportunities for renewable energy sources can contribute to reliability and security of the region's energy supply. The Government of Alberta continues to support a focus on renewable energy research through Alberta Innovates – Energy and Environmental Solutions, among others, to promote the stimulation and delivery of renewable energy sources to move directionally towards clean energy sources.

Corridors for the Co-location of Linear Infrastructure

Objective:

- The region's infrastructure is planned to facilitate economic and population growth and efficient use of land.

Strategies:

- a) Ensure that opportunities for future routes and siting for **pipeline gateways, transportation corridors and utility and electrical transmission corridors** are maintained in the region and in consideration of the needs of adjacent Land-use Framework regions and provinces.
- b) Work with municipalities, landowners and industry to explore **multi-use corridors** for co-location of linear infrastructure that supports **critical economic linkages** to markets for expanded access.

The Government of Alberta will continue to work with all stakeholders, including municipalities, First Nations, industry and other jurisdictions, to ensure long-range economic opportunities related to linear infrastructure continue. Where it is satisfied that it is in the public interest, the Cabinet may declare any area under its jurisdiction to be part of a multi-use corridor.



Agriculture

Objective:

- The region's agricultural industry is maintained and diversified.

Strategies:

- a) **Maintain an agricultural land base** by reducing the fragmentation and conversion of agricultural land.
 - Municipalities are encouraged to **identify areas** where agricultural activities, including extensive and intensive agricultural and associated activities, should be the primary land use in the region.
 - Municipalities are encouraged to **limit the fragmentation** of agricultural lands and their premature conversion to other non-agricultural uses, especially within areas where agricultural has been identified as a primary land use in the region. Municipal planning, policies and tools that promote the efficient use of land should be used where appropriate to support this strategy.
 - Where possible, municipalities are encouraged to employ appropriate planning tools to direct non-agricultural subdivision and development to areas where such development will **not constrain agricultural activities**, or to areas of lower-quality agricultural lands.
 - Municipalities are encouraged to **minimize conflicts between intensive agricultural operations and incompatible land uses** by using appropriate planning tools, setback distances and other mitigating measures.
- b) Support a diverse, innovative and **value-added agriculture and agri-food sector** in the South Saskatchewan Region through implementation of [Alberta's Irrigation: A Strategy for the Future](#). Through research, programming (planning) and policy development, the roadmap will enhance both economic opportunities and contribute to vibrant rural communities in the region.

Irrigated agriculture provides a reliable and high-quality product supply, attracting first stage processing as well as secondary and tertiary industries that benefit the local and provincial economy. The irrigation roadmap will ensure that Alberta's irrigation industry continues to be seen as a global leader in the efficient and productive use of water resources.
- c) Assist the agriculture and agri-food industry to **maximize opportunities for value-added agricultural products by focusing on workforce development, investment attraction, and domestic and international market development**.

The Government of Alberta will position the province as a competitive global supplier of agricultural products and services by enhancing and promoting Alberta's ability to provide safe and consistently dependable food in an environmentally and socially responsible manner. Toward achieving this goal, the Government of Alberta offers extension programs



and services, research-based information and innovative business tools. Productivity enhancements, workforce development and new product development will be supported through federal-provincial-territorial funding programs.

- d) Support a business climate, complementary production and marketing approach that **recognize local, domestic and international market opportunities** for Alberta's agriculture, agri-food and agri-product sectors.

Marketing is typically focused on international buyers; however, consumer demand for local and domestic products has created opportunities for the agricultural industry. Continued diversification of marketing opportunities is beneficial for the long-term sustainability of a successful agriculture, agri-food and agri-product sector in Alberta. Working with industry and non-governmental organizations, the Government of Alberta will continue to be engaged and collaborate across community and economic development, health, academic and agricultural supply chain disciplines to focus on multi-scale, commercially viable agricultural production.

- e) Support and enhance the **next generation of agricultural, food and rural entrepreneurs.**

Acting on advice from the 2013 "Next Generation Advisory Council," the Government of Alberta will work with relevant stakeholders and organizations to support the attraction of new entrants to the agriculture and agri-food sector. This will be accomplished through the development of programs and services specific to their needs, including initiatives such as ensuring that government-funded loan programs remain competitive and effective, that training and enhanced extension services are provided, and also through the continued provision of federal-provincial-territorial shared funding opportunities in the areas of business planning, transition planning, marketing, accounting, financial analysis and leadership development provided through online tutorials, seminars and one-on-one coaching.

Relevant provincial legislation governing the agriculture industry includes the *Municipal Government Act*, the *Agricultural Operation Practices Act* (AOPA and its regulations), the *Irrigation Districts Act* (including Regulations), the *Soil Conservation Act*, and both the *Forests Reserve Act* and the *Public Lands Act* with respect to grazing leases. In addition, the Natural Resources Conservation Board (NRCB) administers Part 2 of AOPA which deals with livestock and manure including permits for confined feeding operations.



Forestry

Objective:

- The region's forest industry is maintained and diversified.

Strategies:

- a) Promote diversification of the forest industry through implementation of **The Alberta Forest Products Roadmap to 2020** which will identify opportunities to diversify the sector through new markets and products, including the bioenergy sector.

- b) Deliver an effective **forest health management program to mitigate risk to timber supply and forest health.**

Invasive species and other forest health issues impacting timber supplies and other forest values will be addressed through programs to mitigate or control infestations of highest risk. Of primary concern is the mountain pine beetle. Existing policy tools and programs will be used including implementing the Mountain Pine Beetle Action Plan and Mountain Pine Beetle Management Strategy. Spruce budworm and fir defoliators are also significant forest health issues requiring continuous monitoring and control action as necessary.

- c) **Incorporate wildfire management planning** into forest management initiatives including the development of landscape wildfire risk assessments, landscape disturbance planning and FireSmart strategies. Forest Management activities – such as prescribed burning, thinning, and timber harvesting – will support meeting community and landscape-level FireSmart objectives.

Planning in the region must consider wildfire disturbances. The potential devastating impacts from wildfire can be reduced by increasing landscape resiliency. Although not all wildfires can be controlled under extreme conditions, integrated planning approaches can reduce the probability of large landscape fires over a long-term planning timeline.

Surface Materials

Objective:

- Opportunities for the responsible development of surface materials resources are maintained on public lands.

Strategies:

- a) **Allocate the surface materials** appropriately and monitor extraction operations to provide opportunities for sustainable development of the land.
- b) Municipalities, in collaboration with industry, provincial government and other stakeholders are encouraged to **identify areas of existing and future extraction of surface materials** (e.g., sand and gravel) and



mineral resources, and determine appropriate land use in the vicinity of these resources.

Surface materials are an essential component for development and maintenance of infrastructure throughout the region and province. Maintaining opportunities for surface materials resource extraction supports the increasing need for surface materials products to keep pace with the region and the province's population growth. Maintaining opportunities for the development of these resources is critical to the success of surface materials industries.

The main provincial statute governing surface materials extraction on public lands is the *Public Lands Act*. The regulation grants approvals for surface materials extraction activities through an application and lease and licensing system. The Alberta Aggregate (Sand and Gravel) Allocation Policy for Commercial Use on Public Lands provides a management framework to ensure there is fair and equitable use of Alberta's aggregate resources on public lands.

Tourism

Objective:

- The region is positioned as a world-class, year-round, tourism destination.

Strategies:

- Enhance **iconic tourism destinations** within the South Saskatchewan Region by engaging with aboriginal communities, municipalities and local stakeholders (See Appendix E – Iconic Tourism Destinations: Kananaskis, Canadian Badlands and Southern Rockies).
 - Develop **destination management strategies** that integrate planning, development, marketing and management, and **implement destination management plans** that provide direction for the sustainable development of tourism in the region in collaboration with all stakeholders for the identified destinations.
 - Identify and confirm existing and potential **tourism development nodes** in collaboration with all stakeholders, and designate and market nodes as appropriate.
 - Work collaboratively with local aboriginal communities, the private sector and provincial and local governments, interested private landowners and stakeholders to **enhance and expand the supply of tourism products, experiences and infrastructure** – including attractions, activities, amenities, accommodations and access.
- Work with municipalities, private investors and landowners to identify areas of high value for recreation and tourism, and to **encourage tourism investment and infrastructure development opportunities** on identified lands.

Iconic Tourism Destination:

An Iconic Tourism Destination is a provincially unique and awe-inspiring area that has the potential to attract visitors and gain national and international recognition. These destinations offer a variety of quality, unique and appealing experiences that contain a wide range of tourism products in the form of accommodations, attractions, events, activities and amenities.



- c) Work with municipal governments and other partners to identify, establish and promote scenic byways in and around areas with high-quality attractions and recreation and tourism features. This would include routes, trails and waterways to create distinctive travel experiences and showcase the region's unique scenic resources and cultural landscapes.
- d) Provide **long-term security** (that is, longer term leases) for tourism and recreation investment opportunities.

There is great potential for increased tourism development in the region, as it is home to diverse cultures, a rich heritage and other numerous tourism and recreation features. Additional tourism opportunities would increase the amount of tourism and recreational expenditures retained in Alberta, and would support economic diversification in the region. A competitive tourism industry depends on a sufficient supply of land where the integrity of attractive features, settings and scenery are maintained and long-term access is provided. Highway and air transportation also contributes to and supports the tourism industry and enhanced transportation access will continue to facilitate tourism activity in the region.

General Indicators:

- Gross Domestic Product
- Production volumes
- Business diversification
- Capital investments
- Building permits
- Employment
- Personal income
- Agricultural land conversion

Energy:

- Energy revenues
- Provincial royalties
- Cost of production

Agriculture:

- Farm cash receipts for major agricultural products
- Fragmentation and conversion of agricultural land to non-agricultural land uses
- New agricultural products to market
- Number of Alberta-approved farmers' market days
- Export-to-import ratio (trade balance) by product and aggregate
- The average age of Alberta farmers from the Agricultural Census
- Number of participants in beginning farmer loan programs



Forestry:

- Annual allowable cut versus timber production
- Wildfire risk

Tourism:

- Tourism receipts by visitor origin
- Tourism visitation
- Tourism visitor expenditures
- Tourism occupancy

Outcome 2:

Biodiversity and ecosystem function are sustained with shared stewardship.

Objectives:

- Terrestrial and aquatic biodiversity are maintained.
- Species at risk are recovered; and key grasslands habitat is sustained.
- Areas are added to the regional network of conservation areas.
- Biodiversity and healthy functioning ecosystems continue to provide a range of benefits to communities in the region and all Albertans.
- Long-term forest ecosystem health and resiliency are maintained.

Biodiversity and Ecosystems

Strategies:

- Complete the South Saskatchewan Biodiversity Management Framework** by the end of 2014. (See Appendix F – Overview of Biodiversity Management Framework.)

The biodiversity management framework is a new approach to support cumulative effects management of important elements of biodiversity that are affected by land uses in the region. It is not intended to address all aspects of biodiversity.

The framework will focus on indicators based on key species that represent the broad range of biodiversity in the region, important habitats where specific direction is provided in recovery plans (e.g., grizzly bears); and maintaining key landscapes (protection of headwaters, retaining existing intact public land grassland areas) important to sustaining long-term ecosystem health. Biodiversity targets for these selected indicators will provide guidance for



decisions about future and existing land-use activities. The framework will also provide guidance for integrated management approaches on public lands. While the objectives set in the framework will apply to the entire region (including private lands) it is recognized that any actions by landowners towards meeting objectives is voluntary and subject to availability and landowner interest to use tools such as conservation easements and other mechanisms described in the next section on Stewardship and Conservation on Private Lands. The biodiversity management framework will be implemented to add to and complement, not replace or duplicate, existing policies, legislation, regulations and management tools.

Monitoring of the indicators will be through the Alberta Biodiversity Monitoring Institute and other finer scale monitoring by the Government of Alberta and partners. By focusing on management actions for these indicators, it is expected that other indicators of biodiversity will benefit. Monitoring will be essential to validate this assumption.

- b) **Manage existing conserved lands** to achieve long-term conservation of biological diversity and ecosystem processes.
- c) Create **new conservation areas** on provincial Crown land. (See Schedule C – SSRP Land Uses and Schedule D – SSRP Digital Map.)
- d) Develop a **linear footprint management plan** for White and Green Area public lands in the region by the end of 2017. These plans will outline a system to minimize the extent, duration and rate of linear footprint development in order to meet objectives and targets established in the South Saskatchewan Biodiversity Management Framework.

Key features of this plan are listed below:

- Requirements related to linear footprint intensity, including limits where applicable, in specific areas such as species at risk habitat (for example, sage grouse habitat in the southeast portion of the region, areas of core grizzly habitat in eastern slopes).
- Required use of Integrated Land Management (ILM) tools to minimize the extent and duration of linear footprint including coordinated industry planning of major access corridors and associated development infrastructure; re-use of existing linear disturbances; and progressive and timely reclamation of linear disturbances.
- A practical system for monitoring, measuring and reporting on linear footprint.

White Area Public Land:

- Integration with other initiatives such as the Southeast Conservation Offset Pilot and MULTISAR (Multiple Species at Risk – a voluntary species-at-risk conservation program).
- An approach to voluntary conservation offsets for native grasslands, where public land linear footprint could be voluntarily offset through agreements with landowners for conservation of intact grasslands on private land. The approach would build off principles established in

Conservation Areas

Definition:

A clearly defined geographical space dedicated and managed to achieve the long-term conservation of biological diversity and ecosystem process.

Management Intent:

Legally protect areas that are relatively undisturbed. They retain their natural character and influence and are areas for measuring ecological performance in relation to human development.

Key Criteria for Conservation Areas

- Areas with little to no industrial activity;
- Areas that support aboriginal traditional uses;
- Areas that are representative of the biological diversity of the area (e.g., land forms, species, vegetation); and
- Areas of sufficient size.



Information Letter 2002-1 of the Alberta Energy Regulator (formerly the Energy Resources Conservation Board) entitled *Principles for Minimizing Surface Disturbance in Native Prairie and Parkland Areas*.

Green Area Public Land:

- A management approach for motorized access or “open route density” – a key action identified in Alberta’s grizzly bear recovery plan.
- Integration with other planning initiatives such as the regional trail system plan for recreation, and initiatives led by partners such as watershed planning advisory councils.

Research and species recovery planning initiatives in the region (and other parts of Alberta) have shown that managing linear human footprint (linear footprint) is one of the most significant actions that can be taken to support biodiversity. The linear footprint management plan will have an initial focus on key headwaters, grizzly bear habitat and intact native prairie in the grasslands.

- e) Consolidate and expand **Public Land Use Zones for Green Area** public lands. (See Appendix G – Consolidation and Expansion of Public Land Use Zones.)

These areas provide important recreational opportunities including off-highway vehicle recreation. Public Land Use Zones are being consolidated and expanded to improve the province’s ability to more effectively manage public land across the Green Area, manage undesirable impacts, address priority issues, and increase the safety and enjoyment of recreationists throughout these areas. The steps that will be used for the consolidation and expansion are described in Appendix G.

The intention is to recognize Albertans’ wishes to have access for recreation including off-highway vehicle use and to provide opportunities for this while ensuring there is protection for watercourses, water bodies and wetland areas. Requirements in existing legislation continue and where necessary they have been reinforced through enhancements to regulations. Safety is also a priority. There are requirements to avoid camping and off-highway vehicle recreation on industrial facility areas, for example well sites.*

The Public Land Use Zones will be used in the implementation of other strategies of the regional plan, including recreation and access management plans, the linear footprint management plan and the Regional Trail Systems Plan.

* amendments will be made to the Public Lands Administration Regulation

- f) Review and incorporate the region’s **Integrated Resource Plans**.

Numerous sub-regional Integrated Resource Plans (IRPs) have been in place under the Eastern Slopes Policy, and new plans will be developed in this regional plan (linear footprint management, recreation and access management plans). A deliberate effort is needed to streamline and reduce the number of sub-regional-scale plans to ensure effective implementation of the regional plan. The review of IRPs will ensure that



provisions that are still relevant will be maintained and ensure clarity and consistency with the regional plan.

The Majorville Land Management Framework, an on-going, collaborative initiative to conserve significant natural and cultural resources in the Majorville area, will also be considered in this review. This collaborative initiative with external partners supports an area that is recognized for its heritage values, First Nations traditional use, and unique native prairie biodiversity within existing agricultural and industrial developments.

- g) Engage in collaborative **outreach and education programs** to promote responsible land use and shared stewardship on the eastern slopes. An “on the ground” program will be established including seasonal outreach staff with a field presence. Responsible use messaging will include providing information on requirements to avoid watercourses, water bodies and wetland areas as well as the need to avoid power line rights-of-way and other industrial facilities for safety purposes.
- h) **Manage forests** in the Green Area with headwaters protection and integrity (water storage, recharge, and release functions) as the highest management priority.

Other values such as biodiversity (grizzly bear, limber pine and whitebark pine recovery), forest ecosystem resiliency (natural disturbance patterns), and timber supply will be key secondary management priorities. Practices to manage wildfire risk to communities will be equal in priority to headwaters protection and integrity. This strategy for the region will form part of a provincial Alberta Forestry Strategy which is under development.

In the Green Area, forest management activities are guided by forest management plans and the timber harvest planning and operating ground rules. The plans for the Forest Management Unit C5 and Spray Lakes Sawmills Forest Management Agreement areas and associated ground rules will be adjusted to align with this strategy for the region.

- i) **Minimize conversion of intact native grasslands** through guidelines to avoid new sales of surface public land in areas of intact native grasslands. (See Appendix H – Conversion of Grasslands – White Area Public Land – Policy Guidelines.)

The native grasslands represent a diverse habitat containing many species not found elsewhere in Alberta. It is important to preserve this unique landscape.

Public Land Use Zones (PLUZ) are designed to facilitate a wide range of recreation activities and ecosystem services provision which are compatible with managed industrial activity, primarily forest management, livestock grazing, and also oil and gas and surface materials extraction.



- j) Continue to work with other government agencies, other levels of government, landholders, non-government organizations, industry, the research community, and other partners within and outside the province to **manage risk associated with invasive species**.

Invasive species already established will be controlled where environmental and economic impacts are at greatest risk. Invasive species not yet found in Alberta but with high environmental or economic risk will have programs developed and implemented to prevent establishment. In addition to terrestrial invasive species, a current focus is on the three most noxious aquatic invasive species: zebra mussels, quagga mussels and Eurasian water-milfoil. Preventing establishment of these species is important for both maintaining aquatic ecosystem health and to avoid the economic costs associated with affected water infrastructure.



Regulatory Details Plan: Part 2 Conserved Land

Designated Minister

13 For the purposes of this Part, the Minister designated under section 16 of the *Government Organization Act* as the Minister responsible for the *Surveys Act* is the Designated Minister.

Definitions

14 In this Part,

- (a) “conservation purposes,” in respect of land, means the purposes referred to in section 29(1) of the Act, but does not include the following agricultural purposes:
 - (i) cultivation;
 - (ii) clearing; and
 - (iii) range improvements within the meaning of regulations and rules under the *Public Lands Act*.
- (b) “conserved land” means
 - (i) wildland provincial parks designated under the *Provincial Parks Act*;
 - (ii) wilderness areas, ecological reserves, natural areas and heritage rangelands designated under the *Wilderness Areas, Ecological Reserves, Natural Areas and Heritage Rangelands Act*; and
 - (iii) Castle Conservation Area public land use zone designated under the *Public Lands Act*.

Conserved land

15 The Designated Minister shall establish and maintain programs

- (a) monitoring the total combined area of conserved land in the planning region, and
- (b) evaluating the ratio of conserved land referred to in clause (a) to the total area of land comprising the planning region.



Regulatory Details Plan: Part 3 Conservation Areas

Definitions

16 In this Part, “conservation area” means the lands identified as conservation areas and labeled “A” through “K” on the SSRP Digital Map Schedule “D”.

Designated Minister in respect of conservation areas – Wildland Provincial Parks

17 For the purposes of this Part in respect of conservation areas “A” through “I” as shown on the SSRP Digital Map, the Minister designated under section 16 of the *Government Organization Act* as the Minister responsible for the *Provincial Parks Act* is the Designated Minister.

