

**CPAWS Comments on South Saskatchewan Regional Plan Strategies  
Biodiversity Management Framework**

The Canadian Parks and Wilderness Society – Southern Alberta chapter (CPAWS SAB) appreciates the opportunity to provide feedback on the draft South Saskatchewan Regional Plan Biodiversity Management Framework (BMF).

CPAWS envisages a healthy ecosphere where people experience and respect natural ecosystems. We are the only national conservation organization dedicated to the protection and sustainability of public lands across the country. CPAWS Southern Alberta Chapter promotes awareness and understanding of ecological principles and the inherent values of wilderness amongst resident Albertans and visitors.

CPAWS SAB has participated actively in the Land Use Framework (LUF) process and its regional plans since the LUF's inception in 2008. CPAWS SAB commends the government for taking the initiative on land-use planning to ensure that as we develop our resources, we also maintain and conserve the natural areas that provide the high quality of life we have in Alberta. CPAWS is committed to ensuring these regional plans are completed and to working with the Ministry of Environment and Parks in implementing these regional plans to ensure conservation related objectives are met.

CPAWS SAB supports the need for a biodiversity management framework and the overall goals of the framework. We have reviewed the draft BMF and have the following comments and recommendations:

**The BMF should include goals for restoration of biodiversity**

The primary objective of the BMF is “terrestrial and aquatic biodiversity are maintained.” Given that the BMF also argues that we do not know enough about biodiversity and ecosystem function, it is possible that we have already passed biodiversity thresholds which may impact ecosystem functions and processes. Thus the objective should be not just to maintain current biodiversity but also to restore species richness and abundance and ecosystem functions in many areas.

Likewise the complementary objectives, “Long-term ecosystem health and resiliency are sustained” and “Intact grassland habitat is sustained,” should also include objectives to improve and recover ecosystem health including extent and health of intact grasslands.

The calculation of reference condition, and the subsequent use of the reference condition, to assess the Level of the indicator is an important part of the process but becomes less useful if the objective is not to try to restore biodiversity to within a natural and resilient level.

## **Indicators should be appropriate to monitor and restore biodiversity**

*Aquatic habitat indicators* Tier 2 and 3 Wetland Habitat and Riparian Habitat should also include measures of wetland and riparian health. Many wetlands and riparian areas have lost much of their functionality and while they exist on the landscape they do not have the biodiversity or ecosystem value as un-impacted wetlands and riparian areas. It is important to monitor health as well as area.

Recreational activities should also be included in Table 7 as a pressure on aquatic and wetlands native cover and wetland habitat (including wetland health). Recreational activities can have major impacts on wetland health and functioning.

Strategies identified for managing human footprint on public land on page 42 include “managing public motorized access in specific locations.” We recommend that public motorized access is managed on all public land using the management regime that public land is closed to motorized access unless specifically open on a properly designed, managed and enforced designated trail. This point should read “managing public motorized access to only specific locations where trails have been designed to avoid impacts to biodiversity values.”

*Aquatic species indicators* Tier 2 Amphibian community should include a measure of species composition and abundance of amphibian species not just amphibians as an aggregate group (ie. diversity of amphibians).

## **The BMF must include Species at Risk as an indicator**

The regional objectives include a complementary objective that “species at risk are recovered and no new species at risk are designated,” yet the BMF does not include species at risk as an indicator. While the management responses and actions may incidentally benefit species at risk, by not monitoring species at risk we could be missing key impacts and actions needed to recover these species and thus maintain or improve biodiversity in the region. Under this model we could lose or see further declines in species at risk in the SSR and this would not impact the biodiversity indicators; however by definition loss or decline of a species decreases biodiversity.

The Indicator Selection also outlines the criteria for selecting indicators as “responsive to changes in land use.” It can be argued that species already at risk are those most responsive to land use changes and thus should be included as Terrestrial and Aquatic Species Indicators.

If a key objective is to recover species at risk and to provide a “robust assessment of the overall condition of biodiversity in the region” they must be included as an indicator.

## **Clear targets and limits should be used in addition to triggers**

The use of triggers without limits and targets will not ensure land use is managed to conserve biodiversity. While the use of triggers to indicate when a management response is needed, thresholds or hard limits should be used when available and appropriate. CPAWS SAB is concerned that without actual enforceable thresholds, the Biodiversity Management Framework will not be strong enough to be enforced. Triggers should be used to prompt a management action before the threshold is hit.

For example, grizzly bears show increased rates of decline when linear access features are at or above 0.6 km/km<sup>2</sup> and bull trout decline at even lower densities. It is unclear how the Biodiversity Management Framework and the Linear Access Management Framework interact, however the Biodiversity Management Framework should set this as a disturbance threshold to be used in implementing the Linear Access Management Framework.

A precautionary approach should be used where limits are set using the best available science even if all factors are unknown.

