

Planning Connections: Recommended Environmental Objectives for the South Saskatchewan Regional Plan

Executive Summary

Canadian Parks and Wilderness Society Southern Alberta Chapter (CPAWS SA) recognizes that the members of the South Saskatchewan Regional Advisory Council (RAC) have an enormous task ahead of them as they work to create a regional plan and develop recommendations that balance the ecological, economical, and cultural needs of the South Saskatchewan Region. To help the RAC sort through an abundance of information, CPAWS SA has provided them with a report detailing recommended environmental objectives designed to meet the South Saskatchewan Regional Plan Terms of Reference. Our report consists of:

- A written report detailing CPAWS SA's recommendations (available for download at: <http://www.cpaws-southernalberta.org/>)
- An interactive, internet-based map (<http://goliath.rockies.ca/maps/cpaws.html>) outlining Environmentally Significant Areas (ESAs), their characteristics, and landscape wildlife movement patterns in the South Saskatchewan region.

Recommendations for the South Saskatchewan Region

The South Saskatchewan region contains a diversity of land-uses ranging from resource extraction to recreation, and from urban planning to wilderness protection. These diverse activities have led to a myriad of threats facing the environmental health of this region including a changing climate, habitat fragmentation, loss of biodiversity, and most critically changes in water quality and quantity. Even though these problems are diverse, to adequately address them requires one solution. The South Saskatchewan Region requires a more ***complete set of interconnected protected areas***, which will protect our waters, wildlife, economy, and quality of life. This will address the many threats facing the region and position southern Alberta as a role model in maximizing environmental and economic gains.

1. Addressing cumulative effects management

Cumulative effects are predicted to increase in size and are characterized by an accumulation of change in environmental systems over space and time. Addressing cumulative effects is a central premise of the Land Use Framework (LUF) and its supporting legislation, the Alberta Land & Stewardship Act (ALSA). CPAWS SA reinforces the importance of *integrating* cumulative impact assessment with planning by *establishing appropriate thresholds* to define and manage cumulative impacts. CPAWS SA also recommends the implementation of *adaptive management* strategies to compliment cumulative assessment. *Minimizing the impacts of individual actions* and *changing the way we do things* are key components of limiting cumulative effects.

2. Our Changing Climate, Biodiversity, and Connectivity

In Southern Alberta, changes in climate are expected to cause decreased precipitation, increased evaporation and increased drought frequency. This is an immediate and urgent

threat that requires implementing *practical and adaptive strategies* to mitigate negative impacts, which need to be *a central premise of any regional plan*. Strategies include:

- Increasing the extent of protected areas
- Protecting and improving wildlife connectivity corridors
- Evaluation and enhancement of monitoring systems
- Reviewing and modifying existing regulations surrounding wildlife and natural resource management, and
- Implementing programs in ways that simultaneously address emission standards, biodiversity conservation, connectivity, and human livelihoods.

Connectivity is the most frequent recommendation for adapting to a changing climate, and *ensuring connectivity* will preserve wildlife movements and genetic exchange. Underlying the need for addressing climate change and ensuring connectivity is the *need to enhance biodiversity* as maintaining a declining biodiversity will not be sufficient.

3. Planning to Maintain Ecological Goods and Services (EGS)

We are afforded numerous benefits by maintaining or enhancing healthy and intact ecosystems. Ecological Goods and Services include water purification, carbon storage, floodwater retention, clean air, and disease control. Once threatened, these goods and services cannot be replaced by man-made technologies and inventions. Ecosystem services are often given too little weight in policy decisions.

For these goods and services to be preserved, they need to be considered as *capital* - as part of the total economic value of the planet. There are benefits in enabling a healthy ecosystem as a major stimulus for a healthy economy. To strike a balance between our economic and ecological needs, *these two systems need to work in conjunction with each other and should be planned in an integrated fashion*.

One EGS requires special attention. Recreation in all forms contributes to overall health of communities and economies, and *all* forms of recreation have the potential to impact ecosystems. Management is key to ensuring recreational opportunities can be enjoyed appropriately. To gauge management requirements, CPAWS SA strongly recommends an *assessment of all relevant components of tourism* in the South Saskatchewan region. CPAWS SA strongly urges the RAC to *include advice on how recreation should be managed to minimize the impacts to ecosystems while maximizing visitor satisfaction*.

Management in space, time and purpose should be applied to recreational activities throughout the region depending on the local needs and ecological sensitivities; however, *ecological integrity should be the number one priority in recreation management*.