Designated Minister in respect of conservation areas – Heritage Rangeland

18 For the purposes of this Part in respect of conservation area “J” as shown on the SSRP Digital Map, the Minister designated under section 16 of the *Government Organization Act* as the Minister responsible for the *Public Lands Act* is the Designated Minister.

Designated Minister in respect of conservation areas – Public Land Use Zone

19 For the purposes of this Part in respect of conservation area “K” as shown on the SSRP Digital Map, the Minister designated under section 16 of the *Government Organization Act* as the Minister responsible for the *Public Lands Act* is the Designated Minister.

Conservation objectives

20(1) The Designated Minister may take whatever steps those in the opinion of the Designated Minister are desirable for achieving the conservation objectives of the SSRP Strategic Plan and SSRP Implementation Plan and for implementing Schedule “C” to the SSRP Implementation Plan in respect of conservation areas.

(2) Subject to any other law, a statutory consent may be renewed in a conservation area if the statutory consent is, at the effective date of renewal, in good standing under the provisions of the enactment or enactments applicable to the statutory consent, and

- (a) if the statutory consent is consistent with this regional plan; or
- (b) if the statutory consent is inconsistent with or non-compliant with this regional plan, within the meaning of section 11(2), but
 - (i) is an agreement under the *Mines and Minerals Act* or a disposition under the *Public Lands Act* that is valid and subsisting at the time this regional plan comes in to force, or
 - (ii) if it is not an agreement or disposition referred to in subclause (i), but is, within the meaning of section 11(4), incidental to an agreement or disposition referred to in subclause (i).



Programs to manage objectives

21 In respect of the land use in a conservation area, the Designated Minister shall establish and maintain programs evaluating the effectiveness of the conservation area in meeting the relevant conservation objectives in the SSRP Implementation Plan.

Castle Conservation Area Public Land Use Zone

22(1) The land shown as “K” on the SSRP Digital Map Schedule “D” is designated as the Castle Conservation Area.

23(1) Subject to subsection (2), the Minister responsible for the *Public Lands Act* shall not, with respect to land that is included in the Castle Conservation Area Public Land Use Zone,

- (a) grant authority to construct an access road, or
- (b) grant a disposition under the *Public Lands Act*.

(2) Notwithstanding subsection (1), the Minister responsible for the *Public Lands Act* may

- (a) grant an authority or disposition referred to in subsection (1) for the purpose of the working, extraction or removal of subsurface minerals from land within the Castle Conservation Area Public Land Use Zone, if the rights to the subsurface minerals existed on the coming into force of the regional plan,
- (b) grant an authority or disposition referred to in subsection (1) for the purpose of the harvesting of timber from land included within the Castle Conservation Area Public Land Use Zone.
- (c) grant an authority or disposition referred to in subsection (1) if the authority pertains to land which has been designated as Multi-use Corridor.

24(1) The Minister responsible for the *Forest Reserves Act*, may grant a disposition allowing the grazing of livestock on land included in the Castle Conservation Area Public Land Use Zone.

25(1) The Minister responsible for the *Forests Act* may issue a timber license, timber permit or grant any other authority to harvest timber from land included within the Castle Conservation Area Public Land Use Zone.



Stewardship and Conservation on Private Lands

Objectives:

- The contributions of landowners for their stewardship and conservation efforts on private lands are recognized.
- The contribution and value of private land in supplying ecosystem services is recognized, and opportunities to support ecosystem services on private land are identified.
- The value of ecosystem services supplied by economic sectors reliant on private lands is recognized.

Strategies:

- Encourage and support the continued stewardship of Alberta's private lands through the development and **piloting of regionally appropriate conservation tools**. These tools may include exploring market-based options, voluntary conservation easements, and the provision of other government and/or private sector incentives that assist in achieving environmental outcomes. This will be done within the provincial approach for management of ecosystem services.
 - Acknowledge the voluntary contributions of private land owners in enhancing ecosystem services. Assess opportunities for achieving greater regional biodiversity on private agricultural lands through the development of new and/or expanded voluntary partnerships with private landowners.
 - Consider pilot studies with the goal of assisting development of a voluntary, privately operated, market-based system for ecosystem services valuation and payment.
 - Encourage local authorities or qualified organizations to explore the applicability and use of voluntary stewardship and conservation tools on private lands including conservation easements, conservation off-set programs and transfer of development credit schemes.
 - Explore innovative funding mechanisms to support stewardship and conservation on private lands.
- Complete development and evaluation of the **Southeast Conservation Offset Pilot** by the end of 2015.

The pilot will offset new industrial impacts on native prairie (such as oil and gas or power lines development) by contracting private landowners (through a third party) to convert fields from annual cropland to native range. The pilot will test aspects of voluntary conservation offsets including:

- A workable approach to quantify development site offset requirements;
- A market-based approach to target offset habitat project development on privately owned agricultural lands with the greatest benefit for biodiversity and species at risk;



- An open-price discovery approach to determine agricultural landowner costs; and
- The role for a third party to facilitate habitat development and associated conservation offset obligations (including contracts, verification and monitoring).

Experience gained through the pilot study will be used to educate and demonstrate the use of offsets to producers and to inform development of future market-based approaches for ecosystem services.

- c) Develop and facilitate the continued adoption of **environmentally beneficial management practices that demonstrate agriculture and agri-food sector commitment to environmental stewardship.**
- Implementation of programs will help encourage adoption of beneficial management practices that contribute to environmental health.
- d) Consider **intact native grasslands as the highest priority under the Land Trust Grant Program.**

Outcome 3:

Air quality is managed to support healthy ecosystems and human needs through shared stewardship.

Air Quality

Objective:

- Releases from various point and non-point sources are managed so they do not collectively result in unacceptable air quality.

Strategy:

- a) Implement the **Air Quality Management Framework for the South Saskatchewan Region.**

Implementation of the Air Quality Management Framework will serve as one of the ways that the provincial commitment to a comprehensive Air Quality Management System and cumulative effects management will be delivered at a regional scale. The ambient air quality limits and triggers in the framework are based on Canadian Ambient Air Quality Standards for fine particulate matter and ground-level ozone, and Alberta Ambient Air Quality Objectives for nitrogen dioxide.

If monitoring indicates that a trigger or limit has been exceeded, there will be a management response. The framework describes the kinds of management actions that may be required, such as the preparation of management plans (individual or collective) and further modeling and/

Land trusts are non-profit charitable organizations that seek to enable conservation of private lands.

The Government of Alberta established the **Land Trust Grant Program** in 2011 whereby proceeds from the sales of public lands are directed to the Land Stewardship Fund which provides funding to Alberta land trusts for:

- The acquisition of conservation easements
- Administrative costs associated with obtaining and managing a new conservation easement or donated land (legal fees, baseline surveys and stewardship endowments).

To be eligible to receive funding, the land trust must demonstrate that it has two-to-one leveraging of funds and alignment to the Government of Alberta's conservation initiatives (protecting large areas of intact native habitat, intact native grasslands).

From 2011 to 2013, the Land Trust Grant Program has granted approximately \$20 million for the conservation of approximately 43,400 acres of land.

Under a **conservation easement**, landowners can voluntarily restrict the use of their land to protect its natural, agricultural or cultural heritage. The landowner retains ownership of the land and the easement is registered on land title.

Conservation easements have been in place for over 15 years. Through the *Alberta Land Stewardship Act*, the provisions for easements were expanded to include agricultural lands.



or monitoring. Taking action to manage air quality in the region will involve the provincial government and a number of parties, including municipalities, partnership groups like local airshed groups, individual citizens and others. Finally, the framework establishes a commitment to ongoing monitoring, evaluation and reporting of ambient air quality conditions, and verification if triggers or limits are exceeded. This is described in more detail in the management framework.

The Government of Alberta will continue to work with local airshed groups within the South Saskatchewan Region. The local airshed groups have made important contributions and will continue to serve an important role in contributing to management of air quality issues.

There are some issues that are more local in nature in the region, including odour, dust, and issues related to emissions from individual industrial activities, such as sour gas plants, aggregate facilities and agricultural operations. As appropriate, the Government of Alberta will continue to monitor and assess these local issues and work collaboratively to determine appropriate place-based management actions and mitigation of effects. This will include the continued application of regulatory tools, such as regulation of industrial facilities under the *Environmental Protection and Enhancement Act* and requirements for Confined Feeding Operations under the *Agricultural Operation Practices Act*, and use of non-regulatory approaches such as beneficial management practices.

- b) Continue to support the implementation of the **Calgary Region Airshed Zone Particulate Matter and Ozone Management Plan** in alignment with implementation of the national Air Quality Management System and the air quality management framework for the South Saskatchewan Region.
- c) Encourage municipalities, industry and the public to be **proactive in addressing air quality issues** through voluntary programs and initiatives.

The relevant legislation includes the *Environmental Protection and Enhancement Act* and the *Agricultural Operation Practices Act* and regulations.

Indicators:

- Fine particulate matter ($PM_{2.5}$).
- Ground-level ozone (ozone or O_3).
- Nitrogen dioxide (NO_2).

Limits:

- Based on existing Canadian Ambient Air Quality Standards for fine particulate matter and ozone (see Schedule A – Air Quality Management Framework Limits and Triggers) and Alberta Ambient Air Quality Objectives for nitrogen dioxide.



- Apply at continuous air monitoring stations in the South Saskatchewan Region as reported through the Clean Air Strategic Alliance Data Warehouse.

Triggers:

- Based on existing Canadian Ambient Air Quality Standards for fine particulate matter and ozone, and the Alberta Ambient Air Quality Objectives for nitrogen dioxide. (See Schedule A – Air Quality Management Framework Limits and Triggers.)
- Apply at continuous air monitoring stations in the South Saskatchewan Region as reported through the Clean Air Strategic Alliance Data Warehouse.



Regulatory Details Plan: Part 4 Air Quality

Designated Minister

26 For the purposes of this Part, the Minister designated under section 16 of the *Government Organization Act* as the Minister responsible for the *Environmental Protection and Enhancement Act* is the Designated Minister.

Definitions

27 In this Part,

- (a) “framework” means the document referred to in this regional plan as the Air Quality Management Framework for the South Saskatchewan Region as amended or replaced from time to time;
- (b) “limit” means the applicable limit specified in Schedule “A” Tables 1 and 3 of the SSRP Implementation Plan;
- (c) “person responsible” has the same meaning as defined in the *Environmental Protection and Enhancement Act*;
- (d) “trigger” means the applicable trigger specified in Schedule “A” Tables 1, 2 and 3 of the SSRP Implementation Plan.

Designated Minister’s decision final and binding

28(1) The Designated Minister in the exercise of the Designated Minister’s powers and duties under this Part may determine

- (a) the measurements of substances of concern at monitoring stations established and maintained under a program referred to in section 29;
- (b) whether a trigger or limit has been exceeded for the purposes of this Part;
- (c) whether a trigger or limit exceeded in respect of one or more specific areas in the planning region is of concerning other areas of the planning region or the whole planning region; and
- (d) the duration of an exceedance of a trigger or limit determined by the Designated Minister.

(2) The Designated Minister’s determination is final and binding on the Crown, decision-makers, local government bodies, and, subject to section 15.1 of the Act, all other persons.

Programs to manage effects

29 In respect of the framework, the Designated Minister shall establish and maintain programs

- (a) managing ambient air quality limits and triggers for substances that in the opinion of the Designated Minister are indicators of the air quality effects of concern for the planning region;
- (b) monitoring and evaluating the ambient air quality in the planning region; and



- (c) evaluating the effectiveness of the framework in meeting the air quality objective stated in the SSRP Implementation Plan.

Notice respecting limits

30(1) If in the opinion of the Designated Minister, a non-point source or non-point sources are reasonably expected to have a significant direct or indirect effect on the limit or limits, the Designated Minister is not required to issue a notice pursuant to subsection (2).

(2) In respect of one or more limits that, in the opinion of the Designated Minister, has been exceeded, the Designated Minister shall issue a notice specifying:

- (a) an activity or activities or type, types, class or classes of activity or activities that in the opinion of the Designated Minister are reasonably expected to have a direct or indirect effect on the limit or limits;
- (b) the applicable limit or limits in respect of the activity or activities referred to in clause(a) that, in the opinion of the Designated Minister, has been exceeded;
- (c) the relevant area of the planning region affected by the limit or limits;
- (d) the decision-maker or decision-makers affected by the notice;
- (e) the local government body or local government bodies affected by the notice;
- (f) the anticipated duration of the effect of the exceedance of the limit or limits on the activity, type, types, class or classes of activity or activities, area, decision-maker, decision-makers, local government body or local government bodies;
- (g) action to be taken by affected decision-makers and affected local government bodies in response to the exceedance of the limit.

(3) All affected decision-makers and affected local government bodies referred to in (2)(d) and(e) shall be served with the notice by personal service, registered mail, or fax.

(4) Upon receiving a notice referred to in subsection (2) a decision-maker or local government body is bound by the notice.

(5) A notice referred to in subsection (2) shall be publicly available.

Management response

31(1) If the Designated Minister determines that a trigger or limit has been exceeded, an appropriate official or officials in the Designated Minister's government department must initiate a management response consistent with the framework.

(2) A person responsible shall comply with the lawful directions of an official in respect of a management response referred to in subsection (1).



(3) An official responsible for initiating a management response under this section shall as soon as practicable report to the Designated Minister in writing the details and the effect of the management response.

(4) A report referred to in subsection (3) shall be publicly available.

Designated Minister's considerations

32 For greater clarification, in reaching an opinion under sections 30 and 31, the Designated Minister may consider such information as in the Designated Minister's opinion is material to

- (a) a particular activity or activities or type or class of activity or types or classes of activities;
- (b) the relevant area or relevant part of the area in which the activity is to occur;
- (c) the relevant area or relevant part of the area in which an effect or effects of the activity or activities are reasonably expected to occur;
- (d) the reasonably expected, relevant period or duration of the effect or effects of the activity or activities;
- (e) any other matter that in the Designated Minister's opinion is advisable under a program referred to in Section 29.



Outcome 4:

Watersheds are managed to support healthy ecosystems and human needs through shared stewardship.

Surface Water Quality

Objective:

- Surface water quality in the Bow, Oldman, South Saskatchewan and Milk rivers is managed so current and future water uses are protected.

Strategies:

- a) Implement the **Surface Water Quality Management Framework for the South Saskatchewan Region.**

Implementation of the Surface Water Quality Management Framework will provide an important approach for the management of cumulative effects of development on ambient water quality. The surface water quality limits in the framework are based on provincially used water quality guidelines. They were chosen to protect the most sensitive water use such as agricultural, industrial, recreational and esthetics, drinking water and protection of aquatic life. The surface water quality triggers in the framework form an early warning system to signal change.

If monitoring indicates that a trigger or limit has been exceeded, there will be a regional management response. The framework describes the kinds of management responses that may be required, such as the preparation of management plans (individual or collective), further modeling and/or monitoring, development and the use of best management practices, and education and awareness programs. Taking action to manage surface water quality in the region will involve the provincial government and a number of parties, including the agricultural sector, municipalities, partnership groups and others. Finally, the framework establishes a commitment to ongoing monitoring, evaluation and reporting of ambient water quality conditions and verification if triggers or limits are exceeded.

A Phosphorus Management Plan for the Bow River has been initiated as a proactive management response to elevated phosphorus levels in the river. This multi-stakeholder collaborative project is a means to address point and non-point source phosphorus inputs using a cumulative effects management approach. As part of the implementation of the Surface Water Quality Management Framework for the South Saskatchewan Region, the work on the Phosphorus Management Plan will continue and will be ready for implementation by the end of 2013.

The relevant legislation includes the *Environmental Protection and Enhancement Act*, the *Water Act* and the *Agricultural Operations Practices Act*.



Indicators:

- Fifteen general water quality indicators have been selected. (See Schedule B – Surface Water Quality Management Framework Limits and Triggers); and
- Two metals and four pesticides have been selected as secondary indicators to be monitored, but triggers and limits are not yet established due to insufficient data.

Limits:

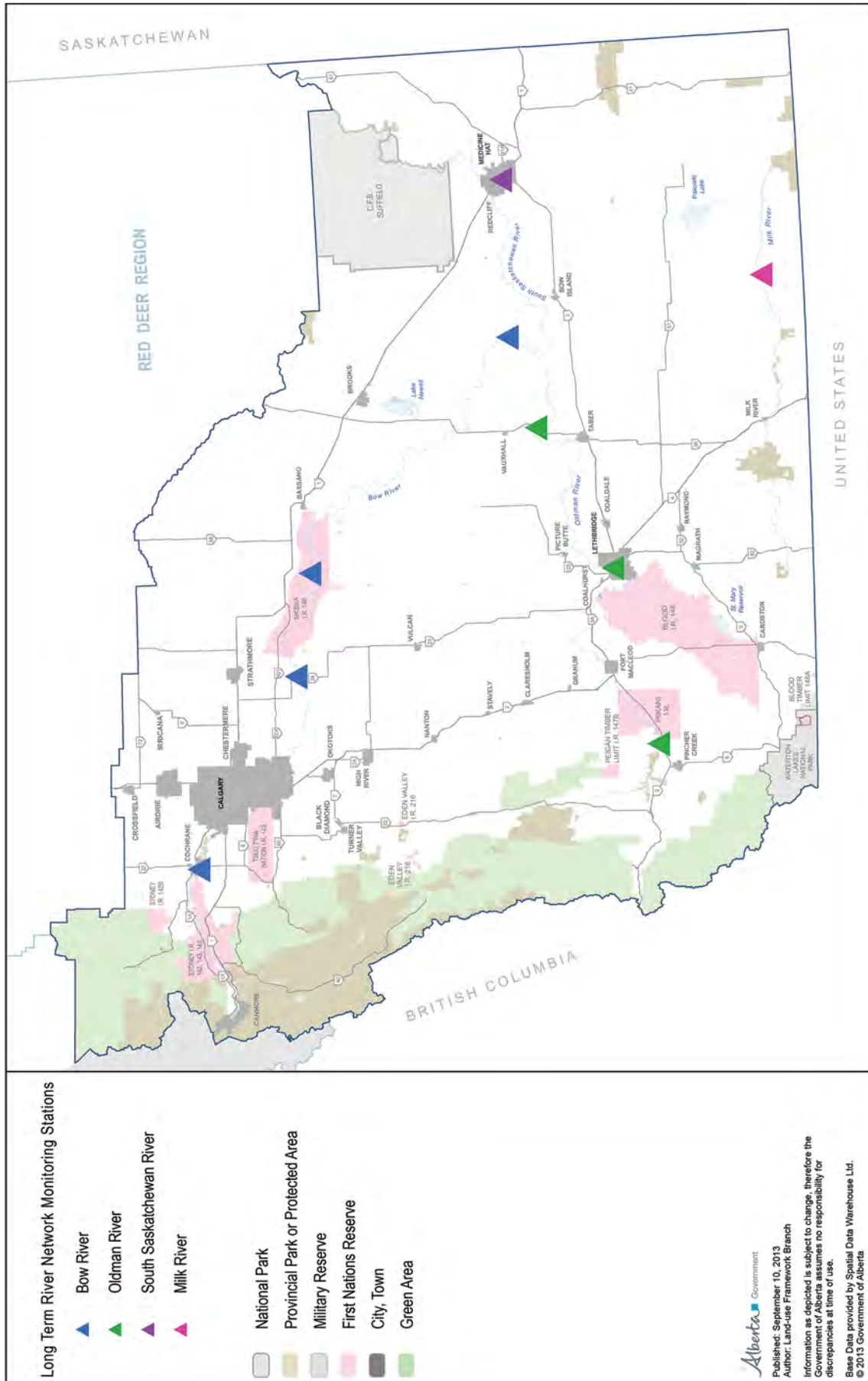
- Established from existing provincially accepted water quality guidelines where applicable; further risk-based limits are to be developed. (See Schedule B – Surface Water Quality Management Framework Limits and Triggers.)
- Apply at nine Long Term River Network monitoring stations as indicated in the management framework.

Triggers:

- Based on statistical deviation from historical ambient concentrations. (See Schedule B – Surface Water Quality Management Frameworks Limits.)
- Apply at nine Long Term River Network monitoring stations as indicated in the management framework.



