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Alberta, Private Land Conservation, and the Pathway to Target 1: Proposed Description of Biodiversity Conservation

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Proposed Description of Biodiversity Conservation

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Context

Efforts to identify and screen *Other Effective Area-based Conservation Measures* suffer from the a lack of a robust, locally-relevant definition of what is biodiversity conservation.

We do have a robust definition of biodiversity from the Convention on Biological Diversity (CBD):

“The variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part: this includes diversity within species, between species and of ecosystems.”

However, defining biodiversity is different from describing what an effective effort to conserve it is. Recognizing this, the CBD has also produced a definition of ‘in-situ conservation’, one which underpins much of the guidance for identifying and screening OECMs:

“The conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties.”

However, while these definitions and guidance work well at a high level, it still leaves those who actually govern and manage potential OECMs with limited direction as to whether their area will qualify.

In an effort address this, the IUCN’s World Commission on Protected Areas has released further guidance, stating that “OECMs will effectively protect one or more of the following elements of native biodiversity:

- *Rare, threatened or endangered species and habitats, and the ecosystems that support them, including species and sites identified on the IUCN Red List of Threatened Species, Red List of Ecosystems, or national equivalents.*
- *Representative natural ecosystems.*
- *High level of ecological integrity or ecological intactness, which are characterised by the occurrence of the full range of native species and supporting ecological processes. These areas will be intact or be capable of being restored under the proposed management regime.*
- *Range-restricted species and ecosystems in natural settings.*
- *Important species aggregations, including during migration or spawning.*
- *Ecosystems especially important for species life stages, feeding, resting, moulting and breeding.*

- *Areas of importance for ecological connectivity or that are important to complete a conservation network within a landscape or seascape.*
- *Areas that provide critical ecosystem services, such as clean water and carbon storage, in addition to in-situ biodiversity conservation.*
- *Species and habitats that are important for traditional human uses, such as native medicinal plants.*

Again, this direction provides an additional level of guidance, but perhaps not one sufficient to guide provincial-level screening of effective biodiversity conservation.

It is also important to recognize we are not starting at zero in this endeavour. For example, the Government of Alberta staff involved in the *Alberta Land Trust Grants Program* have done extensive work at the provincial scale identifying what conservation activity would qualify for that program. It provides an excellent basis for Alberta's efforts to reconcile 'private land conservation' and 'OECMs' as it is focused on the intersection between private land conservation activity in the province and the Government of Alberta's goals with regard to ecological conservation, and it was conceived as a screening tool.

Defining 'Biodiversity Conservation'

The need exists for a 'next-level-down' definition (or description) of biodiversity conservation that would better enable private land conservation practitioners to self-assess if their conservation area would satisfy the criteria for an OECM. This description needs to draw a line back up through the existing international and national definitions, but 1) be more applicable for the provincial context, and 2) be accessible to a private land conservation practitioners.

We offer the following proposed description of 'biodiversity conservation.' It is based on several existing articulations of biodiversity conservation, but most explicitly the WPCA guidance on OECMs and the Alberta Land Trust Grant Program screening tool.

Proposed Description of Biodiversity Conservation

Biodiversity Conservation means placing restrictions on, or prescriptions for, land use and management of natural areas over the long-term:

THAT ...

1) Protect:

- Ecological connectivity, including
 - Wildlife movement corridors
 - Important habitat isolates
 - Regionally important or locally important zones of connectivity
- Important patches of terrestrial or aquatic wildlife habitat, including
 - Core habitats
 - Seasonal ranges
 - Areas important for species' life stages (e.g., feeding, breeding, mating, nesting, spawning, moulting)
 - Known ranges of native species
- Important areas of natural vegetation, including
 - Native prairie
 - Old growth or otherwise intact forest ecosystems
 - Under-represented natural regions
- Vulnerable, rare, or irreplaceable species and their habitat, including
 - Species listed provincially, federally, or internationally as endangered, threatened or vulnerable
 - Species at risk of local extirpation
- Riparian, wetland and riverine systems, including
 - Riparian habitats adjacent to flowing or standing water
 - Wetlands and wetland complexes

- Groundwater recharge areas
- Areas of important hydrological connectivity
- In-stream flows required for aquatic habitat

OR ...

- 2) Reduce the negative impacts of anthropogenic disturbance, including
- Buffering known areas of biological diversity
 - Mitigating known threats to areas of important biological diversity
 - Protecting evolutionary pathways important in the face of climate change
 - Sequestering carbon above or below ground using natural vegetation communities
 - Restoring ecological structure and function to a natural state

WITH CONSIDERATION ...

3) That these restrictions are intended to conserve not simply individual elements and instances, but the viability and persistence of the systems on which biodiversity as a whole is dependent. Therefore, whether a given act of protection constitutes 'biodiversity conservation' must be judged by the significance of its contribution to the protection of the ecological systems of which that biodiversity element is a part.

AND THAT ...

4) That satisfying any *one* of these criteria may be sufficient to constitute *biodiversity conservation*. However, again, whether a given act of protection constitutes 'biodiversity conservation' must be judged by the significance of its contribution to the protection of the ecological systems of which that biodiversity element is a part.

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