4. Management of Parks & Protected Areas

Parks and protected areas are integral to both the environment and economy of the South Saskatchewan region. While legislated protected areas help immensely in conserving biodiversity, they also provide economic opportunities for communities and businesses to

diversify and combat the boom-bust cycles of resource extraction markets. To maximize the economic and environmental benefits of parks and protected areas in South Saskatchewan region, CPAWS SA recommends that *protected areas be better located, designed and managed* in the context of an ecosystem approach, with regard for the importance of corridors and interconnectivity to other protected areas and to external threats.

Protected areas alone will not be sufficient to support viable wildlife populations, but are a valuable part of protecting the landscape of the South Saskatchewan region. By applying appropriate conservation tools outlined in ALSA, environmentally significant areas (on both private and public land) can be combined with large protected areas, where the latter can function as anchors to support interconnected wilderness and habitat. CPAWS SA strongly recommends that *additional parks and protected areas be established*.

5. Addressing road density

One of the largest problems facing the South Saskatchewan region is the abundance of roads, particularly along the eastern slopes. These roads have an array of negative impacts including but not limited to, increases in road-kill frequency and animal vulnerability, increases in erosion and contamination of watersheds due to road construction.

Retaining intact forest systems allows ecosystems to act as natural filtering systems and deliver a range of other ecological services. In the South Saskatchewan region, the primary recommendation from CPAWS SA is to *decrease road density to 0.6km/km²* and to *manage access* to limit impacts on the ecosystems.

6. Recommended Specific Areas of Focus

In addition to the above recommendations, CPAWS SA has identified ***recommended specific areas of focus*** for the South Saskatchewan Region:

a) Alberta's Castle Special Place

'The Castle' is an area of international ecological significance in Southern Alberta. It is home to exceptional biodiversity and is the water tower for most of Southern Alberta, providing one third of all water in the Oldman Watershed. Roads and access are the primary human-caused disturbance in the Castle. This has had significant impacts on sensitive species and the area's overall ecological integrity.

Although the Castle was designated as a protected area in 1998, it has yet to be legislated as such. As a partner of a citizen-led Castle Working Group, CPAWS SA recommends that the present types of recreation uses in the Castle continue within the ecological limits of the Castle. The Castle Working Group recommends the Castle be protected as a combination of a Wildland and Provincial Park. Any further delays in implementing protection of the Castle will perpetuate the vulnerability of one of Canada's most unique mountain environments.

b) Grizzly Bear Habitat Security

The current population of grizzly bears on Alberta's provincial lands is not sustainable in the long term. Recovering the grizzly bear population requires vision and commitment, as well as jurisdictional cooperation supported by meaningful public involvement.

CPAWS SA strongly recommends that the RAC *incorporate grizzly bear habitat requirements* into their recommendations for the South Saskatchewan region, which should include numerically defined core habitat standards. *Road density along the Eastern Slopes needs to decrease to recover grizzly bear populations and ensure water quality and quantity* in the South Saskatchewan region.

c) Conservation of native grasslands

Alberta contains the greatest percentage of native Canadian grasslands, and a large majority of these grasslands are encompassed in South Saskatchewan region. It is imperative to address conservation strategies to preserve native grasslands.

Grasslands provide an array of EGS:

- Provision of goods (food, fuel, fibre, fresh water)
- Cultural service (education, recreation, spiritual values)
- Regulatory services (pollination, climate regulation, pest and disease control)
- Supporting services (primary production, nutrient cycling, soil formation)

To effectively conserve native grasslands, *conservation tools must be strategically developed to protect substantial portions* of grassland areas on both public and private land.

i. The Milk River Ridge

The Milk River Ridge is one the six largest blocks of remaining native grasslands in Alberta and houses several endangered plants and animals. CPAWS SA is recommending an expansion of the currently protected Twin River Heritage Rangeland Natural Area, into the Grazing Reserve and/or implementation of an Integrated Land Management System (ILM) to protect an additional 134km² of native grasslands.

ii. South Saskatchewan Canyon

The South Saskatchewan Canyon contains one of the premiere wild river sections in the Canadian grasslands regions, and provides a diverse range of environmental features and critical habitat. *A National migration corridor* should be established in this ESA using the conservation tools outlined in ALSA. Biodiversity friendly grazing should be encouraged. The potential for ecotourism and wildlife viewing on privately owned land should be explored.

Many solutions are presented in this report; most of which involve *increasing the extent of protected areas* in Southern Alberta. Regardless of what solutions are applied, CPAWS SA encourages the government of Alberta to *prioritize ecological integrity* and *utilize an adaptive management approach* to conservation in the South Saskatchewan region.