South Saskatchewan: Long Term River Network Monitoring Stations





Regulatory Details Plan: Part 5 Surface Water Quality

Designated Minister

33 For the purposes of this Part, the Minister designated under section 16 of the *Government Organization Act* as the Minister responsible for the *Environmental Protection and Enhancement Act* is the Designated Minister.

Definitions

34 In this Part,

- (a) “framework” means the document referred to in this regional plan as the Surface Water Quality Management Framework for the mainstem Bow, Milk, Oldman and South Saskatchewan River as amended or replaced from time to time;
- (b) “limit” means the applicable limit specified in Schedule “B” Tables 1 and 9 of the SSRP Implementation Plan;
- (c) “person responsible” has the same meaning as defined in the *Environmental Protection and Enhancement Act*;
- (d) “trigger” means the applicable trigger specified in Schedule “B” Tables 1 and 9 of the SSRP Implementation Plan;
- (e) “water” has the same meaning as defined in the *Water Act*.

Designated Minister’s decision final and binding

35(1) The Designated Minister in the exercise of the Designated Minister’s powers and duties under this Part may determine

- (a) the measurements of substances of concern at monitoring stations established and maintained under a program referred to in section 36;
- (b) whether a trigger or limit has been exceeded for the purposes of this Part;
- (c) whether a trigger or limit exceeded in respect of one or more specific areas in the South Saskatchewan Region is of concern, or its tributaries or distributaries, or other areas of the planning region or the whole planning region; and
- (d) the duration of an exceedance of a trigger or limit determined by the Designated Minister.

(2) The Designated Minister’s determination is final and binding on the Crown, decision-makers, local government bodies, and, subject to section 15.1 of the Act, all other persons.



Programs to manage effects

36 In respect of the framework, the Designated Minister shall establish and maintain programs

- (a) managing water quality limits and triggers for substances that in the opinion of the Designated Minister are indicators of the surface water quality effects of concern for the South Saskatchewan Region;
- (b) monitoring and evaluating the water quality in the South Saskatchewan Region; and
- (c) evaluating the effectiveness of the framework in meeting the water quality objective for the South Saskatchewan Region stated in the SSRP Implementation Plan.

Notice respecting limits

37(1) If in the opinion of the Designated Minister, a non-point source or non-point sources are reasonably expected to have a significant direct or indirect effect on the limit or limits, the Designated Minister is not required to issue a notice pursuant to subsection (2).

(2) In respect of one or more limits that, in the opinion of the Designated Minister, have been exceeded, the Designated Minister shall issue a notice specifying:

- (a) an activity or activities or type, types, class or classes of activity or activities that in the opinion of the Designated Minister are reasonably expected to have a direct or indirect effect on the limit or limits;
- (b) the applicable limit or limits in respect of the activity or activities referred to in clause(a) that, in the opinion of the Designated Minister, has been exceeded;
- (c) the relevant area of the planning region affected by the limit or limits;
- (d) the decision-maker or decision-makers affected by the notice;
- (e) the local government body or local government bodies affected by the notice;
- (f) the anticipated duration of the effect of the exceedance of the limit or limits on the activity, type, types, class or classes of activity or activities, area, decision-maker, decision-makers, local government body or local government bodies;
- (g) action to be taken by affected decision-makers and affected local government bodies in response to the exceedance of the limit.

(3) All affected decision-makers and affected local government bodies referred to in subsection (2)(d) and (e) shall be served with the notice by personal service, registered mail, or fax.

(4) Upon receiving a notice referred to in subsection (2) a decision-maker or local government body is bound by the notice.

(5) A notice referred to in subsection (2) shall be publicly available.



Management response

38(1) If the Designated Minister determines that a trigger or limit has been exceeded, an appropriate official or officials in the Designated Minister's government department must initiate a management response consistent with the framework.

(2) A person responsible shall comply with the lawful directions of an official in respect of a management response referred to in subsection (1).

(3) An official responsible for initiating a management response under this section shall as soon as practicable report to the Designated Minister in writing the details and the effect of the management response.

(4) A report referred to in subsection (3) shall be publicly available.

Designated Minister's considerations

39 For greater clarification, in reaching an opinion under sections 37 and 38, the Designated Minister may consider such information as in the Designated Minister's opinion is material to

- (a) a particular activity or activities or type or class of activity or types or classes of activities,
- (b) the relevant area or relevant part of the area in which the activity is to occur,
- (c) the relevant area or relevant part of the area in which an effect or effects of the activity or activities are reasonably expected to occur,
- (d) the reasonably expected, relevant period or duration of the effect or effects of the activity or activities, (e) any other matter that in the Designated Minister's opinion is advisable under a program referred to in section 36.



Enhanced Integrated Watershed Management

Objective:

- Regional approaches and tools support integrated management of water and aquatic ecosystems.

Strategies:

- a) Develop a comprehensive approach for **groundwater management**.
 - Confirm priority issues and areas of concern and accelerate monitoring at existing wells in the areas of concern in 2014.
 - Develop an enhanced regional monitoring strategy, to focus on priority issues, by the end of 2015.
 - Continue groundwater mapping in Southern Alberta under the Provincial Groundwater Inventory Program.
 - Develop policy direction related to the connectivity of groundwater to nearby surface water sources.
- b) Continue to support the work of the **watershed planning and advisory councils on watershed assessment and planning** under the Water for Life strategy, in alignment with regional planning. All stakeholders are encouraged to support the work of the watershed planning and advisory councils.
- c) Continue to increase knowledge and **improve management of wetland areas** within the region.
 - Establish regional wetland management objectives under the Alberta Wetland Policy.
 - Continue to facilitate the advancement of wetland knowledge, data systems, and science in the region. Current efforts in these areas include enhancement of the Alberta Wetland Inventory, development of the Alberta Wetland Classification System, and refinement of several wetland assessment tools.
- d) Continue to increase knowledge and **improve management of riparian areas** within the region.
 - Assess the feasibility and need for a regional riparian management strategy, building on the work of the Alberta Water Council's recommendations which are expected by the end of 2014.
 - Encourage municipalities to use **Stepping Back from the Water** to establish appropriate setbacks to maintain water quality, flood water conveyance and storage, bank stability and habitat.
 - Encourage landowners to maintain their riparian areas following beneficial management practices such as those developed by the Alberta Riparian Habitat Management Society (also known as "Cows and Fish").



- Continue to increase knowledge of riparian areas including continued work on mapping and inventories and working with partner organizations and First Nations as appropriate.
- e) Encourage the use of beneficial management practices for large scale land disturbances to **minimize sedimentation of waterways**.
 - Encourage municipalities to work with land developers to develop and implement beneficial management practices and establish guidelines for erosion and sediment control.
- f) Encourage the development of **source water protection plans** and the use of **source water protection measures**. Source water protection plans may be developed by municipal water utilities, watershed planning and advisory councils and upstream stakeholders and include aboriginal participation where appropriate as a collaborative effort which is important for successful implementation.
- g) Continue to require the development of **drinking water safety plans** for all municipal waterworks systems as required under the current regulatory system. Municipalities are encouraged to work collaboratively with upstream stakeholders to identify and mitigate risks in watersheds.
- h) Encourage decision-makers and land managers to use the **available planning information**, including: riparian and wetland mapping and inventories, environmentally significant areas mapping and groundwater vulnerability mapping.

The province continues to be committed to integrated management considering water supply, water quality and aquatic ecosystems. In order to support successful integrated management of water and aquatic ecosystems, ongoing work is needed to ensure innovation and development of tools and approaches. Shared stewardship and collaboration will continue to be underlying principles.

Efficient and Resilient Water Supply

Objective:

- Water is used as efficiently as possible to meet the current and future human and ecosystem needs.
- There is resiliency in the ability of the water management system to adapt to change over time.

Strategies:

- a) Continue to develop an **optimized water management infrastructure system** in the region.

The provincial water management infrastructure will continue to be assessed for optimization and efficiencies to address periods of both low flows and drought conditions, and high flows and flooding conditions. This will build on completed work including:



- The **Water Supply Study** (2009) which assessed current and future water supply and demands.
 - The South Saskatchewan River Basin Adaptation Project which takes a multi-stakeholder approach to identify opportunities for integrated management of the Bow, Oldman and South Saskatchewan river systems.
 - The Bow River Project (2010) which will be used to determine options for managing existing flows and better achieving environmental, irrigation and municipal needs.
 - A water storage opportunities study for the South Saskatchewan Region that will be complete by the end of 2015 to explore the potential to develop additional water storage in the region and assess on-stream and off-stream storage sites.
- b) Continue to work towards the Water for Life outcome with all sectors demonstrating best management practices, ensuring **overall water efficiency and productivity in Alberta improves by 30 per cent** from 2005 levels by 2015.

All seven major water-using sectors will implement their water conservation, efficiency and productivity plans, and produce regular progress reports to the Alberta Water Council. The irrigation and urban municipalities sectors were the first to complete their plans and are currently working on implementation. The Alberta Urban Municipalities Association is working with its members to improve water conservation measures and many of the urban municipalities in the region already have water saving programs in place.

The Alberta Irrigation Projects Association developed the irrigation sector plan. They have already reported improvements and are on track to meet their targets. As the largest water user in the region, the irrigation industry recognizes the need to promote technologies and practices that conserve water resources and only utilize the amount of irrigation water required for crop growth. Looking forward, the Government of Alberta will continue to support water conservation targets through efforts such as implementation of Alberta's Irrigation: A Strategy for the Future.

Progress across all water sectors is being assessed and future direction will be considered in 2015. This may include development of regionally based targets and other additional commitments to improve efficiency and productivity.

- c) Continue to develop approaches to address the **climate variability** found in the region.
- Support flood management planning and preparedness including assessment of flood risk through:
 - Continuing to develop and update **flood hazard mapping** in regions where flooding puts current and future development and infrastructure at risk. Flood hazard mapping will be used in decision-making and to determine appropriate limitations **for new developments and infrastructure**.

On-farm irrigation efficiencies

Irrigation efficiency is the amount of water available for crop growth relative to the amount of water diverted. Highly efficient irrigation minimizes water losses that result from seepage, evaporation and return flows. On-farm efficiency is influenced by the relative uniformity of water application to the field which differs by the type of irrigation system used. For example, a low pressure pivot is more efficient than a side roll wheel move system as water is applied more uniformly and with less evaporative loss.

Flood Hazard Mapping

Flooding can cause damage to property, hardship to people and, in extreme events, loss of life. To assist Albertans in mitigating potential flood losses, the Government of Alberta manages the production of flood hazard studies and mapping under the provincial Flood Hazard Identification Program. Flood hazard mapping delineates flood hazard areas along streams and lakes using design flood levels established as part of flood hazard studies. Flood hazards have not been identified in all communities and may exist in areas without flood hazard studies or mapping.



- Supporting development of **municipal flood hazard mitigation plans** to mitigate the threat from flooding to communities in the region.
- Continuing to work on modeling and data management.
- Supporting drought management planning and preparedness.
- Further develop climate adaptation tools and initiatives.

Indicators:

- Annual reported water use volumes by major licence holders.
- Water conservation holdback volumes through licence transfers for the Bow, Oldman and South Saskatchewan rivers.
- Annual water supply volumes for the Bow, Milk, Oldman and South Saskatchewan rivers.
- Percentage of time the water conservation objective targets are achieved annually for key reaches of the Bow, Oldman and South Saskatchewan rivers.
- On-farm irrigation efficiencies achieved with time.

Efficient use of water is an important underlying principle everywhere, but is especially important in the geographic and climatic setting of southern Alberta. This valuable resource cannot be wasted. Approaches and tools will vary across sectors but the overall conservation, efficiency and productivity goals apply to all. Linked to this is the role that the established water management infrastructure in the region plays in achieving those goals. The region must also be able to adapt to the challenges related to current and projected climate variability.

Headwaters

Objective:

- Headwaters in the region are managed to maintain recharge capabilities and support critical water quality, quantity and aquatic ecosystem requirements.

Strategies:

- a) **Headwaters are protected** through the establishment of conservation areas. (See Outcome 2.)
- b) Continue **collaboration with the watershed planning and advisory councils on headwaters management initiatives** such as development of headwaters integrity indicators.
- c) Review existing **water conservation objectives for headwaters tributaries** in support of the Approved Water Management Plan for the South Saskatchewan River Basin.



The aquatic environment and the water people in the region rely on cannot be sustained unless headwaters are protected. The importance of headwaters has been recognized in the unique geography of the eastern slopes. Headwaters in other parts of the region, although for smaller watersheds, are equally important. Collaboration and shared stewardship will be essential to achieving responsible management.

Outcome 5: Community Development Needs Are Anticipated and Accommodated

Planning Cooperation and Integration

Objectives:

- Cooperation and coordination are fostered among all land-use planners and decision-makers involved in preparing and implementing land plans and strategies.
- Knowledge sharing among communities is encouraged to promote the use of planning tools and the principles of efficient use of land to address community development in the region.

Calgary Regional Partnership

- Municipalities in the metropolitan plan areas are encouraged to work together to:
 - Plan for future growth.
 - Decide on the criteria and decision-making processes for local and regional development approvals to the collective satisfaction of all members within their mandate.

Strategies:

When making land-use decisions, municipalities, provincial departments, boards and agencies, and other partners are encouraged to:

- a) Consider working together to achieve the shared environmental, economic and social outcomes in the South Saskatchewan Regional Plan and minimize negative environmental cumulative effects.
- b) Address common planning issues, especially where valued natural features and historic resources are of interests to more than one stakeholder and where the possible effect of development transcends jurisdictional boundaries.



Provincial Land-Use Policies

Land-use policies established by Lieutenant Governor In Council pursuant to Section 622 of the *Municipal Government Act* Order in Council 522-96 – November 6, 1996, do not apply in any planning region within the meaning of the *Alberta Land Stewardship Act* (ALSA) where there is an ALSA regional plan in place. By incorporating updated broad land-use policy statements in the South Saskatchewan Regional Plan, the Province retains authority to provide guidelines to municipalities on expectations needed to promote cooperation and coordination in land-use planning to reflect the uniqueness of the region

- c) Coordinate and work with each other in their respective planning activities (such as in the development of plans and policies), and development approval processes to address issues of mutual interest.
- d) Work together to anticipate, plan and set aside adequate land with the physical infrastructure and services required to accommodate future population growth and accompanying community development needs.
- e) Utilize the minimum amount of land required for developments (new residential, commercial and industrial).
- f) Plan, design, and locate future development in a manner that utilizes existing infrastructure and minimizes the need for new or expanded infrastructure.
- g) Build awareness regarding the application of land-use planning tools that reduce the impact of residential, commercial, and industrial developments on the land, including approaches and best practices for promoting the efficient use of private and public lands.
- h) Build awareness regarding the application of land-use planning tools that reduce the impact of residential, commercial and industrial developments on the land.
- i) Pursue joint use agreements, regional service commissions and any other joint cooperative arrangements that contribute specifically to intermunicipal land-use planning.
- j) Consider the value of intermunicipal development planning to address land use on fringe areas, airport vicinity protection plans or other areas of mutual interest.
- k) Coordinate land-use planning activities with First Nations, irrigation districts, school boards and health authorities on areas of mutual interest.

Calgary Regional Partnership

- a) Continue to assist the Calgary Regional Partnership and the municipalities (rural and urban) in the region to finalize the Calgary Metropolitan Plan.

Building Sustainable Communities

Objectives:

Ensure provincial guidance is provided to municipalities and other stakeholders to:

- Promote healthy and sustainable communities.
- Foster the establishment of land-use patterns for an orderly, economical and beneficial development, as well as to maintain and improve the quality of the built environment.
- Support timely planning and provision of social infrastructure.



- Contribute to the “maintenance and enhancement” of a healthy natural environment.
- Foster preservation of historic resources through responsible land-use management.
- Contribute to a safe, efficient, and cost-effective transportation network.
- Minimize risks to health, safety and loss to property damage as a result of land-use decisions.

While the following strategies are mainly provided to municipalities for consideration in their planning and decision-making, provincial departments, boards and agencies, and other partners are also encouraged to participate, cooperate and facilitate in this community development process.

Strategies:

Land-use Patterns

Municipalities are encouraged to establish land-use patterns which:

- a) Provide an appropriate mix of agricultural, residential, commercial, industrial, institutional, public and recreational land uses; developed in an orderly, efficient, compatible, safe and economical manner.
- b) Contribute to a healthy environment, a healthy economy and a high quality of life.
- c) Provide a wide range of economic development opportunities, stimulate local employment growth and promote a healthy and stable economy. Municipalities are also encouraged to complement regional and provincial economic development initiatives.
- d) Feature innovative housing designs, range of densities and housing types such as mixed-use, cluster developments, secondary suites, seniors' centres and affordable housing.
- e) Minimize potential conflict of land uses adjacent to natural resource extraction, manufacturing and other industrial developments.
- f) Minimize potential conflict of land uses within and adjacent to areas prone to flooding, erosion, subsidence, or wildfire.
- g) Complement their municipal financial management strategies, thereby contributing to the financial viability of the municipality.
- h) Locate school and health facilities, transportation and other amenities appropriately, to meet increased demand from a growing population.



Water and Watersheds

Municipalities will:

- a) Utilize or incorporate measures which minimize or mitigate possible negative impacts on important water resources or risks to health, safety and loss to property damage due to hazards associated with water, such as flooding, erosion and subsidence due to bank stability issues, etc., within the scope of their jurisdiction.
- b) Incorporate measures in land-use decisions to mitigate the impact of floods through appropriate flood hazard area management, emergency response planning for floods, and appropriate development in the flood hazard area in accordance with provincial policy on development within flood hazard areas.

Municipalities are encouraged to:

- a) Identify and recognize the values of significant water resources and other water features, such as ravines, valleys, riparian areas, stream corridors, lakeshores, wetlands and unique environmentally significant landscapes, within their boundaries.
- b) Determine appropriate land-use patterns in the vicinity of these significant water resources and other water features.
- c) Consider local impacts as well as impacts on the entire watershed.
- d) Consider the protection of these water features, and protect sensitive aquatic habitat and other aquatic resources.
- e) Assess existing developments located within flood hazard areas for long-term opportunities for re-development to reduce risk associated with flooding, including human safety, property damage, infrastructure and economic loss.
- f) Facilitate public access and enjoyment of water features, to the extent possible.
- g) Use available guidance, where appropriate, from water and watershed planning initiatives in support of municipal planning.

Non-Renewable Resources

Municipalities are encouraged to:

- a) In collaboration with industry, provincial government and other stakeholders, identify areas of existing and future extraction of surface materials (e.g., sand and gravel) and energy resources, and determine appropriate land uses in the vicinity of these resources.
- b) Within the scope of their jurisdiction in regards to non-renewable resources development, utilize or incorporate measures which minimize or mitigate possible negative impacts, and minimize risks to health, safety and loss to property damage.



- c) Municipalities, in collaboration with industry, the Government of Alberta and other stakeholders are encouraged to identify areas of existing and future extraction of energy resources, and determine appropriate land use in the vicinity of these resources.

Historic Resources

Municipalities, in consultation with the Minister responsible for the *Historical Resources Act*, are encouraged to:

- a) Identify significant historic resources to foster their preservation and enhancement for use and enjoyment by present and future generations.
- b) Work toward the designation of Municipal Historic Resources to preserve municipally significant historic places.
- c) Formulate agreements for development referrals to assist in the identification and protection of historic resources within the scope of their jurisdiction.

Transportation

- a) Municipalities are encouraged to identify, in consultation with the Minister responsible for the *Highways Development and Protection Act*, the location, nature and purpose of key provincial transportation corridors and related facilities.
- b) Municipalities are encouraged to work with Transportation to minimize negative interactions between the transportation corridors and related facilities identified in accordance with (a) above and the surrounding areas and land uses through the establishment of compatible land-use patterns.
- c) If subdivision and development is to be approved in the vicinity of the areas identified in accordance with (a) above, the municipality is encouraged to employ appropriate setback distances and other mitigating measures relating to noise, air pollution and safety to limit access and enter into highway vicinity agreements with the Minister's department.



Outcome 6: The quality of life of residents is enhanced through increased opportunities for recreation, active living, and the preservation and promotion of the region's unique cultural and natural heritage.