There is potential to use limits and thresholds on Tier 3 indicators. While Tier 3 indicators will be monitored, without triggers and thresholds for individual key indicator species or specific geographic scales, impacts on and actions towards these indicators could be missed. Conservation of biodiversity relies on maintenance and restoration of a variety of habitats. If habitat loss or fragmentation occurs disproportionately in certain habitat types, biodiversity could be compromised without seeing a major impact at the regional scale. It will also be easier to react and implement actions if thresholds are in place at this scale.

It is positive to see that gaps in indicators and triggers will be filled within two years.

### **Evaluation of levels and implementation of management actions should be clear and science based.**

While the risk categories are defined by IUCN breaking points, the Tolerance for Change – Trigger Levels appear to be arbitrary. Assessing tolerance for change should be based in science not informed by policy and social and economic dimensions. While these factors are important to consider in how management actions are implemented they should not inform the tolerance for change. We do not know how much of a decrease of a certain indicator is significant to that indicator and when a collapse point of a species or ecosystem will be reached. Thus any negative trend in any of the indicators should be assessed and management response initiated.

This also creates situations where indicators in high risk categories are placed at low management response levels such as the example given in the BMF where wetland habitat is at 25% of reference condition (75% of wetland habitat has been lost!) yet the indicator is placed in Level 2 where the management response is to improve knowledge and adjust approaches as needed. It is unlikely this management response will be sufficient to conserve and restore wetlands and their associated biodiversity.

### **Management responses and actions should be appropriate proactive**

Management actions that rely solely on best management practices will likely not be sufficient to maintain and restore biodiversity. For example modelling suggests that many key indicators will continue to decline, albeit at a slower rate, even under best management practices<sup>1</sup>.

Figure 11 on the implementation of the Biodiversity Management Framework suggests that if a trigger is not crossed then no management response will be taken. This assumes that if an indicator starts in Levels 2-4 then no management actions will be taken to move the indicator

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<sup>1</sup> Southern Foothills Study East Slopes (Phase 3). 2015. Beneficial Management Practices Scenario. [http://www.salts-landtrust.org/sfs/docs/D\\_150420\\_phase\\_three\\_report\\_final\\_low.pdf](http://www.salts-landtrust.org/sfs/docs/D_150420_phase_three_report_final_low.pdf)

into a lower level unless a trigger is crossed. This strategy is not proactive and does not address the fact that our understanding of ecological functions and processes is not complete. The aim of the biodiversity management strategy should be to restore biodiversity and move indicators to lower levels wherever possible.

The strategy identifies proactive management actions including a network of conservation areas already in place. Given that our protected areas network is not representative of all natural subregions and is far below internationally accepted levels of protection necessary to maintain biodiversity it is hard to argue that this strategy is already in place. It will be important to continue to add to our protected areas network in order to conserve southern Alberta's biodiversity.

Likewise wildfire management planning should also acknowledge that wildfire can enhance biodiversity of some ecosystems.

Section 7.6.3 indicates that "in some cases, no further action, other than continued or additional specific monitoring, may be required once an investigation is concluded." While further monitoring could be an important part of the management actions, if a trigger is crossed or an indicator is starting at a high Level, further monitoring alone will not address the risk to this indicator.

The amount of discretion of the management response could allow for little to be done. There are many examples of areas where management is needed for biodiversity maintenance or recovery and where management response is weak or not appropriate to the cause of biodiversity loss. For example, most provincial species at risk recovery plans are highly prescriptive yet little action is taken due to conflicting interests. Having thresholds instead of targets and necessary actions would strengthen this plan past just monitoring.

Where natural causes or significant natural disturbances are the cause of a trigger being passed, a management response may still be appropriate as human impacts and disturbances could place additional pressure on the indicator and thus require a management response and actions.

Table 10 lists a number of avoidance, reduction, restorative and offset measures. While this hierarchy is an important mechanism for mitigating effects, many of the examples listed do not fit within their listed category. For example, almost all of the "avoidance measures" listed appear to be reduction measures such as beneficial management practices or voluntary ILM. These measures do not avoid human impacts but only modify them. Avoidance measures should include new protected areas and "off-limits" zones for activities shown to have adverse impacts on the indicator. Likewise most of the "restorative measures" do not focus on restoration or restoring habitats or biodiversity but rather reducing impacts.

### **Implementation and associated government funding need to be prioritized**

While the goals of the BMF are important and ambitious CPAWS SAB is concerned that there will not be adequate funding and dedicated budget to complete this important work. While working with stakeholders is a very important part of the process, the implementation cannot rely on partners and stakeholder. Dedicated funding needs to be in place to monitor and implement the BMF.

CPAWS SAB appreciates the opportunity to comment on the development of the Biodiversity Management Framework and look forward to working with the government and stakeholders on development and implementation. I would be happy to meet in person to discuss any of our comments.

Thanks,

A handwritten signature in cursive script, appearing to read "Katie Morrison".

Katie Morrison  
Conservation Director  
CPAWS Southern Alberta Chapter