Objectives:

- A wide range of recreation experiences and tourism opportunities that meet the preferences of regional residents and visitors will be provided.
- The artifacts, fossils, historic places, and aboriginal heritage sites that define the region's distinctive character are identified and effectively managed.

Strategies:

- Manage **recreation and tourism opportunities** to ensure quality outdoor recreation and nature-based tourism experiences while minimizing environmental impacts.
- Continue to maintain locally, regionally and provincially **significant recreation and tourism features**, including sites, areas and corridors.
- Address **flood (2013) damaged** recreation and parks areas.
- Invest in **existing parks facilities** to enhance the experiences of users.
- Expand and designate **new provincial parks and provincial recreation areas** to provide recreational opportunities, contribute to tourism growth and begin to address growing recreational demand in the region. (See Schedule C – SSRP Land Uses and Schedule D – SSRP Digital Map.)
Some of the recreational activities that will be provided include serviced and un-serviced campgrounds, day-use areas, motorized and non-motorized staging areas and trails and tourism opportunities.
- Create **new public land recreation areas** in the eastern slopes to provide managed random camping areas. (See Schedule C – SSRP Land Uses and Schedule D – SSRP Digital Map.)
- Ensure all regional sites within the **provincial parks system** are appropriately **classed and parks areas consolidated** to gain efficiencies in management approach. (See Appendix I – Consolidation Summary for Alberta Parks Sites in the South Saskatchewan Regional Planning Area.)
- Continue to provide **outreach, education and enforcement** throughout the eastern slopes to promote stewardship.
- Work with aboriginal and other communities, stakeholders and partners to develop **comprehensive and integrated recreation and access management plans** for lands in the Green Area. Namely, the Castle, Porcupine Hills, Livingstone and Willow Creek areas by the end of 2017 (see page 50).



- j) Support current and future projects to identify, maintain and enhance sustainable long-term public **access to recreational water bodies**.
- k) In collaboration with aboriginal and other communities, stakeholders and partners develop the **South Saskatchewan Regional Trail System Plan** to provide designated land and water trails for year-round recreation linking communities, parks and outdoor spaces. (See Appendix J – Overview of the South Saskatchewan Regional Trail System Plan.)
- l) Develop the **regional parks plan for the South Saskatchewan Region** to direct the planning and management of new and existing parks within the provincial parks system by the end of 2016. This plan will reflect the conservation, recreation and tourism values, growing demands and changing expectations of visitors.
- m) Explore **legislative tool options** to help address liability concerns and facilitate continued work with trail groups and stewards in planning and managing trails.
- n) In concert with developers, ensure that land-based development activities are assessed to **identify and protect historic resources**.
- o) Ensure continued **public accessibility to information regarding historic resources** in the region.
- p) **Identify and designate important historic resources** in the region with municipal partners.
- q) Work with and support Parks Canada to inscribe **Writing-on-Stone as a UNESCO World Heritage site**.

A growing, prosperous and mobile population is changing the type of experiences people are looking for and putting more pressure on the landscape. More people are seeking outdoor recreation and nature-based tourism opportunities such as camping, picnic and day-use areas, or trail-based recreation, as well as larger and more varied special events using Crown land and public facilities. In addition to identifying the three iconic tourism destinations, there is a need for diverse recreation and tourism opportunities close to urban centres, and for the maintenance of the values that make this region so attractive for recreational users and tourists alike.

Indicators:

- Area per capita of provincial parks or designated open space for recreation.
- Recreation infrastructure such as number of campsites and kilometres of designated trails.
- Number of historic resources studies conducted.
- Number of new and previously identified historic resources protected and managed.
- Number of designated historic sites in the region.



Regulatory Details Plan: Part 6 Recreation and Parks Areas

Definitions

40 In this Part,

- (a) “provincial parks” means lands identified as provincial parks and labelled “1” through “9” on the SSRP Digital Map;
- (b) “provincial recreation area” means lands identified as a provincial recreation area and labeled “10” through “12” on the SSRP Digital Map;
- (c) “public land recreation area” means lands identified as a public land recreation areas and labelled “13” through “21” on the SSRP Digital Map;
- (d) “water” means water as defined in the *Water Act*.

Designated Minister for provincial parks and provincial recreation areas

41 For the purposes of this Part in respect of provincial parks and provincial recreation areas, the Minister designated under section 16 of the *Government Organization Act* as the Minister responsible for the *Provincial Parks Act* is the Designated Minister.

Designated Minister in respect of public land recreation areas

42 For the purposes of this Part in respect of public land recreation areas, the Minister designated under section 16 of the *Government Organization Act* as the Minister responsible for the *Public Lands Act* is the Designated Minister.

Recreation and tourism objectives

43 In respect of provincial parks, provincial recreation areas, and public land recreation areas the Designated Minister may take whatever steps that in the opinion of the Designated Minister is desirable for achieving the recreation and tourism objectives of SSRP Strategic Plan and implementing Schedule “C” to the SSRP Implementation Plan.

Renewal of certain statutory consents in provincial recreation areas and public land recreation areas

44 Subject to any other law, a statutory consent may be renewed in a provincial recreation area or public land recreation area if the statutory consent is, at the effective date of renewal, in good standing under the provisions of the enactment or enactments applicable to the statutory consent, and

- (a) if the statutory consent is consistent with this regional plan; or
- (b) if the statutory consent is inconsistent with or non-compliant with this regional plan, within the meaning of section 11(2), but
 - (i) is an agreement under the *Mines and Minerals Act* or a disposition under the *Public Lands Act* that is valid and subsisting at the time this regional plan comes into force, or



- (ii) if it is not an agreement or disposition referred to in subclause(i), but is, within the meaning of section 11(4), incidental to an agreement or disposition referred to in subclause(i).

Access to water

45 Subject to any other law, where a decision-maker under the *Environmental Protection and Enhancement Act* or *Water Act* issues a statutory consent under either of those Acts respecting water in or adjacent to a provincial park, provincial recreation area or public land recreation area identified and labelled “1” through “21” on the SSRP Digital Map, the Designated Minister shall permit access to the water through the provincial parks, provincial recreation area and public land recreation area to the extent necessary for the holder to comply with the statutory consent.

Programs to manage objectives

46 In respect of the land use in provincial parks, provincial recreation areas, and public land recreation areas, the Designated Minister shall establish and maintain programs evaluating the effectiveness of the provincial park, provincial recreation area or public land recreation area in meeting the recreation and tourism objectives in the SSRP Strategic Plan and SSRP Implementation Plan.



Outcome 7: Aboriginal peoples are included in land-use planning

Objective:

- To encourage aboriginal peoples' participation in land-use planning and input to decision-making in recognition of the cultural and economic importance of land use to those aboriginal communities with constitutionally protected rights. This will provide both aboriginal communities and the Government of Alberta with a basis for better addressing current and potential land-use conflicts, in a manner supportive of aboriginal traditional uses, such as the exercise of treaty rights.

Strategies:

- a) In accordance with applicable government policy as it may be from time to time, the Government of Alberta will continue to **consult with aboriginal peoples** in a meaningful way when government decisions may adversely affect the continued exercise of their constitutionally protected rights and the input from such consultations continues to be considered prior to the decision.
- b) Explore and present potential new approaches to draw on the rich **cultural, ecological and traditional land-use knowledge and stewardship** practices of aboriginal communities.
- c) Establish a **South Saskatchewan Regional Land Sub-Table** with First Nations with an interest in the region. This initiative will consider:
 - Development of a mechanism for engagement and strategic consultation.
 - Fish and wildlife management, access management and economic/business opportunities.
 - Management of current and new conservation areas and public land.
 - Strategic direction and joint priorities.
 - Linkages for environmental management frameworks and sub-tables (e.g., land, water, biodiversity).
- d) Continue First Nation involvement in the following **watershed management planning initiatives**:
 - Treaty 7 First Nations Water Sub-table.
 - Encourage First Nation participation in watershed planning and advisory councils.
 - Encourage First Nation involvement in headwaters protection and management.



- e) Engage aboriginal peoples on initiatives to **support tourism development** including:
- Tourism opportunity assessments.
 - The promotion of cross-cultural awareness and sharing cultural experience through visitor-based activities.
 - Opportunities to align and enhance partnerships at the provincial, regional and local levels to enhance Alberta's range of products while promoting and protecting natural resources, cultural practices and heritage lifestyles.
 - The development of partnerships based on the provision of aboriginal-recognized traditional tourism products, experiences, stories and imaginative product diversification.
 - The development of new or enhanced existing tourism products and infrastructure – including attractions, activities, amenities and accommodations.
 - Invite Treaty 7 First Nations to be involved in the Treaty 7 – Tourism Development Engagement Group Initiative to:
 - Consider opportunities to balance tourism product expansion with the needs of communities through business opportunities.
 - Enhance development and delineation of tourism development nodes and iconic tourism destinations.
 - Consider the connection with Canada's federal tourism strategy regarding Parks Canada and Aboriginal Affairs and Northern Development Canada who are conducting pilot projects for aboriginal cultural tourism businesses in or near Canada's national parks and historic sites.
- f) Promoting the **economic, social and cultural well-being** of aboriginal communities.
- Strike the appropriate balance between development and protection of the environment, with due regard to aboriginal peoples perspectives on such balance.

Indicators:

- Participation of First Nations in the First Nation Treaty 7 – Tourism Development Engagement Group Initiative.
- Participation of First Nations in the First Nation South Saskatchewan Regional Land Use Table Initiative.
- Participation of First Nations in implementation of the regional plan.

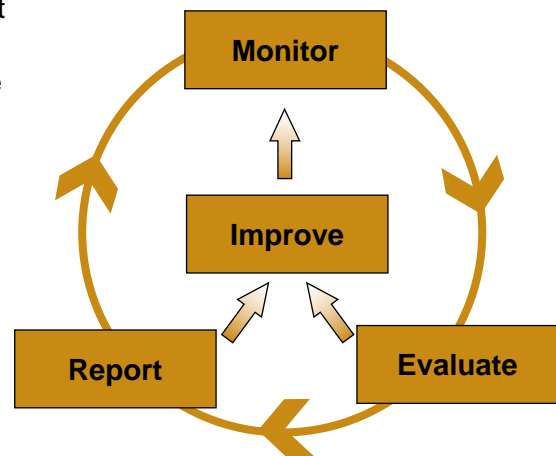


Monitoring, Evaluation and Reporting

Monitoring, evaluation and reporting are key activities for the success of the South Saskatchewan Regional Plan. To respond effectively to changing circumstances and new information, government must have a way to assess regional planning progress on objectives and outcomes and initiate corrective action where required. A system of monitoring, evaluation, reporting and improvement is needed to determine the effectiveness of the regional plan (that is, to determine if land-use strategies and actions will fulfill the regional plan's objectives and outcomes).

Monitoring

On an ongoing basis, government will systematically collect and store data for indicators about the progress of achievement of the SSRP outcomes. The indicators identified in Table 1 show the broad economic, environmental and social outcomes desired for the region. Government will be responsible for collecting data for these indicators over the span of the regional plan and for monitoring the data trends showing changes occurring in the region.



Evaluation

The monitoring data will undergo rigorous evaluation, analysis and interpretation of results within the context of government policies and strategies designed to achieve the regional objectives and ensure management actions are appropriate spatially and temporally.

This includes ministerial evaluation of monitoring data against the limits and triggers established for the region. Wherever possible, the contributions of subject matter experts within the stakeholder community will be encouraged as input into this process.

Reporting

Government will use various mechanisms to formally communicate on regional plan progress to the public, including the release of reports on an annual basis that speak directly to the plan, as well as ministry communications that address more specific aspects of the plan. Websites like the Land-use Framework site (www.landuse.alberta.ca) and other government websites will also be sources for monitoring information and progress updates related to the SSRP.



At least once every five years, an audit committee will be appointed to determine if regional objectives and policies are meeting the purposes of the *Alberta Land Stewardship Act*. The committee will make a public report to the Stewardship Minister. At least once every 10 years, a comprehensive review of the plan and a report on its effectiveness will be initiated by the Land Use Secretariat and submitted to the Stewardship Minister. This review may result in the plan being amended, replaced, renewed or repealed.

Continuously Improving

This on-going cycle of monitoring, evaluating and reporting encourages continuous improvements in decision-making and actions, so current and future generations achieve the balance desired between economic, environmental and social outcomes in South Saskatchewan Region.



Regulatory Details Plan: Part 7 Monitoring and Reporting

Definitions

47 In this Part,

- (a) “lead ministry” means the government department identified in the columns labeled “Lead Ministry” in Tables 1 and 2 of the SSRP Implementation Plan in respect of one or more supporting indicators, strategies and outcomes of this regional plan;
- (b) “strategy” means the strategy identified in the columns labelled “Strategies” in Table 2 of the SSRP Implementation Plan;
- (c) “regional outcome” means the outcome identified in the columns labeled “Provincial and Regional Outcomes” in Tables 1 and 2 of the SSRP Implementation Plan;
- (d) “supporting indicator” means the supporting indicator identified in the columns labeled “Supporting Indicators” in Table 1 of the SSRP Implementation Plan.

Designated Minister

48(1) For the purposes of this Part, the Minister responsible from time to time for a lead ministry identified for the purposes of a supporting indicator or strategy in the corresponding row in Tables 1 and 2 of the SSRP Implementation Plan is the Designated Minister.

(2) In the event a lead ministry is amalgamated with another lead ministry, is divided, or otherwise ceases to exist, the Stewardship Minister may, by order, designate Designated Minister for the purposes this Part in respect of one or more regional outcomes and strategies for the purposes of which the former lead ministry is identified in Tables 1 and 2 of the SSRP Implementation Plan.

Programs to manage objectives

49 In respect of each supporting indicator and strategy for which the Designated Minister is responsible, as identified in Tables 1 and 2 of the SSRP Implementation Plan, the Designated Minister shall establish and maintain programs monitoring and evaluating

- (a) the status of each supporting indicator, and
- (b) the effectiveness of each strategy,

in achieving the regional outcome identified in the corresponding row in those Tables.



Table 1: Regional Outcomes and Supporting Indicators

The indicators identified in the table below show the broad economic, environmental and social outcomes desired for the region. Government will be responsible for collecting data for these indicators over the span of the regional plan and for monitoring and evaluating the data to understand the trends occurring in the region.

Provincial and Regional Outcomes	Supporting Indicators	Lead Ministry
Healthy economy supported by our land and natural resources		
1. The region's economy is growing and diversified	Gross Domestic Product	Enterprise and Advanced Education
	Production Volumes	Energy/Environment and Sustainable Resource Development/ Agriculture and Rural Development/Tourism, Parks and Recreation
	Business Diversification	Enterprise and Advanced Education
	Capital Investments	Enterprise and Advanced Education
	Building Permits	Enterprise and Advanced Education
	Employment	Enterprise and Advanced Education
	Personal Income	Treasury Board and Finance
	Agricultural Land Fragmentation and Conversion	Agriculture and Rural Development

Provincial and Regional Outcomes	Supporting Indicators	Lead Ministry
Healthy ecosystems and environment		
2. Biodiversity and ecosystem function are sustained with shared stewardship	Biodiversity (to be determined as part of Biodiversity Management Framework)	Environment and Sustainable Resource Development
	Area of Conserved Land	Environment and Sustainable Resource Development
3. Air quality is managed to support healthy ecosystems and human needs through shared stewardship	Air Quality	Environment and Sustainable Resource Development
4. Watersheds are managed to support healthy ecosystems and human needs through shared stewardship	Water Quality	Environment and Sustainable Resource Development
	Water Quantity	Environment and Sustainable Resource Development
People friendly community with ample recreational and cultural opportunities		
5. Community development needs are anticipated and accommodated	Population	Treasury Board and Finance
	Housing Starts	Enterprise and Advanced Education
6. The quality of life of residents is enhanced through increased opportunities for recreation, active living, and the preservation and promotion of the region's unique cultural and natural heritage	Parks per Capita	Tourism, Parks and Recreation
	Recreation Infrastructure	Tourism, Parks and Recreation
	Historic Resources	Culture
7. Aboriginal peoples are included in land-use planning	Aboriginal peoples continue to be consulted when Government of Alberta decisions may adversely affect their continued exercise of their constitutionally protected rights, and the input from such consultation continues to be reviewed prior to the decision	Environment and Sustainable Resource Development/ Tourism, Parks and Recreation/Energy/ Aboriginal Relations

Table 2:
Regional Outcomes and Action Items

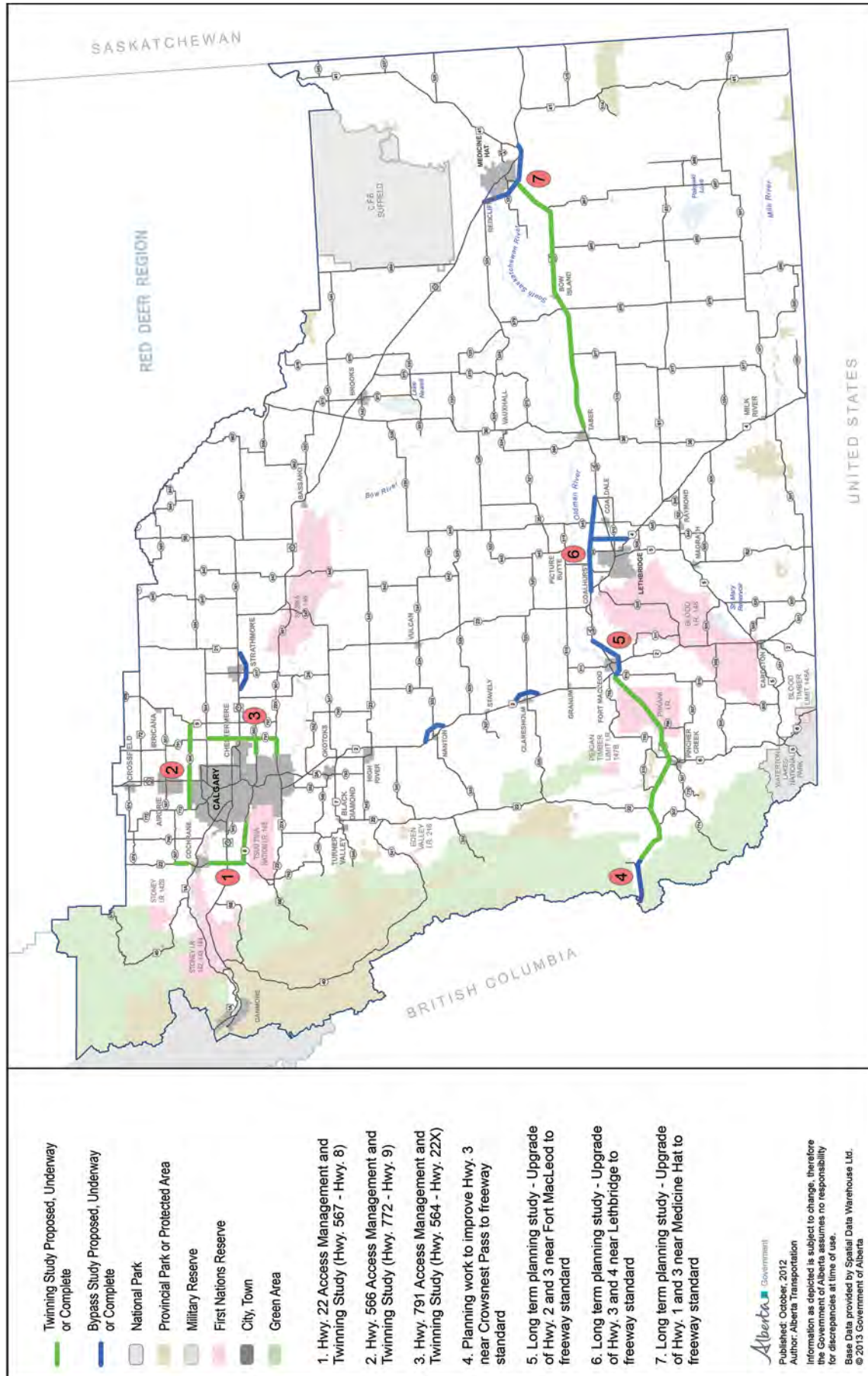
Strategies describe regulatory and non-regulatory approaches that will be used to achieve the objectives identified for each regional outcome. While some strategies identified in the SSRP are already implemented and will be ongoing over the span of the regional plan, the table below identifies the strategies that will be implemented within an identified timeline.

Provincial and Regional Outcomes	Strategies	Lead Ministry	Timeline (year end)
Healthy Economy Supported by Our Land and Natural Resources			
1. The region's economy is growing and diversified	Develop and implement destination management strategies and tourism opportunity plans	Tourism, Parks and Recreation	As soon as practicable
Healthy Ecosystems and Environment			
2. Biodiversity and ecosystem function are sustained with shared stewardship	Complete a Biodiversity Management Framework for Crown land (public lands and provincial parks) in the region	Environment and Sustainable Resource Development	2014
	Establish or expand nine new conservation areas on provincial Crown land	Tourism, Parks and Recreation/Environment and Sustainable Resource Development	As soon as practicable
	Develop a plan for management of linear footprint on Crown land in the region, with an initial focus on grizzly bear habitat, key native prairie, and species at risk habitats in the grasslands	Environment and Sustainable Resource Development	2017
	Complete development and evaluation of a voluntary conservation offset pilot on private lands	Agriculture and Rural Development	2015
	Consolidate and expand existing Public Land Use Zones in the Green Area of the region	Environment and Sustainable Resource Development	As soon as practicable

Provincial and Regional Outcomes	Strategies	Lead Ministry	Timeline (year end)
	Review, streamline and incorporate as necessary existing Integrated Resource Plans in the region into the regional plan	Environment and Sustainable Resource Development	As soon as practicable
3. Air quality is managed to support healthy ecosystems and human needs through shared stewardship	Implement the Air Quality Management Framework for the South Saskatchewan Region	Environment and Sustainable Resource Development	April 1, 2014
4. Watersheds are managed to support healthy ecosystems and human needs through shared stewardship	Implement the Surface Water Quality Management Framework for the South Saskatchewan Region	Environment and Sustainable Resource Development	April 1, 2014
	Develop a comprehensive approach for groundwater management	Environment and Sustainable Resource Development	2015
	Complete a Water Storage Opportunities Report	Agriculture and Rural Development	2015
People Friendly Communities with Ample Recreation and Culture Opportunities			
5. Community development needs are anticipated and accommodated	Strategies for this outcome are all ongoing		
6. The quality of life of residents is enhanced through increased opportunities for recreation, active living, and the preservation and promotion of the region's unique cultural and natural heritage	Address flood (2013) damaged recreation and parks areas	Tourism, Parks and Recreation	As soon as practicable
	Expand and designate new Provincial Recreation Areas and Provincial Parks	Tourism, Parks and Recreation	As soon as practicable
	Enhance facilities at key Provincial Parks	Tourism, Parks and Recreation	As soon as practicable

Provincial and Regional Outcomes	Strategies	Lead Ministry	Timeline (year end)
7. Aboriginal peoples are included in land-use planning	Develop comprehensive and integrated recreation and access management plans for the north Castle, Livingstone, Porcupine Hills and Willow Creek areas	Environment and Sustainable Resource Development	2017
	Develop a South Saskatchewan Regional Trails System Plan	Tourism, Parks and Recreation	As soon as practicable
	Develop a Regional Parks Plan	Tourism, Parks and Recreation	2016
	Develop Public Lands Recreation Areas	Environment and Sustainable Resource Development	As soon as practicable
	Establish a South Saskatchewan Regional Land Sub - Table with interested First Nations in the region	Environment and Sustainable Resource Development	Ongoing
	Continue First Nation involvement in watershed management planning initiatives	Environment and Sustainable Resource Development	Ongoing
	Engage aboriginal peoples on initiatives to support tourism development	Tourism, Parks and Recreation	Ongoing

Appendix A: Initiatives for Consideration



Appendix B:

Overview of the Approved Water Management Plan for the South Saskatchewan River Basin

The South Saskatchewan River Basin (SSRB) includes the Red Deer, Bow, Oldman and South Saskatchewan River sub-basins and is one of the major basins defined in Alberta's *Water Act*. It is managed as a single unit for meeting obligations to allow water to pass to Saskatchewan under the inter-provincial Master Agreement on Apportionment administered by the Prairie Provinces Water Board.

A water management plan for the SSRB was approved by the Lieutenant Governor in Council in 2006. The main outcome of the plan is the recognition that the limit of the water resource has been reached in the Bow, Oldman and South Saskatchewan River basins. This conclusion was reached in view of existing and potential reliability problems for licence holders as well as negative impacts on aquatic ecosystems. Alberta's future ability to meet its water-sharing obligations with the other Prairie provinces was also a factor.

This plan has resulted in the following decisions:

- The Bow, Oldman and South Saskatchewan River Basin Water Allocation Order directs Alberta Environment and Sustainable Resource Development to consider applications for water allocations in the noted sub-basins for the following purposes only:
- First Nations (for projects on reserves and other land controlled by a First Nation).
- Water conservation objective – the desired flow regime instream after diversions.
- Storage – for both the protection of the aquatic environment and for improving availability of water to existing licence holders and registrants.
- Applications filed before the date the Order was filed (August 4, 2007).
- Applications relating to the Little Bow Project/Highwood Diversion Plan or the Pine Coulee Water Management Project.
- Establishment of water conservation objectives for the Bow, Oldman and South Saskatchewan rivers that have the purpose of flow restoration.
- Establishment of a water conservation objective for the Red Deer River that permits additional allocation.
- The authorization of water allocation transfers and water conservation holdbacks.
- Consequently, a market for water allocations (licences) is developing and some significant transactions have taken place.



Water allocation transfers are simply a change to the location of a licenced water intake and/or point of use, providing a means by which reliable water allocations can be secured from existing licence holders through a private arrangement, by enterprises requiring new, additional, or more reliable water allocations in a new location. Alberta Environment and Sustainable Resource Development approval is required, including public review, notice and consideration of impacts on other water users and the aquatic environment. The water management plan prescribes matters and factors that must be considered in making decisions on applications for water allocation transfers, licences, preliminary certificates and approvals.

Water conservation holdbacks are taken from some water allocation transfers when doing so is deemed by Alberta Environment and Sustainable Resource Development to be in the public interest. Up to 10 per cent of the volume transferred can be withheld to remain in stream, for the purpose of helping to restore flows in heavily utilized streams.

Water conservation objectives are established under Alberta's *Water Act* to define the amount and quality of water necessary for the:

- Protection of a natural water body or its aquatic environment, or any part of them.
- Protection of tourism, recreational, transportation or waste assimilation uses of water.
- Management of fish or wildlife.

Appendix C: Alberta's Natural Sub-regions

Parks are an important component of the retention of native landscapes, natural habitats, biodiversity, conservation of riparian areas and protection of headwaters and watershed areas. In Alberta the Natural Regions Landscape Classification Framework has been adopted and helps determine where gaps in the protected areas network exist.

Additionally, inclusion of unique or atypical elements of biological diversity identified outside this framework help to identify the best landscapes for conservation. Two Government of Alberta policies support this work: Alberta's Plan for Parks and the Land-use Framework.

Currently, there are significant representation gaps in three of the natural Sub-regions within the Grassland Natural Region, as well as in the Foothills Parkland Sub-region within the Parkland Natural Region that are achievable within the South Saskatchewan Region. In addition, gaps in the Foothills Parkland, Foothills Fescue and Mixed grass natural Sub-regions can only be



met in the South Saskatchewan Region as they do not occur anywhere else in the province in any significant way.

The table below illustrates the percentage of gaps currently filled by protected areas within the four Sub-regions in Alberta. (This chart does not include the proposed conservation areas in the DRAFT SSRP)

Representation of Natural Landscape Types by Natural Region and Subregion within Parks and Protected Areas in Alberta

Natural Region	Subregion	Subregion Size (km ²)	Total Area of Sites within Subregion (km ²) ¹	% of Subregion Protected	Total # of Sites in Subregion ^{1,2}	Targets		Progress Toward Targets ³		
						# Natural Landscape Type Targets	Total Area of Targets (km ²)	# Sites Contributing to Targets ²	Area Contributing to Target (km ²)	Average % of Targets Achieved
Rocky Mountains	Montane	8,768	2,404	27.4%	87	4	620	28	620	100%
	Subalpine	25,218	13,361	53.0%	49	5	645	31	645	100%
	Alpine	15,084	12,772	84.7%	21	5	645	21	645	100%
	Subtotal	49,070	28,538	58.2%		14	1,910		1,910	100%
Foothills	Lower Foothills	44,899	341	0.8%	60	5	1,125	12	289	41%
	Upper Foothills	21,537	604	2.8%	55	5	710	19	554	71%
	Subtotal	66,436	945	1.4%		10	1,835		843	56%
Grassland	Dry Mixedgrass	46,937	769	1.6%	12	10	1,250	9	714	65%
	Mixedgrass	20,072	208	1.0%	13	10	265	4	162	50%
	Northern Fescue	14,933	196	1.3%	9	11	450	4	173	41%
	Foothills Fescue	13,623	84	0.6%	13	9	270	5	48	32%
	Subtotal	95,565	1,258	1.3%		40	2,235		1,098	40%
Parkland	Central Parkland	53,706	469	0.9%	35	12	1,415	20	390	49%
	Foothills Parkland	3,921	82	2.1%	14	8	230	8	76	42%
	Peace River Parkland	3,120	20	0.6%	5	6	130	4	21	18%
	Subtotal	60,747	570	0.9%		26	1,775		487	40%
Boreal Forest	Dry Mixedwood	85,321	1,375	1.6%	80	11	2,000	38	955	57%
	Central Mixedwood	167,856	18,777	11.2%	80	11	3,500	35	3,500	100%
	Lower Boreal Highlands	55,615	3,245	5.8%	15	8	1,375	7	1,375	100%
	Upper Boreal Highlands	11,858	1,463	12.3%	4	4	325	3	325	100%
	Peace-Athabasca Delta	5,535	4,329	78.2%	3	3	300	3	300	100%
	Northern Mixedwood	29,513	13,216	44.8%	3	8	1,600	3	1,600	100%
	Boreal Subarctic	11,823	5,832	49.3%	2	5	450	2	450	100%
	Athabasca Plain	13,525	2,126	15.7%	8	7	385	7	385	100%
	Subtotal	381,046	50,364	13.2%		57	9,935		8,890	92%
Canadian Shield	Kazan Upland	9,719	1,504	15.5%	5	6	360	5	360	100%
	Subtotal	9,719	1,504	15.5%		6	360		360	100%
ALL	TOTAL	662,583	83,179	12.6%		153	18,050		13,589	70%

1 - Sites include all classes of Provincial Parks and Protected Areas, National Parks and National Wildlife Areas

2 - Individual Sites may contribute to more than one subregion and/or target

3 - Only sites with a primary objective of the conservation of nature are considered to contribute toward representation of targets. Progress achieved through proposed SSRP conservation areas are not reflected in this chart.



Appendix D: Overview of New Conservation Areas and Recreation and Parks Areas in the South Saskatchewan Region

New Conservation Areas (Management of the following areas are further defined in Schedule C)			
Map Area	Area Name (added area)	Area Size (ha)	Legal Designation
A	Don Getty Expansion	27,928	Wildland Provincial Park
B	Bow Valley Expansion	8,075	Wildland Provincial Park
C	Bluerock Expansion	453	Wildland Provincial Park
D	Mt. Livingstone	564	Wildland Provincial Park***
E	Beehive	6,734	Wildland Provincial Park***
F	High Rock	8,362	Wildland Provincial Park
G	Bob Creek Expansion	328	Wildland Provincial Park
H	Livingstone Range	4,614	Wildland Provincial Park
I	Castle	44,558	Wildland Provincial Park
J	Pekisko	33,050	Heritage Rangeland**
K	Castle	10,741	Conservation Area*
Total		134,666 10,741*	

* Conservation Area being established as a Public Land Use Zone under the *Alberta Public Lands Act* – commercial forestry is permitted but the management priority is for maintaining biodiversity and headwaters protection. Enhanced best management practices for biodiversity and headwaters protection will be required such as: winter only operations to avoid critical active periods for grizzly bear, practices to restrict access, buffer zones that cover entire riparian areas and visual buffer screens to increase bear security for travel.

** Management will be undertaken by Environment and Sustainable Resource Development.

*** Mount Livingstone and Beehive are currently Natural Areas and are being designated as Wildland Provincial Parks.



Recreation and Parks Areas

(Management of the following areas are further defined in Schedule C)

Map Area	Area Name	Area Size (ha)	Type of Change	Legal Designation
1	West Bragg Creek	81	Expansion	Provincial Park
2	Gooseberry	56	Expansion	Provincial Park
3	Elbow River	107	Expansion	Provincial Park
4	Elbow Falls	43	Expansion	Provincial Park
5	Little Elbow	28	Expansion	Provincial Park
6	Sheep River	266	Expansion	Provincial Park
7	Chinook	217	Expansion	Provincial Park
8	Syncline	418	Expansion	Provincial Park
9	Cypress Hills	129	Expansion	Provincial Park
10	Sibbald Lake	83	Expansion	Provincial Recreation Area (PRA)
11	Crowsnest Lake	14	New	PRA
12	Coleman	32	New	PRA

Public Land Recreation Areas

(Management of the following areas are further defined in Schedule C)

Map Area	Area Name	Area Size (ha)	Type of Change	Legal Designation
13	Speers Creek	TBD	New	Public Land Recreation Area (PLRA)
14	Trout Creek	TBD	New	PLRA
15	Ceasar's Flat	TBD	New	PLRA
16	Beaver Creek	TBD	New	PLRA
17	Atlas	TBD	New	PLRA
18	McGillivray	TBD	New	PLRA
19	Tent Mountain	TBD	New	PLRA
20	Lynx Creek Flats	TBD	New	PLRA
21	Upper Castle Flats	TBD	New	PLRA

The Public Land Recreation Areas boundaries will be determined based upon existing access, use and natural features and will be small in size.



Appendix E: Iconic Tourism Destinations: Kananaskis, Canadian Badlands and Southern Rockies

The three identified areas will be developed as Iconic Tourism Destinations to:

- Diversify the regional and local economy.
- Increase tourism visitation, length of stay and visitor expenditures.
- Offer a full range of recreation and tourism, experiences, opportunities and activities.
- Provide an attractive tourism destination for local, provincial, national and international visitors.
- Support hunting, fishing and trapping (including by aboriginal communities). Hunting includes commercial guiding and outfitting operations where wildlife species management plans provide an allocation for that use.
- Protect and maintain private property rights.
- Honour existing direction regarding statutory consents and tenures on public lands.
- Provide for the continued issuance of new statutory consents and tenures on public lands.

In developing the Iconic Tourism Destinations, the Government of Alberta will work with First Nations to consider how their constitutionally protected rights to hunt, fish and trap for food can continue to occur within reasonable proximity of First Nations' main population centres.

Destination Management Planning

Destination Management Planning provides the tourism industry with the tools to produce sustainable and competitive tourism in a destination. It is organized around a destination's unique tourism assets and unique planning, development, marketing and management needs.

It represents a more integrated approach to understanding destination needs and the delivery of services with the specific planning goals to:

- Collate research and baseline data to document current tourism supply and demand scenarios.
- Investigate land-use planning and natural resource management requirements.
 - Identify recreation and tourism features, settings and scenery on public lands and ensure impacts to these features, settings and scenery are minimized.



- Identify approaches to ensure tourism development is sustainable and meets any regional or area-specific environmental thresholds.
- Gather information from local people, community leaders and industry stakeholders.

Tourism nodes already identified by destination planning currently occurring in these areas will be carried forward into the planning process and will be encouraged as locations for private and community investment.

Destination Management Strategies

Destination Management Strategies provides the framework to guide tourism industry development in the region by coordinating stakeholders in a common direction to maximize the tourism potential of the destination so as to achieve a balance of economic, social and environmental outcomes.

They focus regional development resources on growing and enhancing the supply of tourism products and services that develop the destinations. The strategies will, in collaboration with communities and stakeholders:

- Identify tourism business investment opportunities for the public, private and not-for-profit sectors.
- Identify the need for new innovative tourism product and infrastructure development across the region.
- Identify the region's significant attractions and experiences.
- Identify relevant research on tourism supply and demand and identify new trends in recreation and tourism activities.
- Identify current target markets and those identified for development to achieve the region's long-term potential.
- Identify an agreed focus and mechanism for engagement with the tourism industry, infrastructure providers and private investors.

Destination Management Plans

Destination Management Plans are developed after a comprehensive process of research within the destination, consultation, feedback, planning and review where community-level participation from local tourism organizations, tourism boards, local government and operators is essential in their preparation.

Their purpose is to grow destination appeal and provide direction for the sustainable development of tourism products and services in the three destinations over the next 10 years, and in consideration of other economic and social interests and values in the area. The plans will, in collaboration with communities and stakeholders:

- Identify a vision for each of the destinations.
- Identify key enablers that will encourage tourism growth in the destinations and surrounding region.



- Prioritize product development and visitor experiences that address current expectations and future demand.
- Provide direction to enhance and sustain a quality land base to support tourism product development.
- Prioritize and secure new tourism business investment opportunities.
- Identify specific investment needs that support the priority development of innovative tourism infrastructure projects.
- Facilitate collaboration amongst key tourism industry stakeholders (communities, investors, financiers and operators).
- Identify a destination brand and establish a marketing plan for each of the destinations.
- Provide a detailed implementation action plan, funding priorities and funding strategies.

Both the strategy and the plan will be developed as an *Alberta Land Stewardship Act* issue-specific plan and will be led by Tourism, Parks and Recreation, with engagement with other ministries, aboriginal communities, local governments, stakeholders and the public.

Appendix F: Overview of Biodiversity Management Framework

The following provides an overview of the proposed contents of a biodiversity management framework for the region. This is intended to illustrate the current directions for proposed content; however there will be consultation and engagement during the development of the management framework which will be completed by the end of 2014.

Introduction and Purpose of the Management Framework

Biodiversity, short for “biological diversity,” represents the assortment of life – including the variety of genetics and species, and the habitats in which they occur – all shaped by natural processes of change and adaptation. For regional planning, the focus is on indicators of biodiversity at a regional scale that are affected by land-use activity.

Biodiversity and the services it provides are critical to the well-being of current and future generations of Albertans. Biodiversity and ecosystem services are not the same thing but they are interdependent. Ecosystem services are the benefits humans, communities and society as a whole receive from healthy functioning ecosystems and the biodiversity found in them. Some of these services include fresh water, crops, forests, fish and



wildlife, and cultural and recreational opportunities (e.g. hunting, fishing, and esthetic values). Biodiversity underpins the supply of ecosystem services and so changes in biodiversity will affect the kind and amount of those services available. If biodiversity is not properly managed, species at risk designations can occur which further restrict industry access to resources, and impact Alberta's reputation for environmental management. Collectively this impacts Alberta's economy. Managing biodiversity is integral to continued economic prosperity. The conservation and sustainable use of biodiversity will be essential elements in an overall environmental management approach that supports the social licence for development and management of Alberta's natural resources.

While cumulative effects are considered to be the combined effects of past, present and reasonably foreseeable land-use activities on the environment, it is not the intention of the biodiversity management framework to return Alberta to the levels of biodiversity found prior to European settlement. Today's Alberta includes working landscapes, and the Land-use Framework policy acknowledges the need to balance environmental, social and economic considerations. The focus of the framework is from today into the future, where information from modelled predictions of the past conditions could inform decision-making about desired future conditions.

Policy Context

Alberta is a signatory to the Canadian Biodiversity Strategy, a commitment under the 1992 UN Convention on Biological Diversity. Alberta, along with other Canadian jurisdictions, agreed to use the Canadian Biodiversity Strategy as a guide for actions to conserve biodiversity and to use biological resources in a sustainable manner. Further, Alberta's Land-use Framework establishes environmental outcomes, including maintenance of biodiversity, and that a cumulative effects approach will be taken in land-use planning to manage the long-term cumulative effects of development on the environment.

Regional Objectives

- Terrestrial and aquatic biodiversity are maintained.
- Species at risk are recovered and key grasslands habitat is sustained.
- Areas are added to the regional network of conservation areas.
- Biodiversity and healthy functioning ecosystems continue to provide a range of benefits to communities in the region and Albertans.
- Long-term forest ecosystem health and resiliency is maintained



Indicators and Targets for Biodiversity

Primary indicators will be identified based on two areas of focus: the Eastern Slopes/Parkland/Foothills Fescue area and a grasslands area encompassing the rest of the South Saskatchewan Region. The following are some possible examples that illustrate the types of indicators that may be used:

Eastern Slopes Sub-region Indicators

- Grizzly bear recovery
- Ecosystem health

Grasslands Sub-region Indicators

- Native grassland
- Important/representative species habitats

Secondary indicators will be monitored along with the primary indicators to ensure a broad representation of regional level biodiversity is being assessed over time. If such indicators are trending into areas of high or very high risk, management response planning or other land-use requirements (e.g. human footprint reduction) will be determined.

Methodology to Establish Targets for Biodiversity Indicators

The following existing information will be used for setting targets for selected indicators for regional plans: Species at Risk (SAR) Recovery Plans, Forest Management Plans (FMP), and monitoring reports from the Alberta Biodiversity Monitoring Institute (ABMI) will be used. Environment Canada data, and pertinent research information will also be considered.

Risk Bands

In addition to monitoring data and plans, setting of targets is informed by forecasting (that is, modeling) to assess potential levels of risk to selected biodiversity indicators over time based on regional scale projections of land-use development.

A risk assessment protocol has been developed, based on risk-level breakpoints from the International Union for the Conservation of Nature (IUCN), which is used in assessing the status of species at risk. Although this isn't the same process as designating a species at risk, it gives an indication of trends that need to be considered in development of targets for indicators (see figure on the next page).

Species in the high or very high risk levels are more likely to be assessed as a species at risk, which leads to restrictions on industry access to resources, and other public uses (e.g., recreation). The risk values represent the percentage of the indicator remaining relative to what would have been expected to be found in a landscape with little to no human disturbance impacts on the habitat or ecological function of biodiversity indicators.



Figure – Biodiversity Risk Assessment

Biodiversity Indicator Status	Implications
Stable – Low Risk (70-100 per cent remaining)	Populations are healthy and self-sustaining Low level of restrictions on hunting, fishing, and industrial development
Moderate Risk (50-70 per cent remaining)	Populations are mostly self-sustaining, but some declines Increasing restrictions on hunting, fishing, and industrial development
High Risk (20-50 per cent remaining)	Potential for species at risk designations if projected trend realized through monitoring Negative attention/media within Alberta. Federal involvement May lose hunting and fishing opportunities Increased cost to industry and resource development due to restrictions
Very High Risk (0-20 per cent remaining)	High likelihood to result in species at risk designations if projected trend realized through monitoring Negative reputation for Alberta. Federal intervention High cost for recovery while high potential for species loss Industry access to resources restricted Economic impacts

Management Approaches

Biodiversity targets for selected indicators will guide decisions about future and existing land-use activities. Meeting biodiversity targets established in the framework will depend on a number of actions related to minimizing human footprint on public lands.

These strategies include:

- Minimizing the duration and extent of linear disturbances.
- Managing public motorized access in specific locations.



- Maintaining a diverse range of forest seral stages.
- Maintaining stream continuity (minimizing fragmentation of watercourses due to barriers at stream crossings).
- Managing wildfire risk in key species at risk habitats which depend on natural disturbance.

A range of tools and approaches will be used to achieve biodiversity objectives and targets

1. The existing network of conservation areas with lands added as described under Outcome 2 – designating new areas in the region will support grizzly bear, grasslands, and other indicators.
2. Development of a linear footprint management plan in the Green Area and White Area – will reduce the extent, duration, and rate of total linear footprint development, through detailed planning, setting of limits and targets in favor of key biodiversity indicators such as grizzly bear exposure, and maintaining intact native prairie.
3. Integrated Land Management (ILM) tools will be required including coordinated industry planning of major access corridors and associated development infrastructure; re-use of existing linear disturbance and progressive and timely reclamation of linear disturbances and land not required for further development.

These new approaches and tools will build on, and be incorporated into, existing programs such as the Enhanced Approvals Process (EAP) which outlines oil and gas development requirements; the Landscape Analysis Tool; the Grazing Leaseholders Code of Practice, forest management plans, and existing Public Land Use Zones to manage public access. In the case of linear footprint targets and limits, specific plans may be required, and implemented through the Public Lands Administration Regulation which allows for disturbance standards.

The full compendium of tools under Integrated Land Management can be found on the website of the Ministry responsible for the *Public Lands Act*.

Proposed Monitoring Approach

Monitoring involves collecting quality information on the status of the biodiversity indicators and the amounts of the human disturbance footprint. The Alberta Biodiversity Monitoring Institute (ABMI) has a structured sampling program across the province which will be the main source of biodiversity monitoring in the region. In the future, the Alberta Environmental Monitoring, Evaluation and Reporting Agency will coordinate most of this monitoring work. This program will be linked to other biodiversity monitoring initiatives led by government or partners of government such as the Rangeland Health Monitoring Program, Forest Management Plan reporting, and the Species at Risk recovery plan reporting. Data also comes from existing monitoring done by ESRD (rare, hunted, fished or trapped species) or other organizations (e.g., Alberta Conservation Association), academics, and the federal government if applicable.



Appendix G: Consolidation and Expansion of Public Land Use Zones in Green Area Public Land

What is a Public Land Use Zone?

A Public Land Use Zone is a designated area of public land established under the *Public Lands Act* to assist in the management of industrial, commercial, and recreational land uses and resources. They are typically used in areas of high overlapping activity and contain conditions to manage access to reduce user conflicts, and protect sensitive areas. They are an effective tool to conserve biodiversity on the working landscape.

Public Land Use Zones in the Eastern Slopes

Green Area public land within the South Saskatchewan Region will be managed by means of Public Land Use Zones. This will improve the province's ability to effectively manage public land across the Green Area, manage undesirable impacts, address priority issues, and increase the safety and enjoyment of recreational users throughout these areas.

The existing Public Land Use Zones will be consolidated and expanded as part of implementation of the regional plan. The intention is to standardize Public Land Use Zone conditions and add Public Land Use Zone to remaining Green Area public land.

Current State – Existing Public Land Use Zones and Associated Plans

Public Land Use Zone	Purpose	Associated Plans
Allison/Chinook	Designate separate areas for motorized and non-motorized recreational activities	Crowsnest Corridor Local IRP
Castle Special Management Area	Restrict motorized access to certain areas, and protect ecologically sensitive backcountry areas	Castle River Sub-regional IRP; Castle Access Management Plan
Cataract Creek Snow Vehicle	Provide snowmobiling opportunities in the Cataract Creek area	Eden Valley Local IRP



Public Land Use Zone	Purpose	Associated
Dormer Sheep	Provide year-round access for non-motorized and equestrian use. Access for off highway vehicles (OHV) is permitted on designated trails	Nordegg/Red Deer Sub-regional IRP; Bighorn Backcountry Access Management Plan Recreation Trail Monitoring
Ghost	Address the growing demand for recreation and the potential conflicts among uses in the Ghost-Waiparous area	Ghost River Sub-regional IRP; Ghost-Waiparous Operational Access Management Plan
McLean Creek OHV	Provide an area for off-highway vehicle (OHV) use	Kananaskis Sub-regional IRP
Panther Corners	Provide a year-round network of trails for non-motorized and equestrian use. No motorized access is permitted	Nordegg/Red Deer Sub-regional IRP; Bighorn Backcountry Access Management Plan Recreation Trail Monitoring
Sibbald Snow Vehicle	Provide snowmobiling opportunities in this area	Kananaskis Sub-regional IRP
Kananaskis Country		Kananaskis Sub-regional IRP
Willow Creek	Reduce environmental impacts from use of the area	Livingstone-Porcupine Hills Sub-regional IRP



Proposed Approach for Public Land Use Zones

Existing	Proposed
Green Area public land	Public Land Use Zone coverage
10 Public Land Use Zones Allison/Chinook Castle Special Management Area Cataract Creek (Snow Vehicle) Dormer Sheep Ghost Kananaskis Country Mclean Creek (OHV) Sibbald (Snow Vehicle) Panther Corners Willow Creek	Consolidation and expansion of Public Land Use Zones focused on the following areas: 1 Castle Special Management Area, Allison/Chinook, Cataract Creek (Snow Vehicle) and Willow Creek; adding north Castle, Livingstone, Porcupine Hills, and Poll Haven areas 2 Ghost and Sheep Dormer; adding lands from Forest Reserve Boundary to Green Area public land boundary 3 Kananaskis including McLean Creek (OHV) and Sibbald (Snow Vehicle) 4 Panther Corners
10 sets of conditions	Consolidation of common conditions; specific conditions for areas as needed reflecting access management and linear footprint planning

New Area Descriptions

Poll Haven – Green Area public land bordering the United States and Waterton National Park.

Livingstone – Green Area public land north of the Crowsnest Pass. Sensitive rough fescue grassland, headwaters, and Cutthroat Trout habitat.

Porcupine Hills – Green Area public land in the foothills area near Livingstone. Sensitive rough fescue grassland, conflicts with grazing and recreation.

North of Kananaskis – Green Area public land from Forest Reserve Boundary to Green Area public land boundary.



Implementation Steps and Timing

On plan approval:

- Public access to Green Area public land will continue
- The Public Lands Administration Regulation. These apply to all provincial land managed by Environment and Sustainable Resource Development under the *Public Lands Act* (including lands within Public Land Use Zones). There will be no change to the application of these requirements.
- Regulations will be amended to ensure protection of watercourses, water bodies and wetland areas.
- Regulations will be amended to ensure avoidance of camping and off-highway vehicle recreation on industrial facility areas (e.g. well sites) for safety reasons.
- The existing 10 Public Land Use Zones will stay in place. Existing access management plans (as listed above) will continue to apply.

Following Plan Approval (through plan implementation):

- Future access and camping management will be determined through trail mapping, and through recreation and access management planning and linear footprint management planning with consultation. Priority areas are the area north of Castle, Livingstone, Porcupine Hills and Willow Creek. The Government of Alberta will work collaboratively with stakeholders and trail associations to determine the appropriate trail network.
- New public land recreation areas (low infrastructure camping areas) will be established in conjunction with other strategies for enhancing recreation and tourism opportunities.
- Expanded Public Land Use Zones will be established after trails are identified through mapping and posting of signs.
- As recreation and access management plans, the linear footprint management plan and the South Saskatchewan Regional Trail System Plan are completed, the Public Land Use Zones Schedule(s) will be updated as part of implementation of these plans.



Appendix H:

Conversion of Grasslands – White Area Public Land – Policy Guidelines

The following policy guidelines are to be considered in review of an application for the sale of White Area public land in the South Saskatchewan Region:

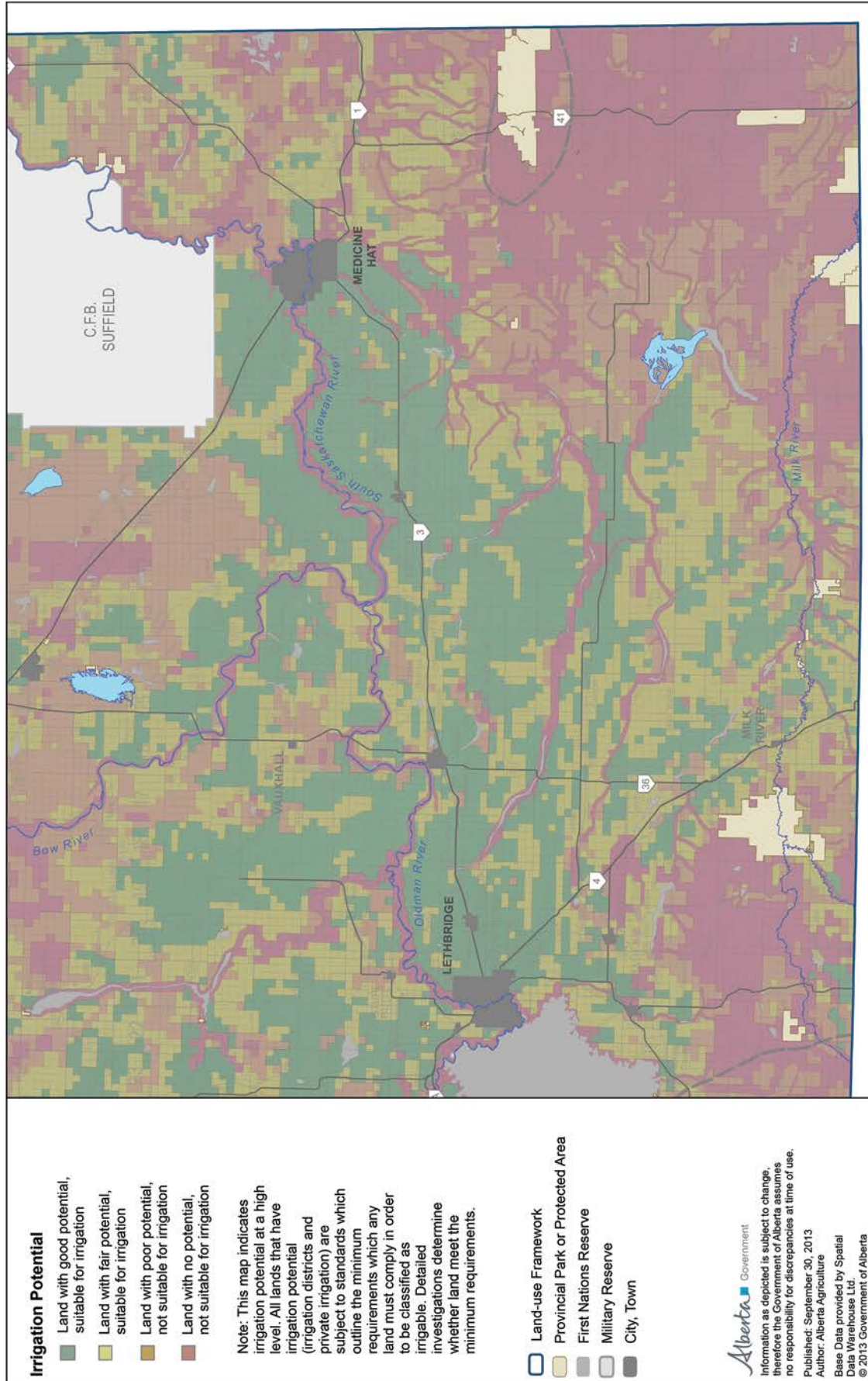
- Intact native grasslands – No new sales of public lands will be permitted in areas of intact native grasslands (see maps – Intact Native Grassland and Irrigation Potential) where no irrigation potential exists based on map and field assessments.

Where irrigation potential exists, applications will be reviewed on a case-by-case basis. Proposals that include an offsetting area of intact grassland from private land would have a higher potential for approval, if all other criteria are met. The preferred offset would be land exchange sponsored by the government where public land being sold would be exchanged for an appropriate ratio of intact private grassland to be held permanently by the provincial Crown. Second priority would be a private land offset held by a sponsoring agency such as a land trust or the Alberta Conservation Association.

- Non-intact native grasslands – Regardless of irrigation potential, new sales of public land will be considered, subject to review for land suitability (e.g. soils) and whether needed for government programs (e.g., soil conservation, species at risk habitat).



South Saskatchewan: Irrigation Potential





Appendix I: Proposed Reclassification and Consolidation for Alberta Parks Sites in the South Saskatchewan Regional Planning Area

As part of the Plan for Parks, the Government of Alberta has committed to providing quality park experiences for all Albertans. A part of that commitment is clarifying and refining the parks system by ensuring that all sites within the provincial parks system are appropriately classed under the existing parks legislation. Currently there are several sites across the systems that are not classed properly, for example the size, uniqueness, or quality of experience indicates that they should be classed differently.

Consolidations and re-classifications would help to clarify the existing use of the sites and will also help create efficiencies in management, operations and costs so that resources can be allocated more effectively. Existing use would not change by the re-classification and consolidation of these sites.

Sites in the SSRP will be reviewed and proposed re-classifications and consolidations will be recommended and consulted upon as part of implementation of the regional plan. An example of re-classifications and consolidations that would occur is the re-classification and consolidation of the Provincial Recreation Areas within the Elbow Valley into one Elbow Valley Provincial Park, as per the approved Kananaskis Provincial Recreation Areas and Bragg Creek Provincial Park Management Plan.

Appendix J: Overview of the South Saskatchewan Regional Trail System Plan

Tourism, Parks and Recreation and Environment and Sustainable Resource Development will collaborate with and engage aboriginal communities, municipal governments, stakeholders and the public to plan and develop a regional trail system plan. The regional trail system plan will:

- Use the Alberta Recreation Corridor and Trails Classification System to identify and designate winter and summer motorized, non-motorized and mixed-use land- and water-based trails, routes and areas that link communities, neighbourhoods, destinations and other jurisdictions with the region's parks, outdoor spaces and recreation and tourism areas;
- Identify and designate sustainable, high-intensity motorized recreation areas;



- Identify other infrastructure and facilities necessary to support trails-based recreation; and
- Be planned, developed and managed in accordance with the standards and guides set out in the Provincial Trails System and other supporting documents.

The development of the regional trail system plan will include:

- The identification and analysis of recreation trail demands, supply and gaps;
- An inventory and assessment of the sustainability and quality of existing pathways, trails and user-created travel routes and areas;
- The gathering and analysis of environmental, resource, land use, heritage, aboriginal and other social data and land-use commitments;
- The development, assessment and discussion of options and scenarios for regional trail system design. This will include an assessment of the benefits and risks of these options and scenarios for other objectives in the SSRP, their consistency with other provisions in the SSRP and existing land-use commitments;
- In accordance with the Provincial Trails System, establish the class, desired experience and explicit management objective statement for each trail, route or area in the system;
- Trail, route and area development, maintenance and management priorities; information and education strategies and performance monitoring;
- Direction on enforcement, including plans for any modifications of – or enhancements to – the existing enforcement capability needed to achieve timely, fair and effective enforcement of restrictions on trail use, access and associated activities that support the objectives of the regional trail system; and
- The identification of industrial access, resource roads or developments that could contribute to the regional trail system and where reclamation requirements may be deferred and/or amended to reflect their contribution to the regional trail system.



Schedule A: Air Quality Management Framework Limits and Triggers

Table A-1 Annual Ambient Air Quality Triggers and Limit for NO₂

Description	NO ₂
Level 4	
Limit ¹	45 µg/m ³ (24 ppb)
Level 3	
Trigger for Level 3	30 µg/m ³ (16 ppb)
Level 2	
Trigger for Level 2	15 µg/m ³ (8 ppb)
Level 1	

Ambient air quality triggers and limits apply at continuous air monitoring stations, as described in this framework. Limits are based upon Alberta Ambient Air Quality Objectives.

Table A-2: Interim Upper Range of Data (99th percentile) Ambient Air Quality Triggers for NO₂

Description	NO ₂
Level 4	
Trigger for Level 4*	196 µg/m ³ (104 ppb)
Level 3	
Trigger for Level 3	130 µg/m ³ (69 ppb)
Level 2	
Trigger for Level 2	66 µg/m ³ (35 ppb)
Level 1	

* This is an ambient trigger and not a limit.

Ambient air quality triggers and limits apply at continuous air monitoring stations, as described in this framework.



Table A-3: Action Levels, Triggers and Limits for Ozone and Fine Particulate Matter

Description	O ₃ (*)	PM _{2.5} 24-hour (**)	PM _{2.5} annual
Level 4 ^(iv)			
Limit ⁽ⁱ⁾	63 ppb	28 µg/m ³	10 µg/m ³
Level 3 ^(v)			
Trigger for Level 3 ⁽ⁱⁱ⁾	56 ppb	19 µg/m ³	6.4 µg/m ³
Level 2 ^(vi)			
Trigger for Level 2 ⁽ⁱⁱⁱ⁾	50 ppb	10 µg/m ³	4.0 µg/m ³
Level 1 ^(vii)			

* 8-hour averaging time, achievement to be based on 4th highest annual measurement, averaged over three consecutive years

** 24-hour averaging time, achievement to be based on 98th percentile annual value, averaged over three consecutive years

(i) CAAQS refers to this as Highest Threshold

(ii) CAAQS refers to this as Middle Threshold

(iii) CAAQS refers to this as Lowest Threshold

(iv) CAAQS refers to these as Actions for Achieving Air Zone CAAQS, or Red Management Level

(v) CAAQS refers to these as Actions for Preventing CAAQS exceedances, or Orange Management Level

(vi) CAAQS refers to these as Actions for Preventing AQ Deterioration, or Yellow Management Level

(vii) CAAQS refers to these as Actions for Keeping Clean Areas Clean, or Green Management Level

First reporting under the framework is anticipated be done in the year following the regional plan coming into force. This will be aligned with monitoring and reporting of progress and activities under the national Air Quality Management System.

Schedule B: Surface Water Quality Management Framework Limits and Triggers

Table B-1: Ambient Surface Water Quality Triggers and Limits for the Bow River at Cochrane.

Indicator	Surface Water Quality Triggers				Surface Water Quality Limit
	Open Water (April to Oct.)		Winter (Nov. to March)		
	Median	90%ile	Median	90%ile	
Total Ammonia (NH ₃₊₄ -N) mg/L	0.005	0.041	0.008	0.025	varies with pH and temperature ^a
Chloride (Cl ⁻) mg/L	1.9	2.9	2.0	2.6	100 ^b
Nitrate (NO ₃ -N) mg/L	0.074	0.108	0.109	0.130	3.0 ^a
Total Nitrogen (TN) mg/L	0.18	0.40	0.17	0.23	-
Total Dissolved Phosphorus (TDP) mg/L	0.002	0.004	0.002	0.004	-
Total Phosphorus (TP) mg/L	0.005	0.009	0.003	0.006	-
Sulphate (SO ₄ ⁻) mg/L	33.6	40.4	42.2	45.8	1000 ^{c,1}
Sodium Adsorption Ratio (SAR)	0.07	0.12	0.07	0.10	5 ^d
Specific Conductivity µS/cm	289	317	330	349	1000 ^d
Total Dissolved Solids mg/L	165	190	190	200	500 ^b
Total Organic Carbon mg/L	1.0	1.6	0.8	0.9	-
Total Suspended Solids mg/L	2	8	1	2	-
Turbidity NTU	1.8	10.1	0.8	1.7	-
pH	8.23	8.38	8.17	8.30	<6.5 or >9.0 ^a
<i>Escherichia coli</i> cfu per 100 mL	2	13	1	2	100 ^b

a CCME Guidelines for the Protection of Aquatic Life

b CCME Guidelines for the Protection of Agricultural Water Uses - Irrigation Use

c CCME Guidelines for the Protection of Agricultural Water Uses - Livestock Use

d Alberta Agriculture and Rural Development Guidelines for Irrigation Water Quality - note is combination of SAR and Specific Conductivity limit values in evaluating water suitability for use.

1 Sulphate guidelines related to livestock use presently under review

mg/L = milligram per litre; µS/cm = microsiemens per centimetre; NTU = Nephelometric Turbidity Unit; cfu = colony forming units

Table B-2: Ambient Surface Water Quality Triggers and Limits for the Bow River at Carseland

Indicator	Surface Water Quality Triggers				Surface Water Quality Limit
	Open Water (April to Oct.)		Winter (Nov. to March)		
	Median	90%ile	Median	90%ile	
Total Ammonia (NH ₃₊₄ -N) mg/L	0.045	0.160	0.250	0.472	varies with pH and temperature ^a
Chloride (Cl ⁻) mg/L	7.6	13.1	12.7	20.4	100 ^b
Nitrate (NO ₃ -N) mg/L	0.601	0.990	1.130	1.403	3.0 ^a
Total Nitrogen (TN) mg/L	1.02	1.72	1.68	2.17	-
Total Dissolved Phosphorus (TDP) mg/L	0.007	0.016	0.017	0.028	-
Total Phosphorus (TP) mg/L	0.021	0.083	0.030	0.062	-
Sulphate (SO ₄ ⁻) mg/L	42.9	51.5	53.9	58.0	1000 ^{c,1}
Sodium Adsorption Ratio (SAR)	0.30	0.45	0.39	0.58	5 ^d
Specific Conductivity µS/cm	346	398	422	443	1000 ^d
Total Dissolved Solids mg/L	201	232	246	260	500 ^b
Total Organic Carbon mg/L	2.0	3.6	1.5	1.9	-
Total Suspended Solids mg/L	6	64	5	14	-
Turbidity NTU	4.0	48.4	2.6	9.3	-
pH	8.20	8.39	8.06	8.20	<6.5 or >9.0 ^a
<i>Escherichia coli</i> cfu per 100 mL	28	144	10	25	100 ^b

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d Alberta Agriculture and Rural Development Guidelines for Irrigation Water Quality - note is combination of SAR and Specific Conductivity limit values in evaluating water suitability for use.

1 Sulphate guidelines related to livestock use presently under review

mg/L = milligram per litre; µS/cm = microsiemens per centimetre; NTU = Nephelometric Turbidity Unit; cfu = colony forming units

Table B-3: Ambient Surface Water Quality Triggers and Limits for the Bow River at Cluny

Indicator	Surface Water Quality Triggers				Surface Water Quality Limit
	Open Water (April to Oct.)		Winter (Nov. to March)		
	Median	90%ile	Median	90%ile	
Total Ammonia (NH ₃₊₄ -N) mg/L	0.025	0.120	0.195	0.372	varies with pH and temperature ^a
Chloride (Cl ⁻) mg/L	8.0	13.0	13.0	20.9	100 ^b
Nitrate (NO ₃ -N) mg/L	0.520	0.837	1.195	1.455	3.0 ^a
Total Nitrogen (TN) mg/L	0.94	1.52	1.68	2.07	-
Total Dissolved Phosphorus (TDP) mg/L	0.005	0.014	0.012	0.020	-
Total Phosphorus (TP) mg/L	0.017	0.128	0.017	0.025	-
Sulphate (SO ₄ ⁻) mg/L	47.9	58.1	57.2	63.1	1000 ^{c,1}
Sodium Adsorption Ratio (SAR)	0.35	0.60	0.42	0.72	5 ^d
Specific Conductivity µS/cm	360	425	441	490	1000 ^d
Total Dissolved Solids mg/L	210	245	257	290	500 ^b
Total Organic Carbon mg/L	2.2	4.3	1.3	1.8	-
Total Suspended Solids mg/L	11	80	4	9	-
Turbidity NTU	8.5	62.7	2.8	7.1	-
pH	8.30	8.46	8.00	8.23	<6.5 or >9.0 ^a
<i>Escherichia coli</i> cfu per 100 mL	8	56	1	6	100 ^b

a CCME Guidelines for the Protection of Aquatic Life

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d Alberta Agriculture and Rural Development Guidelines for Irrigation Water Quality - note is combination of SAR and Specific Conductivity limit values in evaluating water suitability for use.

1 Sulphate guidelines related to livestock use presently under review

mg/L = milligram per litre; µS/cm = microsiemens per centimetre; NTU = Nephelometric Turbidity Unit; cfu = colony forming units

Table B-4: Ambient Surface Water Quality Triggers and Limits for the Bow River at Ronalane

Indicator	Surface Water Quality Triggers				Surface Water Quality Limit
	Open Water (April to Oct.)		Winter (Nov. to March)		
	Median	90%ile	Median	90%ile	
Total Ammonia (NH ₃₊₄ -N) mg/L	0.020	0.081	0.130	0.292	varies with pH and temperature ^a
Chloride (Cl ⁻) mg/L	8.4	12.0	13.0	19.7	100 ^b
Nitrate (NO ₃ -N) mg/L	0.302	0.747	1.190	1.440	3.0 ^a
Total Nitrogen (TN) mg/L	0.68	1.26	1.58	1.91	-
Total Dissolved Phosphorus (TDP) mg/L	0.005	0.010	0.005	0.017	-
Total Phosphorus (TP) mg/L	0.025	0.138	0.012	0.027	-
Sulphate (SO ₄ ⁻) mg/L	62.2	78.2	60.9	70.5	1000 ^{c,1}
Sodium Adsorption Ratio (SAR)	0.55	0.80	0.48	0.67	5 ^d
Specific Conductivity µS/cm	386	431	448	499	1000 ^d
Total Dissolved Solids mg/L	228	260	263	291	500 ^b
Total Organic Carbon mg/L	3.0	4.8	1.5	2.5	-
Total Suspended Solids mg/L	12	72	6	18	-
Turbidity NTU	10.4	73.3	3.8	17.4	-
pH	8.32	8.58	8.06	8.30	<6.5 or >9.0 ^a
<i>Escherichia coli</i> cfu per 100 mL	14	77	1	6	100 ^b

a CCME Guidelines for the Protection of Aquatic Life

b CCME Guidelines for the Protection of Agricultural Water Uses - Irrigation Use

c CCME Guidelines for the Protection of Agricultural Water Uses - Livestock Use

d Alberta Agriculture and Rural Development Guidelines for Irrigation Water Quality - note is combination of SAR and Specific Conductivity limit values in evaluating water suitability for use.

1 Sulphate guidelines related to livestock use presently under review

mg/L = milligram per litre; µS/cm = microsiemens per centimetre; NTU = Nephelometric Turbidity Unit; cfu = colony forming units

Table B-5: Ambient Surface Water Quality Triggers and Limits for the Milk River at Highway 880

Indicator	Surface Water Quality Triggers				Surface Water Quality Limit
	Open Water (April to Oct.)		Winter (Nov. to March)		
	Median	90%ile	Median	90%ile	
Total Ammonia (NH ₃₊₄ -N) mg/L	0.025	0.070	0.040	0.130	varies with pH and temperature ^a
Chloride (Cl ⁻) mg/L	1.3	6.2	8.0	14.3	100 ^b
Nitrate (NO ₃ -N) mg/L	0.031	0.123	0.382	0.807	3.0 ^a
Total Nitrogen (TN) mg/L	0.31	0.59	0.82	1.22	-
Total Dissolved Phosphorus (TDP) mg/L	0.003	0.006	0.003	0.010	-
Total Phosphorus (TP) mg/L	0.079	0.193	0.007	0.039	-
Sulphate (SO ₄ ⁻) mg/L	22.3	170.0	197.0	316.0	1000 ^{c,1}
Sodium Adsorption Ratio (SAR)	0.43	2.26	2.54	3.80	5 ^d
Specific Conductivity µS/cm	248	733	916	1380	1000 ^d
Total Dissolved Solids mg/L	140	488	606	900	500 ^b
Total Organic Carbon mg/L	2.1	4.2	3.7	4.8	-
Total Suspended Solids mg/L	107	304	3	12	-
Turbidity NTU	60.0	170.0	3.7	17.5	-
pH	8.23	8.43	8.30	8.41	<6.5 or >9.0 ^a
<i>Escherichia coli</i> cfu per 100 mL	57	230	1	9	100 ^b

a CCME Guidelines for the Protection of Aquatic Life

b CCME Guidelines for the Protection of Agricultural Water Uses - Irrigation Use

c CCME Guidelines for the Protection of Agricultural Water Uses - Livestock Use

d Alberta Agriculture and Rural Development Guidelines for Irrigation Water Quality - note is combination of SAR and Specific Conductivity limit values in evaluating water suitability for use.

1 Sulphate guidelines related to livestock use presently under review

mg/L = milligram per litre; µS/cm = microsiemens per centimetre; NTU = Nephelometric Turbidity Unit; cfu = colony forming units

Table B-6: Ambient Surface Water Quality Triggers and Limits for the Oldman River at Brocket

Indicator	Surface Water Quality Triggers				Surface Water Quality Limit
	Open Water (April to Oct.)		Winter (Nov. to March)		
	Median	90%ile	Median	90%ile	
Total Ammonia (NH ₃₊₄ -N) mg/L	0.010	0.030	0.010	0.030	varies with pH and temperature ^a
Chloride (Cl ⁻) mg/L	0.9	1.8	1.2	1.9	100 ^b
Nitrate (NO ₃ -N) mg/L	0.078	0.126	0.093	0.132	3.0 ^a
Total Nitrogen (TN) mg/L	0.23	0.35	0.19	0.32	-
Total Dissolved Phosphorus (TDP) mg/L	0.003	0.006	0.003	0.005	-
Total Phosphorus (TP) mg/L	0.007	0.018	0.005	0.010	-
Sulphate (SO ₄ ⁻) mg/L	22.1	29.4	29.6	36.0	1000 ^{c,1}
Sodium Adsorption Ratio (SAR)	0.16	0.22	0.18	0.20	5 ^d
Specific Conductivity µS/cm	275	311	307	342	1000 ^d
Total Dissolved Solids mg/L	156	181	179	202	500 ^b
Total Organic Carbon mg/L	2.0	3.7	1.6	2.2	-
Total Suspended Solids mg/L	4	10	1	6	-
Turbidity NTU	5.0	18.8	2.3	8.0	-
pH	8.26	8.35	8.25	8.34	<6.5 or >9.0 ^a
<i>Escherichia coli</i> cfu per 100 mL	3	14	2	27	100 ^b

a CCME Guidelines for the Protection of Aquatic Life

b CCME Guidelines for the Protection of Agricultural Water Uses - Irrigation Use

c CCME Guidelines for the Protection of Agricultural Water Uses - Livestock Use

d Alberta Agriculture and Rural Development Guidelines for Irrigation Water Quality - note is combination of SAR and Specific Conductivity limit values in evaluating water suitability for use.

1 Sulphate guidelines related to livestock use presently under review

mg/L = milligram per litre; µS/cm = microsiemens per centimetre; NTU = Nephelometric Turbidity Unit; cfu = colony forming units

Table B-7: Ambient Surface Water Quality Triggers and Limits for the Oldman River at Highway 3

Indicator	Surface Water Quality Triggers				Surface Water Quality Limit
	Open Water (April to Oct.)		Winter (Nov. to March)		
	Median	90%ile	Median	90%ile	
Total Ammonia (NH ₃₊₄ -N) mg/L	0.020	0.070	0.020	0.060	varies with pH and temperature ^a
Chloride (Cl ⁻) mg/L	1.5	3.2	2.1	3.0	100 ^b
Nitrate (NO ₃ -N) mg/L	0.022	0.110	0.221	0.349	3.0 ^a
Total Nitrogen (TN) mg/L	0.25	0.64	0.40	0.59	-
Total Dissolved Phosphorus (TDP) mg/L	0.003	0.009	0.003	0.006	-
Total Phosphorus (TP) mg/L	0.013	0.147	0.008	0.022	-
Sulphate (SO ₄ ⁻) mg/L	35.8	52.1	45.0	58.0	1000 ^{c,1}
Sodium Adsorption Ratio (SAR)	0.42	0.59	0.46	0.60	5 ^d
Specific Conductivity µS/cm	323	391	358	437	1000 ^d
Total Dissolved Solids mg/L	182	224	217	256	500 ^b
Total Organic Carbon mg/L	2.4	3.9	1.7	2.5	-
Total Suspended Solids mg/L	10	163	6	34	-
Turbidity NTU	10.0	143.9	6.2	26.2	-
pH	8.33	8.53	8.19	8.27	<6.5 or >9.0 ^a
<i>Escherichia coli</i> cfu per 100 mL	13	77	2	13	100 ^b

a CCME Guidelines for the Protection of Aquatic Life

b CCME Guidelines for the Protection of Agricultural Water Uses - Irrigation Use

c CCME Guidelines for the Protection of Agricultural Water Uses - Livestock Use

d Alberta Agriculture and Rural Development Guidelines for Irrigation Water Quality - note is combination of SAR and Specific Conductivity limit values in evaluating water suitability for use.

1 Sulphate guidelines related to livestock use presently under review

mg/L = milligram per litre; µS/cm = microsiemens per centimetre; NTU = Nephelometric Turbidity Unit; cfu = colony forming units

Table B-8: Ambient Surface Water Quality Triggers and Limits for the Oldman River at Highway 36

Indicator	Surface Water Quality Triggers				Surface Water Quality Limit
	Open Water (April to Oct.)		Winter (Nov. to March)		
	Median	90%ile	Median	90%ile	
Total Ammonia (NH ₃₊₄ -N) mg/L	0.020	0.090	0.040	0.135	varies with pH and temperature ^a
Chloride (Cl ⁻) mg/L	4.0	6.1	6.0	8.1	100 ^b
Nitrate (NO ₃ -N) mg/L	0.006	0.127	0.318	0.502	3.0 ^a
Total Nitrogen (TN) mg/L	0.31	0.75	0.59	0.96	-
Total Dissolved Phosphorus (TDP) mg/L	0.003	0.011	0.003	0.007	-
Total Phosphorus (TP) mg/L	0.015	0.160	0.009	0.018	-
Sulphate (SO ₄ ⁻) mg/L	44.8	61.4	58.1	77.4	1000 ^{c,1}
Sodium Adsorption Ratio (SAR)	0.56	0.78	0.65	0.80	5 ^d
Specific Conductivity µS/cm	355	422	416	502	1000 ^d
Total Dissolved Solids mg/L	200	243	246	296	500 ^b
Total Organic Carbon mg/L	2.9	4.4	2.2	3.0	-
Total Suspended Solids mg/L	11	190	3	15	-
Turbidity NTU	10.0	173.0	4.8	17.3	-
pH	8.36	8.53	8.21	8.32	<6.5 or >9.0 ^a
<i>Escherichia coli</i> cfu per 100 mL	14	151	3	17	100 ^b

a CCME Guidelines for the Protection of Aquatic Life

b CCME Guidelines for the Protection of Agricultural Water Uses - Irrigation Use

c CCME Guidelines for the Protection of Agricultural Water Uses - Livestock Use

d Alberta Agriculture and Rural Development Guidelines for Irrigation Water Quality - note is combination of SAR and Specific Conductivity limit values in evaluating water suitability for use.

1 Sulphate guidelines related to livestock use presently under review

mg/L = milligram per litre; µS/cm = microsiemens per centimetre; NTU = Nephelometric Turbidity Unit; cfu = colony forming units

Table B-9: Ambient Surface Water Quality Triggers and Limits for the South Saskatchewan River at Medicine Hat – Highway 1

Indicator	Surface Water Quality Triggers				Surface Water Quality Limit
	Open Water (April to Oct.)		Winter (Nov. to March)		
	Median	90%ile	Median	90%ile	
Total Ammonia (NH ₃₊₄ -N) mg/L	0.020	0.060	0.090	0.253	varies with pH and temperature ^a
Chloride (Cl ⁻) mg/L	6.4	9.8	12.6	19.9	100 ^b
Nitrate (NO ₃ -N) mg/L	0.103	0.497	1.015	1.258	3.0 ^a
Total Nitrogen (TN) mg/L	0.55	1.01	1.33	1.72	-
Total Dissolved Phosphorus (TDP) mg/L	0.004	0.009	0.004	0.010	-
Total Phosphorus (TP) mg/L	0.023	0.098	0.011	0.042	-
Sulphate (SO ₄ ⁻) mg/L	56.5	76.9	62.4	77.6	1000 ^{c,1}
Sodium Adsorption Ratio (SAR)	0.60	0.79	0.59	0.88	5 ^d
Specific Conductivity µS/cm	369	436	462	519	1000 ^d
Total Dissolved Solids mg/L	221	252	268	316	500 ^b
Total Organic Carbon mg/L	2.7	4.0	1.7	3.0	-
Total Suspended Solids mg/L	19	105	5	32	-
Turbidity NTU	16.4	80.5	4.0	28.3	-
pH	8.32	8.47	8.14	8.27	<6.5 or >9.0 ^a
<i>Escherichia coli</i> cfu per 100 mL	13	99	1	7	100 ^b

a CCME Guidelines for the Protection of Aquatic Life

b CCME Guidelines for the Protection of Agricultural Water Uses - Irrigation Use

c CCME Guidelines for the Protection of Agricultural Water Uses - Livestock Use

d Alberta Agriculture and Rural Development Guidelines for Irrigation Water Quality - note is combination of SAR and Specific Conductivity limit values in evaluating water suitability for use.

1 Sulphate guidelines related to livestock use presently under review

mg/L = milligram per litre; µS/cm = microsiemens per centimetre; NTU = Nephelometric Turbidity Unit; cfu = colony forming units

Schedule C: SSRP Land Uses

Conservation Areas														
Map Area	Area Name	Area Size (ha)	Type of Change	Legal Designation	Petroleum and Natural Gas (Note 1, 2)	Metallic and Industrial Minerals, Coal, and Other Crown Minerals (Note 1, 2)	Surface Materials (Note 3)	Commercial Forestry (Note 4)	Grazing (Note 5)	Off-Highway Vehicles (Note 7)	Hunting, Trapping (Note 8)	Fishing (Note 8)	Linear Infra-structure (Note 9)	MUC (Note 10)
	Ghost River	15,317		Wilderness Area	X	X	X	X	X	X	X	X	X	X
	Kennedy Coulee	1,068		Ecological Reserve	X	X	X	X	X	X	X	X	X	X
	Plateau Mountain	2,323		Ecological Reserve	X	X	X	X	X	X	X	X	X	X
	West Castle Wetlands	94		Ecological Reserve	X	X	X	X	X	X	X	X	X	X
E	Beehive (Note 6)	6,734	Reclass from Natural Area	Wildland Provincial Park	X	X	X	X	✓	X	✓	✓	X	✓
C	Bluerock (Note 6)	12,720 +453	Expansion	Wildland Provincial Park	X	X	X	X	✓	X	✓	✓	X	✓
G	Bob Creek (Note 6)	20,778 +328	Expansion	Wildland Provincial Park	X	X	X	X	✓	✓	✓	✓	X	✓
B	Bow Valley (Note 6)	37,370 +8,075	Expansion	Wildland Provincial Park	X	X	X	X	✓	X	✓	✓	X	✓
I	Castle (Note 6)	44,558	New	Wildland Provincial Park	X	X	X	X	✓	✓	✓	✓	X	✓
K	Castle Conservation Area (Note 6)	10,741	New	Public Land Use Zone	X	X	X	✓	✓	✓	✓	✓	X	✓
A	Don Getty (Note 6)	62,775 +27,928	Expansion	Wildland Provincial Park	X	X	X	X	✓	✓ (snowmobile only)	✓	✓	X	✓
	Elbow Sheep	79,998		Wildland Provincial Park	X	X	X	X	✓	✓ (snowmobile only)	✓	✓	X	✓
F	High Rock (Note 6)	8,362	New	Wildland Provincial Park	X	X	X	X	✓	✓	✓	✓	X	✓

Conservation Areas

Map Area	Area Name	Area Size (ha)	Type of Change	Legal Designation	Petroleum and Natural Gas (Note 1, 2)	Metallic and Industrial Minerals, Coal, and Other Crown Minerals (Note 1, 2)	Surface Materials (Note 3)	Commercial Forestry (Note 4)	Grazing (Note 5)	Off-Highway Vehicles (Note 7)	Hunting, Trapping (Note 8)	Fishing (Note 8)	Linear Infrastructure (Note 9)	MUC (Note 10)
H	Livingstone Range (Note 6)	4,614	New	Wildland Provincial Park	X	X	X	X	✓	✓	✓	✓	X	✓
D	Mt. Livingstone (Note 6)	564	Reclass from Natural Area	Wildland Provincial Park	X	X	X	X	✓	X	✓	✓	X	✓
	Black Creek	7,733		Heritage Rangelands	X	X	X	X	✓	X (grazing lease holder use permitted)	✓ (by leaseholder permission)	✓	X	✓
	OH Ranch	4,277		Heritage Rangelands	X	X	X	X	✓	X (grazing lease holder use permitted)	✓ (by leaseholder permission)	✓	X	✓
□	Pekisko (Note 6)	33,050	New	Heritage Rangelands	X	X	X	X	✓	X (grazing lease holder use permitted)	✓ (by leaseholder permission)	✓	X	✓
	Emerson Creek	194		Natural Area	X	X	X	X	✓	X	✓	✓	X	✓
	Highwood River	10		Natural Area	X	X	X	X	✓	X	✓	✓	X	✓
	Milk River	5,344		Natural Area	X	X	X	X	✓	✓	✓	✓	X	✓
	Ole Buck Mountain	357		Natural Area	X	X	X	X	✓	X	✓	✓	X	✓
	Onefour Heritage Rangeland	11,165		Natural Area	X	X	X	X	✓	✓	✓	✓	X	✓
	Outpost Wetlands	72		Natural Area	X	X	X	X	✓	X	✓	✓	X	✓
	Prairie Coulees	1,788		Natural Area	X	X	X	X	✓	✓	✓	✓	X	✓
	Red Rock Coulee	324		Natural Area	X	X	X	X	✓	X	✓	✓	X	✓
	Ross Lake	1,943		Natural Area	X	X	X	X	✓	✓	✓	✓	X	✓
	Sheep Creek	5		Natural Area	X	X	X	X	✓	✓	✓	✓	X	✓
	Threepoint Creek	52		Natural Area	X	X	X	X	✓	✓	✓	✓	X	✓
	Twin River Heritage Rangeland	19,028		Natural Area	X	X	X	X	✓	✓	✓	✓	X	✓
	Wildcat Island	8		Natural Area	X	X	X	X	✓	X	✓	✓	X	✓

Recreation and Parks Areas

Map Area	Area Name	Area Size (ha)	Type of Change	Legal Designation	Petroleum and Natural Gas (Note 1, 2)	Metallic and Industrial Minerals, Coal, and Other Crown Minerals (Note 1, 2)	Surface Materials (Note 3)	Commercial Forestry (Note 4)	Grazing (Note 5)	Off-Highway Vehicles (Note 7)	Hunting, Trapping (Note 8)	Fishing (Note 8)	Linear Infrastructure (Note 9)	MUC (Note 10)
	Beauvais Lake	1,161		Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
	Big Hill Springs	32		Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
	Bow Valley	3,129		Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
	Bragg Creek	128		Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
	Brown-Lowery	278		Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
	Canmore Nordic Centre	805		Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
	Chain Lakes	409		Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
7	Chinook	45 +217	Expansion	Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
9	Cypress Hills	20,450 +129	Expansion	Provincial Park	X	X	X	X	✓	X	X (Elk Management Hunt only)	✓	X	✓
	Dinosaur	8,086		Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
4	Elbow Falls	84 +43	Expansion	Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
3	Elbow River	236 +107	Expansion	Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
	Elbow River Launch	15		Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
	Fish Creek	1,356		Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
	Glenbow Ranch	1,334		Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
2	Gooseberry	42 +56	Expansion	Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
	Kinbrook Island	540		Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
	Little Bow	110		Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
5	Little Elbow	215 +28	Expansion	Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
	Park Lake	224		Provincial Park	X	X	X	X	✓	X	X	✓	X	✓

Recreation and Parks Areas

Map Area	Area Name	Area Size (ha)	Type of Change	Legal Designation	Petroleum and Natural Gas (Note 1, 2)	Metallic and Industrial Minerals, Coal, and Other Crown Minerals (Note 1, 2)	Surface Materials (Note 3)	Commercial Forestry (Note 4)	Grazing (Note 5)	Off-Highway Vehicles (Note 7)	Hunting, Trapping (Note 8)	Fishing (Note 8)	Linear Infrastructure (Note 9)	MUC (Note 10)
	Peter Loughheed	50,142		Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
	Police Outpost	223		Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
6	Sheep River	6,192 +266	Expansion	Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
	Spray Valley	27,472		Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
8	Syncline	15 +418	Expansion	Provincial Park	X	X	X	X	✓	✓ (OHV staging)	X	✓	X	✓
	Tilbrook	140		Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
1	West Bragg Creek	25 +81	Expansion	Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
	Willow Creek	79		Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
	Woolford	35		Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
	Writing-on-Stone	2,689		Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
	Wyndham-Carseland	178		Provincial Park	X	X	X	X	✓	X	X	✓	X	✓
	Beaver Mines Lake	113		Provincial Recreation Area	X	X	X	X	✓	✓ (OHV staging)	X	✓	X	✓
	Bow Valley	4		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Bullshead Reservoir	4		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Burnt Timber	33		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Cartier Creek	44		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Castle Falls	30		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Castle River Bridge	15		Provincial Recreation Area	X	X	X	X	✓	✓ (OHV staging)	X	✓	X	✓
	Cat Creek	10		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓

Recreation and Parks Areas

Map Area	Area Name	Area Size (ha)	Type of Change	Legal Designation	Petroleum and Natural Gas (Note 1, 2)	Metallic and Industrial Minerals, Coal, and Other Crown Minerals (Note 1, 2)	Surface Materials (Note 3)	Commercial Forestry (Note 4)	Grazing (Note 5)	Off-Highway Vehicles (Note 7)	Hunting, Trapping (Note 8)	Fishing (Note 8)	Linear Infrastructure (Note 9)	MUC (Note 10)
	Cataract Creek	53		Provincial Recreation Area	X	X	X	X	✓	✓ (snowmobile staging)	X	✓	X	✓
	Chin Coulee	1		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Cobble Flats	91		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
12	Coleman	32	New	Provincial Recreation Area	X	X	X	X	✓	✓	X	✓	X	✓
11	Crowsnest Lake	14	New	Provincial Recreation Area	X	X	X	X	✓	✓	X	✓	X	✓
	Dawson	2		Provincial Recreation Area	X	X	X	X	✓	✓ (snowmobile staging)	X	✓	X	✓
	Dutch Creek	16		Provincial Recreation Area	X	X	X	X	✓	✓ (OHV staging)	X	✓	X	✓
	Elbow River Creek	15		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Elbow River Launch	15		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Etherington Creek	46		Provincial Recreation Area	X	X	X	X	✓	✓ (snowmobile staging)	X	✓	X	✓
	Evan-Thomas	2,571		Provincial Recreation Area	X	X	X	X	✓	X	✓ (In WMU 408 Marmot Basin area)	✓	X	✓
	Fallen Timber	3		Provincial Recreation Area	X	X	X	X	✓	✓ (OHV staging)	X	✓	X	✓
	Fallen Timber South	50		Provincial Recreation Area	X	X	X	X	✓	✓ (OHV staging)	X	✓	X	✓
	Fisher Creek	11		Provincial Recreation Area	X	X	X	X	✓	✓ (OHV staging)	X	✓	X	✓
	Fitzsimmons Creek	2		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Ghost Airstrip	157		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Ghost Reservoir	24		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Greenford	2		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Heart Creek	10		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓

Recreation and Parks Areas

Map Area	Area Name	Area Size (ha)	Type of Change	Legal Designation	Petroleum and Natural Gas (Note 1, 2)	Metallic and Industrial Minerals, Coal, and Other Crown Minerals (Note 1, 2)	Surface Materials (Note 3)	Commercial Forestry (Note 4)	Grazing (Note 5)	Off-Highway Vehicles (Note 7)	Hunting, Trapping (Note 8)	Fishing (Note 8)	Linear Infrastructure (Note 9)	MUC (Note 10)
	Highwood	31		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Highwood Junction	6		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Honeymoon Creek	7		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Indian Graves	15		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Ing's Mine	27		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Island Lake	3		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Jensen Reservoir	9		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Jumpingpound Creek	13		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Lake McGregor	140		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Lantern Creek	11		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Lineham	7		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Little Bow Reservoir	70		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Livingstone Falls	24		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Lundbreck Falls	9		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Lusk Creek	14		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Lynx Creek	26		Provincial Recreation Area	X	X	X	X	✓	✓ (OHV staging)	X	✓	X	✓
	Maycroft	6		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	McLean Creek	245		Provincial Recreation Area	X	X	X	X	✓	✓ (OHV staging)	X	✓	X	✓
	Mesa Butte	10		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓

Recreation and Parks Areas

Map Area	Area Name	Area Size (ha)	Type of Change	Legal Designation	Petroleum and Natural Gas (Note 1, 2)	Metallic and Industrial Minerals, Coal, and Other Crown Minerals (Note 1, 2)	Surface Materials (Note 3)	Commercial Forestry (Note 4)	Grazing (Note 5)	Off-Highway Vehicles (Note 7)	Hunting, Trapping (Note 8)	Fishing (Note 8)	Linear Infrastructure (Note 9)	MUC (Note 10)
	Michelle Reservoir	9		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Mist Creek	16		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Moose Mountain Trailhead	15		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	North Fork	17		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Old Baldy Pass Trail	28		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Oldman Dam	4,846		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Oldman River	2		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Oldman River North	39		Provincial Recreation Area	X	X	X	X	✓	✓ (OHV staging)	X	✓	X	✓
	Payne Lake	37		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Picklejar	8		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Pine Grove	27		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Pinetop	5		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Racehorse	14		Provincial Recreation Area	X	X	X	X	✓	✓ (OHV staging)	X	✓	X	✓
	Sentinel	15		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
10	Sibbald Lake	73 +83	Expansion	Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Sibbald Meadows Pond	10		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	Sibbald Viewpoint	16		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓
	South Ghost	7		Provincial Recreation Area	X	X	X	X	✓	✓ (OHV staging)	X	✓	X	✓
	St. Mary Reservoir	173		Provincial Recreation Area	X	X	X	X	✓	X	X	✓	X	✓

Recreation and Parks Areas

[illegible]

Public Land Recreation Area

Map Area	Area Name	Area Size (ha)	Type of Change	Legal Designation	Petroleum and Natural Gas	Metallic and Industrial Minerals, Coal, and Other Crown Minerals	Surface Materials	Commercial Forestry	Grazing	Off-Highway Vehicles	Hunting, Trapping (Note 8)	Fishing (Note 8)	Linear Infrastructure	MUC (Note 10)
17	Atlas	TBD	Establish	Public Land Recreation Area	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
16	Beaver Creek	TBD	Establish	Public Land Recreation Area	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
15	Ceasar's Flat	TBD	Establish	Public Land Recreation Area	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
20	Lynx Creek Flats	TBD	Establish	Public Land Recreation Area	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
18	McGillivray	TBD	Establish	Public Land Recreation Area	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
13	Speers Creek	TBD	Establish	Public Land Recreation Area	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
19	Tent Mountain	TBD	Establish	Public Land Recreation Area	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
14	Trout Creek	TBD	Establish	Public Land Recreation Area	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
21	Upper Castle Flats	TBD	Establish	Public Land Recreation Area	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Green Area - Public Land								
Petroleum and Natural Gas	Metallic and Industrial Minerals, Coal, and Other Crown Minerals	Surface Materials	Commercial Forestry	Grazing	Off-Highway Vehicles	Fishing, Hunting, Trapping (Note 8)	Linear Infrastructure	MUC (Note 10)
✓	✓	✓	✓	✓	✓ For grazing lease permission of lease holder is required for recreational access Access will be managed pursuant to the Public Land Administration Regulation and its schedules	✓	✓	✓
White Area - Public Land								
Petroleum and Natural Gas	Metallic and Industrial Minerals, Coal, and Other Crown Minerals	Surface Materials	Commercial Forestry	Grazing (Note 5)	Off-Highway Vehicles	Fishing, Hunting, Trapping (Note 8)	Linear Infrastructure	MUC (Note 10)
✓	✓	✓	✓	✓	✓ For grazing lease permission of lease holder is required for recreational access Access will be managed pursuant to the Public Land	✓	✓	✓

Note 1: Petroleum and Natural Gas Exploration and Development – Existing Commitments

Existing petroleum and natural gas tenure will be honoured in conservation areas and recreation and parks areas, in accordance with existing policy.

This includes all subsurface and surface activities needed to explore for, develop and extract the resource defined in the existing agreement. Care must be taken when exploring, developing and extracting the resource in order to minimize impacts of activities on the natural landscape, historic resources, wildlife, fish and vegetation.

- This also includes renewing subsurface and surface dispositions, approvals and agreements for existing activities.
- Applications for **new surface dispositions** (e.g., a new disposition for a well, road, pipeline or facility, etc.) required to access an existing subsurface commitment would also be honoured as necessary extensions to an existing commitment, subject to review through the current application and approval process.
- Applications for **seismic programs** associated with existing subsurface commitments will be reviewed through the current application and approval process.
- Limitations: Existing surface or subsurface commitments related to petroleum and natural gas within a protected area cannot be used as a basis to access new subsurface rights within a protected area (e.g., whether to access new subsurface deeper rights, new lateral subsurface rights or additional new rights). By definition, any new subsurface disposition or subsurface right does not qualify as an existing commitment, as it came into effect after the protected area was established.

For greater clarity, this Note 1 does not apply to metallic and industrial minerals, coal, or other Crown minerals.

Note 2: Freehold Minerals

Freehold minerals (petroleum and natural gas, coal, metallic and industrial minerals, other minerals) are exempt from the restrictions associated with any part of this plan including conservation areas and recreation and parks areas.

Note 3: Surface Materials (sand, gravel, clay, marl, silt and peat)

Existing surface materials leases will be honoured in conservation areas and recreation and parks areas, in accordance with the Alberta Aggregate (Sand and Gravel) Allocation Policy for Commercial Use on Public Land.



Note 4: Commercial Forestry

Management for wildfire, insect and disease control will be allowed in areas where commercial forestry activities are not permitted. This may include prescribed burns and limited tree removal.

In the Conservation Area commercial forestry is permitted but the management priority is for maintaining biodiversity and headwaters protection. Enhanced best management practices for biodiversity and headwaters protection will be required such as: winter only operations to avoid critical active periods for grizzly bear, practices to restrict access, buffer zones that cover entire riparian areas and visual buffer screens to increase bear security for travel.

Note 5: Grazing

Existing grazing activities will continue. Approvals for new grazing dispositions are subject to a grazing suitability assessment.

Note 6: Access to Water

There are a number of known corridors and key routes that are used for access to water resources and associated infrastructure. This access to surface water and ground water is related to various activities.

At the time when the new conservation areas are established, these known corridors and key access routes will be identified. Following the establishment of the new conservation areas, any further access for water would have to be compatible with the management intent for the area. Activities such as monitoring may be considered compatible, while permanent infrastructure for private purposes would not.

Note 7: Off-highway vehicles (motorized-recreation):

Where it is a permitted use, off-highway vehicle use will be managed to designated trails and areas, subject to the following:

- Off-highway vehicle use is permitted on existing trails and areas or where a management plan, trails plan or regulation specifies.
- In areas where designation of trails has not yet occurred, use of existing access can continue but no new trails or routes or access may be developed without an access management plan.
- Regardless of whether or not there is a management plan or trails plan in place, off-highway vehicle use shall not occur in the beds and shores of permanent water bodies. Furthermore, off-highway vehicle use shall not occur on industrial facility areas (e.g., wellsites), unless specifically authorized to do so.
- In areas designated as Heritage Rangelands, grazing lease holders are permitted to use off-highway vehicles in connection with the exercise of holders' rights under the grazing lease.



Note 8: Hunting, Fishing and Trapping (including by aboriginal peoples)

With the exception of new public motorized access management requirements, hunting, fishing and trapping will continue in accordance with existing provincial laws governing such activities as such laws may be amended or replaced from time to time. Hunting includes commercial guiding and outfitting operations where wildlife species management plans provide an allocation for that use. Existing trapping will be honoured.

Note 9: Linear infrastructure

Linear infrastructure (roads, electric transmission, pipelines, water management, telecommunication towers and underground fibre-optic cables) are generally prohibited within conservation areas and recreation and parks areas. There are three exceptions to this general rule:

- 1) Linear infrastructure developed in accordance with activities, approvals and agreements or their renewal that is part of honouring existing petroleum and natural gas tenure as explained by Note 1;
- 2) Linear infrastructure developed in accordance with activities, approvals and agreements or their renewal that is part of honouring freehold minerals as explained by Note 2; or
- 3) Linear infrastructure developed in accordance with activities, approvals and agreements or their renewal that is part of honouring existing surface material tenure as explained by Note 3; or
- 4) Cabinet has designated and approved a Multi-Use Corridor.

Note 10: Multi-use Corridors

A multi-use corridor is a dedicated land area identified by Cabinet for co-location of linear infrastructure that supports critical economic linkages and is in the public interest. A multi-use corridor may include one or more of the following:

- public highways and roads
- electric transmission
- high-speed rail and rail
- pipelines
- water management
- telecommunication towers and underground fibre-optic cables
- recreation trails.

Schedule D: South Saskatchewan Digital Map

